Coolidge Terminal Replacement Project
Environmental Assessment
January 2023

# APPENDIX B

## TRAFFIC STUDY

DLZ
ARCHITECTURE • ENGINEERING • PLANNING
SURVEYING • CONSTRUCTION SERVICES

INNOVATIVE IDEAS
EXCEPTIONAL DESIGN
UNMATCHED CLIENT SERVICE

# OFFICE MEMORANDUM

**DATE:** August 9, 2022

**TO:** Donna C. Rice, LEED Green Associate
Detroit Building Authority

**FROM:** Charles H. Fawcett, P.E., PTOE

**SUBJECT:** DDOT Coolidge Bus Maintenance Facility – Traffic Impact Study

## INTRODUCTION

This memorandum presents the methodology, analysis, findings, and recommendations for the Traffic Impact Study (TIS) of the proposed Detroit Department of Transportation (DDOT) Coolidge Bus Operations and Maintenance Facility. The bus facility is proposed to be located on Schaefer Highway between Schoolcraft Road and Lyndon Street. The facility is designed to be built with an initial capacity of 144 buses with the potential to be expanded in the future to accommodate 216 buses at full build-out.

The purpose of this TIS is to determine the expected traffic impacts of the proposed bus facility on nearby intersections. The study area was determined to include the intersections identified in Figure 1.

The facility is expected to be built and operational in 2025. At opening, the facility is expected to operate at its initial capacity, accommodating 144 buses. For the purposes of this study, it is assumed that the facility will be expanded to full capacity within 20 years of opening – by 2045. This study analyzed Existing conditions at the study intersections, opening year 2025 conditions including the No-Build conditions, and Initial Build conditions; and the horizon year 2045 Full Build conditions. Trafficware's Synchro 11 (the latest version available) software program was used to perform intersection capacity analysis.

## DATA COLLECTION

DLZ collected the 24-hour traffic counts on a typical weekday – Tuesday June 15, 2021. The turning movement counts were collected at the following 9 intersections which will collectively comprise the study area shown in Figure 1. Turning movement data reports are included in Appendix A.

1. Schaefer Highway and Lyndon Street
2. Schaefer Highway and Schoolcraft Road
3. Schaefer Highway and Grand River Avenue
4. Schaefer Highway and I-96 Service Road
5. Schaefer Highway and Jefferies Service Drive
6. Grand River Avenue and I-96 Service Road
7. Grand River and Jefferies Service Road

8. Schoolcraft Road and Ward Avenue
9. Meyers Road and Kendall Street

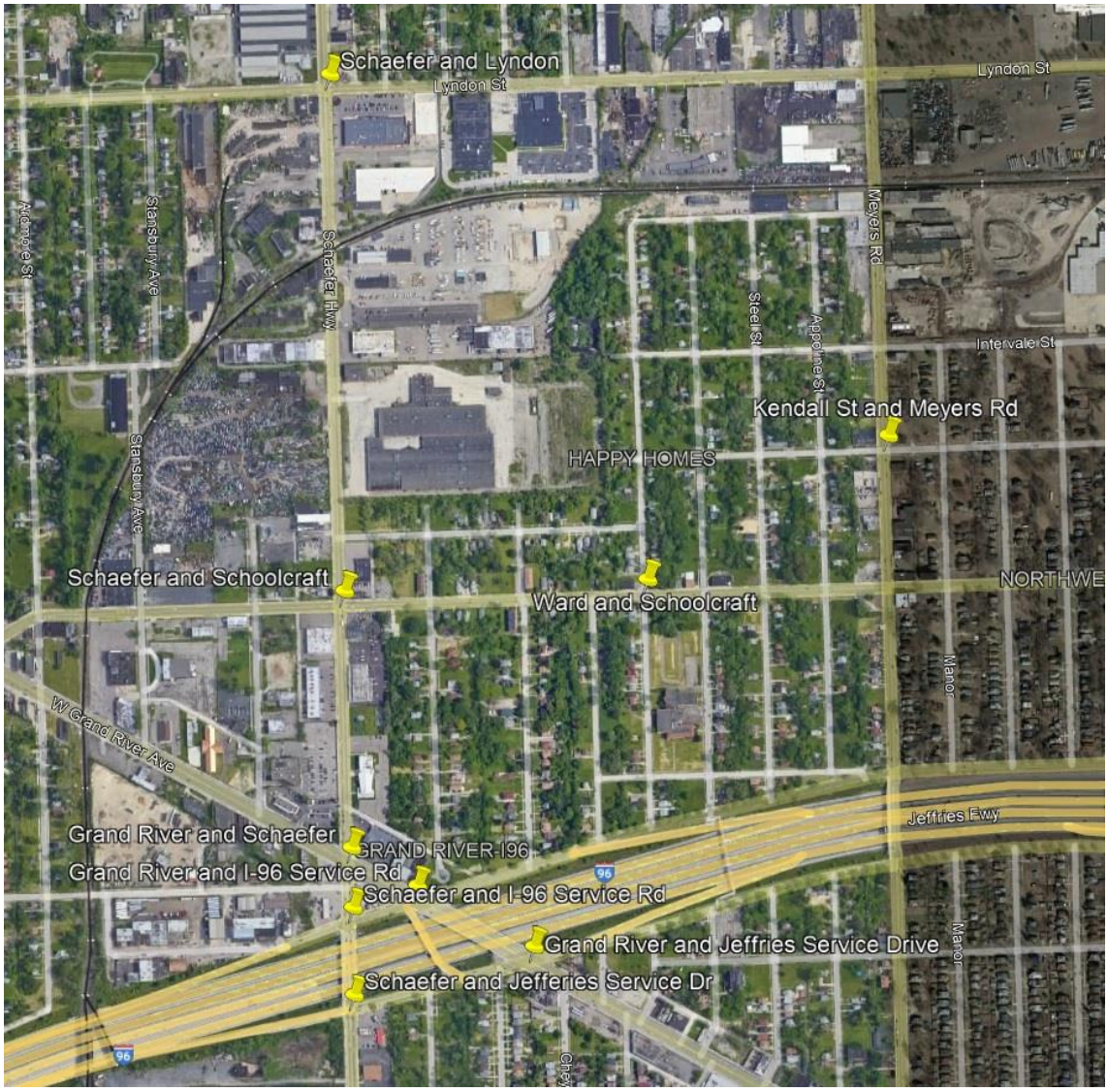



**Figure 1 - Study Area Map**

To determine the hours for capacity analysis, 24-hours of traffic data at the intersection of Schaefer Highway and Grand River Avenue were compared with the forecasted hourly site trips. (The development of forecasted site traffic is discussed below).

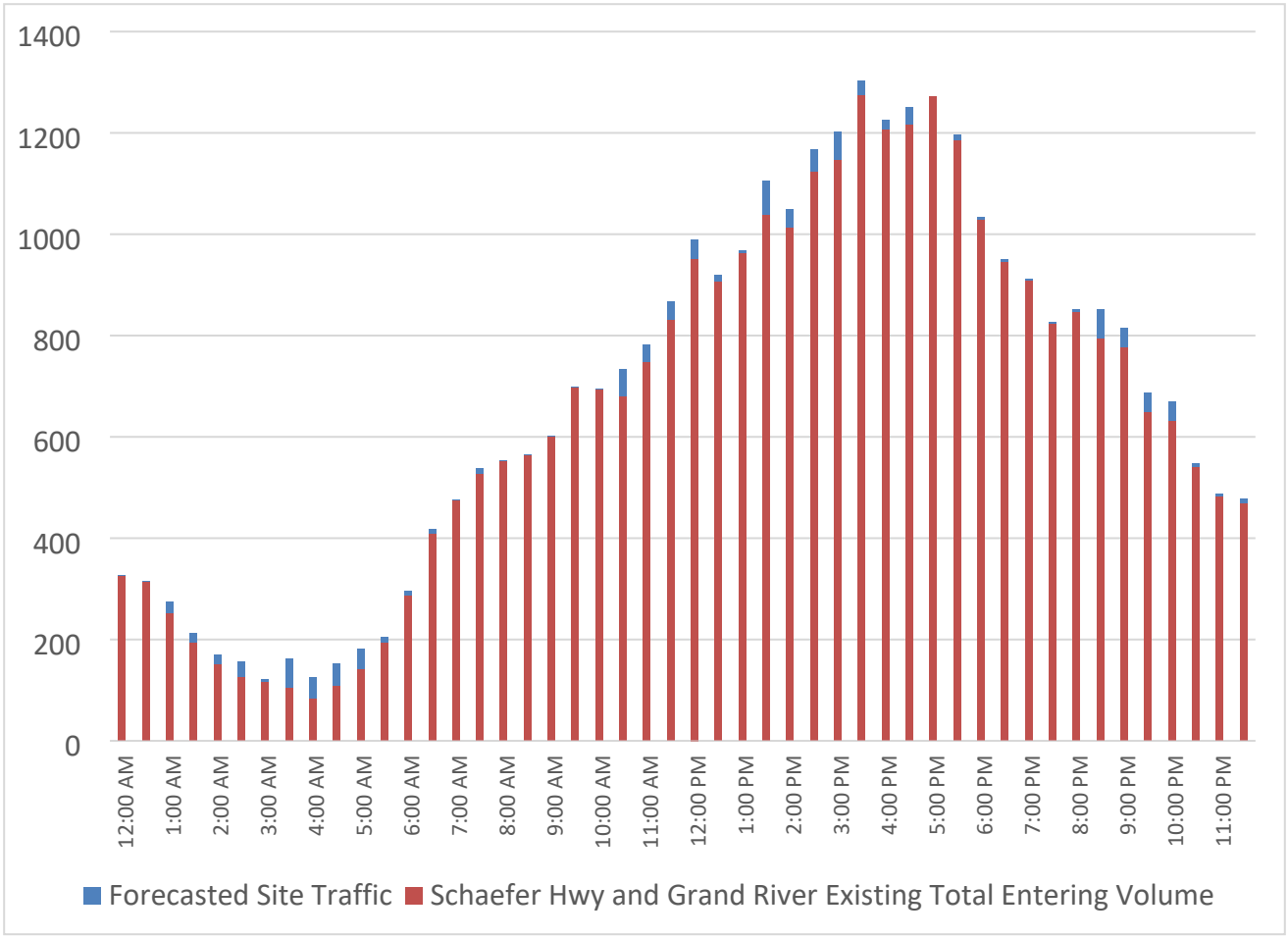



**Figure 2 - Schaefer Highway and Grand River Avenue and Site Traffic Study**

The traffic volume profile of the Schaefer Highway and Grand River Avenue intersection shows one peak period between approximately 3:30 PM and 5:30 PM. Site traffic during this period is expected to be minimal, however. Site traffic is expected to peak in early afternoon and late evening. Therefore, the peak hours for the purposes of this study were determined to be 1:30 PM – 2:30 PM (Midday) and 8:00 PM – 9:00 PM (Evening). Turning movement data at the remaining study intersections during these hours was used in the analysis described below and illustrated in Exhibit 1.

In addition to existing traffic counts, traffic signal timing information was obtained from the City of Detroit Traffic Engineering Department (TED) and from the Michigan Department of Transportation (MDOT) for their respective study area intersections controlled by traffic signals.

## EXISTING CONDITIONS ANALYSIS

Synchro models were developed for each peak hour – Midday and Evening. The existing models were developed according to the roadway network, lane configurations, traffic control plans, and the existing traffic volumes, heavy vehicle percentages and peak hour factors. Existing lane configurations and traffic control are illustrated in Exhibit 2. Intersection capacity analyses were performed for the study intersections during the weekday Midday and Evening peak hours to determine their levels of service (LOS). LOS is a qualitative measure describing operational conditions within a traffic stream, generally in terms of such service measures as speed and travel time, freedom to maneuver, traffic interruptions, and comfort and convenience. Operational LOS reflects delays experienced by the motorist and is designated a letter grade of A through F. LOS A represents the best operating conditions and LOS F the worst. LOS D or better is considered acceptable for future intersections in this study. The Highway Capacity Manual (HCM) defines level of service for signalized and unsignalized intersections as a function of the average vehicle control delay in seconds per vehicle (sec) as summarized in Table 1 below.

### Table 1 - LOS Criteria for Control Delay at Intersections

| Level of Service Grade | Signalized Intersection (sec) | Unsignalized Intersection (sec) |
|---|---|---|
| A | ≤10 | ≤10 |
| B | 10-20 | 10-15 |
| C | 20-35 | 15-25 |
| D | 35-55 | 25-35 |
| E | 55-80 | 35-50 |
| F | ≥80 | ≥50 |

The Existing condition Synchro models were used to determine the intersection LOS and average delay per vehicle. Those results are summarized in Table 2. The Existing conditions analysis found that all movements at the study intersections operate acceptable levels of service of D or better. Synchro intersection capacity analysis reports are in Appendix B.

## Table 2 - Existing Conditions Capacity Analysis Results

| Level of Service Summary – Midday Peak Hour | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Intersection | LOS/Delay (s/veh) | | | | | | | | | | | | |
| | Lane Group | | | | | | | | | | | | |
| | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR | Overall |
| Schaefer Hwy & Lyndon St | 28.6 C | 36.3 D | | 38.8 D | 30.0 C | | 10.1 B | 18.5 B | | 5.3 A | 9.0 A | | 19.4 B |
| Schaefer Hwy & Schoolcraft Rd | 25.5 C | 22.4 C | | 25.5 C | 22.2 C | | 7.3 A | 23.5 C | | 6.4 A | 22.6 C | | 22.3 C |
| Schaefer Hwy & Grand River Ave | 10.5 B | 7.1 A | | 8.7 A | 6.5 A | | 26.2 C | 37.4 D | 6.9 A | 53.5 D | 28.8 C | | 17.7 B |
| Schaefer Hwy & I-96 Service Rd | | | | 30.9 C | 25.3 C | | 4.6 A | 2.6 A | | | 10.1 B | | 10.3 B |
| Schaefer Hwy & Jeffries Service Dr | | 26.0 C | | | | | | 10.7 B | | 5.6 A | 5.0 A | | 14.9 B |
| Grand River Ave & I-96 Service Rd | | | | | 23.8 C | 11.2 B | 52.2 D | 1.2 A | | | 7.0 A | 1.1 A | 11.9 B |
| Grand River Ave & Jeffries Service Dr | | 31.4 C | | | | | | 3.9 A | | | 2.3 A | | 11.2 B |
| Left Turn Bridge & Jeffries Service Dr | | 3.2 A | | | | | | | | 0.1 A | | | 2.3 A |
| Schoolcraft Rd & Ward Ave | 7.6 A | 0.0 A | | 7.6 A | 0.0 A | | | 9.5 A | | | 10.3 B | | 0.9 A |
| Meyers Rd & Kendall St | | 12.0 B | | | 14.1 B | | 7.9 A | | | 8.0 A | | | 1.1 A |

| Level of Service Summary – Evening Peak Hour | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Intersection | LOS/Delay (s/veh) | | | | | | | | | | | | |
| | Lane Group | | | | | | | | | | | | |
| | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR | Overall |
| Schaefer Hwy & Lyndon St | 22.3 C | 18.7 B | | 23.8 C | 22.8 C | | 5.1 A | 9.4 A | | 5.1 A | 8.3 A | | 12.4 B |
| Schaefer Hwy & Schoolcraft Rd | 24.1 C | 25.9 C | | 24.1 C | 23.3 C | | 7.1 A | 19.2 B | | 7.4 A | 18.4 B | | 20.0 B |
| Schaefer Hwy & Grand River Ave | 8.9 A | 6.9 A | | 8.1 A | 5.8 A | | 24.6 C | 36.4 D | 10.4 B | 40.8 D | 28.7 C | | 16.6 B |
| Schaefer Hwy & I-96 Service Rd | | | | 33.1 C | 27.8 C | | 2.8 A | 2.0 A | | | 8.3 A | | 9.7 A |
| Schaefer Hwy & Jeffries Service Dr | | 25.6 C | | | | | | 8.8 A | | 45.5 D | 3.7 A | | 14.6 B |
| Grand River Ave & I-96 Service Rd | | | | | 25.1 C | 11.7 B | 52.1 A | 0.6 A | | | 6.9 D | 0.8 A | 12.0 B |
| Grand River Ave & Jeffries Service Dr | | 31.5 C | | | | | | 3.8 A | | | 2.2 A | | 11.0 B |
| Left Turn Bridge & Jeffries Service Dr | | 2.0 A | | | | | | | | 0.1 A | | | 1.4 A |
| Schoolcraft Rd & Ward Ave | 7.7 A | 0.0 A | | 0.0 A | | | | 0.0 A | | | 9.5 A | | 0.5 A |
| Meyers Rd & Kendall St | | 11.9 B | | | 14.1 B | | 7.8 A | | | 8.0 A | | | 1.1 A |

## NO BUILD CONDITIONS ANALYSIS

The Year 2025 No-Build scenario Synchro models were developed based on 1% annual background traffic growth rate at all intersections, the existing roadway geometries and signal timing plans. The year 2025 forecasted turning movement volumes used in the No Build analysis are illustrated in Exhibit 3. The analysis found that one movement at the intersection of Shaefer Highway and Grand River Avenue is expected to operate at LOS E in this future scenario without the proposed bus facility. This movement is addressed in the Build scenario with traffic signal timing modifications. The No Build condition capacity analysis results are summarized below in Table 3. Synchro intersection capacity analysis reports are included in Appendix B.

### Table 3 – 2025 No Build Condition Capacity Analysis Results

| Level of Service Summary – Midday Peak Hour | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Intersection | LOS/Delay (s/veh) | | | | | | | | | | | | |
| | Lane Group | | | | | | | | | | | | |
| | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR | Overall |
| Schaefer Hwy & Lyndon St | 28.5 C | 36.6 D | | 39.9 D | 30.2 C | | 7.2 A | 17.8 B | | 5.4 A | 9.2 A | | 19.2 B |
| Schaefer Hwy & Schoolcraft Rd | 25.7 C | 23.4 C | | 25.7 C | 22.6 C | | 7.4 A | 24.5 C | | 6.5 A | 23.2 C | | 23.0 C |
| Schaefer Hwy & Grand River Ave | 11.0 B | 7.4 A | | 8.9 A | 6.8 A | | 26.0 C | 37.1 D | 6.6 A | 58.6 E | 28.6 C | | 18.0 B |
| Schaefer Hwy & I-96 Service Rd | | | | 30.4 C | 24.9 C | | 5.1 A | 2.8 A | | | 10.9 B | | 10.6 B |
| Schaefer Hwy & Jeffries Service Dr | | 26.2 C | | | | | | 11.3 B | | 5.9 A | 5.3 A | | 15.2 B |
| Grand River Ave & I-96 Service Rd | | | | | 24.0 C | 11.1 B | 52.9 D | 1.2 A | | | 7.0 A | 1.2 A | 12.0 B |
| Grand River Ave & Jeffries Service Dr | | 31.9 C | | | | | | 4.0 A | | | 2.3 A | | 11.4 B |
| Left Turn Bridge & Jeffries Service Dr | | 3.5 A | | | | | | | | 0.1 A | | | 2.5 A |
| Schoolcraft Rd & Ward Ave | 7.6 A | 0.0 A | | 7.6 A | 0.0 A | | | 9.6 A | | | 10.4 B | | 0.9 A |
| Meyers Rd & Kendall St | | 12.2 B | | | 14.5 B | | 7.9 A | | | 8.0 A | | | 1.1 A |

| Level of Service Summary – Evening Peak Hour | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Intersection | LOS/Delay (s/veh) | | | | | | | | | | | | |
| | Lane Group | | | | | | | | | | | | |
| | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR | Overall |
| Schaefer Hwy & Lyndon St | 22.2 C | 18.8 B | | 23.8 C | 23.0 C | | 5.2 A | 9.6 A | | 5.2 A | 8.5 A | | 12.6 B |
| Schaefer Hwy & Schoolcraft Rd | 24.1 C | 26.0 C | | 24.1 C | 23.6 C | | 7.1 A | 19.7 B | | 7.5 A | 18.7 B | | 20.3 C |
| Schaefer Hwy & Grand River Ave | 9.0 A | 7.1 A | | 8.2 A | 6.0 A | | 24.3 C | 36.6 D | 10.4 B | 43.1 D | 28.6 C | | 16.8 B |
| Schaefer Hwy & I-96 Service Rd | | | | 33.1 C | 28.3 C | | 2.9 A | 2.1 A | | | 8.9 A | | 10.3 B |
| Schaefer Hwy & Jeffries Service Dr | | 25.6 C | | | | | | 9.2 A | | 46.0 D | 3.9 A | | 14.8 B |
| Grand River Ave & I-96 Service Rd | | | | | 25.1 C | 11.6 B | 53.5 D | 0.7 A | | | 6.9 A | 0.8 A | 12.1 B |
| Grand River Ave & Jeffries Service Dr | | 31.3 C | | | | | | 3.8 A | | | 2.2 A | | 11.0 B |
| Left Turn Bridge & Jeffries Service Dr | | 2.0 A | | | | | | | | 0.1 A | | | 1.4 A |
| Schoolcraft Rd & Ward Ave | 7.7 A | 0.0 A | | 0.0 A | | | | 0.0 A | | | 9.5 A | | 0.5 A |
| Meyers Rd & Kendall St | | 10.6 B | | | 10.2 B | | 7.8 A | | | 7.5 A | | | 0.9 A |

## TRIP GENERATION, DISTRIBUTION AND ASSIGNMENT

The proposed development is an operations and maintenance facility for DDOT's public bus transit routes. The facility has been designed to accommodate a total of 216 buses. It is expected that at opening in 2025, the facility will operate at an Initial Build capacity and is assumed to be operating at Full Build capacity within 20 years. Therefore, trip generation, distribution and assignment of site traffic was performed for the opening year 2025 Initial Build Scenario and forecasted horizon year of 2045 Full Build Scenario.

Access to the site is proposed on Schaefer Highway with two driveways – one for buses and one for employees. An emergency access driveway is proposed on the east side of the site aligned with the intersection of Ward and Kendall Avenues. This driveway will be gated and used in emergency situations only. No site traffic was assigned to the emergency access driveway. The proposed site plan is shown below in Figure 3.

City traffic engineering department officials requested that a consolidation of the two proposed driveways be explored. Therefore, two site access scenarios were analyzed, one according to the site plan and one assuming one consolidated driveway. Both are discussed in the Build Conditions Analysis Section below.


**Figure 3 - Proposed Site Plan**

## *Trip Generation*

The design team modeled the daily operations at the facility on an hourly basis which included the number of employees and buses coming in and leaving site each hour. PDF versions of the Shift Analyses for Opening Day 2025 Initial Build Scenario of 144 buses and the 2045 Full Build Scenario of 216 buses are included in Appendix C. Detroit DOT provided the existing bus block chart that is shown in Figure 4 Site trips were generated based on this Shift Analysis and Bus Block chart. The Shift Analyses were used to forecast employee site trips. The bus block chart was used to forecast bus site trips.

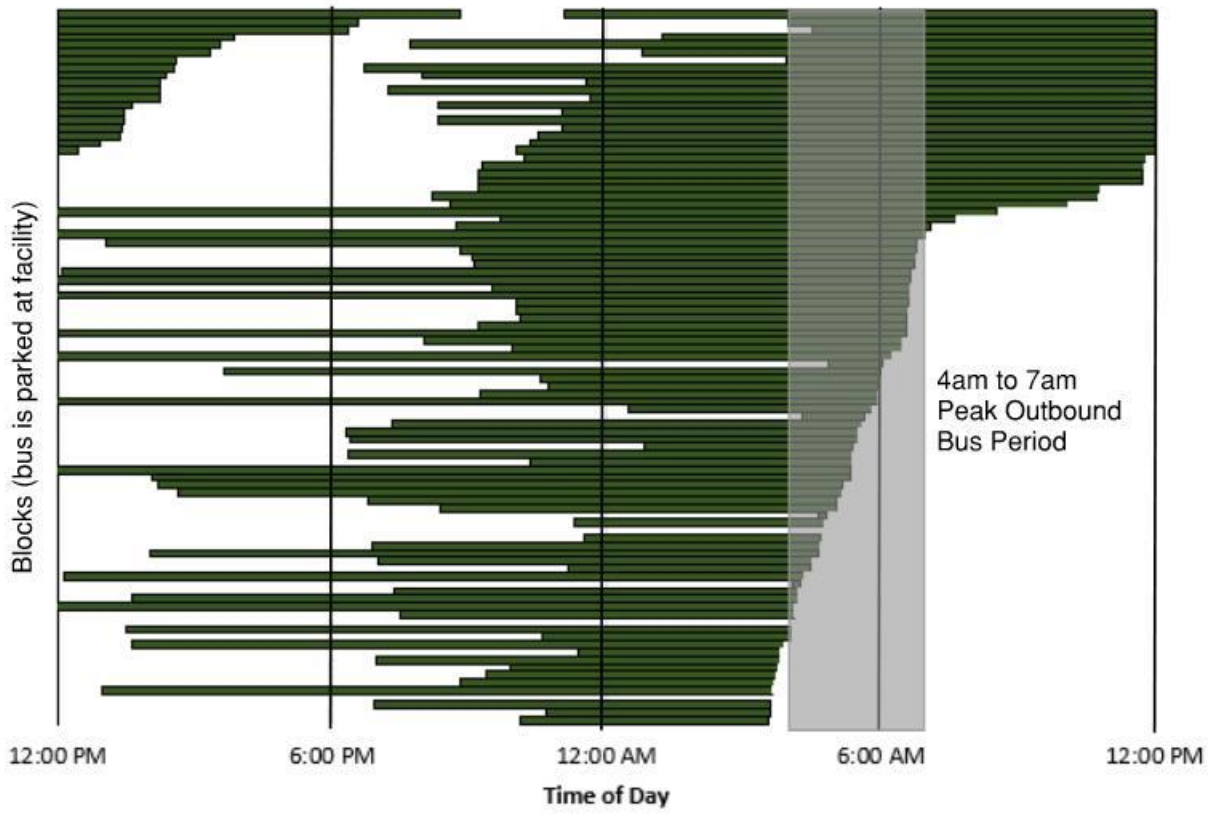



**Figure 4 - Bus Block Schedule**

The bus block chart shows that there are 91 buses using the Gilbert facility that will be moved over to Coolidge facility. It is assumed that 91 buses will be served at Coolidge in 2025. In year 2045 when the bus operators increase about 10% the buses will increase at the same pace.

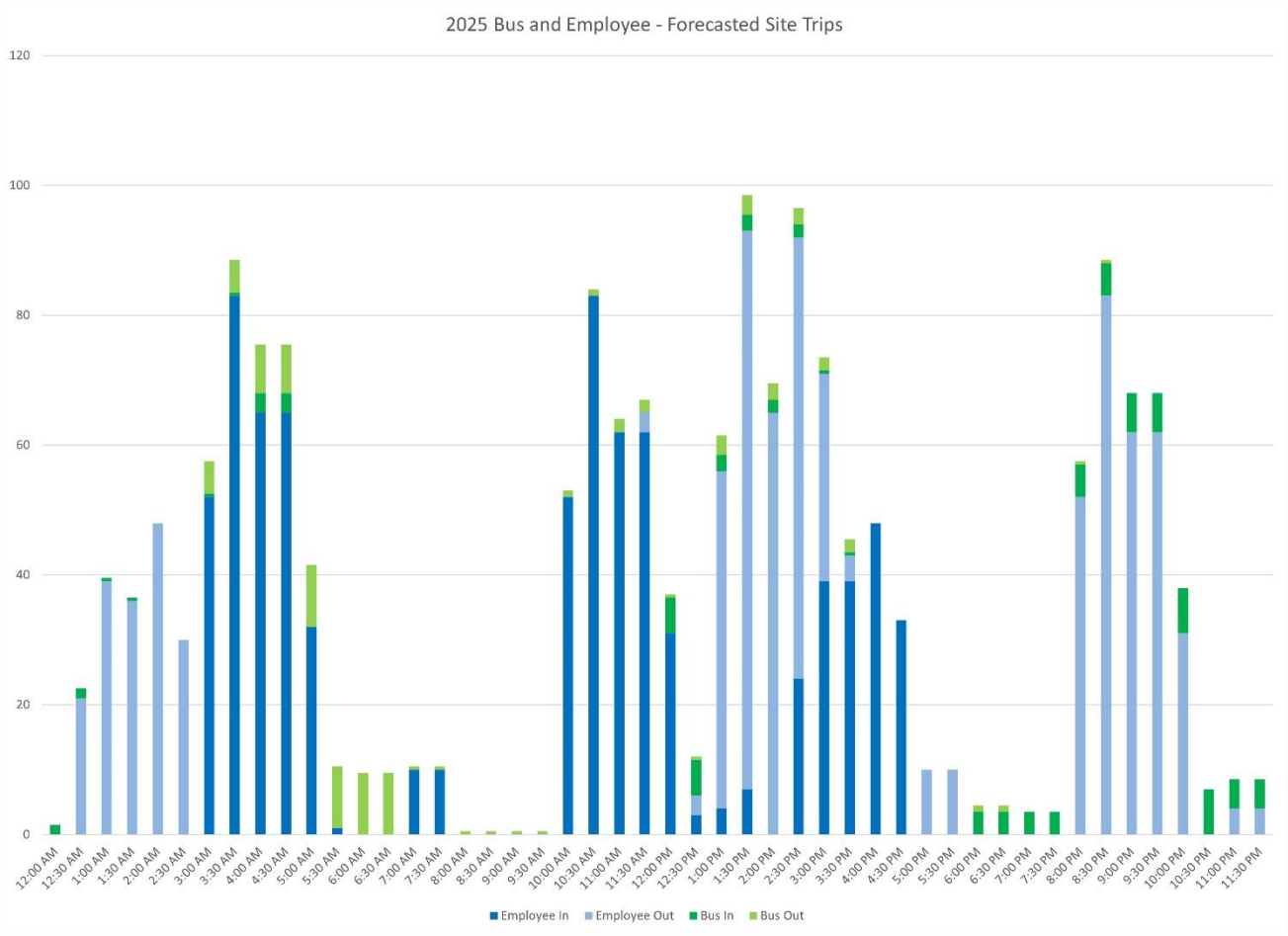



**Figure 5 - Forecasted Site Trips**

The forecasted employee and bus trips by hour are combined in the chart in Figure 5.

The hour with the highest intensity of trips was found to be the hour during the mid-day shift change between 1:30 PM to 2:30 PM. The second highest hour is during the evening shift change between 8:00 PM and 9:00 PM. These are the two hours that are expected to have largest impact on traffic within the study area and, therefore, are the hours analyzed in this study. It is noted that neither of the site peak hours occur during the commuter peak period that occurs from about 3:30 PM to 5:30 PM. The forecasted employee and bus trips forecasted during these two peak hours is shown in Table 4 below.

**Table 4 - Trip Generation**

| Description | 2025 Mid-Day Peak Hour 1:30 PM to 2:30 PM | | | 2025 Evening Peak 8:00 PM to 9:00 PM | | |
|---|---|---|---|---|---|---|
| | IN | OUT | Total | IN | OUT | Total |
| Employees | 7 | 86 | 93 | 0 | 52 | 52 |
| Buses | 5 | 6 | 11 | 10 | 1 | 11 |
| Total Trips | 12 | 92 | 104 | 10 | 53 | 63 |

| Description | 2045 Mid-Day Peak Hour 1:30 PM to 2:30 PM | | | 2045 Evening Peak 8:00 PM to 9:00 PM | | |
|---|---|---|---|---|---|---|
| | IN | OUT | Total | IN | OUT | Total |
| Employees | 39 | 96 | 135 | 17 | 53 | 70 |
| Buses | 6 | 7 | 13 | 12 | 1 | 13 |
| Total Trips | 45 | 103 | 148 | 29 | 54 | 83 |

### *Distribution and Assignment*

An existing distribution model was created for the study area intersections based on existing peak hour traffic volumes. The distribution model was used to distribute employee traffic volumes. Generally, about 20% of employee traffic is expected to arrive and depart to the north from the site and about 80% to the south. Employee site traffic was assigned to each study intersection according to this model for each of the two peak hours.

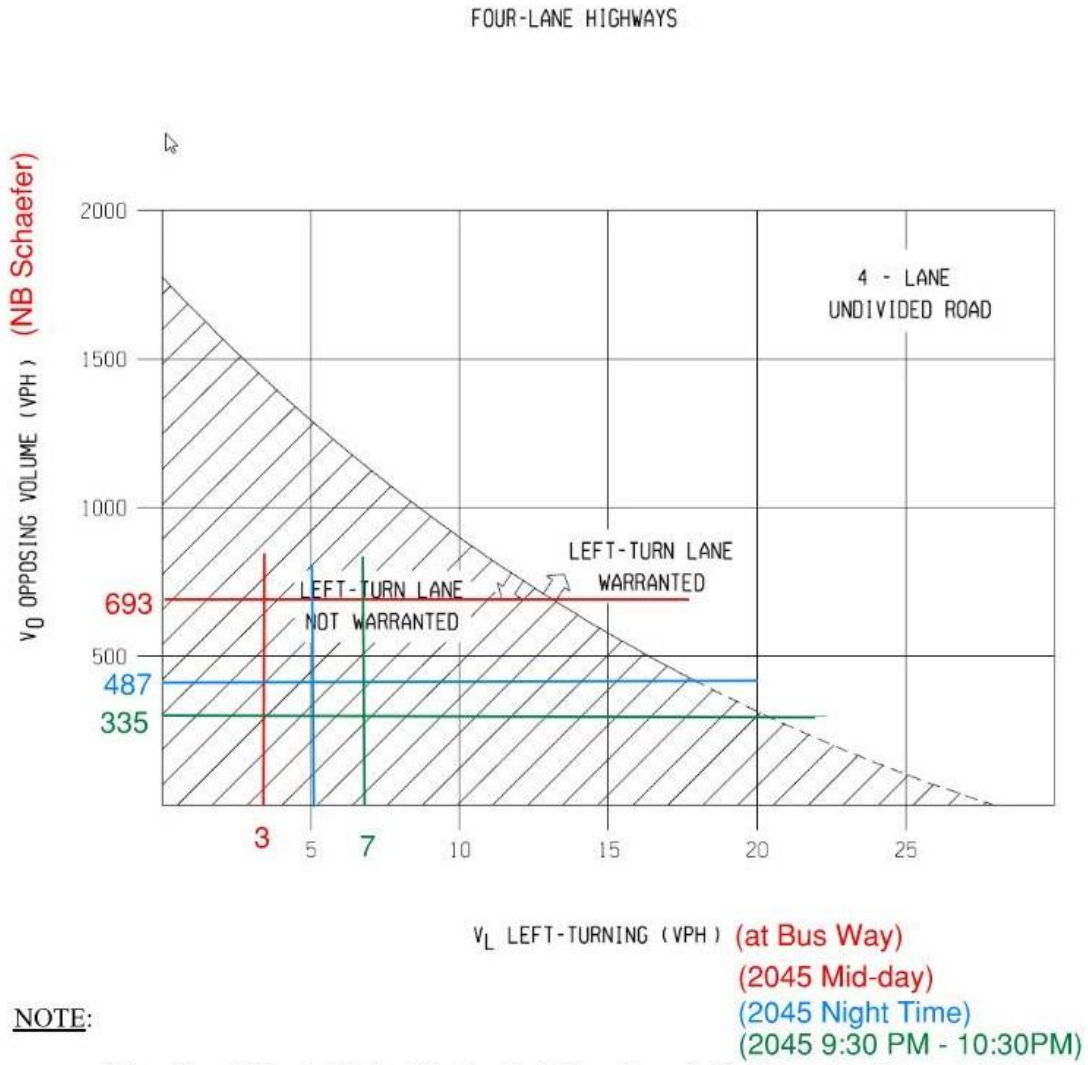
The distribution of buses to and from the site was developed based on the expected routes that this facility is expected to serve. For the purposes of this analysis, it was assumed that DDOT routes would be served equally between this facility and the Shoemaker facility located on the east side of the city with the Coolidge facility serving routes on the west side. Approximately 20 routes were selected as serving the west side and assumed to operate out of the Coolidge facility. Outbound buses were distributed to the starting points of these 20 routes and assigned to study intersections accordingly. Inbound buses were distributed from the route endpoints and assigned to study intersections as well. The distribution of buses to and from their respective routes resulted in approximately 45% of buses traveling to and from the north from the site and 55% to and from the south.

The resulting turning movement volumes expected to be associated with the site trips at the study intersections and the site driveways are illustrated in Exhibits 4-1 and 4-2.

## BUILD CONDITIONS ANALYSIS

Forecasted site traffic was added to the forecasted No Build traffic volumes at each study intersection and the two proposed site driveways to arrive at expected total future traffic volumes in the 2025 and 2045 analysis years. The total forecasted turning movement volumes for the Build Condition are illustrated in Exhibits 5-1 and 5-2. Heavy Vehicle percentages for each movement at each study intersection were adjusted according to the bus trip assignments at those intersections. Capacity analysis at each intersection was performed for each of the Mid-Day and Evening peak hours. For the purposes of this analysis, it was assumed that traffic signal timings would be updated to accommodate expected traffic volumes within the next 20 years. In the No Build scenario, some movements at intersections along Grand River Avenue were expected to operate at LOS E in the future without the proposed bus facility. Traffic signal timing improvements were found to improve operations at these intersections even with the addition of site traffic.

We reviewed the need for southbound left turn lanes into each of the two proposed site driveways. This analysis was done using MDOT's Geometric Design Guidance section 1.1.5 Traffic Volume Guidelines for Left-Turn Lanes and the chart for four-lane undivided roads. Northbound opposing traffic and southbound left turning traffic forecasted at each driveway were plotted on the chart. The chart for the bus driveway is shown in Figure 6 and for the employee driveway is shown in Figure 7. The analysis found that a southbound left turn lane is not expected to be warranted at the proposed bus access points nor at the employee driveway during the midday and nighttime peak hours. We looked further at other time periods. The incoming bus volume is at the highest between 9:30 -10:30 PM. In 2045 there are 7 buses that make the SB left turn. However, the northbound opposing traffic is lower than 400 vph. This does not qualify for the warrant condition. The employee incoming traffic volume has a few peaks throughout the 24 hours. The highest southbound left turn volume is 19 vph from 3:30 AM – 4:30 AM, and from 11:30 AM – 12:30 PM. Only from 11:30 AM to 12:30 PM the volumes meet the left turn lane warrants. The second highest left turn volume is 14 vph from 13:30 PM to 1:30 PM at Employee Parking entrance, which does not meet the left turn lane warrant. Overall, there is only one hour at the employee entrance the left turn lane is warranted in 2045. Similarly, in the opening year 2025, there is only one hour that meets the left turn lane warrant at the employee entrance. Therefore, it is not recommended to have a left turn lane at either Coolidge facility entrances, but the traffic volumes be monitored for the future changes should more employee traffic takes the southbound left turn lane.




NOTE:

When $V_O$ <400 vph (dashed line), a Left-Turn Lane is Not Normally Warranted Unless The Advancing Volume ($V_A$) in The Same Direction as the Left-Turning Traffic Exceeds 400 vph ($V_A$ > 400 vph).

**Figure 6 - Southbound Left Turn Lane Analysis - Bus Driveway**

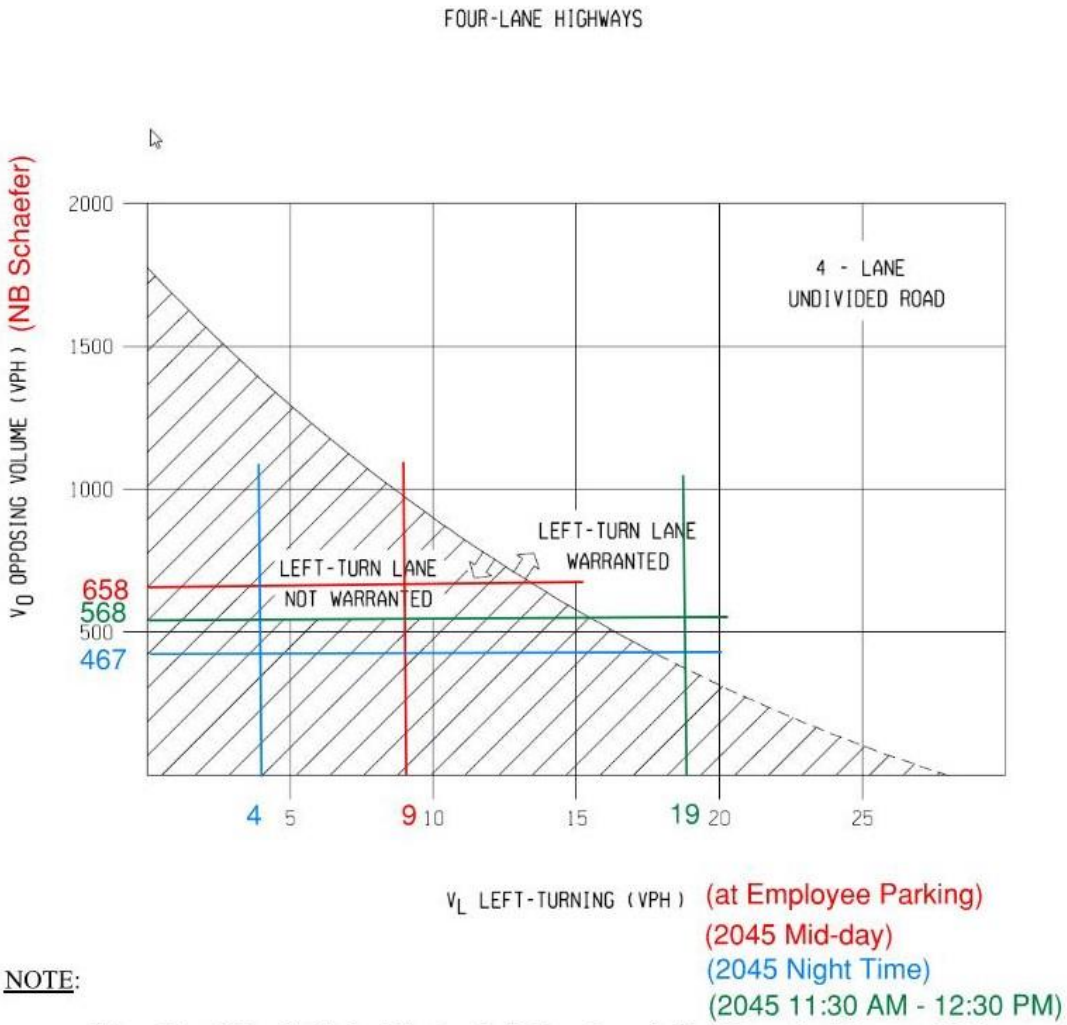



**Figure 7 - Southbound Left Turn Lane Analysis - Employee Driveway**

The Build Condition capacity analysis found that all movements at the study intersections are expected to continue to operate at acceptable LOS except at the site bus driveway in 2045. During the Mid-Day peak hour, the westbound left turn exiting the bus driveway is expected to operate at LOS E if controlled by a stop sign. This expected LOS is the result of the type of vehicle using the driveway since buses are slower and require larger gaps in traffic to enter a free-flowing roadway than passenger cars. It is noted that the total number of buses forecasted to exit the site and turn left during the Mid-Day peak hour during the 2045 Full Build scenario is four (4). It is recommended that this driveway operate as a stop-controlled approach to Schaefer Highway and that the operations be monitored for indications that alternative control may be needed as the population of on-site employees increases over the coming years.

The results of the Build Condition Capacity Analysis are included in Table 5 and Table 6. The lane configurations and traffic control resulting from the above analysis are illustrated in Exhibit 6.

## Table 5 – 2025 Initial Build Condition Capacity Analysis Results

| Level of Service Summary – Midday Peak Hour | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Intersection | LOS/Delay (s/veh) | | | | | | | | | | | | |
| | Lane Group | | | | | | | | | | | | |
| | EB L | EB T | EB R | WB L | WB T | WB R | NB L | NB T | NB R | SB L | SB T | SB R | Overall |
| Schaefer Hwy & Lyndon St | 28.3 C | 36.0 D | | 39.3 D | 29.6 C | | 4.0 A | 4.5 A | | 5.9 A | 9.1 A | | 13.9 B |
| Schaefer Hwy & Coolidge Bus Drive (Unsignalized) | | | | 29.0 D | | 12.6 B | | | | 11.8 B | 0.0 A | | 0.1 A |
| Schaefer Hwy & Coolidge Employee Drive (Unsignalized) | | | | 20.2 C | | 10.3 B | | | | 8.6 A | 0.0 A | | 1.4 A |
| Schaefer Hwy & Schoolcraft Rd | 25.8 C | 21.1 C | | 23.8 C | 21.0 C | | 14.5 B | 26.8 C | | 11.1 B | 22.4 C | | 23.3 C |
| Schaefer Hwy & Grand River Ave | 13.4 B | 9.2 A | | 9.5 A | 7.3 A | | 20.5 C | 27.8 C | 3.0 A | 40.4 D | 26.5 C | | 16.3 B |
| Schaefer Hwy & I-96 Service Rd | | | | 22.1 C | 16.8 B | | 4.6 A | 2.7 A | | | 3.6 A | | 6.3 A |
| Schaefer Hwy & Jeffries Service Dr | | 26.3 C | | | | | | 17.6 B | | 6.7 A | 5.0 A | | 17.3 B |
| Grand River Ave & I-96 Service Rd | | | | | 24.0 C | 11.2 B | 38.0 D | 0.9 A | | | 7.4 A | 1.5 A | 11.4 B |
| Grand River Ave & Jeffries Service Dr | | 34.6 C | | | | | | 4.1 A | | | 1.7 A | | 12.3 B |
| Left Turn Bridge & Jeffries Service Dr | | 3.1 A | | | | | | | | 1.3 A | | | 2.6 A |
| Schoolcraft Rd & Ward Ave | 7.6 A | 0.0 A | | 7.6 A | 0.0 A | | | 10.0 B | | | 10.4 B | | 1.0 A |
| Meyers Rd & Kendall St | | 12.2 B | | | 14.5 B | | 7.9 A | | | 8.0 A | | | 1.1 A |

| Level of Service Summary – Evening Peak Hour | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Intersection | LOS/Delay (s/veh) | | | | | | | | | | | | |
| | Lane Group | | | | | | | | | | | | |
| | EB L | EB T | EB R | WB L | WB T | WB R | NB L | NB T | NB R | SB L | SB T | SB R | Overall |
| Schaefer Hwy & Lyndon St | 22.2 C | 18.5 B | | 23.9 C | 22.8 C | | 5.2 A | 8.4 A | | 5.3 A | 8.5 A | | 12.1 B |
| Schaefer Hwy & Coolidge Bus Drive (Unsignalized) | | | | 20.5 C | | 0.0 A | | | | 10.5 B | 0.1 A | | 0.1 A |
| Schaefer Hwy & Coolidge Employee Drive (Unsignalized) | | | | 14.5 B | | 9.5 A | | | | 0.0 A | | | 0.8 A |
| Schaefer Hwy & Schoolcraft Rd | 24.4 C | 23.8 C | | 22.4 C | 21.9 C | | 8.1 A | 21.4 C | | 8.6 A | 21.4 C | | 21.3 C |
| Schaefer Hwy & Grand River Ave | 10.3 B | 8.3 A | | 8.2 A | 6.3 A | | 18.5 B | 29.4 C | 3.4 A | 39.7 D | 26.7 C | | 15.7 B |
| Schaefer Hwy & I-96 Service Rd | | | | 21.7 C | 17.3 B | | 2.7 A | 1.9 A | | | 2.6 A | | 5.7 A |
| Schaefer Hwy & Jeffries Service Dr | | 25.5 C | | | | | | 13.7 B | | 43.5 D | 3.6 A | | 16.4 B |
| Grand River Ave & I-96 Service Rd | | | | | 25.1 C | 11.7 B | 40.3 D | 0.9 A | | | 11.3 B | 6.1 A | 13.2 B |
| Grand River Ave & Jeffries Service Dr | | 32.8 C | | | | | | 3.9 A | | | 2.8 A | | 11.6 B |
| Left Turn Bridge & Jeffries Service Dr | | 2.6 A | | | | | | | | 0.5 A | | | 2.0 A |
| Schoolcraft Rd & Ward Ave | 8.7 A | 0.0 A | | 0.0 A | | | | 0.0 A | | | 12.4 B | | 0.5 A |
| Meyers Rd & Kendall St | | 11.0 B | | | 11.2 B | | 7.8 A | | | 7.8 A | | | 0.8 A |

## Table 6 - 2045 Full Build Condition Capacity Analysis Results

| Level of Service Summary – Midday Peak Hour | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Intersection | LOS/Delay (s/veh) | | | | | | | | | | | | |
| | Lane Group | | | | | | | | | | | | |
| | EB L | EB T | EB R | WB L | WB T | WB R | NB L | NB T | NB R | SB L | SB T | SB R | Overall |
| Schaefer Hwy & Lyndon St | 27.2 C | 36.4 D | | 47.9 D | 29.3 C | | 4.1 A | 4.4 A | | 7.8 A | 11.6 B | | 15.2 B |
| Schaefer Hwy & Coolidge Bus Drive (Unsignalized) | | | | 42.6 E | | 13.9 B | | | | 13.4 B | 0.1 A | | 0.3 A |
| Schaefer Hwy & Coolidge Employee Drive (Unsignalized) | | | | 30.7 D | | 11.0 B | | | | 9.2 A | 0.1 A | | 2.0 A |
| Schaefer Hwy & Schoolcraft Rd | 27.6 C | 22.6 C | | 24.7 C | 23.0 C | | 15.0 B | 45.4 D | | 13.5 B | 45.4 D | | 34.9 D |
| Schaefer Hwy & Grand River Ave | 21.7 C | 12.4 B | | 12.6 B | 9.8 A | | 17.8 B | 22.9 C | 2.2 A | 49.7 D | 23.3 C | | 17.0 B |
| Schaefer Hwy & I-96 Service Rd | | | | 17.0 B | 13.0 B | | 8.3 A | 3.5 A | | | 4.6 A | | 6.7 A |
| Schaefer Hwy & Jeffries Service Dr | | 27.0 C | | | | | | 29.1 C | | 12.0 B | 6.6 A | | 22.3 C |
| Grand River Ave & I-96 Service Rd | | | | | 23.7 C | 10.1 B | 42.0 D | 1.2 A | | | 9.6 A | 3.0 A | 12.1 B |
| Grand River Ave & Jeffries Service Dr | | 35.6 D | | | | | | 4.9 A | | | 1.3 A | | 12.6 B |
| Left Turn Bridge & Jeffries Service Dr | | 4.5 A | | | | | | | | 3.8 A | | | 4.3 A |
| Schoolcraft Rd & Ward Ave | 7.7 A | 0.0 A | | 7.7 A | 0.0 A | | | 10.3 B | | | 11.0 B | | 1.1 A |
| Meyers Rd & Kendall St | | 13.9 B | | | 17.4 C | | 8.1 A | | | 8.3 A | | | 1.4 A |

| Level of Service Summary – Evening Peak Hour | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Intersection | LOS/Delay (s/veh) | | | | | | | | | | | | |
| | Lane Group | | | | | | | | | | | | |
| | EB L | EB T | EB R | WB L | WB T | WB R | NB L | NB T | NB R | SB L | SB T | SB R | Overall |
| Schaefer Hwy & Lyndon St | 21.5 C | 19.1 B | | 23.6 C | 23.4 C | | 6.1 A | 9.5 A | | 6.3 A | 9.7 A | | 13.0 B |
| Schaefer Hwy & Coolidge Bus Drive (Unsignalized) | | | | 25.8 D | | 0.0 A | | | | 11.3 B | 0.1 A | | 0.1 A |
| Schaefer Hwy & Coolidge Employee Drive (Unsignalized) | | | | 17.3 C | | 9.9 A | | | | 8.4 A | | | 0.9 A |
| Schaefer Hwy & Schoolcraft Rd | 25.6 C | 25.1 C | | 22.9 C | 23.6 C | | 8.2 A | 25.5 C | | 9.2 A | 24.5 C | | 24.1 C |
| Schaefer Hwy & Grand River Ave | 14.2 B | 11.0 B | | 11.1 B | 8.7 A | | 16.0 B | 26.3 C | 4.2 A | 43.5 D | 23.8 C | | 16.3 B |
| Schaefer Hwy & I-96 Service Rd | | | | 23.8 C | 19.3 B | | 3.7 A | 2.4 A | | | 3.2 A | | 6.6 A |
| Schaefer Hwy & Jeffries Service Dr | | 27.9 C | | | | | | 17.5 B | | 48.7 D | 4.6 A | | 19.2 B |
| Grand River Ave & I-96 Service Rd | | | | | 24.7 C | 10.6 B | 37.6 D | 0.5 A | | | 7.5 A | 1.1 A | 11.3 B |
| Grand River Ave & Jeffries Service Dr | | 36.8 D | | | | | | 4.5 A | | | 1.3 A | | 12.4 B |
| Left Turn Bridge & Jeffries Service Dr | | 2.6 A | | | | | | | | 0.1 A | | | 2.1 A |
| Schoolcraft Rd & Ward Ave | 9.2 A | 0.0 A | | 0.0 A | | | | 0.0 A | | | 13.9 B | | 0.6 A |
| Meyers Rd & Kendall St | | 12.0 B | | | 12.2 B | | 7.9 A | | | 8.0 A | | | 0.9 A |

### *Consolidated Access Point*

At the request of the Detroit Traffic Engineering Department, consolidating the two driveways on Schaefer Highway with both buses and employee traffic using one driveway was considered as part of this analysis. An operational analysis was conducted which combined the bus and employee traffic volumes at a single entrance on Schaefer Highway. Based on the analysis conducted and described above, the proposed driveway intersection was assumed to be controlled by a traffic signal and a southbound left turn lane was assumed to be provided on Schaefer Highway. The Synchro analysis found that a consolidated driveway would be expected to operate at acceptable levels of service in this scenario.

Providing only one access point to the site for all bus, truck, employee and visitor traffic results in logistical and operational challenges internal the site, however. This site will also be secured with guard houses and gates for access. Separate guard houses must be provided for bus and truck traffic and for passenger car traffic to accommodate the different methods for gaining access (key cards, badges, paperwork, etc.), accommodate the different vehicle sizes, and ensure efficient ingress and egress.

The safest environment for passenger car, bus and truck traffic to mix is on the public roadway system that is designed for this variation in vehicle type and size and where drivers expect it. Once on site, drivers of passenger vehicles are not expecting to encounter large vehicles. Drivers of heavy vehicles expect that once on site, they have the space and freedom to maneuver without the expectation of encountering smaller vehicles. For these reasons, industrial facilities such as this are typically designed to separate access and circulation of passenger and heavy vehicle traffic to minimize the potential for conflicts and, thus, crashes between the two.

Separate access drives for the site on Schaefer Highway are expected to operate well as described in the Build Conditions analysis section above. Consolidating the access to one driveway is expected to result in conflicts and challenges detrimental to the operations of the proposed facility. Therefore, it is recommended that two access driveways be provided according to the proposed site plan in Figure 3.

### *Emergency Access Use*

In certain emergency situations, it may be necessary for buses to utilize the Emergency Access driveway proposed on the east side of the site at the intersection of Ward and Kendall Avenues. This situation was analyzed as it pertains to its expected impact on the intersections of Ward Avenue with Schoolcraft Road and Kendall Avenue at Meyers Road. Both intersections operate with minor leg stop control, however, the Ward Avenue and Schoolcraft intersection was previously controlled by a traffic signal. The traffic signal was removed in 2017 or 2018. An analysis was performed assuming approximately 50 buses would exit the Emergency Access driveway during the Mid-Day peak hour and distribute according to the distribution model discussed above. The analysis found that in this situation, both intersections would continue to operate at acceptable levels of service of LOS C or better. Therefore, no mitigation measures are expected to be needed in the event that the Emergency Access needs to temporarily be used by buses.

## CONCLUSIONS

DLZ analyzed the expected traffic impacts of the proposed Coolidge Bus Operations and Maintenance Facility on the area roadway network including Schaefer Highway between Lyndon Street and the Jeffries Freeway (I-96). The study resulted in the following recommendations:

1. Provide separate site access points for buses and employees per the site plan, consolidating the access points into one is not recommended.
2. Westbound stop controls of the proposed site driveways for buses and employees at Schaefer Highway are recommended.
3. Monitor the westbound approach of the bus driveway during the Mid-Day peak hour near the horizon year as the intersection capacity is forecasted to approach LOS E.
4. Left turn lanes on Shaefer Highway were not found to be warranted for the Opening Year 2025 Initial Build Scenario based on forecasted traffic volumes and MDOT's Geometric Design Guidance. A southbound left turn lane may be warranted at the employee driveway in the year 2045 Full Build Scenario.
5. In emergency situations where buses must exit via the Emergency Access driveway, the intersections of Ward Avenue / Schoolcraft Road and Kendall Street / Meyers Road are expected to operate at acceptable levels of service with no mitigation measures needed.

With these recommendations, the study area intersections are expected to operate at acceptable levels of service with the proposed Coolidge Bus facility operating at full capacity in the year 2045. One possible exception is the proposed bus driveway during peak hours. Operations at this driveway should be monitored, and mitigation measures identified if needed, as the horizon year approaches.

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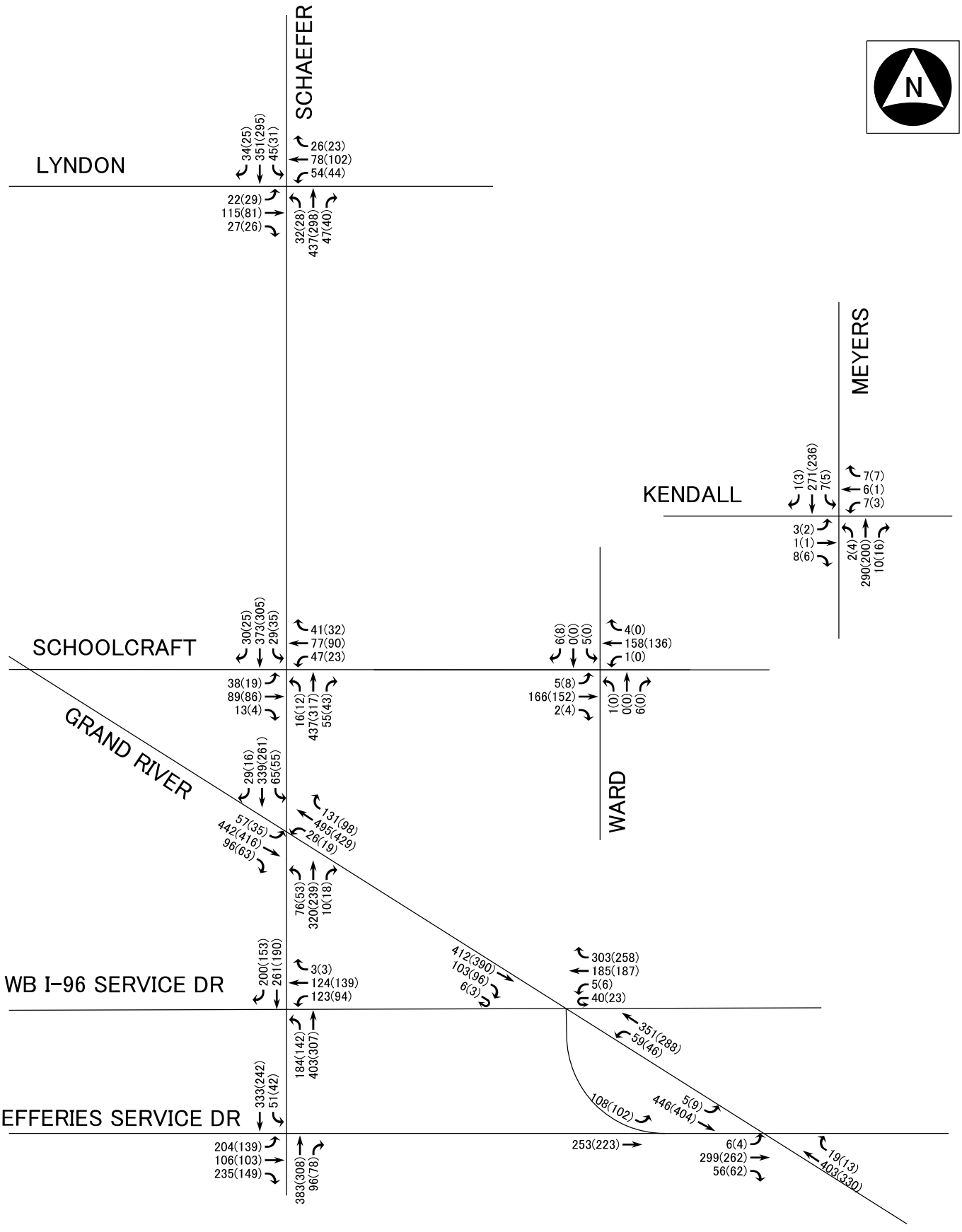
INNOVATIVE IDEAS
EXCEPTIONAL DESIGN
UNMATCHED CLIENT SERVICE

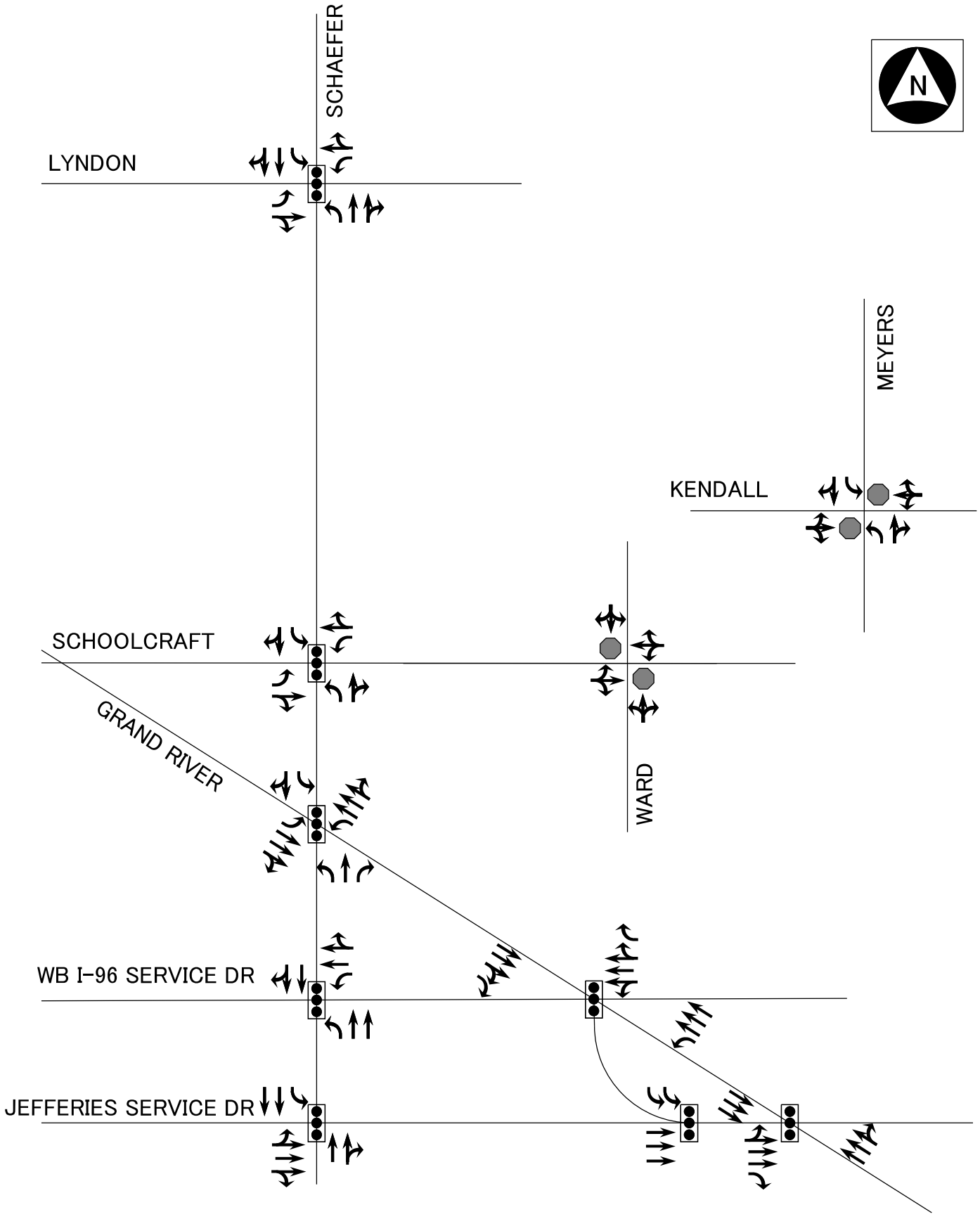
# TRAFFIC VOLUME AND LANE CONFIGURATION EXHIBITS




DLZ

# EXISTING (2021)

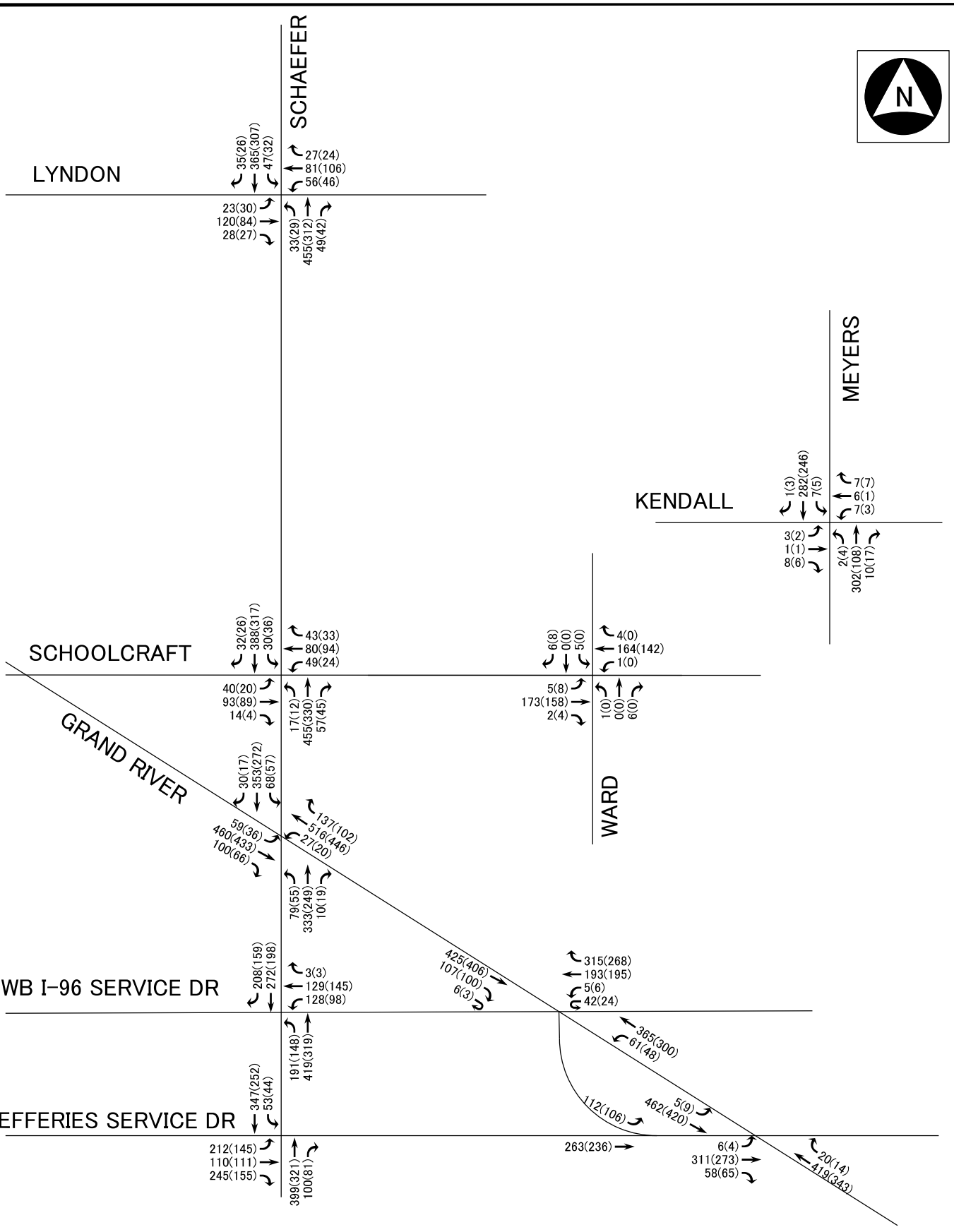
EXHIBIT 1
PEAK HOUR
TURNING MOVEMENT VOLUMES
MID-DAY (EVENING)




DLZ

# EXISTING (2021)

EXHIBIT 2
LANE CONFIGURATION

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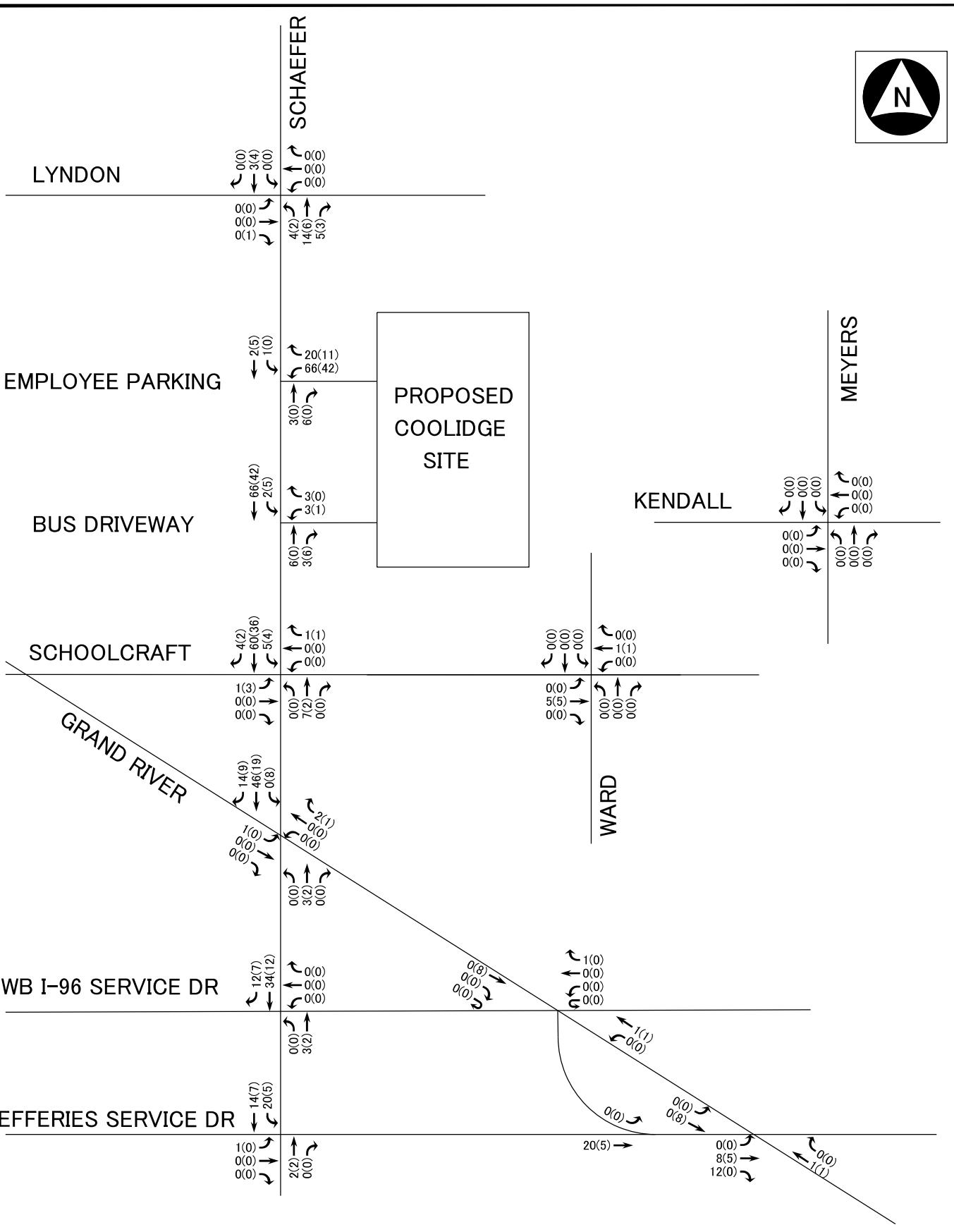
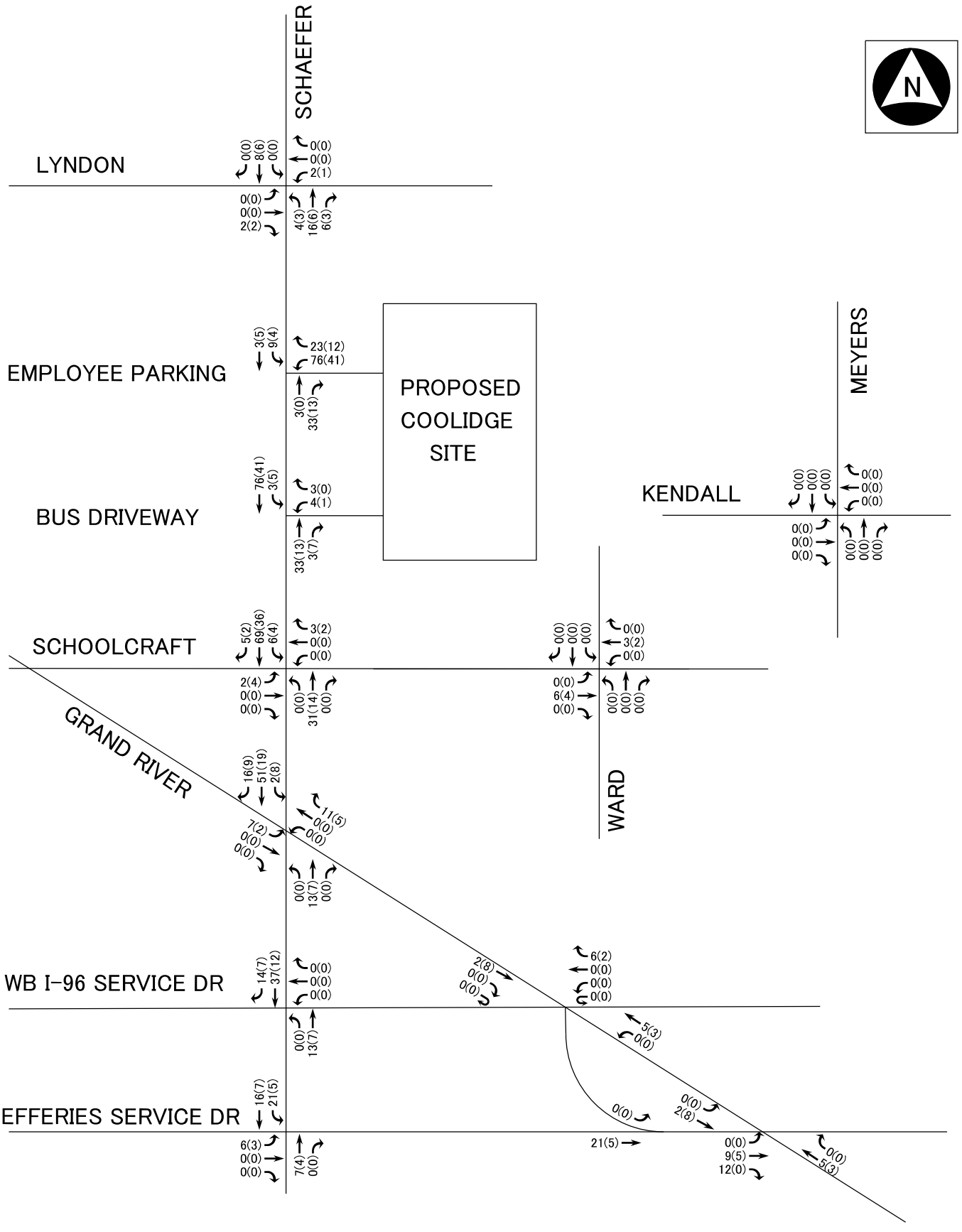
# PROJECTED NO-BUILD (2025)

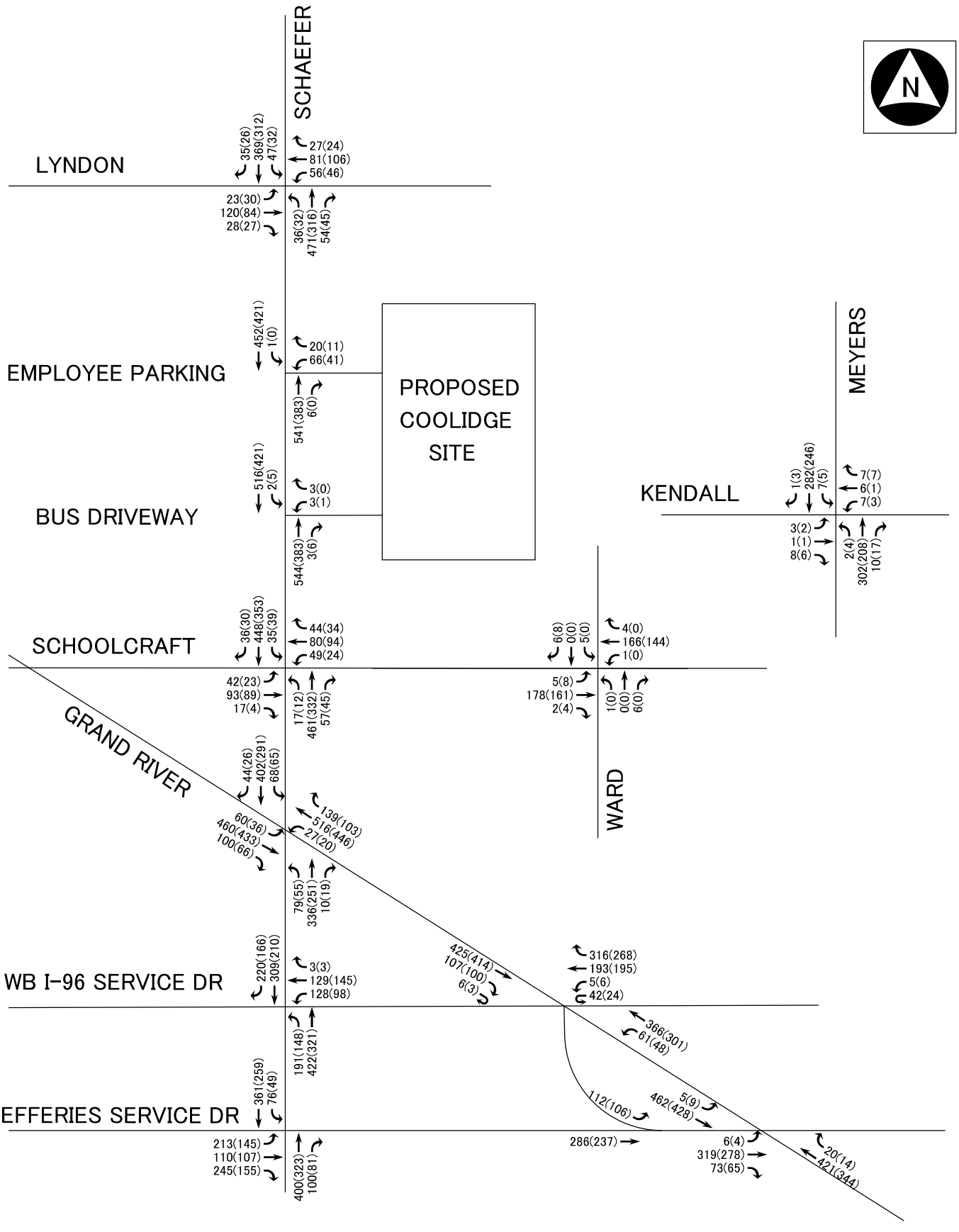
EXHIBIT 3
PEAK HOUR
TURNING MOVEMENT VOLUMES
MID-DAY (EVENING)




| | | |
|---|---|---|
| DLZ | PROPOSED SITE (2025) | EXHIBIT 4-1<br>PEAK HOUR<br>TURNING MOVEMENT VOLUMES<br>MID-DAY (EVENING) |



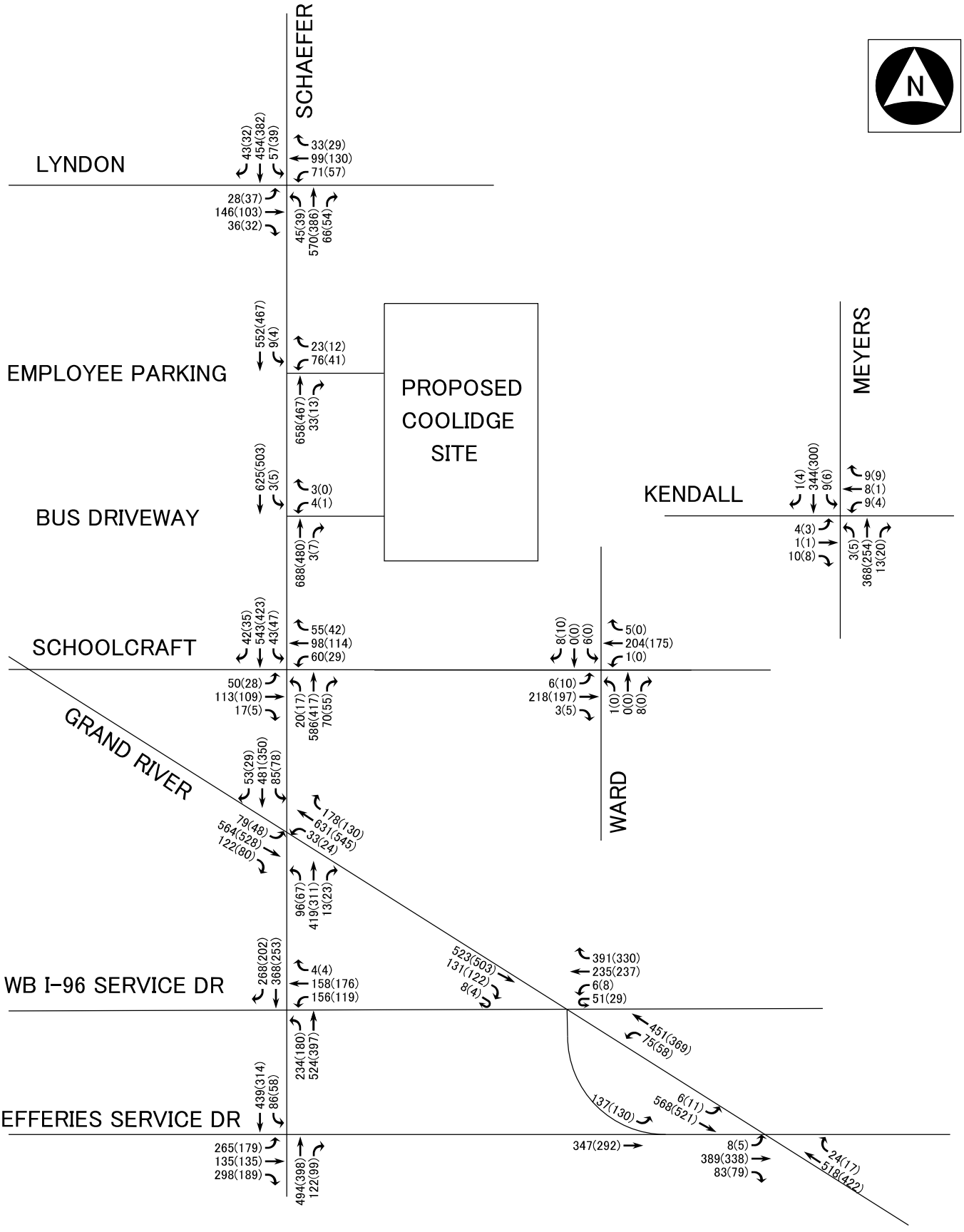

| | | |
|---|---|---|
| DLZ | PROPOSED SITE (2045) | EXHIBIT 4-2<br>PEAK HOUR<br>TURNING MOVEMENT VOLUMES<br>MID-DAY (EVENING) |




DLZ

# PROJECTED BUILD (2025)

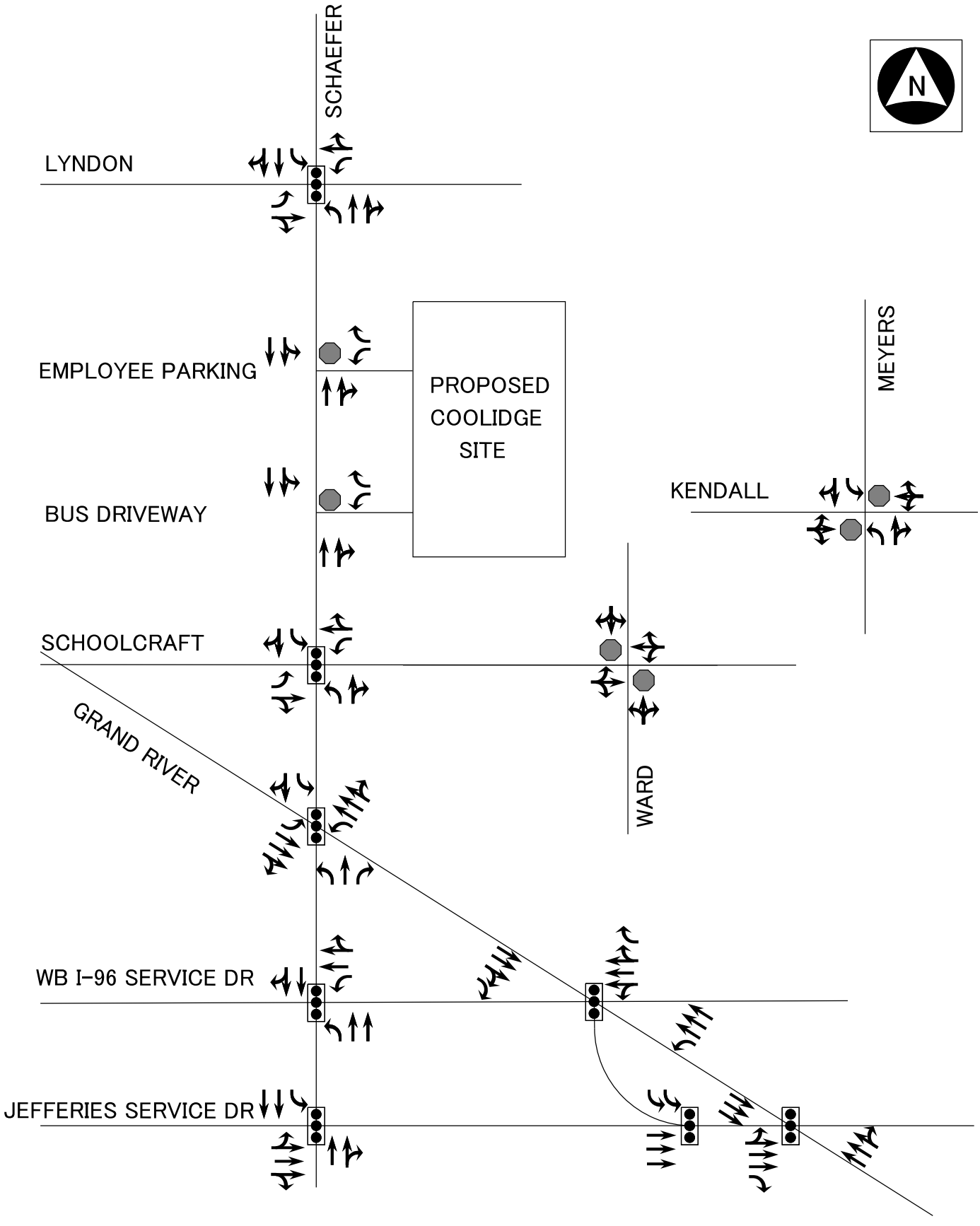
EXHIBIT 5-1
PEAK HOUR
TURNING MOVEMENT VOLUMES
MID-DAY (EVENING)




DLZ

# PROJECTED BUILD (2045)

EXHIBIT 5-2
PEAK HOUR
TURNING MOVEMENT VOLUMES
MID-DAY (EVENING)

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# PROPOSED BUILD (2025)

EXHIBIT 6
LANE CONFIGURATION

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INNOVATIVE IDEAS
EXCEPTIONAL DESIGN
UNMATCHED CLIENT SERVICE

# APPENDIX A

# TRAFFIC TURNING MOVEMENT COUNTS

Unit Number:

DLZ
8430 West Bryn Mawr Avenue, Suite 100

Chicago, Illinois, United States 60631
(773) 283-2600

Count Name: Schaefer Hwy & Lyndon St
Site Code: 1942-6994-50/0800/2000
Start Date: 06/15/2021
Page No: 1

# Turning Movement Data

| Start Time | Schaefer Hwy. Southbound | | | | | | Lyndon St. Westbound | | | | | | Schaefer Hwy. Northbound | | | | | | Lyndon St. Eastbound | | | | | | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Right | Thru | Left | U-Turn | Peds | App. Total | Right | Thru | Left | U-Turn | Peds | App. Total | Right | Thru | Left | U-Turn | Peds | App. Total | Right | Thru | Left | U-Turn | Peds | App. Total | |
| 12:30 PM | 5 | 70 | 12 | 0 | 1 | 87 | 7 | 17 | 14 | 0 | 0 | 38 | 11 | 75 | 4 | 0 | 1 | 90 | 6 | 23 | 6 | 0 | 2 | 35 | 250 |
| 12:45 PM | 5 | 76 | 9 | 0 | 1 | 90 | 5 | 23 | 12 | 0 | 1 | 40 | 13 | 70 | 5 | 0 | 3 | 88 | 5 | 30 | 1 | 0 | 1 | 36 | 254 |
| Hourly Total | 10 | 146 | 21 | 0 | 2 | 177 | 12 | 40 | 26 | 0 | 1 | 78 | 24 | 145 | 9 | 0 | 4 | 178 | 11 | 53 | 7 | 0 | 3 | 71 | 504 |
| 1:00 PM | 5 | 57 | 6 | 0 | 1 | 68 | 12 | 21 | 12 | 0 | 0 | 45 | 8 | 83 | 7 | 0 | 2 | 98 | 4 | 28 | 9 | 0 | 1 | 41 | 252 |
| 1:15 PM | 2 | 85 | 12 | 0 | 1 | 99 | 10 | 18 | 17 | 0 | 0 | 45 | 17 | 83 | 16 | 0 | 0 | 116 | 6 | 20 | 11 | 0 | 0 | 37 | 297 |
| 1:30 PM | 4 | 78 | 13 | 0 | 0 | 95 | 4 | 18 | 12 | 0 | 2 | 34 | 15 | 78 | 9 | 0 | 0 | 102 | 5 | 27 | 6 | 0 | 0 | 38 | 269 |
| 1:45 PM | 10 | 80 | 11 | 0 | 0 | 101 | 5 | 14 | 12 | 0 | 0 | 31 | 16 | 91 | 12 | 0 | 0 | 119 | 9 | 21 | 6 | 0 | 0 | 36 | 287 |
| Hourly Total | 21 | 300 | 42 | 0 | 2 | 363 | 31 | 71 | 53 | 0 | 2 | 155 | 56 | 335 | 44 | 0 | 2 | 435 | 24 | 96 | 32 | 0 | 1 | 152 | 1105 |
| 2:00 PM | 7 | 74 | 6 | 0 | 0 | 87 | 8 | 28 | 12 | 0 | 3 | 48 | 4 | 97 | 5 | 0 | 1 | 106 | 7 | 38 | 2 | 0 | 2 | 47 | 288 |
| 2:15 PM | 13 | 92 | 15 | 0 | 0 | 120 | 9 | 18 | 18 | 0 | 0 | 45 | 12 | 105 | 6 | 0 | 1 | 123 | 6 | 29 | 8 | 0 | 4 | 43 | 331 |
| *** BREAK *** | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Hourly Total | 20 | 166 | 21 | 0 | 0 | 207 | 17 | 46 | 30 | 0 | 3 | 93 | 16 | 202 | 11 | 0 | 2 | 229 | 13 | 67 | 10 | 0 | 6 | 90 | 619 |
| 8:00 PM | 2 | 66 | 5 | 0 | 0 | 73 | 6 | 30 | 9 | 0 | 0 | 45 | 13 | 82 | 7 | 1 | 2 | 103 | 6 | 19 | 10 | 0 | 3 | 35 | 256 |
| 8:15 PM | 12 | 73 | 13 | 0 | 2 | 98 | 6 | 21 | 13 | 0 | 0 | 40 | 13 | 78 | 3 | 0 | 2 | 94 | 9 | 20 | 7 | 0 | 2 | 36 | 268 |
| 8:30 PM | 5 | 78 | 6 | 0 | 0 | 89 | 5 | 26 | 15 | 0 | 0 | 46 | 6 | 73 | 7 | 0 | 1 | 86 | 4 | 22 | 6 | 0 | 1 | 32 | 253 |
| 8:45 PM | 6 | 68 | 7 | 0 | 0 | 81 | 6 | 25 | 7 | 0 | 1 | 38 | 8 | 65 | 10 | 0 | 1 | 83 | 7 | 20 | 6 | 0 | 0 | 33 | 235 |
| Hourly Total | 25 | 285 | 31 | 0 | 2 | 341 | 23 | 102 | 44 | 0 | 1 | 169 | 40 | 298 | 27 | 1 | 6 | 366 | 26 | 81 | 29 | 0 | 6 | 136 | 1012 |
| 9:00 PM | 4 | 59 | 4 | 0 | 0 | 67 | 9 | 17 | 14 | 0 | 2 | 40 | 18 | 58 | 7 | 0 | 3 | 83 | 10 | 13 | 5 | 0 | 0 | 28 | 218 |
| 9:15 PM | 6 | 58 | 2 | 0 | 1 | 66 | 4 | 14 | 12 | 0 | 0 | 30 | 7 | 57 | 4 | 0 | 1 | 68 | 8 | 16 | 1 | 0 | 2 | 25 | 189 |
| 9:30 PM | 3 | 58 | 3 | 0 | 0 | 64 | 5 | 11 | 8 | 0 | 0 | 24 | 5 | 61 | 1 | 0 | 0 | 67 | 5 | 19 | 3 | 0 | 0 | 27 | 182 |
| 9:45 PM | 4 | 60 | 4 | 0 | 0 | 68 | 3 | 13 | 8 | 0 | 0 | 24 | 6 | 63 | 2 | 0 | 0 | 71 | 2 | 9 | 4 | 0 | 4 | 15 | 178 |
| Hourly Total | 17 | 235 | 13 | 0 | 1 | 265 | 21 | 55 | 42 | 0 | 2 | 118 | 36 | 239 | 14 | 0 | 4 | 289 | 25 | 57 | 13 | 0 | 6 | 95 | 767 |
| Grand Total | 93 | 1132 | 128 | 0 | 7 | 1353 | 104 | 314 | 195 | 0 | 9 | 613 | 172 | 1219 | 105 | 1 | 18 | 1497 | 99 | 354 | 91 | 0 | 22 | 544 | 4007 |
| Approach % | 6.9 | 83.7 | 9.5 | 0.0 | - | - | 17.0 | 51.2 | 31.8 | 0.0 | - | - | 11.5 | 81.4 | 7.0 | 0.1 | - | - | 18.2 | 65.1 | 16.7 | 0.0 | - | - | - |
| Total % | 2.3 | 28.3 | 3.2 | 0.0 | - | 33.8 | 2.6 | 7.8 | 4.9 | 0.0 | - | 15.3 | 4.3 | 30.4 | 2.6 | 0.0 | - | 37.4 | 2.5 | 8.8 | 2.3 | 0.0 | - | 13.6 | - |
| Lights | 92 | 1114 | 125 | 0 | - | 1331 | 100 | 310 | 186 | 0 | - | 596 | 168 | 1192 | 104 | 1 | - | 1465 | 98 | 348 | 90 | 0 | - | 536 | 3928 |
| % Lights | 98.9 | 98.4 | 97.7 | - | - | 98.4 | 96.2 | 98.7 | 95.4 | - | - | 97.2 | 97.7 | 97.8 | 99.0 | 100.0 | - | 97.9 | 99.0 | 98.3 | 98.9 | - | - | 98.5 | 98.0 |
| Buses | 0 | 3 | 0 | 0 | - | 3 | 0 | 0 | 0 | 0 | - | 0 | 0 | 4 | 0 | 0 | - | 4 | 0 | 1 | 0 | 0 | - | 1 | 8 |
| % Buses | 0.0 | 0.3 | 0.0 | - | - | 0.2 | 0.0 | 0.0 | 0.0 | - | - | 0.0 | 0.0 | 0.3 | 0.0 | 0.0 | - | 0.3 | 0.0 | 0.3 | 0.0 | - | - | 0.2 | 0.2 |
| Single-Unit Trucks | 1 | 8 | 3 | 0 | - | 12 | 3 | 4 | 8 | 0 | - | 15 | 2 | 18 | 1 | 0 | - | 21 | 1 | 5 | 1 | 0 | - | 7 | 55 |
| % Single-Unit Trucks | 1.1 | 0.7 | 2.3 | - | - | 0.9 | 2.9 | 1.3 | 4.1 | - | - | 2.4 | 1.2 | 1.5 | 1.0 | 0.0 | - | 1.4 | 1.0 | 1.4 | 1.1 | - | - | 1.3 | 1.4 |
| Articulated Trucks | 0 | 7 | 0 | 0 | - | 7 | 1 | 0 | 1 | 0 | - | 2 | 2 | 5 | 0 | 0 | - | 7 | 0 | 0 | 0 | 0 | - | 0 | 16 |
| % Articulated Trucks | 0.0 | 0.6 | 0.0 | - | - | 0.5 | 1.0 | 0.0 | 0.5 | - | - | 0.3 | 1.2 | 0.4 | 0.0 | 0.0 | - | 0.5 | 0.0 | 0.0 | 0.0 | - | - | 0.0 | 0.4 |
| Bicycles on Crosswalk | - | - | - | - | 3 | - | - | - | - | - | 1 | - | - | - | - | - | 4 | - | - | - | - | - | 2 | - | - |
| % Bicycles on Crosswalk | - | - | - | - | 42.9 | - | - | - | - | - | 11.1 | - | - | - | - | - | 22.2 | - | - | - | - | - | 9.1 | - | - |
| Pedestrians | - | - | - | - | 4 | - | - | - | - | - | 8 | - | - | - | - | - | 14 | - | - | - | - | - | 20 | - | - |

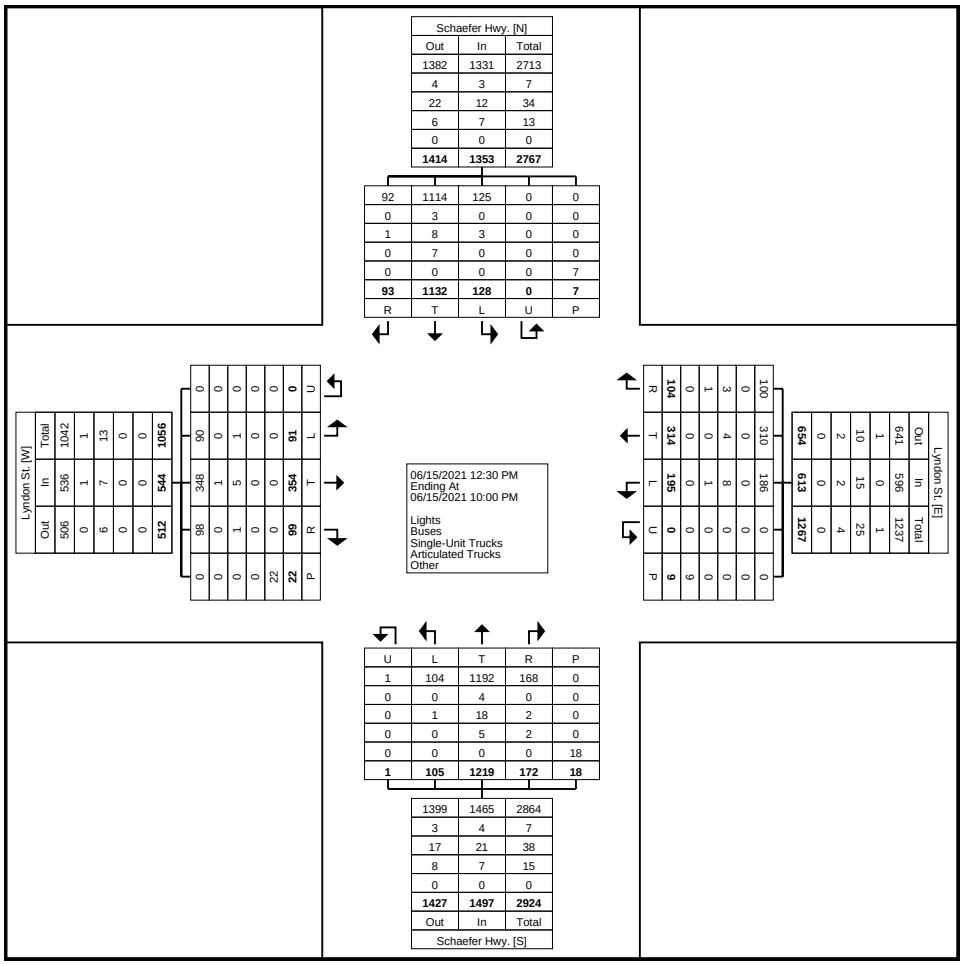
| | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| % Pedestrians | - | - | - | - | 57.1 | - | - | - | - | - | 88.9 | - | - | - | - | - | 77.8 | - | - | - | - | - | 90.9 | - | - |

Unit Number:

DLZ
8430 West Bryn Mawr Avenue, Suite 100

Chicago, Illinois, United States 60631
(773) 283-2600

Count Name: Schaefer Hwy & Lyndon St
Site Code: 1942-6994-50/0800/2000
Start Date: 06/15/2021
Page No: 3




Turning Movement Data Plot

Unit Number:

DLZ
8430 West Bryn Mawr Avenue, Suite 100

Chicago, Illinois, United States 60631
(773) 283-2600

Count Name: Schaefer Hwy & Lyndon St
Site Code: 1942-6994-50/0800/2000
Start Date: 06/15/2021


# Turning Movement Peak Hour Data (1:30 PM)

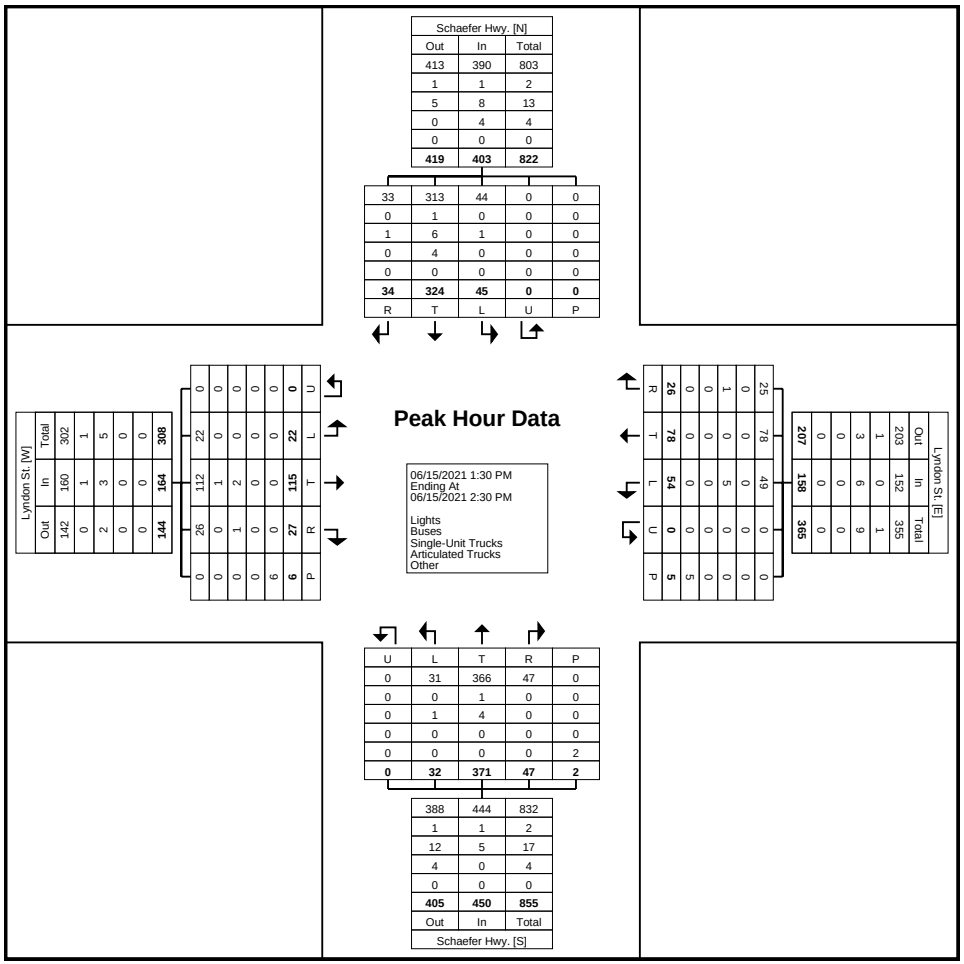
| Start Time | Schaefer Hwy. Southbound | | | | | | Lyndon St. Westbound | | | | | | Schaefer Hwy. Northbound | | | | | | Lyndon St. Eastbound | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Right | Thru | Left | U-Turn | Peds | App. Total | Right | Thru | Left | U-Turn | Peds | App. Total | Right | Thru | Left | U-Turn | Peds | App. Total | Right | Thru | Left | U-Turn | Peds | App. Total | Int. Total |
| 1:30 PM | 4 | 78 | 13 | 0 | 0 | 95 | 4 | 18 | 12 | 0 | 2 | 34 | 15 | 78 | 9 | 0 | 0 | 102 | 5 | 27 | 6 | 0 | 0 | 38 | 269 |
| 1:45 PM | 10 | 80 | 11 | 0 | 0 | 101 | 5 | 14 | 12 | 0 | 0 | 31 | 16 | 91 | 12 | 0 | 0 | 119 | 9 | 21 | 6 | 0 | 0 | 36 | 287 |
| 2:00 PM | 7 | 74 | 6 | 0 | 0 | 87 | 8 | 28 | 12 | 0 | 3 | 48 | 4 | 97 | 5 | 0 | 1 | 106 | 7 | 38 | 2 | 0 | 2 | 47 | 288 |
| 2:15 PM | 13 | 92 | 15 | 0 | 0 | 120 | 9 | 18 | 18 | 0 | 0 | 45 | 12 | 105 | 6 | 0 | 1 | 123 | 6 | 29 | 8 | 0 | 4 | 43 | 331 |
| Total | 34 | 324 | 45 | 0 | 0 | 403 | 26 | 78 | 54 | 0 | 5 | 158 | 47 | 371 | 32 | 0 | 2 | 450 | 27 | 115 | 22 | 0 | 6 | 164 | 1175 |
| Approach % | 8.4 | 80.4 | 11.2 | 0.0 | - | - | 16.5 | 49.4 | 34.2 | 0.0 | - | - | 10.4 | 82.4 | 7.1 | 0.0 | - | - | 16.5 | 70.1 | 13.4 | 0.0 | - | - | - |
| Total % | 2.9 | 27.6 | 3.8 | 0.0 | - | 34.3 | 2.2 | 6.6 | 4.6 | 0.0 | - | 13.4 | 4.0 | 31.6 | 2.7 | 0.0 | - | 38.3 | 2.3 | 9.8 | 1.9 | 0.0 | - | 14.0 | - |
| PHF | 0.654 | 0.880 | 0.750 | 0.000 | - | 0.840 | 0.722 | 0.696 | 0.750 | 0.000 | - | 0.823 | 0.734 | 0.883 | 0.667 | 0.000 | - | 0.915 | 0.750 | 0.757 | 0.688 | 0.000 | - | 0.872 | 0.887 |
| Lights | 33 | 313 | 44 | 0 | - | 390 | 25 | 78 | 49 | 0 | - | 152 | 47 | 366 | 31 | 0 | - | 444 | 26 | 112 | 22 | 0 | - | 160 | 1146 |
| % Lights | 97.1 | 96.6 | 97.8 | - | - | 96.8 | 96.2 | 100.0 | 90.7 | - | - | 96.2 | 100.0 | 98.7 | 96.9 | - | - | 98.7 | 96.3 | 97.4 | 100.0 | - | - | 97.6 | 97.5 |
| Buses | 0 | 1 | 0 | 0 | - | 1 | 0 | 0 | 0 | 0 | - | 0 | 0 | 1 | 0 | 0 | - | 1 | 0 | 1 | 0 | 0 | - | 1 | 3 |
| % Buses | 0.0 | 0.3 | 0.0 | - | - | 0.2 | 0.0 | 0.0 | 0.0 | - | - | 0.0 | 0.0 | 0.3 | 0.0 | - | - | 0.2 | 0.0 | 0.9 | 0.0 | - | - | 0.6 | 0.3 |
| Single-Unit Trucks | 1 | 6 | 1 | 0 | - | 8 | 1 | 0 | 5 | 0 | - | 6 | 0 | 4 | 1 | 0 | - | 5 | 1 | 2 | 0 | 0 | - | 3 | 22 |
| % Single-Unit Trucks | 2.9 | 1.9 | 2.2 | - | - | 2.0 | 3.8 | 0.0 | 9.3 | - | - | 3.8 | 0.0 | 1.1 | 3.1 | - | - | 1.1 | 3.7 | 1.7 | 0.0 | - | - | 1.8 | 1.9 |
| Articulated Trucks | 0 | 4 | 0 | 0 | - | 4 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 4 |
| % Articulated Trucks | 0.0 | 1.2 | 0.0 | - | - | 1.0 | 0.0 | 0.0 | 0.0 | - | - | 0.0 | 0.0 | 0.0 | 0.0 | - | - | 0.0 | 0.0 | 0.0 | 0.0 | - | - | 0.0 | 0.3 |
| Bicycles on Crosswalk | - | - | - | - | 0 | - | - | - | - | - | 1 | - | - | - | - | - | 0 | - | - | - | - | - | 1 | - | - |
| % Bicycles on Crosswalk | - | - | - | - | - | - | - | - | - | - | 20.0 | - | - | - | - | - | 0.0 | - | - | - | - | - | 16.7 | - | - |
| Pedestrians | - | - | - | - | 0 | - | - | - | - | - | 4 | - | - | - | - | - | 2 | - | - | - | - | - | 5 | - | - |
| % Pedestrians | - | - | - | - | - | - | - | - | - | - | 80.0 | - | - | - | - | - | 100.0 | - | - | - | - | - | 83.3 | - | - |

Unit Number:

DLZ
8430 West Bryn Mawr Avenue, Suite 100

Chicago, Illinois, United States 60631
(773) 283-2600

Count Name: Schaefer Hwy & Lyndon St
Site Code: 1942-6994-50/0800/2000
Start Date: 06/15/2021


Turning Movement Peak Hour Data Plot (1:30 PM)

Unit Number:

DLZ
8430 West Bryn Mawr Avenue, Suite 100

Chicago, Illinois, United States 60631
(773) 283-2600

Count Name: Schaefer Hwy & Lyndon St
Site Code: 1942-6994-50/0800/2000
Start Date: 06/15/2021


# Turning Movement Peak Hour Data (8:00 PM)

| Start Time | Schaefer Hwy. Southbound | | | | | | Lyndon St. Westbound | | | | | | Schaefer Hwy. Northbound | | | | | | Lyndon St. Eastbound | | | | | | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Right | Thru | Left | U-Turn | Peds | App. Total | Right | Thru | Left | U-Turn | Peds | App. Total | Right | Thru | Left | U-Turn | Peds | App. Total | Right | Thru | Left | U-Turn | Peds | App. Total | |
| 8:00 PM | 2 | 66 | 5 | 0 | 0 | 73 | 6 | 30 | 9 | 0 | 0 | 45 | 13 | 82 | 7 | 1 | 2 | 103 | 6 | 19 | 10 | 0 | 3 | 35 | 256 |
| 8:15 PM | 12 | 73 | 13 | 0 | 2 | 98 | 6 | 21 | 13 | 0 | 0 | 40 | 13 | 78 | 3 | 0 | 2 | 94 | 9 | 20 | 7 | 0 | 2 | 36 | 268 |
| 8:30 PM | 5 | 78 | 6 | 0 | 0 | 89 | 5 | 26 | 15 | 0 | 0 | 46 | 6 | 73 | 7 | 0 | 1 | 86 | 4 | 22 | 6 | 0 | 1 | 32 | 253 |
| 8:45 PM | 6 | 68 | 7 | 0 | 0 | 81 | 6 | 25 | 7 | 0 | 1 | 38 | 8 | 65 | 10 | 0 | 1 | 83 | 7 | 20 | 6 | 0 | 0 | 33 | 235 |
| Total | 25 | 285 | 31 | 0 | 2 | 341 | 23 | 102 | 44 | 0 | 1 | 169 | 40 | 298 | 27 | 1 | 6 | 366 | 26 | 81 | 29 | 0 | 6 | 136 | 1012 |
| Approach % | 7.3 | 83.6 | 9.1 | 0.0 | - | - | 13.6 | 60.4 | 26.0 | 0.0 | - | - | 10.9 | 81.4 | 7.4 | 0.3 | - | - | 19.1 | 59.6 | 21.3 | 0.0 | - | - | - |
| Total % | 2.5 | 28.2 | 3.1 | 0.0 | - | 33.7 | 2.3 | 10.1 | 4.3 | 0.0 | - | 16.7 | 4.0 | 29.4 | 2.7 | 0.1 | - | 36.2 | 2.6 | 8.0 | 2.9 | 0.0 | - | 13.4 | - |
| PHF | 0.521 | 0.913 | 0.596 | 0.000 | - | 0.870 | 0.958 | 0.850 | 0.733 | 0.000 | - | 0.918 | 0.769 | 0.909 | 0.675 | 0.250 | - | 0.888 | 0.722 | 0.920 | 0.725 | 0.000 | - | 0.944 | 0.944 |
| Lights | 25 | 284 | 30 | 0 | - | 339 | 23 | 102 | 44 | 0 | - | 169 | 39 | 295 | 27 | 1 | - | 362 | 26 | 81 | 29 | 0 | - | 136 | 1006 |
| % Lights | 100.0 | 99.6 | 96.8 | - | - | 99.4 | 100.0 | 100.0 | 100.0 | - | - | 100.0 | 97.5 | 99.0 | 100.0 | 100.0 | - | 98.9 | 100.0 | 100.0 | 100.0 | - | - | 100.0 | 99.4 |
| Buses | 0 | 1 | 0 | 0 | - | 1 | 0 | 0 | 0 | 0 | - | 0 | 0 | 1 | 0 | 0 | - | 1 | 0 | 0 | 0 | 0 | - | 0 | 2 |
| % Buses | 0.0 | 0.4 | 0.0 | - | - | 0.3 | 0.0 | 0.0 | 0.0 | - | - | 0.0 | 0.0 | 0.3 | 0.0 | 0.0 | - | 0.3 | 0.0 | 0.0 | 0.0 | - | - | 0.0 | 0.2 |
| Single-Unit Trucks | 0 | 0 | 1 | 0 | - | 1 | 0 | 0 | 0 | 0 | - | 0 | 1 | 1 | 0 | 0 | - | 2 | 0 | 0 | 0 | 0 | - | 0 | 3 |
| % Single-Unit Trucks | 0.0 | 0.0 | 3.2 | - | - | 0.3 | 0.0 | 0.0 | 0.0 | - | - | 0.0 | 2.5 | 0.3 | 0.0 | 0.0 | - | 0.5 | 0.0 | 0.0 | 0.0 | - | - | 0.0 | 0.3 |
| Articulated Trucks | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 1 | 0 | 0 | - | 1 | 0 | 0 | 0 | 0 | - | 0 | 1 |
| % Articulated Trucks | 0.0 | 0.0 | 0.0 | - | - | 0.0 | 0.0 | 0.0 | 0.0 | - | - | 0.0 | 0.0 | 0.3 | 0.0 | 0.0 | - | 0.3 | 0.0 | 0.0 | 0.0 | - | - | 0.0 | 0.1 |
| Bicycles on Crosswalk | - | - | - | - | 1 | - | - | - | - | - | 0 | - | - | - | - | - | 2 | - | - | - | - | - | 0 | - | - |
| % Bicycles on Crosswalk | - | - | - | - | 50.0 | - | - | - | - | - | 0.0 | - | - | - | - | - | 33.3 | - | - | - | - | - | 0.0 | - | - |
| Pedestrians | - | - | - | - | 1 | - | - | - | - | - | 1 | - | - | - | - | - | 4 | - | - | - | - | - | 6 | - | - |
| % Pedestrians | - | - | - | - | 50.0 | - | - | - | - | - | 100.0 | - | - | - | - | - | 66.7 | - | - | - | - | - | 100.0 | - | - |

Unit Number:

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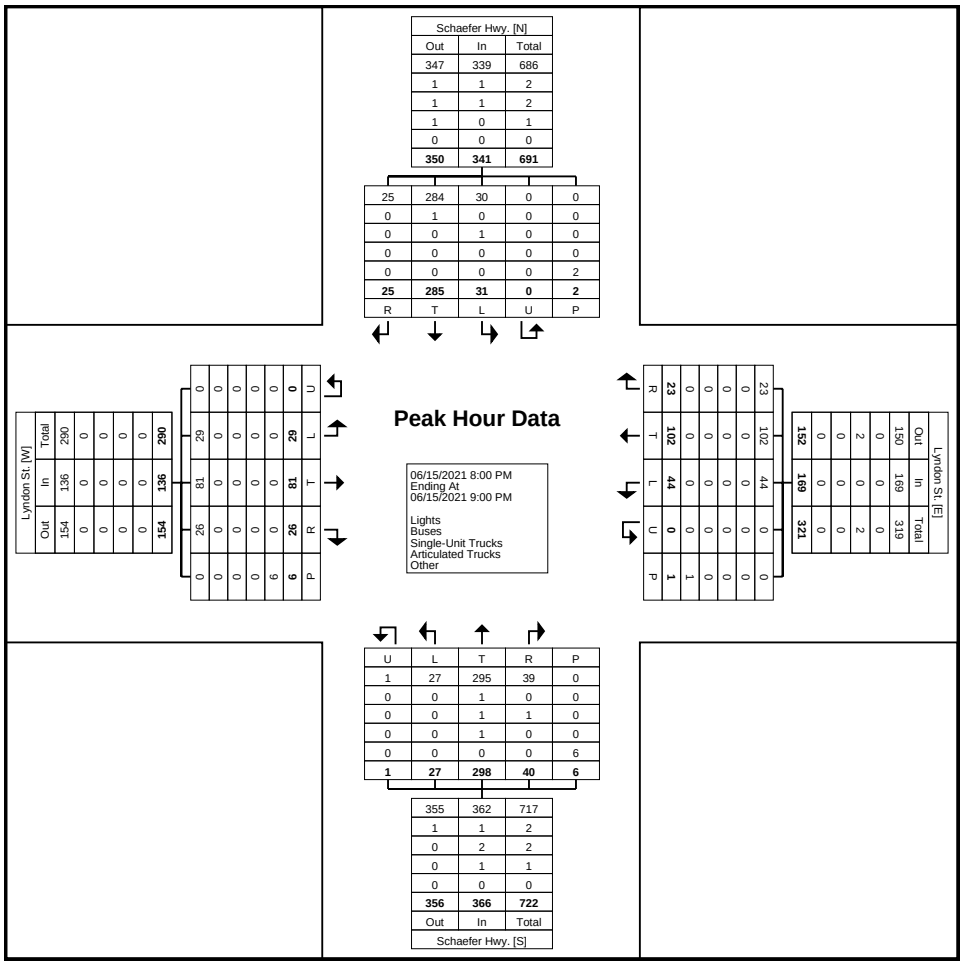
(773) 283-2600

Count Name: Schaefer Hwy & Lyndon St
Site Code: 1942-6994-50/0800/2000
Start Date: 06/15/2021


Turning Movement Peak Hour Data Plot (8:00 PM)

Unit Number:

DLZ
8430 West Bryn Mawr Avenue, Suite 100

Chicago, Illinois, United States 60631
(773) 283-2600

Count Name: Schafer Hwy & Schoolcraft
Site Code: 1942-6994-50/0800/2000
Start Date: 06/15/2021


# Turning Movement Data

| Start Time | Schaefer Hwy. Southbound | | | | | | Schoolcraft Westbound | | | | | | Schaefer Hwy. Northbound | | | | | | Schoolcraft Eastbound | | | | | | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Right | Thru | Left | U-Turn | Peds | App. Total | Right | Thru | Left | U-Turn | Peds | App. Total | Right | Thru | Left | U-Turn | Peds | App. Total | Right | Thru | Left | U-Turn | Peds | App. Total | |
| 12:30 PM | 2 | 80 | 3 | 0 | 0 | 85 | 8 | 12 | 5 | 0 | 1 | 25 | 7 | 82 | 6 | 0 | 1 | 95 | 3 | 20 | 10 | 0 | 0 | 33 | 238 |
| 12:45 PM | 7 | 88 | 8 | 0 | 0 | 103 | 5 | 26 | 7 | 0 | 1 | 38 | 18 | 92 | 6 | 0 | 0 | 116 | 2 | 21 | 4 | 0 | 0 | 27 | 284 |
| Hourly Total | 9 | 168 | 11 | 0 | 0 | 188 | 13 | 38 | 12 | 0 | 2 | 63 | 25 | 174 | 12 | 0 | 1 | 211 | 5 | 41 | 14 | 0 | 0 | 60 | 522 |
| 1:00 PM | 5 | 74 | 5 | 0 | 1 | 84 | 2 | 17 | 13 | 0 | 1 | 32 | 8 | 99 | 8 | 0 | 0 | 115 | 9 | 21 | 14 | 0 | 0 | 44 | 275 |
| 1:15 PM | 14 | 94 | 9 | 0 | 0 | 117 | 10 | 18 | 5 | 0 | 0 | 33 | 18 | 101 | 7 | 0 | 2 | 126 | 2 | 25 | 4 | 0 | 0 | 31 | 307 |
| 1:30 PM | 6 | 96 | 5 | 0 | 0 | 107 | 8 | 20 | 11 | 0 | 1 | 39 | 17 | 99 | 7 | 0 | 0 | 123 | 6 | 17 | 11 | 0 | 0 | 34 | 303 |
| 1:45 PM | 6 | 87 | 5 | 0 | 0 | 98 | 8 | 27 | 13 | 0 | 0 | 48 | 16 | 104 | 2 | 0 | 0 | 122 | 2 | 20 | 6 | 0 | 0 | 28 | 296 |
| Hourly Total | 31 | 351 | 24 | 0 | 1 | 406 | 28 | 82 | 42 | 0 | 2 | 152 | 59 | 403 | 24 | 0 | 2 | 486 | 19 | 83 | 35 | 0 | 0 | 137 | 1181 |
| 2:00 PM | 11 | 88 | 8 | 0 | 0 | 107 | 13 | 17 | 14 | 0 | 3 | 44 | 11 | 108 | 6 | 0 | 0 | 125 | 3 | 23 | 6 | 0 | 0 | 32 | 308 |
| 2:15 PM | 7 | 102 | 11 | 0 | 0 | 120 | 12 | 13 | 9 | 0 | 0 | 34 | 11 | 112 | 1 | 0 | 0 | 124 | 2 | 21 | 15 | 0 | 0 | 38 | 316 |
| *** BREAK *** | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Hourly Total | 18 | 190 | 19 | 0 | 0 | 227 | 25 | 30 | 23 | 0 | 3 | 78 | 22 | 220 | 7 | 0 | 0 | 249 | 5 | 44 | 21 | 0 | 0 | 70 | 624 |
| 8:00 PM | 3 | 70 | 7 | 0 | 0 | 80 | 9 | 28 | 3 | 0 | 1 | 40 | 5 | 82 | 4 | 0 | 0 | 91 | 3 | 34 | 6 | 0 | 0 | 43 | 254 |
| 8:15 PM | 9 | 75 | 9 | 0 | 0 | 93 | 9 | 20 | 5 | 0 | 2 | 34 | 14 | 85 | 4 | 0 | 3 | 103 | 1 | 11 | 9 | 0 | 0 | 21 | 251 |
| 8:30 PM | 10 | 65 | 10 | 0 | 1 | 85 | 7 | 24 | 8 | 0 | 1 | 39 | 15 | 73 | 3 | 0 | 2 | 91 | 0 | 18 | 2 | 0 | 0 | 20 | 235 |
| 8:45 PM | 3 | 60 | 9 | 0 | 0 | 72 | 7 | 18 | 7 | 0 | 2 | 32 | 9 | 69 | 1 | 0 | 1 | 79 | 0 | 23 | 2 | 0 | 1 | 25 | 208 |
| Hourly Total | 25 | 270 | 35 | 0 | 1 | 330 | 32 | 90 | 23 | 0 | 6 | 145 | 43 | 309 | 12 | 0 | 6 | 364 | 4 | 86 | 19 | 0 | 1 | 109 | 948 |
| 9:00 PM | 4 | 66 | 13 | 0 | 0 | 83 | 8 | 25 | 12 | 0 | 0 | 45 | 8 | 71 | 4 | 0 | 0 | 83 | 4 | 16 | 4 | 0 | 0 | 24 | 235 |
| 9:15 PM | 4 | 71 | 5 | 0 | 0 | 80 | 8 | 18 | 5 | 0 | 0 | 31 | 10 | 52 | 3 | 0 | 0 | 65 | 1 | 13 | 8 | 0 | 0 | 22 | 198 |
| 9:30 PM | 9 | 57 | 10 | 0 | 0 | 76 | 2 | 18 | 5 | 0 | 0 | 25 | 15 | 57 | 2 | 0 | 0 | 74 | 3 | 16 | 3 | 0 | 0 | 22 | 197 |
| 9:45 PM | 2 | 51 | 10 | 0 | 0 | 63 | 4 | 17 | 5 | 0 | 0 | 26 | 8 | 58 | 1 | 0 | 0 | 67 | 0 | 12 | 5 | 0 | 0 | 17 | 173 |
| Hourly Total | 19 | 245 | 38 | 0 | 0 | 302 | 22 | 78 | 27 | 0 | 0 | 127 | 41 | 238 | 10 | 0 | 0 | 289 | 8 | 57 | 20 | 0 | 0 | 85 | 803 |
| Grand Total | 102 | 1224 | 127 | 0 | 2 | 1453 | 120 | 318 | 127 | 0 | 13 | 565 | 190 | 1344 | 65 | 0 | 9 | 1599 | 41 | 311 | 109 | 0 | 1 | 461 | 4078 |
| Approach % | 7.0 | 84.2 | 8.7 | 0.0 | - | - | 21.2 | 56.3 | 22.5 | 0.0 | - | - | 11.9 | 84.1 | 4.1 | 0.0 | - | - | 8.9 | 67.5 | 23.6 | 0.0 | - | - | - |
| Total % | 2.5 | 30.0 | 3.1 | 0.0 | - | 35.6 | 2.9 | 7.8 | 3.1 | 0.0 | - | 13.9 | 4.7 | 33.0 | 1.6 | 0.0 | - | 39.2 | 1.0 | 7.6 | 2.7 | 0.0 | - | 11.3 | - |
| Lights | 101 | 1179 | 124 | 0 | - | 1404 | 120 | 314 | 121 | 0 | - | 555 | 183 | 1293 | 65 | 0 | - | 1541 | 40 | 305 | 108 | 0 | - | 453 | 3953 |
| % Lights | 99.0 | 96.3 | 97.6 | - | - | 96.6 | 100.0 | 98.7 | 95.3 | - | - | 98.2 | 96.3 | 96.2 | 100.0 | - | - | 96.4 | 97.6 | 98.1 | 99.1 | - | - | 98.3 | 96.9 |
| Buses | 0 | 4 | 0 | 0 | - | 4 | 0 | 2 | 0 | 0 | - | 2 | 0 | 4 | 0 | 0 | - | 4 | 0 | 2 | 0 | 0 | - | 2 | 12 |
| % Buses | 0.0 | 0.3 | 0.0 | - | - | 0.3 | 0.0 | 0.6 | 0.0 | - | - | 0.4 | 0.0 | 0.3 | 0.0 | - | - | 0.3 | 0.0 | 0.6 | 0.0 | - | - | 0.4 | 0.3 |
| Single-Unit Trucks | 1 | 29 | 3 | 0 | - | 33 | 0 | 2 | 1 | 0 | - | 3 | 2 | 39 | 0 | 0 | - | 41 | 1 | 4 | 1 | 0 | - | 6 | 83 |
| % Single-Unit Trucks | 1.0 | 2.4 | 2.4 | - | - | 2.3 | 0.0 | 0.6 | 0.8 | - | - | 0.5 | 1.1 | 2.9 | 0.0 | - | - | 2.6 | 2.4 | 1.3 | 0.9 | - | - | 1.3 | 2.0 |
| Articulated Trucks | 0 | 12 | 0 | 0 | - | 12 | 0 | 0 | 5 | 0 | - | 5 | 5 | 8 | 0 | 0 | - | 13 | 0 | 0 | 0 | 0 | - | 0 | 30 |
| % Articulated Trucks | 0.0 | 1.0 | 0.0 | - | - | 0.8 | 0.0 | 0.0 | 3.9 | - | - | 0.9 | 2.6 | 0.6 | 0.0 | - | - | 0.8 | 0.0 | 0.0 | 0.0 | - | - | 0.0 | 0.7 |
| Bicycles on Crosswalk | - | - | - | - | 1 | - | - | - | - | - | 6 | - | - | - | - | - | 1 | - | - | - | - | - | 0 | - | - |
| % Bicycles on Crosswalk | - | - | - | - | 50.0 | - | - | - | - | - | 46.2 | - | - | - | - | - | 11.1 | - | - | - | - | - | 0.0 | - | - |
| Pedestrians | - | - | - | - | 1 | - | - | - | - | - | 7 | - | - | - | - | - | 8 | - | - | - | - | - | 1 | - | - |

| | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| % Pedestrians | - | - | - | - | 50.0 | - | - | - | - | - | 53.8 | - | - | - | - | - | 88.9 | - | - | - | - | - | 100.0 | - | - |

Unit Number:

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8430 West Bryn Mawr Avenue, Suite 100

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(773) 283-2600

Count Name: Schafer Hwy & Schoolcraft
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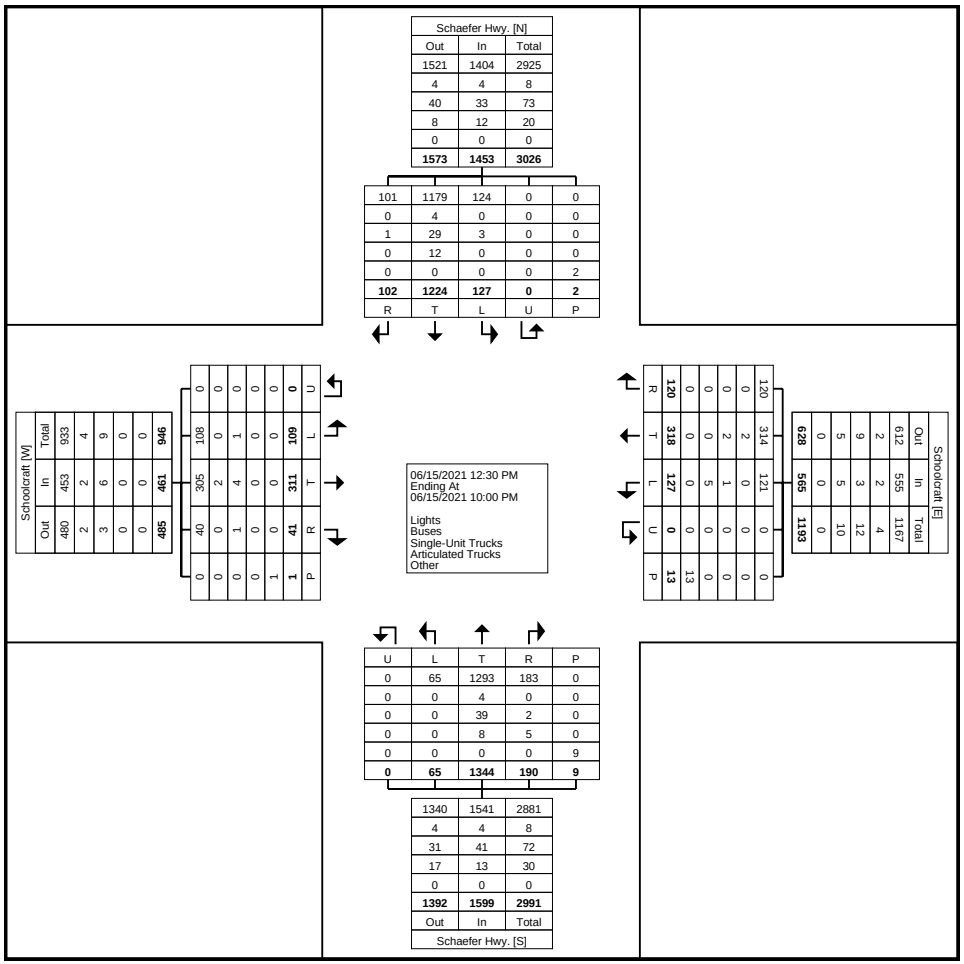
Start Date: 06/15/2021


Turning Movement Data Plot

Unit Number:

DLZ
8430 West Bryn Mawr Avenue, Suite 100

Chicago, Illinois, United States 60631
(773) 283-2600

Count Name: Schafer Hwy & Schoolcraft
Site Code: 1942-6994-50/0800/2000
Start Date: 06/15/2021


# Turning Movement Peak Hour Data (1:30 PM)

| Start Time | Schaefer Hwy. Southbound | | | | | | Schoolcraft Westbound | | | | | | Schaefer Hwy. Northbound | | | | | | Schoolcraft Eastbound | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Right | Thru | Left | U-Turn | Peds | App. Total | Right | Thru | Left | U-Turn | Peds | App. Total | Right | Thru | Left | U-Turn | Peds | App. Total | Right | Thru | Left | U-Turn | Peds | App. Total | Int. Total |
| 1:30 PM | 6 | 96 | 5 | 0 | 0 | 107 | 8 | 20 | 11 | 0 | 1 | 39 | 17 | 99 | 7 | 0 | 0 | 123 | 6 | 17 | 11 | 0 | 0 | 34 | 303 |
| 1:45 PM | 6 | 87 | 5 | 0 | 0 | 98 | 8 | 27 | 13 | 0 | 0 | 48 | 16 | 104 | 2 | 0 | 0 | 122 | 2 | 20 | 6 | 0 | 0 | 28 | 296 |
| 2:00 PM | 11 | 88 | 8 | 0 | 0 | 107 | 13 | 17 | 14 | 0 | 3 | 44 | 11 | 108 | 6 | 0 | 0 | 125 | 3 | 23 | 6 | 0 | 0 | 32 | 308 |
| 2:15 PM | 7 | 102 | 11 | 0 | 0 | 120 | 12 | 13 | 9 | 0 | 0 | 34 | 11 | 112 | 1 | 0 | 0 | 124 | 2 | 21 | 15 | 0 | 0 | 38 | 316 |
| Total | 30 | 373 | 29 | 0 | 0 | 432 | 41 | 77 | 47 | 0 | 4 | 165 | 55 | 423 | 16 | 0 | 0 | 494 | 13 | 81 | 38 | 0 | 0 | 132 | 1223 |
| Approach % | 6.9 | 86.3 | 6.7 | 0.0 | - | - | 24.8 | 46.7 | 28.5 | 0.0 | - | - | 11.1 | 85.6 | 3.2 | 0.0 | - | - | 9.8 | 61.4 | 28.8 | 0.0 | - | - | - |
| Total % | 2.5 | 30.5 | 2.4 | 0.0 | - | 35.3 | 3.4 | 6.3 | 3.8 | 0.0 | - | 13.5 | 4.5 | 34.6 | 1.3 | 0.0 | - | 40.4 | 1.1 | 6.6 | 3.1 | 0.0 | - | 10.8 | - |
| PHF | 0.682 | 0.914 | 0.659 | 0.000 | - | 0.900 | 0.788 | 0.713 | 0.839 | 0.000 | - | 0.859 | 0.809 | 0.944 | 0.571 | 0.000 | - | 0.988 | 0.542 | 0.880 | 0.633 | 0.000 | - | 0.868 | 0.968 |
| Lights | 30 | 347 | 28 | 0 | - | 405 | 41 | 76 | 43 | 0 | - | 160 | 52 | 410 | 16 | 0 | - | 478 | 13 | 80 | 38 | 0 | - | 131 | 1174 |
| % Lights | 100.0 | 93.0 | 96.6 | - | - | 93.8 | 100.0 | 98.7 | 91.5 | - | - | 97.0 | 94.5 | 96.9 | 100.0 | - | - | 96.8 | 100.0 | 98.8 | 100.0 | - | - | 99.2 | 96.0 |
| Buses | 0 | 1 | 0 | 0 | - | 1 | 0 | 0 | 0 | 0 | - | 0 | 0 | 1 | 0 | 0 | - | 1 | 0 | 1 | 0 | 0 | - | 1 | 3 |
| % Buses | 0.0 | 0.3 | 0.0 | - | - | 0.2 | 0.0 | 0.0 | 0.0 | - | - | 0.0 | 0.0 | 0.2 | 0.0 | - | - | 0.2 | 0.0 | 1.2 | 0.0 | - | - | 0.8 | 0.2 |
| Single-Unit Trucks | 0 | 22 | 1 | 0 | - | 23 | 0 | 1 | 1 | 0 | - | 2 | 1 | 10 | 0 | 0 | - | 11 | 0 | 0 | 0 | 0 | - | 0 | 36 |
| % Single-Unit Trucks | 0.0 | 5.9 | 3.4 | - | - | 5.3 | 0.0 | 1.3 | 2.1 | - | - | 1.2 | 1.8 | 2.4 | 0.0 | - | - | 2.2 | 0.0 | 0.0 | 0.0 | - | - | 0.0 | 2.9 |
| Articulated Trucks | 0 | 3 | 0 | 0 | - | 3 | 0 | 0 | 3 | 0 | - | 3 | 2 | 2 | 0 | 0 | - | 4 | 0 | 0 | 0 | 0 | - | 0 | 10 |
| % Articulated Trucks | 0.0 | 0.8 | 0.0 | - | - | 0.7 | 0.0 | 0.0 | 6.4 | - | - | 1.8 | 3.6 | 0.5 | 0.0 | - | - | 0.8 | 0.0 | 0.0 | 0.0 | - | - | 0.0 | 0.8 |
| Bicycles on Crosswalk | - | - | - | - | 0 | - | - | - | - | - | 2 | - | - | - | - | - | 0 | - | - | - | - | - | 0 | - | - |
| % Bicycles on Crosswalk | - | - | - | - | - | - | - | - | - | - | 50.0 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Pedestrians | - | - | - | - | 0 | - | - | - | - | - | 2 | - | - | - | - | - | 0 | - | - | - | - | - | 0 | - | - |
| % Pedestrians | - | - | - | - | - | - | - | - | - | - | 50.0 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |

Unit Number:

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Count Name: Schafer Hwy & Schoolcraft
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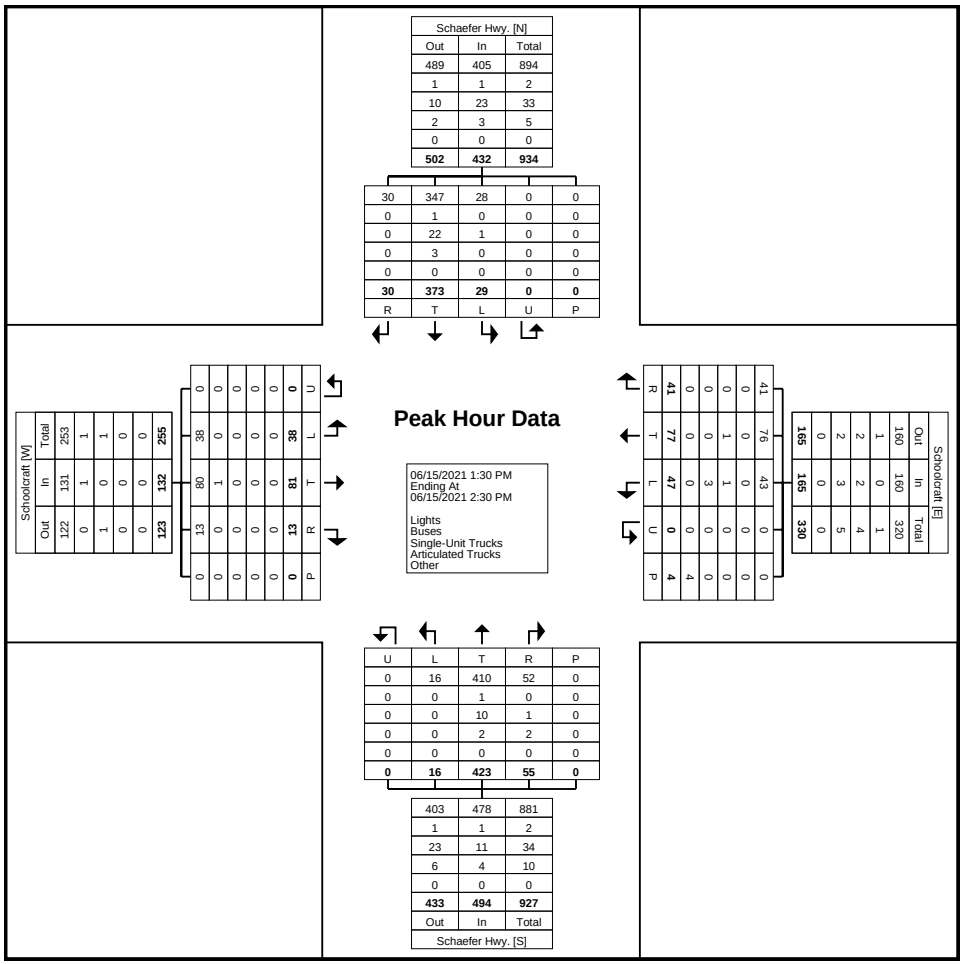
Start Date: 06/15/2021


Turning Movement Peak Hour Data Plot (1:30 PM)

Unit Number:

DLZ
8430 West Bryn Mawr Avenue, Suite 100

Chicago, Illinois, United States 60631
(773) 283-2600

Count Name: Schafer Hwy & Schoolcraft
Site Code: 1942-6994-50/0800/2000
Start Date: 06/15/2021


# Turning Movement Peak Hour Data (8:00 PM)

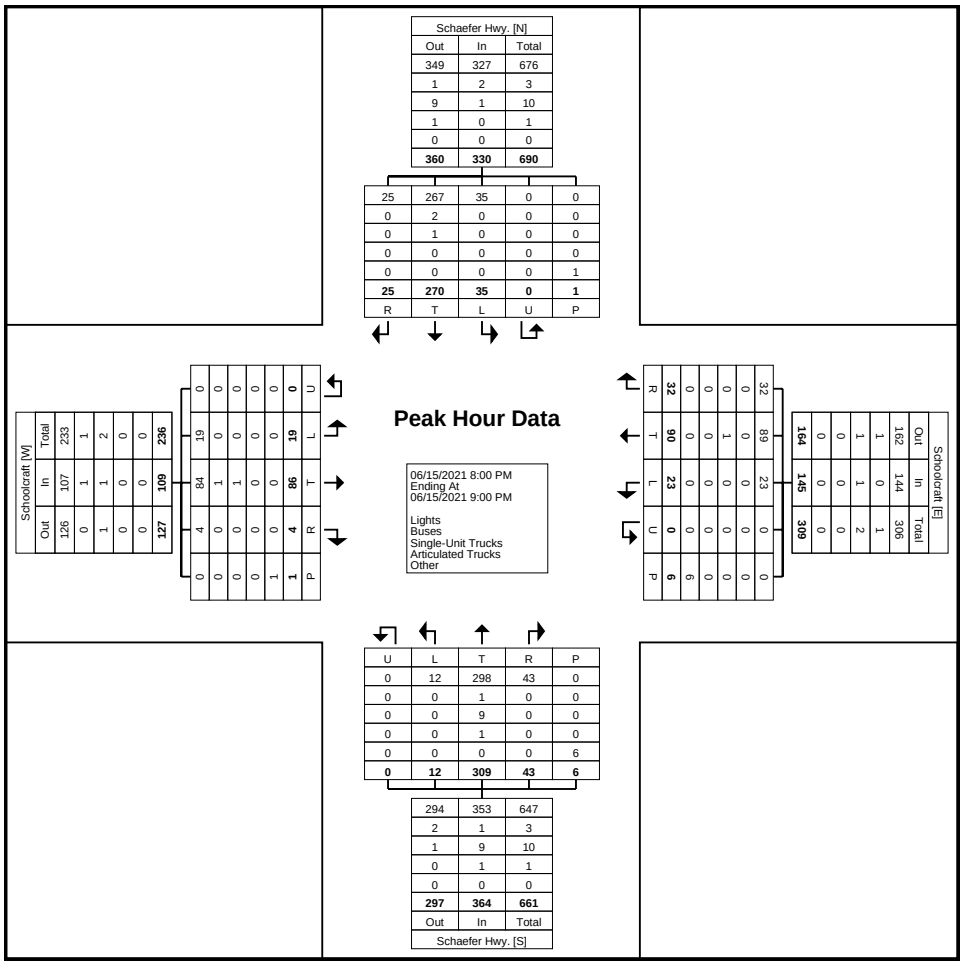
| Start Time | Schaefer Hwy. Southbound | | | | | | Schoolcraft Westbound | | | | | | Schaefer Hwy. Northbound | | | | | | Schoolcraft Eastbound | | | | | | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Right | Thru | Left | U-Turn | Peds | App. Total | Right | Thru | Left | U-Turn | Peds | App. Total | Right | Thru | Left | U-Turn | Peds | App. Total | Right | Thru | Left | U-Turn | Peds | App. Total | |
| 8:00 PM | 3 | 70 | 7 | 0 | 0 | 80 | 9 | 28 | 3 | 0 | 1 | 40 | 5 | 82 | 4 | 0 | 0 | 91 | 3 | 34 | 6 | 0 | 0 | 43 | 254 |
| 8:15 PM | 9 | 75 | 9 | 0 | 0 | 93 | 9 | 20 | 5 | 0 | 2 | 34 | 14 | 85 | 4 | 0 | 3 | 103 | 1 | 11 | 9 | 0 | 0 | 21 | 251 |
| 8:30 PM | 10 | 65 | 10 | 0 | 1 | 85 | 7 | 24 | 8 | 0 | 1 | 39 | 15 | 73 | 3 | 0 | 2 | 91 | 0 | 18 | 2 | 0 | 0 | 20 | 235 |
| 8:45 PM | 3 | 60 | 9 | 0 | 0 | 72 | 7 | 18 | 7 | 0 | 2 | 32 | 9 | 69 | 1 | 0 | 1 | 79 | 0 | 23 | 2 | 0 | 1 | 25 | 208 |
| Total | 25 | 270 | 35 | 0 | 1 | 330 | 32 | 90 | 23 | 0 | 6 | 145 | 43 | 309 | 12 | 0 | 6 | 364 | 4 | 86 | 19 | 0 | 1 | 109 | 948 |
| Approach % | 7.6 | 81.8 | 10.6 | 0.0 | - | - | 22.1 | 62.1 | 15.9 | 0.0 | - | - | 11.8 | 84.9 | 3.3 | 0.0 | - | - | 3.7 | 78.9 | 17.4 | 0.0 | - | - | - |
| Total % | 2.6 | 28.5 | 3.7 | 0.0 | - | 34.8 | 3.4 | 9.5 | 2.4 | 0.0 | - | 15.3 | 4.5 | 32.6 | 1.3 | 0.0 | - | 38.4 | 0.4 | 9.1 | 2.0 | 0.0 | - | 11.5 | - |
| PHF | 0.625 | 0.900 | 0.875 | 0.000 | - | 0.887 | 0.889 | 0.804 | 0.719 | 0.000 | - | 0.906 | 0.717 | 0.909 | 0.750 | 0.000 | - | 0.883 | 0.333 | 0.632 | 0.528 | 0.000 | - | 0.634 | 0.933 |
| Lights | 25 | 267 | 35 | 0 | - | 327 | 32 | 89 | 23 | 0 | - | 144 | 43 | 298 | 12 | 0 | - | 353 | 4 | 84 | 19 | 0 | - | 107 | 931 |
| % Lights | 100.0 | 98.9 | 100.0 | - | - | 99.1 | 100.0 | 98.9 | 100.0 | - | - | 99.3 | 100.0 | 96.4 | 100.0 | - | - | 97.0 | 100.0 | 97.7 | 100.0 | - | - | 98.2 | 98.2 |
| Buses | 0 | 2 | 0 | 0 | - | 2 | 0 | 0 | 0 | 0 | - | 0 | 0 | 1 | 0 | 0 | - | 1 | 0 | 1 | 0 | 0 | - | 1 | 4 |
| % Buses | 0.0 | 0.7 | 0.0 | - | - | 0.6 | 0.0 | 0.0 | 0.0 | - | - | 0.0 | 0.0 | 0.3 | 0.0 | - | - | 0.3 | 0.0 | 1.2 | 0.0 | - | - | 0.9 | 0.4 |
| Single-Unit Trucks | 0 | 1 | 0 | 0 | - | 1 | 0 | 1 | 0 | 0 | - | 1 | 0 | 9 | 0 | 0 | - | 9 | 0 | 1 | 0 | 0 | - | 1 | 12 |
| % Single-Unit Trucks | 0.0 | 0.4 | 0.0 | - | - | 0.3 | 0.0 | 1.1 | 0.0 | - | - | 0.7 | 0.0 | 2.9 | 0.0 | - | - | 2.5 | 0.0 | 1.2 | 0.0 | - | - | 0.9 | 1.3 |
| Articulated Trucks | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 1 | 0 | 0 | - | 1 | 0 | 0 | 0 | 0 | - | 0 | 1 |
| % Articulated Trucks | 0.0 | 0.0 | 0.0 | - | - | 0.0 | 0.0 | 0.0 | 0.0 | - | - | 0.0 | 0.0 | 0.3 | 0.0 | - | - | 0.3 | 0.0 | 0.0 | 0.0 | - | - | 0.0 | 0.1 |
| Bicycles on Crosswalk | - | - | - | - | 1 | - | - | - | - | - | 3 | - | - | - | - | - | 1 | - | - | - | - | - | 0 | - | - |
| % Bicycles on Crosswalk | - | - | - | - | 100.0 | - | - | - | - | - | 50.0 | - | - | - | - | - | 16.7 | - | - | - | - | - | 0.0 | - | - |
| Pedestrians | - | - | - | - | 0 | - | - | - | - | - | 3 | - | - | - | - | - | 5 | - | - | - | - | - | 1 | - | - |
| % Pedestrians | - | - | - | - | 0.0 | - | - | - | - | - | 50.0 | - | - | - | - | - | 83.3 | - | - | - | - | - | 100.0 | - | - |

Unit Number:

DLZ
8430 West Bryn Mawr Avenue, Suite 100

Chicago, Illinois, United States 60631
(773) 283-2600

Count Name: Schafer Hwy & Schoolcraft
Site Code: 1942-6994-50/0800/2000
Start Date: 06/15/2021


Turning Movement Peak Hour Data Plot (8:00 PM)

Unit Number:

DLZ
8430 West Bryn Mawr Avenue, Suite 100

Chicago, Illinois, United States 60631
(773) 283-2600

Count Name: Schaefer Hwy & I-96 Service Rd
Site Code: 1942-6994-50/0800/2000
Start Date: 06/15/2021


# Turning Movement Data

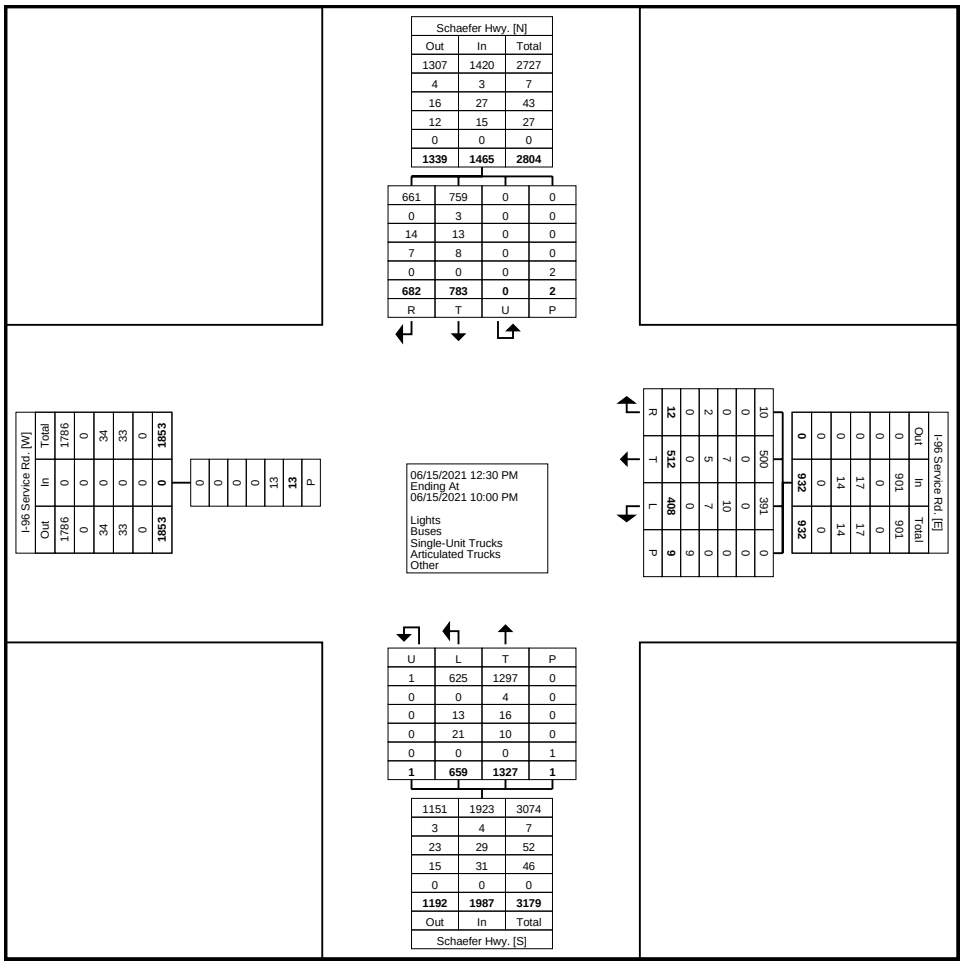
| Start Time | Schaefer Hwy. Southbound | | | | | I-96 Service Rd. Westbound | | | | | Schaefer Hwy. Northbound | | | | | I-96 Service Rd. Eastbound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Right | Thru | U-Turn | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Thru | Left | U-Turn | Peds | App. Total | Peds | App. Total | Int. Total |
| 12:30 PM | 44 | 42 | 0 | 0 | 86 | 0 | 48 | 29 | 1 | 77 | 77 | 48 | 0 | 0 | 125 | 0 | 0 | 288 |
| 12:45 PM | 59 | 51 | 0 | 0 | 110 | 3 | 35 | 29 | 0 | 67 | 100 | 50 | 0 | 0 | 150 | 1 | 0 | 327 |
| Hourly Total | 103 | 93 | 0 | 0 | 196 | 3 | 83 | 58 | 1 | 144 | 177 | 98 | 0 | 0 | 275 | 1 | 0 | 615 |
| 1:00 PM | 36 | 49 | 0 | 0 | 85 | 1 | 35 | 19 | 0 | 55 | 92 | 51 | 0 | 0 | 143 | 1 | 0 | 283 |
| 1:15 PM | 48 | 60 | 0 | 0 | 108 | 0 | 34 | 28 | 1 | 62 | 90 | 45 | 0 | 0 | 135 | 0 | 0 | 305 |
| 1:30 PM | 54 | 63 | 0 | 1 | 117 | 0 | 26 | 31 | 2 | 57 | 99 | 43 | 0 | 0 | 142 | 1 | 0 | 316 |
| 1:45 PM | 42 | 54 | 0 | 0 | 96 | 0 | 25 | 33 | 1 | 58 | 111 | 55 | 0 | 0 | 166 | 0 | 0 | 320 |
| Hourly Total | 180 | 226 | 0 | 1 | 406 | 1 | 120 | 111 | 4 | 232 | 392 | 194 | 0 | 0 | 586 | 2 | 0 | 1224 |
| 2:00 PM | 52 | 60 | 0 | 0 | 112 | 0 | 25 | 20 | 0 | 45 | 92 | 42 | 0 | 0 | 134 | 3 | 0 | 291 |
| 2:15 PM | 52 | 63 | 0 | 0 | 115 | 3 | 36 | 39 | 0 | 78 | 101 | 43 | 1 | 0 | 145 | 0 | 0 | 338 |
| *** BREAK *** | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Hourly Total | 104 | 123 | 0 | 0 | 227 | 3 | 61 | 59 | 0 | 123 | 193 | 85 | 1 | 0 | 279 | 3 | 0 | 629 |
| 8:00 PM | 39 | 38 | 0 | 0 | 77 | 2 | 32 | 24 | 1 | 58 | 76 | 38 | 0 | 1 | 114 | 2 | 0 | 249 |
| 8:15 PM | 47 | 44 | 0 | 0 | 91 | 0 | 33 | 17 | 0 | 50 | 101 | 41 | 0 | 0 | 142 | 1 | 0 | 283 |
| 8:30 PM | 36 | 52 | 0 | 0 | 88 | 0 | 30 | 31 | 0 | 61 | 69 | 30 | 0 | 0 | 99 | 0 | 0 | 248 |
| 8:45 PM | 31 | 41 | 0 | 0 | 72 | 1 | 27 | 22 | 2 | 50 | 61 | 33 | 0 | 0 | 94 | 1 | 0 | 216 |
| Hourly Total | 153 | 175 | 0 | 0 | 328 | 3 | 122 | 94 | 3 | 219 | 307 | 142 | 0 | 1 | 449 | 4 | 0 | 996 |
| 9:00 PM | 40 | 46 | 0 | 0 | 86 | 0 | 33 | 23 | 0 | 56 | 63 | 39 | 0 | 0 | 102 | 0 | 0 | 244 |
| 9:15 PM | 33 | 52 | 0 | 0 | 85 | 0 | 40 | 24 | 0 | 64 | 60 | 29 | 0 | 0 | 89 | 3 | 0 | 238 |
| 9:30 PM | 36 | 32 | 0 | 1 | 68 | 0 | 35 | 23 | 1 | 58 | 74 | 36 | 0 | 0 | 110 | 0 | 0 | 236 |
| 9:45 PM | 33 | 36 | 0 | 0 | 69 | 2 | 18 | 16 | 0 | 36 | 61 | 36 | 0 | 0 | 97 | 0 | 0 | 202 |
| Hourly Total | 142 | 166 | 0 | 1 | 308 | 2 | 126 | 86 | 1 | 214 | 258 | 140 | 0 | 0 | 398 | 3 | 0 | 920 |
| Grand Total | 682 | 783 | 0 | 2 | 1465 | 12 | 512 | 408 | 9 | 932 | 1327 | 659 | 1 | 1 | 1987 | 13 | 0 | 4384 |
| Approach % | 46.6 | 53.4 | 0.0 | - | - | 1.3 | 54.9 | 43.8 | - | - | 66.8 | 33.2 | 0.1 | - | - | - | - | - |
| Total % | 15.6 | 17.9 | 0.0 | - | 33.4 | 0.3 | 11.7 | 9.3 | - | 21.3 | 30.3 | 15.0 | 0.0 | - | 45.3 | - | 0.0 | - |
| Lights | 661 | 759 | 0 | - | 1420 | 10 | 500 | 391 | - | 901 | 1297 | 625 | 1 | - | 1923 | - | 0 | 4244 |
| % Lights | 96.9 | 96.9 | - | - | 96.9 | 83.3 | 97.7 | 95.8 | - | 96.7 | 97.7 | 94.8 | 100.0 | - | 96.8 | - | - | 96.8 |
| Buses | 0 | 3 | 0 | - | 3 | 0 | 0 | 0 | - | 0 | 4 | 0 | 0 | - | 4 | - | 0 | 7 |
| % Buses | 0.0 | 0.4 | - | - | 0.2 | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.3 | 0.0 | 0.0 | - | 0.2 | - | - | 0.2 |
| Single-Unit Trucks | 14 | 13 | 0 | - | 27 | 0 | 7 | 10 | - | 17 | 16 | 13 | 0 | - | 29 | - | 0 | 73 |
| % Single-Unit Trucks | 2.1 | 1.7 | - | - | 1.8 | 0.0 | 1.4 | 2.5 | - | 1.8 | 1.2 | 2.0 | 0.0 | - | 1.5 | - | - | 1.7 |
| Articulated Trucks | 7 | 8 | 0 | - | 15 | 2 | 5 | 7 | - | 14 | 10 | 21 | 0 | - | 31 | - | 0 | 60 |
| % Articulated Trucks | 1.0 | 1.0 | - | - | 1.0 | 16.7 | 1.0 | 1.7 | - | 1.5 | 0.8 | 3.2 | 0.0 | - | 1.6 | - | - | 1.4 |
| Bicycles on Crosswalk | - | - | - | 0 | - | - | - | - | 4 | - | - | - | - | 0 | - | 3 | - | - |
| % Bicycles on Crosswalk | - | - | - | 0.0 | - | - | - | - | 44.4 | - | - | - | - | 0.0 | - | 23.1 | - | - |
| Pedestrians | - | - | - | 2 | - | - | - | - | 5 | - | - | - | - | 1 | - | 10 | - | - |
| % Pedestrians | - | - | - | 100.0 | - | - | - | - | 55.6 | - | - | - | - | 100.0 | - | 76.9 | - | - |

Unit Number:

DLZ
8430 West Bryn Mawr Avenue, Suite 100

Chicago, Illinois, United States 60631
(773) 283-2600

Count Name: Schaefer Hwy & I-96 Service Rd
Site Code: 1942-6994-50/0800/2000
Start Date: 06/15/2021


Turning Movement Data Plot

Unit Number:

DLZ
8430 West Bryn Mawr Avenue, Suite 100

Chicago, Illinois, United States 60631
(773) 283-2600

Count Name: Schaefer Hwy & I-96 Service Rd
Site Code: 1942-6994-50/0800/2000
Start Date: 06/15/2021


# Turning Movement Peak Hour Data (1:30 PM)

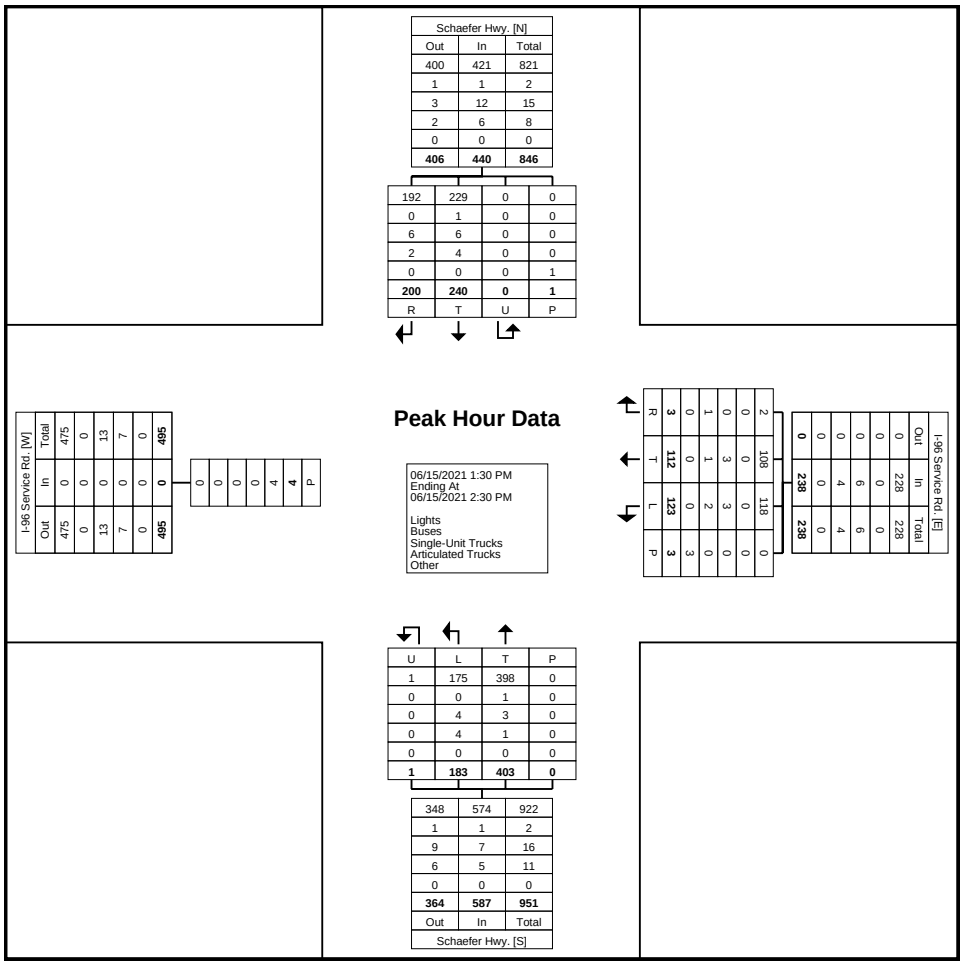
| Start Time | Schaefer Hwy. Southbound | | | | | I-96 Service Rd. Westbound | | | | | Schaefer Hwy. Northbound | | | | | I-96 Service Rd. Eastbound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Right | Thru | U-Turn | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Thru | Left | U-Turn | Peds | App. Total | Peds | App. Total | Int. Total |
| 1:30 PM | 54 | 63 | 0 | 1 | 117 | 0 | 26 | 31 | 2 | 57 | 99 | 43 | 0 | 0 | 142 | 1 | 0 | 316 |
| 1:45 PM | 42 | 54 | 0 | 0 | 96 | 0 | 25 | 33 | 1 | 58 | 111 | 55 | 0 | 0 | 166 | 0 | 0 | 320 |
| 2:00 PM | 52 | 60 | 0 | 0 | 112 | 0 | 25 | 20 | 0 | 45 | 92 | 42 | 0 | 0 | 134 | 3 | 0 | 291 |
| 2:15 PM | 52 | 63 | 0 | 0 | 115 | 3 | 36 | 39 | 0 | 78 | 101 | 43 | 1 | 0 | 145 | 0 | 0 | 338 |
| Total | 200 | 240 | 0 | 1 | 440 | 3 | 112 | 123 | 3 | 238 | 403 | 183 | 1 | 0 | 587 | 4 | 0 | 1265 |
| Approach % | 45.5 | 54.5 | 0.0 | - | - | 1.3 | 47.1 | 51.7 | - | - | 68.7 | 31.2 | 0.2 | - | - | - | - | - |
| Total % | 15.8 | 19.0 | 0.0 | - | 34.8 | 0.2 | 8.9 | 9.7 | - | 18.8 | 31.9 | 14.5 | 0.1 | - | 46.4 | - | 0.0 | - |
| PHF | 0.926 | 0.952 | 0.000 | - | 0.940 | 0.250 | 0.778 | 0.788 | - | 0.763 | 0.908 | 0.832 | 0.250 | - | 0.884 | - | 0.000 | 0.936 |
| Lights | 192 | 229 | 0 | - | 421 | 2 | 108 | 118 | - | 228 | 398 | 175 | 1 | - | 574 | - | 0 | 1223 |
| % Lights | 96.0 | 95.4 | - | - | 95.7 | 66.7 | 96.4 | 95.9 | - | 95.8 | 98.8 | 95.6 | 100.0 | - | 97.8 | - | - | 96.7 |
| Buses | 0 | 1 | 0 | - | 1 | 0 | 0 | 0 | - | 0 | 1 | 0 | 0 | - | 1 | - | 0 | 2 |
| % Buses | 0.0 | 0.4 | - | - | 0.2 | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.2 | 0.0 | 0.0 | - | 0.2 | - | - | 0.2 |
| Single-Unit Trucks | 6 | 6 | 0 | - | 12 | 0 | 3 | 3 | - | 6 | 3 | 4 | 0 | - | 7 | - | 0 | 25 |
| % Single-Unit Trucks | 3.0 | 2.5 | - | - | 2.7 | 0.0 | 2.7 | 2.4 | - | 2.5 | 0.7 | 2.2 | 0.0 | - | 1.2 | - | - | 2.0 |
| Articulated Trucks | 2 | 4 | 0 | - | 6 | 1 | 1 | 2 | - | 4 | 1 | 4 | 0 | - | 5 | - | 0 | 15 |
| % Articulated Trucks | 1.0 | 1.7 | - | - | 1.4 | 33.3 | 0.9 | 1.6 | - | 1.7 | 0.2 | 2.2 | 0.0 | - | 0.9 | - | - | 1.2 |
| Bicycles on Crosswalk | - | - | - | 0 | - | - | - | - | 3 | - | - | - | - | 0 | - | 0 | - | - |
| % Bicycles on Crosswalk | - | - | - | 0.0 | - | - | - | - | 100.0 | - | - | - | - | - | - | 0.0 | - | - |
| Pedestrians | - | - | - | 1 | - | - | - | - | 0 | - | - | - | - | 0 | - | 4 | - | - |
| % Pedestrians | - | - | - | 100.0 | - | - | - | - | 0.0 | - | - | - | - | - | - | 100.0 | - | - |

Unit Number:

DLZ
8430 West Bryn Mawr Avenue, Suite 100

Chicago, Illinois, United States 60631
(773) 283-2600

Count Name: Schaefer Hwy & I-96 Service Rd
Site Code: 1942-6994-50/0800/2000
Start Date: 06/15/2021


Turning Movement Peak Hour Data Plot (1:30 PM)

Unit Number:

DLZ
8430 West Bryn Mawr Avenue, Suite 100

Chicago, Illinois, United States 60631
(773) 283-2600

Count Name: Schaefer Hwy & I-96 Service Rd
Site Code: 1942-6994-50/0800/2000
Start Date: 06/15/2021


# Turning Movement Peak Hour Data (8:00 PM)

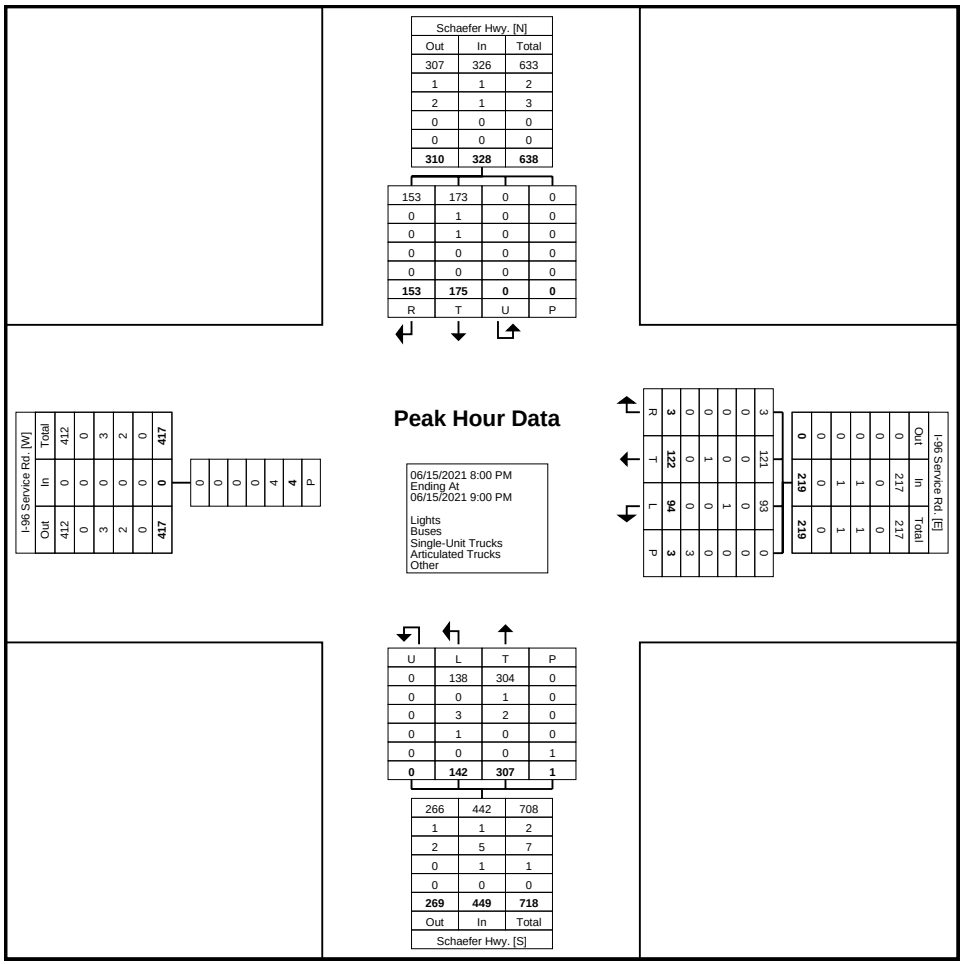
| Start Time | Schaefer Hwy. Southbound | | | | | I-96 Service Rd. Westbound | | | | | Schaefer Hwy. Northbound | | | | | I-96 Service Rd. Eastbound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Right | Thru | U-Turn | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Thru | Left | U-Turn | Peds | App. Total | Peds | App. Total | Int. Total |
| 8:00 PM | 39 | 38 | 0 | 0 | 77 | 2 | 32 | 24 | 1 | 58 | 76 | 38 | 0 | 1 | 114 | 2 | 0 | 249 |
| 8:15 PM | 47 | 44 | 0 | 0 | 91 | 0 | 33 | 17 | 0 | 50 | 101 | 41 | 0 | 0 | 142 | 1 | 0 | 283 |
| 8:30 PM | 36 | 52 | 0 | 0 | 88 | 0 | 30 | 31 | 0 | 61 | 69 | 30 | 0 | 0 | 99 | 0 | 0 | 248 |
| 8:45 PM | 31 | 41 | 0 | 0 | 72 | 1 | 27 | 22 | 2 | 50 | 61 | 33 | 0 | 0 | 94 | 1 | 0 | 216 |
| Total | 153 | 175 | 0 | 0 | 328 | 3 | 122 | 94 | 3 | 219 | 307 | 142 | 0 | 1 | 449 | 4 | 0 | 996 |
| Approach % | 46.6 | 53.4 | 0.0 | - | - | 1.4 | 55.7 | 42.9 | - | - | 68.4 | 31.6 | 0.0 | - | - | - | - | - |
| Total % | 15.4 | 17.6 | 0.0 | - | 32.9 | 0.3 | 12.2 | 9.4 | - | 22.0 | 30.8 | 14.3 | 0.0 | - | 45.1 | - | 0.0 | - |
| PHF | 0.814 | 0.841 | 0.000 | - | 0.901 | 0.375 | 0.924 | 0.758 | - | 0.898 | 0.760 | 0.866 | 0.000 | - | 0.790 | - | 0.000 | 0.880 |
| Lights | 153 | 173 | 0 | - | 326 | 3 | 121 | 93 | - | 217 | 304 | 138 | 0 | - | 442 | - | 0 | 985 |
| % Lights | 100.0 | 98.9 | - | - | 99.4 | 100.0 | 99.2 | 98.9 | - | 99.1 | 99.0 | 97.2 | - | - | 98.4 | - | - | 98.9 |
| Buses | 0 | 1 | 0 | - | 1 | 0 | 0 | 0 | - | 0 | 1 | 0 | 0 | - | 1 | - | 0 | 2 |
| % Buses | 0.0 | 0.6 | - | - | 0.3 | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.3 | 0.0 | - | - | 0.2 | - | - | 0.2 |
| Single-Unit Trucks | 0 | 1 | 0 | - | 1 | 0 | 0 | 1 | - | 1 | 2 | 3 | 0 | - | 5 | - | 0 | 7 |
| % Single-Unit Trucks | 0.0 | 0.6 | - | - | 0.3 | 0.0 | 0.0 | 1.1 | - | 0.5 | 0.7 | 2.1 | - | - | 1.1 | - | - | 0.7 |
| Articulated Trucks | 0 | 0 | 0 | - | 0 | 0 | 1 | 0 | - | 1 | 0 | 1 | 0 | - | 1 | - | 0 | 2 |
| % Articulated Trucks | 0.0 | 0.0 | - | - | 0.0 | 0.0 | 0.8 | 0.0 | - | 0.5 | 0.0 | 0.7 | - | - | 0.2 | - | - | 0.2 |
| Bicycles on Crosswalk | - | - | - | 0 | - | - | - | - | 0 | - | - | - | - | 0 | - | 1 | - | - |
| % Bicycles on Crosswalk | - | - | - | - | - | - | - | - | 0.0 | - | - | - | - | 0.0 | - | 25.0 | - | - |
| Pedestrians | - | - | - | 0 | - | - | - | - | 3 | - | - | - | - | 1 | - | 3 | - | - |
| % Pedestrians | - | - | - | - | - | - | - | - | 100.0 | - | - | - | - | 100.0 | - | 75.0 | - | - |

Unit Number:

DLZ
8430 West Bryn Mawr Avenue, Suite 100

Chicago, Illinois, United States 60631
(773) 283-2600

Count Name: Schaefer Hwy & I-96 Service Rd
Site Code: 1942-6994-50/0800/2000
Start Date: 06/15/2021


Turning Movement Peak Hour Data Plot (8:00 PM)

Unit Number:

DLZ
8430 West Bryn Mawr Avenue, Suite 100

Chicago, Illinois, United States 60631
(773) 283-2600

Count Name: Schaefer Hwy & Jefferies Service Dr
Site Code: 1942-6994-50/0800/2000
Start Date: 06/15/2021


# Turning Movement Data

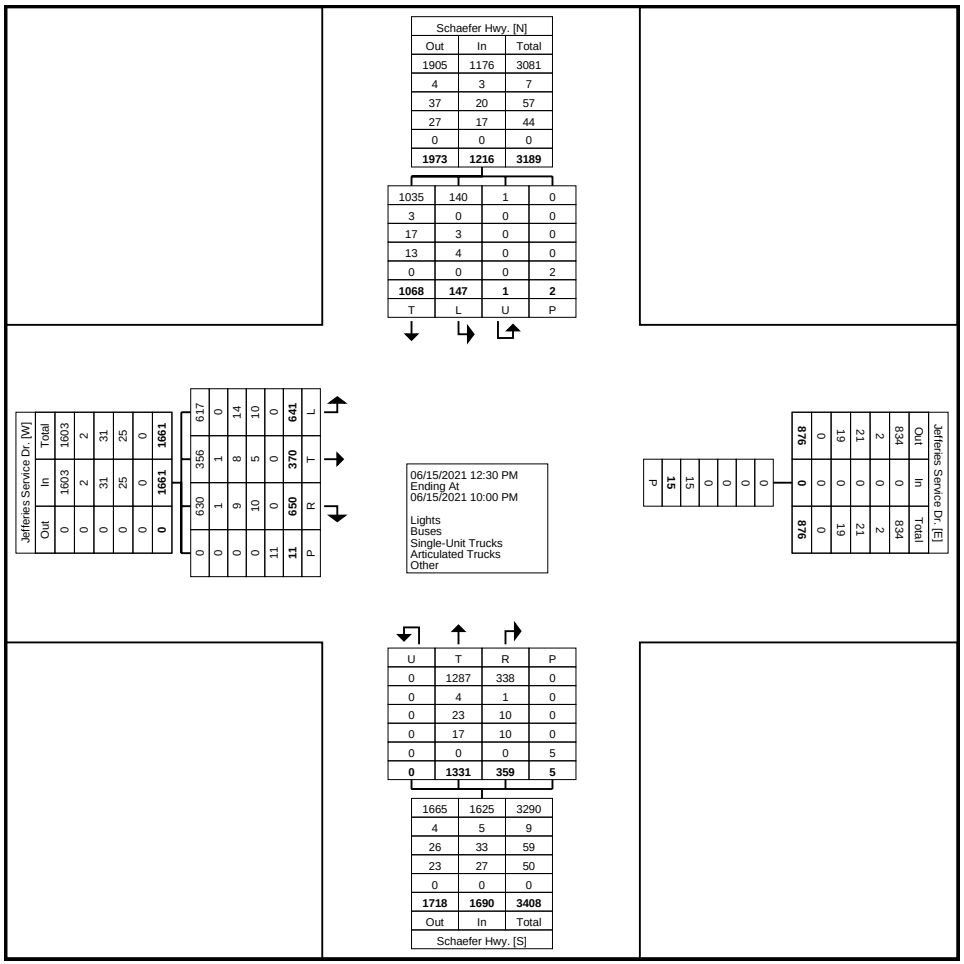
| Start Time | Schaefer Hwy. Southbound | | | | | Jefferies Service Dr. Westbound | | Schaefer Hwy. Northbound | | | | | Jefferies Service Dr. Eastbound | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Thru | Left | U-Turn | Peds | App. Total | Peds | App. Total | Right | Thru | U-Turn | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Int. Total |
| 12:30 PM | 66 | 9 | 0 | 0 | 75 | 1 | 0 | 28 | 88 | 0 | 0 | 116 | 43 | 32 | 42 | 0 | 117 | 308 |
| 12:45 PM | 73 | 5 | 1 | 1 | 79 | 1 | 0 | 31 | 107 | 0 | 1 | 138 | 33 | 21 | 43 | 2 | 97 | 314 |
| Hourly Total | 139 | 14 | 1 | 1 | 154 | 2 | 0 | 59 | 195 | 0 | 1 | 254 | 76 | 53 | 85 | 2 | 214 | 622 |
| 1:00 PM | 64 | 5 | 0 | 0 | 69 | 0 | 0 | 27 | 93 | 0 | 0 | 120 | 34 | 16 | 47 | 1 | 97 | 286 |
| 1:15 PM | 73 | 16 | 0 | 0 | 89 | 1 | 0 | 25 | 94 | 0 | 0 | 119 | 38 | 25 | 41 | 0 | 104 | 312 |
| 1:30 PM | 78 | 16 | 0 | 1 | 94 | 2 | 0 | 27 | 82 | 0 | 2 | 109 | 76 | 21 | 53 | 3 | 150 | 353 |
| 1:45 PM | 81 | 9 | 0 | 0 | 90 | 1 | 0 | 13 | 111 | 0 | 0 | 124 | 59 | 22 | 60 | 0 | 141 | 355 |
| Hourly Total | 296 | 46 | 0 | 1 | 342 | 4 | 0 | 92 | 380 | 0 | 2 | 472 | 207 | 84 | 201 | 4 | 492 | 1306 |
| 2:00 PM | 73 | 13 | 0 | 0 | 86 | 3 | 0 | 26 | 85 | 0 | 1 | 111 | 52 | 12 | 45 | 1 | 109 | 306 |
| 2:15 PM | 86 | 13 | 0 | 0 | 99 | 0 | 0 | 30 | 93 | 0 | 0 | 123 | 48 | 36 | 46 | 0 | 130 | 352 |
| *** BREAK *** | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Hourly Total | 159 | 26 | 0 | 0 | 185 | 3 | 0 | 56 | 178 | 0 | 1 | 234 | 100 | 48 | 91 | 1 | 239 | 658 |
| 8:00 PM | 57 | 8 | 0 | 0 | 65 | 2 | 0 | 27 | 78 | 0 | 0 | 105 | 36 | 27 | 36 | 0 | 99 | 269 |
| 8:15 PM | 50 | 13 | 0 | 0 | 63 | 0 | 0 | 21 | 103 | 0 | 0 | 124 | 40 | 33 | 39 | 0 | 112 | 299 |
| 8:30 PM | 77 | 11 | 0 | 0 | 88 | 0 | 0 | 15 | 62 | 0 | 0 | 77 | 41 | 21 | 37 | 0 | 99 | 264 |
| 8:45 PM | 58 | 10 | 0 | 0 | 68 | 2 | 0 | 15 | 65 | 0 | 0 | 80 | 32 | 22 | 27 | 0 | 81 | 229 |
| Hourly Total | 242 | 42 | 0 | 0 | 284 | 4 | 0 | 78 | 308 | 0 | 0 | 386 | 149 | 103 | 139 | 0 | 391 | 1061 |
| 9:00 PM | 63 | 3 | 0 | 0 | 66 | 0 | 0 | 17 | 68 | 0 | 1 | 85 | 32 | 23 | 31 | 1 | 86 | 237 |
| 9:15 PM | 67 | 8 | 0 | 0 | 75 | 1 | 0 | 24 | 65 | 0 | 0 | 89 | 32 | 15 | 28 | 2 | 75 | 239 |
| 9:30 PM | 52 | 7 | 0 | 0 | 59 | 1 | 0 | 15 | 76 | 0 | 0 | 91 | 32 | 25 | 32 | 0 | 89 | 239 |
| 9:45 PM | 50 | 1 | 0 | 0 | 51 | 0 | 0 | 18 | 61 | 0 | 0 | 79 | 22 | 19 | 34 | 1 | 75 | 205 |
| Hourly Total | 232 | 19 | 0 | 0 | 251 | 2 | 0 | 74 | 270 | 0 | 1 | 344 | 118 | 82 | 125 | 4 | 325 | 920 |
| Grand Total | 1068 | 147 | 1 | 2 | 1216 | 15 | 0 | 359 | 1331 | 0 | 5 | 1690 | 650 | 370 | 641 | 11 | 1661 | 4567 |
| Approach % | 87.8 | 12.1 | 0.1 | - | - | - | - | 21.2 | 78.8 | 0.0 | - | - | 39.1 | 22.3 | 38.6 | - | - | - |
| Total % | 23.4 | 3.2 | 0.0 | - | 26.6 | - | 0.0 | 7.9 | 29.1 | 0.0 | - | 37.0 | 14.2 | 8.1 | 14.0 | - | 36.4 | - |
| Lights | 1035 | 140 | 1 | - | 1176 | - | 0 | 338 | 1287 | 0 | - | 1625 | 630 | 356 | 617 | - | 1603 | 4404 |
| % Lights | 96.9 | 95.2 | 100.0 | - | 96.7 | - | - | 94.2 | 96.7 | - | - | 96.2 | 96.9 | 96.2 | 96.3 | - | 96.5 | 96.4 |
| Buses | 3 | 0 | 0 | - | 3 | - | 0 | 1 | 4 | 0 | - | 5 | 1 | 1 | 0 | - | 2 | 10 |
| % Buses | 0.3 | 0.0 | 0.0 | - | 0.2 | - | - | 0.3 | 0.3 | - | - | 0.3 | 0.2 | 0.3 | 0.0 | - | 0.1 | 0.2 |
| Single-Unit Trucks | 17 | 3 | 0 | - | 20 | - | 0 | 10 | 23 | 0 | - | 33 | 9 | 8 | 14 | - | 31 | 84 |
| % Single-Unit Trucks | 1.6 | 2.0 | 0.0 | - | 1.6 | - | - | 2.8 | 1.7 | - | - | 2.0 | 1.4 | 2.2 | 2.2 | - | 1.9 | 1.8 |
| Articulated Trucks | 13 | 4 | 0 | - | 17 | - | 0 | 10 | 17 | 0 | - | 27 | 10 | 5 | 10 | - | 25 | 69 |
| % Articulated Trucks | 1.2 | 2.7 | 0.0 | - | 1.4 | - | - | 2.8 | 1.3 | - | - | 1.6 | 1.5 | 1.4 | 1.6 | - | 1.5 | 1.5 |
| Bicycles on Crosswalk | - | - | - | 0 | - | 4 | - | - | - | - | 0 | - | - | - | - | 2 | - | - |
| % Bicycles on Crosswalk | - | - | - | 0.0 | - | 26.7 | - | - | - | - | 0.0 | - | - | - | - | 18.2 | - | - |
| Pedestrians | - | - | - | 2 | - | 11 | - | - | - | - | 5 | - | - | - | - | 9 | - | - |
| % Pedestrians | - | - | - | 100.0 | - | 73.3 | - | - | - | - | 100.0 | - | - | - | - | 81.8 | - | - |

Unit Number:

DLZ
8430 West Bryn Mawr Avenue, Suite 100

Chicago, Illinois, United States 60631
(773) 283-2600

Count Name: Schaefer Hwy & Jefferies Service Dr
Site Code: 1942-6994-50/0800/2000
Start Date: 06/15/2021


Turning Movement Data Plot

Unit Number:

DLZ
8430 West Bryn Mawr Avenue, Suite 100

Chicago, Illinois, United States 60631
(773) 283-2600

Count Name: Schaefer Hwy & Jefferies Service Dr
Site Code: 1942-6994-50/0800/2000
Start Date: 06/15/2021


# Turning Movement Peak Hour Data (1:30 PM)

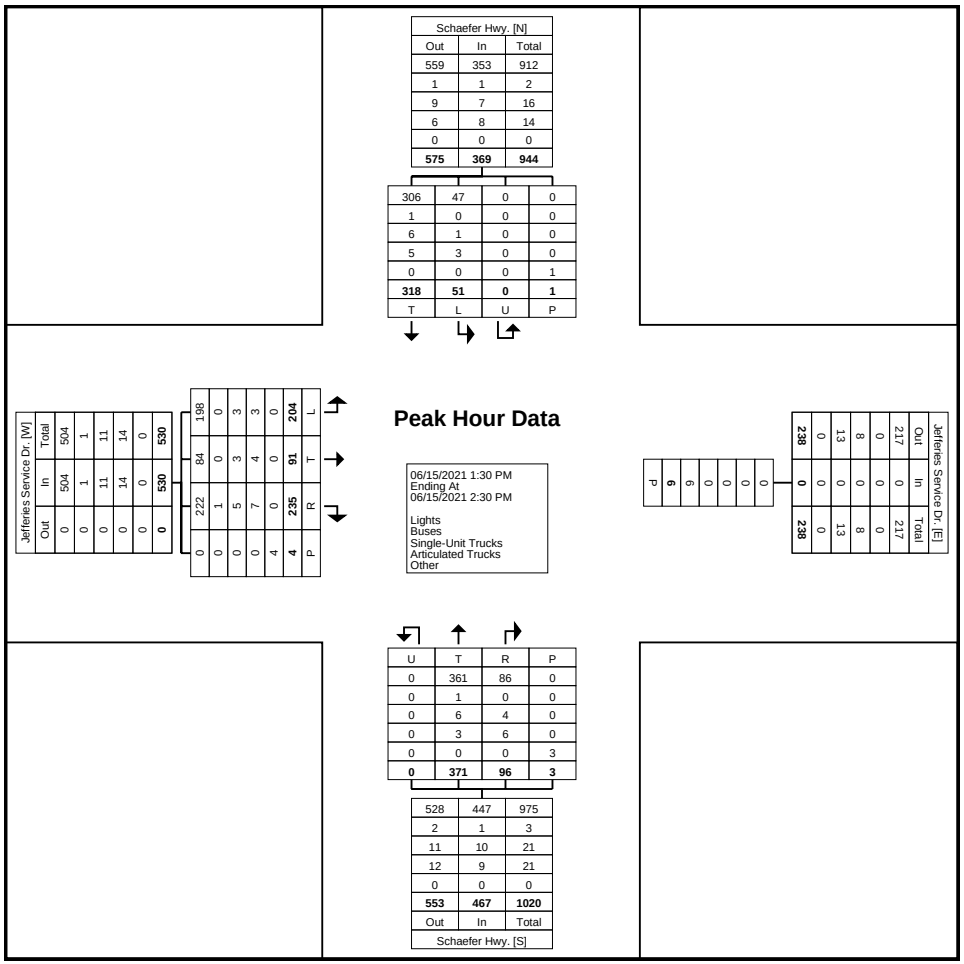
| Start Time | Schaefer Hwy. Southbound | | | | | Jefferies Service Dr. Westbound | | Schaefer Hwy. Northbound | | | | | Jefferies Service Dr. Eastbound | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Thru | Left | U-Turn | Peds | App. Total | Peds | App. Total | Right | Thru | U-Turn | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Int. Total |
| 1:30 PM | 78 | 16 | 0 | 1 | 94 | 2 | 0 | 27 | 82 | 0 | 2 | 109 | 76 | 21 | 53 | 3 | 150 | 353 |
| 1:45 PM | 81 | 9 | 0 | 0 | 90 | 1 | 0 | 13 | 111 | 0 | 0 | 124 | 59 | 22 | 60 | 0 | 141 | 355 |
| 2:00 PM | 73 | 13 | 0 | 0 | 86 | 3 | 0 | 26 | 85 | 0 | 1 | 111 | 52 | 12 | 45 | 1 | 109 | 306 |
| 2:15 PM | 86 | 13 | 0 | 0 | 99 | 0 | 0 | 30 | 93 | 0 | 0 | 123 | 48 | 36 | 46 | 0 | 130 | 352 |
| Total | 318 | 51 | 0 | 1 | 369 | 6 | 0 | 96 | 371 | 0 | 3 | 467 | 235 | 91 | 204 | 4 | 530 | 1366 |
| Approach % | 86.2 | 13.8 | 0.0 | - | - | - | - | 20.6 | 79.4 | 0.0 | - | - | 44.3 | 17.2 | 38.5 | - | - | - |
| Total % | 23.3 | 3.7 | 0.0 | - | 27.0 | - | 0.0 | 7.0 | 27.2 | 0.0 | - | 34.2 | 17.2 | 6.7 | 14.9 | - | 38.8 | - |
| PHF | 0.924 | 0.797 | 0.000 | - | 0.932 | - | 0.000 | 0.800 | 0.836 | 0.000 | - | 0.942 | 0.773 | 0.632 | 0.850 | - | 0.883 | 0.962 |
| Lights | 306 | 47 | 0 | - | 353 | - | 0 | 86 | 361 | 0 | - | 447 | 222 | 84 | 198 | - | 504 | 1304 |
| % Lights | 96.2 | 92.2 | - | - | 95.7 | - | - | 89.6 | 97.3 | - | - | 95.7 | 94.5 | 92.3 | 97.1 | - | 95.1 | 95.5 |
| Buses | 1 | 0 | 0 | - | 1 | - | 0 | 0 | 1 | 0 | - | 1 | 1 | 0 | 0 | - | 1 | 3 |
| % Buses | 0.3 | 0.0 | - | - | 0.3 | - | - | 0.0 | 0.3 | - | - | 0.2 | 0.4 | 0.0 | 0.0 | - | 0.2 | 0.2 |
| Single-Unit Trucks | 6 | 1 | 0 | - | 7 | - | 0 | 4 | 6 | 0 | - | 10 | 5 | 3 | 3 | - | 11 | 28 |
| % Single-Unit Trucks | 1.9 | 2.0 | - | - | 1.9 | - | - | 4.2 | 1.6 | - | - | 2.1 | 2.1 | 3.3 | 1.5 | - | 2.1 | 2.0 |
| Articulated Trucks | 5 | 3 | 0 | - | 8 | - | 0 | 6 | 3 | 0 | - | 9 | 7 | 4 | 3 | - | 14 | 31 |
| % Articulated Trucks | 1.6 | 5.9 | - | - | 2.2 | - | - | 6.3 | 0.8 | - | - | 1.9 | 3.0 | 4.4 | 1.5 | - | 2.6 | 2.3 |
| Bicycles on Crosswalk | - | - | - | 0 | - | 3 | - | - | - | - | 0 | - | - | - | - | 0 | - | - |
| % Bicycles on Crosswalk | - | - | - | 0.0 | - | 50.0 | - | - | - | - | 0.0 | - | - | - | - | 0.0 | - | - |
| Pedestrians | - | - | - | 1 | - | 3 | - | - | - | - | 3 | - | - | - | - | 4 | - | - |
| % Pedestrians | - | - | - | 100.0 | - | 50.0 | - | - | - | - | 100.0 | - | - | - | - | 100.0 | - | - |

Unit Number:

DLZ
8430 West Bryn Mawr Avenue, Suite 100

Chicago, Illinois, United States 60631
(773) 283-2600

Count Name: Schaefer Hwy & Jefferies Service Dr
Site Code: 1942-6994-50/0800/2000
Start Date: 06/15/2021


Turning Movement Peak Hour Data Plot (1:30 PM)

Unit Number:

DLZ
8430 West Bryn Mawr Avenue, Suite 100

Chicago, Illinois, United States 60631
(773) 283-2600

Count Name: Schaefer Hwy & Jefferies Service Dr
Site Code: 1942-6994-50/0800/2000
Start Date: 06/15/2021


# Turning Movement Peak Hour Data (8:00 PM)

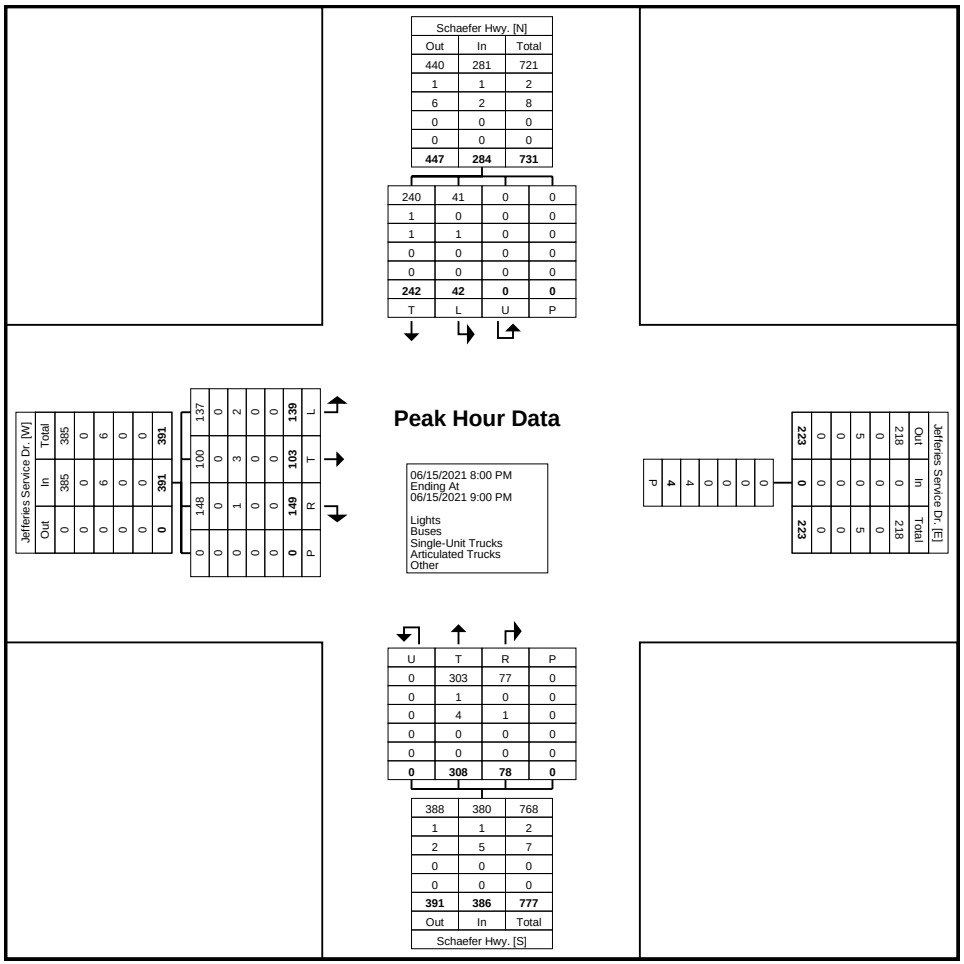
| Start Time | Schaefer Hwy. Southbound | | | | | Jefferies Service Dr. Westbound | | Schaefer Hwy. Northbound | | | | | Jefferies Service Dr. Eastbound | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Thru | Left | U-Turn | Peds | App. Total | Peds | App. Total | Right | Thru | U-Turn | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Int. Total |
| 8:00 PM | 57 | 8 | 0 | 0 | 65 | 2 | 0 | 27 | 78 | 0 | 0 | 105 | 36 | 27 | 36 | 0 | 99 | 269 |
| 8:15 PM | 50 | 13 | 0 | 0 | 63 | 0 | 0 | 21 | 103 | 0 | 0 | 124 | 40 | 33 | 39 | 0 | 112 | 299 |
| 8:30 PM | 77 | 11 | 0 | 0 | 88 | 0 | 0 | 15 | 62 | 0 | 0 | 77 | 41 | 21 | 37 | 0 | 99 | 264 |
| 8:45 PM | 58 | 10 | 0 | 0 | 68 | 2 | 0 | 15 | 65 | 0 | 0 | 80 | 32 | 22 | 27 | 0 | 81 | 229 |
| Total | 242 | 42 | 0 | 0 | 284 | 4 | 0 | 78 | 308 | 0 | 0 | 386 | 149 | 103 | 139 | 0 | 391 | 1061 |
| Approach % | 85.2 | 14.8 | 0.0 | - | - | - | - | 20.2 | 79.8 | 0.0 | - | - | 38.1 | 26.3 | 35.5 | - | - | - |
| Total % | 22.8 | 4.0 | 0.0 | - | 26.8 | - | 0.0 | 7.4 | 29.0 | 0.0 | - | 36.4 | 14.0 | 9.7 | 13.1 | - | 36.9 | - |
| PHF | 0.786 | 0.808 | 0.000 | - | 0.807 | - | 0.000 | 0.722 | 0.748 | 0.000 | - | 0.778 | 0.909 | 0.780 | 0.891 | - | 0.873 | 0.887 |
| Lights | 240 | 41 | 0 | - | 281 | - | 0 | 77 | 303 | 0 | - | 380 | 148 | 100 | 137 | - | 385 | 1046 |
| % Lights | 99.2 | 97.6 | - | - | 98.9 | - | - | 98.7 | 98.4 | - | - | 98.4 | 99.3 | 97.1 | 98.6 | - | 98.5 | 98.6 |
| Buses | 1 | 0 | 0 | - | 1 | - | 0 | 0 | 1 | 0 | - | 1 | 0 | 0 | 0 | - | 0 | 2 |
| % Buses | 0.4 | 0.0 | - | - | 0.4 | - | - | 0.0 | 0.3 | - | - | 0.3 | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.2 |
| Single-Unit Trucks | 1 | 1 | 0 | - | 2 | - | 0 | 1 | 4 | 0 | - | 5 | 1 | 3 | 2 | - | 6 | 13 |
| % Single-Unit Trucks | 0.4 | 2.4 | - | - | 0.7 | - | - | 1.3 | 1.3 | - | - | 1.3 | 0.7 | 2.9 | 1.4 | - | 1.5 | 1.2 |
| Articulated Trucks | 0 | 0 | 0 | - | 0 | - | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | - | 0 | 0 |
| % Articulated Trucks | 0.0 | 0.0 | - | - | 0.0 | - | - | 0.0 | 0.0 | - | - | 0.0 | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.0 |
| Bicycles on Crosswalk | - | - | - | 0 | - | 0 | - | - | - | - | 0 | - | - | - | - | 0 | - | - |
| % Bicycles on Crosswalk | - | - | - | - | - | 0.0 | - | - | - | - | - | - | - | - | - | - | - | - |
| Pedestrians | - | - | - | 0 | - | 4 | - | - | - | - | 0 | - | - | - | - | 0 | - | - |
| % Pedestrians | - | - | - | - | - | 100.0 | - | - | - | - | - | - | - | - | - | - | - | - |

Unit Number:

DLZ
8430 West Bryn Mawr Avenue, Suite 100

Chicago, Illinois, United States 60631
(773) 283-2600

Count Name: Schaefer Hwy & Jefferies Service Dr
Site Code: 1942-6994-50/0800/2000
Start Date: 06/15/2021
Page No: 6




Turning Movement Peak Hour Data Plot (8:00 PM)

Unit Number:

DLZ
8430 West Bryn Mawr Avenue, Suite 100

Chicago, Illinois, United States 60631
(773) 283-2600

Count Name: Grand River Ave & Jefferies Service Dr
Site Code: 1942-6994-50/0800/2000
Start Date: 06/15/2021


# Turning Movement Data

| Start Time | Grand River Ave. Southbound | | | | | Jefferies Service Dr. Westbound | | Grand River Ave. Northbound | | | | | Jefferies Service Dr. Eastbound | | | | | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Thru | Left | U-Turn | Peds | App. Total | Peds | App. Total | Right | Thru | U-Turn | Peds | App. Total | Right | Thru | Left | Peds | App. Total | |
| 12:30 PM | 96 | 7 | 0 | 0 | 103 | 0 | 0 | 3 | 115 | 1 | 0 | 119 | 13 | 81 | 3 | 0 | 97 | 319 |
| 12:45 PM | 118 | 2 | 0 | 0 | 120 | 0 | 0 | 3 | 78 | 0 | 0 | 81 | 16 | 59 | 1 | 0 | 76 | 277 |
| Hourly Total | 214 | 9 | 0 | 0 | 223 | 0 | 0 | 6 | 193 | 1 | 0 | 200 | 29 | 140 | 4 | 0 | 173 | 596 |
| 1:00 PM | 101 | 8 | 0 | 0 | 109 | 0 | 0 | 6 | 112 | 0 | 0 | 118 | 9 | 72 | 0 | 0 | 81 | 308 |
| 1:15 PM | 106 | 1 | 0 | 0 | 107 | 0 | 0 | 7 | 100 | 1 | 0 | 108 | 18 | 67 | 0 | 0 | 85 | 300 |
| 1:30 PM | 117 | 0 | 0 | 0 | 117 | 0 | 0 | 1 | 109 | 0 | 0 | 110 | 14 | 76 | 0 | 0 | 90 | 317 |
| 1:45 PM | 107 | 0 | 0 | 0 | 107 | 0 | 0 | 4 | 104 | 0 | 0 | 108 | 12 | 69 | 2 | 1 | 83 | 298 |
| Hourly Total | 431 | 9 | 0 | 0 | 440 | 0 | 0 | 18 | 425 | 1 | 0 | 444 | 53 | 284 | 2 | 1 | 339 | 1223 |
| 2:00 PM | 100 | 4 | 0 | 0 | 104 | 0 | 0 | 3 | 92 | 0 | 0 | 95 | 6 | 68 | 2 | 0 | 76 | 275 |
| 2:15 PM | 122 | 1 | 0 | 0 | 123 | 1 | 0 | 11 | 98 | 0 | 0 | 109 | 24 | 86 | 2 | 1 | 112 | 344 |
| *** BREAK *** | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Hourly Total | 222 | 5 | 0 | 0 | 227 | 1 | 0 | 14 | 190 | 0 | 0 | 204 | 30 | 154 | 4 | 1 | 188 | 619 |
| 8:00 PM | 99 | 3 | 0 | 0 | 102 | 0 | 0 | 2 | 117 | 0 | 0 | 119 | 16 | 68 | 2 | 1 | 86 | 307 |
| 8:15 PM | 99 | 2 | 0 | 0 | 101 | 1 | 0 | 2 | 81 | 0 | 0 | 83 | 24 | 70 | 1 | 0 | 95 | 279 |
| 8:30 PM | 105 | 0 | 0 | 0 | 105 | 2 | 0 | 5 | 66 | 0 | 0 | 71 | 12 | 70 | 1 | 1 | 83 | 259 |
| 8:45 PM | 101 | 4 | 0 | 0 | 105 | 0 | 0 | 4 | 66 | 0 | 0 | 70 | 10 | 54 | 0 | 1 | 64 | 239 |
| Hourly Total | 404 | 9 | 0 | 0 | 413 | 3 | 0 | 13 | 330 | 0 | 0 | 343 | 62 | 262 | 4 | 3 | 328 | 1084 |
| 9:00 PM | 81 | 0 | 0 | 0 | 81 | 0 | 0 | 1 | 93 | 0 | 0 | 94 | 18 | 53 | 0 | 0 | 71 | 246 |
| 9:15 PM | 73 | 1 | 0 | 0 | 74 | 0 | 0 | 3 | 89 | 0 | 0 | 92 | 7 | 65 | 0 | 2 | 72 | 238 |
| 9:30 PM | 63 | 3 | 0 | 0 | 66 | 0 | 0 | 6 | 71 | 0 | 0 | 77 | 21 | 49 | 1 | 0 | 71 | 214 |
| 9:45 PM | 69 | 4 | 0 | 0 | 73 | 0 | 0 | 2 | 66 | 0 | 0 | 68 | 9 | 56 | 0 | 0 | 65 | 206 |
| Hourly Total | 286 | 8 | 0 | 0 | 294 | 0 | 0 | 12 | 319 | 0 | 0 | 331 | 55 | 223 | 1 | 2 | 279 | 904 |
| Grand Total | 1557 | 40 | 0 | 0 | 1597 | 4 | 0 | 63 | 1457 | 2 | 0 | 1522 | 229 | 1063 | 15 | 7 | 1307 | 4426 |
| Approach % | 97.5 | 2.5 | 0.0 | - | - | - | - | 4.1 | 95.7 | 0.1 | - | - | 17.5 | 81.3 | 1.1 | - | - | - |
| Total % | 35.2 | 0.9 | 0.0 | - | 36.1 | - | 0.0 | 1.4 | 32.9 | 0.0 | - | 34.4 | 5.2 | 24.0 | 0.3 | - | 29.5 | - |
| Lights | 1535 | 38 | 0 | - | 1573 | - | 0 | 60 | 1432 | 2 | - | 1494 | 219 | 1022 | 15 | - | 1256 | 4323 |
| % Lights | 98.6 | 95.0 | - | - | 98.5 | - | - | 95.2 | 98.3 | 100.0 | - | 98.2 | 95.6 | 96.1 | 100.0 | - | 96.1 | 97.7 |
| Buses | 11 | 0 | 0 | - | 11 | - | 0 | 0 | 9 | 0 | - | 9 | 1 | 3 | 0 | - | 4 | 24 |
| % Buses | 0.7 | 0.0 | - | - | 0.7 | - | - | 0.0 | 0.6 | 0.0 | - | 0.6 | 0.4 | 0.3 | 0.0 | - | 0.3 | 0.5 |
| Single-Unit Trucks | 8 | 2 | 0 | - | 10 | - | 0 | 1 | 13 | 0 | - | 14 | 5 | 21 | 0 | - | 26 | 50 |
| % Single-Unit Trucks | 0.5 | 5.0 | - | - | 0.6 | - | - | 1.6 | 0.9 | 0.0 | - | 0.9 | 2.2 | 2.0 | 0.0 | - | 2.0 | 1.1 |
| Articulated Trucks | 3 | 0 | 0 | - | 3 | - | 0 | 2 | 3 | 0 | - | 5 | 4 | 17 | 0 | - | 21 | 29 |
| % Articulated Trucks | 0.2 | 0.0 | - | - | 0.2 | - | - | 3.2 | 0.2 | 0.0 | - | 0.3 | 1.7 | 1.6 | 0.0 | - | 1.6 | 0.7 |
| Bicycles on Crosswalk | - | - | - | 0 | - | 3 | - | - | - | - | 0 | - | - | - | - | 4 | - | - |
| % Bicycles on Crosswalk | - | - | - | - | - | 75.0 | - | - | - | - | - | - | - | - | - | 57.1 | - | - |
| Pedestrians | - | - | - | 0 | - | 1 | - | - | - | - | 0 | - | - | - | - | 3 | - | - |
| % Pedestrians | - | - | - | - | - | 25.0 | - | - | - | - | - | - | - | - | - | 42.9 | - | - |

Unit Number:

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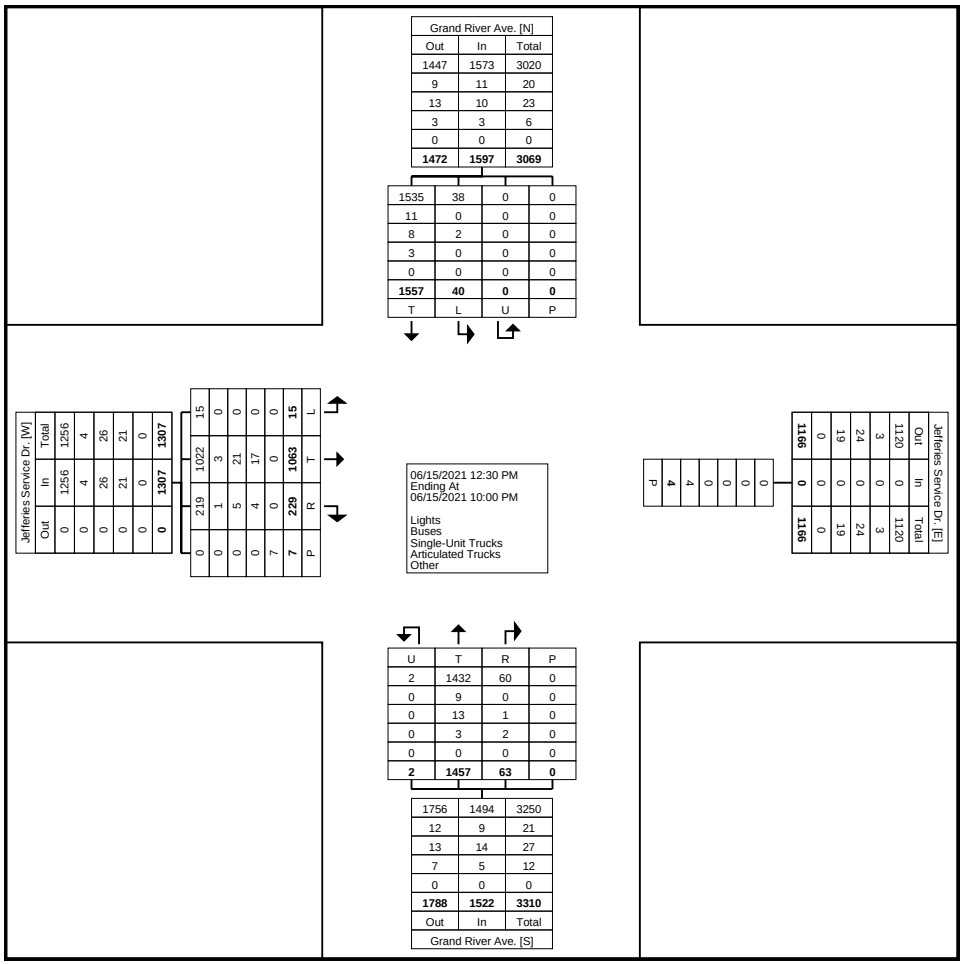
Site Code: 1942-6994-50/0800/2000
Start Date: 06/15/2021


Turning Movement Data Plot

Unit Number:

DLZ
8430 West Bryn Mawr Avenue, Suite 100

Chicago, Illinois, United States 60631
(773) 283-2600

Count Name: Grand River Ave & Jefferies Service Dr
Site Code: 1942-6994-50/0800/2000
Start Date: 06/15/2021


# Turning Movement Peak Hour Data (1:30 PM)

| Start Time | Grand River Ave. Southbound | | | | | Jefferies Service Dr. Westbound | | Grand River Ave. Northbound | | | | | Jefferies Service Dr. Eastbound | | | | | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Thru | Left | U-Turn | Peds | App. Total | Peds | App. Total | Right | Thru | U-Turn | Peds | App. Total | Right | Thru | Left | Peds | App. Total | |
| 1:30 PM | 117 | 0 | 0 | 0 | 117 | 0 | 0 | 1 | 109 | 0 | 0 | 110 | 14 | 76 | 0 | 0 | 90 | 317 |
| 1:45 PM | 107 | 0 | 0 | 0 | 107 | 0 | 0 | 4 | 104 | 0 | 0 | 108 | 12 | 69 | 2 | 1 | 83 | 298 |
| 2:00 PM | 100 | 4 | 0 | 0 | 104 | 0 | 0 | 3 | 92 | 0 | 0 | 95 | 6 | 68 | 2 | 0 | 76 | 275 |
| 2:15 PM | 122 | 1 | 0 | 0 | 123 | 1 | 0 | 11 | 98 | 0 | 0 | 109 | 24 | 86 | 2 | 1 | 112 | 344 |
| Total | 446 | 5 | 0 | 0 | 451 | 1 | 0 | 19 | 403 | 0 | 0 | 422 | 56 | 299 | 6 | 2 | 361 | 1234 |
| Approach % | 98.9 | 1.1 | 0.0 | - | - | - | - | 4.5 | 95.5 | 0.0 | - | - | 15.5 | 82.8 | 1.7 | - | - | - |
| Total % | 36.1 | 0.4 | 0.0 | - | 36.5 | - | 0.0 | 1.5 | 32.7 | 0.0 | - | 34.2 | 4.5 | 24.2 | 0.5 | - | 29.3 | - |
| PHF | 0.914 | 0.313 | 0.000 | - | 0.917 | - | 0.000 | 0.432 | 0.924 | 0.000 | - | 0.959 | 0.583 | 0.869 | 0.750 | - | 0.806 | 0.897 |
| Lights | 437 | 5 | 0 | - | 442 | - | 0 | 18 | 397 | 0 | - | 415 | 51 | 279 | 6 | - | 336 | 1193 |
| % Lights | 98.0 | 100.0 | - | - | 98.0 | - | - | 94.7 | 98.5 | - | - | 98.3 | 91.1 | 93.3 | 100.0 | - | 93.1 | 96.7 |
| Buses | 5 | 0 | 0 | - | 5 | - | 0 | 0 | 3 | 0 | - | 3 | 0 | 1 | 0 | - | 1 | 9 |
| % Buses | 1.1 | 0.0 | - | - | 1.1 | - | - | 0.0 | 0.7 | - | - | 0.7 | 0.0 | 0.3 | 0.0 | - | 0.3 | 0.7 |
| Single-Unit Trucks | 4 | 0 | 0 | - | 4 | - | 0 | 0 | 3 | 0 | - | 3 | 2 | 10 | 0 | - | 12 | 19 |
| % Single-Unit Trucks | 0.9 | 0.0 | - | - | 0.9 | - | - | 0.0 | 0.7 | - | - | 0.7 | 3.6 | 3.3 | 0.0 | - | 3.3 | 1.5 |
| Articulated Trucks | 0 | 0 | 0 | - | 0 | - | 0 | 1 | 0 | 0 | - | 1 | 3 | 9 | 0 | - | 12 | 13 |
| % Articulated Trucks | 0.0 | 0.0 | - | - | 0.0 | - | - | 5.3 | 0.0 | - | - | 0.2 | 5.4 | 3.0 | 0.0 | - | 3.3 | 1.1 |
| Bicycles on Crosswalk | - | - | - | 0 | - | 0 | - | - | - | - | 0 | - | - | - | - | 2 | - | - |
| % Bicycles on Crosswalk | - | - | - | - | - | 0.0 | - | - | - | - | - | - | - | - | - | 100.0 | - | - |
| Pedestrians | - | - | - | 0 | - | 1 | - | - | - | - | 0 | - | - | - | - | 0 | - | - |
| % Pedestrians | - | - | - | - | - | 100.0 | - | - | - | - | - | - | - | - | - | 0.0 | - | - |

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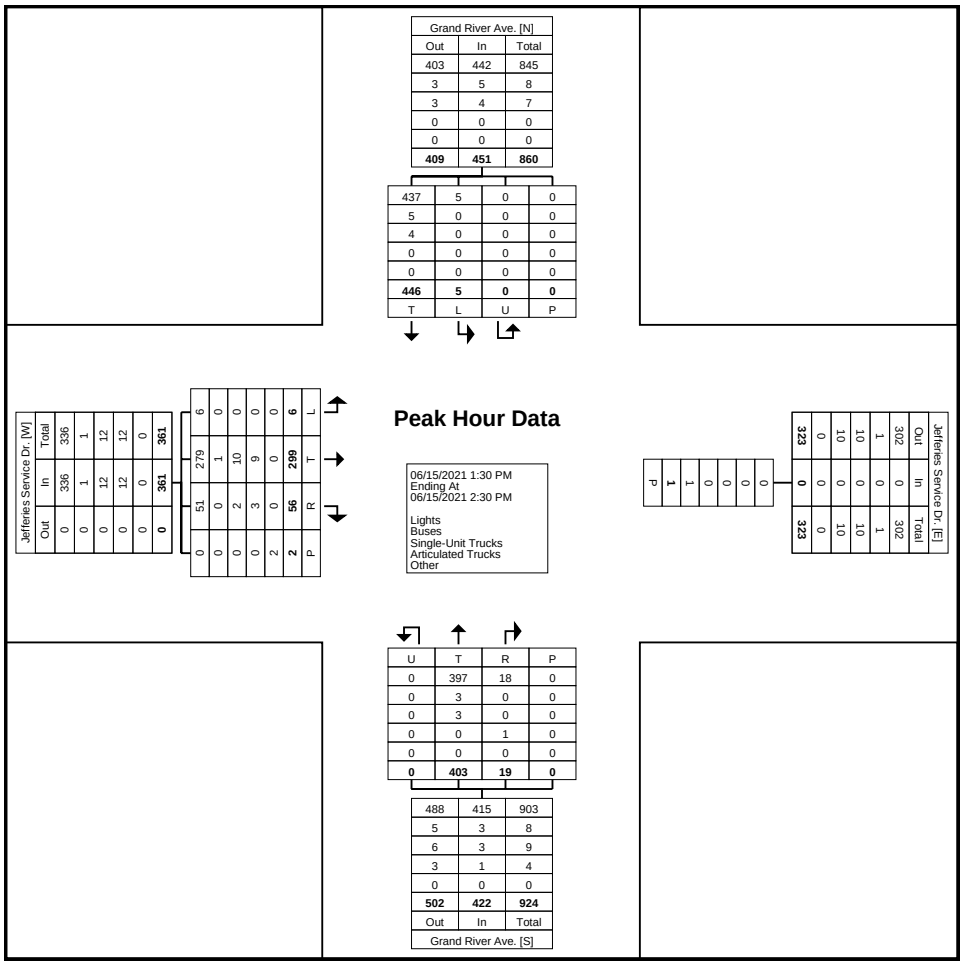
Start Date: 06/15/2021


Turning Movement Peak Hour Data Plot (1:30 PM)

Unit Number:

DLZ
8430 West Bryn Mawr Avenue, Suite 100

Chicago, Illinois, United States 60631
(773) 283-2600

Count Name: Grand River Ave & Jefferies Service Dr
Site Code: 1942-6994-50/0800/2000
Start Date: 06/15/2021


# Turning Movement Peak Hour Data (8:00 PM)

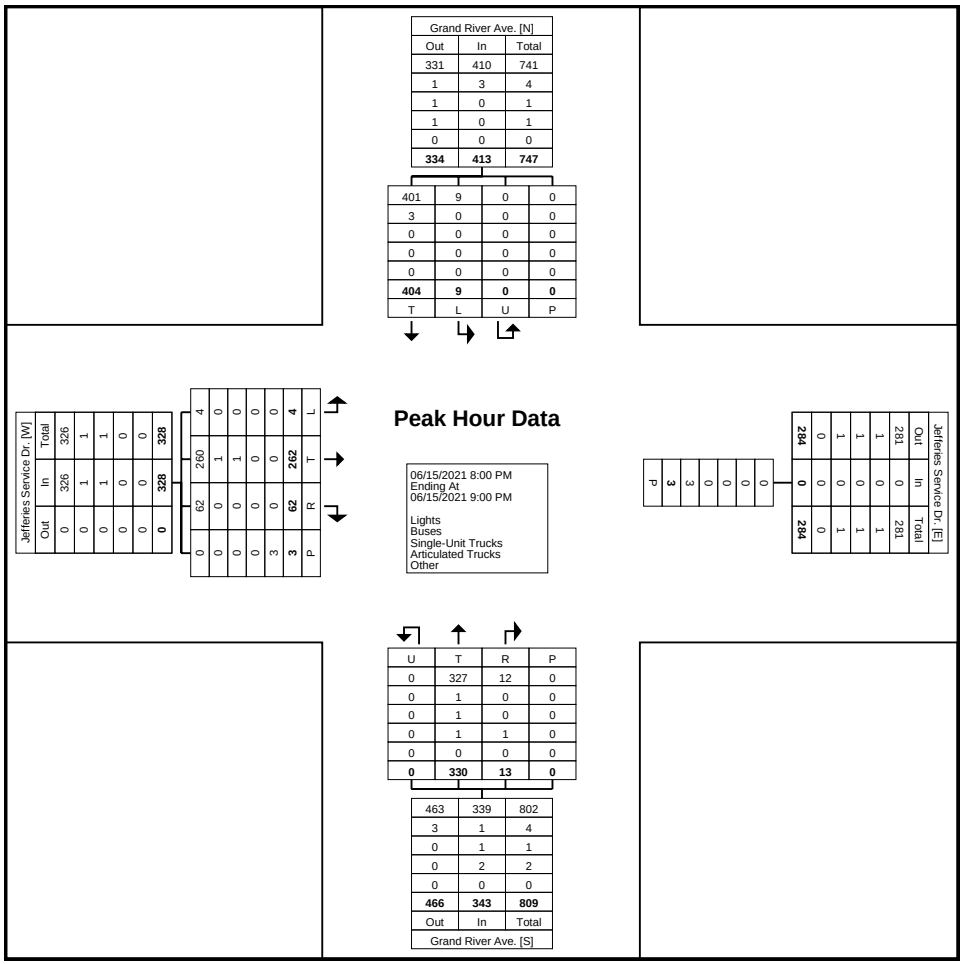
| Start Time | Grand River Ave. Southbound | | | | | Jefferies Service Dr. Westbound | | Grand River Ave. Northbound | | | | | Jefferies Service Dr. Eastbound | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Thru | Left | U-Turn | Peds | App. Total | Peds | App. Total | Right | Thru | U-Turn | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Int. Total |
| 8:00 PM | 99 | 3 | 0 | 0 | 102 | 0 | 0 | 2 | 117 | 0 | 0 | 119 | 16 | 68 | 2 | 1 | 86 | 307 |
| 8:15 PM | 99 | 2 | 0 | 0 | 101 | 1 | 0 | 2 | 81 | 0 | 0 | 83 | 24 | 70 | 1 | 0 | 95 | 279 |
| 8:30 PM | 105 | 0 | 0 | 0 | 105 | 2 | 0 | 5 | 66 | 0 | 0 | 71 | 12 | 70 | 1 | 1 | 83 | 259 |
| 8:45 PM | 101 | 4 | 0 | 0 | 105 | 0 | 0 | 4 | 66 | 0 | 0 | 70 | 10 | 54 | 0 | 1 | 64 | 239 |
| Total | 404 | 9 | 0 | 0 | 413 | 3 | 0 | 13 | 330 | 0 | 0 | 343 | 62 | 262 | 4 | 3 | 328 | 1084 |
| Approach % | 97.8 | 2.2 | 0.0 | - | - | - | - | 3.8 | 96.2 | 0.0 | - | - | 18.9 | 79.9 | 1.2 | - | - | - |
| Total % | 37.3 | 0.8 | 0.0 | - | 38.1 | - | 0.0 | 1.2 | 30.4 | 0.0 | - | 31.6 | 5.7 | 24.2 | 0.4 | - | 30.3 | - |
| PHF | 0.962 | 0.563 | 0.000 | - | 0.983 | - | 0.000 | 0.650 | 0.705 | 0.000 | - | 0.721 | 0.646 | 0.936 | 0.500 | - | 0.863 | 0.883 |
| Lights | 401 | 9 | 0 | - | 410 | - | 0 | 12 | 327 | 0 | - | 339 | 62 | 260 | 4 | - | 326 | 1075 |
| % Lights | 99.3 | 100.0 | - | - | 99.3 | - | - | 92.3 | 99.1 | - | - | 98.8 | 100.0 | 99.2 | 100.0 | - | 99.4 | 99.2 |
| Buses | 3 | 0 | 0 | - | 3 | - | 0 | 0 | 1 | 0 | - | 1 | 0 | 1 | 0 | - | 1 | 5 |
| % Buses | 0.7 | 0.0 | - | - | 0.7 | - | - | 0.0 | 0.3 | - | - | 0.3 | 0.0 | 0.4 | 0.0 | - | 0.3 | 0.5 |
| Single-Unit Trucks | 0 | 0 | 0 | - | 0 | - | 0 | 0 | 1 | 0 | - | 1 | 0 | 1 | 0 | - | 1 | 2 |
| % Single-Unit Trucks | 0.0 | 0.0 | - | - | 0.0 | - | - | 0.0 | 0.3 | - | - | 0.3 | 0.0 | 0.4 | 0.0 | - | 0.3 | 0.2 |
| Articulated Trucks | 0 | 0 | 0 | - | 0 | - | 0 | 1 | 1 | 0 | - | 2 | 0 | 0 | 0 | - | 0 | 2 |
| % Articulated Trucks | 0.0 | 0.0 | - | - | 0.0 | - | - | 7.7 | 0.3 | - | - | 0.6 | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.2 |
| Bicycles on Crosswalk | - | - | - | 0 | - | 3 | - | - | - | - | 0 | - | - | - | - | 1 | - | - |
| % Bicycles on Crosswalk | - | - | - | - | - | 100.0 | - | - | - | - | - | - | - | - | - | 33.3 | - | - |
| Pedestrians | - | - | - | 0 | - | 0 | - | - | - | - | 0 | - | - | - | - | 2 | - | - |
| % Pedestrians | - | - | - | - | - | 0.0 | - | - | - | - | - | - | - | - | - | 66.7 | - | - |

Unit Number:

DLZ
8430 West Bryn Mawr Avenue, Suite 100

Chicago, Illinois, United States 60631
(773) 283-2600

Count Name: Grand River Ave & Jefferies Service Dr
Site Code: 1942-6994-50/0800/2000
Start Date: 06/15/2021


Turning Movement Peak Hour Data Plot (8:00 PM)

Unit Number:

DLZ
8430 West Bryn Mawr Avenue, Suite 100

Chicago, Illinois, United States 60631
(773) 283-2600

Count Name: Kendall St & Meyers Rd
Site Code: 1942-6994-50/0800/2000
Start Date: 06/15/2021


# Turning Movement Data

| Start Time | Meyers Rd. Southbound | | | | | | Kendall St. Westbound | | | | | | Meyers Rd. Northbound | | | | | | Kendall St. Eastbound | | | | | | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Right | Thru | Left | U-Turn | Peds | App. Total | Right | Thru | Left | U-Turn | Peds | App. Total | Right | Thru | Left | U-Turn | Peds | App. Total | Right | Thru | Left | U-Turn | Peds | App. Total | |
| 12:30 PM | 2 | 55 | 1 | 0 | 0 | 58 | 1 | 3 | 3 | 0 | 0 | 7 | 3 | 62 | 0 | 0 | 0 | 65 | 0 | 0 | 1 | 0 | 0 | 1 | 131 |
| 12:45 PM | 0 | 60 | 1 | 0 | 0 | 61 | 0 | 2 | 1 | 0 | 1 | 3 | 6 | 67 | 0 | 0 | 1 | 73 | 5 | 0 | 1 | 0 | 1 | 6 | 143 |
| Hourly Total | 2 | 115 | 2 | 0 | 0 | 119 | 1 | 5 | 4 | 0 | 1 | 10 | 9 | 129 | 0 | 0 | 1 | 138 | 5 | 0 | 2 | 0 | 1 | 7 | 274 |
| 1:00 PM | 1 | 70 | 3 | 0 | 0 | 74 | 3 | 2 | 2 | 0 | 1 | 7 | 1 | 76 | 0 | 0 | 1 | 77 | 1 | 0 | 1 | 0 | 0 | 2 | 160 |
| 1:15 PM | 0 | 74 | 1 | 0 | 0 | 75 | 2 | 1 | 1 | 0 | 0 | 4 | 2 | 64 | 1 | 0 | 1 | 67 | 2 | 1 | 1 | 0 | 1 | 4 | 150 |
| 1:30 PM | 0 | 67 | 2 | 0 | 0 | 69 | 2 | 1 | 3 | 0 | 1 | 6 | 1 | 83 | 1 | 0 | 0 | 85 | 0 | 0 | 0 | 0 | 0 | 0 | 160 |
| 1:45 PM | 1 | 56 | 0 | 0 | 0 | 57 | 0 | 0 | 1 | 0 | 0 | 1 | 3 | 62 | 1 | 0 | 0 | 66 | 2 | 1 | 0 | 0 | 1 | 3 | 127 |
| Hourly Total | 2 | 267 | 6 | 0 | 0 | 275 | 7 | 4 | 7 | 0 | 2 | 18 | 7 | 285 | 3 | 0 | 2 | 295 | 5 | 2 | 2 | 0 | 2 | 9 | 597 |
| 2:00 PM | 0 | 79 | 3 | 0 | 0 | 82 | 0 | 0 | 1 | 0 | 0 | 1 | 2 | 60 | 1 | 0 | 0 | 63 | 2 | 0 | 1 | 0 | 0 | 3 | 149 |
| 2:15 PM | 0 | 73 | 0 | 0 | 0 | 73 | 2 | 0 | 1 | 0 | 0 | 3 | 4 | 76 | 1 | 0 | 0 | 81 | 0 | 0 | 2 | 0 | 0 | 2 | 159 |
| *** BREAK *** | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Hourly Total | 0 | 152 | 3 | 0 | 0 | 155 | 2 | 0 | 2 | 0 | 0 | 4 | 6 | 136 | 2 | 0 | 0 | 144 | 2 | 0 | 3 | 0 | 0 | 5 | 308 |
| 8:00 PM | 1 | 60 | 1 | 0 | 0 | 62 | 1 | 1 | 0 | 0 | 0 | 2 | 8 | 62 | 1 | 0 | 0 | 71 | 0 | 0 | 0 | 0 | 0 | 0 | 135 |
| 8:15 PM | 1 | 58 | 1 | 0 | 0 | 60 | 5 | 0 | 0 | 0 | 0 | 5 | 2 | 44 | 1 | 0 | 0 | 47 | 4 | 1 | 0 | 0 | 0 | 5 | 117 |
| 8:30 PM | 1 | 59 | 3 | 0 | 0 | 63 | 0 | 0 | 1 | 0 | 0 | 1 | 3 | 47 | 1 | 0 | 1 | 51 | 0 | 0 | 1 | 0 | 2 | 1 | 116 |
| 8:45 PM | 0 | 59 | 0 | 0 | 0 | 59 | 1 | 0 | 2 | 0 | 0 | 3 | 3 | 47 | 1 | 0 | 0 | 51 | 2 | 0 | 1 | 0 | 0 | 3 | 116 |
| Hourly Total | 3 | 236 | 5 | 0 | 0 | 244 | 7 | 1 | 3 | 0 | 0 | 11 | 16 | 200 | 4 | 0 | 1 | 220 | 6 | 1 | 2 | 0 | 2 | 9 | 484 |
| 9:00 PM | 5 | 42 | 1 | 0 | 0 | 48 | 1 | 0 | 2 | 0 | 0 | 3 | 2 | 49 | 0 | 0 | 0 | 51 | 0 | 0 | 2 | 0 | 0 | 2 | 104 |
| 9:15 PM | 0 | 41 | 1 | 0 | 0 | 42 | 1 | 0 | 0 | 0 | 0 | 1 | 2 | 46 | 1 | 0 | 1 | 49 | 0 | 0 | 0 | 0 | 0 | 0 | 92 |
| 9:30 PM | 0 | 50 | 0 | 0 | 0 | 50 | 2 | 0 | 1 | 0 | 0 | 3 | 2 | 41 | 0 | 0 | 0 | 43 | 0 | 1 | 0 | 0 | 1 | 1 | 97 |
| 9:45 PM | 1 | 44 | 2 | 0 | 0 | 47 | 0 | 0 | 7 | 0 | 0 | 7 | 6 | 44 | 2 | 0 | 0 | 52 | 1 | 0 | 2 | 0 | 0 | 3 | 109 |
| Hourly Total | 6 | 177 | 4 | 0 | 0 | 187 | 4 | 0 | 10 | 0 | 0 | 14 | 12 | 180 | 3 | 0 | 1 | 195 | 1 | 1 | 4 | 0 | 1 | 6 | 402 |
| Grand Total | 13 | 947 | 20 | 0 | 0 | 980 | 21 | 10 | 26 | 0 | 3 | 57 | 50 | 930 | 12 | 0 | 5 | 992 | 19 | 4 | 13 | 0 | 6 | 36 | 2065 |
| Approach % | 1.3 | 96.6 | 2.0 | 0.0 | - | - | 36.8 | 17.5 | 45.6 | 0.0 | - | - | 5.0 | 93.8 | 1.2 | 0.0 | - | - | 52.8 | 11.1 | 36.1 | 0.0 | - | - | - |
| Total % | 0.6 | 45.9 | 1.0 | 0.0 | - | 47.5 | 1.0 | 0.5 | 1.3 | 0.0 | - | 2.8 | 2.4 | 45.0 | 0.6 | 0.0 | - | 48.0 | 0.9 | 0.2 | 0.6 | 0.0 | - | 1.7 | - |
| Lights | 13 | 930 | 18 | 0 | - | 961 | 21 | 10 | 26 | 0 | - | 57 | 50 | 901 | 12 | 0 | - | 963 | 19 | 4 | 13 | 0 | - | 36 | 2017 |
| % Lights | 100.0 | 98.2 | 90.0 | - | - | 98.1 | 100.0 | 100.0 | 100.0 | - | - | 100.0 | 100.0 | 96.9 | 100.0 | - | - | 97.1 | 100.0 | 100.0 | 100.0 | - | - | 100.0 | 97.7 |
| Buses | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 3 | 0 | 0 | - | 3 | 0 | 0 | 0 | 0 | - | 0 | 3 |
| % Buses | 0.0 | 0.0 | 0.0 | - | - | 0.0 | 0.0 | 0.0 | 0.0 | - | - | 0.0 | 0.0 | 0.3 | 0.0 | - | - | 0.3 | 0.0 | 0.0 | 0.0 | - | - | 0.0 | 0.1 |
| Single-Unit Trucks | 0 | 17 | 2 | 0 | - | 19 | 0 | 0 | 0 | 0 | - | 0 | 0 | 16 | 0 | 0 | - | 16 | 0 | 0 | 0 | 0 | - | 0 | 35 |
| % Single-Unit Trucks | 0.0 | 1.8 | 10.0 | - | - | 1.9 | 0.0 | 0.0 | 0.0 | - | - | 0.0 | 0.0 | 1.7 | 0.0 | - | - | 1.6 | 0.0 | 0.0 | 0.0 | - | - | 0.0 | 1.7 |
| Articulated Trucks | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 10 | 0 | 0 | - | 10 | 0 | 0 | 0 | 0 | - | 0 | 10 |
| % Articulated Trucks | 0.0 | 0.0 | 0.0 | - | - | 0.0 | 0.0 | 0.0 | 0.0 | - | - | 0.0 | 0.0 | 1.1 | 0.0 | - | - | 1.0 | 0.0 | 0.0 | 0.0 | - | - | 0.0 | 0.5 |
| Bicycles on Crosswalk | - | - | - | - | 0 | - | - | - | - | - | 0 | - | - | - | - | - | 0 | - | - | - | - | - | 1 | - | - |
| % Bicycles on Crosswalk | - | - | - | - | - | - | - | - | - | - | 0.0 | - | - | - | - | - | 0.0 | - | - | - | - | - | 16.7 | - | - |
| Pedestrians | - | - | - | - | 0 | - | - | - | - | - | 3 | - | - | - | - | - | 5 | - | - | - | - | - | 5 | - | - |

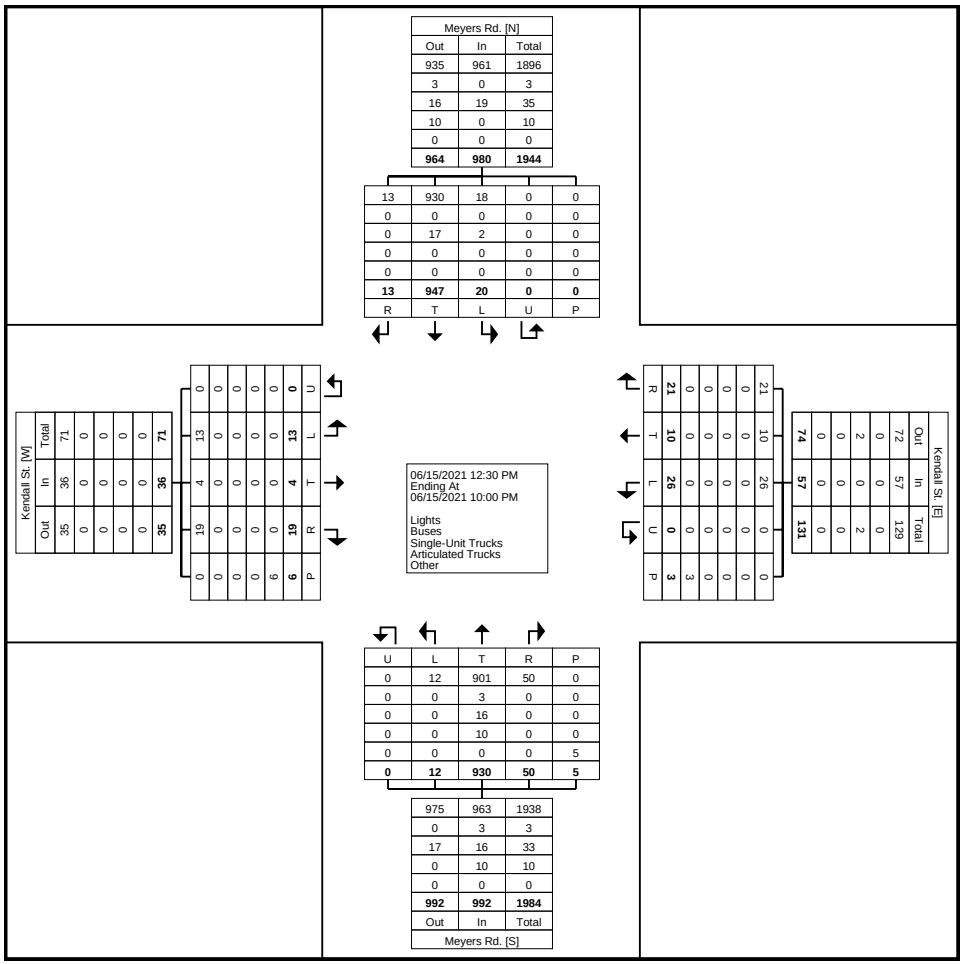
| | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| % Pedestrians | - | - | - | - | - | - | - | - | - | - | 100.0 | - | - | - | - | - | 100.0 | - | - | - | - | - | 83.3 | - | - |

Unit Number:

DLZ
8430 West Bryn Mawr Avenue, Suite 100

Chicago, Illinois, United States 60631
(773) 283-2600

Count Name: Kendall St & Meyers Rd
Site Code: 1942-6994-50/0800/2000
Start Date: 06/15/2021


Turning Movement Data Plot

Unit Number:

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8430 West Bryn Mawr Avenue, Suite 100

Chicago, Illinois, United States 60631
(773) 283-2600

Count Name: Kendall St & Meyers Rd
Site Code: 1942-6994-50/0800/2000
Start Date: 06/15/2021


# Turning Movement Peak Hour Data (12:45 PM)

| Start Time | Meyers Rd. Southbound | | | | | | Kendall St. Westbound | | | | | | Meyers Rd. Northbound | | | | | | Kendall St. Eastbound | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Right | Thru | Left | U-Turn | Peds | App. Total | Right | Thru | Left | U-Turn | Peds | App. Total | Right | Thru | Left | U-Turn | Peds | App. Total | Right | Thru | Left | U-Turn | Peds | App. Total | Int. Total |
| 12:45 PM | 0 | 60 | 1 | 0 | 0 | 61 | 0 | 2 | 1 | 0 | 1 | 3 | 6 | 67 | 0 | 0 | 1 | 73 | 5 | 0 | 1 | 0 | 1 | 6 | 143 |
| 1:00 PM | 1 | 70 | 3 | 0 | 0 | 74 | 3 | 2 | 2 | 0 | 1 | 7 | 1 | 76 | 0 | 0 | 1 | 77 | 1 | 0 | 1 | 0 | 0 | 2 | 160 |
| 1:15 PM | 0 | 74 | 1 | 0 | 0 | 75 | 2 | 1 | 1 | 0 | 0 | 4 | 2 | 64 | 1 | 0 | 1 | 67 | 2 | 1 | 1 | 0 | 1 | 4 | 150 |
| 1:30 PM | 0 | 67 | 2 | 0 | 0 | 69 | 2 | 1 | 3 | 0 | 1 | 6 | 1 | 83 | 1 | 0 | 0 | 85 | 0 | 0 | 0 | 0 | 0 | 0 | 160 |
| Total | 1 | 271 | 7 | 0 | 0 | 279 | 7 | 6 | 7 | 0 | 3 | 20 | 10 | 290 | 2 | 0 | 3 | 302 | 8 | 1 | 3 | 0 | 2 | 12 | 613 |
| Approach % | 0.4 | 97.1 | 2.5 | 0.0 | - | - | 35.0 | 30.0 | 35.0 | 0.0 | - | - | 3.3 | 96.0 | 0.7 | 0.0 | - | - | 66.7 | 8.3 | 25.0 | 0.0 | - | - | - |
| Total % | 0.2 | 44.2 | 1.1 | 0.0 | - | 45.5 | 1.1 | 1.0 | 1.1 | 0.0 | - | 3.3 | 1.6 | 47.3 | 0.3 | 0.0 | - | 49.3 | 1.3 | 0.2 | 0.5 | 0.0 | - | 2.0 | - |
| PHF | 0.250 | 0.916 | 0.583 | 0.000 | - | 0.930 | 0.583 | 0.750 | 0.583 | 0.000 | - | 0.714 | 0.417 | 0.873 | 0.500 | 0.000 | - | 0.888 | 0.400 | 0.250 | 0.750 | 0.000 | - | 0.500 | 0.958 |
| Lights | 1 | 260 | 5 | 0 | - | 266 | 7 | 6 | 7 | 0 | - | 20 | 10 | 277 | 2 | 0 | - | 289 | 8 | 1 | 3 | 0 | - | 12 | 587 |
| % Lights | 100.0 | 95.9 | 71.4 | - | - | 95.3 | 100.0 | 100.0 | 100.0 | - | - | 100.0 | 100.0 | 95.5 | 100.0 | - | - | 95.7 | 100.0 | 100.0 | 100.0 | - | - | 100.0 | 95.8 |
| Buses | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 |
| % Buses | 0.0 | 0.0 | 0.0 | - | - | 0.0 | 0.0 | 0.0 | 0.0 | - | - | 0.0 | 0.0 | 0.0 | 0.0 | - | - | 0.0 | 0.0 | 0.0 | 0.0 | - | - | 0.0 | 0.0 |
| Single-Unit Trucks | 0 | 11 | 2 | 0 | - | 13 | 0 | 0 | 0 | 0 | - | 0 | 0 | 5 | 0 | 0 | - | 5 | 0 | 0 | 0 | 0 | - | 0 | 18 |
| % Single-Unit Trucks | 0.0 | 4.1 | 28.6 | - | - | 4.7 | 0.0 | 0.0 | 0.0 | - | - | 0.0 | 0.0 | 1.7 | 0.0 | - | - | 1.7 | 0.0 | 0.0 | 0.0 | - | - | 0.0 | 2.9 |
| Articulated Trucks | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 8 | 0 | 0 | - | 8 | 0 | 0 | 0 | 0 | - | 0 | 8 |
| % Articulated Trucks | 0.0 | 0.0 | 0.0 | - | - | 0.0 | 0.0 | 0.0 | 0.0 | - | - | 0.0 | 0.0 | 2.8 | 0.0 | - | - | 2.6 | 0.0 | 0.0 | 0.0 | - | - | 0.0 | 1.3 |
| Bicycles on Crosswalk | - | - | - | - | 0 | - | - | - | - | - | 0 | - | - | - | - | - | 0 | - | - | - | - | - | 0 | - | - |
| % Bicycles on Crosswalk | - | - | - | - | - | - | - | - | - | - | 0.0 | - | - | - | - | - | 0.0 | - | - | - | - | - | 0.0 | - | - |
| Pedestrians | - | - | - | - | 0 | - | - | - | - | - | 3 | - | - | - | - | - | 3 | - | - | - | - | - | 2 | - | - |
| % Pedestrians | - | - | - | - | - | - | - | - | - | - | 100.0 | - | - | - | - | - | 100.0 | - | - | - | - | - | 100.0 | - | - |

Unit Number:

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Chicago, Illinois, United States 60631
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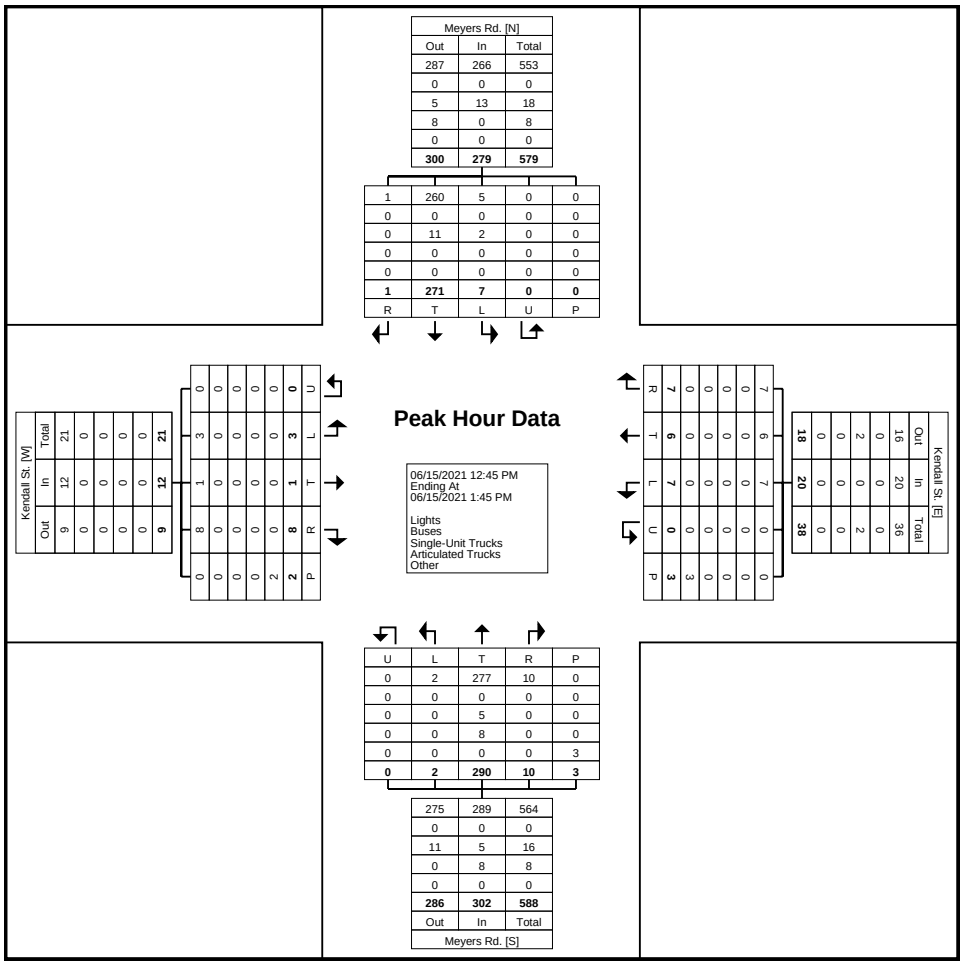
Count Name: Kendall St & Meyers Rd
Site Code: 1942-6994-50/0800/2000
Start Date: 06/15/2021


Turning Movement Peak Hour Data Plot (12:45 PM)

Unit Number:

DLZ
8430 West Bryn Mawr Avenue, Suite 100

Chicago, Illinois, United States 60631
(773) 283-2600

Count Name: Kendall St & Meyers Rd
Site Code: 1942-6994-50/0800/2000
Start Date: 06/15/2021


# Turning Movement Peak Hour Data (8:00 PM)

| Start Time | Meyers Rd. Southbound | | | | | | Kendall St. Westbound | | | | | | Meyers Rd. Northbound | | | | | | Kendall St. Eastbound | | | | | | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Right | Thru | Left | U-Turn | Peds | App. Total | Right | Thru | Left | U-Turn | Peds | App. Total | Right | Thru | Left | U-Turn | Peds | App. Total | Right | Thru | Left | U-Turn | Peds | App. Total | |
| 8:00 PM | 1 | 60 | 1 | 0 | 0 | 62 | 1 | 1 | 0 | 0 | 0 | 2 | 8 | 62 | 1 | 0 | 0 | 71 | 0 | 0 | 0 | 0 | 0 | 0 | 135 |
| 8:15 PM | 1 | 58 | 1 | 0 | 0 | 60 | 5 | 0 | 0 | 0 | 0 | 5 | 2 | 44 | 1 | 0 | 0 | 47 | 4 | 1 | 0 | 0 | 0 | 5 | 117 |
| 8:30 PM | 1 | 59 | 3 | 0 | 0 | 63 | 0 | 0 | 1 | 0 | 0 | 1 | 3 | 47 | 1 | 0 | 1 | 51 | 0 | 0 | 1 | 0 | 2 | 1 | 116 |
| 8:45 PM | 0 | 59 | 0 | 0 | 0 | 59 | 1 | 0 | 2 | 0 | 0 | 3 | 3 | 47 | 1 | 0 | 0 | 51 | 2 | 0 | 1 | 0 | 0 | 3 | 116 |
| Total | 3 | 236 | 5 | 0 | 0 | 244 | 7 | 1 | 3 | 0 | 0 | 11 | 16 | 200 | 4 | 0 | 1 | 220 | 6 | 1 | 2 | 0 | 2 | 9 | 484 |
| Approach % | 1.2 | 96.7 | 2.0 | 0.0 | - | - | 63.6 | 9.1 | 27.3 | 0.0 | - | - | 7.3 | 90.9 | 1.8 | 0.0 | - | - | 66.7 | 11.1 | 22.2 | 0.0 | - | - | - |
| Total % | 0.6 | 48.8 | 1.0 | 0.0 | - | 50.4 | 1.4 | 0.2 | 0.6 | 0.0 | - | 2.3 | 3.3 | 41.3 | 0.8 | 0.0 | - | 45.5 | 1.2 | 0.2 | 0.4 | 0.0 | - | 1.9 | - |
| PHF | 0.750 | 0.983 | 0.417 | 0.000 | - | 0.968 | 0.350 | 0.250 | 0.375 | 0.000 | - | 0.550 | 0.500 | 0.806 | 1.000 | 0.000 | - | 0.775 | 0.375 | 0.250 | 0.500 | 0.000 | - | 0.450 | 0.896 |
| Lights | 3 | 236 | 5 | 0 | - | 244 | 7 | 1 | 3 | 0 | - | 11 | 16 | 200 | 4 | 0 | - | 220 | 6 | 1 | 2 | 0 | - | 9 | 484 |
| % Lights | 100.0 | 100.0 | 100.0 | - | - | 100.0 | 100.0 | 100.0 | 100.0 | - | - | 100.0 | 100.0 | 100.0 | 100.0 | - | - | 100.0 | 100.0 | 100.0 | 100.0 | - | - | 100.0 | 100.0 |
| Buses | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 |
| % Buses | 0.0 | 0.0 | 0.0 | - | - | 0.0 | 0.0 | 0.0 | 0.0 | - | - | 0.0 | 0.0 | 0.0 | 0.0 | - | - | 0.0 | 0.0 | 0.0 | 0.0 | - | - | 0.0 | 0.0 |
| Single-Unit Trucks | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 |
| % Single-Unit Trucks | 0.0 | 0.0 | 0.0 | - | - | 0.0 | 0.0 | 0.0 | 0.0 | - | - | 0.0 | 0.0 | 0.0 | 0.0 | - | - | 0.0 | 0.0 | 0.0 | 0.0 | - | - | 0.0 | 0.0 |
| Articulated Trucks | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 |
| % Articulated Trucks | 0.0 | 0.0 | 0.0 | - | - | 0.0 | 0.0 | 0.0 | 0.0 | - | - | 0.0 | 0.0 | 0.0 | 0.0 | - | - | 0.0 | 0.0 | 0.0 | 0.0 | - | - | 0.0 | 0.0 |
| Bicycles on Crosswalk | - | - | - | - | 0 | - | - | - | - | - | 0 | - | - | - | - | - | 0 | - | - | - | - | - | 0 | - | - |
| % Bicycles on Crosswalk | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 0.0 | - | - | - | - | - | 0.0 | - | - |
| Pedestrians | - | - | - | - | 0 | - | - | - | - | - | 0 | - | - | - | - | - | 1 | - | - | - | - | - | 2 | - | - |
| % Pedestrians | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 100.0 | - | - | - | - | - | 100.0 | - | - |

Unit Number:

DLZ
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Chicago, Illinois, United States 60631
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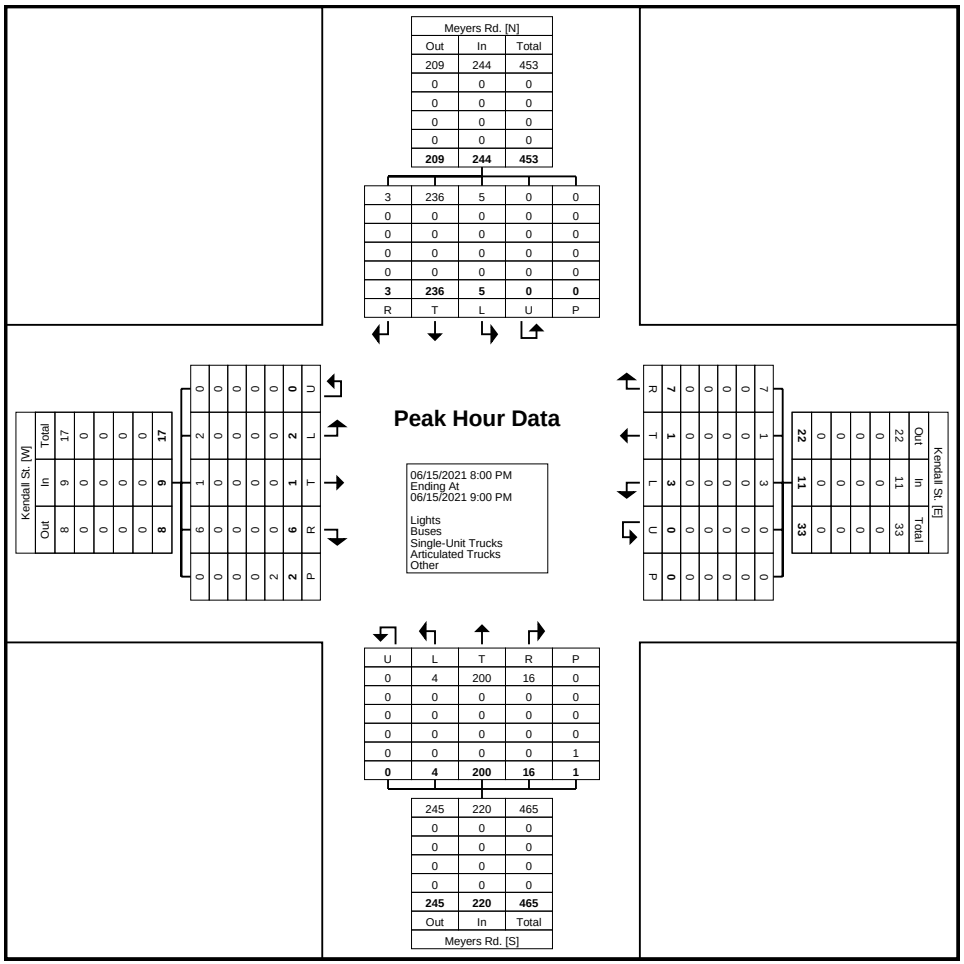
Count Name: Kendall St & Meyers Rd
Site Code: 1942-6994-50/0800/2000
Start Date: 06/15/2021


Turning Movement Peak Hour Data Plot (8:00 PM)

Unit Number:

DLZ
8430 West Bryn Mawr Avenue, Suite 100

Chicago, Illinois, United States 60631
(773) 283-2600

Count Name: Ward Ave & Schoolcraft
Site Code: 1942-6994-50/0800/2000
Start Date: 06/15/2021
Page No: 1

# Turning Movement Data

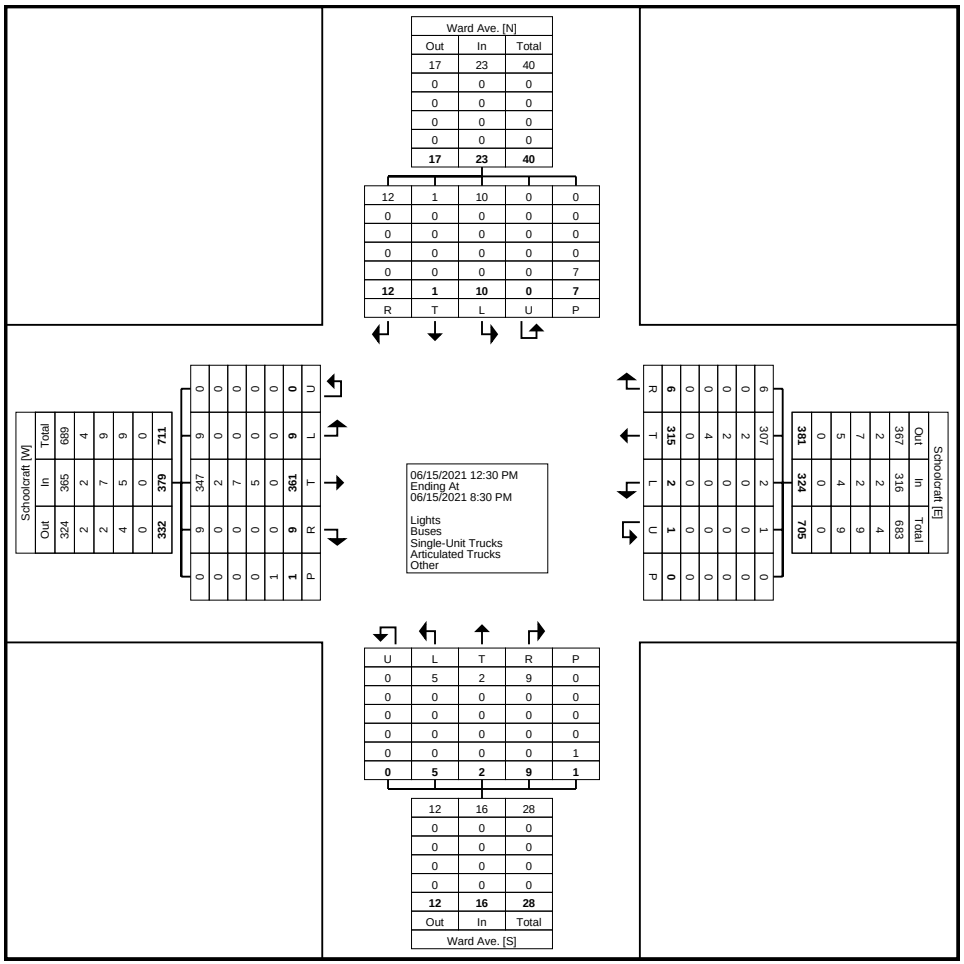
| Start Time | Ward Ave. Southbound | | | | | | Schoolcraft Westbound | | | | | | Ward Ave. Northbound | | | | | | Schoolcraft Eastbound | | | | | | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Right | Thru | Left | U-Turn | Peds | App. Total | Right | Thru | Left | U-Turn | Peds | App. Total | Right | Thru | Left | U-Turn | Peds | App. Total | Right | Thru | Left | U-Turn | Peds | App. Total | |
| 12:30 PM | 1 | 0 | 0 | 0 | 2 | 1 | 1 | 25 | 2 | 0 | 0 | 28 | 1 | 0 | 1 | 0 | 0 | 2 | 1 | 32 | 0 | 0 | 0 | 33 | 64 |
| 12:45 PM | 2 | 1 | 1 | 0 | 0 | 4 | 0 | 44 | 0 | 0 | 0 | 44 | 1 | 0 | 1 | 0 | 0 | 2 | 2 | 42 | 1 | 0 | 1 | 45 | 95 |
| Hourly Total | 3 | 1 | 1 | 0 | 2 | 5 | 1 | 69 | 2 | 0 | 0 | 72 | 2 | 0 | 2 | 0 | 0 | 4 | 3 | 74 | 1 | 0 | 1 | 78 | 159 |
| 1:00 PM | 1 | 0 | 2 | 0 | 1 | 3 | 1 | 26 | 0 | 0 | 0 | 27 | 1 | 2 | 2 | 0 | 0 | 5 | 1 | 35 | 0 | 0 | 0 | 36 | 71 |
| 1:15 PM | 0 | 0 | 2 | 0 | 1 | 2 | 0 | 28 | 0 | 0 | 0 | 28 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 40 | 1 | 0 | 0 | 43 | 73 |
| 1:30 PM | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 39 | 0 | 0 | 0 | 39 | 2 | 0 | 0 | 0 | 0 | 2 | 1 | 41 | 1 | 0 | 0 | 43 | 85 |
| 1:45 PM | 3 | 0 | 2 | 0 | 0 | 5 | 1 | 46 | 0 | 0 | 0 | 47 | 3 | 0 | 1 | 0 | 1 | 4 | 0 | 41 | 2 | 0 | 0 | 43 | 99 |
| Hourly Total | 5 | 0 | 6 | 0 | 3 | 11 | 2 | 139 | 0 | 0 | 0 | 141 | 6 | 2 | 3 | 0 | 1 | 11 | 4 | 157 | 4 | 0 | 0 | 165 | 328 |
| 2:00 PM | 1 | 0 | 2 | 0 | 2 | 3 | 1 | 45 | 0 | 1 | 0 | 47 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 40 | 2 | 0 | 0 | 43 | 93 |
| 2:15 PM | 1 | 0 | 1 | 0 | 0 | 2 | 2 | 28 | 0 | 0 | 0 | 30 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 44 | 0 | 0 | 0 | 44 | 77 |
| *** BREAK *** | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Hourly Total | 2 | 0 | 3 | 0 | 2 | 5 | 3 | 73 | 0 | 1 | 0 | 77 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 84 | 2 | 0 | 0 | 87 | 170 |
| 8:00 PM | 2 | 0 | 0 | 0 | 0 | 2 | 0 | 34 | 0 | 0 | 0 | 34 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 46 | 2 | 0 | 0 | 49 | 85 |
| 8:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Grand Total | 12 | 1 | 10 | 0 | 7 | 23 | 6 | 315 | 2 | 1 | 0 | 324 | 9 | 2 | 5 | 0 | 1 | 16 | 9 | 361 | 9 | 0 | 1 | 379 | 742 |
| Approach % | 52.2 | 4.3 | 43.5 | 0.0 | - | - | 1.9 | 97.2 | 0.6 | 0.3 | - | - | 56.3 | 12.5 | 31.3 | 0.0 | - | - | 2.4 | 95.3 | 2.4 | 0.0 | - | - | - |
| Total % | 1.6 | 0.1 | 1.3 | 0.0 | - | 3.1 | 0.8 | 42.5 | 0.3 | 0.1 | - | 43.7 | 1.2 | 0.3 | 0.7 | 0.0 | - | 2.2 | 1.2 | 48.7 | 1.2 | 0.0 | - | 51.1 | - |
| Lights | 12 | 1 | 10 | 0 | - | 23 | 6 | 307 | 2 | 1 | - | 316 | 9 | 2 | 5 | 0 | - | 16 | 9 | 347 | 9 | 0 | - | 365 | 720 |
| % Lights | 100.0 | 100.0 | 100.0 | - | - | 100.0 | 100.0 | 97.5 | 100.0 | 100.0 | - | 97.5 | 100.0 | 100.0 | 100.0 | - | - | 100.0 | 100.0 | 96.1 | 100.0 | - | - | 96.3 | 97.0 |
| Buses | 0 | 0 | 0 | 0 | - | 0 | 0 | 2 | 0 | 0 | - | 2 | 0 | 0 | 0 | 0 | - | 0 | 0 | 2 | 0 | 0 | - | 2 | 4 |
| % Buses | 0.0 | 0.0 | 0.0 | - | - | 0.0 | 0.0 | 0.6 | 0.0 | 0.0 | - | 0.6 | 0.0 | 0.0 | 0.0 | - | - | 0.0 | 0.0 | 0.6 | 0.0 | - | - | 0.5 | 0.5 |
| Single-Unit Trucks | 0 | 0 | 0 | 0 | - | 0 | 0 | 2 | 0 | 0 | - | 2 | 0 | 0 | 0 | 0 | - | 0 | 0 | 7 | 0 | 0 | - | 7 | 9 |
| % Single-Unit Trucks | 0.0 | 0.0 | 0.0 | - | - | 0.0 | 0.0 | 0.6 | 0.0 | 0.0 | - | 0.6 | 0.0 | 0.0 | 0.0 | - | - | 0.0 | 0.0 | 1.9 | 0.0 | - | - | 1.8 | 1.2 |
| Articulated Trucks | 0 | 0 | 0 | 0 | - | 0 | 0 | 4 | 0 | 0 | - | 4 | 0 | 0 | 0 | 0 | - | 0 | 0 | 5 | 0 | 0 | - | 5 | 9 |
| % Articulated Trucks | 0.0 | 0.0 | 0.0 | - | - | 0.0 | 0.0 | 1.3 | 0.0 | 0.0 | - | 1.2 | 0.0 | 0.0 | 0.0 | - | - | 0.0 | 0.0 | 1.4 | 0.0 | - | - | 1.3 | 1.2 |
| Bicycles on Crosswalk | - | - | - | - | 0 | - | - | - | - | - | 0 | - | - | - | - | - | 0 | - | - | - | - | - | 0 | - | - |
| % Bicycles on Crosswalk | - | - | - | - | 0.0 | - | - | - | - | - | - | - | - | - | - | - | 0.0 | - | - | - | - | - | 0.0 | - | - |
| Pedestrians | - | - | - | - | 7 | - | - | - | - | - | 0 | - | - | - | - | - | 1 | - | - | - | - | - | 1 | - | - |
| % Pedestrians | - | - | - | - | 100.0 | - | - | - | - | - | - | - | - | - | - | - | 100.0 | - | - | - | - | - | 100.0 | - | - |

Unit Number:

DLZ
8430 West Bryn Mawr Avenue, Suite 100

Chicago, Illinois, United States 60631
(773) 283-2600

Count Name: Ward Ave & Schoolcraft
Site Code: 1942-6994-50/0800/2000
Start Date: 06/15/2021


Turning Movement Data Plot

Unit Number:

DLZ
8430 West Bryn Mawr Avenue, Suite 100

Chicago, Illinois, United States 60631
(773) 283-2600

Count Name: Ward Ave & Schoolcraft
Site Code: 1942-6994-50/0800/2000
Start Date: 06/15/2021


# Turning Movement Peak Hour Data (1:30 PM)

| Start Time | Ward Ave. Southbound | | | | | | Schoolcraft Westbound | | | | | | Ward Ave. Northbound | | | | | | Schoolcraft Eastbound | | | | | | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Right | Thru | Left | U-Turn | Peds | App. Total | Right | Thru | Left | U-Turn | Peds | App. Total | Right | Thru | Left | U-Turn | Peds | App. Total | Right | Thru | Left | U-Turn | Peds | App. Total | |
| 1:30 PM | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 39 | 0 | 0 | 0 | 39 | 2 | 0 | 0 | 0 | 0 | 2 | 1 | 41 | 1 | 0 | 0 | 43 | 85 |
| 1:45 PM | 3 | 0 | 2 | 0 | 0 | 5 | 1 | 46 | 0 | 0 | 0 | 47 | 3 | 0 | 1 | 0 | 1 | 4 | 0 | 41 | 2 | 0 | 0 | 43 | 99 |
| 2:00 PM | 1 | 0 | 2 | 0 | 2 | 3 | 1 | 45 | 0 | 1 | 0 | 47 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 40 | 2 | 0 | 0 | 43 | 93 |
| 2:15 PM | 1 | 0 | 1 | 0 | 0 | 2 | 2 | 28 | 0 | 0 | 0 | 30 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 44 | 0 | 0 | 0 | 44 | 77 |
| Total | 6 | 0 | 5 | 0 | 3 | 11 | 4 | 158 | 0 | 1 | 0 | 163 | 6 | 0 | 1 | 0 | 1 | 7 | 2 | 166 | 5 | 0 | 0 | 173 | 354 |
| Approach % | 54.5 | 0.0 | 45.5 | 0.0 | - | - | 2.5 | 96.9 | 0.0 | 0.6 | - | - | 85.7 | 0.0 | 14.3 | 0.0 | - | - | 1.2 | 96.0 | 2.9 | 0.0 | - | - | - |
| Total % | 1.7 | 0.0 | 1.4 | 0.0 | - | 3.1 | 1.1 | 44.6 | 0.0 | 0.3 | - | 46.0 | 1.7 | 0.0 | 0.3 | 0.0 | - | 2.0 | 0.6 | 46.9 | 1.4 | 0.0 | - | 48.9 | - |
| PHF | 0.500 | 0.000 | 0.625 | 0.000 | - | 0.550 | 0.500 | 0.859 | 0.000 | 0.250 | - | 0.867 | 0.500 | 0.000 | 0.250 | 0.000 | - | 0.438 | 0.500 | 0.943 | 0.625 | 0.000 | - | 0.983 | 0.894 |
| Lights | 6 | 0 | 5 | 0 | - | 11 | 4 | 154 | 0 | 1 | - | 159 | 6 | 0 | 1 | 0 | - | 7 | 2 | 161 | 5 | 0 | - | 168 | 345 |
| % Lights | 100.0 | - | 100.0 | - | - | 100.0 | 100.0 | 97.5 | - | 100.0 | - | 97.5 | 100.0 | - | 100.0 | - | - | 100.0 | 100.0 | 97.0 | 100.0 | - | - | 97.1 | 97.5 |
| Buses | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 1 | 0 | 0 | - | 1 | 1 |
| % Buses | 0.0 | - | 0.0 | - | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | - | 0.0 | - | - | 0.0 | 0.0 | 0.6 | 0.0 | - | - | 0.6 | 0.3 |
| Single-Unit Trucks | 0 | 0 | 0 | 0 | - | 0 | 0 | 1 | 0 | 0 | - | 1 | 0 | 0 | 0 | 0 | - | 0 | 0 | 2 | 0 | 0 | - | 2 | 3 |
| % Single-Unit Trucks | 0.0 | - | 0.0 | - | - | 0.0 | 0.0 | 0.6 | - | 0.0 | - | 0.6 | 0.0 | - | 0.0 | - | - | 0.0 | 0.0 | 1.2 | 0.0 | - | - | 1.2 | 0.8 |
| Articulated Trucks | 0 | 0 | 0 | 0 | - | 0 | 0 | 3 | 0 | 0 | - | 3 | 0 | 0 | 0 | 0 | - | 0 | 0 | 2 | 0 | 0 | - | 2 | 5 |
| % Articulated Trucks | 0.0 | - | 0.0 | - | - | 0.0 | 0.0 | 1.9 | - | 0.0 | - | 1.8 | 0.0 | - | 0.0 | - | - | 0.0 | 0.0 | 1.2 | 0.0 | - | - | 1.2 | 1.4 |
| Bicycles on Crosswalk | - | - | - | - | 0 | - | - | - | - | - | 0 | - | - | - | - | - | 0 | - | - | - | - | - | 0 | - | - |
| % Bicycles on Crosswalk | - | - | - | - | 0.0 | - | - | - | - | - | - | - | - | - | - | - | 0.0 | - | - | - | - | - | - | - | - |
| Pedestrians | - | - | - | - | 3 | - | - | - | - | - | 0 | - | - | - | - | - | 1 | - | - | - | - | - | 0 | - | - |
| % Pedestrians | - | - | - | - | 100.0 | - | - | - | - | - | - | - | - | - | - | - | 100.0 | - | - | - | - | - | - | - | - |

Unit Number:

DLZ
8430 West Bryn Mawr Avenue, Suite 100

Chicago, Illinois, United States 60631
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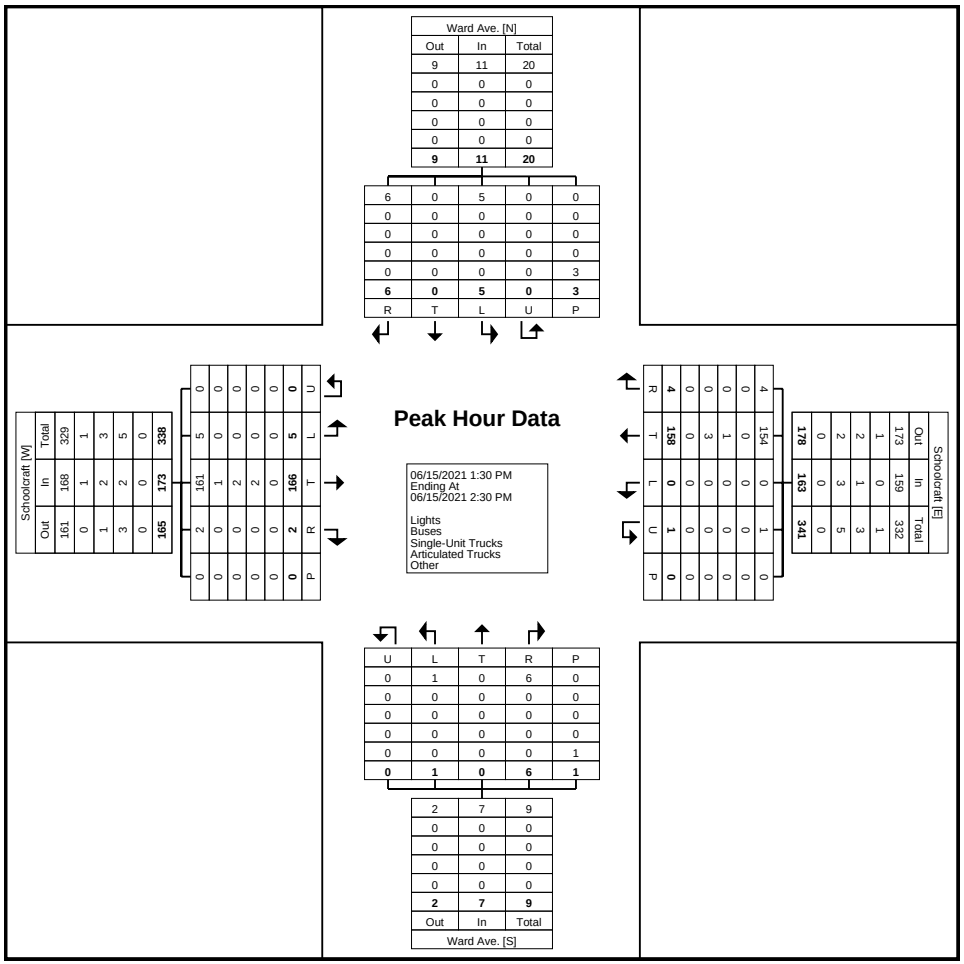
Count Name: Ward Ave & Schoolcraft
Site Code: 1942-6994-50/0800/2000
Start Date: 06/15/2021


Turning Movement Peak Hour Data Plot (1:30 PM)

| | |
|---|---|
| **Study Name** | Grand River Ave & I-96 Service Rd |
| **Start Date** | Tuesday, June 15, 2021 12:30 PM |
| **End Date** | Tuesday, June 15, 2021 10:00 PM |
| **Site Code** | 1942-6994-50/0800/2000 |

## Report Summary

| | | Southwestbound | | | | | | Northwestbound | | | | | | Northbound | | Northeastbound | | Eastbound | | Southeastbound | | | | | | | | Crosswalk | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Time Period** | **Class.** | **R** | **T** | **BL** | **L** | **I** | **O** | **T** | **L** | **HL** | **U** | **I** | **O** | **I** | **O** | **I** | **O** | **I** | **O** | **R** | **BR** | **T** | **U** | **I** | **O** | **Total** | | **s on Crodestria** | | **Total** |
| **Peak 1** | Lights | 292 | 175 | 5 | 40 | 512 | 0 | 344 | 59 | 0 | 0 | 403 | 443 | 0 | 102 | 0 | 240 | 0 | 0 | 6 | 97 | 403 | 0 | 506 | 636 | 1421 | NE | 0 | 0 | 0 |
| Specified Period | % | 96% | 95% | 100% | 100% | 96% | 0% | 98% | 100% | 0% | 0% | 98% | 98% | 0% | 94% | 0% | 96% | 0% | 0% | 100% | 94% | 98% | 0% | 97% | 97% | 97% | | 0% | 0% | |
| 12:30 PM - 2:30 PM | Buses | 1 | 0 | 0 | 0 | 1 | 0 | 3 | 0 | 0 | 0 | 3 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 5 | 4 | 9 | SE | 0 | 0 | 0 |
| One Hour Peak | % | 0% | 0% | 0% | 0% | 0% | 0% | 1% | 0% | 0% | 0% | 1% | 1% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 1% | 0% | 1% | 1% | 1% | | 0% | 0% | |
| 1:30 PM - 2:30 PM | ıgle-Unit Truc | 8 | 5 | 0 | 0 | 13 | 0 | 4 | 0 | 0 | 0 | 4 | 4 | 0 | 5 | 0 | 5 | 0 | 0 | 0 | 5 | 4 | 0 | 9 | 12 | 26 | S | 0 | 0 | 0 |
| | % | 3% | 3% | 0% | 0% | 2% | 0% | 1% | 0% | 0% | 0% | 1% | 1% | 0% | 5% | 0% | 2% | 0% | 0% | 0% | 5% | 1% | 0% | 2% | 2% | 2% | | 0% | 0% | |
| | ticulated Truc | 2 | 5 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 5 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 2 | 8 | SW | 0 | 0 | 0 |
| | % | 1% | 3% | 0% | 0% | 1% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 1% | 0% | 2% | 0% | 0% | 0% | 1% | 0% | 0% | 0% | 0% | 1% | | 0% | 0% | |
| | **Total** | **303** | **185** | **5** | **40** | **533** | **0** | **351** | **59** | **0** | **0** | **410** | **452** | **0** | **108** | **0** | **250** | **0** | **0** | **6** | **103** | **412** | **0** | **521** | **654** | **1464** | W | 1 | 0 | 1 |
| | PHF | 0.8 | 0.84 | 0.62 | 0.62 | 0.79 | 0 | 0.89 | 0.78 | 0 | 0 | 0.93 | 0.91 | 0 | 0.75 | 0 | 0.82 | 0 | 0 | 0.5 | 0.74 | 0.93 | 0 | 0.93 | 0.9 | 0.89 | | 100% | 0% | |
| | Approach % | | | | | 36% | 0% | | | | | 28% | 31% | 0% | 7% | 0% | 17% | 0% | 0% | | | | | 36% | 45% | | NW | 0 | 0 | 0 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | 0% | 0% | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | **1** | **0** | **1** |
| **Peak 2** | Lights | 253 | 185 | 6 | 23 | 467 | 0 | 285 | 46 | 0 | 0 | 331 | 402 | 0 | 101 | 0 | 234 | 0 | 0 | 3 | 95 | 379 | 0 | 477 | 538 | 1275 | NE | 2 | 1 | 3 |
| Specified Period | % | 98% | 99% | 100% | 100% | 99% | 0% | 99% | 100% | 0% | 0% | 99% | 99% | 0% | 99% | 0% | 99% | 0% | 0% | 100% | 99% | 99% | 0% | 99% | 99% | 99% | | 67% | 33% | |
| 8:00 PM - 10:00 PM | Buses | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 3 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 0 | 4 | 1 | 5 | SE | 0 | 0 | 0 |
| One Hour Peak | % | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 1% | 0% | 1% | 0% | 0% | 0% | 0% | 0% | 1% | 1% | 0% | 1% | 0% | 0% | | 0% | 0% | |
| 8:00 PM - 9:00 PM | ıgle-Unit Truc | 2 | 1 | 0 | 0 | 3 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 4 | S | 0 | 0 | 0 |
| | % | 1% | 1% | 0% | 0% | 1% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 1% | 0% | | 0% | 0% | |
| | ticulated Truc | 3 | 1 | 0 | 0 | 4 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 5 | SW | 0 | 0 | 0 |
| | % | 1% | 1% | 0% | 0% | 1% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 1% | 0% | | 0% | 0% | |
| | **Total** | **258** | **187** | **6** | **23** | **474** | **0** | **288** | **46** | **0** | **0** | **334** | **405** | **0** | **102** | **0** | **236** | **0** | **0** | **3** | **96** | **382** | **0** | **481** | **546** | **1289** | W | 1 | 1 | 2 |
| | PHF | 0.85 | 0.85 | 0.5 | 0.64 | 0.86 | 0 | 0.73 | 0.57 | 0 | 0 | 0.7 | 0.96 | 0 | 0.85 | 0 | 0.95 | 0 | 0 | 0.75 | 0.83 | 0.94 | 0 | 0.95 | 0.89 | 0.97 | | 50% | 50% | |
| | Approach % | | | | | 37% | 0% | | | | | 26% | 31% | 0% | 8% | 0% | 18% | 0% | 0% | | | | | 37% | 42% | | NW | 0 | 1 | 1 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | 0% | 100% | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | **3** | **3** | **6** |

## Lights

**Study Name** Grand River Ave & I-96 Service Rd
**Start Date** 06/15/2021
**Start Time** 12:30 PM
**Site Code** 1942-6994-50/0800/2000
**Unit Number**

| | I-96 Service Rd Southwestbound | | | | Grand River Ave Northwestbound | | | | Grand River Ave Southeastbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Bear Left | Left | Thru | Left | Hard Left | U-Turn | Right | Bear Right | Thru | U-Turn |
| 12:30 PM | 50 | 47 | 6 | 10 | 89 | 25 | 1 | 0 | 1 | 20 | 91 | 2 |
| 12:45 PM | 67 | 38 | 1 | 12 | 55 | 17 | 0 | 0 | 3 | 14 | 103 | 2 |
| 1:00 PM | 65 | 36 | 2 | 14 | 91 | 18 | 0 | 0 | 2 | 27 | 91 | 0 |
| 1:15 PM | 62 | 42 | 4 | 3 | 87 | 12 | 0 | 0 | 0 | 21 | 101 | 1 |
| 1:30 PM | 66 | 35 | 1 | 8 | 89 | 19 | 0 | 0 | 3 | 19 | 110 | 0 |
| 1:45 PM | 63 | 45 | 1 | 6 | 97 | 9 | 0 | 0 | 0 | 33 | 102 | 0 |
| 2:00 PM | 72 | 43 | 1 | 10 | 73 | 13 | 0 | 0 | 0 | 20 | 86 | 0 |
| 2:15 PM | 91 | 52 | 2 | 16 | 85 | 18 | 0 | 0 | 3 | 25 | 105 | 0 |
| 8:00 PM | 51 | 41 | 3 | 6 | 96 | 20 | 0 | 0 | 1 | 20 | 88 | 0 |
| 8:15 PM | 68 | 44 | 1 | 9 | 69 | 13 | 0 | 0 | 1 | 29 | 89 | 0 |
| 8:30 PM | 74 | 53 | 2 | 4 | 61 | 6 | 0 | 0 | 1 | 24 | 101 | 0 |
| 8:45 PM | 60 | 47 | 0 | 4 | 59 | 7 | 0 | 0 | 0 | 22 | 101 | 0 |
| 9:00 PM | 72 | 41 | 5 | 8 | 75 | 15 | 0 | 0 | 2 | 18 | 69 | 0 |
| 9:15 PM | 66 | 50 | 5 | 5 | 79 | 11 | 0 | 0 | 0 | 20 | 62 | 0 |
| 9:30 PM | 45 | 45 | 2 | 8 | 53 | 13 | 0 | 0 | 1 | 18 | 53 | 0 |
| 9:45 PM | 69 | 25 | 3 | 3 | 56 | 8 | 0 | 0 | 1 | 20 | 67 | 0 |

## Buses

**Study Name** Grand River Ave & I-96 Service Rd
**Start Date** 06/15/2021
**Start Time** 12:30 PM
**Site Code** 1942-6994-50/0800/2000
**Unit Number**

| | I-96 Service Rd Southwestbound | | | | Grand River Ave Northwestbound | | | | Grand River Ave Southeastbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Bear Left | Left | Thru | Left | Hard Left | U-Turn | Right | Bear Right | Thru | U-Turn |
| 12:30 PM | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12:45 PM | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| 1:00 PM | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| 1:30 PM | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| 2:00 PM | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 |
| 2:15 PM | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 2 | 0 |
| 8:00 PM | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 |
| 8:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| 8:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| 9:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| 9:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9:30 PM | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

## Single-Unit Trucks

**Study Name** Grand River Ave & I-96 Service Rd
**Start Date** 06/15/2021
**Start Time** 12:30 PM
**Site Code** 1942-6994-50/0800/2000
**Unit Number**

| | I-96 Service Rd Southwestbound | | | | Grand River Ave Northwestbound | | | | Grand River Ave Southeastbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Bear Left | Left | Thru | Left | Hard Left | U-Turn | Right | Bear Right | Thru | U-Turn |
| 12:30 PM | 2 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 2 | 0 |
| 12:45 PM | 1 | 4 | 0 | 1 | 3 | 1 | 0 | 0 | 0 | 4 | 1 | 0 |
| 1:00 PM | 2 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 2 | 0 |
| 1:15 PM | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1:30 PM | 1 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 0 |
| 1:45 PM | 2 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 1 | 2 | 0 |
| 2:00 PM | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| 2:15 PM | 3 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 0 |
| 8:00 PM | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:30 PM | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9:00 PM | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| 9:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9:30 PM | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

## Articulated Trucks

**Study Name** Grand River Ave & I-96 Service Rd
**Start Date** 06/15/2021
**Start Time** 12:30 PM
**Site Code** 1942-6994-50/0800/2000
**Unit Number**

| | I-96 Service Rd Southwestbound | | | | Grand River Ave Northwestbound | | | | Grand River Ave Southeastbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Bear Left | Left | Thru | Left | Hard Left | U-Turn | Right | Bear Right | Thru | U-Turn |
| 12:30 PM | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12:45 PM | 1 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1:00 PM | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 0 |
| 1:15 PM | 1 | 4 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 |
| 1:30 PM | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1:45 PM | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| 2:00 PM | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2:15 PM | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:00 PM | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:30 PM | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

## Bicycles on Crosswalk

**Study Name** Grand River Ave & I-96 Service Rd
**Start Date** 06/15/2021
**Start Time** 12:30 PM
**Site Code** 1942-6994-50/0800/2000
**Unit Number**

| | I-96 Service Rd Southwestbound | | Grand River Ave Northwestbound | | Bridge to EB I-96 Northbound | | I-96 Service Rd Northeastbound | | Center Crossing Eastbound | | Grand River Ave Southeastbound | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Peds CCW | Peds CW | Peds CCW | Peds CW | Peds CCW | Peds CW | Peds CCW | Peds CW | Peds CCW | Peds CW | Peds CCW | Peds CW |
| 12:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| 8:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| 8:15 PM | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:30 PM | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| 9:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

## Pedestrians

**Study Name** Grand River Ave & I-96 Service Rd
**Start Date** 06/15/2021
**Start Time** 12:30 PM
**Site Code** 1942-6994-50/0800/2000
**Unit Number**

| | I-96 Service Rd Southwestbound | | Grand River Ave Northwestbound | | Bridge to EB I-96 Northbound | | I-96 Service Rd Northeastbound | | Center Crossing Eastbound | | Grand River Ave Southeastbound | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Peds CCW | Peds CW | Peds CCW | Peds CW | Peds CCW | Peds CW | Peds CCW | Peds CW | Peds CCW | Peds CW | Peds CCW | Peds CW |
| 12:30 PM | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:45 PM | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 |
| 9:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9:15 PM | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| 9:30 PM | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

## Totals

**Study Name** Grand River Ave & I-96 Service Rd
**Start Date** 06/15/2021
**Start Time** 12:30 PM
**Site Code** 1942-6994-50/0800/2000
**Unit Number**

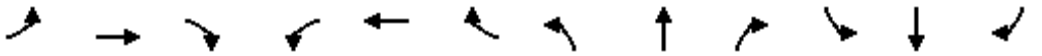
| | I-96 Service Rd Southwestbound | | | | Grand River Ave Northwestbound | | | | Grand River Ave Southeastbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Bear Left | Left | Thru | Left | Hard Left | U-Turn | Right | Bear Right | Thru | U-Turn |
| 12:30 PM | 53 | 49 | 6 | 10 | 90 | 27 | 1 | 0 | 1 | 20 | 93 | 2 |
| 12:45 PM | 69 | 45 | 1 | 13 | 59 | 18 | 0 | 0 | 3 | 18 | 105 | 2 |
| 1:00 PM | 70 | 36 | 2 | 14 | 97 | 18 | 0 | 0 | 2 | 28 | 95 | 0 |
| 1:15 PM | 65 | 47 | 4 | 3 | 87 | 13 | 0 | 0 | 0 | 21 | 103 | 1 |
| 1:30 PM | 67 | 39 | 1 | 8 | 91 | 19 | 0 | 0 | 3 | 21 | 111 | 0 |
| 1:45 PM | 66 | 46 | 1 | 6 | 99 | 9 | 0 | 0 | 0 | 35 | 105 | 0 |
| 2:00 PM | 75 | 45 | 1 | 10 | 74 | 13 | 0 | 0 | 0 | 21 | 88 | 0 |
| 2:15 PM | 95 | 55 | 2 | 16 | 87 | 18 | 0 | 0 | 3 | 26 | 108 | 0 |
| 8:00 PM | 54 | 41 | 3 | 6 | 99 | 20 | 0 | 0 | 1 | 20 | 88 | 0 |
| 8:15 PM | 68 | 44 | 1 | 9 | 69 | 13 | 0 | 0 | 1 | 29 | 91 | 0 |
| 8:30 PM | 76 | 55 | 2 | 4 | 61 | 6 | 0 | 0 | 1 | 24 | 102 | 0 |
| 8:45 PM | 60 | 47 | 0 | 4 | 59 | 7 | 0 | 0 | 0 | 23 | 101 | 0 |
| 9:00 PM | 73 | 41 | 5 | 8 | 75 | 15 | 0 | 0 | 2 | 18 | 71 | 0 |
| 9:15 PM | 66 | 50 | 5 | 5 | 79 | 11 | 0 | 0 | 0 | 20 | 62 | 0 |
| 9:30 PM | 46 | 45 | 2 | 8 | 55 | 13 | 0 | 0 | 1 | 18 | 53 | 0 |
| 9:45 PM | 69 | 25 | 3 | 3 | 56 | 8 | 0 | 0 | 1 | 20 | 67 | 0 |

# APPENDIX B
# SYNCHRO REPORTS

DLZ
ARCHITECTURE • ENGINEERING • PLANNING
SURVEYING • CONSTRUCTION SERVICES

INNOVATIVE IDEAS
EXCEPTIONAL DESIGN
UNMATCHED CLIENT SERVICE

# EXISTING CONDITIONS

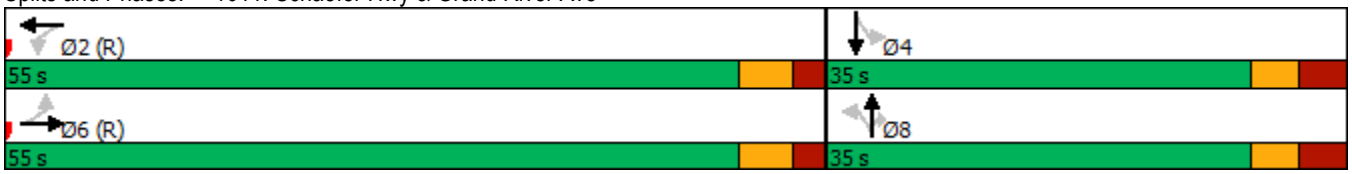


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 57 | 442 | 96 | 26 | 495 | 131 | 76 | 320 | 10 | 65 | 339 | 29 |
| Future Volume (vph) | 57 | 442 | 96 | 26 | 495 | 131 | 76 | 320 | 10 | 65 | 339 | 29 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 115 | | 0 | 95 | | 0 | 155 | | 0 | 80 | | 240 |
| Storage Lanes | 1 | | 0 | 0 | | 0 | 1 | | 1 | 1 | | 1 |
| Taper Length (ft) | 65 | | | 65 | | | 25 | | | 65 | | |
| Lane Util. Factor | 1.00 | 0.91 | 0.91 | 1.00 | 0.91 | 0.91 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 |
| Ped Bike Factor | 1.00 | 1.00 | | 1.00 | 0.99 | | 1.00 | | 0.99 | 1.00 | 1.00 | |
| Frt | | 0.971 | | | 0.964 | | | | 0.850 | | 0.988 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1805 | 4943 | 0 | 1805 | 4835 | 0 | 1805 | 1845 | 1615 | 1583 | 3369 | 0 |
| Flt Permitted | 0.376 | | | 0.416 | | | 0.464 | | | 0.296 | | |
| Satd. Flow (perm) | 712 | 4943 | 0 | 789 | 4835 | 0 | 881 | 1845 | 1593 | 493 | 3369 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 100 | | | 141 | | | | 34 | | 11 | |
| Link Speed (mph) | | 35 | | | 35 | | | 30 | | | 30 | |
| Link Distance (ft) | | 932 | | | 427 | | | 332 | | | 1209 | |
| Travel Time (s) | | 18.2 | | | 8.3 | | | 7.5 | | | 27.5 | |
| Confl. Peds. (#/hr) | 5 | | 3 | 3 | | 5 | 3 | | 2 | 2 | | 3 |
| Peak Hour Factor | 0.71 | 0.92 | 0.83 | 0.78 | 0.94 | 0.78 | 0.83 | 0.89 | 0.63 | 0.81 | 0.93 | 0.91 |
| Heavy Vehicles (%) | 0% | 2% | 0% | 0% | 2% | 5% | 0% | 3% | 0% | 14% | 6% | 3% |
| Adj. Flow (vph) | 80 | 480 | 116 | 33 | 527 | 168 | 92 | 360 | 16 | 80 | 365 | 32 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 80 | 596 | 0 | 33 | 695 | 0 | 92 | 360 | 16 | 80 | 397 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 12 | | | 12 | | | 12 | | | 12 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | Yes | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Turn Type | Perm | NA | | Perm | NA | | Perm | NA | Perm | Perm | NA | |
| Protected Phases | | 6 | | | 2 | | | 8 | | | 4 | |
| Permitted Phases | 6 | | | 2 | | | 8 | | 8 | 4 | | |
| Detector Phase | 6 | 6 | | 2 | 2 | | 8 | 8 | 8 | 4 | 4 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | | 10.0 | 10.0 | | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | |
| Minimum Split (s) | 35.8 | 35.8 | | 35.8 | 35.8 | | 46.5 | 46.5 | 46.5 | 46.5 | 46.5 | |
| Total Split (s) | 55.0 | 55.0 | | 55.0 | 55.0 | | 35.0 | 35.0 | 35.0 | 35.0 | 35.0 | |
| Total Split (%) | 61.1% | 61.1% | | 61.1% | 61.1% | | 38.9% | 38.9% | 38.9% | 38.9% | 38.9% | |
| Maximum Green (s) | 49.2 | 49.2 | | 49.2 | 49.2 | | 28.5 | 28.5 | 28.5 | 28.5 | 28.5 | |
| Yellow Time (s) | 3.6 | 3.6 | | 3.6 | 3.6 | | 3.2 | 3.2 | 3.2 | 3.2 | 3.2 | |
| All-Red Time (s) | 2.2 | 2.2 | | 2.2 | 2.2 | | 3.3 | 3.3 | 3.3 | 3.3 | 3.3 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Total Lost Time (s) | 5.8 | 5.8 | | 5.8 | 5.8 | | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Vehicle Extension (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | |
| Recall Mode | C-Max | C-Max | | C-Max | C-Max | | None | None | None | None | None | |
| Walk Time (s) | 7.0 | 7.0 | | 7.0 | 7.0 | | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | |
| Flash Dont Walk (s) | 23.0 | 23.0 | | 23.0 | 23.0 | | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 | |
| Pedestrian Calls (#/hr) | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | |
| Act Effct Green (s) | 55.1 | 55.1 | | 55.1 | 55.1 | | 22.6 | 22.6 | 22.6 | 22.6 | 22.6 | |
| Actuated g/C Ratio | 0.61 | 0.61 | | 0.61 | 0.61 | | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | |
| v/c Ratio | 0.18 | 0.19 | | 0.07 | 0.23 | | 0.42 | 0.78 | 0.04 | 0.65 | 0.47 | |
| Control Delay | 10.5 | 7.1 | | 8.7 | 6.5 | | 26.2 | 36.8 | 6.9 | 53.5 | 28.8 | |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 | |
| Total Delay | 10.5 | 7.1 | | 8.7 | 6.5 | | 26.2 | 37.4 | 6.9 | 53.5 | 28.8 | |
| LOS | B | A | | A | A | | C | D | A | D | C | |
| Approach Delay | | 7.5 | | | 6.6 | | | 34.1 | | | 32.9 | |
| Approach LOS | | A | | | A | | | C | | | C | |
| Queue Length 50th (ft) | 18 | 41 | | 6 | 40 | | 47 | 199 | 0 | 41 | 97 | |
| Queue Length 95th (ft) | 36 | 67 | | 19 | 68 | | 81 | 275 | 6 | 75 | 128 | |
| Internal Link Dist (ft) | | 852 | | | 347 | | | 252 | | | 1129 | |
| Turn Bay Length (ft) | 115 | | | 95 | | | 155 | | | 80 | | |
| Base Capacity (vph) | 436 | 3066 | | 483 | 3015 | | 278 | 584 | 527 | 156 | 1074 | |
| Starvation Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 46 | 0 | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | |
| Reduced v/c Ratio | 0.18 | 0.19 | | 0.07 | 0.23 | | 0.33 | 0.67 | 0.03 | 0.51 | 0.37 | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 90 | | | |
| Actuated Cycle Length: 90 | | | |
| Offset: 59 (66%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green | | | |
| Natural Cycle: 85 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.78 | | | |
| Intersection Signal Delay: 17.7 | | Intersection LOS: B | |
| Intersection Capacity Utilization 77.6% | | ICU Level of Service D | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 1011: Schaefer Hwy & Grand River Ave

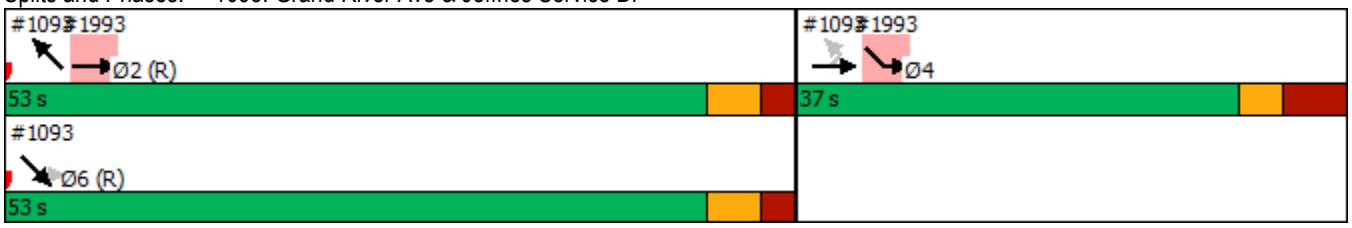


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | SEL | SET | SER | NWL | NWT | NWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 6 | 299 | 56 | 0 | 0 | 0 | 5 | 446 | 0 | 0 | 403 | 19 |
| Future Volume (vph) | 6 | 299 | 56 | 0 | 0 | 0 | 5 | 446 | 0 | 0 | 403 | 19 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Util. Factor | 0.86 | 0.86 | 0.86 | 1.00 | 1.00 | 1.00 | 0.91 | 0.91 | 1.00 | 1.00 | 0.91 | 0.91 |
| Ped Bike Factor | | | | | | | | 1.00 | | | 1.00 | |
| Frt | | 0.977 | | | | | | | | | 0.990 | |
| Flt Protected | | 0.999 | | | | | | 0.999 | | | | |
| Satd. Flow (prot) | 0 | 6254 | 0 | 0 | 0 | 0 | 0 | 5082 | 0 | 0 | 5066 | 0 |
| Flt Permitted | | 0.999 | | | | | | 0.933 | | | | |
| Satd. Flow (perm) | 0 | 6254 | 0 | 0 | 0 | 0 | 0 | 4746 | 0 | 0 | 5066 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 55 | | | | | | | | | 19 | |
| Link Speed (mph) | | 35 | | | 35 | | | 35 | | | 35 | |
| Link Distance (ft) | | 329 | | | 379 | | | 582 | | | 812 | |
| Travel Time (s) | | 6.4 | | | 7.4 | | | 11.3 | | | 15.8 | |
| Confl. Peds. (#/hr) | | | | | | | 1 | | | | | 1 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.60 | 0.91 | 0.92 | 0.92 | 0.92 | 0.60 |
| Heavy Vehicles (%) | 2% | 2% | 2% | 2% | 2% | 2% | 0% | 2% | 2% | 2% | 1% | 5% |
| Adj. Flow (vph) | 7 | 325 | 61 | 0 | 0 | 0 | 8 | 490 | 0 | 0 | 438 | 32 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 393 | 0 | 0 | 0 | 0 | 0 | 498 | 0 | 0 | 470 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 0 | | | 0 | | | 12 | | | 12 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Turn Type | Perm | NA | | | | | Perm | NA | | | NA | |
| Protected Phases | | 4 | | | | | | 6 | | | 2 | |
| Permitted Phases | 4 | | | | | | 6 | | | | | |
| Detector Phase | 4 | 4 | | | | | 6 | 6 | | | 2 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | | | | | 10.0 | 10.0 | | | 10.0 | |
| Minimum Split (s) | 57.4 | 57.4 | | | | | 37.0 | 37.0 | | | 37.0 | |
| Total Split (s) | 37.0 | 37.0 | | | | | 53.0 | 53.0 | | | 53.0 | |
| Total Split (%) | 41.1% | 41.1% | | | | | 58.9% | 58.9% | | | 58.9% | |
| Maximum Green (s) | 29.6 | 29.6 | | | | | 47.0 | 47.0 | | | 47.0 | |
| Yellow Time (s) | 3.0 | 3.0 | | | | | 3.6 | 3.6 | | | 3.6 | |
| All-Red Time (s) | 4.4 | 4.4 | | | | | 2.4 | 2.4 | | | 2.4 | |
| Lost Time Adjust (s) | | 0.0 | | | | | | 0.0 | | | 0.0 | |
| Total Lost Time (s) | | 7.4 | | | | | | 6.0 | | | 6.0 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Vehicle Extension (s) | 3.0 | 3.0 | | | | | 3.0 | 3.0 | | | 3.0 | |
| Recall Mode | None | None | | | | | C-Max | C-Max | | | C-Max | |
| Walk Time (s) | 9.0 | 9.0 | | | | | 7.0 | 7.0 | | | 7.0 | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | SEL | SET | SER | NWL | NWT | NWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Flash Dont Walk (s) | 33.0 | 33.0 | | | | | 24.0 | 24.0 | | | 24.0 | |
| Pedestrian Calls (#/hr) | 0 | 0 | | | | | 0 | 0 | | | 0 | |
| Act Effct Green (s) | | 11.5 | | | | | | 65.1 | | | 65.1 | |
| Actuated g/C Ratio | | 0.13 | | | | | | 0.72 | | | 0.72 | |
| v/c Ratio | | 0.46 | | | | | | 0.15 | | | 0.13 | |
| Control Delay | | 31.4 | | | | | | 2.3 | | | 3.9 | |
| Queue Delay | | 0.0 | | | | | | 0.0 | | | 0.0 | |
| Total Delay | | 31.4 | | | | | | 2.3 | | | 3.9 | |
| LOS | | C | | | | | | A | | | A | |
| Approach Delay | | 31.4 | | | | | | 2.3 | | | 3.9 | |
| Approach LOS | | C | | | | | | A | | | A | |
| Queue Length 50th (ft) | | 59 | | | | | | 11 | | | 23 | |
| Queue Length 95th (ft) | | 86 | | | | | | 15 | | | 38 | |
| Internal Link Dist (ft) | | 249 | | | 299 | | | 502 | | | 732 | |
| Turn Bay Length (ft) | | | | | | | | | | | | |
| Base Capacity (vph) | | 2093 | | | | | | 3431 | | | 3667 | |
| Starvation Cap Reductn | | 0 | | | | | | 0 | | | 0 | |
| Spillback Cap Reductn | | 0 | | | | | | 0 | | | 0 | |
| Storage Cap Reductn | | 0 | | | | | | 0 | | | 0 | |
| Reduced v/c Ratio | | 0.19 | | | | | | 0.15 | | | 0.13 | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 90 | | | |
| Actuated Cycle Length: 90 | | | |
| Offset: 54 (60%), Referenced to phase 2:NWT and 6:SETL, Start of Green | | | |
| Natural Cycle: 95 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.46 | | | |
| Intersection Signal Delay: 11.2 | | Intersection LOS: B | |
| Intersection Capacity Utilization 45.3% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 1093: Grand River Ave & Jeffries Service Dr

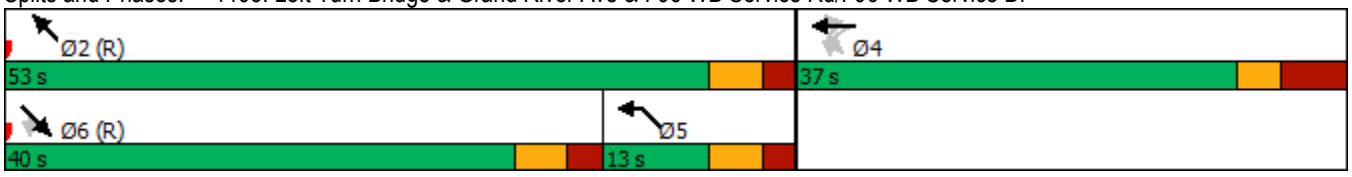


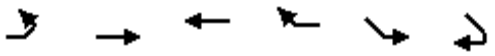
| Lane Group | WBL2 | WBL | WBT | WBR | SET | SER | SER2 | NWL | NWT |
|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | |
| Traffic Volume (vph) | 40 | 5 | 185 | 303 | 412 | 103 | 6 | 59 | 351 |
| Future Volume (vph) | 40 | 5 | 185 | 303 | 412 | 103 | 6 | 59 | 351 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | | 0 | | 0 | | 140 | | 260 | |
| Storage Lanes | | 0 | | 1 | | 1 | | 1 | |
| Taper Length (ft) | | 65 | | | | | | 65 | |
| Lane Util. Factor | 0.91 | 0.91 | 0.86 | 0.86 | 0.86 | 0.86 | 0.91 | 1.00 | 0.91 |
| Frt | | | 0.940 | 0.850 | 0.994 | 0.850 | | | |
| Flt Protected | | | 0.994 | | | | | 0.950 | |
| Satd. Flow (prot) | 0 | 0 | 4490 | 1362 | 4770 | 1316 | 0 | 1805 | 5085 |
| Flt Permitted | | | 0.994 | | | | | 0.950 | |
| Satd. Flow (perm) | 0 | 0 | 4490 | 1362 | 4770 | 1316 | 0 | 1805 | 5085 |
| Right Turn on Red | | | | Yes | | | Yes | | |
| Satd. Flow (RTOR) | | | 165 | 164 | | 126 | | | |
| Link Speed (mph) | | | 35 | | 35 | | | | 35 |
| Link Distance (ft) | | | 675 | | 427 | | | | 582 |
| Travel Time (s) | | | 13.1 | | 8.3 | | | | 11.3 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.93 | 0.74 | 0.60 | 0.78 | 0.89 |
| Heavy Vehicles (%) | 2% | 2% | 2% | 2% | 2% | 6% | 0% | 0% | 2% |
| Adj. Flow (vph) | 43 | 5 | 201 | 329 | 443 | 139 | 10 | 76 | 394 |
| Shared Lane Traffic (%) | | | | 50% | | 13% | | | |
| Lane Group Flow (vph) | 0 | 0 | 414 | 164 | 461 | 131 | 0 | 76 | 394 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Left | Right | Left | Right | Right | Left | Left |
| Median Width(ft) | | | 0 | | 12 | | | | 12 |
| Link Offset(ft) | | | 0 | | 0 | | | | 0 |
| Crosswalk Width(ft) | | | 16 | | 16 | | | | 16 |
| Two way Left Turn Lane | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | 15 | | 9 | | 9 | 9 | 15 | |
| Turn Type | Perm | Perm | NA | Perm | NA | Perm | | Prot | NA |
| Protected Phases | | | 4 | | 6 | | | 5 | 2 |
| Permitted Phases | 4 | 4 | | 4 | | 6 | | | |
| Detector Phase | 4 | 4 | 4 | 4 | 6 | 6 | | 5 | 2 |
| Switch Phase | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | | 7.0 | 10.0 |
| Minimum Split (s) | 55.5 | 55.5 | 55.5 | 55.5 | 37.9 | 37.9 | | 12.9 | 37.9 |
| Total Split (s) | 37.0 | 37.0 | 37.0 | 37.0 | 40.0 | 40.0 | | 13.0 | 53.0 |
| Total Split (%) | 41.1% | 41.1% | 41.1% | 41.1% | 44.4% | 44.4% | | 14.4% | 58.9% |
| Maximum Green (s) | 29.5 | 29.5 | 29.5 | 29.5 | 34.1 | 34.1 | | 7.1 | 47.1 |
| Yellow Time (s) | 3.0 | 3.0 | 3.0 | 3.0 | 3.6 | 3.6 | | 3.6 | 3.6 |
| All-Red Time (s) | 4.5 | 4.5 | 4.5 | 4.5 | 2.3 | 2.3 | | 2.3 | 2.3 |
| Lost Time Adjust (s) | | | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Total Lost Time (s) | | | 7.5 | 7.5 | 5.9 | 5.9 | | 5.9 | 5.9 |
| Lead/Lag | | | | | Lead | Lead | | Lag | |
| Lead-Lag Optimize? | | | | | Yes | Yes | | Yes | |
| Vehicle Extension (s) | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | | 3.0 | 3.0 |
| Recall Mode | None | None | None | None | C-Max | C-Max | | None | C-Max |

| Lane Group | WBL2 | WBL | WBT | WBR | SET | SER | SER2 | NWL | NWT |
|---|---|---|---|---|---|---|---|---|---|
| Walk Time (s) | 9.0 | 9.0 | 9.0 | 9.0 | 7.0 | 7.0 | | | 7.0 |
| Flash Dont Walk (s) | 39.0 | 39.0 | 39.0 | 39.0 | 25.0 | 25.0 | | | 25.0 |
| Pedestrian Calls (#/hr) | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 |
| Act Effct Green (s) | | | 12.4 | 12.4 | 53.8 | 53.8 | | 7.1 | 64.2 |
| Actuated g/C Ratio | | | 0.14 | 0.14 | 0.60 | 0.60 | | 0.08 | 0.71 |
| v/c Ratio | | | 0.55 | 0.50 | 0.16 | 0.16 | | 0.54 | 0.11 |
| Control Delay | | | 23.8 | 11.2 | 7.0 | 1.1 | | 52.2 | 1.2 |
| Queue Delay | | | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Total Delay | | | 23.8 | 11.2 | 7.0 | 1.1 | | 52.2 | 1.2 |
| LOS | | | C | B | A | A | | D | A |
| Approach Delay | | | 20.3 | | 5.7 | | | | 9.5 |
| Approach LOS | | | C | | A | | | | A |
| Queue Length 50th (ft) | | | 51 | 0 | 35 | 1 | | 43 | 2 |
| Queue Length 95th (ft) | | | 79 | 60 | 44 | 3 | | 76 | 4 |
| Internal Link Dist (ft) | | | 595 | | 347 | | | | 502 |
| Turn Bay Length (ft) | | | | | | 140 | | 260 | |
| Base Capacity (vph) | | | 1582 | 556 | 2852 | 837 | | 142 | 3628 |
| Starvation Cap Reductn | | | 0 | 0 | 0 | 0 | | 0 | 0 |
| Spillback Cap Reductn | | | 0 | 0 | 0 | 0 | | 0 | 0 |
| Storage Cap Reductn | | | 0 | 0 | 0 | 0 | | 0 | 0 |
| Reduced v/c Ratio | | | 0.26 | 0.29 | 0.16 | 0.16 | | 0.54 | 0.11 |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 90 | | | |
| Actuated Cycle Length: 90 | | | |
| Offset: 66 (73%), Referenced to phase 2:NWT and 6:SET, Start of Green | | | |
| Natural Cycle: 110 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.55 | | | |
| Intersection Signal Delay: 11.9 | | Intersection LOS: B | |
| Intersection Capacity Utilization 39.0% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 1193: Left Turn Bridge & Grand River Ave & I-96 WB Service Rd/I-96 WB Service Dr



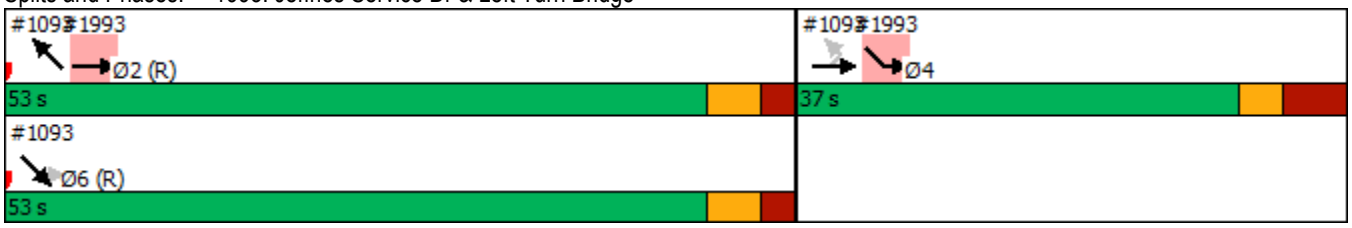


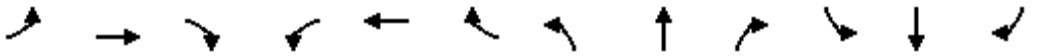
| Lane Group | EBL | EBT | WBT | WBR | SEL | SER | Ø6 |
|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | |
| Traffic Volume (vph) | 0 | 253 | 0 | 0 | 108 | 0 | |
| Future Volume (vph) | 0 | 253 | 0 | 0 | 108 | 0 | |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | |
| Storage Length (ft) | 0 | | | 0 | 50 | 0 | |
| Storage Lanes | 0 | | | 0 | 0 | 0 | |
| Taper Length (ft) | 65 | | | | 65 | | |
| Lane Util. Factor | 1.00 | 0.91 | 1.00 | 1.00 | 0.97 | 1.00 | |
| Frt | | | | | | | |
| Flt Protected | | | | | 0.950 | | |
| Satd. Flow (prot) | 0 | 5085 | 0 | 0 | 3433 | 0 | |
| Flt Permitted | | | | | 0.950 | | |
| Satd. Flow (perm) | 0 | 5085 | 0 | 0 | 3433 | 0 | |
| Right Turn on Red | | | | Yes | Yes | Yes | |
| Satd. Flow (RTOR) | | | | | 1077 | | |
| Link Speed (mph) | | 35 | 35 | | 30 | | |
| Link Distance (ft) | | 184 | 329 | | 419 | | |
| Travel Time (s) | | 3.6 | 6.4 | | 9.5 | | |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | |
| Adj. Flow (vph) | 0 | 275 | 0 | 0 | 117 | 0 | |
| Shared Lane Traffic (%) | | | | | | | |
| Lane Group Flow (vph) | 0 | 275 | 0 | 0 | 117 | 0 | |
| Enter Blocked Intersection | No | No | No | No | No | No | |
| Lane Alignment | Left | Left | Left | Right | Left | Right | |
| Median Width(ft) | | 0 | 0 | | 24 | | |
| Link Offset(ft) | | 0 | 0 | | 0 | | |
| Crosswalk Width(ft) | | 16 | 16 | | 16 | | |
| Two way Left Turn Lane | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | |
| Turning Speed (mph) | 15 | | | 9 | 15 | 9 | |
| Turn Type | | NA | | | Prot | | |
| Protected Phases | | 2 | | | 4 | | 6 |
| Permitted Phases | | | | | | | |
| Detector Phase | | 2 | | | 4 | | |
| Switch Phase | | | | | | | |
| Minimum Initial (s) | | 10.0 | | | 10.0 | | 10.0 |
| Minimum Split (s) | | 37.0 | | | 57.4 | | 37.0 |
| Total Split (s) | | 53.0 | | | 37.0 | | 53.0 |
| Total Split (%) | | 58.9% | | | 41.1% | | 59% |
| Maximum Green (s) | | 47.0 | | | 29.6 | | 47.0 |
| Yellow Time (s) | | 3.6 | | | 3.0 | | 3.6 |
| All-Red Time (s) | | 2.4 | | | 4.4 | | 2.4 |
| Lost Time Adjust (s) | | 0.0 | | | 0.0 | | |
| Total Lost Time (s) | | 6.0 | | | 7.4 | | |
| Lead/Lag | | | | | | | |
| Lead-Lag Optimize? | | | | | | | |
| Vehicle Extension (s) | | 3.0 | | | 3.0 | | 3.0 |
| Recall Mode | | C-Max | | | None | | C-Max |
| Walk Time (s) | | 7.0 | | | 9.0 | | 7.0 |

| Lane Group | EBL | EBT | WBT | WBR | SEL | SER | Ø6 |
|---|---|---|---|---|---|---|---|
| Flash Dont Walk (s) | | 24.0 | | | 33.0 | | 24.0 |
| Pedestrian Calls (#/hr) | | 0 | | | 0 | | 0 |
| Act Effct Green (s) | | 65.1 | | | 11.5 | | |
| Actuated g/C Ratio | | 0.72 | | | 0.13 | | |
| v/c Ratio | | 0.07 | | | 0.08 | | |
| Control Delay | | 3.2 | | | 0.1 | | |
| Queue Delay | | 0.0 | | | 0.0 | | |
| Total Delay | | 3.2 | | | 0.1 | | |
| LOS | | A | | | A | | |
| Approach Delay | | 3.2 | | | 0.1 | | |
| Approach LOS | | A | | | A | | |
| Queue Length 50th (ft) | | 8 | | | 0 | | |
| Queue Length 95th (ft) | | 23 | | | 0 | | |
| Internal Link Dist (ft) | | 104 | 249 | | 339 | | |
| Turn Bay Length (ft) | | | | | 50 | | |
| Base Capacity (vph) | | 3675 | | | 1851 | | |
| Starvation Cap Reductn | | 0 | | | 0 | | |
| Spillback Cap Reductn | | 0 | | | 0 | | |
| Storage Cap Reductn | | 0 | | | 0 | | |
| Reduced v/c Ratio | | 0.07 | | | 0.06 | | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 90 | | | |
| Actuated Cycle Length: 90 | | | |
| Offset: 54 (60%), Referenced to phase 2:NWT and 6:SETL, Start of Green | | | |
| Natural Cycle: 95 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.46 | | | |
| Intersection Signal Delay: 2.3 | | Intersection LOS: A | |
| Intersection Capacity Utilization 27.8% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 1993: Jeffries Service Dr & Left Turn Bridge



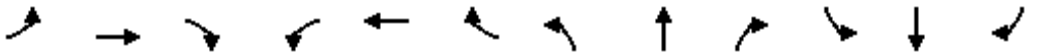


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 38 | 81 | 13 | 47 | 77 | 41 | 16 | 437 | 55 | 29 | 373 | 30 |
| Future Volume (vph) | 38 | 81 | 13 | 47 | 77 | 41 | 16 | 437 | 55 | 29 | 373 | 30 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 60 | | 0 | 60 | | 0 | 80 | | 0 | 80 | | 0 |
| Storage Lanes | 1 | | 0 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 65 | | | 65 | | | 65 | | | 65 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped Bike Factor | | | | | | | | 1.00 | | 1.00 | | |
| Frt | | 0.971 | | | 0.951 | | | 0.981 | | | 0.985 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1805 | 1830 | 0 | 1656 | 1795 | 0 | 1805 | 1799 | 0 | 1752 | 1760 | 0 |
| Flt Permitted | 0.656 | | | 0.684 | | | 0.373 | | | 0.295 | | |
| Satd. Flow (perm) | 1246 | 1830 | 0 | 1192 | 1795 | 0 | 709 | 1799 | 0 | 543 | 1760 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 14 | | | 29 | | | 12 | | | 8 | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 699 | | | 1470 | | | 1209 | | | 234 | |
| Travel Time (s) | | 15.9 | | | 33.4 | | | 27.5 | | | 5.3 | |
| Confl. Peds. (#/hr) | | | | | | | | | 4 | 4 | | |
| Peak Hour Factor | 0.63 | 0.88 | 0.60 | 0.84 | 0.71 | 0.79 | 0.60 | 0.94 | 0.81 | 0.66 | 0.91 | 0.68 |
| Heavy Vehicles (%) | 0% | 1% | 0% | 9% | 1% | 0% | 0% | 3% | 5% | 3% | 7% | 0% |
| Adj. Flow (vph) | 60 | 92 | 22 | 56 | 108 | 52 | 27 | 465 | 68 | 44 | 410 | 44 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 60 | 114 | 0 | 56 | 160 | 0 | 27 | 533 | 0 | 44 | 454 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 12 | | | 12 | | | 12 | | | 12 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | Yes | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Turn Type | Perm | NA | | Perm | NA | | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | | 8 | | | 4 | | 1 | 6 | | 5 | 2 | |
| Permitted Phases | 8 | | | 4 | | | 6 | | | 2 | | |
| Detector Phase | 8 | 8 | | 4 | 4 | | 1 | 6 | | 5 | 2 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 6.0 | 6.0 | | 6.0 | 6.0 | | 5.0 | 9.0 | | 5.0 | 9.0 | |
| Minimum Split (s) | 28.8 | 28.8 | | 28.8 | 28.8 | | 10.6 | 26.6 | | 10.6 | 26.6 | |
| Total Split (s) | 27.0 | 27.0 | | 27.0 | 27.0 | | 12.0 | 41.0 | | 12.0 | 41.0 | |
| Total Split (%) | 33.8% | 33.8% | | 33.8% | 33.8% | | 15.0% | 51.3% | | 15.0% | 51.3% | |
| Maximum Green (s) | 20.2 | 20.2 | | 20.2 | 20.2 | | 6.4 | 34.4 | | 6.4 | 34.4 | |
| Yellow Time (s) | 3.8 | 3.8 | | 3.8 | 3.8 | | 3.5 | 3.6 | | 3.5 | 3.6 | |
| All-Red Time (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 2.1 | 3.0 | | 2.1 | 3.0 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 6.8 | 6.8 | | 6.8 | 6.8 | | 5.6 | 6.6 | | 5.6 | 6.6 | |
| Lead/Lag | | | | | | | Lead | Lag | | Lead | Lag | |
| Lead-Lag Optimize? | | | | | | | Yes | Yes | | Yes | Yes | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Vehicle Extension (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | |
| Recall Mode | Max | Max | | Max | Max | | Max | C-Max | | Max | C-Max | |
| Walk Time (s) | 7.0 | 7.0 | | 7.0 | 7.0 | | | 7.0 | | | 7.0 | |
| Flash Dont Walk (s) | 15.0 | 15.0 | | 15.0 | 15.0 | | | 13.0 | | | 13.0 | |
| Pedestrian Calls (#/hr) | 0 | 0 | | 0 | 0 | | | 0 | | | 0 | |
| Act Effct Green (s) | 20.2 | 20.2 | | 20.2 | 20.2 | | 41.8 | 34.4 | | 41.8 | 34.4 | |
| Actuated g/C Ratio | 0.25 | 0.25 | | 0.25 | 0.25 | | 0.52 | 0.43 | | 0.52 | 0.43 | |
| v/c Ratio | 0.19 | 0.24 | | 0.19 | 0.34 | | 0.06 | 0.68 | | 0.12 | 0.60 | |
| Control Delay | 25.5 | 22.4 | | 25.5 | 22.2 | | 7.3 | 23.5 | | 6.4 | 22.6 | |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 25.5 | 22.4 | | 25.5 | 22.2 | | 7.3 | 23.5 | | 6.4 | 22.6 | |
| LOS | C | C | | C | C | | A | C | | A | C | |
| Approach Delay | | 23.5 | | | 23.1 | | | 22.7 | | | 21.2 | |
| Approach LOS | | C | | | C | | | C | | | C | |
| Queue Length 50th (ft) | 24 | 39 | | 22 | 53 | | 5 | 203 | | 3 | 191 | |
| Queue Length 95th (ft) | 37 | 79 | | 49 | 77 | | 10 | 316 | | 7 | 303 | |
| Internal Link Dist (ft) | | 619 | | | 1390 | | | 1129 | | | 154 | |
| Turn Bay Length (ft) | 60 | | | 60 | | | 80 | | | 80 | | |
| Base Capacity (vph) | 314 | 472 | | 300 | 474 | | 458 | 780 | | 380 | 761 | |
| Starvation Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | 0.19 | 0.24 | | 0.19 | 0.34 | | 0.06 | 0.68 | | 0.12 | 0.60 | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 80 | | | |
| Actuated Cycle Length: 80 | | | |
| Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green | | | |
| Natural Cycle: 70 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.68 | | | |
| Intersection Signal Delay: 22.3 | | Intersection LOS: C | |
| Intersection Capacity Utilization 46.8% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 2609: Schaefer Hwy & Schoolcraft Rd



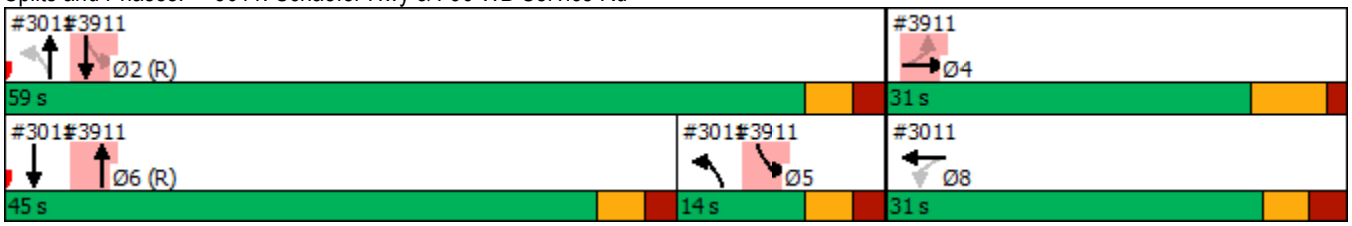
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 0 | 0 | 0 | 123 | 124 | 3 | 184 | 403 | 0 | 0 | 261 | 200 |
| Future Volume (vph) | 0 | 0 | 0 | 123 | 124 | 3 | 184 | 403 | 0 | 0 | 261 | 200 |
| Ideal Flow (vphpl) | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 |
| Lane Width (ft) | 12 | 12 | 12 | 12 | 11 | 12 | 11 | 11 | 12 | 12 | 11 | 12 |
| Storage Length (ft) | 0 | | 0 | 0 | | 0 | 250 | | 0 | 0 | | 0 |
| Storage Lanes | 0 | | 0 | 1 | | 0 | 1 | | 0 | 0 | | 0 |
| Taper Length (ft) | 65 | | | 65 | | | 65 | | | 65 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 0.95 |
| Ped Bike Factor | | | | | | | 1.00 | | | | 0.99 | |
| Frt | | | | | 0.997 | | | | | | 0.934 | |
| Flt Protected | | | | 0.950 | | | 0.950 | | | | | |
| Satd. Flow (prot) | 0 | 0 | 0 | 1863 | 3591 | 0 | 1766 | 3637 | 0 | 0 | 3255 | 0 |
| Flt Permitted | | | | 0.950 | | | 0.462 | | | | | |
| Satd. Flow (perm) | 0 | 0 | 0 | 1863 | 3591 | 0 | 856 | 3637 | 0 | 0 | 3255 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | | | 2 | | | | | | 215 | |
| Link Speed (mph) | | 25 | | | 25 | | | 25 | | | 35 | |
| Link Distance (ft) | | 298 | | | 364 | | | 384 | | | 332 | |
| Travel Time (s) | | 8.1 | | | 9.9 | | | 10.5 | | | 6.5 | |
| Confl. Peds. (#/hr) | | | | | | | 4 | | | | | 4 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.83 | 0.91 | 0.92 | 0.92 | 0.95 | 0.93 |
| Heavy Vehicles (%) | 2% | 2% | 2% | 2% | 2% | 2% | 4% | 1% | 2% | 2% | 5% | 4% |
| Adj. Flow (vph) | 0 | 0 | 0 | 134 | 135 | 3 | 222 | 443 | 0 | 0 | 275 | 215 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 0 | 0 | 134 | 138 | 0 | 222 | 443 | 0 | 0 | 490 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 12 | | | 12 | | | 12 | | | 12 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 0.94 | 0.94 | 0.94 | 0.94 | 0.98 | 0.94 | 0.98 | 0.98 | 0.94 | 0.94 | 0.98 | 0.94 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Turn Type | | | | Perm | NA | | pm+pt | NA | | | NA | |
| Protected Phases | | | | | 8 | | 5 | 2 | | | 6 | |
| Permitted Phases | | | | 8 | | | 2 | | | | | |
| Detector Phase | | | | 8 | 8 | | 5 | 2 | | | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | | | | 10.0 | 10.0 | | 7.0 | 10.0 | | | 10.0 | |
| Minimum Split (s) | | | | 28.7 | 28.7 | | 12.4 | 23.4 | | | 23.4 | |
| Total Split (s) | | | | 31.0 | 31.0 | | 14.0 | 59.0 | | | 45.0 | |
| Total Split (%) | | | | 34.4% | 34.4% | | 15.6% | 65.6% | | | 50.0% | |
| Maximum Green (s) | | | | 25.3 | 25.3 | | 8.6 | 53.6 | | | 39.6 | |
| Yellow Time (s) | | | | 3.0 | 3.0 | | 3.2 | 3.2 | | | 3.2 | |
| All-Red Time (s) | | | | 2.7 | 2.7 | | 2.2 | 2.2 | | | 2.2 | |
| Lost Time Adjust (s) | | | | 0.0 | 0.0 | | 0.0 | 0.0 | | | 0.0 | |
| Total Lost Time (s) | | | | 5.7 | 5.7 | | 5.4 | 5.4 | | | 5.4 | |
| Lead/Lag | | | | | | | Lag | | | | Lead | |

| Lane Group | Ø4 |
|---|---|
| Lane Configurations | |
| Traffic Volume (vph) | |
| Future Volume (vph) | |
| Ideal Flow (vphpl) | |
| Lane Width (ft) | |
| Storage Length (ft) | |
| Storage Lanes | |
| Taper Length (ft) | |
| Lane Util. Factor | |
| Ped Bike Factor | |
| Frt | |
| Flt Protected | |
| Satd. Flow (prot) | |
| Flt Permitted | |
| Satd. Flow (perm) | |
| Right Turn on Red | |
| Satd. Flow (RTOR) | |
| Link Speed (mph) | |
| Link Distance (ft) | |
| Travel Time (s) | |
| Confl. Peds. (#/hr) | |
| Peak Hour Factor | |
| Heavy Vehicles (%) | |
| Adj. Flow (vph) | |
| Shared Lane Traffic (%) | |
| Lane Group Flow (vph) | |
| Enter Blocked Intersection | |
| Lane Alignment | |
| Median Width(ft) | |
| Link Offset(ft) | |
| Crosswalk Width(ft) | |
| Two way Left Turn Lane | |
| Headway Factor | |
| Turning Speed (mph) | |
| Turn Type | |
| Protected Phases | 4 |
| Permitted Phases | |
| Detector Phase | |
| Switch Phase | |
| Minimum Initial (s) | 10.0 |
| Minimum Split (s) | 30.5 |
| Total Split (s) | 31.0 |
| Total Split (%) | 34% |
| Maximum Green (s) | 24.5 |
| Yellow Time (s) | 5.0 |
| All-Red Time (s) | 1.5 |
| Lost Time Adjust (s) | |
| Total Lost Time (s) | |
| Lead/Lag | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead-Lag Optimize? | | | | | | | Yes | | | | Yes | |
| Vehicle Extension (s) | | | | 3.0 | 3.0 | | 3.0 | 3.0 | | | 3.0 | |
| Recall Mode | | | | None | None | | None | C-Max | | | C-Max | |
| Walk Time (s) | | | | 7.0 | 7.0 | | | 7.0 | | | 7.0 | |
| Flash Dont Walk (s) | | | | 16.0 | 16.0 | | | 11.0 | | | 11.0 | |
| Pedestrian Calls (#/hr) | | | | 0 | 0 | | | 0 | | | 0 | |
| Act Effct Green (s) | | | | 14.9 | 14.9 | | 64.0 | 64.0 | | | 50.0 | |
| Actuated g/C Ratio | | | | 0.17 | 0.17 | | 0.71 | 0.71 | | | 0.56 | |
| v/c Ratio | | | | 0.44 | 0.23 | | 0.32 | 0.17 | | | 0.26 | |
| Control Delay | | | | 30.9 | 25.3 | | 4.6 | 2.6 | | | 10.1 | |
| Queue Delay | | | | 0.0 | 0.0 | | 0.0 | 0.0 | | | 0.0 | |
| Total Delay | | | | 30.9 | 25.3 | | 4.6 | 2.6 | | | 10.1 | |
| LOS | | | | C | C | | A | A | | | B | |
| Approach Delay | | | | | 28.1 | | | 3.3 | | | 10.1 | |
| Approach LOS | | | | | C | | | A | | | B | |
| Queue Length 50th (ft) | | | | 80 | 42 | | 30 | 31 | | | 40 | |
| Queue Length 95th (ft) | | | | 138 | 72 | | 52 | 52 | | | 94 | |
| Internal Link Dist (ft) | | 218 | | | 284 | | | 304 | | | 252 | |
| Turn Bay Length (ft) | | | | | | | 250 | | | | | |
| Base Capacity (vph) | | | | 523 | 1010 | | 695 | 2587 | | | 1905 | |
| Starvation Cap Reductn | | | | 0 | 0 | | 0 | 0 | | | 0 | |
| Spillback Cap Reductn | | | | 0 | 0 | | 0 | 113 | | | 0 | |
| Storage Cap Reductn | | | | 0 | 0 | | 0 | 0 | | | 0 | |
| Reduced v/c Ratio | | | | 0.26 | 0.14 | | 0.32 | 0.18 | | | 0.26 | |

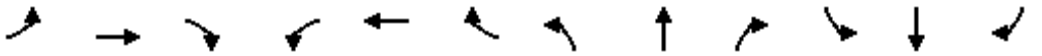
| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 90 | | | |
| Actuated Cycle Length: 90 | | | |
| Offset: 87 (97%), Referenced to phase 2:NBTL and 6:SBT, Start of Green | | | |
| Natural Cycle: 70 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.65 | | | |
| Intersection Signal Delay: 10.3 | | Intersection LOS: B | |
| Intersection Capacity Utilization 46.8% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 3011: Schaefer Hwy & I-96 WB Service Rd



| Lane Group | Ø4 |
|---|---|
| Lead-Lag Optimize? | |
| Vehicle Extension (s) | 3.0 |
| Recall Mode | None |
| Walk Time (s) | 7.0 |
| Flash Dont Walk (s) | 17.0 |
| Pedestrian Calls (#/hr) | 0 |
| Act Effct Green (s) | |
| Actuated g/C Ratio | |
| v/c Ratio | |
| Control Delay | |
| Queue Delay | |
| Total Delay | |
| LOS | |
| Approach Delay | |
| Approach LOS | |
| Queue Length 50th (ft) | |
| Queue Length 95th (ft) | |
| Internal Link Dist (ft) | |
| Turn Bay Length (ft) | |
| Base Capacity (vph) | |
| Starvation Cap Reductn | |
| Spillback Cap Reductn | |
| Storage Cap Reductn | |
| Reduced v/c Ratio | |

| Intersection Summary |
|---|



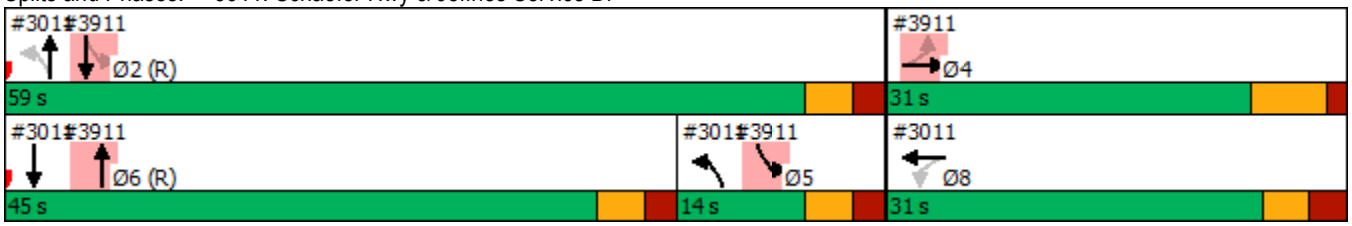
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 204 | 106 | 235 | 0 | 0 | 0 | 0 | 383 | 96 | 51 | 333 | 0 |
| Future Volume (vph) | 204 | 106 | 235 | 0 | 0 | 0 | 0 | 383 | 96 | 51 | 333 | 0 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 0 | | 0 | 0 | | 0 | 0 | | 0 | 90 | | 0 |
| Storage Lanes | 0 | | 0 | 0 | | 0 | 0 | | 0 | 1 | | 0 |
| Taper Length (ft) | 65 | | | 65 | | | 65 | | | 65 | | |
| Lane Util. Factor | 0.91 | 0.91 | 0.91 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 1.00 |
| Ped Bike Factor | | | | | | | | 1.00 | | 1.00 | | |
| Frt | | 0.935 | | | | | | 0.969 | | | | |
| Flt Protected | | 0.982 | | | | | | | | 0.950 | | |
| Satd. Flow (prot) | 0 | 4669 | 0 | 0 | 0 | 0 | 0 | 3334 | 0 | 1671 | 3471 | 0 |
| Flt Permitted | | 0.982 | | | | | | | | 0.414 | | |
| Satd. Flow (perm) | 0 | 4669 | 0 | 0 | 0 | 0 | 0 | 3334 | 0 | 726 | 3471 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 209 | | | | | | 47 | | | | |
| Link Speed (mph) | | 35 | | | 35 | | | 30 | | | 30 | |
| Link Distance (ft) | | 417 | | | 372 | | | 291 | | | 384 | |
| Travel Time (s) | | 8.1 | | | 7.2 | | | 6.6 | | | 8.7 | |
| Confl. Peds. (#/hr) | | | | | | | | | 6 | 6 | | |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.84 | 0.80 | 0.80 | 0.92 | 0.92 |
| Heavy Vehicles (%) | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 3% | 10% | 8% | 4% | 2% |
| Adj. Flow (vph) | 222 | 115 | 255 | 0 | 0 | 0 | 0 | 456 | 120 | 64 | 362 | 0 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 592 | 0 | 0 | 0 | 0 | 0 | 576 | 0 | 64 | 362 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 0 | | | 0 | | | 12 | | | 12 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | Yes | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Turn Type | Perm | NA | | | | | | NA | | pm+pt | NA | |
| Protected Phases | | 4 | | | | | | 6 | | 5 | 2 | |
| Permitted Phases | 4 | | | | | | | | | 2 | | |
| Detector Phase | 4 | 4 | | | | | | 6 | | 5 | 2 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | | | | | | 10.0 | | 7.0 | 10.0 | |
| Minimum Split (s) | 30.5 | 30.5 | | | | | | 23.4 | | 12.4 | 23.4 | |
| Total Split (s) | 31.0 | 31.0 | | | | | | 45.0 | | 14.0 | 59.0 | |
| Total Split (%) | 34.4% | 34.4% | | | | | | 50.0% | | 15.6% | 65.6% | |
| Maximum Green (s) | 24.5 | 24.5 | | | | | | 39.6 | | 8.6 | 53.6 | |
| Yellow Time (s) | 5.0 | 5.0 | | | | | | 3.2 | | 3.2 | 3.2 | |
| All-Red Time (s) | 1.5 | 1.5 | | | | | | 2.2 | | 2.2 | 2.2 | |
| Lost Time Adjust (s) | | 0.0 | | | | | | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | | 6.5 | | | | | | 5.4 | | 5.4 | 5.4 | |
| Lead/Lag | | | | | | | | Lead | | Lag | | |
| Lead-Lag Optimize? | | | | | | | | Yes | | Yes | | |

| Lane Group | Ø8 |
|---|---|
| Lane Configurations | |
| Traffic Volume (vph) | |
| Future Volume (vph) | |
| Ideal Flow (vphpl) | |
| Storage Length (ft) | |
| Storage Lanes | |
| Taper Length (ft) | |
| Lane Util. Factor | |
| Ped Bike Factor | |
| Frt | |
| Flt Protected | |
| Satd. Flow (prot) | |
| Flt Permitted | |
| Satd. Flow (perm) | |
| Right Turn on Red | |
| Satd. Flow (RTOR) | |
| Link Speed (mph) | |
| Link Distance (ft) | |
| Travel Time (s) | |
| Confl. Peds. (#/hr) | |
| Peak Hour Factor | |
| Heavy Vehicles (%) | |
| Adj. Flow (vph) | |
| Shared Lane Traffic (%) | |
| Lane Group Flow (vph) | |
| Enter Blocked Intersection | |
| Lane Alignment | |
| Median Width(ft) | |
| Link Offset(ft) | |
| Crosswalk Width(ft) | |
| Two way Left Turn Lane | |
| Headway Factor | |
| Turning Speed (mph) | |
| Turn Type | |
| Protected Phases | 8 |
| Permitted Phases | |
| Detector Phase | |
| Switch Phase | |
| Minimum Initial (s) | 10.0 |
| Minimum Split (s) | 28.7 |
| Total Split (s) | 31.0 |
| Total Split (%) | 34% |
| Maximum Green (s) | 25.3 |
| Yellow Time (s) | 3.0 |
| All-Red Time (s) | 2.7 |
| Lost Time Adjust (s) | |
| Total Lost Time (s) | |
| Lead/Lag | |
| Lead-Lag Optimize? | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Vehicle Extension (s) | 3.0 | 3.0 | | | | | | 3.0 | | 3.0 | 3.0 | |
| Recall Mode | None | None | | | | | | C-Max | | None | C-Max | |
| Walk Time (s) | 7.0 | 7.0 | | | | | | 7.0 | | | 7.0 | |
| Flash Dont Walk (s) | 17.0 | 17.0 | | | | | | 11.0 | | | 11.0 | |
| Pedestrian Calls (#/hr) | 0 | 0 | | | | | | 0 | | | 0 | |
| Act Effct Green (s) | | 14.1 | | | | | | 50.0 | | 64.0 | 64.0 | |
| Actuated g/C Ratio | | 0.16 | | | | | | 0.56 | | 0.71 | 0.71 | |
| v/c Ratio | | 0.65 | | | | | | 0.31 | | 0.11 | 0.15 | |
| Control Delay | | 26.0 | | | | | | 10.7 | | 5.6 | 5.0 | |
| Queue Delay | | 0.0 | | | | | | 0.0 | | 0.0 | 0.0 | |
| Total Delay | | 26.0 | | | | | | 10.7 | | 5.6 | 5.0 | |
| LOS | | C | | | | | | B | | A | A | |
| Approach Delay | | 26.0 | | | | | | 10.7 | | | 5.1 | |
| Approach LOS | | C | | | | | | B | | | A | |
| Queue Length 50th (ft) | | 74 | | | | | | 77 | | 15 | 46 | |
| Queue Length 95th (ft) | | 105 | | | | | | 113 | | 29 | 65 | |
| Internal Link Dist (ft) | | 337 | | | 292 | | | 211 | | | 304 | |
| Turn Bay Length (ft) | | | | | | | | | | 90 | | |
| Base Capacity (vph) | | 1423 | | | | | | 1874 | | 607 | 2469 | |
| Starvation Cap Reductn | | 0 | | | | | | 0 | | 0 | 0 | |
| Spillback Cap Reductn | | 0 | | | | | | 0 | | 0 | 0 | |
| Storage Cap Reductn | | 0 | | | | | | 0 | | 0 | 0 | |
| Reduced v/c Ratio | | 0.42 | | | | | | 0.31 | | 0.11 | 0.15 | |

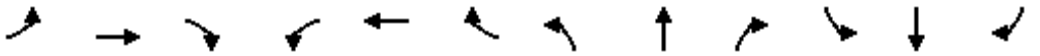
| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 90 | | | |
| Actuated Cycle Length: 90 | | | |
| Offset: 87 (97%), Referenced to phase 2:NBTL and 6:SBT, Start of Green | | | |
| Natural Cycle: 70 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.65 | | | |
| Intersection Signal Delay: 14.9 | | Intersection LOS: B | |
| Intersection Capacity Utilization 46.8% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 3911: Schaefer Hwy & Jeffries Service Dr



| Lane Group | Ø8 |
|---|---|
| Vehicle Extension (s) | 3.0 |
| Recall Mode | None |
| Walk Time (s) | 7.0 |
| Flash Dont Walk (s) | 16.0 |
| Pedestrian Calls (#/hr) | 0 |
| Act Effct Green (s) | |
| Actuated g/C Ratio | |
| v/c Ratio | |
| Control Delay | |
| Queue Delay | |
| Total Delay | |
| LOS | |
| Approach Delay | |
| Approach LOS | |
| Queue Length 50th (ft) | |
| Queue Length 95th (ft) | |
| Internal Link Dist (ft) | |
| Turn Bay Length (ft) | |
| Base Capacity (vph) | |
| Starvation Cap Reductn | |
| Spillback Cap Reductn | |
| Storage Cap Reductn | |
| Reduced v/c Ratio | |

| Intersection Summary |
|---|



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 22 | 115 | 27 | 54 | 78 | 26 | 32 | 437 | 47 | 45 | 351 | 34 |
| Future Volume (vph) | 22 | 115 | 27 | 54 | 78 | 26 | 32 | 437 | 47 | 45 | 351 | 34 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 80 | | 0 | 80 | | 0 | 80 | | 0 | 80 | | 0 |
| Storage Lanes | 1 | | 0 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 65 | | | 65 | | | 65 | | | 65 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 |
| Ped Bike Factor | | 1.00 | | 1.00 | | | 0.99 | 1.00 | | 1.00 | 1.00 | |
| Frt | | 0.971 | | | 0.963 | | | 0.983 | | | 0.983 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1805 | 1783 | 0 | 1656 | 1812 | 0 | 1752 | 3506 | 0 | 1770 | 3433 | 0 |
| Flt Permitted | 0.647 | | | 0.538 | | | 0.491 | | | 0.429 | | |
| Satd. Flow (perm) | 1229 | 1783 | 0 | 936 | 1812 | 0 | 900 | 3506 | 0 | 796 | 3433 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 14 | | | 19 | | | 23 | | | 23 | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 648 | | | 545 | | | 2255 | | | 685 | |
| Travel Time (s) | | 14.7 | | | 12.4 | | | 51.3 | | | 15.6 | |
| Confl. Peds. (#/hr) | | | 2 | 2 | | | 6 | | 5 | 5 | | 6 |
| Peak Hour Factor | 0.69 | 0.76 | 0.75 | 0.75 | 0.70 | 0.72 | 0.67 | 0.88 | 0.73 | 0.75 | 0.88 | 0.65 |
| Heavy Vehicles (%) | 0% | 3% | 4% | 9% | 0% | 4% | 3% | 1% | 0% | 2% | 3% | 3% |
| Adj. Flow (vph) | 32 | 151 | 36 | 72 | 111 | 36 | 48 | 497 | 64 | 60 | 399 | 52 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 32 | 187 | 0 | 72 | 147 | 0 | 48 | 561 | 0 | 60 | 451 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 12 | | | 12 | | | 12 | | | 12 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Turn Type | Perm | NA | | Perm | NA | | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | | 4 | | | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | | 8 | | | 2 | | | 6 | | |
| Detector Phase | 4 | 4 | | 8 | 8 | | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | | 10.0 | 10.0 | | 4.0 | 15.0 | | 4.0 | 15.0 | |
| Minimum Split (s) | 24.6 | 24.6 | | 24.6 | 24.6 | | 9.6 | 26.6 | | 9.6 | 26.6 | |
| Total Split (s) | 24.0 | 24.0 | | 24.0 | 24.0 | | 14.0 | 42.0 | | 14.0 | 42.0 | |
| Total Split (%) | 30.0% | 30.0% | | 30.0% | 30.0% | | 17.5% | 52.5% | | 17.5% | 52.5% | |
| Maximum Green (s) | 18.4 | 18.4 | | 18.4 | 18.4 | | 8.4 | 36.4 | | 8.4 | 36.4 | |
| Yellow Time (s) | 3.5 | 3.5 | | 3.5 | 3.5 | | 3.5 | 3.5 | | 3.5 | 3.5 | |
| All-Red Time (s) | 2.1 | 2.1 | | 2.1 | 2.1 | | 2.1 | 2.1 | | 2.1 | 2.1 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 5.6 | 5.6 | | 5.6 | 5.6 | | 5.6 | 5.6 | | 5.6 | 5.6 | |
| Lead/Lag | | | | | | | Lead | Lag | | Lead | Lag | |
| Lead-Lag Optimize? | | | | | | | Yes | Yes | | Yes | Yes | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Vehicle Extension (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | |
| Recall Mode | Min | Min | | Min | Min | | None | C-Max | | None | C-Max | |
| Walk Time (s) | 7.0 | 7.0 | | 7.0 | 7.0 | | | 7.0 | | | 7.0 | |
| Flash Dont Walk (s) | 12.0 | 12.0 | | 12.0 | 12.0 | | | 14.0 | | | 14.0 | |
| Pedestrian Calls (#/hr) | 0 | 0 | | 0 | 0 | | | 0 | | | 0 | |
| Act Effct Green (s) | 13.4 | 13.4 | | 13.4 | 13.4 | | 51.9 | 47.9 | | 52.2 | 48.0 | |
| Actuated g/C Ratio | 0.17 | 0.17 | | 0.17 | 0.17 | | 0.65 | 0.60 | | 0.65 | 0.60 | |
| v/c Ratio | 0.16 | 0.60 | | 0.46 | 0.46 | | 0.07 | 0.27 | | 0.10 | 0.22 | |
| Control Delay | 28.6 | 36.3 | | 38.8 | 30.0 | | 7.1 | 16.1 | | 5.3 | 9.0 | |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 28.6 | 36.3 | | 38.8 | 30.0 | | 7.1 | 16.1 | | 5.3 | 9.0 | |
| LOS | C | D | | D | C | | A | B | | A | A | |
| Approach Delay | | 35.2 | | | 32.9 | | | 15.4 | | | 8.5 | |
| Approach LOS | | D | | | C | | | B | | | A | |
| Queue Length 50th (ft) | 14 | 81 | | 33 | 58 | | 12 | 125 | | 8 | 53 | |
| Queue Length 95th (ft) | 27 | 110 | | 56 | 77 | | m19 | 178 | | 19 | 92 | |
| Internal Link Dist (ft) | | 568 | | | 465 | | | 2175 | | | 605 | |
| Turn Bay Length (ft) | 80 | | | 80 | | | 80 | | | 80 | | |
| Base Capacity (vph) | 282 | 420 | | 215 | 431 | | 684 | 2106 | | 629 | 2068 | |
| Starvation Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | 0.11 | 0.45 | | 0.33 | 0.34 | | 0.07 | 0.27 | | 0.10 | 0.22 | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 80 | | | |
| Actuated Cycle Length: 80 | | | |
| Offset: 14 (18%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green | | | |
| Natural Cycle: 65 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.60 | | | |
| Intersection Signal Delay: 18.4 | | Intersection LOS: B | |
| Intersection Capacity Utilization 56.7% | | ICU Level of Service B | |
| Analysis Period (min) 15 | | | |
| m Volume for 95th percentile queue is metered by upstream signal. | | | |

Splits and Phases: 4001: Schaefer Hwy & Lyndon St

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

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | ⇕ | | | ⇕ | | | ⇕ | | | ⇕ | |
| Traffic Vol, veh/h | 5 | 166 | 2 | 1 | 158 | 4 | 1 | 0 | 6 | 5 | 0 | 6 |
| Future Vol, veh/h | 5 | 166 | 2 | 1 | 158 | 4 | 1 | 0 | 6 | 5 | 0 | 6 |
| Conflicting Peds, #/hr | 3 | 0 | 1 | 1 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 63 | 94 | 60 | 60 | 86 | 60 | 60 | 60 | 60 | 63 | 60 | 60 |
| Heavy Vehicles, % | 0 | 3 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 8 | 177 | 3 | 2 | 184 | 7 | 2 | 0 | 10 | 8 | 0 | 10 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 194 | 0 | 0 | 181 | 0 | 0 | 393 | 394 | 180 | 395 | 392 | 191 |
| Stage 1 | - | - | - | - | - | - | 196 | 196 | - | 195 | 195 | - |
| Stage 2 | - | - | - | - | - | - | 197 | 198 | - | 200 | 197 | - |
| Critical Hdwy | 4.1 | - | - | 4.1 | - | - | 7.1 | 6.5 | 6.2 | 7.1 | 6.5 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.1 | 5.5 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.1 | 5.5 | - |
| Follow-up Hdwy | 2.2 | - | - | 2.2 | - | - | 3.5 | 4 | 3.3 | 3.5 | 4 | 3.3 |
| Pot Cap-1 Maneuver | 1391 | - | - | 1407 | - | - | 570 | 546 | 868 | 568 | 547 | 856 |
| Stage 1 | - | - | - | - | - | - | 810 | 742 | - | 811 | 743 | - |
| Stage 2 | - | - | - | - | - | - | 809 | 741 | - | 806 | 742 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 1387 | - | - | 1406 | - | - | 559 | 539 | 867 | 557 | 540 | 854 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 559 | 539 | - | 557 | 540 | - |
| Stage 1 | - | - | - | - | - | - | 804 | 737 | - | 804 | 739 | - |
| Stage 2 | - | - | - | - | - | - | 798 | 737 | - | 792 | 737 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0.3 | 0.1 | 9.5 | 10.3 |
| HCM LOS | | | A | B |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 804 | 1387 | - | - | 1406 | - | - | 691 |
| HCM Lane V/C Ratio | 0.015 | 0.006 | - | - | 0.001 | - | - | 0.026 |
| HCM Control Delay (s) | 9.5 | 7.6 | 0 | - | 7.6 | 0 | - | 10.3 |
| HCM Lane LOS | A | A | A | - | A | A | - | B |
| HCM 95th %tile Q(veh) | 0 | 0 | - | - | 0 | - | - | 0.1 |

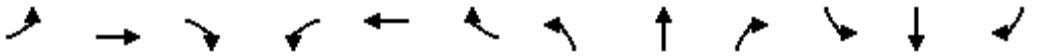
| Intersection | |
|---|---|
| Int Delay, s/veh | 1.1 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 3 | 1 | 8 | 7 | 6 | 7 | 2 | 290 | 10 | 7 | 271 | 1 |
| Future Vol, veh/h | 3 | 1 | 8 | 7 | 6 | 7 | 2 | 290 | 10 | 7 | 271 | 1 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 1 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | 50 | - | - | 50 | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 60 | 60 | 60 | 60 | 60 | 60 | 100 | 85 | 63 | 60 | 87 | 60 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 3 | 0 |
| Mvmt Flow | 5 | 2 | 13 | 12 | 10 | 12 | 2 | 341 | 16 | 12 | 311 | 2 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 701 | 699 | 313 | 698 | 692 | 350 | 314 | 0 | 0 | 358 | 0 | 0 |
| Stage 1 | 337 | 337 | - | 354 | 354 | - | - | - | - | - | - | - |
| Stage 2 | 364 | 362 | - | 344 | 338 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.1 | 6.5 | 6.2 | 7.1 | 6.5 | 6.2 | 4.1 | - | - | 4.1 | - | - |
| Critical Hdwy Stg 1 | 6.1 | 5.5 | - | 6.1 | 5.5 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.1 | 5.5 | - | 6.1 | 5.5 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.5 | 4 | 3.3 | 3.5 | 4 | 3.3 | 2.2 | - | - | 2.2 | - | - |
| Pot Cap-1 Maneuver | 356 | 366 | 732 | 358 | 370 | 698 | 1258 | - | - | 1212 | - | - |
| Stage 1 | 681 | 645 | - | 667 | 634 | - | - | - | - | - | - | - |
| Stage 2 | 659 | 629 | - | 676 | 644 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | 339 | 361 | 731 | 347 | 365 | 697 | 1257 | - | - | 1211 | - | - |
| Mov Cap-2 Maneuver | 339 | 361 | - | 347 | 365 | - | - | - | - | - | - | - |
| Stage 1 | 679 | 638 | - | 665 | 632 | - | - | - | - | - | - | - |
| Stage 2 | 637 | 627 | - | 655 | 637 | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 12 | 14.1 | 0 | 0.3 |
| HCM LOS | B | B | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 1257 | - | - | 532 | 429 | 1211 | - | - |
| HCM Lane V/C Ratio | 0.002 | - | - | 0.038 | 0.078 | 0.01 | - | - |
| HCM Control Delay (s) | 7.9 | - | - | 12 | 14.1 | 8 | - | - |
| HCM Lane LOS | A | - | - | B | B | A | - | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 0.1 | 0.3 | 0 | - | - |

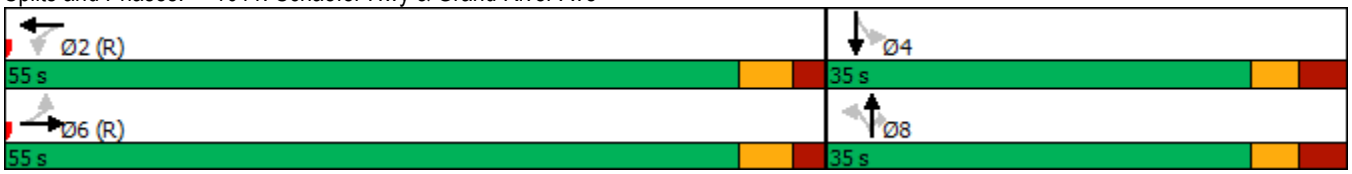


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 35 | 416 | 63 | 19 | 429 | 98 | 53 | 239 | 18 | 55 | 261 | 16 |
| Future Volume (vph) | 35 | 416 | 63 | 19 | 429 | 98 | 53 | 239 | 18 | 55 | 261 | 16 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 115 | | 0 | 95 | | 0 | 155 | | 0 | 80 | | 240 |
| Storage Lanes | 1 | | 0 | 0 | | 0 | 1 | | 1 | 1 | | 1 |
| Taper Length (ft) | 65 | | | 65 | | | 25 | | | 65 | | |
| Lane Util. Factor | 1.00 | 0.91 | 0.91 | 1.00 | 0.91 | 0.91 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 |
| Ped Bike Factor | | 1.00 | | 1.00 | | | | | 0.99 | 1.00 | | |
| Frt | | 0.976 | | | 0.969 | | | | 0.850 | | 0.991 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1805 | 5009 | 0 | 1805 | 4955 | 0 | 1805 | 1900 | 1615 | 1770 | 3544 | 0 |
| Flt Permitted | 0.420 | | | 0.431 | | | 0.537 | | | 0.332 | | |
| Satd. Flow (perm) | 798 | 5009 | 0 | 818 | 4955 | 0 | 1020 | 1900 | 1593 | 618 | 3544 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 66 | | | 111 | | | | 34 | | 8 | |
| Link Speed (mph) | | 35 | | | 35 | | | 30 | | | 30 | |
| Link Distance (ft) | | 932 | | | 422 | | | 332 | | | 1209 | |
| Travel Time (s) | | 18.2 | | | 8.2 | | | 7.5 | | | 27.5 | |
| Confl. Peds. (#/hr) | | | 2 | 2 | | | | | 2 | 2 | | |
| Peak Hour Factor | 0.80 | 0.88 | 0.72 | 0.59 | 0.92 | 0.82 | 0.74 | 0.74 | 0.60 | 0.76 | 0.86 | 0.80 |
| Heavy Vehicles (%) | 0% | 1% | 0% | 0% | 0% | 7% | 0% | 0% | 0% | 2% | 1% | 0% |
| Adj. Flow (vph) | 44 | 473 | 88 | 32 | 466 | 120 | 72 | 323 | 30 | 72 | 303 | 20 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 44 | 561 | 0 | 32 | 586 | 0 | 72 | 323 | 30 | 72 | 323 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 12 | | | 12 | | | 12 | | | 12 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | Yes | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Turn Type | Perm | NA | | Perm | NA | | Perm | NA | Perm | Perm | NA | |
| Protected Phases | | 6 | | | 2 | | | 8 | | | 4 | |
| Permitted Phases | 6 | | | 2 | | | 8 | | 8 | 4 | | |
| Detector Phase | 6 | 6 | | 2 | 2 | | 8 | 8 | 8 | 4 | 4 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | | 10.0 | 10.0 | | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | |
| Minimum Split (s) | 35.8 | 35.8 | | 35.8 | 35.8 | | 46.5 | 46.5 | 46.5 | 46.5 | 46.5 | |
| Total Split (s) | 55.0 | 55.0 | | 55.0 | 55.0 | | 35.0 | 35.0 | 35.0 | 35.0 | 35.0 | |
| Total Split (%) | 61.1% | 61.1% | | 61.1% | 61.1% | | 38.9% | 38.9% | 38.9% | 38.9% | 38.9% | |
| Maximum Green (s) | 49.2 | 49.2 | | 49.2 | 49.2 | | 28.5 | 28.5 | 28.5 | 28.5 | 28.5 | |
| Yellow Time (s) | 3.6 | 3.6 | | 3.6 | 3.6 | | 3.2 | 3.2 | 3.2 | 3.2 | 3.2 | |
| All-Red Time (s) | 2.2 | 2.2 | | 2.2 | 2.2 | | 3.3 | 3.3 | 3.3 | 3.3 | 3.3 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Total Lost Time (s) | 5.8 | 5.8 | | 5.8 | 5.8 | | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Vehicle Extension (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | |
| Recall Mode | C-Max | C-Max | | C-Max | C-Max | | None | None | None | None | None | |
| Walk Time (s) | 7.0 | 7.0 | | 7.0 | 7.0 | | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | |
| Flash Dont Walk (s) | 23.0 | 23.0 | | 23.0 | 23.0 | | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 | |
| Pedestrian Calls (#/hr) | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | |
| Act Effct Green (s) | 56.8 | 56.8 | | 56.8 | 56.8 | | 20.9 | 20.9 | 20.9 | 20.9 | 20.9 | |
| Actuated g/C Ratio | 0.63 | 0.63 | | 0.63 | 0.63 | | 0.23 | 0.23 | 0.23 | 0.23 | 0.23 | |
| v/c Ratio | 0.09 | 0.18 | | 0.06 | 0.19 | | 0.30 | 0.73 | 0.08 | 0.50 | 0.39 | |
| Control Delay | 8.9 | 6.9 | | 8.1 | 5.8 | | 24.6 | 36.1 | 10.4 | 40.8 | 28.7 | |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.3 | 0.0 | 0.0 | 0.0 | |
| Total Delay | 8.9 | 6.9 | | 8.1 | 5.8 | | 24.6 | 36.4 | 10.4 | 40.8 | 28.7 | |
| LOS | A | A | | A | A | | C | D | B | D | C | |
| Approach Delay | | 7.0 | | | 5.9 | | | 32.6 | | | 30.9 | |
| Approach LOS | | A | | | A | | | C | | | C | |
| Queue Length 50th (ft) | 9 | 37 | | 6 | 32 | | 36 | 177 | 0 | 36 | 80 | |
| Queue Length 95th (ft) | 25 | 65 | | 13 | 57 | | 56 | 193 | 16 | 59 | 99 | |
| Internal Link Dist (ft) | | 852 | | | 342 | | | 252 | | | 1129 | |
| Turn Bay Length (ft) | 115 | | | 95 | | | 155 | | | 80 | | |
| Base Capacity (vph) | 503 | 3183 | | 515 | 3165 | | 323 | 601 | 527 | 195 | 1127 | |
| Starvation Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 48 | 0 | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | |
| Reduced v/c Ratio | 0.09 | 0.18 | | 0.06 | 0.19 | | 0.22 | 0.58 | 0.06 | 0.37 | 0.29 | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 90 | | | |
| Actuated Cycle Length: 90 | | | |
| Offset: 59 (66%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green | | | |
| Natural Cycle: 85 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.73 | | | |
| Intersection Signal Delay: 16.6 | | Intersection LOS: B | |
| Intersection Capacity Utilization 64.5% | | ICU Level of Service C | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 1011: Schaefer Hwy & Grand River Ave

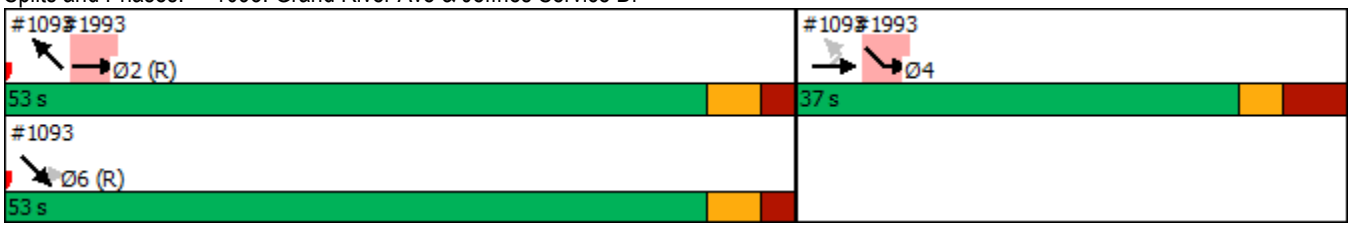


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | SEL | SET | SER | NWL | NWT | NWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 4 | 262 | 62 | 0 | 0 | 0 | 9 | 404 | 0 | 0 | 330 | 13 |
| Future Volume (vph) | 4 | 262 | 62 | 0 | 0 | 0 | 9 | 404 | 0 | 0 | 330 | 13 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Util. Factor | 0.86 | 0.86 | 0.86 | 1.00 | 1.00 | 1.00 | 0.91 | 0.91 | 1.00 | 1.00 | 0.91 | 0.91 |
| Ped Bike Factor | | | | | | | | 1.00 | | | 1.00 | |
| Frt | | 0.972 | | | | | | | | | 0.994 | |
| Flt Protected | | 0.999 | | | | | | 0.998 | | | | |
| Satd. Flow (prot) | 0 | 6222 | 0 | 0 | 0 | 0 | 0 | 5127 | 0 | 0 | 5087 | 0 |
| Flt Permitted | | 0.999 | | | | | | 0.919 | | | | |
| Satd. Flow (perm) | 0 | 6222 | 0 | 0 | 0 | 0 | 0 | 4721 | 0 | 0 | 5087 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 67 | | | | | | | | | 11 | |
| Link Speed (mph) | | 35 | | | 35 | | | 35 | | | 35 | |
| Link Distance (ft) | | 342 | | | 423 | | | 587 | | | 812 | |
| Travel Time (s) | | 6.7 | | | 8.2 | | | 11.4 | | | 15.8 | |
| Confl. Peds. (#/hr) | | | | | | | 3 | | | | | 3 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.60 | 0.96 | 0.92 | 0.92 | 0.71 | 0.65 |
| Heavy Vehicles (%) | 2% | 2% | 2% | 2% | 2% | 2% | 0% | 1% | 2% | 2% | 1% | 8% |
| Adj. Flow (vph) | 4 | 285 | 67 | 0 | 0 | 0 | 15 | 421 | 0 | 0 | 465 | 20 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 356 | 0 | 0 | 0 | 0 | 0 | 436 | 0 | 0 | 485 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 0 | | | 0 | | | 12 | | | 12 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Turn Type | Perm | NA | | | | | Perm | NA | | | NA | |
| Protected Phases | | 4 | | | | | | 6 | | | 2 | |
| Permitted Phases | 4 | | | | | | 6 | | | | | |
| Detector Phase | 4 | 4 | | | | | 6 | 6 | | | 2 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | | | | | 10.0 | 10.0 | | | 10.0 | |
| Minimum Split (s) | 49.4 | 49.4 | | | | | 37.0 | 37.0 | | | 37.0 | |
| Total Split (s) | 37.0 | 37.0 | | | | | 53.0 | 53.0 | | | 53.0 | |
| Total Split (%) | 41.1% | 41.1% | | | | | 58.9% | 58.9% | | | 58.9% | |
| Maximum Green (s) | 29.6 | 29.6 | | | | | 47.0 | 47.0 | | | 47.0 | |
| Yellow Time (s) | 3.0 | 3.0 | | | | | 3.6 | 3.6 | | | 3.6 | |
| All-Red Time (s) | 4.4 | 4.4 | | | | | 2.4 | 2.4 | | | 2.4 | |
| Lost Time Adjust (s) | | 0.0 | | | | | | 0.0 | | | 0.0 | |
| Total Lost Time (s) | | 7.4 | | | | | | 6.0 | | | 6.0 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Vehicle Extension (s) | 3.0 | 3.0 | | | | | 3.0 | 3.0 | | | 3.0 | |
| Recall Mode | None | None | | | | | C-Max | C-Max | | | C-Max | |
| Walk Time (s) | 9.0 | 9.0 | | | | | 7.0 | 7.0 | | | 7.0 | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | SEL | SET | SER | NWL | NWT | NWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Flash Dont Walk (s) | 33.0 | 33.0 | | | | | 24.0 | 24.0 | | | 24.0 | |
| Pedestrian Calls (#/hr) | 0 | 0 | | | | | 0 | 0 | | | 0 | |
| Act Effct Green (s) | | 11.0 | | | | | | 65.6 | | | 65.6 | |
| Actuated g/C Ratio | | 0.12 | | | | | | 0.73 | | | 0.73 | |
| v/c Ratio | | 0.43 | | | | | | 0.13 | | | 0.13 | |
| Control Delay | | 31.5 | | | | | | 2.2 | | | 3.8 | |
| Queue Delay | | 0.0 | | | | | | 0.0 | | | 0.0 | |
| Total Delay | | 31.5 | | | | | | 2.2 | | | 3.8 | |
| LOS | | C | | | | | | A | | | A | |
| Approach Delay | | 31.5 | | | | | | 2.2 | | | 3.8 | |
| Approach LOS | | C | | | | | | A | | | A | |
| Queue Length 50th (ft) | | 51 | | | | | | 10 | | | 23 | |
| Queue Length 95th (ft) | | 76 | | | | | | 13 | | | 29 | |
| Internal Link Dist (ft) | | 262 | | | 343 | | | 507 | | | 732 | |
| Turn Bay Length (ft) | | | | | | | | | | | | |
| Base Capacity (vph) | | 2091 | | | | | | 3440 | | | 3709 | |
| Starvation Cap Reductn | | 0 | | | | | | 0 | | | 0 | |
| Spillback Cap Reductn | | 0 | | | | | | 0 | | | 0 | |
| Storage Cap Reductn | | 0 | | | | | | 0 | | | 0 | |
| Reduced v/c Ratio | | 0.17 | | | | | | 0.13 | | | 0.13 | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 90 | | | |
| Actuated Cycle Length: 90 | | | |
| Offset: 54 (60%), Referenced to phase 2:NWT and 6:SETL, Start of Green | | | |
| Natural Cycle: 90 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.43 | | | |
| Intersection Signal Delay: 11.0 | | Intersection LOS: B | |
| Intersection Capacity Utilization 45.3% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 1093: Grand River Ave & Jeffries Service Dr

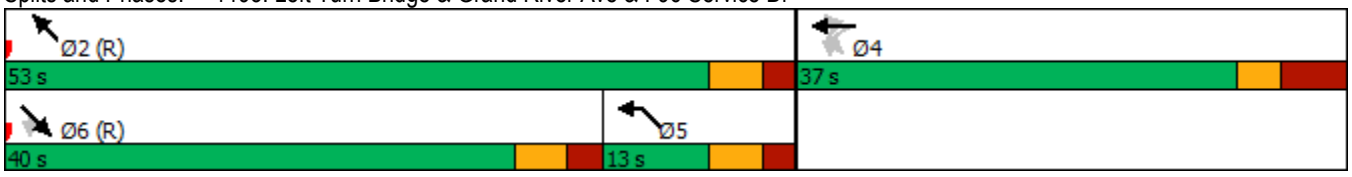


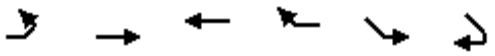
| Lane Group | WBL2 | WBL | WBT | WBR | SET | SER | SER2 | NWL | NWT |
|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | |
| Traffic Volume (vph) | 23 | 6 | 187 | 258 | 390 | 96 | 3 | 46 | 288 |
| Future Volume (vph) | 23 | 6 | 187 | 258 | 390 | 96 | 3 | 46 | 288 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | | 0 | | 0 | | 140 | | 260 | |
| Storage Lanes | | 0 | | 1 | | 1 | | 1 | |
| Taper Length (ft) | | 65 | | | | | | 65 | |
| Lane Util. Factor | 0.91 | 0.91 | 0.86 | 0.86 | 0.86 | 0.86 | 0.91 | 1.00 | 0.91 |
| Frt | | | 0.944 | 0.850 | 0.996 | 0.850 | | | |
| Flt Protected | | | 0.996 | | | | | 0.950 | |
| Satd. Flow (prot) | 0 | 0 | 4519 | 1362 | 4834 | 1376 | 0 | 1805 | 5136 |
| Flt Permitted | | | 0.996 | | | | | 0.950 | |
| Satd. Flow (perm) | 0 | 0 | 4519 | 1362 | 4834 | 1376 | 0 | 1805 | 5136 |
| Right Turn on Red | | | | Yes | | | Yes | | |
| Satd. Flow (RTOR) | | | 140 | 140 | | 126 | | | |
| Link Speed (mph) | | | 35 | | 35 | | | | 35 |
| Link Distance (ft) | | | 480 | | 422 | | | | 587 |
| Travel Time (s) | | | 9.4 | | 8.2 | | | | 11.4 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.94 | 0.83 | 0.75 | 0.60 | 0.73 |
| Heavy Vehicles (%) | 2% | 2% | 2% | 2% | 1% | 1% | 0% | 0% | 1% |
| Adj. Flow (vph) | 25 | 7 | 203 | 280 | 415 | 116 | 4 | 77 | 395 |
| Shared Lane Traffic (%) | | | | 50% | | 10% | | | |
| Lane Group Flow (vph) | 0 | 0 | 375 | 140 | 427 | 108 | 0 | 77 | 395 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Left | Right | Left | Right | Right | Left | Left |
| Median Width(ft) | | | 0 | | 12 | | | | 12 |
| Link Offset(ft) | | | 0 | | 0 | | | | 0 |
| Crosswalk Width(ft) | | | 16 | | 16 | | | | 16 |
| Two way Left Turn Lane | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | 15 | | 9 | | 9 | 9 | 15 | |
| Turn Type | Perm | Perm | NA | Perm | NA | Perm | | Prot | NA |
| Protected Phases | | | 4 | | 6 | | | 5 | 2 |
| Permitted Phases | 4 | 4 | | 4 | | 6 | | | |
| Detector Phase | 4 | 4 | 4 | 4 | 6 | 6 | | 5 | 2 |
| Switch Phase | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | | 7.0 | 10.0 |
| Minimum Split (s) | 55.5 | 55.5 | 55.5 | 55.5 | 37.9 | 37.9 | | 12.9 | 37.9 |
| Total Split (s) | 37.0 | 37.0 | 37.0 | 37.0 | 40.0 | 40.0 | | 13.0 | 53.0 |
| Total Split (%) | 41.1% | 41.1% | 41.1% | 41.1% | 44.4% | 44.4% | | 14.4% | 58.9% |
| Maximum Green (s) | 29.5 | 29.5 | 29.5 | 29.5 | 34.1 | 34.1 | | 7.1 | 47.1 |
| Yellow Time (s) | 3.0 | 3.0 | 3.0 | 3.0 | 3.6 | 3.6 | | 3.6 | 3.6 |
| All-Red Time (s) | 4.5 | 4.5 | 4.5 | 4.5 | 2.3 | 2.3 | | 2.3 | 2.3 |
| Lost Time Adjust (s) | | | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Total Lost Time (s) | | | 7.5 | 7.5 | 5.9 | 5.9 | | 5.9 | 5.9 |
| Lead/Lag | | | | | Lead | Lead | | Lag | |
| Lead-Lag Optimize? | | | | | Yes | Yes | | Yes | |
| Vehicle Extension (s) | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | | 3.0 | 3.0 |
| Recall Mode | None | None | None | None | C-Max | C-Max | | None | C-Max |

| Lane Group | WBL2 | WBL | WBT | WBR | SET | SER | SER2 | NWL | NWT |
|---|---|---|---|---|---|---|---|---|---|
| Walk Time (s) | 9.0 | 9.0 | 9.0 | 9.0 | 7.0 | 7.0 | | | 7.0 |
| Flash Dont Walk (s) | 39.0 | 39.0 | 39.0 | 39.0 | 25.0 | 25.0 | | | 25.0 |
| Pedestrian Calls (#/hr) | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 |
| Act Effct Green (s) | | | 11.7 | 11.7 | 54.5 | 54.5 | | 7.1 | 64.9 |
| Actuated g/C Ratio | | | 0.13 | 0.13 | 0.61 | 0.61 | | 0.08 | 0.72 |
| v/c Ratio | | | 0.53 | 0.47 | 0.15 | 0.12 | | 0.54 | 0.11 |
| Control Delay | | | 25.1 | 11.7 | 6.9 | 0.8 | | 52.1 | 0.6 |
| Queue Delay | | | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Total Delay | | | 25.1 | 11.7 | 6.9 | 0.8 | | 52.1 | 0.6 |
| LOS | | | C | B | A | A | | D | A |
| Approach Delay | | | 21.5 | | 5.6 | | | | 9.0 |
| Approach LOS | | | C | | A | | | | A |
| Queue Length 50th (ft) | | | 48 | 0 | 32 | 1 | | 43 | 0 |
| Queue Length 95th (ft) | | | 76 | 58 | 44 | 2 | | 58 | 0 |
| Internal Link Dist (ft) | | | 400 | | 342 | | | | 507 |
| Turn Bay Length (ft) | | | | | | 140 | | 260 | |
| Base Capacity (vph) | | | 1575 | 540 | 2925 | 882 | | 142 | 3701 |
| Starvation Cap Reductn | | | 0 | 0 | 0 | 0 | | 0 | 0 |
| Spillback Cap Reductn | | | 0 | 0 | 0 | 0 | | 0 | 0 |
| Storage Cap Reductn | | | 0 | 0 | 0 | 0 | | 0 | 0 |
| Reduced v/c Ratio | | | 0.24 | 0.26 | 0.15 | 0.12 | | 0.54 | 0.11 |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 90 | | | |
| Actuated Cycle Length: 90 | | | |
| Offset: 66 (73%), Referenced to phase 2:NWT and 6:SET, Start of Green | | | |
| Natural Cycle: 110 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.54 | | | |
| Intersection Signal Delay: 12.0 | | Intersection LOS: B | |
| Intersection Capacity Utilization 38.6% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 1193: Left Turn Bridge & Grand River Ave & I-96 Service Dr



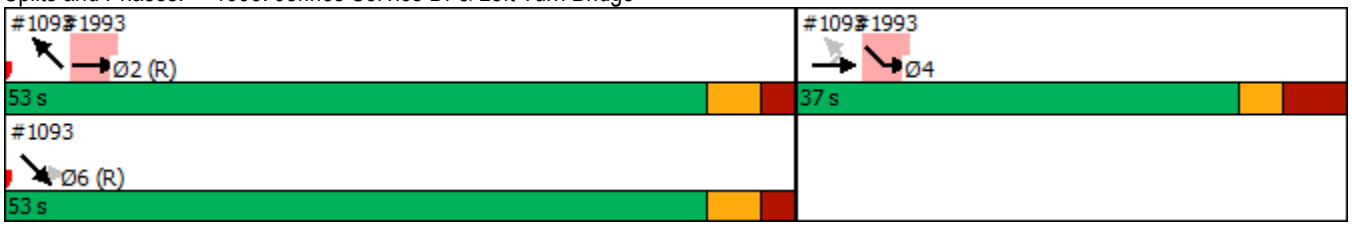


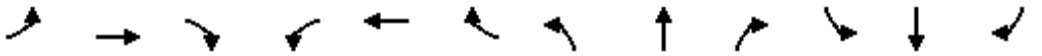
| Lane Group | EBL | EBT | WBT | WBR | SEL | SER | Ø6 |
|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | |
| Traffic Volume (vph) | 0 | 223 | 0 | 0 | 102 | 0 | |
| Future Volume (vph) | 0 | 223 | 0 | 0 | 102 | 0 | |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | |
| Lane Util. Factor | 1.00 | 0.91 | 1.00 | 1.00 | 0.97 | 1.00 | |
| Frt | | | | | | | |
| Flt Protected | | | | | 0.950 | | |
| Satd. Flow (prot) | 0 | 5085 | 0 | 0 | 3433 | 0 | |
| Flt Permitted | | | | | 0.950 | | |
| Satd. Flow (perm) | 0 | 5085 | 0 | 0 | 3433 | 0 | |
| Right Turn on Red | | | | Yes | Yes | Yes | |
| Satd. Flow (RTOR) | | | | | 1170 | | |
| Link Speed (mph) | | 35 | 35 | | 30 | | |
| Link Distance (ft) | | 191 | 342 | | 422 | | |
| Travel Time (s) | | 3.7 | 6.7 | | 9.6 | | |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | |
| Adj. Flow (vph) | 0 | 242 | 0 | 0 | 111 | 0 | |
| Shared Lane Traffic (%) | | | | | | | |
| Lane Group Flow (vph) | 0 | 242 | 0 | 0 | 111 | 0 | |
| Enter Blocked Intersection | No | No | No | No | No | No | |
| Lane Alignment | Left | Left | Left | Right | Left | Right | |
| Median Width(ft) | | 0 | 0 | | 24 | | |
| Link Offset(ft) | | 0 | 0 | | 0 | | |
| Crosswalk Width(ft) | | 16 | 16 | | 16 | | |
| Two way Left Turn Lane | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | |
| Turning Speed (mph) | 15 | | | 9 | 15 | 9 | |
| Turn Type | | NA | | | Prot | | |
| Protected Phases | | 2 | | | 4 | | 6 |
| Permitted Phases | | | | | | | |
| Detector Phase | | 2 | | | 4 | | |
| Switch Phase | | | | | | | |
| Minimum Initial (s) | | 10.0 | | | 10.0 | | 10.0 |
| Minimum Split (s) | | 37.0 | | | 49.4 | | 37.0 |
| Total Split (s) | | 53.0 | | | 37.0 | | 53.0 |
| Total Split (%) | | 58.9% | | | 41.1% | | 59% |
| Maximum Green (s) | | 47.0 | | | 29.6 | | 47.0 |
| Yellow Time (s) | | 3.6 | | | 3.0 | | 3.6 |
| All-Red Time (s) | | 2.4 | | | 4.4 | | 2.4 |
| Lost Time Adjust (s) | | 0.0 | | | 0.0 | | |
| Total Lost Time (s) | | 6.0 | | | 7.4 | | |
| Lead/Lag | | | | | | | |
| Lead-Lag Optimize? | | | | | | | |
| Vehicle Extension (s) | | 3.0 | | | 3.0 | | 3.0 |
| Recall Mode | | C-Max | | | None | | C-Max |
| Walk Time (s) | | 7.0 | | | 9.0 | | 7.0 |
| Flash Dont Walk (s) | | 24.0 | | | 33.0 | | 24.0 |
| Pedestrian Calls (#/hr) | | 0 | | | 0 | | 0 |
| Act Effct Green (s) | | 65.6 | | | 11.0 | | |

| Lane Group | EBL | EBT | WBT | WBR | SEL | SER | Ø6 |
|---|---|---|---|---|---|---|---|
| Actuated g/C Ratio | | 0.73 | | | 0.12 | | |
| v/c Ratio | | 0.07 | | | 0.08 | | |
| Control Delay | | 2.0 | | | 0.1 | | |
| Queue Delay | | 0.0 | | | 0.0 | | |
| Total Delay | | 2.0 | | | 0.1 | | |
| LOS | | A | | | A | | |
| Approach Delay | | 2.0 | | | 0.1 | | |
| Approach LOS | | A | | | A | | |
| Queue Length 50th (ft) | | 6 | | | 0 | | |
| Queue Length 95th (ft) | | 10 | | | 0 | | |
| Internal Link Dist (ft) | | 111 | 262 | | 342 | | |
| Turn Bay Length (ft) | | | | | | | |
| Base Capacity (vph) | | 3704 | | | 1914 | | |
| Starvation Cap Reductn | | 0 | | | 0 | | |
| Spillback Cap Reductn | | 0 | | | 0 | | |
| Storage Cap Reductn | | 0 | | | 0 | | |
| Reduced v/c Ratio | | 0.07 | | | 0.06 | | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 90 | | | |
| Actuated Cycle Length: 90 | | | |
| Offset: 54 (60%), Referenced to phase 2:NWT and 6:SETL, Start of Green | | | |
| Natural Cycle: 90 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.43 | | | |
| Intersection Signal Delay: 1.4 | | Intersection LOS: A | |
| Intersection Capacity Utilization 27.8% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 1993: Jeffries Service Dr & Left Turn Bridge



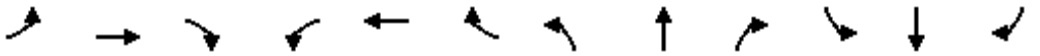


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 19 | 86 | 4 | 23 | 90 | 32 | 12 | 317 | 43 | 35 | 305 | 25 |
| Future Volume (vph) | 19 | 86 | 4 | 23 | 90 | 32 | 12 | 317 | 43 | 35 | 305 | 25 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 60 | | 0 | 60 | | 0 | 80 | | 0 | 80 | | 0 |
| Storage Lanes | 1 | | 0 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 65 | | | 65 | | | 65 | | | 65 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped Bike Factor | 1.00 | 1.00 | | 0.99 | 0.99 | | 1.00 | 1.00 | | 0.99 | 1.00 | |
| Frt | | 0.993 | | | 0.964 | | | 0.978 | | | 0.984 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1805 | 1849 | 0 | 1805 | 1808 | 0 | 1805 | 1789 | 0 | 1805 | 1849 | 0 |
| Flt Permitted | 0.662 | | | 0.665 | | | 0.450 | | | 0.420 | | |
| Satd. Flow (perm) | 1256 | 1849 | 0 | 1252 | 1808 | 0 | 854 | 1789 | 0 | 793 | 1849 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 3 | | | 19 | | | 14 | | | 9 | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 699 | | | 1470 | | | 1209 | | | 215 | |
| Travel Time (s) | | 15.9 | | | 33.4 | | | 27.5 | | | 4.9 | |
| Confl. Peds. (#/hr) | 1 | | 6 | 6 | | 1 | 1 | | 6 | 6 | | 1 |
| Peak Hour Factor | 0.60 | 0.63 | 0.60 | 0.72 | 0.80 | 0.89 | 0.75 | 0.91 | 0.72 | 0.88 | 0.90 | 0.63 |
| Heavy Vehicles (%) | 0% | 2% | 0% | 0% | 1% | 0% | 0% | 4% | 0% | 0% | 1% | 0% |
| Adj. Flow (vph) | 32 | 137 | 7 | 32 | 113 | 36 | 16 | 348 | 60 | 40 | 339 | 40 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 32 | 144 | 0 | 32 | 149 | 0 | 16 | 408 | 0 | 40 | 379 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 12 | | | 12 | | | 12 | | | 12 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | Yes | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Turn Type | Perm | NA | | Perm | NA | | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | | 8 | | | 4 | | 1 | 6 | | 5 | 2 | |
| Permitted Phases | 8 | | | 4 | | | 6 | | | 2 | | |
| Detector Phase | 8 | 8 | | 4 | 4 | | 1 | 6 | | 5 | 2 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 6.0 | 6.0 | | 6.0 | 6.0 | | 5.0 | 9.0 | | 5.0 | 9.0 | |
| Minimum Split (s) | 28.8 | 28.8 | | 28.8 | 28.8 | | 10.6 | 26.6 | | 10.6 | 26.6 | |
| Total Split (s) | 27.0 | 27.0 | | 27.0 | 27.0 | | 12.0 | 41.0 | | 12.0 | 41.0 | |
| Total Split (%) | 33.8% | 33.8% | | 33.8% | 33.8% | | 15.0% | 51.3% | | 15.0% | 51.3% | |
| Maximum Green (s) | 20.2 | 20.2 | | 20.2 | 20.2 | | 6.4 | 34.4 | | 6.4 | 34.4 | |
| Yellow Time (s) | 3.8 | 3.8 | | 3.8 | 3.8 | | 3.5 | 3.6 | | 3.5 | 3.6 | |
| All-Red Time (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 2.1 | 3.0 | | 2.1 | 3.0 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 6.8 | 6.8 | | 6.8 | 6.8 | | 5.6 | 6.6 | | 5.6 | 6.6 | |
| Lead/Lag | | | | | | | Lead | Lag | | Lead | Lag | |
| Lead-Lag Optimize? | | | | | | | Yes | Yes | | Yes | Yes | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Vehicle Extension (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | |
| Recall Mode | Max | Max | | Max | Max | | Max | C-Max | | Max | C-Max | |
| Walk Time (s) | 7.0 | 7.0 | | 7.0 | 7.0 | | | 7.0 | | | 7.0 | |
| Flash Dont Walk (s) | 15.0 | 15.0 | | 15.0 | 15.0 | | | 13.0 | | | 13.0 | |
| Pedestrian Calls (#/hr) | 0 | 0 | | 0 | 0 | | | 0 | | | 0 | |
| Act Effct Green (s) | 20.2 | 20.2 | | 20.2 | 20.2 | | 41.8 | 34.4 | | 41.8 | 34.4 | |
| Actuated g/C Ratio | 0.25 | 0.25 | | 0.25 | 0.25 | | 0.52 | 0.43 | | 0.52 | 0.43 | |
| v/c Ratio | 0.10 | 0.31 | | 0.10 | 0.32 | | 0.03 | 0.53 | | 0.08 | 0.47 | |
| Control Delay | 24.1 | 25.9 | | 24.1 | 23.3 | | 7.1 | 19.2 | | 7.4 | 18.4 | |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 24.1 | 25.9 | | 24.1 | 23.3 | | 7.1 | 19.2 | | 7.4 | 18.4 | |
| LOS | C | C | | C | C | | A | B | | A | B | |
| Approach Delay | | 25.6 | | | 23.5 | | | 18.7 | | | 17.3 | |
| Approach LOS | | C | | | C | | | B | | | B | |
| Queue Length 50th (ft) | 12 | 57 | | 12 | 52 | | 3 | 140 | | 8 | 128 | |
| Queue Length 95th (ft) | 22 | 71 | | 27 | 88 | | 9 | 222 | | 19 | 203 | |
| Internal Link Dist (ft) | | 619 | | | 1390 | | | 1129 | | | 135 | |
| Turn Bay Length (ft) | 60 | | | 60 | | | 80 | | | 80 | | |
| Base Capacity (vph) | 317 | 469 | | 316 | 470 | | 522 | 777 | | 495 | 800 | |
| Starvation Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | 0.10 | 0.31 | | 0.10 | 0.32 | | 0.03 | 0.53 | | 0.08 | 0.47 | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 80 | | | |
| Actuated Cycle Length: 80 | | | |
| Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green | | | |
| Natural Cycle: 70 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.53 | | | |
| Intersection Signal Delay: 20.0 | | Intersection LOS: B | |
| Intersection Capacity Utilization 57.7% | | ICU Level of Service B | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 2609: Schaefer Hwy & Schoolcraft Rd



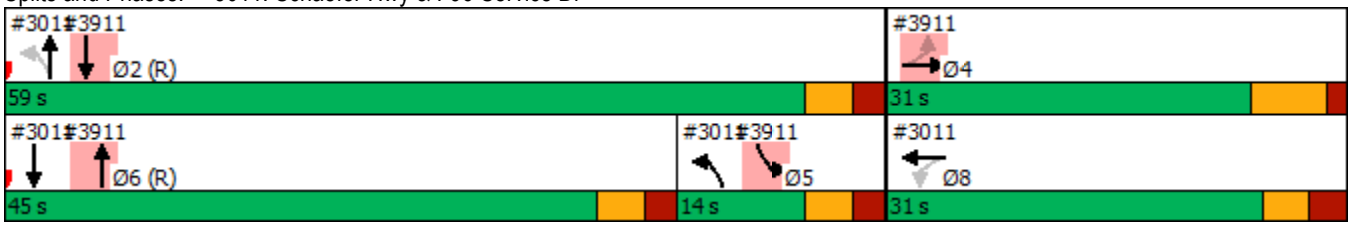
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 0 | 0 | 0 | 94 | 122 | 3 | 142 | 307 | 0 | 0 | 190 | 153 |
| Future Volume (vph) | 0 | 0 | 0 | 94 | 122 | 3 | 142 | 307 | 0 | 0 | 190 | 153 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 0 | | 0 | 0 | | 0 | 90 | | 0 | 0 | | 0 |
| Storage Lanes | 0 | | 0 | 1 | | 0 | 1 | | 0 | 0 | | 0 |
| Taper Length (ft) | 65 | | | 65 | | | 65 | | | 65 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 0.95 |
| Ped Bike Factor | | | | | | | 1.00 | | | | 0.99 | |
| Frt | | | | | 0.997 | | | | | | 0.932 | |
| Flt Protected | | | | 0.950 | | | 0.950 | | | | | |
| Satd. Flow (prot) | 0 | 0 | 0 | 1770 | 3529 | 0 | 1752 | 3574 | 0 | 0 | 3319 | 0 |
| Flt Permitted | | | | 0.950 | | | 0.509 | | | | | |
| Satd. Flow (perm) | 0 | 0 | 0 | 1770 | 3529 | 0 | 936 | 3574 | 0 | 0 | 3319 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | | | 2 | | | | | | 189 | |
| Link Speed (mph) | | 35 | | | 35 | | | 30 | | | 30 | |
| Link Distance (ft) | | 298 | | | 375 | | | 384 | | | 332 | |
| Travel Time (s) | | 5.8 | | | 7.3 | | | 8.7 | | | 7.5 | |
| Confl. Peds. (#/hr) | | | | | | | 4 | | | | | 4 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.87 | 0.76 | 0.92 | 0.92 | 0.84 | 0.81 |
| Heavy Vehicles (%) | 2% | 2% | 2% | 2% | 2% | 2% | 3% | 1% | 2% | 2% | 1% | 0% |
| Adj. Flow (vph) | 0 | 0 | 0 | 102 | 133 | 3 | 163 | 404 | 0 | 0 | 226 | 189 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 0 | 0 | 102 | 136 | 0 | 163 | 404 | 0 | 0 | 415 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 12 | | | 12 | | | 12 | | | 12 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | Yes | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Turn Type | | | | Perm | NA | | pm+pt | NA | | | NA | |
| Protected Phases | | | | | 8 | | 5 | 2 | | | 6 | |
| Permitted Phases | | | | 8 | | | 2 | | | | | |
| Detector Phase | | | | 8 | 8 | | 5 | 2 | | | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | | | | 10.0 | 10.0 | | 7.0 | 10.0 | | | 10.0 | |
| Minimum Split (s) | | | | 28.7 | 28.7 | | 12.4 | 23.4 | | | 23.4 | |
| Total Split (s) | | | | 31.0 | 31.0 | | 14.0 | 59.0 | | | 45.0 | |
| Total Split (%) | | | | 34.4% | 34.4% | | 15.6% | 65.6% | | | 50.0% | |
| Maximum Green (s) | | | | 25.3 | 25.3 | | 8.6 | 53.6 | | | 39.6 | |
| Yellow Time (s) | | | | 3.0 | 3.0 | | 3.2 | 3.2 | | | 3.2 | |
| All-Red Time (s) | | | | 2.7 | 2.7 | | 2.2 | 2.2 | | | 2.2 | |
| Lost Time Adjust (s) | | | | 0.0 | 0.0 | | 0.0 | 0.0 | | | 0.0 | |
| Total Lost Time (s) | | | | 5.7 | 5.7 | | 5.4 | 5.4 | | | 5.4 | |
| Lead/Lag | | | | | | | Lag | | | | Lead | |
| Lead-Lag Optimize? | | | | | | | Yes | | | | Yes | |

| Lane Group | Ø4 |
|---|---|
| Lane Configurations | |
| Traffic Volume (vph) | |
| Future Volume (vph) | |
| Ideal Flow (vphpl) | |
| Storage Length (ft) | |
| Storage Lanes | |
| Taper Length (ft) | |
| Lane Util. Factor | |
| Ped Bike Factor | |
| Frt | |
| Flt Protected | |
| Satd. Flow (prot) | |
| Flt Permitted | |
| Satd. Flow (perm) | |
| Right Turn on Red | |
| Satd. Flow (RTOR) | |
| Link Speed (mph) | |
| Link Distance (ft) | |
| Travel Time (s) | |
| Confl. Peds. (#/hr) | |
| Peak Hour Factor | |
| Heavy Vehicles (%) | |
| Adj. Flow (vph) | |
| Shared Lane Traffic (%) | |
| Lane Group Flow (vph) | |
| Enter Blocked Intersection | |
| Lane Alignment | |
| Median Width(ft) | |
| Link Offset(ft) | |
| Crosswalk Width(ft) | |
| Two way Left Turn Lane | |
| Headway Factor | |
| Turning Speed (mph) | |
| Turn Type | |
| Protected Phases | 4 |
| Permitted Phases | |
| Detector Phase | |
| Switch Phase | |
| Minimum Initial (s) | 10.0 |
| Minimum Split (s) | 30.5 |
| Total Split (s) | 31.0 |
| Total Split (%) | 34% |
| Maximum Green (s) | 24.5 |
| Yellow Time (s) | 5.0 |
| All-Red Time (s) | 1.5 |
| Lost Time Adjust (s) | |
| Total Lost Time (s) | |
| Lead/Lag | |
| Lead-Lag Optimize? | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Vehicle Extension (s) | | | | 3.0 | 3.0 | | 3.0 | 3.0 | | | 3.0 | |
| Recall Mode | | | | None | None | | None | C-Max | | | C-Max | |
| Walk Time (s) | | | | 7.0 | 7.0 | | | 7.0 | | | 7.0 | |
| Flash Dont Walk (s) | | | | 16.0 | 16.0 | | | 11.0 | | | 11.0 | |
| Pedestrian Calls (#/hr) | | | | 0 | 0 | | | 0 | | | 0 | |
| Act Effct Green (s) | | | | 12.2 | 12.2 | | 66.7 | 66.7 | | | 52.7 | |
| Actuated g/C Ratio | | | | 0.14 | 0.14 | | 0.74 | 0.74 | | | 0.59 | |
| v/c Ratio | | | | 0.42 | 0.28 | | 0.21 | 0.15 | | | 0.21 | |
| Control Delay | | | | 33.1 | 27.8 | | 2.8 | 2.0 | | | 8.3 | |
| Queue Delay | | | | 0.0 | 0.0 | | 0.0 | 0.0 | | | 0.0 | |
| Total Delay | | | | 33.1 | 27.8 | | 2.8 | 2.0 | | | 8.3 | |
| LOS | | | | C | C | | A | A | | | A | |
| Approach Delay | | | | | 30.1 | | | 2.2 | | | 8.3 | |
| Approach LOS | | | | | C | | | A | | | A | |
| Queue Length 50th (ft) | | | | 62 | 42 | | 15 | 21 | | | 22 | |
| Queue Length 95th (ft) | | | | 113 | 73 | | 35 | 33 | | | 71 | |
| Internal Link Dist (ft) | | 218 | | | 295 | | | 304 | | | 252 | |
| Turn Bay Length (ft) | | | | | | | 90 | | | | | |
| Base Capacity (vph) | | | | 497 | 993 | | 771 | 2647 | | | 2021 | |
| Starvation Cap Reductn | | | | 0 | 0 | | 0 | 0 | | | 0 | |
| Spillback Cap Reductn | | | | 0 | 0 | | 0 | 43 | | | 0 | |
| Storage Cap Reductn | | | | 0 | 0 | | 0 | 0 | | | 0 | |
| Reduced v/c Ratio | | | | 0.21 | 0.14 | | 0.21 | 0.16 | | | 0.21 | |

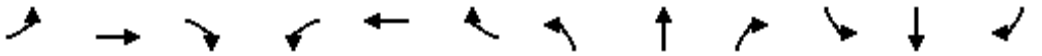
| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 90 | | | |
| Actuated Cycle Length: 90 | | | |
| Offset: 87 (97%), Referenced to phase 2:NBTL and 6:SBT, Start of Green | | | |
| Natural Cycle: 70 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.58 | | | |
| Intersection Signal Delay: 9.7 | | Intersection LOS: A | |
| Intersection Capacity Utilization 45.0% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 3011: Schaefer Hwy & I-96 Service Dr



| Lane Group | Ø4 |
|---|---|
| Vehicle Extension (s) | 3.0 |
| Recall Mode | None |
| Walk Time (s) | 7.0 |
| Flash Dont Walk (s) | 17.0 |
| Pedestrian Calls (#/hr) | 0 |
| Act Effct Green (s) | |
| Actuated g/C Ratio | |
| v/c Ratio | |
| Control Delay | |
| Queue Delay | |
| Total Delay | |
| LOS | |
| Approach Delay | |
| Approach LOS | |
| Queue Length 50th (ft) | |
| Queue Length 95th (ft) | |
| Internal Link Dist (ft) | |
| Turn Bay Length (ft) | |
| Base Capacity (vph) | |
| Starvation Cap Reductn | |
| Spillback Cap Reductn | |
| Storage Cap Reductn | |
| Reduced v/c Ratio | |

| Intersection Summary |
|---|



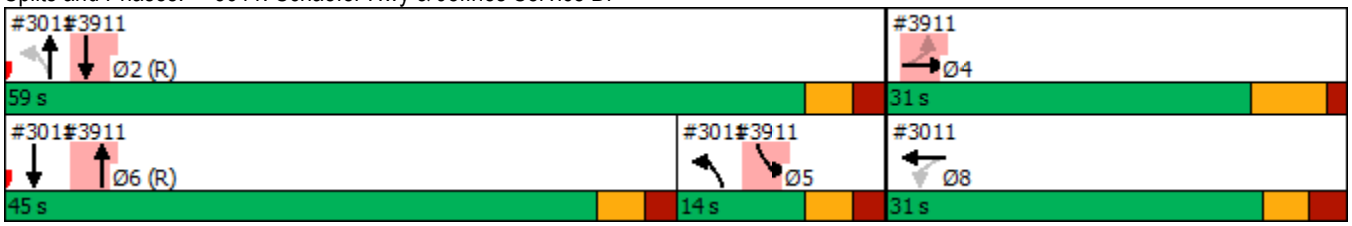
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 139 | 103 | 149 | 0 | 0 | 0 | 0 | 308 | 78 | 42 | 242 | 0 |
| Future Volume (vph) | 139 | 103 | 149 | 0 | 0 | 0 | 0 | 308 | 78 | 42 | 242 | 0 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 0 | | 0 | 0 | | 0 | 0 | | 0 | 90 | | 0 |
| Storage Lanes | 0 | | 0 | 0 | | 0 | 0 | | 0 | 1 | | 0 |
| Taper Length (ft) | 65 | | | 65 | | | 65 | | | 65 | | |
| Lane Util. Factor | 0.91 | 0.91 | 0.91 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 1.00 |
| Ped Bike Factor | | | | | | | | 1.00 | | 1.00 | | |
| Frt | | 0.943 | | | | | | 0.969 | | | | |
| Flt Protected | | 0.983 | | | | | | | | 0.950 | | |
| Satd. Flow (prot) | 0 | 4714 | 0 | 0 | 0 | 0 | 0 | 3424 | 0 | 1770 | 3574 | 0 |
| Flt Permitted | | 0.983 | | | | | | | | 0.950 | | |
| Satd. Flow (perm) | 0 | 4714 | 0 | 0 | 0 | 0 | 0 | 3424 | 0 | 1764 | 3574 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 162 | | | | | | 47 | | | | |
| Link Speed (mph) | | 35 | | | 35 | | | 30 | | | 30 | |
| Link Distance (ft) | | 417 | | | 354 | | | 291 | | | 384 | |
| Travel Time (s) | | 8.1 | | | 6.9 | | | 6.6 | | | 8.7 | |
| Confl. Peds. (#/hr) | | | | | | | | | 4 | 4 | | |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.75 | 0.72 | 0.81 | 0.79 | 0.92 |
| Heavy Vehicles (%) | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 1% | 2% | 1% | 2% |
| Adj. Flow (vph) | 151 | 112 | 162 | 0 | 0 | 0 | 0 | 411 | 108 | 52 | 306 | 0 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 425 | 0 | 0 | 0 | 0 | 0 | 519 | 0 | 52 | 306 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 0 | | | 0 | | | 12 | | | 12 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | Yes | | | Yes | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Turn Type | Perm | NA | | | | | | NA | | Prot | NA | |
| Protected Phases | | 4 | | | | | | 6 | | 5 | 2 | |
| Permitted Phases | 4 | | | | | | | | | | | |
| Detector Phase | 4 | 4 | | | | | | 6 | | 5 | 2 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | | | | | | 10.0 | | 7.0 | 10.0 | |
| Minimum Split (s) | 30.5 | 30.5 | | | | | | 23.4 | | 12.4 | 23.4 | |
| Total Split (s) | 31.0 | 31.0 | | | | | | 45.0 | | 14.0 | 59.0 | |
| Total Split (%) | 34.4% | 34.4% | | | | | | 50.0% | | 15.6% | 65.6% | |
| Maximum Green (s) | 24.5 | 24.5 | | | | | | 39.6 | | 8.6 | 53.6 | |
| Yellow Time (s) | 5.0 | 5.0 | | | | | | 3.2 | | 3.2 | 3.2 | |
| All-Red Time (s) | 1.5 | 1.5 | | | | | | 2.2 | | 2.2 | 2.2 | |
| Lost Time Adjust (s) | | 0.0 | | | | | | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | | 6.5 | | | | | | 5.4 | | 5.4 | 5.4 | |
| Lead/Lag | | | | | | | | Lead | | Lag | | |
| Lead-Lag Optimize? | | | | | | | | Yes | | Yes | | |

| Lane Group | Ø8 |
|---|---|
| Lane Configurations | |
| Traffic Volume (vph) | |
| Future Volume (vph) | |
| Ideal Flow (vphpl) | |
| Storage Length (ft) | |
| Storage Lanes | |
| Taper Length (ft) | |
| Lane Util. Factor | |
| Ped Bike Factor | |
| Frt | |
| Flt Protected | |
| Satd. Flow (prot) | |
| Flt Permitted | |
| Satd. Flow (perm) | |
| Right Turn on Red | |
| Satd. Flow (RTOR) | |
| Link Speed (mph) | |
| Link Distance (ft) | |
| Travel Time (s) | |
| Confl. Peds. (#/hr) | |
| Peak Hour Factor | |
| Heavy Vehicles (%) | |
| Adj. Flow (vph) | |
| Shared Lane Traffic (%) | |
| Lane Group Flow (vph) | |
| Enter Blocked Intersection | |
| Lane Alignment | |
| Median Width(ft) | |
| Link Offset(ft) | |
| Crosswalk Width(ft) | |
| Two way Left Turn Lane | |
| Headway Factor | |
| Turning Speed (mph) | |
| Turn Type | |
| Protected Phases | 8 |
| Permitted Phases | |
| Detector Phase | |
| Switch Phase | |
| Minimum Initial (s) | 10.0 |
| Minimum Split (s) | 28.7 |
| Total Split (s) | 31.0 |
| Total Split (%) | 34% |
| Maximum Green (s) | 25.3 |
| Yellow Time (s) | 3.0 |
| All-Red Time (s) | 2.7 |
| Lost Time Adjust (s) | |
| Total Lost Time (s) | |
| Lead/Lag | |
| Lead-Lag Optimize? | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Vehicle Extension (s) | 3.0 | 3.0 | | | | | | 3.0 | | 3.0 | 3.0 | |
| Recall Mode | None | None | | | | | | C-Max | | None | C-Max | |
| Walk Time (s) | 7.0 | 7.0 | | | | | | 7.0 | | | 7.0 | |
| Flash Dont Walk (s) | 17.0 | 17.0 | | | | | | 11.0 | | | 11.0 | |
| Pedestrian Calls (#/hr) | 0 | 0 | | | | | | 0 | | | 0 | |
| Act Effct Green (s) | | 11.4 | | | | | | 52.7 | | 8.6 | 66.7 | |
| Actuated g/C Ratio | | 0.13 | | | | | | 0.59 | | 0.10 | 0.74 | |
| v/c Ratio | | 0.58 | | | | | | 0.26 | | 0.31 | 0.12 | |
| Control Delay | | 25.6 | | | | | | 8.8 | | 45.5 | 3.7 | |
| Queue Delay | | 0.0 | | | | | | 0.0 | | 0.0 | 0.0 | |
| Total Delay | | 25.6 | | | | | | 8.8 | | 45.5 | 3.7 | |
| LOS | | C | | | | | | A | | D | A | |
| Approach Delay | | 25.6 | | | | | | 8.8 | | | 9.8 | |
| Approach LOS | | C | | | | | | A | | | A | |
| Queue Length 50th (ft) | | 52 | | | | | | 61 | | 22 | 35 | |
| Queue Length 95th (ft) | | 80 | | | | | | 77 | | 51 | 45 | |
| Internal Link Dist (ft) | | 337 | | | 274 | | | 211 | | | 304 | |
| Turn Bay Length (ft) | | | | | | | | | | 90 | | |
| Base Capacity (vph) | | 1401 | | | | | | 2023 | | 169 | 2647 | |
| Starvation Cap Reductn | | 0 | | | | | | 0 | | 0 | 0 | |
| Spillback Cap Reductn | | 0 | | | | | | 0 | | 0 | 0 | |
| Storage Cap Reductn | | 0 | | | | | | 0 | | 0 | 0 | |
| Reduced v/c Ratio | | 0.30 | | | | | | 0.26 | | 0.31 | 0.12 | |

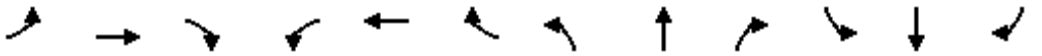
| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 90 | | | |
| Actuated Cycle Length: 90 | | | |
| Offset: 87 (97%), Referenced to phase 2:NBTL and 6:SBT, Start of Green | | | |
| Natural Cycle: 70 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.58 | | | |
| Intersection Signal Delay: 14.6 | | Intersection LOS: B | |
| Intersection Capacity Utilization 45.0% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 3911: Schaefer Hwy & Jeffries Service Dr



| Lane Group | Ø8 |
|---|---|
| Vehicle Extension (s) | 3.0 |
| Recall Mode | None |
| Walk Time (s) | 7.0 |
| Flash Dont Walk (s) | 16.0 |
| Pedestrian Calls (#/hr) | 0 |
| Act Effct Green (s) | |
| Actuated g/C Ratio | |
| v/c Ratio | |
| Control Delay | |
| Queue Delay | |
| Total Delay | |
| LOS | |
| Approach Delay | |
| Approach LOS | |
| Queue Length 50th (ft) | |
| Queue Length 95th (ft) | |
| Internal Link Dist (ft) | |
| Turn Bay Length (ft) | |
| Base Capacity (vph) | |
| Starvation Cap Reductn | |
| Spillback Cap Reductn | |
| Storage Cap Reductn | |
| Reduced v/c Ratio | |

| Intersection Summary |
|---|



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 29 | 81 | 26 | 44 | 102 | 23 | 28 | 298 | 40 | 31 | 295 | 25 |
| Future Volume (vph) | 29 | 81 | 26 | 44 | 102 | 23 | 28 | 298 | 40 | 31 | 295 | 25 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 80 | | 0 | 80 | | 0 | 80 | | 0 | 80 | | 0 |
| Storage Lanes | 1 | | 0 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 65 | | | 65 | | | 65 | | | 65 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 |
| Ped Bike Factor | 1.00 | 0.99 | | 1.00 | 1.00 | | 0.99 | 1.00 | | 1.00 | 1.00 | |
| Frt | | 0.956 | | | 0.975 | | | 0.979 | | | 0.983 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1805 | 1807 | 0 | 1805 | 1848 | 0 | 1805 | 3479 | 0 | 1752 | 3537 | 0 |
| Flt Permitted | 0.665 | | | 0.677 | | | 0.534 | | | 0.504 | | |
| Satd. Flow (perm) | 1262 | 1807 | 0 | 1280 | 1848 | 0 | 1009 | 3479 | 0 | 929 | 3537 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 35 | | | 17 | | | 31 | | | 24 | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 648 | | | 545 | | | 2274 | | | 685 | |
| Travel Time (s) | | 14.7 | | | 12.4 | | | 51.7 | | | 15.6 | |
| Confl. Peds. (#/hr) | 2 | | 6 | 6 | | 2 | 6 | | 1 | 1 | | 6 |
| Peak Hour Factor | 0.73 | 0.92 | 0.72 | 0.73 | 0.85 | 0.95 | 0.68 | 0.91 | 0.77 | 0.60 | 0.91 | 0.60 |
| Heavy Vehicles (%) | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 1% | 3% | 3% | 0% | 0% |
| Adj. Flow (vph) | 40 | 88 | 36 | 60 | 120 | 24 | 41 | 327 | 52 | 52 | 324 | 42 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 40 | 124 | 0 | 60 | 144 | 0 | 41 | 379 | 0 | 52 | 366 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 12 | | | 12 | | | 12 | | | 12 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Turn Type | Perm | NA | | Perm | NA | | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | | 4 | | | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | | 8 | | | 2 | | | 6 | | |
| Detector Phase | 4 | 4 | | 8 | 8 | | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | | 10.0 | 10.0 | | 4.0 | 15.0 | | 4.0 | 15.0 | |
| Minimum Split (s) | 24.6 | 24.6 | | 24.6 | 24.6 | | 9.6 | 26.6 | | 9.6 | 26.6 | |
| Total Split (s) | 24.0 | 24.0 | | 24.0 | 24.0 | | 12.0 | 24.0 | | 12.0 | 24.0 | |
| Total Split (%) | 40.0% | 40.0% | | 40.0% | 40.0% | | 20.0% | 40.0% | | 20.0% | 40.0% | |
| Maximum Green (s) | 18.4 | 18.4 | | 18.4 | 18.4 | | 6.4 | 18.4 | | 6.4 | 18.4 | |
| Yellow Time (s) | 3.5 | 3.5 | | 3.5 | 3.5 | | 3.5 | 3.5 | | 3.5 | 3.5 | |
| All-Red Time (s) | 2.1 | 2.1 | | 2.1 | 2.1 | | 2.1 | 2.1 | | 2.1 | 2.1 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 5.6 | 5.6 | | 5.6 | 5.6 | | 5.6 | 5.6 | | 5.6 | 5.6 | |
| Lead/Lag | | | | | | | Lead | Lag | | Lead | Lag | |
| Lead-Lag Optimize? | | | | | | | Yes | Yes | | Yes | Yes | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Vehicle Extension (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | |
| Recall Mode | Min | Min | | Min | Min | | None | C-Max | | None | C-Max | |
| Walk Time (s) | 7.0 | 7.0 | | 7.0 | 7.0 | | | 7.0 | | | 7.0 | |
| Flash Dont Walk (s) | 12.0 | 12.0 | | 12.0 | 12.0 | | | 14.0 | | | 14.0 | |
| Pedestrian Calls (#/hr) | 0 | 0 | | 0 | 0 | | | 0 | | | 0 | |
| Act Effct Green (s) | 10.8 | 10.8 | | 10.8 | 10.8 | | 34.5 | 30.6 | | 35.8 | 33.1 | |
| Actuated g/C Ratio | 0.18 | 0.18 | | 0.18 | 0.18 | | 0.58 | 0.51 | | 0.60 | 0.55 | |
| v/c Ratio | 0.18 | 0.35 | | 0.26 | 0.41 | | 0.06 | 0.21 | | 0.08 | 0.19 | |
| Control Delay | 22.3 | 18.7 | | 23.8 | 22.8 | | 5.1 | 9.4 | | 5.1 | 8.3 | |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 22.3 | 18.7 | | 23.8 | 22.8 | | 5.1 | 9.4 | | 5.1 | 8.3 | |
| LOS | C | B | | C | C | | A | A | | A | A | |
| Approach Delay | | 19.6 | | | 23.1 | | | 9.0 | | | 7.9 | |
| Approach LOS | | B | | | C | | | A | | | A | |
| Queue Length 50th (ft) | 13 | 29 | | 19 | 42 | | 4 | 37 | | 6 | 21 | |
| Queue Length 95th (ft) | 27 | 65 | | 36 | 76 | | 11 | 72 | | 12 | 70 | |
| Internal Link Dist (ft) | | 568 | | | 465 | | | 2194 | | | 605 | |
| Turn Bay Length (ft) | 80 | | | 80 | | | 80 | | | 80 | | |
| Base Capacity (vph) | 387 | 578 | | 392 | 578 | | 668 | 1790 | | 645 | 1959 | |
| Starvation Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | 0.10 | 0.21 | | 0.15 | 0.25 | | 0.06 | 0.21 | | 0.08 | 0.19 | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 60 | | | |
| Actuated Cycle Length: 60 | | | |
| Offset: 14 (23%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green | | | |
| Natural Cycle: 65 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.41 | | | |
| Intersection Signal Delay: 12.4 | | Intersection LOS: B | |
| Intersection Capacity Utilization 57.5% | | ICU Level of Service B | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 4001: Schaefer Hwy & Lyndon St

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

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | ⇕ | | | ⇕ | | | ⇕ | | | ⇕ | |
| Traffic Vol, veh/h | 8 | 152 | 4 | 0 | 136 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| Future Vol, veh/h | 8 | 152 | 4 | 0 | 136 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 60 | 60 | 60 | 60 | 60 | 60 | 25 | 25 | 25 | 25 | 25 | 60 |
| Heavy Vehicles, % | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 13 | 253 | 7 | 0 | 227 | 0 | 0 | 0 | 0 | 0 | 0 | 13 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 227 | 0 | 0 | 260 | 0 | 0 | 517 | 510 | 257 | 510 | 513 | 227 |
| Stage 1 | - | - | - | - | - | - | 283 | 283 | - | 227 | 227 | - |
| Stage 2 | - | - | - | - | - | - | 234 | 227 | - | 283 | 286 | - |
| Critical Hdwy | 4.1 | - | - | 4.1 | - | - | 7.1 | 6.5 | 6.2 | 7.1 | 6.5 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.1 | 5.5 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.1 | 5.5 | - |
| Follow-up Hdwy | 2.2 | - | - | 2.2 | - | - | 3.5 | 4 | 3.3 | 3.5 | 4 | 3.3 |
| Pot Cap-1 Maneuver | 1353 | - | - | 1316 | - | - | 472 | 469 | 787 | 477 | 468 | 817 |
| Stage 1 | - | - | - | - | - | - | 728 | 681 | - | 780 | 720 | - |
| Stage 2 | - | - | - | - | - | - | 774 | 720 | - | 728 | 679 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 1353 | - | - | 1316 | - | - | 460 | 464 | 787 | 473 | 463 | 817 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 460 | 464 | - | 473 | 463 | - |
| Stage 1 | - | - | - | - | - | - | 720 | 674 | - | 771 | 720 | - |
| Stage 2 | - | - | - | - | - | - | 761 | 720 | - | 720 | 672 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0.4 | 0 | 0 | 9.5 |
| HCM LOS | | | A | A |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | - | 1353 | - | - | 1316 | - | - | 817 |
| HCM Lane V/C Ratio | - | 0.01 | - | - | - | - | - | 0.016 |
| HCM Control Delay (s) | 0 | 7.7 | 0 | - | 0 | - | - | 9.5 |
| HCM Lane LOS | A | A | A | - | A | - | - | A |
| HCM 95th %tile Q(veh) | - | 0 | - | - | 0 | - | - | 0.1 |

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

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 2 | 1 | 6 | 3 | 1 | 7 | 4 | 200 | 16 | 5 | 236 | 3 |
| Future Vol, veh/h | 2 | 1 | 6 | 3 | 1 | 7 | 4 | 200 | 16 | 5 | 236 | 3 |
| Conflicting Peds, #/hr | 0 | 0 | 1 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 2 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | 50 | - | - | 50 | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 60 | 60 | 60 | 60 | 60 | 60 | 100 | 81 | 60 | 60 | 95 | 75 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 3 | 2 | 10 | 5 | 2 | 12 | 4 | 247 | 27 | 8 | 248 | 4 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 544 | 550 | 253 | 542 | 539 | 261 | 254 | 0 | 0 | 274 | 0 | 0 |
| Stage 1 | 268 | 268 | - | 269 | 269 | - | - | - | - | - | - | - |
| Stage 2 | 276 | 282 | - | 273 | 270 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.1 | 6.5 | 6.2 | 7.1 | 6.5 | 6.2 | 4.1 | - | - | 4.1 | - | - |
| Critical Hdwy Stg 1 | 6.1 | 5.5 | - | 6.1 | 5.5 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.1 | 5.5 | - | 6.1 | 5.5 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.5 | 4 | 3.3 | 3.5 | 4 | 3.3 | 2.2 | - | - | 2.2 | - | - |
| Pot Cap-1 Maneuver | 453 | 446 | 791 | 454 | 452 | 783 | 1323 | - | - | 1301 | - | - |
| Stage 1 | 742 | 691 | - | 741 | 690 | - | - | - | - | - | - | - |
| Stage 2 | 735 | 681 | - | 737 | 690 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | 441 | 441 | 789 | 444 | 447 | 783 | 1320 | - | - | 1301 | - | - |
| Mov Cap-2 Maneuver | 441 | 441 | - | 444 | 447 | - | - | - | - | - | - | - |
| Stage 1 | 738 | 685 | - | 739 | 688 | - | - | - | - | - | - | - |
| Stage 2 | 720 | 679 | - | 721 | 684 | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 10.9 | 11.1 | 0.1 | 0.2 |
| HCM LOS | B | B | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 1320 | - | - | 625 | 613 | 1301 | - | - |
| HCM Lane V/C Ratio | 0.003 | - | - | 0.024 | 0.03 | 0.006 | - | - |
| HCM Control Delay (s) | 7.7 | - | - | 10.9 | 11.1 | 7.8 | - | - |
| HCM Lane LOS | A | - | - | B | B | A | - | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 0.1 | 0.1 | 0 | - | - |

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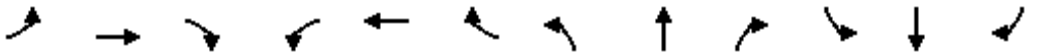
INNOVATIVE IDEAS
EXCEPTIONAL DESIGN
UNMATCHED CLIENT SERVICE

# NO BUILD CONDITIONS

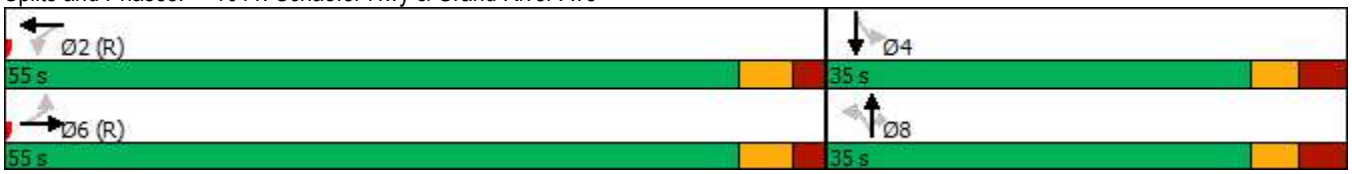


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 59 | 460 | 100 | 27 | 516 | 137 | 79 | 333 | 10 | 68 | 353 | 30 |
| Future Volume (vph) | 59 | 460 | 100 | 27 | 516 | 137 | 79 | 333 | 10 | 68 | 353 | 30 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 115 | | 0 | 95 | | 0 | 155 | | 0 | 80 | | 240 |
| Storage Lanes | 1 | | 0 | 0 | | 0 | 1 | | 1 | 1 | | 1 |
| Taper Length (ft) | 65 | | | 65 | | | 25 | | | 65 | | |
| Lane Util. Factor | 1.00 | 0.91 | 0.91 | 1.00 | 0.91 | 0.91 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 |
| Ped Bike Factor | 1.00 | 1.00 | | 1.00 | 0.99 | | 1.00 | | 0.99 | 1.00 | 1.00 | |
| Frt | | 0.971 | | | 0.964 | | | | 0.850 | | 0.988 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1805 | 4943 | 0 | 1805 | 4835 | 0 | 1805 | 1845 | 1615 | 1583 | 3369 | 0 |
| Flt Permitted | 0.362 | | | 0.406 | | | 0.451 | | | 0.283 | | |
| Satd. Flow (perm) | 686 | 4943 | 0 | 771 | 4835 | 0 | 856 | 1845 | 1593 | 471 | 3369 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 99 | | | 142 | | | | 34 | | 10 | |
| Link Speed (mph) | | 35 | | | 35 | | | 30 | | | 30 | |
| Link Distance (ft) | | 932 | | | 427 | | | 332 | | | 1209 | |
| Travel Time (s) | | 18.2 | | | 8.3 | | | 7.5 | | | 27.5 | |
| Confl. Peds. (#/hr) | 5 | | 3 | 3 | | 5 | 3 | | 2 | 2 | | 3 |
| Peak Hour Factor | 0.71 | 0.92 | 0.83 | 0.78 | 0.94 | 0.78 | 0.83 | 0.89 | 0.63 | 0.81 | 0.93 | 0.91 |
| Heavy Vehicles (%) | 0% | 2% | 0% | 0% | 2% | 5% | 0% | 3% | 0% | 14% | 6% | 3% |
| Adj. Flow (vph) | 83 | 500 | 120 | 35 | 549 | 176 | 95 | 374 | 16 | 84 | 380 | 33 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 83 | 620 | 0 | 35 | 725 | 0 | 95 | 374 | 16 | 84 | 413 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 12 | | | 12 | | | 12 | | | 12 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | Yes | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | | 1 | 2 | | 1 | 2 | 1 | 1 | 2 | |
| Detector Template | Left | Thru | | Left | Thru | | Left | Thru | Right | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | | 20 | 100 | | 20 | 100 | 20 | 20 | 100 | |
| Trailing Detector (ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | |
| Detector 1 Position(ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | |
| Detector 1 Size(ft) | 20 | 6 | | 20 | 6 | | 20 | 6 | 20 | 20 | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Detector 1 Queue (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Detector 1 Delay (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | 6 | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Turn Type | Perm | NA | | Perm | NA | | Perm | NA | Perm | Perm | NA | |
| Protected Phases | | 6 | | | 2 | | | 8 | | | 4 | |
| Permitted Phases | 6 | | | 2 | | | 8 | | 8 | 4 | | |
| Detector Phase | 6 | 6 | | 2 | 2 | | 8 | 8 | 8 | 4 | 4 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | | 10.0 | 10.0 | | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | |
| Minimum Split (s) | 35.8 | 35.8 | | 35.8 | 35.8 | | 46.5 | 46.5 | 46.5 | 46.5 | 46.5 | |
| Total Split (s) | 55.0 | 55.0 | | 55.0 | 55.0 | | 35.0 | 35.0 | 35.0 | 35.0 | 35.0 | |
| Total Split (%) | 61.1% | 61.1% | | 61.1% | 61.1% | | 38.9% | 38.9% | 38.9% | 38.9% | 38.9% | |
| Maximum Green (s) | 49.2 | 49.2 | | 49.2 | 49.2 | | 28.5 | 28.5 | 28.5 | 28.5 | 28.5 | |
| Yellow Time (s) | 3.6 | 3.6 | | 3.6 | 3.6 | | 3.2 | 3.2 | 3.2 | 3.2 | 3.2 | |
| All-Red Time (s) | 2.2 | 2.2 | | 2.2 | 2.2 | | 3.3 | 3.3 | 3.3 | 3.3 | 3.3 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Total Lost Time (s) | 5.8 | 5.8 | | 5.8 | 5.8 | | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Vehicle Extension (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | |
| Recall Mode | C-Max | C-Max | | C-Max | C-Max | | None | None | None | None | None | |
| Walk Time (s) | 7.0 | 7.0 | | 7.0 | 7.0 | | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | |
| Flash Dont Walk (s) | 23.0 | 23.0 | | 23.0 | 23.0 | | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 | |
| Pedestrian Calls (#/hr) | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | |
| Act Effct Green (s) | 54.5 | 54.5 | | 54.5 | 54.5 | | 23.2 | 23.2 | 23.2 | 23.2 | 23.2 | |
| Actuated g/C Ratio | 0.61 | 0.61 | | 0.61 | 0.61 | | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 | |
| v/c Ratio | 0.20 | 0.20 | | 0.08 | 0.24 | | 0.43 | 0.79 | 0.04 | 0.69 | 0.47 | |
| Control Delay | 11.0 | 7.4 | | 8.9 | 6.8 | | 26.0 | 36.4 | 6.6 | 58.6 | 28.6 | |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.7 | 0.0 | 0.0 | 0.0 | |
| Total Delay | 11.0 | 7.4 | | 8.9 | 6.8 | | 26.0 | 37.1 | 6.6 | 58.6 | 28.6 | |
| LOS | B | A | | A | A | | C | D | A | E | C | |
| Approach Delay | | 7.8 | | | 6.9 | | | 33.9 | | | 33.7 | |
| Approach LOS | | A | | | A | | | C | | | C | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 90 | | | |
| Actuated Cycle Length: 90 | | | |
| Offset: 59 (66%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green | | | |
| Natural Cycle: 85 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.79 | | | |
| Intersection Signal Delay: 18.0 | | Intersection LOS: B | |
| Intersection Capacity Utilization 78.2% | | ICU Level of Service D | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 1011: Schaefer Hwy & Grand River Ave



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | SEL | SET | SER | NWL | NWT | NWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 6 | 311 | 58 | 0 | 0 | 0 | 5 | 462 | 0 | 0 | 419 | 20 |
| Future Volume (vph) | 6 | 311 | 58 | 0 | 0 | 0 | 5 | 462 | 0 | 0 | 419 | 20 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Util. Factor | 0.86 | 0.86 | 0.86 | 1.00 | 1.00 | 1.00 | 0.91 | 0.91 | 1.00 | 1.00 | 0.91 | 0.91 |
| Ped Bike Factor | | | | | | | | 1.00 | | | 1.00 | |
| Frt | | 0.977 | | | | | | | | | 0.990 | |
| Flt Protected | | 0.999 | | | | | | 0.999 | | | | |
| Satd. Flow (prot) | 0 | 6254 | 0 | 0 | 0 | 0 | 0 | 5082 | 0 | 0 | 5066 | 0 |
| Flt Permitted | | 0.999 | | | | | | 0.933 | | | | |
| Satd. Flow (perm) | 0 | 6254 | 0 | 0 | 0 | 0 | 0 | 4746 | 0 | 0 | 5066 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 54 | | | | | | | | | 19 | |
| Link Speed (mph) | | 35 | | | 35 | | | 35 | | | 35 | |
| Link Distance (ft) | | 329 | | | 379 | | | 582 | | | 812 | |
| Travel Time (s) | | 6.4 | | | 7.4 | | | 11.3 | | | 15.8 | |
| Confl. Peds. (#/hr) | | | | | | | 1 | | | | | 1 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.60 | 0.91 | 0.92 | 0.92 | 0.92 | 0.60 |
| Heavy Vehicles (%) | 2% | 2% | 2% | 2% | 2% | 2% | 0% | 2% | 2% | 2% | 1% | 5% |
| Adj. Flow (vph) | 7 | 338 | 63 | 0 | 0 | 0 | 8 | 508 | 0 | 0 | 455 | 33 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 408 | 0 | 0 | 0 | 0 | 0 | 516 | 0 | 0 | 488 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 0 | | | 0 | | | 12 | | | 12 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | | | | | 1 | 2 | | | 2 | |
| Detector Template | Left | Thru | | | | | Left | Thru | | | Thru | |
| Leading Detector (ft) | 20 | 100 | | | | | 20 | 100 | | | 100 | |
| Trailing Detector (ft) | 0 | 0 | | | | | 0 | 0 | | | 0 | |
| Detector 1 Position(ft) | 0 | 0 | | | | | 0 | 0 | | | 0 | |
| Detector 1 Size(ft) | 20 | 6 | | | | | 20 | 6 | | | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | | | | | Cl+Ex | Cl+Ex | | | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | | | | | 0.0 | 0.0 | | | 0.0 | |
| Detector 1 Queue (s) | 0.0 | 0.0 | | | | | 0.0 | 0.0 | | | 0.0 | |
| Detector 1 Delay (s) | 0.0 | 0.0 | | | | | 0.0 | 0.0 | | | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | | | | 6 | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | | | | 0.0 | | | 0.0 | |
| Turn Type | Perm | NA | | | | | Perm | NA | | | NA | |
| Protected Phases | | 4 | | | | | | 6 | | | 2 | |
| Permitted Phases | 4 | | | | | | 6 | | | | | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | SEL | SET | SER | NWL | NWT | NWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detector Phase | 4 | 4 | | | | | 6 | 6 | | | 2 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | | | | | 10.0 | 10.0 | | | 10.0 | |
| Minimum Split (s) | 57.4 | 57.4 | | | | | 37.0 | 37.0 | | | 37.0 | |
| Total Split (s) | 37.0 | 37.0 | | | | | 53.0 | 53.0 | | | 53.0 | |
| Total Split (%) | 41.1% | 41.1% | | | | | 58.9% | 58.9% | | | 58.9% | |
| Maximum Green (s) | 29.6 | 29.6 | | | | | 47.0 | 47.0 | | | 47.0 | |
| Yellow Time (s) | 3.0 | 3.0 | | | | | 3.6 | 3.6 | | | 3.6 | |
| All-Red Time (s) | 4.4 | 4.4 | | | | | 2.4 | 2.4 | | | 2.4 | |
| Lost Time Adjust (s) | | 0.0 | | | | | | 0.0 | | | 0.0 | |
| Total Lost Time (s) | | 7.4 | | | | | | 6.0 | | | 6.0 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Vehicle Extension (s) | 3.0 | 3.0 | | | | | 3.0 | 3.0 | | | 3.0 | |
| Recall Mode | None | None | | | | | C-Max | C-Max | | | C-Max | |
| Walk Time (s) | 9.0 | 9.0 | | | | | 7.0 | 7.0 | | | 7.0 | |
| Flash Dont Walk (s) | 33.0 | 33.0 | | | | | 24.0 | 24.0 | | | 24.0 | |
| Pedestrian Calls (#/hr) | 0 | 0 | | | | | 0 | 0 | | | 0 | |
| Act Effct Green (s) | | 11.7 | | | | | | 64.9 | | | 64.9 | |
| Actuated g/C Ratio | | 0.13 | | | | | | 0.72 | | | 0.72 | |
| v/c Ratio | | 0.47 | | | | | | 0.15 | | | 0.13 | |
| Control Delay | | 31.9 | | | | | | 2.3 | | | 4.0 | |
| Queue Delay | | 0.0 | | | | | | 0.0 | | | 0.0 | |
| Total Delay | | 31.9 | | | | | | 2.3 | | | 4.0 | |
| LOS | | C | | | | | | A | | | A | |
| Approach Delay | | 31.9 | | | | | | 2.3 | | | 4.0 | |
| Approach LOS | | C | | | | | | A | | | A | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 90 | | | |
| Actuated Cycle Length: 90 | | | |
| Offset: 54 (60%), Referenced to phase 2:NWT and 6:SETL, Start of Green | | | |
| Natural Cycle: 95 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.47 | | | |
| Intersection Signal Delay: 11.4 | | Intersection LOS: B | |
| Intersection Capacity Utilization 45.3% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |

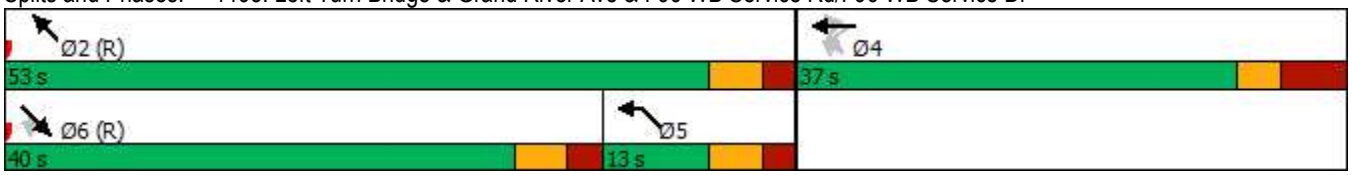
Splits and Phases: 1093: Grand River Ave & Jeffries Service Dr

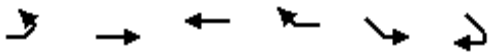
| Lane Group | WBL2 | WBL | WBT | WBR | SET | SER | SER2 | NWL | NWT |
|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | |
| Traffic Volume (vph) | 42 | 5 | 193 | 315 | 425 | 107 | 6 | 61 | 365 |
| Future Volume (vph) | 42 | 5 | 193 | 315 | 425 | 107 | 6 | 61 | 365 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | | 0 | | 0 | | 140 | | 260 | |
| Storage Lanes | | 0 | | 1 | | 1 | | 1 | |
| Taper Length (ft) | | 65 | | | | | | 65 | |
| Lane Util. Factor | 0.91 | 0.91 | 0.86 | 0.86 | 0.86 | 0.86 | 0.91 | 1.00 | 0.91 |
| Frt | | | 0.941 | 0.850 | 0.994 | 0.850 | | | |
| Flt Protected | | | 0.994 | | | | | 0.950 | |
| Satd. Flow (prot) | 0 | 0 | 4495 | 1362 | 4770 | 1316 | 0 | 1805 | 5085 |
| Flt Permitted | | | 0.994 | | | | | 0.950 | |
| Satd. Flow (perm) | 0 | 0 | 4495 | 1362 | 4770 | 1316 | 0 | 1805 | 5085 |
| Right Turn on Red | | | | Yes | | | Yes | | |
| Satd. Flow (RTOR) | | | 171 | 171 | | 126 | | | |
| Link Speed (mph) | | | 35 | | 35 | | | | 35 |
| Link Distance (ft) | | | 675 | | 427 | | | | 582 |
| Travel Time (s) | | | 13.1 | | 8.3 | | | | 11.3 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.93 | 0.74 | 0.60 | 0.78 | 0.89 |
| Heavy Vehicles (%) | 2% | 2% | 2% | 2% | 2% | 6% | 0% | 0% | 2% |
| Adj. Flow (vph) | 46 | 5 | 210 | 342 | 457 | 145 | 10 | 78 | 410 |
| Shared Lane Traffic (%) | | | | 50% | | 13% | | | |
| Lane Group Flow (vph) | 0 | 0 | 432 | 171 | 476 | 136 | 0 | 78 | 410 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Left | Right | Left | Right | Right | Left | Left |
| Median Width(ft) | | | 0 | | 12 | | | | 12 |
| Link Offset(ft) | | | 0 | | 0 | | | | 0 |
| Crosswalk Width(ft) | | | 16 | | 16 | | | | 16 |
| Two way Left Turn Lane | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | 15 | | 9 | | 9 | 9 | 15 | |
| Number of Detectors | 1 | 1 | 2 | 1 | 2 | 1 | | 1 | 2 |
| Detector Template | Left | Left | Thru | Right | Thru | Right | | Left | Thru |
| Leading Detector (ft) | 20 | 20 | 100 | 20 | 100 | 20 | | 20 | 100 |
| Trailing Detector (ft) | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 |
| Detector 1 Position(ft) | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 |
| Detector 1 Size(ft) | 20 | 20 | 6 | 20 | 6 | 20 | | 20 | 6 |
| Detector 1 Type | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex |
| Detector 1 Channel | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Detector 1 Queue (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Detector 1 Delay (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Detector 2 Position(ft) | | | 94 | | 94 | | | | 94 |
| Detector 2 Size(ft) | | | 6 | | 6 | | | | 6 |
| Detector 2 Type | | | Cl+Ex | | Cl+Ex | | | | Cl+Ex |
| Detector 2 Channel | | | | | | | | | |
| Detector 2 Extend (s) | | | 0.0 | | 0.0 | | | | 0.0 |
| Turn Type | Perm | Perm | NA | Perm | NA | Perm | | Prot | NA |
| Protected Phases | | | 4 | | 6 | | | 5 | 2 |

| Lane Group | WBL2 | WBL | WBT | WBR | SET | SER | SER2 | NWL | NWT |
|---|---|---|---|---|---|---|---|---|---|
| Permitted Phases | 4 | 4 | | 4 | | 6 | | | |
| Detector Phase | 4 | 4 | 4 | 4 | 6 | 6 | | 5 | 2 |
| Switch Phase | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | | 7.0 | 10.0 |
| Minimum Split (s) | 55.5 | 55.5 | 55.5 | 55.5 | 37.9 | 37.9 | | 12.9 | 37.9 |
| Total Split (s) | 37.0 | 37.0 | 37.0 | 37.0 | 40.0 | 40.0 | | 13.0 | 53.0 |
| Total Split (%) | 41.1% | 41.1% | 41.1% | 41.1% | 44.4% | 44.4% | | 14.4% | 58.9% |
| Maximum Green (s) | 29.5 | 29.5 | 29.5 | 29.5 | 34.1 | 34.1 | | 7.1 | 47.1 |
| Yellow Time (s) | 3.0 | 3.0 | 3.0 | 3.0 | 3.6 | 3.6 | | 3.6 | 3.6 |
| All-Red Time (s) | 4.5 | 4.5 | 4.5 | 4.5 | 2.3 | 2.3 | | 2.3 | 2.3 |
| Lost Time Adjust (s) | | | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Total Lost Time (s) | | | 7.5 | 7.5 | 5.9 | 5.9 | | 5.9 | 5.9 |
| Lead/Lag | | | | | Lead | Lead | | Lag | |
| Lead-Lag Optimize? | | | | | Yes | Yes | | Yes | |
| Vehicle Extension (s) | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | | 3.0 | 3.0 |
| Recall Mode | None | None | None | None | C-Max | C-Max | | None | C-Max |
| Walk Time (s) | 9.0 | 9.0 | 9.0 | 9.0 | 7.0 | 7.0 | | | 7.0 |
| Flash Dont Walk (s) | 39.0 | 39.0 | 39.0 | 39.0 | 25.0 | 25.0 | | | 25.0 |
| Pedestrian Calls (#/hr) | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 |
| Act Effct Green (s) | | | 12.5 | 12.5 | 53.7 | 53.7 | | 7.1 | 64.1 |
| Actuated g/C Ratio | | | 0.14 | 0.14 | 0.60 | 0.60 | | 0.08 | 0.71 |
| v/c Ratio | | | 0.56 | 0.51 | 0.17 | 0.16 | | 0.55 | 0.11 |
| Control Delay | | | 24.0 | 11.1 | 7.0 | 1.2 | | 52.9 | 1.2 |
| Queue Delay | | | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Total Delay | | | 24.0 | 11.1 | 7.0 | 1.2 | | 52.9 | 1.2 |
| LOS | | | C | B | A | A | | D | A |
| Approach Delay | | | 20.3 | | 5.7 | | | | 9.5 |
| Approach LOS | | | C | | A | | | | A |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 90 | | | |
| Actuated Cycle Length: 90 | | | |
| Offset: 66 (73%), Referenced to phase 2:NWT and 6:SET, Start of Green | | | |
| Natural Cycle: 110 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.56 | | | |
| Intersection Signal Delay: 12.0 | | Intersection LOS: B | |
| Intersection Capacity Utilization 39.3% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 1193: Left Turn Bridge & Grand River Ave & I-96 WB Service Rd/I-96 WB Service Dr



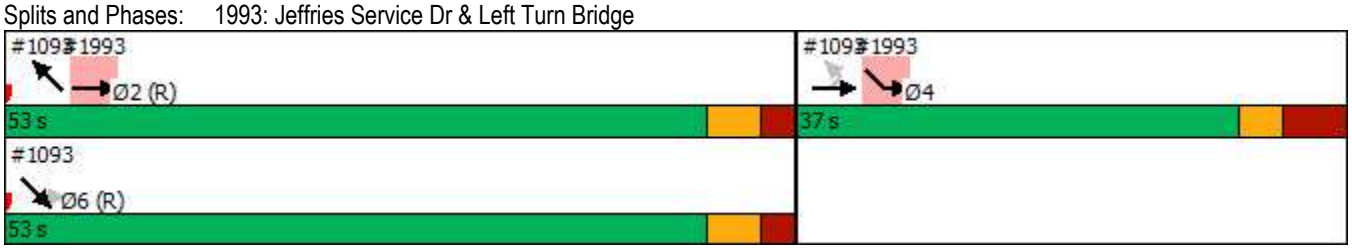


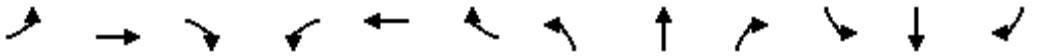
| Lane Group | EBL | EBT | WBT | WBR | SEL | SER | Ø6 |
|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | |
| Traffic Volume (vph) | 0 | 263 | 0 | 0 | 112 | 0 | |
| Future Volume (vph) | 0 | 263 | 0 | 0 | 112 | 0 | |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | |
| Storage Length (ft) | 0 | | | 0 | 50 | 0 | |
| Storage Lanes | 0 | | | 0 | 0 | 0 | |
| Taper Length (ft) | 65 | | | | 65 | | |
| Lane Util. Factor | 1.00 | 0.91 | 1.00 | 1.00 | 0.97 | 1.00 | |
| Frt | | | | | | | |
| Flt Protected | | | | | 0.950 | | |
| Satd. Flow (prot) | 0 | 5085 | 0 | 0 | 3433 | 0 | |
| Flt Permitted | | | | | 0.950 | | |
| Satd. Flow (perm) | 0 | 5085 | 0 | 0 | 3433 | 0 | |
| Right Turn on Red | | | | Yes | Yes | Yes | |
| Satd. Flow (RTOR) | | | | | 1048 | | |
| Link Speed (mph) | | 35 | 35 | | 30 | | |
| Link Distance (ft) | | 184 | 329 | | 419 | | |
| Travel Time (s) | | 3.6 | 6.4 | | 9.5 | | |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | |
| Adj. Flow (vph) | 0 | 286 | 0 | 0 | 122 | 0 | |
| Shared Lane Traffic (%) | | | | | | | |
| Lane Group Flow (vph) | 0 | 286 | 0 | 0 | 122 | 0 | |
| Enter Blocked Intersection | No | No | No | No | No | No | |
| Lane Alignment | Left | Left | Left | Right | Left | Right | |
| Median Width(ft) | | 0 | 0 | | 24 | | |
| Link Offset(ft) | | 0 | 0 | | 0 | | |
| Crosswalk Width(ft) | | 16 | 16 | | 16 | | |
| Two way Left Turn Lane | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | |
| Turning Speed (mph) | 15 | | | 9 | 15 | 9 | |
| Number of Detectors | | 2 | | | 1 | | |
| Detector Template | | Thru | | | Left | | |
| Leading Detector (ft) | | 100 | | | 20 | | |
| Trailing Detector (ft) | | 0 | | | 0 | | |
| Detector 1 Position(ft) | | 0 | | | 0 | | |
| Detector 1 Size(ft) | | 6 | | | 20 | | |
| Detector 1 Type | | Cl+Ex | | | Cl+Ex | | |
| Detector 1 Channel | | | | | | | |
| Detector 1 Extend (s) | | 0.0 | | | 0.0 | | |
| Detector 1 Queue (s) | | 0.0 | | | 0.0 | | |
| Detector 1 Delay (s) | | 0.0 | | | 0.0 | | |
| Detector 2 Position(ft) | | 94 | | | | | |
| Detector 2 Size(ft) | | 6 | | | | | |
| Detector 2 Type | | Cl+Ex | | | | | |
| Detector 2 Channel | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | | | |
| Turn Type | | NA | | | Prot | | |
| Protected Phases | | 2 | | | 4 | | 6 |
| Permitted Phases | | | | | | | |

| Lane Group | EBL | EBT | WBT | WBR | SEL | SER | Ø6 |
|---|---|---|---|---|---|---|---|
| Detector Phase | | 2 | | | 4 | | |
| Switch Phase | | | | | | | |
| Minimum Initial (s) | | 10.0 | | | 10.0 | | 10.0 |
| Minimum Split (s) | | 37.0 | | | 57.4 | | 37.0 |
| Total Split (s) | | 53.0 | | | 37.0 | | 53.0 |
| Total Split (%) | | 58.9% | | | 41.1% | | 59% |
| Maximum Green (s) | | 47.0 | | | 29.6 | | 47.0 |
| Yellow Time (s) | | 3.6 | | | 3.0 | | 3.6 |
| All-Red Time (s) | | 2.4 | | | 4.4 | | 2.4 |
| Lost Time Adjust (s) | | 0.0 | | | 0.0 | | |
| Total Lost Time (s) | | 6.0 | | | 7.4 | | |
| Lead/Lag | | | | | | | |
| Lead-Lag Optimize? | | | | | | | |
| Vehicle Extension (s) | | 3.0 | | | 3.0 | | 3.0 |
| Recall Mode | | C-Max | | | None | | C-Max |
| Walk Time (s) | | 7.0 | | | 9.0 | | 7.0 |
| Flash Dont Walk (s) | | 24.0 | | | 33.0 | | 24.0 |
| Pedestrian Calls (#/hr) | | 0 | | | 0 | | 0 |
| Act Effct Green (s) | | 64.9 | | | 11.7 | | |
| Actuated g/C Ratio | | 0.72 | | | 0.13 | | |
| v/c Ratio | | 0.08 | | | 0.09 | | |
| Control Delay | | 3.5 | | | 0.1 | | |
| Queue Delay | | 0.0 | | | 0.0 | | |
| Total Delay | | 3.5 | | | 0.1 | | |
| LOS | | A | | | A | | |
| Approach Delay | | 3.5 | | | 0.1 | | |
| Approach LOS | | A | | | A | | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 90 | | | |
| Actuated Cycle Length: 90 | | | |
| Offset: 54 (60%), Referenced to phase 2:NWT and 6:SETL, Start of Green | | | |
| Natural Cycle: 95 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.47 | | | |
| Intersection Signal Delay: 2.5 | | Intersection LOS: A | |
| Intersection Capacity Utilization 27.8% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 1993: Jeffries Service Dr & Left Turn Bridge





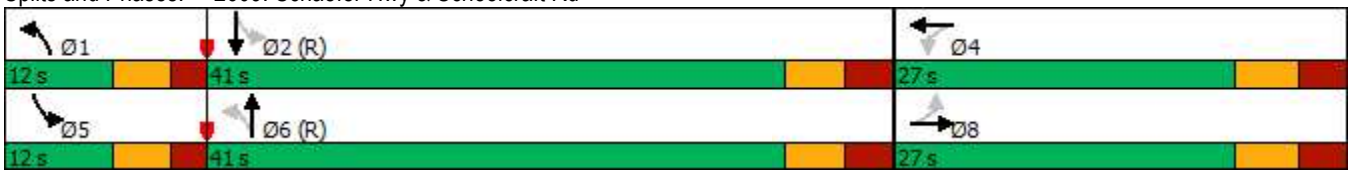
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 40 | 93 | 14 | 49 | 80 | 43 | 17 | 455 | 57 | 30 | 388 | 32 |
| Future Volume (vph) | 40 | 93 | 14 | 49 | 80 | 43 | 17 | 455 | 57 | 30 | 388 | 32 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 60 | | 0 | 60 | | 0 | 80 | | 0 | 80 | | 0 |
| Storage Lanes | 1 | | 0 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 65 | | | 65 | | | 65 | | | 65 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped Bike Factor | | | | | | | | 1.00 | | 1.00 | | |
| Frt | | 0.973 | | | 0.951 | | | 0.981 | | | 0.985 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1805 | 1834 | 0 | 1656 | 1795 | 0 | 1805 | 1799 | 0 | 1752 | 1761 | 0 |
| Flt Permitted | 0.651 | | | 0.674 | | | 0.354 | | | 0.275 | | |
| Satd. Flow (perm) | 1237 | 1834 | 0 | 1175 | 1795 | 0 | 673 | 1799 | 0 | 506 | 1761 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 13 | | | 29 | | | 11 | | | 9 | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 699 | | | 1470 | | | 1209 | | | 234 | |
| Travel Time (s) | | 15.9 | | | 33.4 | | | 27.5 | | | 5.3 | |
| Confl. Peds. (#/hr) | | | | | | | | | 4 | 4 | | |
| Peak Hour Factor | 0.63 | 0.88 | 0.60 | 0.84 | 0.71 | 0.79 | 0.60 | 0.94 | 0.81 | 0.66 | 0.91 | 0.68 |
| Heavy Vehicles (%) | 0% | 1% | 0% | 9% | 1% | 0% | 0% | 3% | 5% | 3% | 7% | 0% |
| Adj. Flow (vph) | 63 | 106 | 23 | 58 | 113 | 54 | 28 | 484 | 70 | 45 | 426 | 47 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 63 | 129 | 0 | 58 | 167 | 0 | 28 | 554 | 0 | 45 | 473 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 12 | | | 12 | | | 12 | | | 12 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | Yes | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | | 1 | 2 | | 1 | 2 | | 1 | 2 | |
| Detector Template | Left | Thru | | Left | Thru | | Left | Thru | | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | | 20 | 100 | | 20 | 100 | | 20 | 100 | |
| Trailing Detector (ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Detector 1 Position(ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Detector 1 Size(ft) | 20 | 6 | | 20 | 6 | | 20 | 6 | | 20 | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Queue (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Delay (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | 6 | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |

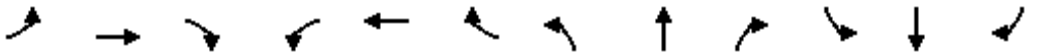
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Turn Type | Perm | NA | | Perm | NA | | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | | 8 | | | 4 | | 1 | 6 | | 5 | 2 | |
| Permitted Phases | 8 | | | 4 | | | 6 | | | 2 | | |
| Detector Phase | 8 | 8 | | 4 | 4 | | 1 | 6 | | 5 | 2 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 6.0 | 6.0 | | 6.0 | 6.0 | | 5.0 | 9.0 | | 5.0 | 9.0 | |
| Minimum Split (s) | 28.8 | 28.8 | | 28.8 | 28.8 | | 10.6 | 26.6 | | 10.6 | 26.6 | |
| Total Split (s) | 27.0 | 27.0 | | 27.0 | 27.0 | | 12.0 | 41.0 | | 12.0 | 41.0 | |
| Total Split (%) | 33.8% | 33.8% | | 33.8% | 33.8% | | 15.0% | 51.3% | | 15.0% | 51.3% | |
| Maximum Green (s) | 20.2 | 20.2 | | 20.2 | 20.2 | | 6.4 | 34.4 | | 6.4 | 34.4 | |
| Yellow Time (s) | 3.8 | 3.8 | | 3.8 | 3.8 | | 3.5 | 3.6 | | 3.5 | 3.6 | |
| All-Red Time (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 2.1 | 3.0 | | 2.1 | 3.0 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 6.8 | 6.8 | | 6.8 | 6.8 | | 5.6 | 6.6 | | 5.6 | 6.6 | |
| Lead/Lag | | | | | | | Lead | Lag | | Lead | Lag | |
| Lead-Lag Optimize? | | | | | | | Yes | Yes | | Yes | Yes | |
| Vehicle Extension (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | |
| Recall Mode | Max | Max | | Max | Max | | Max | C-Max | | Max | C-Max | |
| Walk Time (s) | 7.0 | 7.0 | | 7.0 | 7.0 | | | 7.0 | | | 7.0 | |
| Flash Dont Walk (s) | 15.0 | 15.0 | | 15.0 | 15.0 | | | 13.0 | | | 13.0 | |
| Pedestrian Calls (#/hr) | 0 | 0 | | 0 | 0 | | | 0 | | | 0 | |
| Act Effct Green (s) | 20.2 | 20.2 | | 20.2 | 20.2 | | 41.8 | 34.4 | | 41.8 | 34.4 | |
| Actuated g/C Ratio | 0.25 | 0.25 | | 0.25 | 0.25 | | 0.52 | 0.43 | | 0.52 | 0.43 | |
| v/c Ratio | 0.20 | 0.27 | | 0.20 | 0.35 | | 0.06 | 0.71 | | 0.12 | 0.62 | |
| Control Delay | 25.7 | 23.4 | | 25.7 | 22.6 | | 7.4 | 24.5 | | 6.5 | 23.2 | |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 25.7 | 23.4 | | 25.7 | 22.6 | | 7.4 | 24.5 | | 6.5 | 23.2 | |
| LOS | C | C | | C | C | | A | C | | A | C | |
| Approach Delay | | 24.1 | | | 23.4 | | | 23.7 | | | 21.7 | |
| Approach LOS | | C | | | C | | | C | | | C | |

**Intersection Summary**

Area Type: Other
Cycle Length: 80
Actuated Cycle Length: 80
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
Natural Cycle: 70
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.71
Intersection Signal Delay: 23.0 Intersection LOS: C
Intersection Capacity Utilization 56.1% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 2609: Schaefer Hwy & Schoolcraft Rd





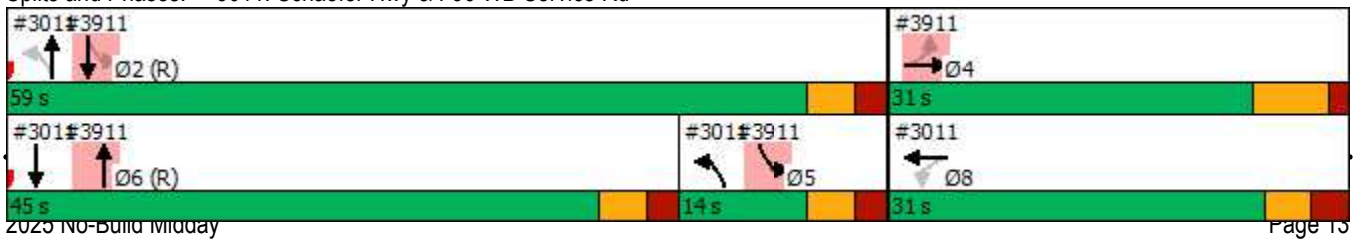
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 0 | 0 | 0 | 128 | 129 | 3 | 191 | 419 | 0 | 0 | 272 | 208 |
| Future Volume (vph) | 0 | 0 | 0 | 128 | 129 | 3 | 191 | 419 | 0 | 0 | 272 | 208 |
| Ideal Flow (vphpl) | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 |
| Lane Width (ft) | 12 | 12 | 12 | 12 | 11 | 12 | 11 | 11 | 12 | 12 | 11 | 12 |
| Storage Length (ft) | 0 | | 0 | 0 | | 0 | 250 | | 0 | 0 | | 0 |
| Storage Lanes | 0 | | 0 | 1 | | 0 | 1 | | 0 | 0 | | 0 |
| Taper Length (ft) | 65 | | | 65 | | | 65 | | | 65 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 0.95 |
| Ped Bike Factor | | | | | | | 1.00 | | | | 0.99 | |
| Frt | | | | | 0.997 | | | | | | 0.934 | |
| Flt Protected | | | | 0.950 | | | 0.950 | | | | | |
| Satd. Flow (prot) | 0 | 0 | 0 | 1863 | 3591 | 0 | 1766 | 3637 | 0 | 0 | 3255 | 0 |
| Flt Permitted | | | | 0.950 | | | 0.450 | | | | | |
| Satd. Flow (perm) | 0 | 0 | 0 | 1863 | 3591 | 0 | 834 | 3637 | 0 | 0 | 3255 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | | | 2 | | | | | | 224 | |
| Link Speed (mph) | | 25 | | | 25 | | | 25 | | | 35 | |
| Link Distance (ft) | | 298 | | | 364 | | | 384 | | | 332 | |
| Travel Time (s) | | 8.1 | | | 9.9 | | | 10.5 | | | 6.5 | |
| Confl. Peds. (#/hr) | | | | | | | 4 | | | | | 4 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.83 | 0.91 | 0.92 | 0.92 | 0.95 | 0.93 |
| Heavy Vehicles (%) | 2% | 2% | 2% | 2% | 2% | 2% | 4% | 1% | 2% | 2% | 5% | 4% |
| Adj. Flow (vph) | 0 | 0 | 0 | 139 | 140 | 3 | 230 | 460 | 0 | 0 | 286 | 224 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 0 | 0 | 139 | 143 | 0 | 230 | 460 | 0 | 0 | 510 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 12 | | | 12 | | | 12 | | | 12 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 0.94 | 0.94 | 0.94 | 0.94 | 0.98 | 0.94 | 0.98 | 0.98 | 0.94 | 0.94 | 0.98 | 0.94 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | | | | 1 | 2 | | 1 | 2 | | | 2 | |
| Detector Template | | | | Left | Thru | | Left | Thru | | | Thru | |
| Leading Detector (ft) | | | | 20 | 100 | | 20 | 100 | | | 100 | |
| Trailing Detector (ft) | | | | 0 | 0 | | 0 | 0 | | | 0 | |
| Detector 1 Position(ft) | | | | 0 | 0 | | 0 | 0 | | | 0 | |
| Detector 1 Size(ft) | | | | 20 | 6 | | 20 | 6 | | | 6 | |
| Detector 1 Type | | | | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | | | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | | | | 0.0 | 0.0 | | 0.0 | 0.0 | | | 0.0 | |
| Detector 1 Queue (s) | | | | 0.0 | 0.0 | | 0.0 | 0.0 | | | 0.0 | |
| Detector 1 Delay (s) | | | | 0.0 | 0.0 | | 0.0 | 0.0 | | | 0.0 | |
| Detector 2 Position(ft) | | | | | 94 | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | | | | 6 | | | 6 | | | 6 | |
| Detector 2 Type | | | | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |

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

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detector 2 Extend (s) | | | | | 0.0 | | | 0.0 | | | 0.0 | |
| Turn Type | | | | Perm | NA | | pm+pt | NA | | | NA | |
| Protected Phases | | | | | 8 | | 5 | 2 | | | 6 | |
| Permitted Phases | | | | 8 | | | 2 | | | | | |
| Detector Phase | | | | 8 | 8 | | 5 | 2 | | | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | | | | 10.0 | 10.0 | | 7.0 | 10.0 | | | 10.0 | |
| Minimum Split (s) | | | | 28.7 | 28.7 | | 12.4 | 23.4 | | | 23.4 | |
| Total Split (s) | | | | 31.0 | 31.0 | | 14.0 | 59.0 | | | 45.0 | |
| Total Split (%) | | | | 34.4% | 34.4% | | 15.6% | 65.6% | | | 50.0% | |
| Maximum Green (s) | | | | 25.3 | 25.3 | | 8.6 | 53.6 | | | 39.6 | |
| Yellow Time (s) | | | | 3.0 | 3.0 | | 3.2 | 3.2 | | | 3.2 | |
| All-Red Time (s) | | | | 2.7 | 2.7 | | 2.2 | 2.2 | | | 2.2 | |
| Lost Time Adjust (s) | | | | 0.0 | 0.0 | | 0.0 | 0.0 | | | 0.0 | |
| Total Lost Time (s) | | | | 5.7 | 5.7 | | 5.4 | 5.4 | | | 5.4 | |
| Lead/Lag | | | | | | | Lag | | | | Lead | |
| Lead-Lag Optimize? | | | | | | | Yes | | | | Yes | |
| Vehicle Extension (s) | | | | 3.0 | 3.0 | | 3.0 | 3.0 | | | 3.0 | |
| Recall Mode | | | | None | None | | None | C-Max | | | C-Max | |
| Walk Time (s) | | | | 7.0 | 7.0 | | | 7.0 | | | 7.0 | |
| Flash Dont Walk (s) | | | | 16.0 | 16.0 | | | 11.0 | | | 11.0 | |
| Pedestrian Calls (#/hr) | | | | 0 | 0 | | | 0 | | | 0 | |
| Act Effct Green (s) | | | | 15.5 | 15.5 | | 63.4 | 63.4 | | | 49.4 | |
| Actuated g/C Ratio | | | | 0.17 | 0.17 | | 0.70 | 0.70 | | | 0.55 | |
| v/c Ratio | | | | 0.43 | 0.23 | | 0.34 | 0.18 | | | 0.27 | |
| Control Delay | | | | 30.4 | 24.9 | | 5.1 | 2.8 | | | 10.9 | |
| Queue Delay | | | | 0.0 | 0.0 | | 0.0 | 0.0 | | | 0.0 | |
| Total Delay | | | | 30.4 | 24.9 | | 5.1 | 2.8 | | | 10.9 | |
| LOS | | | | C | C | | A | A | | | B | |
| Approach Delay | | | | | 27.6 | | | 3.5 | | | 10.9 | |
| Approach LOS | | | | | C | | | A | | | B | |

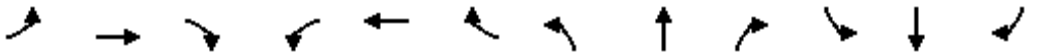
| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 90 | | | |
| Actuated Cycle Length: 90 | | | |
| Offset: 87 (97%), Referenced to phase 2:NBTL and 6:SBT, Start of Green | | | |
| Natural Cycle: 70 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.66 | | | |
| Intersection Signal Delay: 10.6 | | Intersection LOS: B | |
| Intersection Capacity Utilization 47.2% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 3011: Schaefer Hwy & I-96 WB Service Rd



| Lane Group | Ø4 |
|---|---|
| Detector 2 Extend (s) | |
| Turn Type | |
| Protected Phases | 4 |
| Permitted Phases | |
| Detector Phase | |
| Switch Phase | |
| Minimum Initial (s) | 10.0 |
| Minimum Split (s) | 30.5 |
| Total Split (s) | 31.0 |
| Total Split (%) | 34% |
| Maximum Green (s) | 24.5 |
| Yellow Time (s) | 5.0 |
| All-Red Time (s) | 1.5 |
| Lost Time Adjust (s) | |
| Total Lost Time (s) | |
| Lead/Lag | |
| Lead-Lag Optimize? | |
| Vehicle Extension (s) | 3.0 |
| Recall Mode | None |
| Walk Time (s) | 7.0 |
| Flash Dont Walk (s) | 17.0 |
| Pedestrian Calls (#/hr) | 0 |
| Act Effct Green (s) | |
| Actuated g/C Ratio | |
| v/c Ratio | |
| Control Delay | |
| Queue Delay | |
| Total Delay | |
| LOS | |
| Approach Delay | |
| Approach LOS | |

| Intersection Summary |
|---|



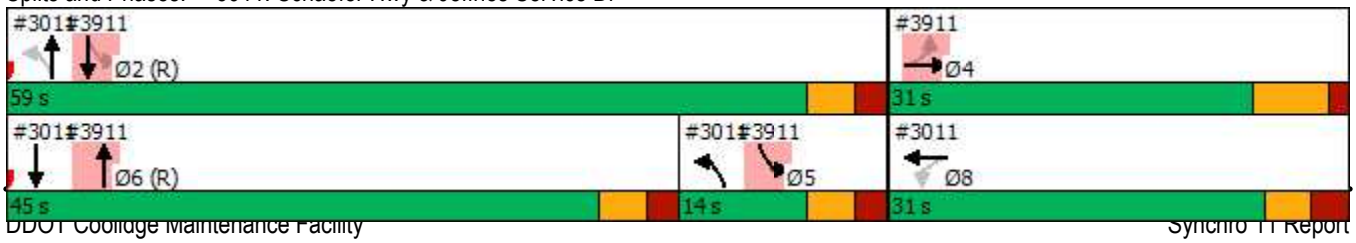
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 212 | 110 | 245 | 0 | 0 | 0 | 0 | 399 | 100 | 53 | 347 | 0 |
| Future Volume (vph) | 212 | 110 | 245 | 0 | 0 | 0 | 0 | 399 | 100 | 53 | 347 | 0 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 0 | | 0 | 0 | | 0 | 0 | | 0 | 90 | | 0 |
| Storage Lanes | 0 | | 0 | 0 | | 0 | 0 | | 0 | 1 | | 0 |
| Taper Length (ft) | 65 | | | 65 | | | 65 | | | 65 | | |
| Lane Util. Factor | 0.91 | 0.91 | 0.91 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 1.00 |
| Ped Bike Factor | | | | | | | | 1.00 | | 1.00 | | |
| Frt | | 0.935 | | | | | | 0.969 | | | | |
| Flt Protected | | 0.982 | | | | | | | | 0.950 | | |
| Satd. Flow (prot) | 0 | 4669 | 0 | 0 | 0 | 0 | 0 | 3334 | 0 | 1671 | 3471 | 0 |
| Flt Permitted | | 0.982 | | | | | | | | 0.400 | | |
| Satd. Flow (perm) | 0 | 4669 | 0 | 0 | 0 | 0 | 0 | 3334 | 0 | 701 | 3471 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 209 | | | | | | 47 | | | | |
| Link Speed (mph) | | 35 | | | 35 | | | 30 | | | 30 | |
| Link Distance (ft) | | 417 | | | 372 | | | 291 | | | 384 | |
| Travel Time (s) | | 8.1 | | | 7.2 | | | 6.6 | | | 8.7 | |
| Confl. Peds. (#/hr) | | | | | | | | | 6 | 6 | | |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.84 | 0.80 | 0.80 | 0.92 | 0.92 |
| Heavy Vehicles (%) | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 3% | 10% | 8% | 4% | 2% |
| Adj. Flow (vph) | 230 | 120 | 266 | 0 | 0 | 0 | 0 | 475 | 125 | 66 | 377 | 0 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 616 | 0 | 0 | 0 | 0 | 0 | 600 | 0 | 66 | 377 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 0 | | | 0 | | | 12 | | | 12 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | Yes | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | | | | | | 2 | | 1 | 2 | |
| Detector Template | Left | Thru | | | | | | Thru | | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | | | | | | 100 | | 20 | 100 | |
| Trailing Detector (ft) | 0 | 0 | | | | | | 0 | | 0 | 0 | |
| Detector 1 Position(ft) | 0 | 0 | | | | | | 0 | | 0 | 0 | |
| Detector 1 Size(ft) | 20 | 6 | | | | | | 6 | | 20 | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | | | | | | Cl+Ex | | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | | | | | | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Queue (s) | 0.0 | 0.0 | | | | | | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Delay (s) | 0.0 | 0.0 | | | | | | 0.0 | | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | | | | 6 | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | | | | 0.0 | | | 0.0 | |

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

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Turn Type | Perm | NA | | | | | | NA | | pm+pt | NA | |
| Protected Phases | | 4 | | | | | | 6 | | 5 | 2 | |
| Permitted Phases | 4 | | | | | | | | | 2 | | |
| Detector Phase | 4 | 4 | | | | | | 6 | | 5 | 2 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | | | | | | 10.0 | | 7.0 | 10.0 | |
| Minimum Split (s) | 30.5 | 30.5 | | | | | | 23.4 | | 12.4 | 23.4 | |
| Total Split (s) | 31.0 | 31.0 | | | | | | 45.0 | | 14.0 | 59.0 | |
| Total Split (%) | 34.4% | 34.4% | | | | | | 50.0% | | 15.6% | 65.6% | |
| Maximum Green (s) | 24.5 | 24.5 | | | | | | 39.6 | | 8.6 | 53.6 | |
| Yellow Time (s) | 5.0 | 5.0 | | | | | | 3.2 | | 3.2 | 3.2 | |
| All-Red Time (s) | 1.5 | 1.5 | | | | | | 2.2 | | 2.2 | 2.2 | |
| Lost Time Adjust (s) | | 0.0 | | | | | | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | | 6.5 | | | | | | 5.4 | | 5.4 | 5.4 | |
| Lead/Lag | | | | | | | | Lead | | Lag | | |
| Lead-Lag Optimize? | | | | | | | | Yes | | Yes | | |
| Vehicle Extension (s) | 3.0 | 3.0 | | | | | | 3.0 | | 3.0 | 3.0 | |
| Recall Mode | None | None | | | | | | C-Max | | None | C-Max | |
| Walk Time (s) | 7.0 | 7.0 | | | | | | 7.0 | | | 7.0 | |
| Flash Dont Walk (s) | 17.0 | 17.0 | | | | | | 11.0 | | | 11.0 | |
| Pedestrian Calls (#/hr) | 0 | 0 | | | | | | 0 | | | 0 | |
| Act Effct Green (s) | | 14.7 | | | | | | 49.4 | | 63.4 | 63.4 | |
| Actuated g/C Ratio | | 0.16 | | | | | | 0.55 | | 0.70 | 0.70 | |
| v/c Ratio | | 0.66 | | | | | | 0.32 | | 0.11 | 0.15 | |
| Control Delay | | 26.2 | | | | | | 11.3 | | 5.9 | 5.3 | |
| Queue Delay | | 0.0 | | | | | | 0.0 | | 0.0 | 0.0 | |
| Total Delay | | 26.2 | | | | | | 11.3 | | 5.9 | 5.3 | |
| LOS | | C | | | | | | B | | A | A | |
| Approach Delay | | 26.2 | | | | | | 11.3 | | | 5.4 | |
| Approach LOS | | C | | | | | | B | | | A | |

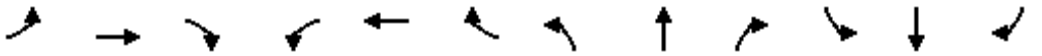
| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 90 | | | |
| Actuated Cycle Length: 90 | | | |
| Offset: 87 (97%), Referenced to phase 2:NBTL and 6:SBT, Start of Green | | | |
| Natural Cycle: 70 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.66 | | | |
| Intersection Signal Delay: 15.2 | | Intersection LOS: B | |
| Intersection Capacity Utilization 47.2% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 3911: Schaefer Hwy & Jeffries Service Dr



| Lane Group | Ø8 |
|---|---|
| Turn Type | |
| Protected Phases | 8 |
| Permitted Phases | |
| Detector Phase | |
| Switch Phase | |
| Minimum Initial (s) | 10.0 |
| Minimum Split (s) | 28.7 |
| Total Split (s) | 31.0 |
| Total Split (%) | 34% |
| Maximum Green (s) | 25.3 |
| Yellow Time (s) | 3.0 |
| All-Red Time (s) | 2.7 |
| Lost Time Adjust (s) | |
| Total Lost Time (s) | |
| Lead/Lag | |
| Lead-Lag Optimize? | |
| Vehicle Extension (s) | 3.0 |
| Recall Mode | None |
| Walk Time (s) | 7.0 |
| Flash Dont Walk (s) | 16.0 |
| Pedestrian Calls (#/hr) | 0 |
| Act Effct Green (s) | |
| Actuated g/C Ratio | |
| v/c Ratio | |
| Control Delay | |
| Queue Delay | |
| Total Delay | |
| LOS | |
| Approach Delay | |
| Approach LOS | |

| Intersection Summary |
|---|



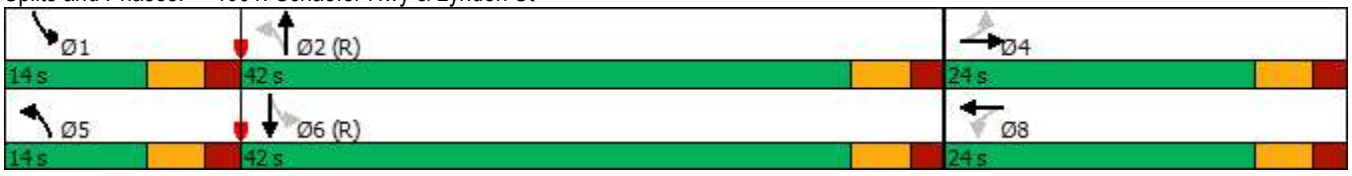
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 23 | 120 | 28 | 56 | 81 | 27 | 33 | 455 | 49 | 47 | 365 | 35 |
| Future Volume (vph) | 23 | 120 | 28 | 56 | 81 | 27 | 33 | 455 | 49 | 47 | 365 | 35 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 80 | | 0 | 80 | | 0 | 80 | | 0 | 80 | | 0 |
| Storage Lanes | 1 | | 0 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 65 | | | 65 | | | 65 | | | 65 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 |
| Ped Bike Factor | | 1.00 | | 1.00 | | | 0.99 | 1.00 | | 1.00 | 1.00 | |
| Frt | | 0.972 | | | 0.963 | | | 0.983 | | | 0.983 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1805 | 1785 | 0 | 1656 | 1812 | 0 | 1752 | 3506 | 0 | 1770 | 3433 | 0 |
| Flt Permitted | 0.630 | | | 0.521 | | | 0.483 | | | 0.402 | | |
| Satd. Flow (perm) | 1197 | 1785 | 0 | 907 | 1812 | 0 | 886 | 3506 | 0 | 746 | 3433 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 14 | | | 19 | | | 23 | | | 23 | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 648 | | | 545 | | | 2255 | | | 685 | |
| Travel Time (s) | | 14.7 | | | 12.4 | | | 51.3 | | | 15.6 | |
| Confl. Peds. (#/hr) | | | 2 | 2 | | | 6 | | 5 | 5 | | 6 |
| Peak Hour Factor | 0.69 | 0.76 | 0.75 | 0.75 | 0.70 | 0.72 | 0.67 | 0.88 | 0.73 | 0.75 | 0.88 | 0.65 |
| Heavy Vehicles (%) | 0% | 3% | 4% | 9% | 0% | 4% | 3% | 1% | 0% | 2% | 3% | 3% |
| Adj. Flow (vph) | 33 | 158 | 37 | 75 | 116 | 38 | 49 | 517 | 67 | 63 | 415 | 54 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 33 | 195 | 0 | 75 | 154 | 0 | 49 | 584 | 0 | 63 | 469 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 12 | | | 12 | | | 12 | | | 12 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | | 1 | 2 | | 1 | 2 | | 1 | 2 | |
| Detector Template | Left | Thru | | Left | Thru | | Left | Thru | | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | | 20 | 100 | | 20 | 100 | | 20 | 100 | |
| Trailing Detector (ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Detector 1 Position(ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Detector 1 Size(ft) | 20 | 6 | | 20 | 6 | | 20 | 6 | | 20 | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Queue (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Delay (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | 6 | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Turn Type | Perm | NA | | Perm | NA | | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | | 4 | | | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | | 8 | | | 2 | | | 6 | | |
| Detector Phase | 4 | 4 | | 8 | 8 | | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | | 10.0 | 10.0 | | 4.0 | 15.0 | | 4.0 | 15.0 | |
| Minimum Split (s) | 24.6 | 24.6 | | 24.6 | 24.6 | | 9.6 | 26.6 | | 9.6 | 26.6 | |
| Total Split (s) | 24.0 | 24.0 | | 24.0 | 24.0 | | 14.0 | 42.0 | | 14.0 | 42.0 | |
| Total Split (%) | 30.0% | 30.0% | | 30.0% | 30.0% | | 17.5% | 52.5% | | 17.5% | 52.5% | |
| Maximum Green (s) | 18.4 | 18.4 | | 18.4 | 18.4 | | 8.4 | 36.4 | | 8.4 | 36.4 | |
| Yellow Time (s) | 3.5 | 3.5 | | 3.5 | 3.5 | | 3.5 | 3.5 | | 3.5 | 3.5 | |
| All-Red Time (s) | 2.1 | 2.1 | | 2.1 | 2.1 | | 2.1 | 2.1 | | 2.1 | 2.1 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 5.6 | 5.6 | | 5.6 | 5.6 | | 5.6 | 5.6 | | 5.6 | 5.6 | |
| Lead/Lag | | | | | | | Lead | Lag | | Lead | Lag | |
| Lead-Lag Optimize? | | | | | | | Yes | Yes | | Yes | Yes | |
| Vehicle Extension (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | |
| Recall Mode | Min | Min | | Min | Min | | None | C-Max | | None | C-Max | |
| Walk Time (s) | 7.0 | 7.0 | | 7.0 | 7.0 | | | 7.0 | | | 7.0 | |
| Flash Dont Walk (s) | 12.0 | 12.0 | | 12.0 | 12.0 | | | 14.0 | | | 14.0 | |
| Pedestrian Calls (#/hr) | 0 | 0 | | 0 | 0 | | | 0 | | | 0 | |
| Act Effct Green (s) | 13.7 | 13.7 | | 13.7 | 13.7 | | 50.4 | 45.2 | | 51.9 | 47.7 | |
| Actuated g/C Ratio | 0.17 | 0.17 | | 0.17 | 0.17 | | 0.63 | 0.56 | | 0.65 | 0.60 | |
| v/c Ratio | 0.16 | 0.62 | | 0.48 | 0.47 | | 0.08 | 0.29 | | 0.11 | 0.23 | |
| Control Delay | 28.5 | 36.6 | | 39.9 | 30.2 | | 7.2 | 17.8 | | 5.4 | 9.2 | |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 28.5 | 36.6 | | 39.9 | 30.2 | | 7.2 | 17.8 | | 5.4 | 9.2 | |
| LOS | C | D | | D | C | | A | B | | A | A | |
| Approach Delay | | 35.4 | | | 33.4 | | | 17.0 | | | 8.7 | |
| Approach LOS | | D | | | C | | | B | | | A | |

**Intersection Summary**

Area Type: Other
Cycle Length: 80
Actuated Cycle Length: 80
Offset: 14 (18%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 65
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.62
Intersection Signal Delay: 19.2 Intersection LOS: B
Intersection Capacity Utilization 56.7% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 4001: Schaefer Hwy & Lyndon St



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

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | ⇕ | | | ⇕ | | | ⇕ | | | ⇕ | |
| Traffic Vol, veh/h | 5 | 173 | 2 | 1 | 164 | 4 | 1 | 0 | 6 | 5 | 0 | 6 |
| Future Vol, veh/h | 5 | 173 | 2 | 1 | 164 | 4 | 1 | 0 | 6 | 5 | 0 | 6 |
| Conflicting Peds, #/hr | 3 | 0 | 1 | 1 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 63 | 94 | 60 | 60 | 86 | 60 | 60 | 60 | 60 | 63 | 60 | 60 |
| Heavy Vehicles, % | 0 | 3 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 8 | 184 | 3 | 2 | 191 | 7 | 2 | 0 | 10 | 8 | 0 | 10 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 201 | 0 | 0 | 188 | 0 | 0 | 407 | 408 | 187 | 409 | 406 | 198 |
| Stage 1 | - | - | - | - | - | - | 203 | 203 | - | 202 | 202 | - |
| Stage 2 | - | - | - | - | - | - | 204 | 205 | - | 207 | 204 | - |
| Critical Hdwy | 4.1 | - | - | 4.1 | - | - | 7.1 | 6.5 | 6.2 | 7.1 | 6.5 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.1 | 5.5 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.1 | 5.5 | - |
| Follow-up Hdwy | 2.2 | - | - | 2.2 | - | - | 3.5 | 4 | 3.3 | 3.5 | 4 | 3.3 |
| Pot Cap-1 Maneuver | 1383 | - | - | 1398 | - | - | 558 | 536 | 860 | 556 | 537 | 848 |
| Stage 1 | - | - | - | - | - | - | 804 | 737 | - | 805 | 738 | - |
| Stage 2 | - | - | - | - | - | - | 803 | 736 | - | 800 | 737 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 1379 | - | - | 1397 | - | - | 547 | 530 | 859 | 545 | 531 | 846 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 547 | 530 | - | 545 | 531 | - |
| Stage 1 | - | - | - | - | - | - | 798 | 732 | - | 798 | 734 | - |
| Stage 2 | - | - | - | - | - | - | 792 | 732 | - | 786 | 732 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0.3 | 0.1 | 9.6 | 10.4 |
| HCM LOS | | | A | B |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 794 | 1379 | - | - | 1397 | - | - | 680 |
| HCM Lane V/C Ratio | 0.015 | 0.006 | - | - | 0.001 | - | - | 0.026 |
| HCM Control Delay (s) | 9.6 | 7.6 | 0 | - | 7.6 | 0 | - | 10.4 |
| HCM Lane LOS | A | A | A | - | A | A | - | B |
| HCM 95th %tile Q(veh) | 0 | 0 | - | - | 0 | - | - | 0.1 |

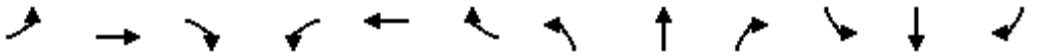
| Intersection | |
|---|---|
| Int Delay, s/veh | 1.1 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 3 | 1 | 8 | 7 | 6 | 7 | 2 | 302 | 10 | 7 | 282 | 1 |
| Future Vol, veh/h | 3 | 1 | 8 | 7 | 6 | 7 | 2 | 302 | 10 | 7 | 282 | 1 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 1 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | 50 | - | - | 50 | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 60 | 60 | 60 | 60 | 60 | 60 | 100 | 85 | 63 | 60 | 87 | 60 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 3 | 0 |
| Mvmt Flow | 5 | 2 | 13 | 12 | 10 | 12 | 2 | 355 | 16 | 12 | 324 | 2 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 728 | 726 | 326 | 725 | 719 | 364 | 327 | 0 | 0 | 372 | 0 | 0 |
| Stage 1 | 350 | 350 | - | 368 | 368 | - | - | - | - | - | - | - |
| Stage 2 | 378 | 376 | - | 357 | 351 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.1 | 6.5 | 6.2 | 7.1 | 6.5 | 6.2 | 4.1 | - | - | 4.1 | - | - |
| Critical Hdwy Stg 1 | 6.1 | 5.5 | - | 6.1 | 5.5 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.1 | 5.5 | - | 6.1 | 5.5 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.5 | 4 | 3.3 | 3.5 | 4 | 3.3 | 2.2 | - | - | 2.2 | - | - |
| Pot Cap-1 Maneuver | 341 | 354 | 720 | 343 | 357 | 685 | 1244 | - | - | 1198 | - | - |
| Stage 1 | 671 | 636 | - | 656 | 625 | - | - | - | - | - | - | - |
| Stage 2 | 648 | 620 | - | 665 | 636 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | 325 | 349 | 719 | 332 | 352 | 684 | 1243 | - | - | 1197 | - | - |
| Mov Cap-2 Maneuver | 325 | 349 | - | 332 | 352 | - | - | - | - | - | - | - |
| Stage 1 | 669 | 629 | - | 654 | 623 | - | - | - | - | - | - | - |
| Stage 2 | 626 | 618 | - | 644 | 629 | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 12.2 | 14.5 | 0 | 0.3 |
| HCM LOS | B | B | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 1243 | - | - | 517 | 414 | 1197 | - | - |
| HCM Lane V/C Ratio | 0.002 | - | - | 0.039 | 0.081 | 0.01 | - | - |
| HCM Control Delay (s) | 7.9 | - | - | 12.2 | 14.5 | 8 | - | - |
| HCM Lane LOS | A | - | - | B | B | A | - | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 0.1 | 0.3 | 0 | - | - |



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 36 | 433 | 66 | 20 | 446 | 102 | 55 | 249 | 19 | 57 | 272 | 17 |
| Future Volume (vph) | 36 | 433 | 66 | 20 | 446 | 102 | 55 | 249 | 19 | 57 | 272 | 17 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 115 | | 0 | 95 | | 0 | 155 | | 0 | 80 | | 240 |
| Storage Lanes | 1 | | 0 | 0 | | 0 | 1 | | 1 | 1 | | 1 |
| Taper Length (ft) | 65 | | | 65 | | | 25 | | | 65 | | |
| Lane Util. Factor | 1.00 | 0.91 | 0.91 | 1.00 | 0.91 | 0.91 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 |
| Ped Bike Factor | | 1.00 | | 1.00 | | | | | 0.99 | 1.00 | | |
| Frt | | 0.976 | | | 0.969 | | | | 0.850 | | 0.991 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1805 | 5009 | 0 | 1805 | 4956 | 0 | 1805 | 1900 | 1615 | 1770 | 3544 | 0 |
| Flt Permitted | 0.411 | | | 0.421 | | | 0.523 | | | 0.317 | | |
| Satd. Flow (perm) | 781 | 5009 | 0 | 799 | 4956 | 0 | 994 | 1900 | 1593 | 590 | 3544 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 67 | | | 111 | | | | 34 | | 8 | |
| Link Speed (mph) | | 35 | | | 35 | | | 30 | | | 30 | |
| Link Distance (ft) | | 932 | | | 422 | | | 332 | | | 1209 | |
| Travel Time (s) | | 18.2 | | | 8.2 | | | 7.5 | | | 27.5 | |
| Confl. Peds. (#/hr) | | | 2 | 2 | | | | | 2 | 2 | | |
| Peak Hour Factor | 0.80 | 0.88 | 0.72 | 0.59 | 0.92 | 0.82 | 0.74 | 0.74 | 0.60 | 0.76 | 0.86 | 0.80 |
| Heavy Vehicles (%) | 0% | 1% | 0% | 0% | 0% | 7% | 0% | 0% | 0% | 2% | 1% | 0% |
| Adj. Flow (vph) | 45 | 492 | 92 | 34 | 485 | 124 | 74 | 336 | 32 | 75 | 316 | 21 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 45 | 584 | 0 | 34 | 609 | 0 | 74 | 336 | 32 | 75 | 337 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 12 | | | 12 | | | 12 | | | 12 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | Yes | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | | 1 | 2 | | 1 | 2 | 1 | 1 | 2 | |
| Detector Template | Left | Thru | | Left | Thru | | Left | Thru | Right | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | | 20 | 100 | | 20 | 100 | 20 | 20 | 100 | |
| Trailing Detector (ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | |
| Detector 1 Position(ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | |
| Detector 1 Size(ft) | 20 | 6 | | 20 | 6 | | 20 | 6 | 20 | 20 | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Detector 1 Queue (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Detector 1 Delay (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | 6 | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Turn Type | Perm | NA | | Perm | NA | | Perm | NA | Perm | Perm | NA | |
| Protected Phases | | 6 | | | 2 | | | 8 | | | 4 | |
| Permitted Phases | 6 | | | 2 | | | 8 | | 8 | 4 | | |
| Detector Phase | 6 | 6 | | 2 | 2 | | 8 | 8 | 8 | 4 | 4 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | | 10.0 | 10.0 | | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | |
| Minimum Split (s) | 35.8 | 35.8 | | 35.8 | 35.8 | | 46.5 | 46.5 | 46.5 | 46.5 | 46.5 | |
| Total Split (s) | 55.0 | 55.0 | | 55.0 | 55.0 | | 35.0 | 35.0 | 35.0 | 35.0 | 35.0 | |
| Total Split (%) | 61.1% | 61.1% | | 61.1% | 61.1% | | 38.9% | 38.9% | 38.9% | 38.9% | 38.9% | |
| Maximum Green (s) | 49.2 | 49.2 | | 49.2 | 49.2 | | 28.5 | 28.5 | 28.5 | 28.5 | 28.5 | |
| Yellow Time (s) | 3.6 | 3.6 | | 3.6 | 3.6 | | 3.2 | 3.2 | 3.2 | 3.2 | 3.2 | |
| All-Red Time (s) | 2.2 | 2.2 | | 2.2 | 2.2 | | 3.3 | 3.3 | 3.3 | 3.3 | 3.3 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Total Lost Time (s) | 5.8 | 5.8 | | 5.8 | 5.8 | | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Vehicle Extension (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | |
| Recall Mode | C-Max | C-Max | | C-Max | C-Max | | None | None | None | None | None | |
| Walk Time (s) | 7.0 | 7.0 | | 7.0 | 7.0 | | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | |
| Flash Dont Walk (s) | 23.0 | 23.0 | | 23.0 | 23.0 | | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 | |
| Pedestrian Calls (#/hr) | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | |
| Act Effct Green (s) | 56.3 | 56.3 | | 56.3 | 56.3 | | 21.4 | 21.4 | 21.4 | 21.4 | 21.4 | |
| Actuated g/C Ratio | 0.63 | 0.63 | | 0.63 | 0.63 | | 0.24 | 0.24 | 0.24 | 0.24 | 0.24 | |
| v/c Ratio | 0.09 | 0.18 | | 0.07 | 0.19 | | 0.31 | 0.75 | 0.08 | 0.54 | 0.40 | |
| Control Delay | 9.0 | 7.1 | | 8.2 | 6.0 | | 24.3 | 36.2 | 10.4 | 43.1 | 28.6 | |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.4 | 0.0 | 0.0 | 0.0 | |
| Total Delay | 9.0 | 7.1 | | 8.2 | 6.0 | | 24.3 | 36.6 | 10.4 | 43.1 | 28.6 | |
| LOS | A | A | | A | A | | C | D | B | D | C | |
| Approach Delay | | 7.2 | | | 6.1 | | | 32.7 | | | 31.2 | |
| Approach LOS | | A | | | A | | | C | | | C | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 90 | | | |
| Actuated Cycle Length: 90 | | | |
| Offset: 59 (66%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green | | | |
| Natural Cycle: 85 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.75 | | | |
| Intersection Signal Delay: 16.8 | | Intersection LOS: B | |
| Intersection Capacity Utilization 65.8% | | ICU Level of Service C | |
| Analysis Period (min) 15 | | | |

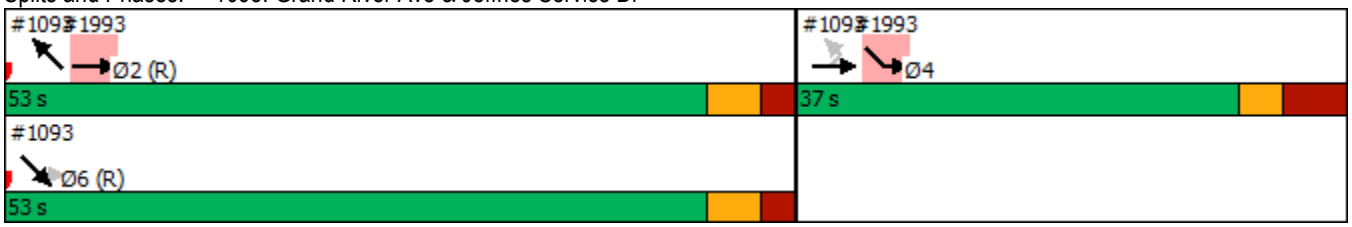
Splits and Phases: 1011: Schaefer Hwy & Grand River Ave

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | SEL | SET | SER | NWL | NWT | NWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 4 | 273 | 65 | 0 | 0 | 0 | 9 | 420 | 0 | 0 | 343 | 14 |
| Future Volume (vph) | 4 | 273 | 65 | 0 | 0 | 0 | 9 | 420 | 0 | 0 | 343 | 14 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Util. Factor | 0.86 | 0.86 | 0.86 | 1.00 | 1.00 | 1.00 | 0.91 | 0.91 | 1.00 | 1.00 | 0.91 | 0.91 |
| Ped Bike Factor | | | | | | | | 1.00 | | | 1.00 | |
| Frt | | 0.971 | | | | | | | | | 0.993 | |
| Flt Protected | | 0.999 | | | | | | 0.998 | | | | |
| Satd. Flow (prot) | 0 | 6216 | 0 | 0 | 0 | 0 | 0 | 5127 | 0 | 0 | 5081 | 0 |
| Flt Permitted | | 0.999 | | | | | | 0.919 | | | | |
| Satd. Flow (perm) | 0 | 6216 | 0 | 0 | 0 | 0 | 0 | 4721 | 0 | 0 | 5081 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 71 | | | | | | | | | 11 | |
| Link Speed (mph) | | 35 | | | 35 | | | 35 | | | 35 | |
| Link Distance (ft) | | 342 | | | 423 | | | 587 | | | 812 | |
| Travel Time (s) | | 6.7 | | | 8.2 | | | 11.4 | | | 15.8 | |
| Confl. Peds. (#/hr) | | | | | | | 3 | | | | | 3 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.60 | 0.96 | 0.92 | 0.92 | 0.71 | 0.65 |
| Heavy Vehicles (%) | 2% | 2% | 2% | 2% | 2% | 2% | 0% | 1% | 2% | 2% | 1% | 8% |
| Adj. Flow (vph) | 4 | 297 | 71 | 0 | 0 | 0 | 15 | 438 | 0 | 0 | 483 | 22 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 372 | 0 | 0 | 0 | 0 | 0 | 453 | 0 | 0 | 505 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 0 | | | 0 | | | 12 | | | 12 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | | | | | 1 | 2 | | | 2 | |
| Detector Template | Left | Thru | | | | | Left | Thru | | | Thru | |
| Leading Detector (ft) | 20 | 100 | | | | | 20 | 100 | | | 100 | |
| Trailing Detector (ft) | 0 | 0 | | | | | 0 | 0 | | | 0 | |
| Detector 1 Position(ft) | 0 | 0 | | | | | 0 | 0 | | | 0 | |
| Detector 1 Size(ft) | 20 | 6 | | | | | 20 | 6 | | | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | | | | | Cl+Ex | Cl+Ex | | | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | | | | | 0.0 | 0.0 | | | 0.0 | |
| Detector 1 Queue (s) | 0.0 | 0.0 | | | | | 0.0 | 0.0 | | | 0.0 | |
| Detector 1 Delay (s) | 0.0 | 0.0 | | | | | 0.0 | 0.0 | | | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | | | | 6 | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | | | | 0.0 | | | 0.0 | |
| Turn Type | Perm | NA | | | | | Perm | NA | | | NA | |
| Protected Phases | | 4 | | | | | | 6 | | | 2 | |
| Permitted Phases | 4 | | | | | | 6 | | | | | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | SEL | SET | SER | NWL | NWT | NWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detector Phase | 4 | 4 | | | | | 6 | 6 | | | 2 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | | | | | 10.0 | 10.0 | | | 10.0 | |
| Minimum Split (s) | 49.4 | 49.4 | | | | | 37.0 | 37.0 | | | 37.0 | |
| Total Split (s) | 37.0 | 37.0 | | | | | 53.0 | 53.0 | | | 53.0 | |
| Total Split (%) | 41.1% | 41.1% | | | | | 58.9% | 58.9% | | | 58.9% | |
| Maximum Green (s) | 29.6 | 29.6 | | | | | 47.0 | 47.0 | | | 47.0 | |
| Yellow Time (s) | 3.0 | 3.0 | | | | | 3.6 | 3.6 | | | 3.6 | |
| All-Red Time (s) | 4.4 | 4.4 | | | | | 2.4 | 2.4 | | | 2.4 | |
| Lost Time Adjust (s) | | 0.0 | | | | | | 0.0 | | | 0.0 | |
| Total Lost Time (s) | | 7.4 | | | | | | 6.0 | | | 6.0 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Vehicle Extension (s) | 3.0 | 3.0 | | | | | 3.0 | 3.0 | | | 3.0 | |
| Recall Mode | None | None | | | | | C-Max | C-Max | | | C-Max | |
| Walk Time (s) | 9.0 | 9.0 | | | | | 7.0 | 7.0 | | | 7.0 | |
| Flash Dont Walk (s) | 33.0 | 33.0 | | | | | 24.0 | 24.0 | | | 24.0 | |
| Pedestrian Calls (#/hr) | 0 | 0 | | | | | 0 | 0 | | | 0 | |
| Act Effct Green (s) | | 11.1 | | | | | | 65.5 | | | 65.5 | |
| Actuated g/C Ratio | | 0.12 | | | | | | 0.73 | | | 0.73 | |
| v/c Ratio | | 0.45 | | | | | | 0.13 | | | 0.14 | |
| Control Delay | | 31.3 | | | | | | 2.2 | | | 3.8 | |
| Queue Delay | | 0.0 | | | | | | 0.0 | | | 0.0 | |
| Total Delay | | 31.3 | | | | | | 2.2 | | | 3.8 | |
| LOS | | C | | | | | | A | | | A | |
| Approach Delay | | 31.3 | | | | | | 2.2 | | | 3.8 | |
| Approach LOS | | C | | | | | | A | | | A | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 90 | | | |
| Actuated Cycle Length: 90 | | | |
| Offset: 54 (60%), Referenced to phase 2:NWT and 6:SETL, Start of Green | | | |
| Natural Cycle: 90 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.45 | | | |
| Intersection Signal Delay: 11.0 | | Intersection LOS: B | |
| Intersection Capacity Utilization 45.3% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 1093: Grand River Ave & Jeffries Service Dr

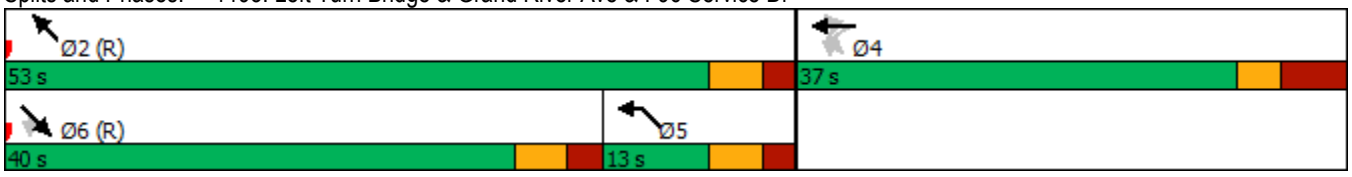


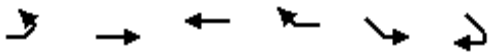
| Lane Group | WBL2 | WBL | WBT | WBR | SET | SER | SER2 | NWL | NWT |
|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | |
| Traffic Volume (vph) | 24 | 6 | 195 | 268 | 406 | 100 | 3 | 48 | 300 |
| Future Volume (vph) | 24 | 6 | 195 | 268 | 406 | 100 | 3 | 48 | 300 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | | 0 | | 0 | | 140 | | 260 | |
| Storage Lanes | | 0 | | 1 | | 1 | | 1 | |
| Taper Length (ft) | | 65 | | | | | | 65 | |
| Lane Util. Factor | 0.91 | 0.91 | 0.86 | 0.86 | 0.86 | 0.86 | 0.91 | 1.00 | 0.91 |
| Frt | | | 0.944 | 0.850 | 0.996 | 0.850 | | | |
| Flt Protected | | | 0.996 | | | | | 0.950 | |
| Satd. Flow (prot) | 0 | 0 | 4519 | 1362 | 4834 | 1376 | 0 | 1805 | 5136 |
| Flt Permitted | | | 0.996 | | | | | 0.950 | |
| Satd. Flow (perm) | 0 | 0 | 4519 | 1362 | 4834 | 1376 | 0 | 1805 | 5136 |
| Right Turn on Red | | | | Yes | | | Yes | | |
| Satd. Flow (RTOR) | | | 146 | 145 | | 126 | | | |
| Link Speed (mph) | | | 35 | | 35 | | | | 35 |
| Link Distance (ft) | | | 480 | | 422 | | | | 587 |
| Travel Time (s) | | | 9.4 | | 8.2 | | | | 11.4 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.94 | 0.83 | 0.75 | 0.60 | 0.73 |
| Heavy Vehicles (%) | 2% | 2% | 2% | 2% | 1% | 1% | 0% | 0% | 1% |
| Adj. Flow (vph) | 26 | 7 | 212 | 291 | 432 | 120 | 4 | 80 | 411 |
| Shared Lane Traffic (%) | | | | 50% | | 10% | | | |
| Lane Group Flow (vph) | 0 | 0 | 391 | 145 | 444 | 112 | 0 | 80 | 411 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Left | Right | Left | Right | Right | Left | Left |
| Median Width(ft) | | | 0 | | 12 | | | | 12 |
| Link Offset(ft) | | | 0 | | 0 | | | | 0 |
| Crosswalk Width(ft) | | | 16 | | 16 | | | | 16 |
| Two way Left Turn Lane | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | 15 | | 9 | | 9 | 9 | 15 | |
| Number of Detectors | 1 | 1 | 2 | 1 | 2 | 1 | | 1 | 2 |
| Detector Template | Left | Left | Thru | Right | Thru | Right | | Left | Thru |
| Leading Detector (ft) | 20 | 20 | 100 | 20 | 100 | 20 | | 20 | 100 |
| Trailing Detector (ft) | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 |
| Detector 1 Position(ft) | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 |
| Detector 1 Size(ft) | 20 | 20 | 6 | 20 | 6 | 20 | | 20 | 6 |
| Detector 1 Type | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex |
| Detector 1 Channel | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Detector 1 Queue (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Detector 1 Delay (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Detector 2 Position(ft) | | | 94 | | 94 | | | | 94 |
| Detector 2 Size(ft) | | | 6 | | 6 | | | | 6 |
| Detector 2 Type | | | Cl+Ex | | Cl+Ex | | | | Cl+Ex |
| Detector 2 Channel | | | | | | | | | |
| Detector 2 Extend (s) | | | 0.0 | | 0.0 | | | | 0.0 |
| Turn Type | Perm | Perm | NA | Perm | NA | Perm | | Prot | NA |
| Protected Phases | | | 4 | | 6 | | | 5 | 2 |

| Lane Group | WBL2 | WBL | WBT | WBR | SET | SER | SER2 | NWL | NWT |
|---|---|---|---|---|---|---|---|---|---|
| Permitted Phases | 4 | 4 | | 4 | | 6 | | | |
| Detector Phase | 4 | 4 | 4 | 4 | 6 | 6 | | 5 | 2 |
| Switch Phase | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | | 7.0 | 10.0 |
| Minimum Split (s) | 55.5 | 55.5 | 55.5 | 55.5 | 37.9 | 37.9 | | 12.9 | 37.9 |
| Total Split (s) | 37.0 | 37.0 | 37.0 | 37.0 | 40.0 | 40.0 | | 13.0 | 53.0 |
| Total Split (%) | 41.1% | 41.1% | 41.1% | 41.1% | 44.4% | 44.4% | | 14.4% | 58.9% |
| Maximum Green (s) | 29.5 | 29.5 | 29.5 | 29.5 | 34.1 | 34.1 | | 7.1 | 47.1 |
| Yellow Time (s) | 3.0 | 3.0 | 3.0 | 3.0 | 3.6 | 3.6 | | 3.6 | 3.6 |
| All-Red Time (s) | 4.5 | 4.5 | 4.5 | 4.5 | 2.3 | 2.3 | | 2.3 | 2.3 |
| Lost Time Adjust (s) | | | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Total Lost Time (s) | | | 7.5 | 7.5 | 5.9 | 5.9 | | 5.9 | 5.9 |
| Lead/Lag | | | | | Lead | Lead | | Lag | |
| Lead-Lag Optimize? | | | | | Yes | Yes | | Yes | |
| Vehicle Extension (s) | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | | 3.0 | 3.0 |
| Recall Mode | None | None | None | None | C-Max | C-Max | | None | C-Max |
| Walk Time (s) | 9.0 | 9.0 | 9.0 | 9.0 | 7.0 | 7.0 | | | 7.0 |
| Flash Dont Walk (s) | 39.0 | 39.0 | 39.0 | 39.0 | 25.0 | 25.0 | | | 25.0 |
| Pedestrian Calls (#/hr) | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 |
| Act Effct Green (s) | | | 11.9 | 11.9 | 54.3 | 54.3 | | 7.1 | 64.7 |
| Actuated g/C Ratio | | | 0.13 | 0.13 | 0.60 | 0.60 | | 0.08 | 0.72 |
| v/c Ratio | | | 0.54 | 0.48 | 0.15 | 0.13 | | 0.56 | 0.11 |
| Control Delay | | | 25.1 | 11.6 | 6.9 | 0.8 | | 53.5 | 0.7 |
| Queue Delay | | | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Total Delay | | | 25.1 | 11.6 | 6.9 | 0.8 | | 53.5 | 0.7 |
| LOS | | | C | B | A | A | | D | A |
| Approach Delay | | | 21.5 | | 5.7 | | | | 9.3 |
| Approach LOS | | | C | | A | | | | A |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 90 | | | |
| Actuated Cycle Length: 90 | | | |
| Offset: 66 (73%), Referenced to phase 2:NWT and 6:SET, Start of Green | | | |
| Natural Cycle: 110 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.56 | | | |
| Intersection Signal Delay: 12.1 | | Intersection LOS: B | |
| Intersection Capacity Utilization 38.9% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 1193: Left Turn Bridge & Grand River Ave & I-96 Service Dr



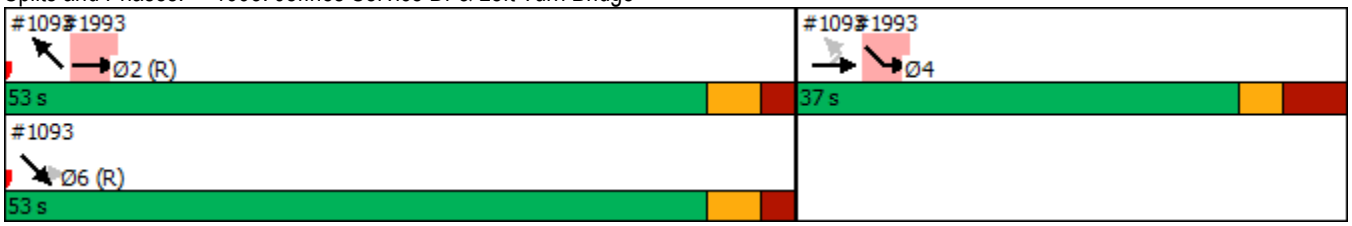


| Lane Group | EBL | EBT | WBT | WBR | SEL | SER | Ø6 |
|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | |
| Traffic Volume (vph) | 0 | 236 | 0 | 0 | 106 | 0 | |
| Future Volume (vph) | 0 | 236 | 0 | 0 | 106 | 0 | |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | |
| Lane Util. Factor | 1.00 | 0.91 | 1.00 | 1.00 | 0.97 | 1.00 | |
| Frt | | | | | | | |
| Flt Protected | | | | | 0.950 | | |
| Satd. Flow (prot) | 0 | 5085 | 0 | 0 | 3433 | 0 | |
| Flt Permitted | | | | | 0.950 | | |
| Satd. Flow (perm) | 0 | 5085 | 0 | 0 | 3433 | 0 | |
| Right Turn on Red | | | | Yes | Yes | Yes | |
| Satd. Flow (RTOR) | | | | | 1127 | | |
| Link Speed (mph) | | 35 | 35 | | 30 | | |
| Link Distance (ft) | | 191 | 342 | | 422 | | |
| Travel Time (s) | | 3.7 | 6.7 | | 9.6 | | |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | |
| Adj. Flow (vph) | 0 | 257 | 0 | 0 | 115 | 0 | |
| Shared Lane Traffic (%) | | | | | | | |
| Lane Group Flow (vph) | 0 | 257 | 0 | 0 | 115 | 0 | |
| Enter Blocked Intersection | No | No | No | No | No | No | |
| Lane Alignment | Left | Left | Left | Right | Left | Right | |
| Median Width(ft) | | 0 | 0 | | 24 | | |
| Link Offset(ft) | | 0 | 0 | | 0 | | |
| Crosswalk Width(ft) | | 16 | 16 | | 16 | | |
| Two way Left Turn Lane | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | |
| Turning Speed (mph) | 15 | | | 9 | 15 | 9 | |
| Number of Detectors | | 2 | | | 1 | | |
| Detector Template | | Thru | | | Left | | |
| Leading Detector (ft) | | 100 | | | 20 | | |
| Trailing Detector (ft) | | 0 | | | 0 | | |
| Detector 1 Position(ft) | | 0 | | | 0 | | |
| Detector 1 Size(ft) | | 6 | | | 20 | | |
| Detector 1 Type | | Cl+Ex | | | Cl+Ex | | |
| Detector 1 Channel | | | | | | | |
| Detector 1 Extend (s) | | 0.0 | | | 0.0 | | |
| Detector 1 Queue (s) | | 0.0 | | | 0.0 | | |
| Detector 1 Delay (s) | | 0.0 | | | 0.0 | | |
| Detector 2 Position(ft) | | 94 | | | | | |
| Detector 2 Size(ft) | | 6 | | | | | |
| Detector 2 Type | | Cl+Ex | | | | | |
| Detector 2 Channel | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | | | |
| Turn Type | | NA | | | Prot | | |
| Protected Phases | | 2 | | | 4 | | 6 |
| Permitted Phases | | | | | | | |
| Detector Phase | | 2 | | | 4 | | |
| Switch Phase | | | | | | | |
| Minimum Initial (s) | | 10.0 | | | 10.0 | | 10.0 |

| Lane Group | EBL | EBT | WBT | WBR | SEL | SER | Ø6 |
|---|---|---|---|---|---|---|---|
| Minimum Split (s) | | 37.0 | | | 49.4 | | 37.0 |
| Total Split (s) | | 53.0 | | | 37.0 | | 53.0 |
| Total Split (%) | | 58.9% | | | 41.1% | | 59% |
| Maximum Green (s) | | 47.0 | | | 29.6 | | 47.0 |
| Yellow Time (s) | | 3.6 | | | 3.0 | | 3.6 |
| All-Red Time (s) | | 2.4 | | | 4.4 | | 2.4 |
| Lost Time Adjust (s) | | 0.0 | | | 0.0 | | |
| Total Lost Time (s) | | 6.0 | | | 7.4 | | |
| Lead/Lag | | | | | | | |
| Lead-Lag Optimize? | | | | | | | |
| Vehicle Extension (s) | | 3.0 | | | 3.0 | | 3.0 |
| Recall Mode | | C-Max | | | None | | C-Max |
| Walk Time (s) | | 7.0 | | | 9.0 | | 7.0 |
| Flash Dont Walk (s) | | 24.0 | | | 33.0 | | 24.0 |
| Pedestrian Calls (#/hr) | | 0 | | | 0 | | 0 |
| Act Effct Green (s) | | 65.5 | | | 11.1 | | |
| Actuated g/C Ratio | | 0.73 | | | 0.12 | | |
| v/c Ratio | | 0.07 | | | 0.08 | | |
| Control Delay | | 2.0 | | | 0.1 | | |
| Queue Delay | | 0.0 | | | 0.0 | | |
| Total Delay | | 2.0 | | | 0.1 | | |
| LOS | | A | | | A | | |
| Approach Delay | | 2.0 | | | 0.1 | | |
| Approach LOS | | A | | | A | | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 90 | | | |
| Actuated Cycle Length: 90 | | | |
| Offset: 54 (60%), Referenced to phase 2:NWT and 6:SETL, Start of Green | | | |
| Natural Cycle: 90 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.45 | | | |
| Intersection Signal Delay: 1.4 | | Intersection LOS: A | |
| Intersection Capacity Utilization 27.8% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 1993: Jeffries Service Dr & Left Turn Bridge



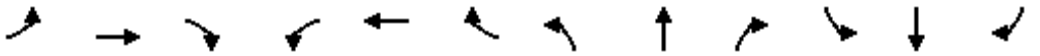
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 20 | 89 | 4 | 24 | 94 | 33 | 12 | 330 | 45 | 36 | 317 | 26 |
| Future Volume (vph) | 20 | 89 | 4 | 24 | 94 | 33 | 12 | 330 | 45 | 36 | 317 | 26 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 60 | | 0 | 60 | | 0 | 80 | | 0 | 80 | | 0 |
| Storage Lanes | 1 | | 0 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 65 | | | 65 | | | 65 | | | 65 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped Bike Factor | 1.00 | 1.00 | | 0.99 | 0.99 | | 1.00 | 1.00 | | 0.99 | 1.00 | |
| Frt | | 0.993 | | | 0.964 | | | 0.978 | | | 0.984 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1805 | 1849 | 0 | 1805 | 1808 | 0 | 1805 | 1789 | 0 | 1805 | 1849 | 0 |
| Flt Permitted | 0.659 | | | 0.663 | | | 0.435 | | | 0.401 | | |
| Satd. Flow (perm) | 1250 | 1849 | 0 | 1249 | 1808 | 0 | 826 | 1789 | 0 | 758 | 1849 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 3 | | | 19 | | | 14 | | | 9 | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 699 | | | 1470 | | | 1209 | | | 215 | |
| Travel Time (s) | | 15.9 | | | 33.4 | | | 27.5 | | | 4.9 | |
| Confl. Peds. (#/hr) | 1 | | 6 | 6 | | 1 | 1 | | 6 | 6 | | 1 |
| Peak Hour Factor | 0.60 | 0.63 | 0.60 | 0.72 | 0.80 | 0.89 | 0.75 | 0.91 | 0.72 | 0.88 | 0.90 | 0.63 |
| Heavy Vehicles (%) | 0% | 2% | 0% | 0% | 1% | 0% | 0% | 4% | 0% | 0% | 1% | 0% |
| Adj. Flow (vph) | 33 | 141 | 7 | 33 | 118 | 37 | 16 | 363 | 63 | 41 | 352 | 41 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 33 | 148 | 0 | 33 | 155 | 0 | 16 | 426 | 0 | 41 | 393 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 12 | | | 12 | | | 12 | | | 12 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | Yes | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | | 1 | 2 | | 1 | 2 | | 1 | 2 | |
| Detector Template | Left | Thru | | Left | Thru | | Left | Thru | | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | | 20 | 100 | | 20 | 100 | | 20 | 100 | |
| Trailing Detector (ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Detector 1 Position(ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Detector 1 Size(ft) | 20 | 6 | | 20 | 6 | | 20 | 6 | | 20 | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Queue (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Delay (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | 6 | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Turn Type | Perm | NA | | Perm | NA | | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | | 8 | | | 4 | | 1 | 6 | | 5 | 2 | |
| Permitted Phases | 8 | | | 4 | | | 6 | | | 2 | | |
| Detector Phase | 8 | 8 | | 4 | 4 | | 1 | 6 | | 5 | 2 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 6.0 | 6.0 | | 6.0 | 6.0 | | 5.0 | 9.0 | | 5.0 | 9.0 | |
| Minimum Split (s) | 28.8 | 28.8 | | 28.8 | 28.8 | | 10.6 | 26.6 | | 10.6 | 26.6 | |
| Total Split (s) | 27.0 | 27.0 | | 27.0 | 27.0 | | 12.0 | 41.0 | | 12.0 | 41.0 | |
| Total Split (%) | 33.8% | 33.8% | | 33.8% | 33.8% | | 15.0% | 51.3% | | 15.0% | 51.3% | |
| Maximum Green (s) | 20.2 | 20.2 | | 20.2 | 20.2 | | 6.4 | 34.4 | | 6.4 | 34.4 | |
| Yellow Time (s) | 3.8 | 3.8 | | 3.8 | 3.8 | | 3.5 | 3.6 | | 3.5 | 3.6 | |
| All-Red Time (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 2.1 | 3.0 | | 2.1 | 3.0 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 6.8 | 6.8 | | 6.8 | 6.8 | | 5.6 | 6.6 | | 5.6 | 6.6 | |
| Lead/Lag | | | | | | | Lead | Lag | | Lead | Lag | |
| Lead-Lag Optimize? | | | | | | | Yes | Yes | | Yes | Yes | |
| Vehicle Extension (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | |
| Recall Mode | Max | Max | | Max | Max | | Max | C-Max | | Max | C-Max | |
| Walk Time (s) | 7.0 | 7.0 | | 7.0 | 7.0 | | | 7.0 | | | 7.0 | |
| Flash Dont Walk (s) | 15.0 | 15.0 | | 15.0 | 15.0 | | | 13.0 | | | 13.0 | |
| Pedestrian Calls (#/hr) | 0 | 0 | | 0 | 0 | | | 0 | | | 0 | |
| Act Effct Green (s) | 20.2 | 20.2 | | 20.2 | 20.2 | | 41.8 | 34.4 | | 41.8 | 34.4 | |
| Actuated g/C Ratio | 0.25 | 0.25 | | 0.25 | 0.25 | | 0.52 | 0.43 | | 0.52 | 0.43 | |
| v/c Ratio | 0.10 | 0.32 | | 0.10 | 0.33 | | 0.03 | 0.55 | | 0.09 | 0.49 | |
| Control Delay | 24.1 | 26.0 | | 24.1 | 23.6 | | 7.1 | 19.7 | | 7.5 | 18.7 | |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 24.1 | 26.0 | | 24.1 | 23.6 | | 7.1 | 19.7 | | 7.5 | 18.7 | |
| LOS | C | C | | C | C | | A | B | | A | B | |
| Approach Delay | | 25.7 | | | 23.7 | | | 19.2 | | | 17.6 | |
| Approach LOS | | C | | | C | | | B | | | B | |

**Intersection Summary**

Area Type: Other
Cycle Length: 80
Actuated Cycle Length: 80
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
Natural Cycle: 70
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.55
Intersection Signal Delay: 20.3 Intersection LOS: C
Intersection Capacity Utilization 58.5% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 2609: Schaefer Hwy & Schoolcraft Rd



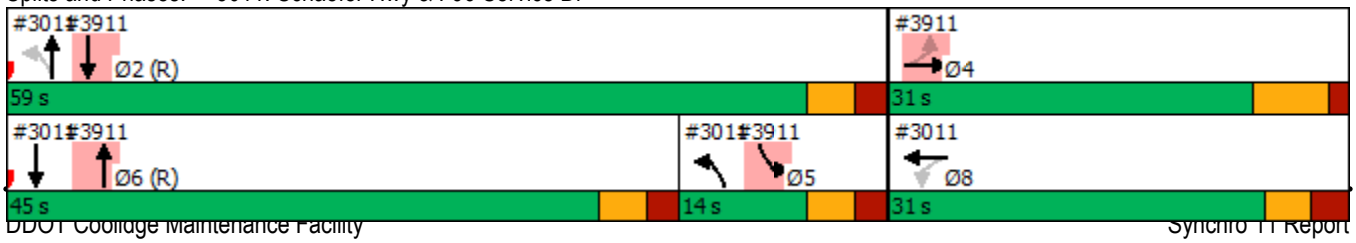
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 0 | 0 | 0 | 98 | 145 | 3 | 148 | 319 | 0 | 0 | 198 | 159 |
| Future Volume (vph) | 0 | 0 | 0 | 98 | 145 | 3 | 148 | 319 | 0 | 0 | 198 | 159 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 0 | | 0 | 0 | | 0 | 90 | | 0 | 0 | | 0 |
| Storage Lanes | 0 | | 0 | 1 | | 0 | 1 | | 0 | 0 | | 0 |
| Taper Length (ft) | 65 | | | 65 | | | 65 | | | 65 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 0.95 |
| Ped Bike Factor | | | | | | | 1.00 | | | | 0.99 | |
| Frt | | | | | 0.997 | | | | | | 0.932 | |
| Flt Protected | | | | 0.950 | | | 0.950 | | | | | |
| Satd. Flow (prot) | 0 | 0 | 0 | 1770 | 3529 | 0 | 1752 | 3574 | 0 | 0 | 3319 | 0 |
| Flt Permitted | | | | 0.950 | | | 0.500 | | | | | |
| Satd. Flow (perm) | 0 | 0 | 0 | 1770 | 3529 | 0 | 919 | 3574 | 0 | 0 | 3319 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | | | 2 | | | | | | 196 | |
| Link Speed (mph) | | 35 | | | 35 | | | 30 | | | 30 | |
| Link Distance (ft) | | 298 | | | 375 | | | 384 | | | 332 | |
| Travel Time (s) | | 5.8 | | | 7.3 | | | 8.7 | | | 7.5 | |
| Confl. Peds. (#/hr) | | | | | | | 4 | | | | | 4 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.87 | 0.76 | 0.92 | 0.92 | 0.84 | 0.81 |
| Heavy Vehicles (%) | 2% | 2% | 2% | 2% | 2% | 2% | 3% | 1% | 2% | 2% | 1% | 0% |
| Adj. Flow (vph) | 0 | 0 | 0 | 107 | 158 | 3 | 170 | 420 | 0 | 0 | 236 | 196 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 0 | 0 | 107 | 161 | 0 | 170 | 420 | 0 | 0 | 432 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 12 | | | 12 | | | 12 | | | 12 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | Yes | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | | | | 1 | 2 | | 1 | 2 | | | 2 | |
| Detector Template | | | | Left | Thru | | Left | Thru | | | Thru | |
| Leading Detector (ft) | | | | 20 | 100 | | 20 | 100 | | | 100 | |
| Trailing Detector (ft) | | | | 0 | 0 | | 0 | 0 | | | 0 | |
| Detector 1 Position(ft) | | | | 0 | 0 | | 0 | 0 | | | 0 | |
| Detector 1 Size(ft) | | | | 20 | 6 | | 20 | 6 | | | 6 | |
| Detector 1 Type | | | | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | | | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | | | | 0.0 | 0.0 | | 0.0 | 0.0 | | | 0.0 | |
| Detector 1 Queue (s) | | | | 0.0 | 0.0 | | 0.0 | 0.0 | | | 0.0 | |
| Detector 1 Delay (s) | | | | 0.0 | 0.0 | | 0.0 | 0.0 | | | 0.0 | |
| Detector 2 Position(ft) | | | | | 94 | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | | | | 6 | | | 6 | | | 6 | |
| Detector 2 Type | | | | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | | | | 0.0 | | | 0.0 | | | 0.0 | |

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

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Turn Type | | | | Perm | NA | | pm+pt | NA | | | NA | |
| Protected Phases | | | | | 8 | | 5 | 2 | | | 6 | |
| Permitted Phases | | | | 8 | | | 2 | | | | | |
| Detector Phase | | | | 8 | 8 | | 5 | 2 | | | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | | | | 10.0 | 10.0 | | 7.0 | 10.0 | | | 10.0 | |
| Minimum Split (s) | | | | 28.7 | 28.7 | | 12.4 | 23.4 | | | 23.4 | |
| Total Split (s) | | | | 31.0 | 31.0 | | 14.0 | 59.0 | | | 45.0 | |
| Total Split (%) | | | | 34.4% | 34.4% | | 15.6% | 65.6% | | | 50.0% | |
| Maximum Green (s) | | | | 25.3 | 25.3 | | 8.6 | 53.6 | | | 39.6 | |
| Yellow Time (s) | | | | 3.0 | 3.0 | | 3.2 | 3.2 | | | 3.2 | |
| All-Red Time (s) | | | | 2.7 | 2.7 | | 2.2 | 2.2 | | | 2.2 | |
| Lost Time Adjust (s) | | | | 0.0 | 0.0 | | 0.0 | 0.0 | | | 0.0 | |
| Total Lost Time (s) | | | | 5.7 | 5.7 | | 5.4 | 5.4 | | | 5.4 | |
| Lead/Lag | | | | | | | Lag | | | | Lead | |
| Lead-Lag Optimize? | | | | | | | Yes | | | | Yes | |
| Vehicle Extension (s) | | | | 3.0 | 3.0 | | 3.0 | 3.0 | | | 3.0 | |
| Recall Mode | | | | None | None | | None | C-Max | | | C-Max | |
| Walk Time (s) | | | | 7.0 | 7.0 | | | 7.0 | | | 7.0 | |
| Flash Dont Walk (s) | | | | 16.0 | 16.0 | | | 11.0 | | | 11.0 | |
| Pedestrian Calls (#/hr) | | | | 0 | 0 | | | 0 | | | 0 | |
| Act Effct Green (s) | | | | 12.6 | 12.6 | | 66.3 | 66.3 | | | 52.3 | |
| Actuated g/C Ratio | | | | 0.14 | 0.14 | | 0.74 | 0.74 | | | 0.58 | |
| v/c Ratio | | | | 0.43 | 0.33 | | 0.22 | 0.16 | | | 0.21 | |
| Control Delay | | | | 33.1 | 28.3 | | 2.9 | 2.1 | | | 8.9 | |
| Queue Delay | | | | 0.0 | 0.0 | | 0.0 | 0.0 | | | 0.0 | |
| Total Delay | | | | 33.1 | 28.3 | | 2.9 | 2.1 | | | 8.9 | |
| LOS | | | | C | C | | A | A | | | A | |
| Approach Delay | | | | | 30.2 | | | 2.3 | | | 8.9 | |
| Approach LOS | | | | | C | | | A | | | A | |

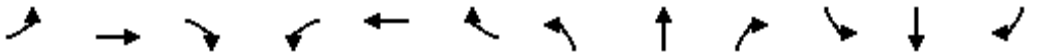
| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 90 | | | |
| Actuated Cycle Length: 90 | | | |
| Offset: 87 (97%), Referenced to phase 2:NBTL and 6:SBT, Start of Green | | | |
| Natural Cycle: 70 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.59 | | | |
| Intersection Signal Delay: 10.3 | | Intersection LOS: B | |
| Intersection Capacity Utilization 45.3% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 3011: Schaefer Hwy & I-96 Service Dr



| Lane Group | Ø4 |
|---|---|
| Turn Type | |
| Protected Phases | 4 |
| Permitted Phases | |
| Detector Phase | |
| Switch Phase | |
| Minimum Initial (s) | 10.0 |
| Minimum Split (s) | 30.5 |
| Total Split (s) | 31.0 |
| Total Split (%) | 34% |
| Maximum Green (s) | 24.5 |
| Yellow Time (s) | 5.0 |
| All-Red Time (s) | 1.5 |
| Lost Time Adjust (s) | |
| Total Lost Time (s) | |
| Lead/Lag | |
| Lead-Lag Optimize? | |
| Vehicle Extension (s) | 3.0 |
| Recall Mode | None |
| Walk Time (s) | 7.0 |
| Flash Dont Walk (s) | 17.0 |
| Pedestrian Calls (#/hr) | 0 |
| Act Effct Green (s) | |
| Actuated g/C Ratio | |
| v/c Ratio | |
| Control Delay | |
| Queue Delay | |
| Total Delay | |
| LOS | |
| Approach Delay | |
| Approach LOS | |

| Intersection Summary |
|---|



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 145 | 111 | 155 | 0 | 0 | 0 | 0 | 321 | 81 | 44 | 252 | 0 |
| Future Volume (vph) | 145 | 111 | 155 | 0 | 0 | 0 | 0 | 321 | 81 | 44 | 252 | 0 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 0 | | 0 | 0 | | 0 | 0 | | 0 | 90 | | 0 |
| Storage Lanes | 0 | | 0 | 0 | | 0 | 0 | | 0 | 1 | | 0 |
| Taper Length (ft) | 65 | | | 65 | | | 65 | | | 65 | | |
| Lane Util. Factor | 0.91 | 0.91 | 0.91 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 1.00 |
| Ped Bike Factor | | | | | | | | 1.00 | | 1.00 | | |
| Frt | | 0.944 | | | | | | 0.969 | | | | |
| Flt Protected | | 0.983 | | | | | | | | 0.950 | | |
| Satd. Flow (prot) | 0 | 4719 | 0 | 0 | 0 | 0 | 0 | 3424 | 0 | 1770 | 3574 | 0 |
| Flt Permitted | | 0.983 | | | | | | | | 0.950 | | |
| Satd. Flow (perm) | 0 | 4719 | 0 | 0 | 0 | 0 | 0 | 3424 | 0 | 1765 | 3574 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 168 | | | | | | 47 | | | | |
| Link Speed (mph) | | 35 | | | 35 | | | 30 | | | 30 | |
| Link Distance (ft) | | 417 | | | 354 | | | 291 | | | 384 | |
| Travel Time (s) | | 8.1 | | | 6.9 | | | 6.6 | | | 8.7 | |
| Confl. Peds. (#/hr) | | | | | | | | | 4 | 4 | | |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.75 | 0.72 | 0.81 | 0.79 | 0.92 |
| Heavy Vehicles (%) | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 1% | 2% | 1% | 2% |
| Adj. Flow (vph) | 158 | 121 | 168 | 0 | 0 | 0 | 0 | 428 | 113 | 54 | 319 | 0 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 447 | 0 | 0 | 0 | 0 | 0 | 541 | 0 | 54 | 319 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 0 | | | 0 | | | 12 | | | 12 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | Yes | | | Yes | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | | | | | | 2 | | 1 | 2 | |
| Detector Template | Left | Thru | | | | | | Thru | | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | | | | | | 100 | | 20 | 100 | |
| Trailing Detector (ft) | 0 | 0 | | | | | | 0 | | 0 | 0 | |
| Detector 1 Position(ft) | 0 | 0 | | | | | | 0 | | 0 | 0 | |
| Detector 1 Size(ft) | 20 | 6 | | | | | | 6 | | 20 | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | | | | | | Cl+Ex | | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | | | | | | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Queue (s) | 0.0 | 0.0 | | | | | | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Delay (s) | 0.0 | 0.0 | | | | | | 0.0 | | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | | | | 6 | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | | | | 0.0 | | | 0.0 | |

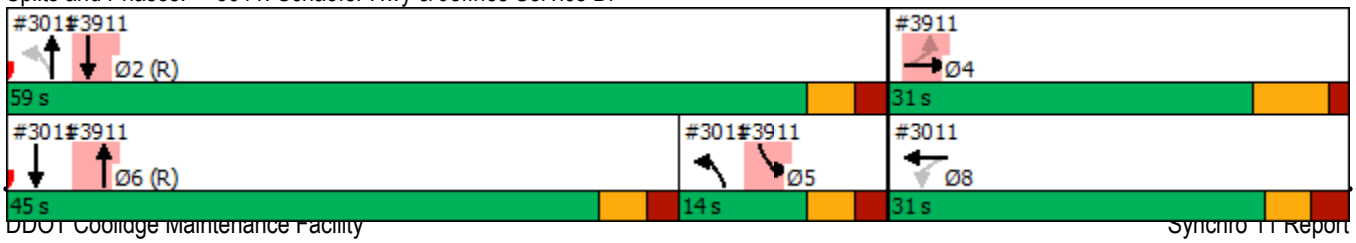
| Lane Group | Ø8 |
|---|---|
| Lane Configurations | |
| Traffic Volume (vph) | |
| Future Volume (vph) | |
| Ideal Flow (vphpl) | |
| Storage Length (ft) | |
| Storage Lanes | |
| Taper Length (ft) | |
| Lane Util. Factor | |
| Ped Bike Factor | |
| Frt | |
| Flt Protected | |
| Satd. Flow (prot) |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

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Turn Type | Perm | NA | | | | | | NA | | Prot | NA | |
| Protected Phases | | 4 | | | | | | 6 | | 5 | 2 | |
| Permitted Phases | 4 | | | | | | | | | | | |
| Detector Phase | 4 | 4 | | | | | | 6 | | 5 | 2 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | | | | | | 10.0 | | 7.0 | 10.0 | |
| Minimum Split (s) | 30.5 | 30.5 | | | | | | 23.4 | | 12.4 | 23.4 | |
| Total Split (s) | 31.0 | 31.0 | | | | | | 45.0 | | 14.0 | 59.0 | |
| Total Split (%) | 34.4% | 34.4% | | | | | | 50.0% | | 15.6% | 65.6% | |
| Maximum Green (s) | 24.5 | 24.5 | | | | | | 39.6 | | 8.6 | 53.6 | |
| Yellow Time (s) | 5.0 | 5.0 | | | | | | 3.2 | | 3.2 | 3.2 | |
| All-Red Time (s) | 1.5 | 1.5 | | | | | | 2.2 | | 2.2 | 2.2 | |
| Lost Time Adjust (s) | | 0.0 | | | | | | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | | 6.5 | | | | | | 5.4 | | 5.4 | 5.4 | |
| Lead/Lag | | | | | | | | Lead | | Lag | | |
| Lead-Lag Optimize? | | | | | | | | Yes | | Yes | | |
| Vehicle Extension (s) | 3.0 | 3.0 | | | | | | 3.0 | | 3.0 | 3.0 | |
| Recall Mode | None | None | | | | | | C-Max | | None | C-Max | |
| Walk Time (s) | 7.0 | 7.0 | | | | | | 7.0 | | | 7.0 | |
| Flash Dont Walk (s) | 17.0 | 17.0 | | | | | | 11.0 | | | 11.0 | |
| Pedestrian Calls (#/hr) | 0 | 0 | | | | | | 0 | | | 0 | |
| Act Effct Green (s) | | 11.8 | | | | | | 52.3 | | 8.6 | 66.3 | |
| Actuated g/C Ratio | | 0.13 | | | | | | 0.58 | | 0.10 | 0.74 | |
| v/c Ratio | | 0.59 | | | | | | 0.27 | | 0.32 | 0.12 | |
| Control Delay | | 25.6 | | | | | | 9.2 | | 46.0 | 3.9 | |
| Queue Delay | | 0.0 | | | | | | 0.0 | | 0.0 | 0.0 | |
| Total Delay | | 25.6 | | | | | | 9.2 | | 46.0 | 3.9 | |
| LOS | | C | | | | | | A | | D | A | |
| Approach Delay | | 25.6 | | | | | | 9.2 | | | 10.0 | |
| Approach LOS | | C | | | | | | A | | | A | |

**Intersection Summary**

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 90
Offset: 87 (97%), Referenced to phase 2:NBTL and 6:SBT, Start of Green
Natural Cycle: 70
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.59
Intersection Signal Delay: 14.8 Intersection LOS: B
Intersection Capacity Utilization 45.3% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 3911: Schaefer Hwy & Jeffries Service Dr



| Lane Group | Ø8 |
|---|---|
| Turn Type | |
| Protected Phases | 8 |
| Permitted Phases | |
| Detector Phase | |
| Switch Phase | |
| Minimum Initial (s) | 10.0 |
| Minimum Split (s) | 28.7 |
| Total Split (s) | 31.0 |
| Total Split (%) | 34% |
| Maximum Green (s) | 25.3 |
| Yellow Time (s) | 3.0 |
| All-Red Time (s) | 2.7 |
| Lost Time Adjust (s) | |
| Total Lost Time (s) | |
| Lead/Lag | |
| Lead-Lag Optimize? | |
| Vehicle Extension (s) | 3.0 |
| Recall Mode | None |
| Walk Time (s) | 7.0 |
| Flash Dont Walk (s) | 16.0 |
| Pedestrian Calls (#/hr) | 0 |
| Act Effct Green (s) | |
| Actuated g/C Ratio | |
| v/c Ratio | |
| Control Delay | |
| Queue Delay | |
| Total Delay | |
| LOS | |
| Approach Delay | |
| Approach LOS | |

| Intersection Summary |
|---|

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 30 | 84 | 26 | 46 | 106 | 24 | 29 | 312 | 42 | 32 | 307 | 26 |
| Future Volume (vph) | 30 | 84 | 26 | 46 | 106 | 24 | 29 | 312 | 42 | 32 | 307 | 26 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 80 | | 0 | 80 | | 0 | 80 | | 0 | 80 | | 0 |
| Storage Lanes | 1 | | 0 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 65 | | | 65 | | | 65 | | | 65 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 |
| Ped Bike Factor | 1.00 | 1.00 | | 1.00 | 1.00 | | 0.99 | 1.00 | | 1.00 | 1.00 | |
| Frt | | 0.957 | | | 0.975 | | | 0.979 | | | 0.983 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1805 | 1809 | 0 | 1805 | 1848 | 0 | 1805 | 3479 | 0 | 1752 | 3537 | 0 |
| Flt Permitted | 0.662 | | | 0.676 | | | 0.526 | | | 0.495 | | |
| Satd. Flow (perm) | 1256 | 1809 | 0 | 1278 | 1848 | 0 | 994 | 3479 | 0 | 912 | 3537 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 34 | | | 17 | | | 31 | | | 24 | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 648 | | | 545 | | | 2274 | | | 685 | |
| Travel Time (s) | | 14.7 | | | 12.4 | | | 51.7 | | | 15.6 | |
| Confl. Peds. (#/hr) | 2 | | 6 | 6 | | 2 | 6 | | 1 | 1 | | 6 |
| Peak Hour Factor | 0.73 | 0.92 | 0.72 | 0.73 | 0.85 | 0.95 | 0.68 | 0.91 | 0.77 | 0.60 | 0.91 | 0.60 |
| Heavy Vehicles (%) | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 1% | 3% | 3% | 0% | 0% |
| Adj. Flow (vph) | 41 | 91 | 36 | 63 | 125 | 25 | 43 | 343 | 55 | 53 | 337 | 43 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 41 | 127 | 0 | 63 | 150 | 0 | 43 | 398 | 0 | 53 | 380 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 12 | | | 12 | | | 12 | | | 12 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | | 1 | 2 | | 1 | 2 | | 1 | 2 | |
| Detector Template | Left | Thru | | Left | Thru | | Left | Thru | | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | | 20 | 100 | | 20 | 100 | | 20 | 100 | |
| Trailing Detector (ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Detector 1 Position(ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Detector 1 Size(ft) | 20 | 6 | | 20 | 6 | | 20 | 6 | | 20 | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Queue (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Delay (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | 6 | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Turn Type | Perm | NA | | Perm | NA | | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | | 4 | | | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | | 8 | | | 2 | | | 6 | | |
| Detector Phase | 4 | 4 | | 8 | 8 | | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | | 10.0 | 10.0 | | 4.0 | 15.0 | | 4.0 | 15.0 | |
| Minimum Split (s) | 24.6 | 24.6 | | 24.6 | 24.6 | | 9.6 | 26.6 | | 9.6 | 26.6 | |
| Total Split (s) | 24.0 | 24.0 | | 24.0 | 24.0 | | 12.0 | 24.0 | | 12.0 | 24.0 | |
| Total Split (%) | 40.0% | 40.0% | | 40.0% | 40.0% | | 20.0% | 40.0% | | 20.0% | 40.0% | |
| Maximum Green (s) | 18.4 | 18.4 | | 18.4 | 18.4 | | 6.4 | 18.4 | | 6.4 | 18.4 | |
| Yellow Time (s) | 3.5 | 3.5 | | 3.5 | 3.5 | | 3.5 | 3.5 | | 3.5 | 3.5 | |
| All-Red Time (s) | 2.1 | 2.1 | | 2.1 | 2.1 | | 2.1 | 2.1 | | 2.1 | 2.1 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 5.6 | 5.6 | | 5.6 | 5.6 | | 5.6 | 5.6 | | 5.6 | 5.6 | |
| Lead/Lag | | | | | | | Lead | Lag | | Lead | Lag | |
| Lead-Lag Optimize? | | | | | | | Yes | Yes | | Yes | Yes | |
| Vehicle Extension (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | |
| Recall Mode | Min | Min | | Min | Min | | None | C-Max | | None | C-Max | |
| Walk Time (s) | 7.0 | 7.0 | | 7.0 | 7.0 | | | 7.0 | | | 7.0 | |
| Flash Dont Walk (s) | 12.0 | 12.0 | | 12.0 | 12.0 | | | 14.0 | | | 14.0 | |
| Pedestrian Calls (#/hr) | 0 | 0 | | 0 | 0 | | | 0 | | | 0 | |
| Act Effct Green (s) | 10.9 | 10.9 | | 10.9 | 10.9 | | 34.4 | 30.5 | | 35.7 | 32.9 | |
| Actuated g/C Ratio | 0.18 | 0.18 | | 0.18 | 0.18 | | 0.57 | 0.51 | | 0.60 | 0.55 | |
| v/c Ratio | 0.18 | 0.36 | | 0.27 | 0.43 | | 0.07 | 0.22 | | 0.08 | 0.19 | |
| Control Delay | 22.2 | 18.8 | | 23.8 | 23.0 | | 5.2 | 9.6 | | 5.2 | 8.5 | |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 22.2 | 18.8 | | 23.8 | 23.0 | | 5.2 | 9.6 | | 5.2 | 8.5 | |
| LOS | C | B | | C | C | | A | A | | A | A | |
| Approach Delay | | 19.6 | | | 23.2 | | | 9.2 | | | 8.1 | |
| Approach LOS | | B | | | C | | | A | | | A | |

**Intersection Summary**

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 14 (23%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 65
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.43
Intersection Signal Delay: 12.6 Intersection LOS: B
Intersection Capacity Utilization 57.5% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 4001: Schaefer Hwy & Lyndon St

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

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 8 | 158 | 4 | 0 | 142 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| Future Vol, veh/h | 8 | 158 | 4 | 0 | 142 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 60 | 60 | 60 | 60 | 60 | 60 | 25 | 25 | 25 | 25 | 25 | 60 |
| Heavy Vehicles, % | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 13 | 263 | 7 | 0 | 237 | 0 | 0 | 0 | 0 | 0 | 0 | 13 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 237 | 0 | 0 | 270 | 0 | 0 | 537 | 530 | 267 | 530 | 533 | 237 |
| Stage 1 | - | - | - | - | - | - | 293 | 293 | - | 237 | 237 | - |
| Stage 2 | - | - | - | - | - | - | 244 | 237 | - | 293 | 296 | - |
| Critical Hdwy | 4.1 | - | - | 4.1 | - | - | 7.1 | 6.5 | 6.2 | 7.1 | 6.5 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.1 | 5.5 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.1 | 5.5 | - |
| Follow-up Hdwy | 2.2 | - | - | 2.2 | - | - | 3.5 | 4 | 3.3 | 3.5 | 4 | 3.3 |
| Pot Cap-1 Maneuver | 1342 | - | - | 1305 | - | - | 458 | 457 | 777 | 463 | 456 | 807 |
| Stage 1 | - | - | - | - | - | - | 719 | 674 | - | 771 | 713 | - |
| Stage 2 | - | - | - | - | - | - | 764 | 713 | - | 719 | 672 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 1342 | - | - | 1305 | - | - | 447 | 452 | 777 | 459 | 451 | 807 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 447 | 452 | - | 459 | 451 | - |
| Stage 1 | - | - | - | - | - | - | 711 | 667 | - | 763 | 713 | - |
| Stage 2 | - | - | - | - | - | - | 751 | 713 | - | 711 | 665 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0.4 | 0 | 0 | 9.5 |
| HCM LOS | | | A | A |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | - | 1342 | - | - | 1305 | - | - | 807 |
| HCM Lane V/C Ratio | - | 0.01 | - | - | - | - | - | 0.017 |
| HCM Control Delay (s) | 0 | 7.7 | 0 | - | 0 | - | - | 9.5 |
| HCM Lane LOS | A | A | A | - | A | - | - | A |
| HCM 95th %tile Q(veh) | - | 0 | - | - | 0 | - | - | 0.1 |

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

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 2 | 1 | 6 | 3 | 1 | 7 | 4 | 108 | 17 | 5 | 246 | 3 |
| Future Vol, veh/h | 2 | 1 | 6 | 3 | 1 | 7 | 4 | 108 | 17 | 5 | 246 | 3 |
| Conflicting Peds, #/hr | 0 | 0 | 1 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 2 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | 50 | - | - | 50 | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 60 | 60 | 60 | 60 | 60 | 60 | 100 | 81 | 60 | 60 | 95 | 75 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 3 | 2 | 10 | 5 | 2 | 12 | 4 | 133 | 28 | 8 | 259 | 4 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 441 | 448 | 264 | 439 | 436 | 147 | 265 | 0 | 0 | 161 | 0 | 0 |
| Stage 1 | 279 | 279 | - | 155 | 155 | - | - | - | - | - | - | - |
| Stage 2 | 162 | 169 | - | 284 | 281 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.1 | 6.5 | 6.2 | 7.1 | 6.5 | 6.2 | 4.1 | - | - | 4.1 | - | - |
| Critical Hdwy Stg 1 | 6.1 | 5.5 | - | 6.1 | 5.5 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.1 | 5.5 | - | 6.1 | 5.5 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.5 | 4 | 3.3 | 3.5 | 4 | 3.3 | 2.2 | - | - | 2.2 | - | - |
| Pot Cap-1 Maneuver | 530 | 509 | 780 | 532 | 517 | 905 | 1311 | - | - | 1430 | - | - |
| Stage 1 | 732 | 683 | - | 852 | 773 | - | - | - | - | - | - | - |
| Stage 2 | 845 | 763 | - | 727 | 682 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | 517 | 503 | 778 | 520 | 511 | 905 | 1309 | - | - | 1430 | - | - |
| Mov Cap-2 Maneuver | 517 | 503 | - | 520 | 511 | - | - | - | - | - | - | - |
| Stage 1 | 728 | 678 | - | 849 | 771 | - | - | - | - | - | - | - |
| Stage 2 | 830 | 761 | - | 711 | 677 | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 10.6 | 10.2 | 0.2 | 0.2 |
| HCM LOS | B | B | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 1309 | - | - | 663 | 711 | 1430 | - | - |
| HCM Lane V/C Ratio | 0.003 | - | - | 0.023 | 0.026 | 0.006 | - | - |
| HCM Control Delay (s) | 7.8 | - | - | 10.6 | 10.2 | 7.5 | - | - |
| HCM Lane LOS | A | - | - | B | B | A | - | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 0.1 | 0.1 | 0 | - | - |

DLZ
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INNOVATIVE IDEAS
EXCEPTIONAL DESIGN
UNMATCHED CLIENT SERVICE

# BUILD CONDITIONS

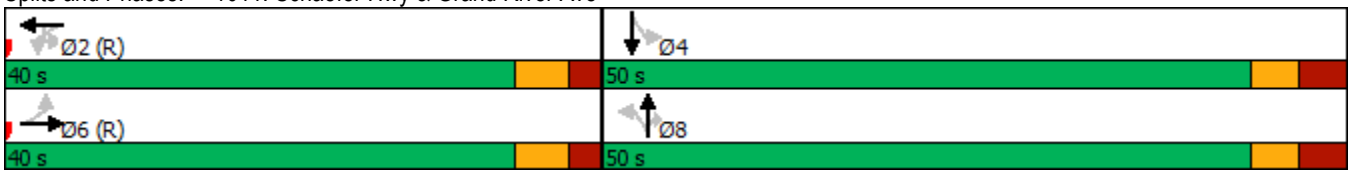
| Lane Group | EBL | EBT | EBR | WBU | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 60 | 460 | 100 | 1 | 27 | 516 | 139 | 79 | 336 | 10 | 68 | 402 |
| Future Volume (vph) | 60 | 460 | 100 | 1 | 27 | 516 | 139 | 79 | 336 | 10 | 68 | 402 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 115 | | 0 | | 95 | | 0 | 155 | | 0 | 80 | |
| Storage Lanes | 1 | | 0 | | 0 | | 0 | 1 | | 1 | 1 | |
| Taper Length (ft) | 65 | | | | 65 | | | 25 | | | 65 | |
| Lane Util. Factor | 1.00 | 0.91 | 0.91 | 0.91 | 1.00 | 0.91 | 0.91 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 |
| Ped Bike Factor | 1.00 | 1.00 | | | 1.00 | 0.99 | | 1.00 | | 0.99 | 1.00 | 1.00 |
| Frt | | 0.971 | | | | 0.963 | | | | 0.850 | | 0.985 |
| Flt Protected | 0.950 | | | | 0.950 | | | 0.950 | | | 0.950 | |
| Satd. Flow (prot) | 1805 | 4943 | 0 | 0 | 1805 | 4807 | 0 | 1805 | 1792 | 1615 | 1583 | 3334 |
| Flt Permitted | 0.358 | | | | 0.406 | | | 0.404 | | | 0.316 | |
| Satd. Flow (perm) | 678 | 4943 | 0 | 0 | 771 | 4807 | 0 | 767 | 1792 | 1593 | 526 | 3334 |
| Right Turn on Red | | | Yes | | | | Yes | | | Yes | | |
| Satd. Flow (RTOR) | | 72 | | | | 105 | | | | 34 | | 18 |
| Link Speed (mph) | | 35 | | | | 35 | | | 30 | | | 30 |
| Link Distance (ft) | | 932 | | | | 427 | | | 332 | | | 1209 |
| Travel Time (s) | | 18.2 | | | | 8.3 | | | 7.5 | | | 27.5 |
| Confl. Peds. (#/hr) | 5 | | 3 | | 3 | | 5 | 3 | | 2 | 2 | |
| Peak Hour Factor | 0.71 | 0.92 | 0.83 | 0.25 | 0.78 | 0.94 | 0.78 | 0.83 | 0.89 | 0.63 | 0.81 | 0.93 |
| Heavy Vehicles (%) | 0% | 2% | 0% | 0% | 0% | 2% | 7% | 0% | 6% | 0% | 14% | 7% |
| Adj. Flow (vph) | 85 | 500 | 120 | 4 | 35 | 549 | 178 | 95 | 378 | 16 | 84 | 432 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 85 | 620 | 0 | 0 | 39 | 727 | 0 | 95 | 378 | 16 | 84 | 480 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | R NA | Left | Left | Right | Left | Left | Right | Left | Left |
| Median Width(ft) | | 12 | | | | 12 | | | 12 | | | 12 |
| Link Offset(ft) | | 0 | | | | 0 | | | 0 | | | 0 |
| Crosswalk Width(ft) | | 16 | | | | 16 | | | 16 | | | 16 |
| Two way Left Turn Lane | | | | | | | | | | | | Yes |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 9 | 15 | | 9 | 15 | | 9 | 15 | |
| Number of Detectors | 1 | 2 | | 1 | 1 | 2 | | 1 | 2 | 1 | 1 | 2 |
| Detector Template | Left | Thru | | Left | Left | Thru | | Left | Thru | Right | Left | Thru |
| Leading Detector (ft) | 20 | 100 | | 20 | 20 | 100 | | 20 | 100 | 20 | 20 | 100 |
| Trailing Detector (ft) | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 |
| Detector 1 Position(ft) | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 |
| Detector 1 Size(ft) | 20 | 6 | | 20 | 20 | 6 | | 20 | 6 | 20 | 20 | 6 |
| Detector 1 Type | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Detector 1 Queue (s) | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Detector 1 Delay (s) | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Detector 2 Position(ft) | | 94 | | | | 94 | | | 94 | | | 94 |
| Detector 2 Size(ft) | | 6 | | | | 6 | | | 6 | | | 6 |
| Detector 2 Type | | Cl+Ex | | | | Cl+Ex | | | Cl+Ex | | | Cl+Ex |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | | 0.0 | | | 0.0 | | | 0.0 |

| Lane Group | SBR |
|---|---|
| Lane Configurations | |
| Traffic Volume (vph) | 44 |
| Future Volume (vph) | 44 |
| Ideal Flow (vphpl) | 1900 |
| Storage Length (ft) | 240 |
| Storage Lanes | 1 |
| Taper Length (ft) | |
| Lane Util. Factor | 0.95 |
| Ped Bike Factor | |
| Frt | |
| Flt Protected | |
| Satd. Flow (prot) | 0 |
| Flt Permitted | |
| Satd. Flow (perm) | 0 |
| Right Turn on Red | Yes |
| Satd. Flow (RTOR) | |
| Link Speed (mph) | |
| Link Distance (ft) | |
| Travel Time (s) | |
| Confl. Peds. (#/hr) | 3 |
| Peak Hour Factor | 0.91 |
| Heavy Vehicles (%) | 2% |
| Adj. Flow (vph) | 48 |
| Shared Lane Traffic (%) | |
| Lane Group Flow (vph) | 0 |
| Enter Blocked Intersection | No |
| Lane Alignment | Right |
| Median Width(ft) | |
| Link Offset(ft) | |
| Crosswalk Width(ft) | |
| Two way Left Turn Lane | |
| Headway Factor | 1.00 |
| Turning Speed (mph) | 9 |
| Number of Detectors | |
| Detector Template | |
| Leading Detector (ft) | |
| Trailing Detector (ft) | |
| Detector 1 Position(ft) | |
| Detector 1 Size(ft) | |
| Detector 1 Type | |
| Detector 1 Channel | |
| Detector 1 Extend (s) | |
| Detector 1 Queue (s) | |
| Detector 1 Delay (s) | |
| Detector 2 Position(ft) | |
| Detector 2 Size(ft) | |
| Detector 2 Type | |
| Detector 2 Channel | |
| Detector 2 Extend (s) | |

| Lane Group | EBL | EBT | EBR | WBU | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Turn Type | Perm | NA | | Perm | Perm | NA | | Perm | NA | Perm | Perm | NA |
| Protected Phases | | 6 | | | | 2 | | | 8 | | | 4 |
| Permitted Phases | 6 | | | 2 | 2 | | | 8 | | 8 | 4 | |
| Detector Phase | 6 | 6 | | 2 | 2 | 2 | | 8 | 8 | 8 | 4 | 4 |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | | 10.0 | 10.0 | 10.0 | | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 |
| Minimum Split (s) | 35.8 | 35.8 | | 35.8 | 35.8 | 35.8 | | 46.5 | 46.5 | 46.5 | 46.5 | 46.5 |
| Total Split (s) | 40.0 | 40.0 | | 40.0 | 40.0 | 40.0 | | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 |
| Total Split (%) | 44.4% | 44.4% | | 44.4% | 44.4% | 44.4% | | 55.6% | 55.6% | 55.6% | 55.6% | 55.6% |
| Maximum Green (s) | 34.2 | 34.2 | | 34.2 | 34.2 | 34.2 | | 43.5 | 43.5 | 43.5 | 43.5 | 43.5 |
| Yellow Time (s) | 3.6 | 3.6 | | 3.6 | 3.6 | 3.6 | | 3.2 | 3.2 | 3.2 | 3.2 | 3.2 |
| All-Red Time (s) | 2.2 | 2.2 | | 2.2 | 2.2 | 2.2 | | 3.3 | 3.3 | 3.3 | 3.3 | 3.3 |
| Lost Time Adjust (s) | 0.0 | 0.0 | | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Lost Time (s) | 5.8 | 5.8 | | | 5.8 | 5.8 | | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Vehicle Extension (s) | 3.0 | 3.0 | | 3.0 | 3.0 | 3.0 | | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 |
| Recall Mode | C-Max | C-Max | | C-Max | C-Max | C-Max | | None | None | None | None | None |
| Walk Time (s) | 7.0 | 7.0 | | 7.0 | 7.0 | 7.0 | | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 |
| Flash Dont Walk (s) | 23.0 | 23.0 | | 23.0 | 23.0 | 23.0 | | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 |
| Pedestrian Calls (#/hr) | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 |
| Act Effct Green (s) | 52.0 | 52.0 | | | 52.0 | 52.0 | | 25.7 | 25.7 | 25.7 | 25.7 | 25.7 |
| Actuated g/C Ratio | 0.58 | 0.58 | | | 0.58 | 0.58 | | 0.29 | 0.29 | 0.29 | 0.29 | 0.29 |
| v/c Ratio | 0.22 | 0.21 | | | 0.09 | 0.26 | | 0.43 | 0.74 | 0.03 | 0.56 | 0.50 |
| Control Delay | 13.4 | 9.2 | | | 9.5 | 7.3 | | 20.5 | 27.6 | 3.0 | 40.4 | 26.5 |
| Queue Delay | 0.0 | 0.0 | | | 0.0 | 0.0 | | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 |
| Total Delay | 13.4 | 9.2 | | | 9.5 | 7.3 | | 20.5 | 27.8 | 3.0 | 40.4 | 26.5 |
| LOS | B | A | | | A | A | | C | C | A | D | C |
| Approach Delay | | 9.7 | | | | 7.4 | | | 25.6 | | | 28.6 |
| Approach LOS | | A | | | | A | | | C | | | C |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 90 | | | |
| Actuated Cycle Length: 90 | | | |
| Offset: 59 (66%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green | | | |
| Natural Cycle: 85 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.74 | | | |
| Intersection Signal Delay: 16.3 | | Intersection LOS: B | |
| Intersection Capacity Utilization 78.4% | | ICU Level of Service D | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 1011: Schaefer Hwy & Grand River Ave



| Lane Group | SBR |
|---|---|
| Turn Type | |
| Protected Phases | |
| Permitted Phases | |
| Detector Phase | |
| Switch Phase | |
| Minimum Initial (s) | |
| Minimum Split (s) | |
| Total Split (s) | |
| Total Split (%) | |
| Maximum Green (s) | |
| Yellow Time (s) | |
| All-Red Time (s) | |
| Lost Time Adjust (s) | |
| Total Lost Time (s) | |
| Lead/Lag | |
| Lead-Lag Optimize? | |
| Vehicle Extension (s) | |
| Recall Mode | |
| Walk Time (s) | |
| Flash Dont Walk (s) | |
| Pedestrian Calls (#/hr) | |
| Act Effct Green (s) | |
| Actuated g/C Ratio | |
| v/c Ratio | |
| Control Delay | |
| Queue Delay | |
| Total Delay | |
| LOS | |
| Approach Delay | |
| Approach LOS | |

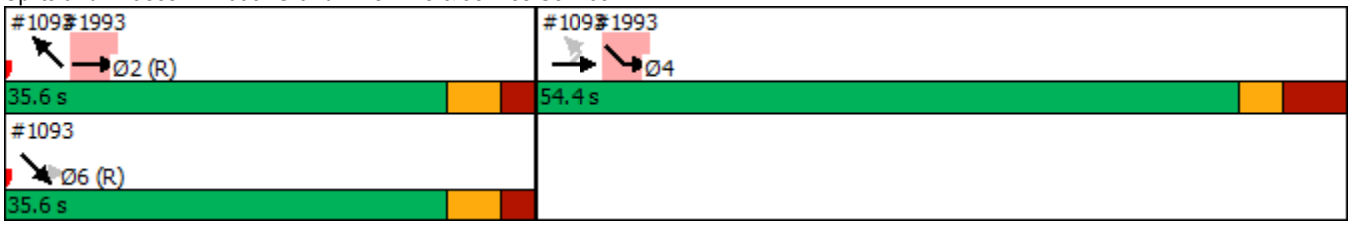
| Intersection Summary |
|---|

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | SEL | SET | SER | NWL | NWT | NWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 6 | 319 | 73 | 0 | 0 | 0 | 5 | 462 | 0 | 0 | 421 | 20 |
| Future Volume (vph) | 6 | 319 | 73 | 0 | 0 | 0 | 5 | 462 | 0 | 0 | 421 | 20 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Util. Factor | 0.86 | 0.86 | 0.86 | 1.00 | 1.00 | 1.00 | 0.91 | 0.91 | 1.00 | 1.00 | 0.91 | 0.91 |
| Ped Bike Factor | | | | | | | | 1.00 | | | 1.00 | |
| Frt | | 0.973 | | | | | | | | | 0.986 | |
| Flt Protected | | 0.999 | | | | | | 0.998 | | | | |
| Satd. Flow (prot) | 0 | 5922 | 0 | 0 | 0 | 0 | 0 | 5030 | 0 | 0 | 4994 | 0 |
| Flt Permitted | | 0.999 | | | | | | 0.920 | | | | |
| Satd. Flow (perm) | 0 | 5922 | 0 | 0 | 0 | 0 | 0 | 4637 | 0 | 0 | 4994 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 79 | | | | | | | | | 20 | |
| Link Speed (mph) | | 35 | | | 35 | | | 35 | | | 35 | |
| Link Distance (ft) | | 329 | | | 379 | | | 582 | | | 812 | |
| Travel Time (s) | | 6.4 | | | 7.4 | | | 11.3 | | | 15.8 | |
| Confl. Peds. (#/hr) | | | | | | | 1 | | | | | 1 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.31 | 0.91 | 0.92 | 0.92 | 0.92 | 0.43 |
| Heavy Vehicles (%) | 2% | 7% | 9% | 2% | 2% | 2% | 0% | 3% | 2% | 2% | 2% | 5% |
| Adj. Flow (vph) | 7 | 347 | 79 | 0 | 0 | 0 | 16 | 508 | 0 | 0 | 458 | 47 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 433 | 0 | 0 | 0 | 0 | 0 | 524 | 0 | 0 | 505 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 0 | | | 0 | | | 12 | | | 12 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | | | | | 1 | 2 | | | 2 | |
| Detector Template | Left | Thru | | | | | Left | Thru | | | Thru | |
| Leading Detector (ft) | 20 | 100 | | | | | 20 | 100 | | | 100 | |
| Trailing Detector (ft) | 0 | 0 | | | | | 0 | 0 | | | 0 | |
| Detector 1 Position(ft) | 0 | 0 | | | | | 0 | 0 | | | 0 | |
| Detector 1 Size(ft) | 20 | 6 | | | | | 20 | 6 | | | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | | | | | Cl+Ex | Cl+Ex | | | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | | | | | 0.0 | 0.0 | | | 0.0 | |
| Detector 1 Queue (s) | 0.0 | 0.0 | | | | | 0.0 | 0.0 | | | 0.0 | |
| Detector 1 Delay (s) | 0.0 | 0.0 | | | | | 0.0 | 0.0 | | | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | | | | 6 | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | | | | 0.0 | | | 0.0 | |
| Turn Type | Perm | NA | | | | | Perm | NA | | | NA | |
| Protected Phases | | 4 | | | | | | 6 | | | 2 | |
| Permitted Phases | 4 | | | | | | 6 | | | | | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | SEL | SET | SER | NWL | NWT | NWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detector Phase | 4 | 4 | | | | | 6 | 6 | | | 2 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | | | | | 10.0 | 10.0 | | | 10.0 | |
| Minimum Split (s) | 57.4 | 57.4 | | | | | 37.0 | 37.0 | | | 37.0 | |
| Total Split (s) | 54.4 | 54.4 | | | | | 35.6 | 35.6 | | | 35.6 | |
| Total Split (%) | 60.4% | 60.4% | | | | | 39.6% | 39.6% | | | 39.6% | |
| Maximum Green (s) | 47.0 | 47.0 | | | | | 29.6 | 29.6 | | | 29.6 | |
| Yellow Time (s) | 3.0 | 3.0 | | | | | 3.6 | 3.6 | | | 3.6 | |
| All-Red Time (s) | 4.4 | 4.4 | | | | | 2.4 | 2.4 | | | 2.4 | |
| Lost Time Adjust (s) | | 0.0 | | | | | | 0.0 | | | 0.0 | |
| Total Lost Time (s) | | 7.4 | | | | | | 6.0 | | | 6.0 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Vehicle Extension (s) | 3.0 | 3.0 | | | | | 3.0 | 3.0 | | | 3.0 | |
| Recall Mode | None | None | | | | | C-Max | C-Max | | | C-Max | |
| Walk Time (s) | 9.0 | 9.0 | | | | | 7.0 | 7.0 | | | 7.0 | |
| Flash Dont Walk (s) | 33.0 | 33.0 | | | | | 24.0 | 24.0 | | | 24.0 | |
| Pedestrian Calls (#/hr) | 0 | 0 | | | | | 0 | 0 | | | 0 | |
| Act Effct Green (s) | | 12.0 | | | | | | 64.6 | | | 64.6 | |
| Actuated g/C Ratio | | 0.13 | | | | | | 0.72 | | | 0.72 | |
| v/c Ratio | | 0.50 | | | | | | 0.16 | | | 0.14 | |
| Control Delay | | 34.6 | | | | | | 1.7 | | | 4.1 | |
| Queue Delay | | 0.0 | | | | | | 0.0 | | | 0.0 | |
| Total Delay | | 34.6 | | | | | | 1.7 | | | 4.1 | |
| LOS | | C | | | | | | A | | | A | |
| Approach Delay | | 34.6 | | | | | | 1.7 | | | 4.1 | |
| Approach LOS | | C | | | | | | A | | | A | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 90 | | | |
| Actuated Cycle Length: 90 | | | |
| Offset: 78 (87%), Referenced to phase 2:NWT and 6:SETL, Start of Green | | | |
| Natural Cycle: 95 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.50 | | | |
| Intersection Signal Delay: 12.3 | | Intersection LOS: B | |
| Intersection Capacity Utilization 45.3% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 1093: Grand River Ave & Jeffries Service Dr

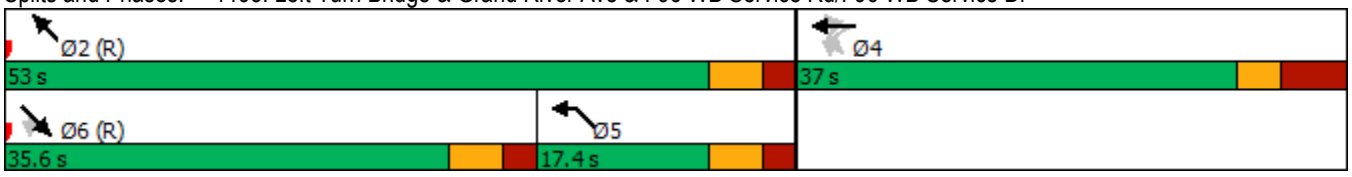


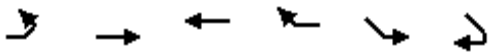
| Lane Group | WBL2 | WBL | WBT | WBR | SET | SER | SER2 | NWL | NWT |
|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | |
| Traffic Volume (vph) | 42 | 5 | 193 | 316 | 425 | 107 | 6 | 61 | 366 |
| Future Volume (vph) | 42 | 5 | 193 | 316 | 425 | 107 | 6 | 61 | 366 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | | 0 | | 0 | | 140 | | 260 | |
| Storage Lanes | | 0 | | 1 | | 1 | | 1 | |
| Taper Length (ft) | | 65 | | | | | | 65 | |
| Lane Util. Factor | 0.91 | 0.91 | 0.86 | 0.86 | 0.86 | 0.86 | 0.91 | 1.00 | 0.91 |
| Frt | | | 0.940 | 0.850 | 0.994 | 0.850 | | | |
| Flt Protected | | | 0.994 | | | | | 0.950 | |
| Satd. Flow (prot) | 0 | 0 | 4394 | 1335 | 4725 | 1317 | 0 | 1805 | 5036 |
| Flt Permitted | | | 0.994 | | | | | 0.950 | |
| Satd. Flow (perm) | 0 | 0 | 4394 | 1335 | 4725 | 1317 | 0 | 1805 | 5036 |
| Right Turn on Red | | | | Yes | | | Yes | | |
| Satd. Flow (RTOR) | | | 172 | 171 | | 126 | | | |
| Link Speed (mph) | | | 35 | | 35 | | | | 35 |
| Link Distance (ft) | | | 675 | | 427 | | | | 582 |
| Travel Time (s) | | | 13.1 | | 8.3 | | | | 11.3 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.93 | 0.74 | 0.50 | 0.78 | 0.89 |
| Heavy Vehicles (%) | 2% | 2% | 5% | 4% | 3% | 6% | 0% | 0% | 3% |
| Adj. Flow (vph) | 46 | 5 | 210 | 343 | 457 | 145 | 12 | 78 | 411 |
| Shared Lane Traffic (%) | | | | 50% | | 14% | | | |
| Lane Group Flow (vph) | 0 | 0 | 433 | 171 | 477 | 137 | 0 | 78 | 411 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Left | Right | Left | Right | Right | Left | Left |
| Median Width(ft) | | | 0 | | 12 | | | | 12 |
| Link Offset(ft) | | | 0 | | 0 | | | | 0 |
| Crosswalk Width(ft) | | | 16 | | 16 | | | | 16 |
| Two way Left Turn Lane | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | 15 | | 9 | | 9 | 9 | 15 | |
| Number of Detectors | 1 | 1 | 2 | 1 | 2 | 1 | | 1 | 2 |
| Detector Template | Left | Left | Thru | Right | Thru | Right | | Left | Thru |
| Leading Detector (ft) | 20 | 20 | 100 | 20 | 100 | 20 | | 20 | 100 |
| Trailing Detector (ft) | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 |
| Detector 1 Position(ft) | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 |
| Detector 1 Size(ft) | 20 | 20 | 6 | 20 | 6 | 20 | | 20 | 6 |
| Detector 1 Type | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex |
| Detector 1 Channel | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Detector 1 Queue (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Detector 1 Delay (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Detector 2 Position(ft) | | | 94 | | 94 | | | | 94 |
| Detector 2 Size(ft) | | | 6 | | 6 | | | | 6 |
| Detector 2 Type | | | Cl+Ex | | Cl+Ex | | | | Cl+Ex |
| Detector 2 Channel | | | | | | | | | |
| Detector 2 Extend (s) | | | 0.0 | | 0.0 | | | | 0.0 |
| Turn Type | Perm | Perm | NA | Perm | NA | Perm | | Prot | NA |
| Protected Phases | | | 4 | | 6 | | | 5 | 2 |

| Lane Group | WBL2 | WBL | WBT | WBR | SET | SER | SER2 | NWL | NWT |
|---|---|---|---|---|---|---|---|---|---|
| Permitted Phases | 4 | 4 | | 4 | | 6 | | | |
| Detector Phase | 4 | 4 | 4 | 4 | 6 | 6 | | 5 | 2 |
| Switch Phase | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | | 7.0 | 10.0 |
| Minimum Split (s) | 55.5 | 55.5 | 55.5 | 55.5 | 37.9 | 37.9 | | 12.9 | 37.9 |
| Total Split (s) | 37.0 | 37.0 | 37.0 | 37.0 | 35.6 | 35.6 | | 17.4 | 53.0 |
| Total Split (%) | 41.1% | 41.1% | 41.1% | 41.1% | 39.6% | 39.6% | | 19.3% | 58.9% |
| Maximum Green (s) | 29.5 | 29.5 | 29.5 | 29.5 | 29.7 | 29.7 | | 11.5 | 47.1 |
| Yellow Time (s) | 3.0 | 3.0 | 3.0 | 3.0 | 3.6 | 3.6 | | 3.6 | 3.6 |
| All-Red Time (s) | 4.5 | 4.5 | 4.5 | 4.5 | 2.3 | 2.3 | | 2.3 | 2.3 |
| Lost Time Adjust (s) | | | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Total Lost Time (s) | | | 7.5 | 7.5 | 5.9 | 5.9 | | 5.9 | 5.9 |
| Lead/Lag | | | | | Lead | Lead | | Lag | |
| Lead-Lag Optimize? | | | | | Yes | Yes | | Yes | |
| Vehicle Extension (s) | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | | 3.0 | 3.0 |
| Recall Mode | None | None | None | None | C-Max | C-Max | | None | C-Max |
| Walk Time (s) | 9.0 | 9.0 | 9.0 | 9.0 | 7.0 | 7.0 | | | 7.0 |
| Flash Dont Walk (s) | 39.0 | 39.0 | 39.0 | 39.0 | 25.0 | 25.0 | | | 25.0 |
| Pedestrian Calls (#/hr) | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 |
| Act Effct Green (s) | | | 12.6 | 12.6 | 50.0 | 50.0 | | 10.6 | 64.0 |
| Actuated g/C Ratio | | | 0.14 | 0.14 | 0.56 | 0.56 | | 0.12 | 0.71 |
| v/c Ratio | | | 0.57 | 0.51 | 0.18 | 0.17 | | 0.37 | 0.11 |
| Control Delay | | | 24.0 | 11.2 | 7.4 | 1.5 | | 38.0 | 0.9 |
| Queue Delay | | | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Total Delay | | | 24.0 | 11.2 | 7.4 | 1.5 | | 38.0 | 0.9 |
| LOS | | | C | B | A | A | | D | A |
| Approach Delay | | | 20.4 | | 6.1 | | | | 6.8 |
| Approach LOS | | | C | | A | | | | A |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 90 | | | |
| Actuated Cycle Length: 90 | | | |
| Offset: 72 (80%), Referenced to phase 2:NWT and 6:SET, Start of Green | | | |
| Natural Cycle: 110 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.57 | | | |
| Intersection Signal Delay: 11.4 | | Intersection LOS: B | |
| Intersection Capacity Utilization 39.3% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 1193: Left Turn Bridge & Grand River Ave & I-96 WB Service Rd/I-96 WB Service Dr



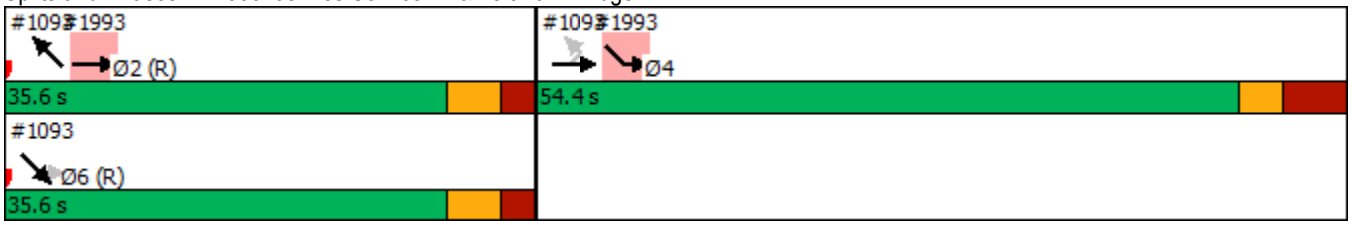


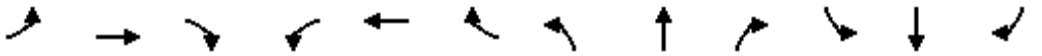
| Lane Group | EBL | EBT | WBT | WBR | SEL | SER | Ø6 |
|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | |
| Traffic Volume (vph) | 0 | 286 | 0 | 0 | 112 | 0 | |
| Future Volume (vph) | 0 | 286 | 0 | 0 | 112 | 0 | |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | |
| Storage Length (ft) | 0 | | | 0 | 50 | 0 | |
| Storage Lanes | 0 | | | 0 | 0 | 0 | |
| Taper Length (ft) | 65 | | | | 65 | | |
| Lane Util. Factor | 1.00 | 0.91 | 1.00 | 1.00 | 0.97 | 1.00 | |
| Frt | | | | | | | |
| Flt Protected | | | | | 0.950 | | |
| Satd. Flow (prot) | 0 | 5085 | 0 | 0 | 3433 | 0 | |
| Flt Permitted | | | | | 0.950 | | |
| Satd. Flow (perm) | 0 | 5085 | 0 | 0 | 3433 | 0 | |
| Right Turn on Red | | | | Yes | Yes | Yes | |
| Satd. Flow (RTOR) | | | | | 621 | | |
| Link Speed (mph) | | 35 | 35 | | 30 | | |
| Link Distance (ft) | | 184 | 329 | | 419 | | |
| Travel Time (s) | | 3.6 | 6.4 | | 9.5 | | |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | |
| Adj. Flow (vph) | 0 | 311 | 0 | 0 | 122 | 0 | |
| Shared Lane Traffic (%) | | | | | | | |
| Lane Group Flow (vph) | 0 | 311 | 0 | 0 | 122 | 0 | |
| Enter Blocked Intersection | No | No | No | No | No | No | |
| Lane Alignment | Left | Left | Left | Right | Left | Right | |
| Median Width(ft) | | 0 | 0 | | 24 | | |
| Link Offset(ft) | | 0 | 0 | | 0 | | |
| Crosswalk Width(ft) | | 16 | 16 | | 16 | | |
| Two way Left Turn Lane | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | |
| Turning Speed (mph) | 15 | | | 9 | 15 | 9 | |
| Number of Detectors | | 2 | | | 1 | | |
| Detector Template | | Thru | | | Left | | |
| Leading Detector (ft) | | 100 | | | 20 | | |
| Trailing Detector (ft) | | 0 | | | 0 | | |
| Detector 1 Position(ft) | | 0 | | | 0 | | |
| Detector 1 Size(ft) | | 6 | | | 20 | | |
| Detector 1 Type | | Cl+Ex | | | Cl+Ex | | |
| Detector 1 Channel | | | | | | | |
| Detector 1 Extend (s) | | 0.0 | | | 0.0 | | |
| Detector 1 Queue (s) | | 0.0 | | | 0.0 | | |
| Detector 1 Delay (s) | | 0.0 | | | 0.0 | | |
| Detector 2 Position(ft) | | 94 | | | | | |
| Detector 2 Size(ft) | | 6 | | | | | |
| Detector 2 Type | | Cl+Ex | | | | | |
| Detector 2 Channel | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | | | |
| Turn Type | | NA | | | Prot | | |
| Protected Phases | | 2 | | | 4 | | 6 |
| Permitted Phases | | | | | | | |

| Lane Group | EBL | EBT | WBT | WBR | SEL | SER | Ø6 |
|---|---|---|---|---|---|---|---|
| Detector Phase | | 2 | | | 4 | | |
| Switch Phase | | | | | | | |
| Minimum Initial (s) | | 10.0 | | | 10.0 | | 10.0 |
| Minimum Split (s) | | 37.0 | | | 57.4 | | 37.0 |
| Total Split (s) | | 35.6 | | | 54.4 | | 35.6 |
| Total Split (%) | | 39.6% | | | 60.4% | | 40% |
| Maximum Green (s) | | 29.6 | | | 47.0 | | 29.6 |
| Yellow Time (s) | | 3.6 | | | 3.0 | | 3.6 |
| All-Red Time (s) | | 2.4 | | | 4.4 | | 2.4 |
| Lost Time Adjust (s) | | 0.0 | | | 0.0 | | |
| Total Lost Time (s) | | 6.0 | | | 7.4 | | |
| Lead/Lag | | | | | | | |
| Lead-Lag Optimize? | | | | | | | |
| Vehicle Extension (s) | | 3.0 | | | 3.0 | | 3.0 |
| Recall Mode | | C-Max | | | None | | C-Max |
| Walk Time (s) | | 7.0 | | | 9.0 | | 7.0 |
| Flash Dont Walk (s) | | 24.0 | | | 33.0 | | 24.0 |
| Pedestrian Calls (#/hr) | | 0 | | | 0 | | 0 |
| Act Effct Green (s) | | 64.6 | | | 12.0 | | |
| Actuated g/C Ratio | | 0.72 | | | 0.13 | | |
| v/c Ratio | | 0.09 | | | 0.12 | | |
| Control Delay | | 3.1 | | | 1.3 | | |
| Queue Delay | | 0.0 | | | 0.0 | | |
| Total Delay | | 3.1 | | | 1.3 | | |
| LOS | | A | | | A | | |
| Approach Delay | | 3.1 | | | 1.3 | | |
| Approach LOS | | A | | | A | | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 90 | | | |
| Actuated Cycle Length: 90 | | | |
| Offset: 78 (87%), Referenced to phase 2:NWT and 6:SETL, Start of Green | | | |
| Natural Cycle: 95 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.50 | | | |
| Intersection Signal Delay: 2.6 | | Intersection LOS: A | |
| Intersection Capacity Utilization 27.8% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 1993: Jeffries Service Dr & Left Turn Bridge





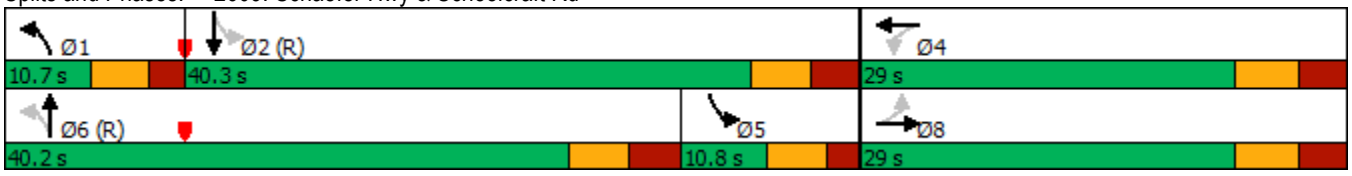
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 42 | 93 | 17 | 49 | 80 | 44 | 17 | 461 | 57 | 35 | 448 | 36 |
| Future Volume (vph) | 42 | 93 | 17 | 49 | 80 | 44 | 17 | 461 | 57 | 35 | 448 | 36 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 60 | | 0 | 60 | | 0 | 80 | | 250 | 80 | | 0 |
| Storage Lanes | 1 | | 0 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 65 | | | 65 | | | 65 | | | 65 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped Bike Factor | | | | | | | | 1.00 | | 1.00 | | |
| Frt | | 0.966 | | | 0.950 | | | 0.981 | | | 0.985 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1378 | 1821 | 0 | 1656 | 1714 | 0 | 1805 | 1769 | 0 | 1530 | 1693 | 0 |
| Flt Permitted | 0.650 | | | 0.669 | | | 0.152 | | | 0.398 | | |
| Satd. Flow (perm) | 943 | 1821 | 0 | 1166 | 1714 | 0 | 289 | 1769 | 0 | 639 | 1693 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 18 | | | 31 | | | 11 | | | 8 | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 699 | | | 1470 | | | 1209 | | | 229 | |
| Travel Time (s) | | 15.9 | | | 33.4 | | | 27.5 | | | 5.2 | |
| Confl. Peds. (#/hr) | | | | | | | | | 4 | 4 | | |
| Peak Hour Factor | 0.63 | 0.88 | 0.54 | 0.84 | 0.71 | 0.79 | 0.57 | 0.94 | 0.81 | 0.66 | 0.91 | 0.68 |
| Heavy Vehicles (%) | 31% | 1% | 0% | 9% | 1% | 14% | 0% | 5% | 5% | 18% | 8% | 34% |
| Adj. Flow (vph) | 67 | 106 | 31 | 58 | 113 | 56 | 30 | 490 | 70 | 53 | 492 | 53 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 67 | 137 | 0 | 58 | 169 | 0 | 30 | 560 | 0 | 53 | 545 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 12 | | | 12 | | | 12 | | | 12 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | Yes | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | | 1 | 2 | | 1 | 2 | | 1 | 2 | |
| Detector Template | Left | Thru | | Left | Thru | | Left | Thru | | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | | 20 | 100 | | 20 | 100 | | 20 | 100 | |
| Trailing Detector (ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Detector 1 Position(ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Detector 1 Size(ft) | 20 | 6 | | 20 | 6 | | 20 | 6 | | 20 | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Queue (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Delay (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | 6 | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |

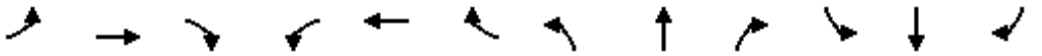
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Turn Type | Perm | NA | | Perm | NA | | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | | 8 | | | 4 | | 1 | 6 | | 5 | 2 | |
| Permitted Phases | 8 | | | 4 | | | 6 | | | 2 | | |
| Detector Phase | 8 | 8 | | 4 | 4 | | 1 | 6 | | 5 | 2 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 6.0 | 6.0 | | 6.0 | 6.0 | | 5.0 | 9.0 | | 5.0 | 9.0 | |
| Minimum Split (s) | 28.8 | 28.8 | | 28.8 | 28.8 | | 10.6 | 26.6 | | 10.6 | 26.6 | |
| Total Split (s) | 29.0 | 29.0 | | 29.0 | 29.0 | | 10.7 | 40.2 | | 10.8 | 40.3 | |
| Total Split (%) | 36.3% | 36.3% | | 36.3% | 36.3% | | 13.4% | 50.3% | | 13.5% | 50.4% | |
| Maximum Green (s) | 22.2 | 22.2 | | 22.2 | 22.2 | | 5.1 | 33.6 | | 5.2 | 33.7 | |
| Yellow Time (s) | 3.8 | 3.8 | | 3.8 | 3.8 | | 3.5 | 3.6 | | 3.5 | 3.6 | |
| All-Red Time (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 2.1 | 3.0 | | 2.1 | 3.0 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 6.8 | 6.8 | | 6.8 | 6.8 | | 5.6 | 6.6 | | 5.6 | 6.6 | |
| Lead/Lag | | | | | | | Lead | Lead | | Lag | Lag | |
| Lead-Lag Optimize? | | | | | | | Yes | Yes | | Yes | Yes | |
| Vehicle Extension (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | |
| Recall Mode | Max | Max | | Max | Max | | Max | C-Max | | Max | C-Max | |
| Walk Time (s) | 7.0 | 7.0 | | 7.0 | 7.0 | | | 7.0 | | | 7.0 | |
| Flash Dont Walk (s) | 15.0 | 15.0 | | 15.0 | 15.0 | | | 13.0 | | | 13.0 | |
| Pedestrian Calls (#/hr) | 0 | 0 | | 0 | 0 | | | 0 | | | 0 | |
| Act Effct Green (s) | 22.2 | 22.2 | | 22.2 | 22.2 | | 34.6 | 33.6 | | 34.7 | 33.7 | |
| Actuated g/C Ratio | 0.28 | 0.28 | | 0.28 | 0.28 | | 0.43 | 0.42 | | 0.43 | 0.42 | |
| v/c Ratio | 0.26 | 0.26 | | 0.18 | 0.34 | | 0.14 | 0.75 | | 0.16 | 0.76 | |
| Control Delay | 25.8 | 21.1 | | 23.8 | 21.0 | | 14.5 | 26.8 | | 11.1 | 22.4 | |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 25.8 | 21.1 | | 23.8 | 21.0 | | 14.5 | 26.8 | | 11.1 | 22.4 | |
| LOS | C | C | | C | C | | B | C | | B | C | |
| Approach Delay | | 22.7 | | | 21.7 | | | 26.2 | | | 21.4 | |
| Approach LOS | | C | | | C | | | C | | | C | |

**Intersection Summary**

Area Type: Other
Cycle Length: 80
Actuated Cycle Length: 80
Offset: 48 (60%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.76
Intersection Signal Delay: 23.3 Intersection LOS: C
Intersection Capacity Utilization 57.8% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 2609: Schaefer Hwy & Schoolcraft Rd





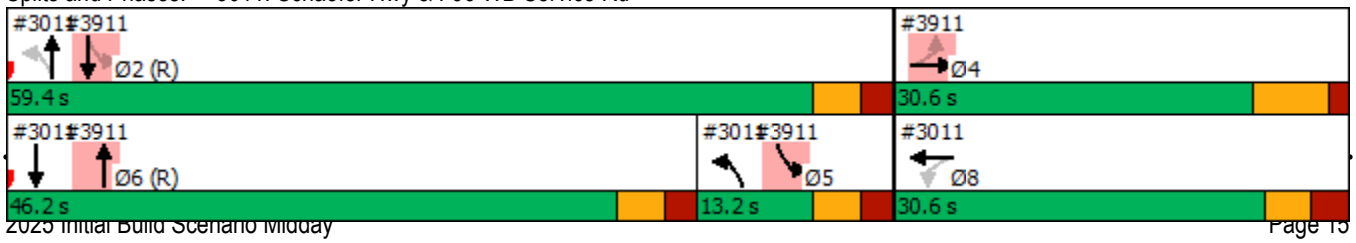
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 0 | 0 | 0 | 128 | 129 | 3 | 191 | 422 | 0 | 0 | 309 | 220 |
| Future Volume (vph) | 0 | 0 | 0 | 128 | 129 | 3 | 191 | 422 | 0 | 0 | 309 | 220 |
| Ideal Flow (vphpl) | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 |
| Lane Width (ft) | 12 | 12 | 12 | 12 | 11 | 12 | 11 | 11 | 12 | 12 | 11 | 12 |
| Storage Length (ft) | 0 | | 0 | 0 | | 0 | 250 | | 0 | 0 | | 0 |
| Storage Lanes | 0 | | 0 | 1 | | 0 | 1 | | 0 | 0 | | 0 |
| Taper Length (ft) | 65 | | | 65 | | | 65 | | | 65 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 0.95 |
| Ped Bike Factor | | | | | | | 1.00 | | | | 0.99 | |
| Frt | | | | | 0.997 | | | | | | 0.937 | |
| Flt Protected | | | | 0.950 | | | 0.950 | | | | | |
| Satd. Flow (prot) | 0 | 0 | 0 | 1863 | 3568 | 0 | 1766 | 3566 | 0 | 0 | 3231 | 0 |
| Flt Permitted | | | | 0.950 | | | 0.422 | | | | | |
| Satd. Flow (perm) | 0 | 0 | 0 | 1863 | 3568 | 0 | 783 | 3566 | 0 | 0 | 3231 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | | | 2 | | | | | | 237 | |
| Link Speed (mph) | | 25 | | | 25 | | | 25 | | | 35 | |
| Link Distance (ft) | | 298 | | | 364 | | | 384 | | | 332 | |
| Travel Time (s) | | 8.1 | | | 9.9 | | | 10.5 | | | 6.5 | |
| Confl. Peds. (#/hr) | | | | | | | 4 | | | | | 4 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.83 | 0.91 | 0.92 | 0.92 | 0.95 | 0.93 |
| Heavy Vehicles (%) | 2% | 2% | 2% | 2% | 2% | 33% | 4% | 3% | 2% | 2% | 7% | 4% |
| Adj. Flow (vph) | 0 | 0 | 0 | 139 | 140 | 3 | 230 | 464 | 0 | 0 | 325 | 237 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 0 | 0 | 139 | 143 | 0 | 230 | 464 | 0 | 0 | 562 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 12 | | | 12 | | | 12 | | | 12 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 0.94 | 0.94 | 0.94 | 0.94 | 0.98 | 0.94 | 0.98 | 0.98 | 0.94 | 0.94 | 0.98 | 0.94 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | | | | 1 | 2 | | 1 | 2 | | | 2 | |
| Detector Template | | | | Left | Thru | | Left | Thru | | | Thru | |
| Leading Detector (ft) | | | | 20 | 100 | | 20 | 100 | | | 100 | |
| Trailing Detector (ft) | | | | 0 | 0 | | 0 | 0 | | | 0 | |
| Detector 1 Position(ft) | | | | 0 | 0 | | 0 | 0 | | | 0 | |
| Detector 1 Size(ft) | | | | 20 | 6 | | 20 | 6 | | | 6 | |
| Detector 1 Type | | | | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | | | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | | | | 0.0 | 0.0 | | 0.0 | 0.0 | | | 0.0 | |
| Detector 1 Queue (s) | | | | 0.0 | 0.0 | | 0.0 | 0.0 | | | 0.0 | |
| Detector 1 Delay (s) | | | | 0.0 | 0.0 | | 0.0 | 0.0 | | | 0.0 | |
| Detector 2 Position(ft) | | | | | 94 | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | | | | 6 | | | 6 | | | 6 | |
| Detector 2 Type | | | | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |

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

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detector 2 Extend (s) | | | | | 0.0 | | | 0.0 | | | 0.0 | |
| Turn Type | | | | Perm | NA | | pm+pt | NA | | | NA | |
| Protected Phases | | | | | 8 | | 5 | 2 | | | 6 | |
| Permitted Phases | | | | 8 | | | 2 | | | | | |
| Detector Phase | | | | 8 | 8 | | 5 | 2 | | | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | | | | 10.0 | 10.0 | | 7.0 | 10.0 | | | 10.0 | |
| Minimum Split (s) | | | | 28.7 | 28.7 | | 12.4 | 23.4 | | | 23.4 | |
| Total Split (s) | | | | 30.6 | 30.6 | | 13.2 | 59.4 | | | 46.2 | |
| Total Split (%) | | | | 34.0% | 34.0% | | 14.7% | 66.0% | | | 51.3% | |
| Maximum Green (s) | | | | 24.9 | 24.9 | | 7.8 | 54.0 | | | 40.8 | |
| Yellow Time (s) | | | | 3.0 | 3.0 | | 3.2 | 3.2 | | | 3.2 | |
| All-Red Time (s) | | | | 2.7 | 2.7 | | 2.2 | 2.2 | | | 2.2 | |
| Lost Time Adjust (s) | | | | 0.0 | 0.0 | | 0.0 | 0.0 | | | 0.0 | |
| Total Lost Time (s) | | | | 5.7 | 5.7 | | 5.4 | 5.4 | | | 5.4 | |
| Lead/Lag | | | | | | | Lag | | | | Lead | |
| Lead-Lag Optimize? | | | | | | | Yes | | | | Yes | |
| Vehicle Extension (s) | | | | 3.0 | 3.0 | | 3.0 | 3.0 | | | 3.0 | |
| Recall Mode | | | | None | None | | None | C-Max | | | C-Max | |
| Walk Time (s) | | | | 7.0 | 7.0 | | | 7.0 | | | 7.0 | |
| Flash Dont Walk (s) | | | | 16.0 | 16.0 | | | 11.0 | | | 11.0 | |
| Pedestrian Calls (#/hr) | | | | 0 | 0 | | | 0 | | | 0 | |
| Act Effct Green (s) | | | | 15.7 | 15.7 | | 63.2 | 63.2 | | | 50.0 | |
| Actuated g/C Ratio | | | | 0.17 | 0.17 | | 0.70 | 0.70 | | | 0.56 | |
| v/c Ratio | | | | 0.43 | 0.23 | | 0.36 | 0.19 | | | 0.30 | |
| Control Delay | | | | 22.1 | 16.8 | | 4.6 | 2.7 | | | 3.4 | |
| Queue Delay | | | | 0.0 | 0.0 | | 0.0 | 0.0 | | | 0.1 | |
| Total Delay | | | | 22.1 | 16.8 | | 4.6 | 2.7 | | | 3.6 | |
| LOS | | | | C | B | | A | A | | | A | |
| Approach Delay | | | | | 19.4 | | | 3.3 | | | 3.6 | |
| Approach LOS | | | | | B | | | A | | | A | |

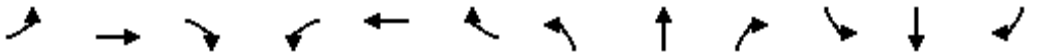
| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 90 | | | |
| Actuated Cycle Length: 90 | | | |
| Offset: 79 (88%), Referenced to phase 2:NBTL and 6:SBT, Start of Green | | | |
| Natural Cycle: 80 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.67 | | | |
| Intersection Signal Delay: 6.3 | | Intersection LOS: A | |
| Intersection Capacity Utilization 59.5% | | ICU Level of Service B | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 3011: Schaefer Hwy & I-96 WB Service Rd



| Lane Group | Ø4 |
|---|---|
| Detector 2 Extend (s) | |
| Turn Type | |
| Protected Phases | 4 |
| Permitted Phases | |
| Detector Phase | |
| Switch Phase | |
| Minimum Initial (s) | 10.0 |
| Minimum Split (s) | 30.5 |
| Total Split (s) | 30.6 |
| Total Split (%) | 34% |
| Maximum Green (s) | 24.1 |
| Yellow Time (s) | 5.0 |
| All-Red Time (s) | 1.5 |
| Lost Time Adjust (s) | |
| Total Lost Time (s) | |
| Lead/Lag | |
| Lead-Lag Optimize? | |
| Vehicle Extension (s) | 3.0 |
| Recall Mode | None |
| Walk Time (s) | 7.0 |
| Flash Dont Walk (s) | 17.0 |
| Pedestrian Calls (#/hr) | 0 |
| Act Effct Green (s) | |
| Actuated g/C Ratio | |
| v/c Ratio | |
| Control Delay | |
| Queue Delay | |
| Total Delay | |
| LOS | |
| Approach Delay | |
| Approach LOS | |

| Intersection Summary |
|---|



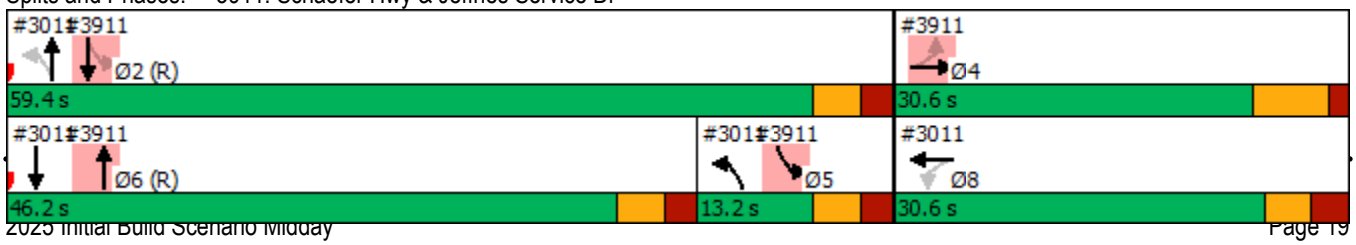
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 213 | 110 | 245 | 0 | 0 | 0 | 0 | 400 | 100 | 76 | 361 | 0 |
| Future Volume (vph) | 213 | 110 | 245 | 0 | 0 | 0 | 0 | 400 | 100 | 76 | 361 | 0 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 0 | | 0 | 0 | | 0 | 0 | | 0 | 90 | | 0 |
| Storage Lanes | 0 | | 0 | 0 | | 0 | 0 | | 0 | 1 | | 0 |
| Taper Length (ft) | 65 | | | 65 | | | 65 | | | 65 | | |
| Lane Util. Factor | 0.91 | 0.91 | 0.91 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 1.00 |
| Ped Bike Factor | | | | | | | | 1.00 | | | | |
| Frt | | 0.935 | | | | | | 0.972 | | | | |
| Flt Protected | | 0.982 | | | | | | | | 0.950 | | |
| Satd. Flow (prot) | 0 | 4549 | 0 | 0 | 0 | 0 | 0 | 1721 | 0 | 1703 | 3406 | 0 |
| Flt Permitted | | 0.982 | | | | | | | | 0.322 | | |
| Satd. Flow (perm) | 0 | 4549 | 0 | 0 | 0 | 0 | 0 | 1721 | 0 | 577 | 3406 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 208 | | | | | | 19 | | | | |
| Link Speed (mph) | | 35 | | | 35 | | | 30 | | | 30 | |
| Link Distance (ft) | | 417 | | | 372 | | | 621 | | | 384 | |
| Travel Time (s) | | 8.1 | | | 7.2 | | | 14.1 | | | 8.7 | |
| Confl. Peds. (#/hr) | | | | | | | | | 6 | 6 | | |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.84 | 0.80 | 0.80 | 0.92 | 0.92 |
| Heavy Vehicles (%) | 2% | 7% | 6% | 2% | 2% | 2% | 2% | 6% | 10% | 6% | 6% | 2% |
| Bus Blockages (#/hr) | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Adj. Flow (vph) | 232 | 120 | 266 | 0 | 0 | 0 | 0 | 476 | 125 | 95 | 392 | 0 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 618 | 0 | 0 | 0 | 0 | 0 | 601 | 0 | 95 | 392 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 0 | | | 0 | | | 12 | | | 12 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | Yes | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | | | | | | 2 | | 1 | 2 | |
| Detector Template | Left | Thru | | | | | | Thru | | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | | | | | | 100 | | 20 | 100 | |
| Trailing Detector (ft) | 0 | 0 | | | | | | 0 | | 0 | 0 | |
| Detector 1 Position(ft) | 0 | 0 | | | | | | 0 | | 0 | 0 | |
| Detector 1 Size(ft) | 20 | 6 | | | | | | 6 | | 20 | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | | | | | | Cl+Ex | | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | | | | | | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Queue (s) | 0.0 | 0.0 | | | | | | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Delay (s) | 0.0 | 0.0 | | | | | | 0.0 | | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | | | | 6 | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |

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

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detector 2 Extend (s) | | 0.0 | | | | | | 0.0 | | | 0.0 | |
| Turn Type | Perm | NA | | | | | | NA | | pm+pt | NA | |
| Protected Phases | | 4 | | | | | | 6 | | 5 | 2 | |
| Permitted Phases | 4 | | | | | | | | | 2 | | |
| Detector Phase | 4 | 4 | | | | | | 6 | | 5 | 2 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | | | | | | 10.0 | | 7.0 | 10.0 | |
| Minimum Split (s) | 30.5 | 30.5 | | | | | | 23.4 | | 12.4 | 23.4 | |
| Total Split (s) | 30.6 | 30.6 | | | | | | 46.2 | | 13.2 | 59.4 | |
| Total Split (%) | 34.0% | 34.0% | | | | | | 51.3% | | 14.7% | 66.0% | |
| Maximum Green (s) | 24.1 | 24.1 | | | | | | 40.8 | | 7.8 | 54.0 | |
| Yellow Time (s) | 5.0 | 5.0 | | | | | | 3.2 | | 3.2 | 3.2 | |
| All-Red Time (s) | 1.5 | 1.5 | | | | | | 2.2 | | 2.2 | 2.2 | |
| Lost Time Adjust (s) | | 0.0 | | | | | | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | | 6.5 | | | | | | 5.4 | | 5.4 | 5.4 | |
| Lead/Lag | | | | | | | | Lead | | Lag | | |
| Lead-Lag Optimize? | | | | | | | | Yes | | Yes | | |
| Vehicle Extension (s) | 3.0 | 3.0 | | | | | | 3.0 | | 3.0 | 3.0 | |
| Recall Mode | None | None | | | | | | C-Max | | None | C-Max | |
| Walk Time (s) | 7.0 | 7.0 | | | | | | 7.0 | | | 7.0 | |
| Flash Dont Walk (s) | 17.0 | 17.0 | | | | | | 11.0 | | | 11.0 | |
| Pedestrian Calls (#/hr) | 0 | 0 | | | | | | 0 | | | 0 | |
| Act Effct Green (s) | | 14.9 | | | | | | 50.0 | | 63.2 | 63.2 | |
| Actuated g/C Ratio | | 0.17 | | | | | | 0.56 | | 0.70 | 0.70 | |
| v/c Ratio | | 0.67 | | | | | | 0.62 | | 0.19 | 0.16 | |
| Control Delay | | 26.3 | | | | | | 17.6 | | 6.7 | 5.0 | |
| Queue Delay | | 0.0 | | | | | | 0.0 | | 0.0 | 0.0 | |
| Total Delay | | 26.3 | | | | | | 17.6 | | 6.7 | 5.0 | |
| LOS | | C | | | | | | B | | A | A | |
| Approach Delay | | 26.3 | | | | | | 17.6 | | | 5.4 | |
| Approach LOS | | C | | | | | | B | | | A | |

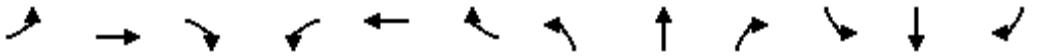
| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 90 | | | |
| Actuated Cycle Length: 90 | | | |
| Offset: 79 (88%), Referenced to phase 2:NBTL and 6:SBT, Start of Green | | | |
| Natural Cycle: 80 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.67 | | | |
| Intersection Signal Delay: 17.3 | | Intersection LOS: B | |
| Intersection Capacity Utilization 59.5% | | ICU Level of Service B | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 3911: Schaefer Hwy & Jeffries Service Dr



| Lane Group | Ø8 |
|---|---|
| Detector 2 Extend (s) | |
| Turn Type | |
| Protected Phases | 8 |
| Permitted Phases | |
| Detector Phase | |
| Switch Phase | |
| Minimum Initial (s) | 10.0 |
| Minimum Split (s) | 28.7 |
| Total Split (s) | 30.6 |
| Total Split (%) | 34% |
| Maximum Green (s) | 24.9 |
| Yellow Time (s) | 3.0 |
| All-Red Time (s) | 2.7 |
| Lost Time Adjust (s) | |
| Total Lost Time (s) | |
| Lead/Lag | |
| Lead-Lag Optimize? | |
| Vehicle Extension (s) | 3.0 |
| Recall Mode | None |
| Walk Time (s) | 7.0 |
| Flash Dont Walk (s) | 16.0 |
| Pedestrian Calls (#/hr) | 0 |
| Act Effct Green (s) | |
| Actuated g/C Ratio | |
| v/c Ratio | |
| Control Delay | |
| Queue Delay | |
| Total Delay | |
| LOS | |
| Approach Delay | |
| Approach LOS | |

| Intersection Summary |
|---|



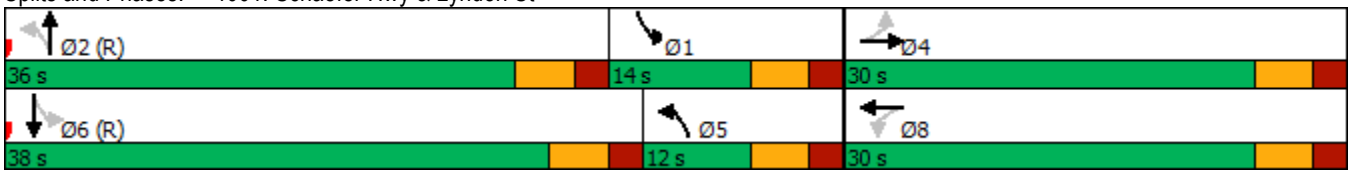
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 23 | 120 | 28 | 56 | 81 | 27 | 36 | 471 | 54 | 47 | 369 | 35 |
| Future Volume (vph) | 23 | 120 | 28 | 56 | 81 | 27 | 36 | 471 | 54 | 47 | 369 | 35 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 80 | | 0 | 80 | | 0 | 80 | | 0 | 80 | | 0 |
| Storage Lanes | 1 | | 0 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 65 | | | 65 | | | 65 | | | 65 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 |
| Ped Bike Factor | | 1.00 | | 1.00 | | | 0.99 | 1.00 | | 1.00 | 1.00 | |
| Frt | | 0.972 | | | 0.963 | | | 0.982 | | | 0.983 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1805 | 1785 | 0 | 1656 | 1812 | 0 | 1752 | 3328 | 0 | 1770 | 3212 | 0 |
| Flt Permitted | 0.631 | | | 0.523 | | | 0.481 | | | 0.398 | | |
| Satd. Flow (perm) | 1199 | 1785 | 0 | 910 | 1812 | 0 | 882 | 3328 | 0 | 739 | 3212 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 15 | | | 21 | | | 22 | | | 21 | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 648 | | | 545 | | | 853 | | | 685 | |
| Travel Time (s) | | 14.7 | | | 12.4 | | | 19.4 | | | 15.6 | |
| Confl. Peds. (#/hr) | | | 2 | 2 | | | 6 | | 5 | 5 | | 6 |
| Peak Hour Factor | 0.69 | 0.76 | 0.75 | 0.75 | 0.70 | 0.72 | 0.67 | 0.88 | 0.73 | 0.75 | 0.88 | 0.65 |
| Heavy Vehicles (%) | 0% | 3% | 4% | 9% | 0% | 4% | 3% | 7% | 0% | 2% | 11% | 3% |
| Adj. Flow (vph) | 33 | 158 | 37 | 75 | 116 | 38 | 54 | 535 | 74 | 63 | 419 | 54 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 33 | 195 | 0 | 75 | 154 | 0 | 54 | 609 | 0 | 63 | 473 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 12 | | | 12 | | | 12 | | | 12 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | | 1 | 2 | | 1 | 2 | | 1 | 2 | |
| Detector Template | Left | Thru | | Left | Thru | | Left | Thru | | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | | 20 | 100 | | 20 | 100 | | 20 | 100 | |
| Trailing Detector (ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Detector 1 Position(ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Detector 1 Size(ft) | 20 | 6 | | 20 | 6 | | 20 | 6 | | 20 | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Queue (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Delay (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | 6 | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Turn Type | Perm | NA | | Perm | NA | | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | | 4 | | | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | | 8 | | | 2 | | | 6 | | |
| Detector Phase | 4 | 4 | | 8 | 8 | | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | | 10.0 | 10.0 | | 4.0 | 15.0 | | 4.0 | 15.0 | |
| Minimum Split (s) | 24.6 | 24.6 | | 24.6 | 24.6 | | 9.6 | 26.6 | | 9.6 | 26.6 | |
| Total Split (s) | 30.0 | 30.0 | | 30.0 | 30.0 | | 12.0 | 36.0 | | 14.0 | 38.0 | |
| Total Split (%) | 37.5% | 37.5% | | 37.5% | 37.5% | | 15.0% | 45.0% | | 17.5% | 47.5% | |
| Maximum Green (s) | 24.4 | 24.4 | | 24.4 | 24.4 | | 6.4 | 30.4 | | 8.4 | 32.4 | |
| Yellow Time (s) | 3.5 | 3.5 | | 3.5 | 3.5 | | 3.5 | 3.5 | | 3.5 | 3.5 | |
| All-Red Time (s) | 2.1 | 2.1 | | 2.1 | 2.1 | | 2.1 | 2.1 | | 2.1 | 2.1 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 5.6 | 5.6 | | 5.6 | 5.6 | | 5.6 | 5.6 | | 5.6 | 5.6 | |
| Lead/Lag | | | | | | | Lag | Lead | | Lag | Lead | |
| Lead-Lag Optimize? | | | | | | | Yes | Yes | | Yes | Yes | |
| Vehicle Extension (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | |
| Recall Mode | Min | Min | | Min | Min | | None | C-Max | | None | C-Max | |
| Walk Time (s) | 7.0 | 7.0 | | 7.0 | 7.0 | | | 7.0 | | | 7.0 | |
| Flash Dont Walk (s) | 12.0 | 12.0 | | 12.0 | 12.0 | | | 14.0 | | | 14.0 | |
| Pedestrian Calls (#/hr) | 0 | 0 | | 0 | 0 | | | 0 | | | 0 | |
| Act Effct Green (s) | 13.8 | 13.8 | | 13.8 | 13.8 | | 50.4 | 44.7 | | 53.9 | 48.1 | |
| Actuated g/C Ratio | 0.17 | 0.17 | | 0.17 | 0.17 | | 0.63 | 0.56 | | 0.67 | 0.60 | |
| v/c Ratio | 0.16 | 0.61 | | 0.48 | 0.47 | | 0.09 | 0.33 | | 0.11 | 0.24 | |
| Control Delay | 28.3 | 36.0 | | 39.3 | 29.6 | | 4.0 | 4.5 | | 5.9 | 9.1 | |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 28.3 | 36.0 | | 39.3 | 29.6 | | 4.0 | 4.5 | | 5.9 | 9.1 | |
| LOS | C | D | | D | C | | A | A | | A | A | |
| Approach Delay | | 34.9 | | | 32.8 | | | 4.5 | | | 8.7 | |
| Approach LOS | | C | | | C | | | A | | | A | |

## Intersection Summary

Area Type: Other
Cycle Length: 80
Actuated Cycle Length: 80
Offset: 16 (20%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 65
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.61
Intersection Signal Delay: 13.9 Intersection LOS: B
Intersection Capacity Utilization 56.7% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 4001: Schaefer Hwy & Lyndon St



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

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 5 | 178 | 2 | 1 | 166 | 4 | 1 | 0 | 6 | 5 | 0 | 6 |
| Future Vol, veh/h | 5 | 178 | 2 | 1 | 166 | 4 | 1 | 0 | 6 | 5 | 0 | 6 |
| Conflicting Peds, #/hr | 3 | 0 | 1 | 1 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 63 | 94 | 50 | 25 | 86 | 50 | 25 | 25 | 50 | 63 | 25 | 50 |
| Heavy Vehicles, % | 0 | 7 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 8 | 189 | 4 | 4 | 193 | 8 | 4 | 0 | 12 | 8 | 0 | 12 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 204 | 0 | 0 | 194 | 0 | 0 | 419 | 420 | 192 | 421 | 418 | 200 |
| Stage 1 | - | - | - | - | - | - | 208 | 208 | - | 208 | 208 | - |
| Stage 2 | - | - | - | - | - | - | 211 | 212 | - | 213 | 210 | - |
| Critical Hdwy | 4.1 | - | - | 4.1 | - | - | 7.1 | 6.5 | 6.2 | 7.1 | 6.5 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.1 | 5.5 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.1 | 5.5 | - |
| Follow-up Hdwy | 2.2 | - | - | 2.2 | - | - | 3.5 | 4 | 3.3 | 3.5 | 4 | 3.3 |
| Pot Cap-1 Maneuver | 1380 | - | - | 1391 | - | - | 548 | 528 | 855 | 546 | 529 | 846 |
| Stage 1 | - | - | - | - | - | - | 799 | 734 | - | 799 | 734 | - |
| Stage 2 | - | - | - | - | - | - | 796 | 731 | - | 794 | 732 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 1376 | - | - | 1390 | - | - | 535 | 521 | 854 | 533 | 522 | 844 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 535 | 521 | - | 533 | 522 | - |
| Stage 1 | - | - | - | - | - | - | 793 | 728 | - | 791 | 730 | - |
| Stage 2 | - | - | - | - | - | - | 782 | 727 | - | 777 | 726 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0.3 | 0.1 | 10 | 10.4 |
| HCM LOS | | | B | B |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 743 | 1376 | - | - | 1390 | - | - | 685 |
| HCM Lane V/C Ratio | 0.022 | 0.006 | - | - | 0.003 | - | - | 0.029 |
| HCM Control Delay (s) | 10 | 7.6 | 0 | - | 7.6 | 0 | - | 10.4 |
| HCM Lane LOS | B | A | A | - | A | A | - | B |
| HCM 95th %tile Q(veh) | 0.1 | 0 | - | - | 0 | - | - | 0.1 |

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

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 3 | 1 | 8 | 7 | 6 | 7 | 2 | 302 | 10 | 7 | 282 | 1 |
| Future Vol, veh/h | 3 | 1 | 8 | 7 | 6 | 7 | 2 | 302 | 10 | 7 | 282 | 1 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 1 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | 50 | - | - | 50 | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 60 | 60 | 60 | 60 | 60 | 60 | 100 | 85 | 63 | 60 | 87 | 60 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 3 | 0 |
| Mvmt Flow | 5 | 2 | 13 | 12 | 10 | 12 | 2 | 355 | 16 | 12 | 324 | 2 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 728 | 726 | 326 | 725 | 719 | 364 | 327 | 0 | 0 | 372 | 0 | 0 |
| Stage 1 | 350 | 350 | - | 368 | 368 | - | - | - | - | - | - | - |
| Stage 2 | 378 | 376 | - | 357 | 351 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.1 | 6.5 | 6.2 | 7.1 | 6.5 | 6.2 | 4.1 | - | - | 4.1 | - | - |
| Critical Hdwy Stg 1 | 6.1 | 5.5 | - | 6.1 | 5.5 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.1 | 5.5 | - | 6.1 | 5.5 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.5 | 4 | 3.3 | 3.5 | 4 | 3.3 | 2.2 | - | - | 2.2 | - | - |
| Pot Cap-1 Maneuver | 341 | 354 | 720 | 343 | 357 | 685 | 1244 | - | - | 1198 | - | - |
| Stage 1 | 671 | 636 | - | 656 | 625 | - | - | - | - | - | - | - |
| Stage 2 | 648 | 620 | - | 665 | 636 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | 325 | 349 | 719 | 332 | 352 | 684 | 1243 | - | - | 1197 | - | - |
| Mov Cap-2 Maneuver | 325 | 349 | - | 332 | 352 | - | - | - | - | - | - | - |
| Stage 1 | 669 | 629 | - | 654 | 623 | - | - | - | - | - | - | - |
| Stage 2 | 626 | 618 | - | 644 | 629 | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 12.2 | 14.5 | 0 | 0.3 |
| HCM LOS | B | B | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 1243 | - | - | 517 | 414 | 1197 | - | - |
| HCM Lane V/C Ratio | 0.002 | - | - | 0.039 | 0.081 | 0.01 | - | - |
| HCM Control Delay (s) | 7.9 | - | - | 12.2 | 14.5 | 8 | - | - |
| HCM Lane LOS | A | - | - | B | B | A | - | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 0.1 | 0.3 | 0 | - | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.1 |

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 3 | 3 | 544 | 3 | 2 | 516 |
| Future Vol, veh/h | 3 | 3 | 544 | 3 | 2 | 516 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | 0 | - | - | - | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 100 | 100 | 2 | 100 | 100 | 2 |
| Mvmt Flow | 3 | 3 | 591 | 3 | 2 | 561 |

| Major/Minor | Minor1 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 878 | 297 | 0 | 0 | 594 | 0 |
| Stage 1 | 593 | - | - | - | - | - |
| Stage 2 | 285 | - | - | - | - | - |
| Critical Hdwy | 8.8 | 8.9 | - | - | 6.1 | - |
| Critical Hdwy Stg 1 | 7.8 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 7.8 | - | - | - | - | - |
| Follow-up Hdwy | 4.5 | 4.3 | - | - | 3.2 | - |
| Pot Cap-1 Maneuver | 154 | 477 | - | - | 529 | - |
| Stage 1 | 313 | - | - | - | - | - |
| Stage 2 | 513 | - | - | - | - | - |
| Platoon blocked, % | | | - | - | | - |
| Mov Cap-1 Maneuver | 153 | 477 | - | - | 529 | - |
| Mov Cap-2 Maneuver | 153 | - | - | - | - | - |
| Stage 1 | 313 | - | - | - | - | - |
| Stage 2 | 510 | - | - | - | - | - |

| Approach | WB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 20.8 | 0 | 0 |
| HCM LOS | C | | |

| Minor Lane/Major Mvmt | NBT | NBR | WBLn1 | WBLn2 | SBL | SBT |
|---|---|---|---|---|---|---|
| Capacity (veh/h) | - | - | 153 | 477 | 529 | - |
| HCM Lane V/C Ratio | - | - | 0.021 | 0.007 | 0.004 | - |
| HCM Control Delay (s) | - | - | 29 | 12.6 | 11.8 | 0 |
| HCM Lane LOS | - | - | D | B | B | A |
| HCM 95th %tile Q(veh) | - | - | 0.1 | 0 | 0 | - |

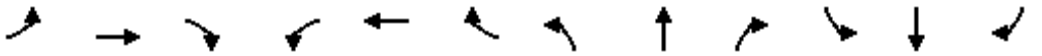
| Intersection | |
|---|---|
| Int Delay, s/veh | 1.4 |

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 66 | 20 | 541 | 6 | 1 | 452 |
| Future Vol, veh/h | 66 | 20 | 541 | 6 | 1 | 452 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | 150 | - | - | - | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 0 | 0 | 7 | 0 | 0 | 8 |
| Mvmt Flow | 72 | 22 | 588 | 7 | 1 | 491 |

| Major/Minor | Minor1 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 840 | 298 | 0 | 0 | 595 | 0 |
| Stage 1 | 592 | - | - | - | - | - |
| Stage 2 | 248 | - | - | - | - | - |
| Critical Hdwy | 6.8 | 6.9 | - | - | 4.1 | - |
| Critical Hdwy Stg 1 | 5.8 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.8 | - | - | - | - | - |
| Follow-up Hdwy | 3.5 | 3.3 | - | - | 2.2 | - |
| Pot Cap-1 Maneuver | 308 | 704 | - | - | 991 | - |
| Stage 1 | 521 | - | - | - | - | - |
| Stage 2 | 776 | - | - | - | - | - |
| Platoon blocked, % | | | - | - | | - |
| Mov Cap-1 Maneuver | 308 | 704 | - | - | 991 | - |
| Mov Cap-2 Maneuver | 308 | - | - | - | - | - |
| Stage 1 | 521 | - | - | - | - | - |
| Stage 2 | 775 | - | - | - | - | - |

| Approach | WB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 17.9 | 0 | 0 |
| HCM LOS | C | | |

| Minor Lane/Major Mvmt | NBT | NBR | WBLn1 | WBLn2 | SBL | SBT |
|---|---|---|---|---|---|---|
| Capacity (veh/h) | - | - | 308 | 704 | 991 | - |
| HCM Lane V/C Ratio | - | - | 0.233 | 0.031 | 0.001 | - |
| HCM Control Delay (s) | - | - | 20.2 | 10.3 | 8.6 | 0 |
| HCM Lane LOS | - | - | C | B | A | A |
| HCM 95th %tile Q(veh) | - | - | 0.9 | 0.1 | 0 | - |



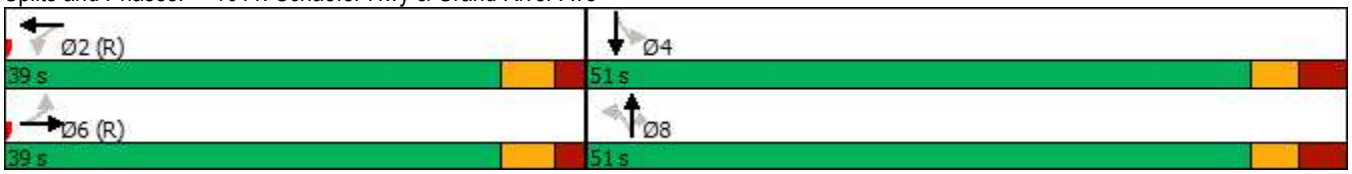
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 36 | 433 | 66 | 20 | 446 | 103 | 55 | 251 | 19 | 65 | 291 | 26 |
| Future Volume (vph) | 36 | 433 | 66 | 20 | 446 | 103 | 55 | 251 | 19 | 65 | 291 | 26 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 115 | | 0 | 95 | | 0 | 155 | | 0 | 80 | | 240 |
| Storage Lanes | 1 | | 0 | 0 | | 0 | 1 | | 1 | 1 | | 1 |
| Taper Length (ft) | 65 | | | 65 | | | 25 | | | 65 | | |
| Lane Util. Factor | 1.00 | 0.91 | 0.91 | 1.00 | 0.91 | 0.91 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 |
| Ped Bike Factor | | 1.00 | | 1.00 | | | | | 0.99 | 1.00 | | |
| Frt | | 0.976 | | | 0.969 | | | | 0.850 | | 0.987 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1805 | 5009 | 0 | 1805 | 4925 | 0 | 1805 | 1827 | 1615 | 1736 | 3499 | 0 |
| Flt Permitted | 0.410 | | | 0.421 | | | 0.494 | | | 0.341 | | |
| Satd. Flow (perm) | 779 | 5009 | 0 | 799 | 4925 | 0 | 939 | 1827 | 1593 | 622 | 3499 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 48 | | | 81 | | | | 38 | | 16 | |
| Link Speed (mph) | | 35 | | | 35 | | | 30 | | | 30 | |
| Link Distance (ft) | | 932 | | | 422 | | | 332 | | | 1209 | |
| Travel Time (s) | | 18.2 | | | 8.2 | | | 7.5 | | | 27.5 | |
| Confl. Peds. (#/hr) | | | 2 | 2 | | | | | 2 | 2 | | |
| Peak Hour Factor | 0.80 | 0.88 | 0.72 | 0.59 | 0.92 | 0.82 | 0.74 | 0.74 | 0.50 | 0.76 | 0.86 | 0.80 |
| Heavy Vehicles (%) | 0% | 1% | 0% | 0% | 0% | 10% | 0% | 4% | 0% | 4% | 2% | 0% |
| Adj. Flow (vph) | 45 | 492 | 92 | 34 | 485 | 126 | 74 | 339 | 38 | 86 | 338 | 33 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 45 | 584 | 0 | 34 | 611 | 0 | 74 | 339 | 38 | 86 | 371 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 12 | | | 12 | | | 12 | | | 12 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | Yes | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | | 1 | 2 | | 1 | 2 | 1 | 1 | 2 | |
| Detector Template | Left | Thru | | Left | Thru | | Left | Thru | Right | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | | 20 | 100 | | 20 | 100 | 20 | 20 | 100 | |
| Trailing Detector (ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | |
| Detector 1 Position(ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | |
| Detector 1 Size(ft) | 20 | 6 | | 20 | 6 | | 20 | 6 | 20 | 20 | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Detector 1 Queue (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Detector 1 Delay (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | 6 | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |

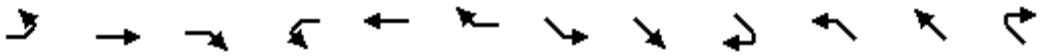
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Turn Type | Perm | NA | | Perm | NA | | Perm | NA | Perm | Perm | NA | |
| Protected Phases | | 6 | | | 2 | | | 8 | | | 4 | |
| Permitted Phases | 6 | | | 2 | | | 8 | | 8 | 4 | | |
| Detector Phase | 6 | 6 | | 2 | 2 | | 8 | 8 | 8 | 4 | 4 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | | 10.0 | 10.0 | | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | |
| Minimum Split (s) | 35.8 | 35.8 | | 35.8 | 35.8 | | 46.5 | 46.5 | 46.5 | 46.5 | 46.5 | |
| Total Split (s) | 39.0 | 39.0 | | 39.0 | 39.0 | | 51.0 | 51.0 | 51.0 | 51.0 | 51.0 | |
| Total Split (%) | 43.3% | 43.3% | | 43.3% | 43.3% | | 56.7% | 56.7% | 56.7% | 56.7% | 56.7% | |
| Maximum Green (s) | 33.2 | 33.2 | | 33.2 | 33.2 | | 44.5 | 44.5 | 44.5 | 44.5 | 44.5 | |
| Yellow Time (s) | 3.6 | 3.6 | | 3.6 | 3.6 | | 3.2 | 3.2 | 3.2 | 3.2 | 3.2 | |
| All-Red Time (s) | 2.2 | 2.2 | | 2.2 | 2.2 | | 3.3 | 3.3 | 3.3 | 3.3 | 3.3 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Total Lost Time (s) | 5.8 | 5.8 | | 5.8 | 5.8 | | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Vehicle Extension (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | |
| Recall Mode | C-Max | C-Max | | C-Max | C-Max | | None | None | None | None | None | |
| Walk Time (s) | 7.0 | 7.0 | | 7.0 | 7.0 | | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | |
| Flash Dont Walk (s) | 23.0 | 23.0 | | 23.0 | 23.0 | | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 | |
| Pedestrian Calls (#/hr) | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | |
| Act Effct Green (s) | 54.5 | 54.5 | | 54.5 | 54.5 | | 23.2 | 23.2 | 23.2 | 23.2 | 23.2 | |
| Actuated g/C Ratio | 0.61 | 0.61 | | 0.61 | 0.61 | | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 | |
| v/c Ratio | 0.10 | 0.19 | | 0.07 | 0.20 | | 0.31 | 0.72 | 0.09 | 0.54 | 0.41 | |
| Control Delay | 10.3 | 8.3 | | 8.2 | 6.3 | | 18.5 | 29.3 | 3.4 | 39.7 | 26.7 | |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | |
| Total Delay | 10.3 | 8.3 | | 8.2 | 6.3 | | 18.5 | 29.4 | 3.4 | 39.7 | 26.7 | |
| LOS | B | A | | A | A | | B | C | A | D | C | |
| Approach Delay | | 8.4 | | | 6.4 | | | 25.4 | | | 29.1 | |
| Approach LOS | | A | | | A | | | C | | | C | |

**Intersection Summary**

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 90
Offset: 60 (67%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green
Natural Cycle: 85
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.72
Intersection Signal Delay: 15.7 Intersection LOS: B
Intersection Capacity Utilization 65.9% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 1011: Schaefer Hwy & Grand River Ave



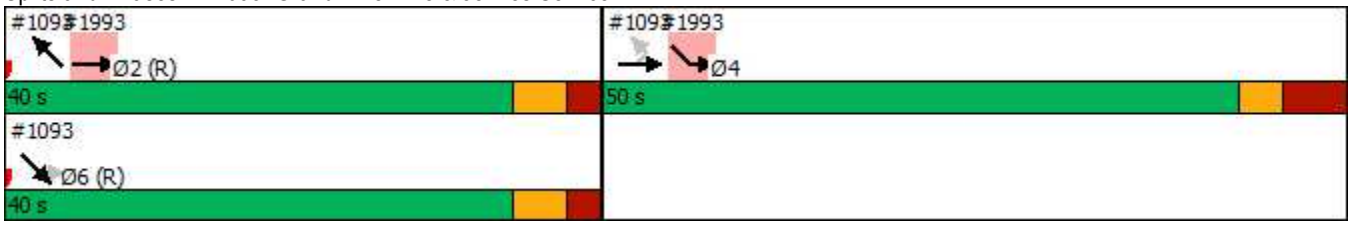


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | SEL | SET | SER | NWL | NWT | NWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 4 | 278 | 65 | 0 | 0 | 0 | 9 | 428 | 0 | 0 | 344 | 14 |
| Future Volume (vph) | 4 | 278 | 65 | 0 | 0 | 0 | 9 | 428 | 0 | 0 | 344 | 14 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Util. Factor | 0.86 | 0.86 | 0.86 | 1.00 | 1.00 | 1.00 | 0.91 | 0.91 | 1.00 | 1.00 | 0.91 | 0.91 |
| Ped Bike Factor | | | | | | | | 1.00 | | | 1.00 | |
| Frt | | 0.972 | | | | | | | | | 0.993 | |
| Flt Protected | | 0.999 | | | | | | 0.998 | | | | |
| Satd. Flow (prot) | 0 | 6296 | 0 | 0 | 0 | 0 | 0 | 5127 | 0 | 0 | 5034 | 0 |
| Flt Permitted | | 0.999 | | | | | | 0.917 | | | | |
| Satd. Flow (perm) | 0 | 6296 | 0 | 0 | 0 | 0 | 0 | 4711 | 0 | 0 | 5034 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 71 | | | | | | | | | 9 | |
| Link Speed (mph) | | 35 | | | 35 | | | 35 | | | 35 | |
| Link Distance (ft) | | 342 | | | 379 | | | 587 | | | 812 | |
| Travel Time (s) | | 6.7 | | | 7.4 | | | 11.4 | | | 15.8 | |
| Confl. Peds. (#/hr) | | | | | | | 3 | | | | | 3 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.56 | 0.96 | 0.92 | 0.92 | 0.71 | 0.65 |
| Heavy Vehicles (%) | 0% | 1% | 0% | 2% | 2% | 2% | 0% | 1% | 2% | 2% | 2% | 8% |
| Adj. Flow (vph) | 4 | 302 | 71 | 0 | 0 | 0 | 16 | 446 | 0 | 0 | 485 | 22 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 377 | 0 | 0 | 0 | 0 | 0 | 462 | 0 | 0 | 507 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 0 | | | 0 | | | 12 | | | 12 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | | | | | 1 | 2 | | | 2 | |
| Detector Template | Left | Thru | | | | | Left | Thru | | | Thru | |
| Leading Detector (ft) | 20 | 100 | | | | | 20 | 100 | | | 100 | |
| Trailing Detector (ft) | 0 | 0 | | | | | 0 | 0 | | | 0 | |
| Detector 1 Position(ft) | 0 | 0 | | | | | 0 | 0 | | | 0 | |
| Detector 1 Size(ft) | 20 | 6 | | | | | 20 | 6 | | | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | | | | | Cl+Ex | Cl+Ex | | | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | | | | | 0.0 | 0.0 | | | 0.0 | |
| Detector 1 Queue (s) | 0.0 | 0.0 | | | | | 0.0 | 0.0 | | | 0.0 | |
| Detector 1 Delay (s) | 0.0 | 0.0 | | | | | 0.0 | 0.0 | | | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | | | | 6 | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | | | | 0.0 | | | 0.0 | |
| Turn Type | Perm | NA | | | | | Perm | NA | | | NA | |
| Protected Phases | | 4 | | | | | | 6 | | | 2 | |
| Permitted Phases | 4 | | | | | | 6 | | | | | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | SEL | SET | SER | NWL | NWT | NWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detector Phase | 4 | 4 | | | | | 6 | 6 | | | 2 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | | | | | 10.0 | 10.0 | | | 10.0 | |
| Minimum Split (s) | 49.4 | 49.4 | | | | | 37.0 | 37.0 | | | 37.0 | |
| Total Split (s) | 50.0 | 50.0 | | | | | 40.0 | 40.0 | | | 40.0 | |
| Total Split (%) | 55.6% | 55.6% | | | | | 44.4% | 44.4% | | | 44.4% | |
| Maximum Green (s) | 42.6 | 42.6 | | | | | 34.0 | 34.0 | | | 34.0 | |
| Yellow Time (s) | 3.0 | 3.0 | | | | | 3.6 | 3.6 | | | 3.6 | |
| All-Red Time (s) | 4.4 | 4.4 | | | | | 2.4 | 2.4 | | | 2.4 | |
| Lost Time Adjust (s) | | 0.0 | | | | | | 0.0 | | | 0.0 | |
| Total Lost Time (s) | | 7.4 | | | | | | 6.0 | | | 6.0 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Vehicle Extension (s) | 3.0 | 3.0 | | | | | 3.0 | 3.0 | | | 3.0 | |
| Recall Mode | None | None | | | | | C-Max | C-Max | | | C-Max | |
| Walk Time (s) | 9.0 | 9.0 | | | | | 7.0 | 7.0 | | | 7.0 | |
| Flash Dont Walk (s) | 33.0 | 33.0 | | | | | 24.0 | 24.0 | | | 24.0 | |
| Pedestrian Calls (#/hr) | 0 | 0 | | | | | 0 | 0 | | | 0 | |
| Act Effct Green (s) | | 11.1 | | | | | | 65.5 | | | 65.5 | |
| Actuated g/C Ratio | | 0.12 | | | | | | 0.73 | | | 0.73 | |
| v/c Ratio | | 0.45 | | | | | | 0.13 | | | 0.14 | |
| Control Delay | | 32.8 | | | | | | 2.8 | | | 3.9 | |
| Queue Delay | | 0.0 | | | | | | 0.0 | | | 0.0 | |
| Total Delay | | 32.8 | | | | | | 2.8 | | | 3.9 | |
| LOS | | C | | | | | | A | | | A | |
| Approach Delay | | 32.8 | | | | | | 2.8 | | | 3.9 | |
| Approach LOS | | C | | | | | | A | | | A | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 90 | | | |
| Actuated Cycle Length: 90 | | | |
| Offset: 71 (79%), Referenced to phase 2:NWT and 6:SETL, Start of Green | | | |
| Natural Cycle: 90 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.45 | | | |
| Intersection Signal Delay: 11.6 | | Intersection LOS: B | |
| Intersection Capacity Utilization 45.3% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 1093: Grand River Ave & Jeffries Service Dr

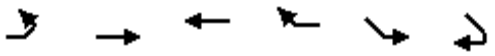


| Lane Group | WBL2 | WBL | WBT | WBR | SET | SER | SER2 | NWL | NWT |
|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | |
| Traffic Volume (vph) | 24 | 6 | 195 | 268 | 414 | 100 | 3 | 48 | 301 |
| Future Volume (vph) | 24 | 6 | 195 | 268 | 414 | 100 | 3 | 48 | 301 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | | 0 | | 0 | | 140 | | 260 | |
| Storage Lanes | | 0 | | 1 | | 1 | | 1 | |
| Taper Length (ft) | | 65 | | | | | | 65 | |
| Lane Util. Factor | 0.91 | 0.91 | 0.86 | 0.86 | 0.86 | 0.86 | 0.91 | 1.00 | 0.91 |
| Frt | | | 0.944 | 0.850 | 0.996 | 0.850 | | | |
| Flt Protected | | | 0.996 | | | | | 0.950 | |
| Satd. Flow (prot) | 0 | 0 | 4544 | 1362 | 4834 | 1376 | 0 | 1805 | 5085 |
| Flt Permitted | | | 0.996 | | | | | 0.950 | |
| Satd. Flow (perm) | 0 | 0 | 4544 | 1362 | 4834 | 1376 | 0 | 1805 | 5085 |
| Right Turn on Red | | | | Yes | | | Yes | | |
| Satd. Flow (RTOR) | | | 146 | 145 | | 126 | | | |
| Link Speed (mph) | | | 35 | | 35 | | | | 35 |
| Link Distance (ft) | | | 480 | | 422 | | | | 587 |
| Travel Time (s) | | | 9.4 | | 8.2 | | | | 11.4 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.94 | 0.83 | 0.75 | 0.58 | 0.73 |
| Heavy Vehicles (%) | 2% | 0% | 1% | 2% | 1% | 1% | 0% | 0% | 2% |
| Adj. Flow (vph) | 26 | 7 | 212 | 291 | 440 | 120 | 4 | 83 | 412 |
| Shared Lane Traffic (%) | | | | 50% | | 10% | | | |
| Lane Group Flow (vph) | 0 | 0 | 391 | 145 | 452 | 112 | 0 | 83 | 412 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Left | Right | Left | Right | Right | Left | Left |
| Median Width(ft) | | | 0 | | 12 | | | | 12 |
| Link Offset(ft) | | | 0 | | 0 | | | | 0 |
| Crosswalk Width(ft) | | | 16 | | 16 | | | | 16 |
| Two way Left Turn Lane | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | 15 | | 9 | | 9 | 9 | 15 | |
| Number of Detectors | 1 | 1 | 2 | 1 | 2 | 1 | | 1 | 2 |
| Detector Template | Left | Left | Thru | Right | Thru | Right | | Left | Thru |
| Leading Detector (ft) | 20 | 20 | 100 | 20 | 100 | 20 | | 20 | 100 |
| Trailing Detector (ft) | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 |
| Detector 1 Position(ft) | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 |
| Detector 1 Size(ft) | 20 | 20 | 6 | 20 | 6 | 20 | | 20 | 6 |
| Detector 1 Type | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex |
| Detector 1 Channel | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Detector 1 Queue (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Detector 1 Delay (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Detector 2 Position(ft) | | | 94 | | 94 | | | | 94 |
| Detector 2 Size(ft) | | | 6 | | 6 | | | | 6 |
| Detector 2 Type | | | Cl+Ex | | Cl+Ex | | | | Cl+Ex |
| Detector 2 Channel | | | | | | | | | |
| Detector 2 Extend (s) | | | 0.0 | | 0.0 | | | | 0.0 |
| Turn Type | Perm | Perm | NA | Perm | NA | Perm | | Prot | NA |
| Protected Phases | | | 4 | | 6 | | | 5 | 2 |

| Lane Group | WBL2 | WBL | WBT | WBR | SET | SER | SER2 | NWL | NWT |
|---|---|---|---|---|---|---|---|---|---|
| Permitted Phases | 4 | 4 | | 4 | | 6 | | | |
| Detector Phase | 4 | 4 | 4 | 4 | 6 | 6 | | 5 | 2 |
| Switch Phase | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | | 7.0 | 10.0 |
| Minimum Split (s) | 55.5 | 55.5 | 55.5 | 55.5 | 37.9 | 37.9 | | 12.9 | 37.9 |
| Total Split (s) | 35.0 | 35.0 | 35.0 | 35.0 | 38.0 | 38.0 | | 17.0 | 55.0 |
| Total Split (%) | 38.9% | 38.9% | 38.9% | 38.9% | 42.2% | 42.2% | | 18.9% | 61.1% |
| Maximum Green (s) | 27.5 | 27.5 | 27.5 | 27.5 | 32.1 | 32.1 | | 11.1 | 49.1 |
| Yellow Time (s) | 3.0 | 3.0 | 3.0 | 3.0 | 3.6 | 3.6 | | 3.6 | 3.6 |
| All-Red Time (s) | 4.5 | 4.5 | 4.5 | 4.5 | 2.3 | 2.3 | | 2.3 | 2.3 |
| Lost Time Adjust (s) | | | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Total Lost Time (s) | | | 7.5 | 7.5 | 5.9 | 5.9 | | 5.9 | 5.9 |
| Lead/Lag | | | | | Lag | Lag | | Lead | |
| Lead-Lag Optimize? | | | | | Yes | Yes | | Yes | |
| Vehicle Extension (s) | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | | 3.0 | 3.0 |
| Recall Mode | None | None | None | None | C-Max | C-Max | | None | C-Max |
| Walk Time (s) | 9.0 | 9.0 | 9.0 | 9.0 | 7.0 | 7.0 | | | 7.0 |
| Flash Dont Walk (s) | 39.0 | 39.0 | 39.0 | 39.0 | 25.0 | 25.0 | | | 25.0 |
| Pedestrian Calls (#/hr) | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 |
| Act Effct Green (s) | | | 11.9 | 11.9 | 51.7 | 51.7 | | 9.7 | 64.7 |
| Actuated g/C Ratio | | | 0.13 | 0.13 | 0.57 | 0.57 | | 0.11 | 0.72 |
| v/c Ratio | | | 0.54 | 0.48 | 0.16 | 0.13 | | 0.43 | 0.11 |
| Control Delay | | | 25.1 | 11.7 | 11.3 | 6.1 | | 40.3 | 0.9 |
| Queue Delay | | | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Total Delay | | | 25.1 | 11.7 | 11.3 | 6.1 | | 40.3 | 0.9 |
| LOS | | | C | B | B | A | | D | A |
| Approach Delay | | | 21.5 | | 10.3 | | | | 7.5 |
| Approach LOS | | | C | | B | | | | A |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 90 | | | |
| Actuated Cycle Length: 90 | | | |
| Offset: 86 (96%), Referenced to phase 2:NWT and 6:SET, Start of Green | | | |
| Natural Cycle: 110 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.54 | | | |
| Intersection Signal Delay: 13.2 | | Intersection LOS: B | |
| Intersection Capacity Utilization 39.0% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 1193: Left Turn Bridge & Grand River Ave & I-96 Service Dr

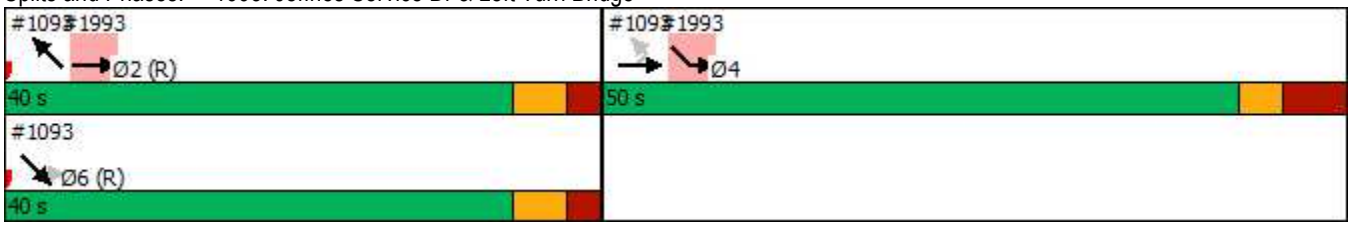


| Lane Group | EBL | EBT | WBT | WBR | SEL | SER | Ø6 |
|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | |
| Traffic Volume (vph) | 0 | 237 | 0 | 0 | 106 | 0 | |
| Future Volume (vph) | 0 | 237 | 0 | 0 | 106 | 0 | |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | |
| Lane Util. Factor | 1.00 | 0.91 | 1.00 | 1.00 | 0.97 | 1.00 | |
| Frt | | | | | | | |
| Flt Protected | | | | | 0.950 | | |
| Satd. Flow (prot) | 0 | 5085 | 0 | 0 | 3433 | 0 | |
| Flt Permitted | | | | | 0.950 | | |
| Satd. Flow (perm) | 0 | 5085 | 0 | 0 | 3433 | 0 | |
| Right Turn on Red | | | | Yes | Yes | Yes | |
| Satd. Flow (RTOR) | | | | | 878 | | |
| Link Speed (mph) | | 35 | 35 | | 30 | | |
| Link Distance (ft) | | 191 | 342 | | 422 | | |
| Travel Time (s) | | 3.7 | 6.7 | | 9.6 | | |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | |
| Adj. Flow (vph) | 0 | 258 | 0 | 0 | 115 | 0 | |
| Shared Lane Traffic (%) | | | | | | | |
| Lane Group Flow (vph) | 0 | 258 | 0 | 0 | 115 | 0 | |
| Enter Blocked Intersection | No | No | No | No | No | No | |
| Lane Alignment | Left | Left | Left | Right | Left | Right | |
| Median Width(ft) | | 0 | 0 | | 24 | | |
| Link Offset(ft) | | 0 | 0 | | 0 | | |
| Crosswalk Width(ft) | | 16 | 16 | | 16 | | |
| Two way Left Turn Lane | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | |
| Turning Speed (mph) | 15 | | | 9 | 15 | 9 | |
| Number of Detectors | | 2 | | | 1 | | |
| Detector Template | | Thru | | | Left | | |
| Leading Detector (ft) | | 100 | | | 20 | | |
| Trailing Detector (ft) | | 0 | | | 0 | | |
| Detector 1 Position(ft) | | 0 | | | 0 | | |
| Detector 1 Size(ft) | | 6 | | | 20 | | |
| Detector 1 Type | | Cl+Ex | | | Cl+Ex | | |
| Detector 1 Channel | | | | | | | |
| Detector 1 Extend (s) | | 0.0 | | | 0.0 | | |
| Detector 1 Queue (s) | | 0.0 | | | 0.0 | | |
| Detector 1 Delay (s) | | 0.0 | | | 0.0 | | |
| Detector 2 Position(ft) | | 94 | | | | | |
| Detector 2 Size(ft) | | 6 | | | | | |
| Detector 2 Type | | Cl+Ex | | | | | |
| Detector 2 Channel | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | | | |
| Turn Type | | NA | | | Prot | | |
| Protected Phases | | 2 | | | 4 | | 6 |
| Permitted Phases | | | | | | | |
| Detector Phase | | 2 | | | 4 | | |
| Switch Phase | | | | | | | |
| Minimum Initial (s) | | 10.0 | | | 10.0 | | 10.0 |

| Lane Group | EBL | EBT | WBT | WBR | SEL | SER | Ø6 |
|---|---|---|---|---|---|---|---|
| Minimum Split (s) | | 37.0 | | | 49.4 | | 37.0 |
| Total Split (s) | | 40.0 | | | 50.0 | | 40.0 |
| Total Split (%) | | 44.4% | | | 55.6% | | 44% |
| Maximum Green (s) | | 34.0 | | | 42.6 | | 34.0 |
| Yellow Time (s) | | 3.6 | | | 3.0 | | 3.6 |
| All-Red Time (s) | | 2.4 | | | 4.4 | | 2.4 |
| Lost Time Adjust (s) | | 0.0 | | | 0.0 | | |
| Total Lost Time (s) | | 6.0 | | | 7.4 | | |
| Lead/Lag | | | | | | | |
| Lead-Lag Optimize? | | | | | | | |
| Vehicle Extension (s) | | 3.0 | | | 3.0 | | 3.0 |
| Recall Mode | | C-Max | | | None | | C-Max |
| Walk Time (s) | | 7.0 | | | 9.0 | | 7.0 |
| Flash Dont Walk (s) | | 24.0 | | | 33.0 | | 24.0 |
| Pedestrian Calls (#/hr) | | 0 | | | 0 | | 0 |
| Act Effct Green (s) | | 65.5 | | | 11.1 | | |
| Actuated g/C Ratio | | 0.73 | | | 0.12 | | |
| v/c Ratio | | 0.07 | | | 0.10 | | |
| Control Delay | | 2.6 | | | 0.5 | | |
| Queue Delay | | 0.0 | | | 0.0 | | |
| Total Delay | | 2.6 | | | 0.5 | | |
| LOS | | A | | | A | | |
| Approach Delay | | 2.6 | | | 0.5 | | |
| Approach LOS | | A | | | A | | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 90 | | | |
| Actuated Cycle Length: 90 | | | |
| Offset: 71 (79%), Referenced to phase 2:NWT and 6:SETL, Start of Green | | | |
| Natural Cycle: 90 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.45 | | | |
| Intersection Signal Delay: 2.0 | | Intersection LOS: A | |
| Intersection Capacity Utilization 27.8% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 1993: Jeffries Service Dr & Left Turn Bridge



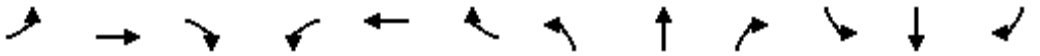
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 23 | 89 | 4 | 24 | 94 | 34 | 12 | 332 | 45 | 39 | 353 | 30 |
| Future Volume (vph) | 23 | 89 | 4 | 24 | 94 | 34 | 12 | 332 | 45 | 39 | 353 | 30 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 60 | | 0 | 60 | | 0 | 80 | | 250 | 80 | | 0 |
| Storage Lanes | 1 | | 0 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 65 | | | 65 | | | 65 | | | 65 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped Bike Factor | 1.00 | 1.00 | | 0.99 | 0.99 | | 1.00 | 1.00 | | 0.99 | 1.00 | |
| Frt | | 0.988 | | | 0.963 | | | 0.978 | | | 0.984 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1228 | 1839 | 0 | 1805 | 1735 | 0 | 1805 | 1745 | 0 | 1671 | 1788 | 0 |
| Flt Permitted | 0.658 | | | 0.660 | | | 0.382 | | | 0.388 | | |
| Satd. Flow (perm) | 849 | 1839 | 0 | 1243 | 1735 | 0 | 725 | 1745 | 0 | 679 | 1788 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 5 | | | 20 | | | 13 | | | 9 | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 699 | | | 1470 | | | 1209 | | | 215 | |
| Travel Time (s) | | 15.9 | | | 33.4 | | | 27.5 | | | 4.9 | |
| Confl. Peds. (#/hr) | 1 | | 6 | 6 | | 1 | 1 | | 6 | 6 | | 1 |
| Peak Hour Factor | 0.53 | 0.63 | 0.33 | 0.72 | 0.80 | 0.89 | 0.75 | 0.91 | 0.72 | 0.88 | 0.90 | 0.63 |
| Heavy Vehicles (%) | 47% | 2% | 0% | 0% | 1% | 17% | 0% | 7% | 0% | 8% | 2% | 23% |
| Adj. Flow (vph) | 43 | 141 | 12 | 33 | 118 | 38 | 16 | 365 | 63 | 44 | 392 | 48 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 43 | 153 | 0 | 33 | 156 | 0 | 16 | 428 | 0 | 44 | 440 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 12 | | | 12 | | | 12 | | | 12 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | Yes | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | | 1 | 2 | | 1 | 2 | | 1 | 2 | |
| Detector Template | Left | Thru | | Left | Thru | | Left | Thru | | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | | 20 | 100 | | 20 | 100 | | 20 | 100 | |
| Trailing Detector (ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Detector 1 Position(ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Detector 1 Size(ft) | 20 | 6 | | 20 | 6 | | 20 | 6 | | 20 | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Queue (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Delay (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | 6 | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Turn Type | Perm | NA | | Perm | NA | | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | | 8 | | | 4 | | 1 | 6 | | 5 | 2 | |
| Permitted Phases | 8 | | | 4 | | | 6 | | | 2 | | |
| Detector Phase | 8 | 8 | | 4 | 4 | | 1 | 6 | | 5 | 2 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 6.0 | 6.0 | | 6.0 | 6.0 | | 5.0 | 9.0 | | 5.0 | 9.0 | |
| Minimum Split (s) | 28.8 | 28.8 | | 28.8 | 28.8 | | 10.6 | 26.6 | | 10.6 | 26.6 | |
| Total Split (s) | 29.1 | 29.1 | | 29.1 | 29.1 | | 10.8 | 39.9 | | 11.0 | 40.1 | |
| Total Split (%) | 36.4% | 36.4% | | 36.4% | 36.4% | | 13.5% | 49.9% | | 13.8% | 50.1% | |
| Maximum Green (s) | 22.3 | 22.3 | | 22.3 | 22.3 | | 5.2 | 33.3 | | 5.4 | 33.5 | |
| Yellow Time (s) | 3.8 | 3.8 | | 3.8 | 3.8 | | 3.5 | 3.6 | | 3.5 | 3.6 | |
| All-Red Time (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 2.1 | 3.0 | | 2.1 | 3.0 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 6.8 | 6.8 | | 6.8 | 6.8 | | 5.6 | 6.6 | | 5.6 | 6.6 | |
| Lead/Lag | | | | | | | Lead | Lag | | Lead | Lag | |
| Lead-Lag Optimize? | | | | | | | Yes | Yes | | Yes | Yes | |
| Vehicle Extension (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | |
| Recall Mode | Max | Max | | Max | Max | | Max | C-Max | | Max | C-Max | |
| Walk Time (s) | 7.0 | 7.0 | | 7.0 | 7.0 | | | 7.0 | | | 7.0 | |
| Flash Dont Walk (s) | 15.0 | 15.0 | | 15.0 | 15.0 | | | 13.0 | | | 13.0 | |
| Pedestrian Calls (#/hr) | 0 | 0 | | 0 | 0 | | | 0 | | | 0 | |
| Act Effct Green (s) | 22.3 | 22.3 | | 22.3 | 22.3 | | 39.5 | 33.3 | | 39.9 | 33.5 | |
| Actuated g/C Ratio | 0.28 | 0.28 | | 0.28 | 0.28 | | 0.49 | 0.42 | | 0.50 | 0.42 | |
| v/c Ratio | 0.18 | 0.30 | | 0.10 | 0.31 | | 0.04 | 0.58 | | 0.11 | 0.58 | |
| Control Delay | 24.4 | 23.8 | | 22.4 | 21.9 | | 8.1 | 21.4 | | 8.6 | 21.4 | |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 24.4 | 23.8 | | 22.4 | 21.9 | | 8.1 | 21.4 | | 8.6 | 21.4 | |
| LOS | C | C | | C | C | | A | C | | A | C | |
| Approach Delay | | 24.0 | | | 21.9 | | | 20.9 | | | 20.2 | |
| Approach LOS | | C | | | C | | | C | | | C | |

**Intersection Summary**

Area Type: Other
Cycle Length: 80
Actuated Cycle Length: 80
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
Natural Cycle: 70
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.58
Intersection Signal Delay: 21.3 Intersection LOS: C
Intersection Capacity Utilization 59.5% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 2609: Schaefer Hwy & Schoolcraft Rd



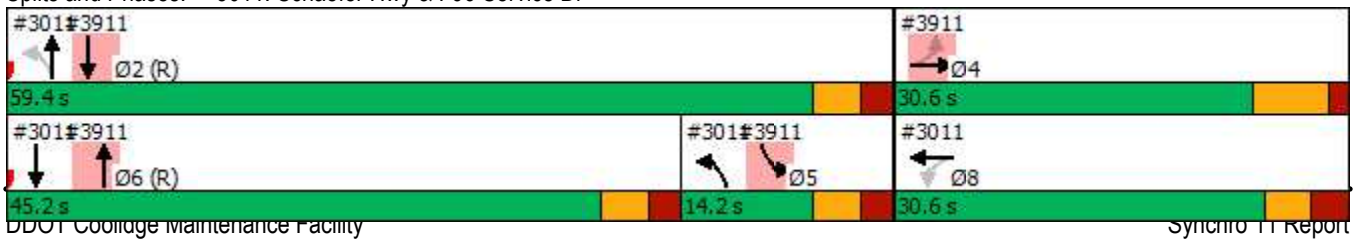
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 0 | 0 | 0 | 98 | 145 | 3 | 148 | 321 | 0 | 0 | 210 | 166 |
| Future Volume (vph) | 0 | 0 | 0 | 98 | 145 | 3 | 148 | 321 | 0 | 0 | 210 | 166 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 0 | | 0 | 0 | | 0 | 90 | | 0 | 0 | | 0 |
| Storage Lanes | 0 | | 0 | 1 | | 0 | 1 | | 0 | 0 | | 0 |
| Taper Length (ft) | 65 | | | 65 | | | 65 | | | 65 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 0.95 |
| Ped Bike Factor | | | | | | | 1.00 | | | | 0.99 | |
| Frt | | | | | 0.997 | | | | | | 0.932 | |
| Flt Protected | | | | 0.950 | | | 0.950 | | | | | |
| Satd. Flow (prot) | 0 | 0 | 0 | 1787 | 3564 | 0 | 1752 | 3471 | 0 | 0 | 3283 | 0 |
| Flt Permitted | | | | 0.950 | | | 0.486 | | | | | |
| Satd. Flow (perm) | 0 | 0 | 0 | 1787 | 3564 | 0 | 894 | 3471 | 0 | 0 | 3283 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | | | 2 | | | | | | 205 | |
| Link Speed (mph) | | 35 | | | 35 | | | 30 | | | 30 | |
| Link Distance (ft) | | 298 | | | 375 | | | 384 | | | 332 | |
| Travel Time (s) | | 5.8 | | | 7.3 | | | 8.7 | | | 7.5 | |
| Confl. Peds. (#/hr) | | | | | | | 4 | | | | | 4 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.87 | 0.76 | 0.92 | 0.92 | 0.84 | 0.81 |
| Heavy Vehicles (%) | 2% | 2% | 2% | 1% | 1% | 0% | 3% | 4% | 2% | 2% | 3% | 0% |
| Adj. Flow (vph) | 0 | 0 | 0 | 107 | 158 | 3 | 170 | 422 | 0 | 0 | 250 | 205 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 0 | 0 | 107 | 161 | 0 | 170 | 422 | 0 | 0 | 455 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 12 | | | 12 | | | 12 | | | 12 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | | | | 1 | 2 | | 1 | 2 | | | 2 | |
| Detector Template | | | | Left | Thru | | Left | Thru | | | Thru | |
| Leading Detector (ft) | | | | 20 | 100 | | 20 | 100 | | | 100 | |
| Trailing Detector (ft) | | | | 0 | 0 | | 0 | 0 | | | 0 | |
| Detector 1 Position(ft) | | | | 0 | 0 | | 0 | 0 | | | 0 | |
| Detector 1 Size(ft) | | | | 20 | 6 | | 20 | 6 | | | 6 | |
| Detector 1 Type | | | | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | | | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | | | | 0.0 | 0.0 | | 0.0 | 0.0 | | | 0.0 | |
| Detector 1 Queue (s) | | | | 0.0 | 0.0 | | 0.0 | 0.0 | | | 0.0 | |
| Detector 1 Delay (s) | | | | 0.0 | 0.0 | | 0.0 | 0.0 | | | 0.0 | |
| Detector 2 Position(ft) | | | | | 94 | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | | | | 6 | | | 6 | | | 6 | |
| Detector 2 Type | | | | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | | | | 0.0 | | | 0.0 | | | 0.0 | |

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

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Turn Type | | | | Perm | NA | | pm+pt | NA | | | NA | |
| Protected Phases | | | | | 8 | | 5 | 2 | | | 6 | |
| Permitted Phases | | | | 8 | | | 2 | | | | | |
| Detector Phase | | | | 8 | 8 | | 5 | 2 | | | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | | | | 10.0 | 10.0 | | 7.0 | 10.0 | | | 10.0 | |
| Minimum Split (s) | | | | 28.7 | 28.7 | | 12.4 | 23.4 | | | 23.4 | |
| Total Split (s) | | | | 30.6 | 30.6 | | 14.2 | 59.4 | | | 45.2 | |
| Total Split (%) | | | | 34.0% | 34.0% | | 15.8% | 66.0% | | | 50.2% | |
| Maximum Green (s) | | | | 24.9 | 24.9 | | 8.8 | 54.0 | | | 39.8 | |
| Yellow Time (s) | | | | 3.0 | 3.0 | | 3.2 | 3.2 | | | 3.2 | |
| All-Red Time (s) | | | | 2.7 | 2.7 | | 2.2 | 2.2 | | | 2.2 | |
| Lost Time Adjust (s) | | | | 0.0 | 0.0 | | 0.0 | 0.0 | | | 0.0 | |
| Total Lost Time (s) | | | | 5.7 | 5.7 | | 5.4 | 5.4 | | | 5.4 | |
| Lead/Lag | | | | | | | Lag | | | | Lead | |
| Lead-Lag Optimize? | | | | | | | Yes | | | | Yes | |
| Vehicle Extension (s) | | | | 3.0 | 3.0 | | 3.0 | 3.0 | | | 3.0 | |
| Recall Mode | | | | None | None | | None | C-Max | | | C-Max | |
| Walk Time (s) | | | | 7.0 | 7.0 | | | 7.0 | | | 7.0 | |
| Flash Dont Walk (s) | | | | 16.0 | 16.0 | | | 11.0 | | | 11.0 | |
| Pedestrian Calls (#/hr) | | | | 0 | 0 | | | 0 | | | 0 | |
| Act Effct Green (s) | | | | 12.5 | 12.5 | | 66.4 | 66.4 | | | 52.2 | |
| Actuated g/C Ratio | | | | 0.14 | 0.14 | | 0.74 | 0.74 | | | 0.58 | |
| v/c Ratio | | | | 0.43 | 0.32 | | 0.23 | 0.16 | | | 0.23 | |
| Control Delay | | | | 21.7 | 17.3 | | 2.7 | 1.9 | | | 2.6 | |
| Queue Delay | | | | 0.0 | 0.0 | | 0.0 | 0.0 | | | 0.0 | |
| Total Delay | | | | 21.7 | 17.3 | | 2.7 | 1.9 | | | 2.6 | |
| LOS | | | | C | B | | A | A | | | A | |
| Approach Delay | | | | | 19.0 | | | 2.2 | | | 2.6 | |
| Approach LOS | | | | | B | | | A | | | A | |

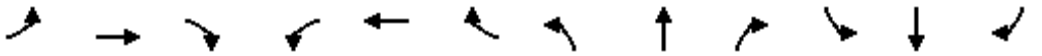
| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 90 | | | |
| Actuated Cycle Length: 90 | | | |
| Offset: 87 (97%), Referenced to phase 2:NBTL and 6:SBT, Start of Green | | | |
| Natural Cycle: 75 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.58 | | | |
| Intersection Signal Delay: 5.7 | | Intersection LOS: A | |
| Intersection Capacity Utilization 50.8% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 3011: Schaefer Hwy & I-96 Service Dr



| Lane Group | Ø4 |
|---|---|
| Turn Type | |
| Protected Phases | 4 |
| Permitted Phases | |
| Detector Phase | |
| Switch Phase | |
| Minimum Initial (s) | 10.0 |
| Minimum Split (s) | 30.5 |
| Total Split (s) | 30.6 |
| Total Split (%) | 34% |
| Maximum Green (s) | 24.1 |
| Yellow Time (s) | 5.0 |
| All-Red Time (s) | 1.5 |
| Lost Time Adjust (s) | |
| Total Lost Time (s) | |
| Lead/Lag | |
| Lead-Lag Optimize? | |
| Vehicle Extension (s) | 3.0 |
| Recall Mode | None |
| Walk Time (s) | 7.0 |
| Flash Dont Walk (s) | 17.0 |
| Pedestrian Calls (#/hr) | 0 |
| Act Effct Green (s) | |
| Actuated g/C Ratio | |
| v/c Ratio | |
| Control Delay | |
| Queue Delay | |
| Total Delay | |
| LOS | |
| Approach Delay | |
| Approach LOS | |

| Intersection Summary |
|---|



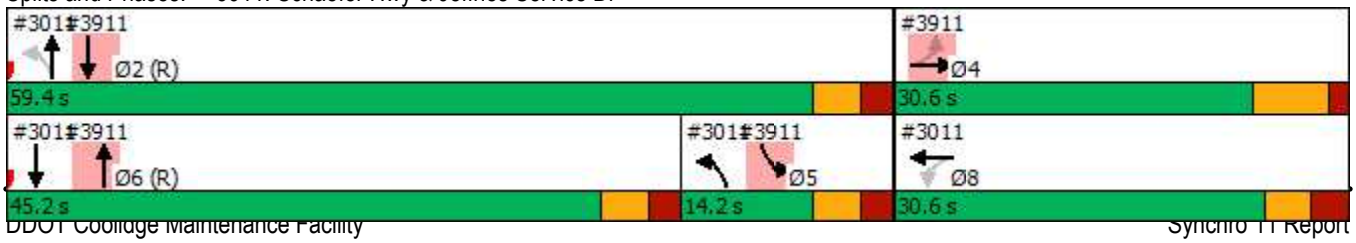
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 145 | 107 | 155 | 0 | 0 | 0 | 0 | 323 | 81 | 49 | 259 | 0 |
| Future Volume (vph) | 145 | 107 | 155 | 0 | 0 | 0 | 0 | 323 | 81 | 49 | 259 | 0 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 0 | | 0 | 0 | | 0 | 0 | | 0 | 90 | | 0 |
| Storage Lanes | 0 | | 0 | 0 | | 0 | 0 | | 0 | 1 | | 0 |
| Taper Length (ft) | 65 | | | 65 | | | 65 | | | 65 | | |
| Lane Util. Factor | 0.91 | 0.91 | 0.91 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 1.00 |
| Ped Bike Factor | | | | | | | | 1.00 | | 1.00 | | |
| Frt | | 0.943 | | | | | | 0.972 | | | | |
| Flt Protected | | 0.982 | | | | | | | | 0.950 | | |
| Satd. Flow (prot) | 0 | 4731 | 0 | 0 | 0 | 0 | 0 | 1766 | 0 | 1770 | 3505 | 0 |
| Flt Permitted | | 0.982 | | | | | | | | 0.950 | | |
| Satd. Flow (perm) | 0 | 4731 | 0 | 0 | 0 | 0 | 0 | 1766 | 0 | 1765 | 3505 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 168 | | | | | | 19 | | | | |
| Link Speed (mph) | | 35 | | | 35 | | | 30 | | | 30 | |
| Link Distance (ft) | | 417 | | | 354 | | | 621 | | | 384 | |
| Travel Time (s) | | 8.1 | | | 6.9 | | | 14.1 | | | 8.7 | |
| Confl. Peds. (#/hr) | | | | | | | | | 4 | 4 | | |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.75 | 0.72 | 0.81 | 0.79 | 0.92 |
| Heavy Vehicles (%) | 1% | 3% | 1% | 2% | 2% | 2% | 2% | 5% | 1% | 2% | 3% | 2% |
| Adj. Flow (vph) | 158 | 116 | 168 | 0 | 0 | 0 | 0 | 431 | 113 | 60 | 328 | 0 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 442 | 0 | 0 | 0 | 0 | 0 | 544 | 0 | 60 | 328 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 0 | | | 0 | | | 12 | | | 12 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | Yes | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | | | | | | 2 | | 1 | 2 | |
| Detector Template | Left | Thru | | | | | | Thru | | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | | | | | | 100 | | 20 | 100 | |
| Trailing Detector (ft) | 0 | 0 | | | | | | 0 | | 0 | 0 | |
| Detector 1 Position(ft) | 0 | 0 | | | | | | 0 | | 0 | 0 | |
| Detector 1 Size(ft) | 20 | 6 | | | | | | 6 | | 20 | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | | | | | | Cl+Ex | | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | | | | | | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Queue (s) | 0.0 | 0.0 | | | | | | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Delay (s) | 0.0 | 0.0 | | | | | | 0.0 | | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | | | | 6 | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | | | | 0.0 | | | 0.0 | |

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

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Turn Type | Perm | NA | | | | | | NA | | Prot | NA | |
| Protected Phases | | 4 | | | | | | 6 | | 5 | 2 | |
| Permitted Phases | 4 | | | | | | | | | | | |
| Detector Phase | 4 | 4 | | | | | | 6 | | 5 | 2 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | | | | | | 10.0 | | 7.0 | 10.0 | |
| Minimum Split (s) | 30.5 | 30.5 | | | | | | 23.4 | | 12.4 | 23.4 | |
| Total Split (s) | 30.6 | 30.6 | | | | | | 45.2 | | 14.2 | 59.4 | |
| Total Split (%) | 34.0% | 34.0% | | | | | | 50.2% | | 15.8% | 66.0% | |
| Maximum Green (s) | 24.1 | 24.1 | | | | | | 39.8 | | 8.8 | 54.0 | |
| Yellow Time (s) | 5.0 | 5.0 | | | | | | 3.2 | | 3.2 | 3.2 | |
| All-Red Time (s) | 1.5 | 1.5 | | | | | | 2.2 | | 2.2 | 2.2 | |
| Lost Time Adjust (s) | | 0.0 | | | | | | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | | 6.5 | | | | | | 5.4 | | 5.4 | 5.4 | |
| Lead/Lag | | | | | | | | Lead | | Lag | | |
| Lead-Lag Optimize? | | | | | | | | Yes | | Yes | | |
| Vehicle Extension (s) | 3.0 | 3.0 | | | | | | 3.0 | | 3.0 | 3.0 | |
| Recall Mode | None | None | | | | | | C-Max | | None | C-Max | |
| Walk Time (s) | 7.0 | 7.0 | | | | | | 7.0 | | | 7.0 | |
| Flash Dont Walk (s) | 17.0 | 17.0 | | | | | | 11.0 | | | 11.0 | |
| Pedestrian Calls (#/hr) | 0 | 0 | | | | | | 0 | | | 0 | |
| Act Effct Green (s) | | 11.7 | | | | | | 52.2 | | 8.8 | 66.4 | |
| Actuated g/C Ratio | | 0.13 | | | | | | 0.58 | | 0.10 | 0.74 | |
| v/c Ratio | | 0.58 | | | | | | 0.53 | | 0.35 | 0.13 | |
| Control Delay | | 25.5 | | | | | | 13.7 | | 43.5 | 3.6 | |
| Queue Delay | | 0.0 | | | | | | 0.0 | | 0.0 | 0.0 | |
| Total Delay | | 25.5 | | | | | | 13.7 | | 43.5 | 3.6 | |
| LOS | | C | | | | | | B | | D | A | |
| Approach Delay | | 25.5 | | | | | | 13.7 | | | 9.8 | |
| Approach LOS | | C | | | | | | B | | | A | |

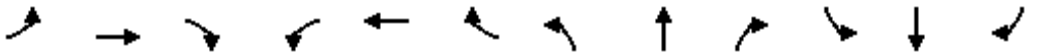
| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 90 | | | |
| Actuated Cycle Length: 90 | | | |
| Offset: 87 (97%), Referenced to phase 2:NBTL and 6:SBT, Start of Green | | | |
| Natural Cycle: 75 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.58 | | | |
| Intersection Signal Delay: 16.4 | | Intersection LOS: B | |
| Intersection Capacity Utilization 50.8% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 3911: Schaefer Hwy & Jeffries Service Dr



| Lane Group | Ø8 |
|---|---|
| Turn Type | |
| Protected Phases | 8 |
| Permitted Phases | |
| Detector Phase | |
| Switch Phase | |
| Minimum Initial (s) | 10.0 |
| Minimum Split (s) | 28.7 |
| Total Split (s) | 30.6 |
| Total Split (%) | 34% |
| Maximum Green (s) | 24.9 |
| Yellow Time (s) | 3.0 |
| All-Red Time (s) | 2.7 |
| Lost Time Adjust (s) | |
| Total Lost Time (s) | |
| Lead/Lag | |
| Lead-Lag Optimize? | |
| Vehicle Extension (s) | 3.0 |
| Recall Mode | None |
| Walk Time (s) | 7.0 |
| Flash Dont Walk (s) | 16.0 |
| Pedestrian Calls (#/hr) | 0 |
| Act Effct Green (s) | |
| Actuated g/C Ratio | |
| v/c Ratio | |
| Control Delay | |
| Queue Delay | |
| Total Delay | |
| LOS | |
| Approach Delay | |
| Approach LOS | |

| Intersection Summary |
|---|

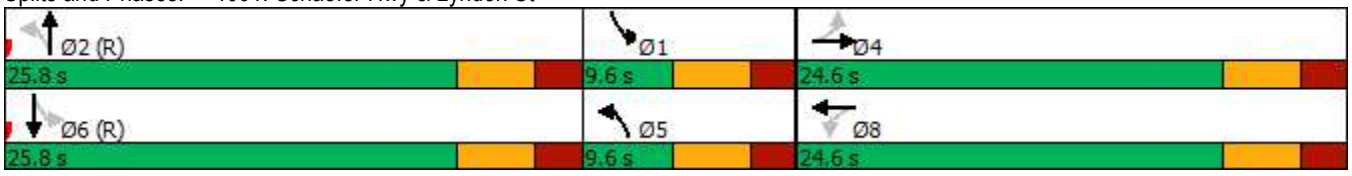


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 30 | 84 | 27 | 46 | 106 | 24 | 32 | 316 | 45 | 32 | 312 | 26 |
| Future Volume (vph) | 30 | 84 | 27 | 46 | 106 | 24 | 32 | 316 | 45 | 32 | 312 | 26 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 80 | | 0 | 80 | | 0 | 80 | | 0 | 80 | | 0 |
| Storage Lanes | 1 | | 0 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 65 | | | 65 | | | 65 | | | 65 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 |
| Ped Bike Factor | 1.00 | 0.99 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Frt | | 0.956 | | | 0.975 | | | 0.979 | | | 0.981 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1805 | 1807 | 0 | 1805 | 1848 | 0 | 1805 | 3365 | 0 | 1752 | 3245 | 0 |
| Flt Permitted | 0.662 | | | 0.674 | | | 0.520 | | | 0.514 | | |
| Satd. Flow (perm) | 1256 | 1807 | 0 | 1275 | 1848 | 0 | 983 | 3365 | 0 | 947 | 3245 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 37 | | | 18 | | | 34 | | | 29 | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 648 | | | 545 | | | 1423 | | | 685 | |
| Travel Time (s) | | 14.7 | | | 12.4 | | | 32.3 | | | 15.6 | |
| Confl. Peds. (#/hr) | 2 | | 6 | 6 | | 2 | 6 | | 1 | 1 | | 6 |
| Peak Hour Factor | 0.73 | 0.92 | 0.72 | 0.73 | 0.85 | 0.96 | 0.68 | 0.91 | 0.77 | 0.60 | 0.91 | 0.52 |
| Heavy Vehicles (%) | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 5% | 3% | 3% | 10% | 0% |
| Adj. Flow (vph) | 41 | 91 | 38 | 63 | 125 | 25 | 47 | 347 | 58 | 53 | 343 | 50 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 41 | 129 | 0 | 63 | 150 | 0 | 47 | 405 | 0 | 53 | 393 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 12 | | | 12 | | | 12 | | | 12 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | | 1 | 2 | | 1 | 2 | | 1 | 2 | |
| Detector Template | Left | Thru | | Left | Thru | | Left | Thru | | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | | 20 | 100 | | 20 | 100 | | 20 | 100 | |
| Trailing Detector (ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Detector 1 Position(ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Detector 1 Size(ft) | 20 | 6 | | 20 | 6 | | 20 | 6 | | 20 | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Queue (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Delay (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | 6 | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Turn Type | Perm | NA | | Perm | NA | | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | | 4 | | | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | | 8 | | | 2 | | | 6 | | |
| Detector Phase | 4 | 4 | | 8 | 8 | | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | | 10.0 | 10.0 | | 4.0 | 15.0 | | 4.0 | 15.0 | |
| Minimum Split (s) | 24.6 | 24.6 | | 24.6 | 24.6 | | 9.6 | 26.6 | | 9.6 | 26.6 | |
| Total Split (s) | 24.6 | 24.6 | | 24.6 | 24.6 | | 9.6 | 25.8 | | 9.6 | 25.8 | |
| Total Split (%) | 41.0% | 41.0% | | 41.0% | 41.0% | | 16.0% | 43.0% | | 16.0% | 43.0% | |
| Maximum Green (s) | 19.0 | 19.0 | | 19.0 | 19.0 | | 4.0 | 20.2 | | 4.0 | 20.2 | |
| Yellow Time (s) | 3.5 | 3.5 | | 3.5 | 3.5 | | 3.5 | 3.5 | | 3.5 | 3.5 | |
| All-Red Time (s) | 2.1 | 2.1 | | 2.1 | 2.1 | | 2.1 | 2.1 | | 2.1 | 2.1 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 5.6 | 5.6 | | 5.6 | 5.6 | | 5.6 | 5.6 | | 5.6 | 5.6 | |
| Lead/Lag | | | | | | | Lag | Lead | | Lag | Lead | |
| Lead-Lag Optimize? | | | | | | | Yes | Yes | | Yes | Yes | |
| Vehicle Extension (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | |
| Recall Mode | Min | Min | | Min | Min | | None | C-Max | | None | C-Max | |
| Walk Time (s) | 7.0 | 7.0 | | 7.0 | 7.0 | | | 7.0 | | | 7.0 | |
| Flash Dont Walk (s) | 12.0 | 12.0 | | 12.0 | 12.0 | | | 14.0 | | | 14.0 | |
| Pedestrian Calls (#/hr) | 0 | 0 | | 0 | 0 | | | 0 | | | 0 | |
| Act Effct Green (s) | 10.9 | 10.9 | | 10.9 | 10.9 | | 36.1 | 32.1 | | 36.1 | 32.1 | |
| Actuated g/C Ratio | 0.18 | 0.18 | | 0.18 | 0.18 | | 0.60 | 0.54 | | 0.60 | 0.54 | |
| v/c Ratio | 0.18 | 0.36 | | 0.27 | 0.43 | | 0.07 | 0.22 | | 0.09 | 0.22 | |
| Control Delay | 22.2 | 18.5 | | 23.9 | 22.8 | | 5.2 | 8.4 | | 5.3 | 8.5 | |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 22.2 | 18.5 | | 23.9 | 22.8 | | 5.2 | 8.4 | | 5.3 | 8.5 | |
| LOS | C | B | | C | C | | A | A | | A | A | |
| Approach Delay | | 19.4 | | | 23.1 | | | 8.0 | | | 8.1 | |
| Approach LOS | | B | | | C | | | A | | | A | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 60 | | | |
| Actuated Cycle Length: 60 | | | |
| Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green | | | |
| Natural Cycle: 65 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.43 | | | |
| Intersection Signal Delay: 12.1 | | Intersection LOS: B | |
| Intersection Capacity Utilization 57.5% | | ICU Level of Service B | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 4001: Schaefer Hwy & Lyndon St



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

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | ⇕ | | | ⇕ | | | ⇕ | | | ⇕ | |
| Traffic Vol, veh/h | 8 | 161 | 4 | 0 | 144 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| Future Vol, veh/h | 8 | 161 | 4 | 0 | 144 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 |
| Heavy Vehicles, % | 0 | 2 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 32 | 644 | 16 | 0 | 576 | 0 | 0 | 0 | 0 | 0 | 0 | 32 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 576 | 0 | 0 | 660 | 0 | 0 | 1308 | 1292 | 652 | 1292 | 1300 | 576 |
| Stage 1 | - | - | - | - | - | - | 716 | 716 | - | 576 | 576 | - |
| Stage 2 | - | - | - | - | - | - | 592 | 576 | - | 716 | 724 | - |
| Critical Hdwy | 4.1 | - | - | 4.1 | - | - | 7.1 | 6.5 | 6.2 | 7.1 | 6.5 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.1 | 5.5 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.1 | 5.5 | - |
| Follow-up Hdwy | 2.2 | - | - | 2.2 | - | - | 3.5 | 4 | 3.3 | 3.5 | 4 | 3.3 |
| Pot Cap-1 Maneuver | 1007 | - | - | 938 | - | - | 138 | 165 | 471 | 141 | 163 | 521 |
| Stage 1 | - | - | - | - | - | - | 424 | 437 | - | 506 | 505 | - |
| Stage 2 | - | - | - | - | - | - | 496 | 505 | - | 424 | 433 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 1007 | - | - | 938 | - | - | 125 | 157 | 471 | 136 | 155 | 521 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 125 | 157 | - | 136 | 155 | - |
| Stage 1 | - | - | - | - | - | - | 403 | 415 | - | 481 | 505 | - |
| Stage 2 | - | - | - | - | - | - | 466 | 505 | - | 403 | 411 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0.4 | 0 | 0 | 12.4 |
| HCM LOS | | | A | B |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | - | 1007 | - | - | 938 | - | - | 521 |
| HCM Lane V/C Ratio | - | 0.032 | - | - | - | - | - | 0.061 |
| HCM Control Delay (s) | 0 | 8.7 | 0 | - | 0 | - | - | 12.4 |
| HCM Lane LOS | A | A | A | - | A | - | - | B |
| HCM 95th %tile Q(veh) | - | 0.1 | - | - | 0 | - | - | 0.2 |

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

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 2 | 1 | 6 | 3 | 1 | 7 | 4 | 208 | 17 | 5 | 246 | 3 |
| Future Vol, veh/h | 2 | 1 | 6 | 3 | 1 | 7 | 4 | 208 | 17 | 5 | 246 | 3 |
| Conflicting Peds, #/hr | 0 | 0 | 1 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 2 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | 50 | - | - | 50 | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 60 | 60 | 60 | 60 | 60 | 60 | 100 | 81 | 60 | 60 | 95 | 75 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 3 | 2 | 10 | 5 | 2 | 12 | 4 | 257 | 28 | 8 | 259 | 4 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 565 | 572 | 264 | 563 | 560 | 271 | 265 | 0 | 0 | 285 | 0 | 0 |
| Stage 1 | 279 | 279 | - | 279 | 279 | - | - | - | - | - | - | - |
| Stage 2 | 286 | 293 | - | 284 | 281 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.1 | 6.5 | 6.2 | 7.1 | 6.5 | 6.2 | 4.1 | - | - | 4.1 | - | - |
| Critical Hdwy Stg 1 | 6.1 | 5.5 | - | 6.1 | 5.5 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.1 | 5.5 | - | 6.1 | 5.5 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.5 | 4 | 3.3 | 3.5 | 4 | 3.3 | 2.2 | - | - | 2.2 | - | - |
| Pot Cap-1 Maneuver | 439 | 433 | 780 | 440 | 440 | 773 | 1311 | - | - | 1289 | - | - |
| Stage 1 | 732 | 683 | - | 732 | 683 | - | - | - | - | - | - | - |
| Stage 2 | 726 | 674 | - | 727 | 682 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | 427 | 428 | 778 | 429 | 435 | 773 | 1309 | - | - | 1289 | - | - |
| Mov Cap-2 Maneuver | 427 | 428 | - | 429 | 435 | - | - | - | - | - | - | - |
| Stage 1 | 728 | 678 | - | 730 | 681 | - | - | - | - | - | - | - |
| Stage 2 | 711 | 672 | - | 711 | 677 | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 11 | 11.2 | 0.1 | 0.2 |
| HCM LOS | B | B | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 1309 | - | - | 611 | 600 | 1289 | - | - |
| HCM Lane V/C Ratio | 0.003 | - | - | 0.025 | 0.031 | 0.006 | - | - |
| HCM Control Delay (s) | 7.8 | - | - | 11 | 11.2 | 7.8 | - | - |
| HCM Lane LOS | A | - | - | B | B | A | - | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 0.1 | 0.1 | 0 | - | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.1 |

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 1 | 0 | 383 | 6 | 5 | 421 |
| Future Vol, veh/h | 1 | 0 | 383 | 6 | 5 | 421 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | 0 | - | - | - | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 100 | 100 | 2 | 100 | 100 | 2 |
| Mvmt Flow | 1 | 0 | 416 | 7 | 5 | 458 |

| Major/Minor | Minor1 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 659 | 212 | 0 | 0 | 423 | 0 |
| Stage 1 | 420 | - | - | - | - | - |
| Stage 2 | 239 | - | - | - | - | - |
| Critical Hdwy | 8.8 | 8.9 | - | - | 6.1 | - |
| Critical Hdwy Stg 1 | 7.8 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 7.8 | - | - | - | - | - |
| Follow-up Hdwy | 4.5 | 4.3 | - | - | 3.2 | - |
| Pot Cap-1 Maneuver | 235 | 561 | - | - | 659 | - |
| Stage 1 | 414 | - | - | - | - | - |
| Stage 2 | 551 | - | - | - | - | - |
| Platoon blocked, % | | | - | - | | - |
| Mov Cap-1 Maneuver | 233 | 561 | - | - | 659 | - |
| Mov Cap-2 Maneuver | 233 | - | - | - | - | - |
| Stage 1 | 414 | - | - | - | - | - |
| Stage 2 | 545 | - | - | - | - | - |

| Approach | WB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 20.5 | 0 | 0.2 |
| HCM LOS | C | | |

| Minor Lane/Major Mvmt | NBT | NBR | WBLn1 | WBLn2 | SBL | SBT |
|---|---|---|---|---|---|---|
| Capacity (veh/h) | - | - | 233 | - | 659 | - |
| HCM Lane V/C Ratio | - | - | 0.005 | - | 0.008 | - |
| HCM Control Delay (s) | - | - | 20.5 | 0 | 10.5 | 0.1 |
| HCM Lane LOS | - | - | C | A | B | A |
| HCM 95th %tile Q(veh) | - | - | 0 | - | 0 | - |

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

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 41 | 11 | 383 | 0 | 0 | 385 |
| Future Vol, veh/h | 41 | 11 | 383 | 0 | 0 | 385 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | 0 | - | - | - | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 0 | 0 | 6 | 0 | 0 | 4 |
| Mvmt Flow | 45 | 12 | 416 | 0 | 0 | 418 |

| Major/Minor | Minor1 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 625 | 208 | 0 | 0 | 416 | 0 |
| Stage 1 | 416 | - | - | - | - | - |
| Stage 2 | 209 | - | - | - | - | - |
| Critical Hdwy | 6.8 | 6.9 | - | - | 4.1 | - |
| Critical Hdwy Stg 1 | 5.8 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.8 | - | - | - | - | - |
| Follow-up Hdwy | 3.5 | 3.3 | - | - | 2.2 | - |
| Pot Cap-1 Maneuver | 422 | 804 | - | - | 1154 | - |
| Stage 1 | 640 | - | - | - | - | - |
| Stage 2 | 812 | - | - | - | - | - |
| Platoon blocked, % | | | - | - | | - |
| Mov Cap-1 Maneuver | 422 | 804 | - | - | 1154 | - |
| Mov Cap-2 Maneuver | 422 | - | - | - | - | - |
| Stage 1 | 640 | - | - | - | - | - |
| Stage 2 | 812 | - | - | - | - | - |

| Approach | WB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 13.4 | 0 | 0 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NBT | NBR | WBLn1 | WBLn2 | SBL | SBT |
|---|---|---|---|---|---|---|
| Capacity (veh/h) | - | - | 422 | 804 | 1154 | - |
| HCM Lane V/C Ratio | - | - | 0.106 | 0.015 | - | - |
| HCM Control Delay (s) | - | - | 14.5 | 9.5 | 0 | - |
| HCM Lane LOS | - | - | B | A | A | - |
| HCM 95th %tile Q(veh) | - | - | 0.4 | 0 | 0 | - |

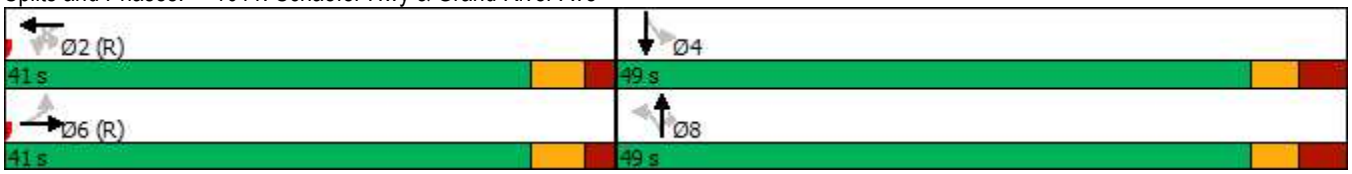
| Lane Group | EBL | EBT | EBR | WBU | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 79 | 564 | 122 | 1 | 33 | 631 | 178 | 96 | 419 | 13 | 85 | 481 |
| Future Volume (vph) | 79 | 564 | 122 | 1 | 33 | 631 | 178 | 96 | 419 | 13 | 85 | 481 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 115 | | 0 | | 95 | | 0 | 155 | | 0 | 80 | |
| Storage Lanes | 1 | | 0 | | 0 | | 0 | 1 | | 1 | 1 | |
| Taper Length (ft) | 65 | | | | 65 | | | 25 | | | 65 | |
| Lane Util. Factor | 1.00 | 0.91 | 0.91 | 0.91 | 1.00 | 0.91 | 0.91 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 |
| Ped Bike Factor | 1.00 | 1.00 | | | 1.00 | 0.99 | | 1.00 | | 0.99 | 1.00 | 1.00 |
| Frt | | 0.971 | | | | 0.962 | | | | 0.850 | | 0.985 |
| Flt Protected | 0.950 | | | | 0.950 | | | 0.950 | | | 0.950 | |
| Satd. Flow (prot) | 1805 | 4943 | 0 | 0 | 1805 | 4798 | 0 | 1805 | 1792 | 1615 | 1583 | 3334 |
| Flt Permitted | 0.280 | | | | 0.336 | | | 0.358 | | | 0.261 | |
| Satd. Flow (perm) | 531 | 4943 | 0 | 0 | 638 | 4798 | 0 | 680 | 1792 | 1593 | 435 | 3334 |
| Right Turn on Red | | | Yes | | | | Yes | | | Yes | | |
| Satd. Flow (RTOR) | | 74 | | | | 112 | | | | 34 | | 18 |
| Link Speed (mph) | | 35 | | | | 35 | | | 30 | | | 30 |
| Link Distance (ft) | | 932 | | | | 427 | | | 332 | | | 1209 |
| Travel Time (s) | | 18.2 | | | | 8.3 | | | 7.5 | | | 27.5 |
| Confl. Peds. (#/hr) | 5 | | 3 | | 3 | | 5 | 3 | | 2 | 2 | |
| Peak Hour Factor | 0.71 | 0.92 | 0.83 | 0.25 | 0.78 | 0.94 | 0.78 | 0.83 | 0.89 | 0.63 | 0.81 | 0.93 |
| Heavy Vehicles (%) | 0% | 2% | 0% | 0% | 0% | 2% | 7% | 0% | 6% | 0% | 14% | 7% |
| Adj. Flow (vph) | 111 | 613 | 147 | 4 | 42 | 671 | 228 | 116 | 471 | 21 | 105 | 517 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 111 | 760 | 0 | 0 | 46 | 899 | 0 | 116 | 471 | 21 | 105 | 575 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | R NA | Left | Left | Right | Left | Left | Right | Left | Left |
| Median Width(ft) | | 12 | | | | 12 | | | 12 | | | 12 |
| Link Offset(ft) | | 0 | | | | 0 | | | 0 | | | 0 |
| Crosswalk Width(ft) | | 16 | | | | 16 | | | 16 | | | 16 |
| Two way Left Turn Lane | | | | | | | | | | | | Yes |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 9 | 15 | | 9 | 15 | | 9 | 15 | |
| Number of Detectors | 1 | 2 | | 1 | 1 | 2 | | 1 | 2 | 1 | 1 | 2 |
| Detector Template | Left | Thru | | Left | Left | Thru | | Left | Thru | Right | Left | Thru |
| Leading Detector (ft) | 20 | 100 | | 20 | 20 | 100 | | 20 | 100 | 20 | 20 | 100 |
| Trailing Detector (ft) | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 |
| Detector 1 Position(ft) | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 |
| Detector 1 Size(ft) | 20 | 6 | | 20 | 20 | 6 | | 20 | 6 | 20 | 20 | 6 |
| Detector 1 Type | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Detector 1 Queue (s) | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Detector 1 Delay (s) | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Detector 2 Position(ft) | | 94 | | | | 94 | | | 94 | | | 94 |
| Detector 2 Size(ft) | | 6 | | | | 6 | | | 6 | | | 6 |
| Detector 2 Type | | Cl+Ex | | | | Cl+Ex | | | Cl+Ex | | | Cl+Ex |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | | 0.0 | | | 0.0 | | | 0.0 |

| Lane Group | SBR |
|---|---|
| Lane Configurations | |
| Traffic Volume (vph) | 53 |
| Future Volume (vph) | 53 |
| Ideal Flow (vphpl) | 1900 |
| Storage Length (ft) | 240 |
| Storage Lanes | 1 |
| Taper Length (ft) | |
| Lane Util. Factor | 0.95 |
| Ped Bike Factor | |
| Frt | |
| Flt Protected | |
| Satd. Flow (prot) | 0 |
| Flt Permitted | |
| Satd. Flow (perm) | 0 |
| Right Turn on Red | Yes |
| Satd. Flow (RTOR) | |
| Link Speed (mph) | |
| Link Distance (ft) | |
| Travel Time (s) | |
| Confl. Peds. (#/hr) | 3 |
| Peak Hour Factor | 0.91 |
| Heavy Vehicles (%) | 2% |
| Adj. Flow (vph) | 58 |
| Shared Lane Traffic (%) | |
| Lane Group Flow (vph) | 0 |
| Enter Blocked Intersection | No |
| Lane Alignment | Right |
| Median Width(ft) | |
| Link Offset(ft) | |
| Crosswalk Width(ft) | |
| Two way Left Turn Lane | |
| Headway Factor | 1.00 |
| Turning Speed (mph) | 9 |
| Number of Detectors | |
| Detector Template | |
| Leading Detector (ft) | |
| Trailing Detector (ft) | |
| Detector 1 Position(ft) | |
| Detector 1 Size(ft) | |
| Detector 1 Type | |
| Detector 1 Channel | |
| Detector 1 Extend (s) | |
| Detector 1 Queue (s) | |
| Detector 1 Delay (s) | |
| Detector 2 Position(ft) | |
| Detector 2 Size(ft) | |
| Detector 2 Type | |
| Detector 2 Channel | |
| Detector 2 Extend (s) | |

| Lane Group | EBL | EBT | EBR | WBU | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Turn Type | Perm | NA | | Perm | Perm | NA | | Perm | NA | Perm | Perm | NA |
| Protected Phases | | 6 | | | | 2 | | | 8 | | | 4 |
| Permitted Phases | 6 | | | 2 | 2 | | | 8 | | 8 | 4 | |
| Detector Phase | 6 | 6 | | 2 | 2 | 2 | | 8 | 8 | 8 | 4 | 4 |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | | 10.0 | 10.0 | 10.0 | | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 |
| Minimum Split (s) | 35.8 | 35.8 | | 35.8 | 35.8 | 35.8 | | 46.5 | 46.5 | 46.5 | 46.5 | 46.5 |
| Total Split (s) | 41.0 | 41.0 | | 41.0 | 41.0 | 41.0 | | 49.0 | 49.0 | 49.0 | 49.0 | 49.0 |
| Total Split (%) | 45.6% | 45.6% | | 45.6% | 45.6% | 45.6% | | 54.4% | 54.4% | 54.4% | 54.4% | 54.4% |
| Maximum Green (s) | 35.2 | 35.2 | | 35.2 | 35.2 | 35.2 | | 42.5 | 42.5 | 42.5 | 42.5 | 42.5 |
| Yellow Time (s) | 3.6 | 3.6 | | 3.6 | 3.6 | 3.6 | | 3.2 | 3.2 | 3.2 | 3.2 | 3.2 |
| All-Red Time (s) | 2.2 | 2.2 | | 2.2 | 2.2 | 2.2 | | 3.3 | 3.3 | 3.3 | 3.3 | 3.3 |
| Lost Time Adjust (s) | 0.0 | 0.0 | | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Lost Time (s) | 5.8 | 5.8 | | | 5.8 | 5.8 | | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Vehicle Extension (s) | 3.0 | 3.0 | | 3.0 | 3.0 | 3.0 | | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 |
| Recall Mode | C-Max | C-Max | | C-Max | C-Max | C-Max | | None | None | None | None | None |
| Walk Time (s) | 7.0 | 7.0 | | 7.0 | 7.0 | 7.0 | | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 |
| Flash Dont Walk (s) | 23.0 | 23.0 | | 23.0 | 23.0 | 23.0 | | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 |
| Pedestrian Calls (#/hr) | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 |
| Act Effct Green (s) | 46.9 | 46.9 | | | 46.9 | 46.9 | | 30.8 | 30.8 | 30.8 | 30.8 | 30.8 |
| Actuated g/C Ratio | 0.52 | 0.52 | | | 0.52 | 0.52 | | 0.34 | 0.34 | 0.34 | 0.34 | 0.34 |
| v/c Ratio | 0.40 | 0.29 | | | 0.14 | 0.35 | | 0.50 | 0.77 | 0.04 | 0.71 | 0.50 |
| Control Delay | 21.7 | 12.4 | | | 12.6 | 9.8 | | 17.8 | 22.8 | 2.2 | 49.7 | 23.3 |
| Queue Delay | 0.0 | 0.0 | | | 0.0 | 0.0 | | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 |
| Total Delay | 21.7 | 12.4 | | | 12.6 | 9.8 | | 17.8 | 22.9 | 2.2 | 49.7 | 23.3 |
| LOS | C | B | | | B | A | | B | C | A | D | C |
| Approach Delay | | 13.5 | | | | 9.9 | | | 21.2 | | | 27.4 |
| Approach LOS | | B | | | | A | | | C | | | C |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 90 | | | |
| Actuated Cycle Length: 90 | | | |
| Offset: 66 (73%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green | | | |
| Natural Cycle: 85 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.77 | | | |
| Intersection Signal Delay: 17.0 | | Intersection LOS: B | |
| Intersection Capacity Utilization 82.4% | | ICU Level of Service E | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 1011: Schaefer Hwy & Grand River Ave



| Lane Group | SBR |
|---|---|
| Turn Type | |
| Protected Phases | |
| Permitted Phases | |
| Detector Phase | |
| Switch Phase | |
| Minimum Initial (s) | |
| Minimum Split (s) | |
| Total Split (s) | |
| Total Split (%) | |
| Maximum Green (s) | |
| Yellow Time (s) | |
| All-Red Time (s) | |
| Lost Time Adjust (s) | |
| Total Lost Time (s) | |
| Lead/Lag | |
| Lead-Lag Optimize? | |
| Vehicle Extension (s) | |
| Recall Mode | |
| Walk Time (s) | |
| Flash Dont Walk (s) | |
| Pedestrian Calls (#/hr) | |
| Act Effct Green (s) | |
| Actuated g/C Ratio | |
| v/c Ratio | |
| Control Delay | |
| Queue Delay | |
| Total Delay | |
| LOS | |
| Approach Delay | |
| Approach LOS | |

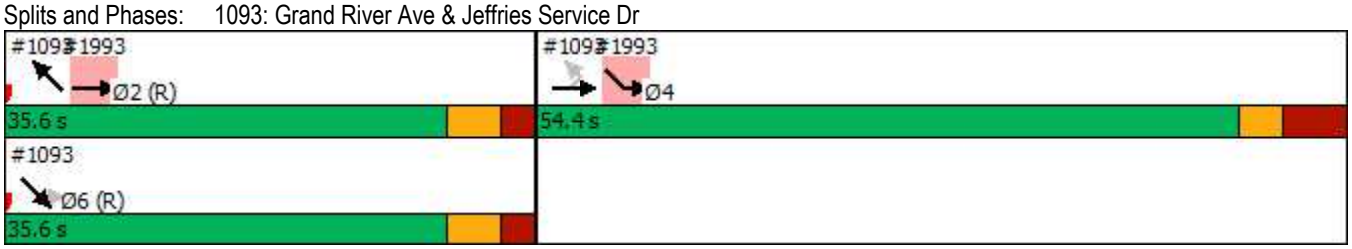
| Intersection Summary |
|---|

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | SEL | SET | SER | NWL | NWT | NWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 8 | 389 | 83 | 0 | 0 | 0 | 6 | 568 | 0 | 0 | 518 | 24 |
| Future Volume (vph) | 8 | 389 | 83 | 0 | 0 | 0 | 6 | 568 | 0 | 0 | 518 | 24 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Util. Factor | 0.86 | 0.86 | 0.86 | 1.00 | 1.00 | 1.00 | 0.91 | 0.91 | 1.00 | 1.00 | 0.91 | 0.91 |
| Ped Bike Factor | | | | | | | | 1.00 | | | 1.00 | |
| Frt | | 0.974 | | | | | | | | | 0.986 | |
| Flt Protected | | 0.999 | | | | | | 0.999 | | | | |
| Satd. Flow (prot) | 0 | 5929 | 0 | 0 | 0 | 0 | 0 | 5035 | 0 | 0 | 4995 | 0 |
| Flt Permitted | | 0.999 | | | | | | 0.914 | | | | |
| Satd. Flow (perm) | 0 | 5929 | 0 | 0 | 0 | 0 | 0 | 4607 | 0 | 0 | 4995 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 88 | | | | | | | | | 20 | |
| Link Speed (mph) | | 35 | | | 35 | | | 35 | | | 35 | |
| Link Distance (ft) | | 329 | | | 379 | | | 582 | | | 812 | |
| Travel Time (s) | | 6.4 | | | 7.4 | | | 11.3 | | | 15.8 | |
| Confl. Peds. (#/hr) | | | | | | | 1 | | | | | 1 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.31 | 0.91 | 0.92 | 0.92 | 0.92 | 0.43 |
| Heavy Vehicles (%) | 2% | 7% | 9% | 2% | 2% | 2% | 0% | 3% | 2% | 2% | 2% | 5% |
| Adj. Flow (vph) | 9 | 423 | 90 | 0 | 0 | 0 | 19 | 624 | 0 | 0 | 563 | 56 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 522 | 0 | 0 | 0 | 0 | 0 | 643 | 0 | 0 | 619 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 0 | | | 0 | | | 12 | | | 12 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | | | | | 1 | 2 | | | 2 | |
| Detector Template | Left | Thru | | | | | Left | Thru | | | Thru | |
| Leading Detector (ft) | 20 | 100 | | | | | 20 | 100 | | | 100 | |
| Trailing Detector (ft) | 0 | 0 | | | | | 0 | 0 | | | 0 | |
| Detector 1 Position(ft) | 0 | 0 | | | | | 0 | 0 | | | 0 | |
| Detector 1 Size(ft) | 20 | 6 | | | | | 20 | 6 | | | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | | | | | Cl+Ex | Cl+Ex | | | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | | | | | 0.0 | 0.0 | | | 0.0 | |
| Detector 1 Queue (s) | 0.0 | 0.0 | | | | | 0.0 | 0.0 | | | 0.0 | |
| Detector 1 Delay (s) | 0.0 | 0.0 | | | | | 0.0 | 0.0 | | | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | | | | 6 | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | | | | 0.0 | | | 0.0 | |
| Turn Type | Perm | NA | | | | | Perm | NA | | | NA | |
| Protected Phases | | 4 | | | | | | 6 | | | 2 | |
| Permitted Phases | 4 | | | | | | 6 | | | | | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | SEL | SET | SER | NWL | NWT | NWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detector Phase | 4 | 4 | | | | | 6 | 6 | | | 2 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | | | | | 10.0 | 10.0 | | | 10.0 | |
| Minimum Split (s) | 57.4 | 57.4 | | | | | 37.0 | 37.0 | | | 37.0 | |
| Total Split (s) | 54.4 | 54.4 | | | | | 35.6 | 35.6 | | | 35.6 | |
| Total Split (%) | 60.4% | 60.4% | | | | | 39.6% | 39.6% | | | 39.6% | |
| Maximum Green (s) | 47.0 | 47.0 | | | | | 29.6 | 29.6 | | | 29.6 | |
| Yellow Time (s) | 3.0 | 3.0 | | | | | 3.6 | 3.6 | | | 3.6 | |
| All-Red Time (s) | 4.4 | 4.4 | | | | | 2.4 | 2.4 | | | 2.4 | |
| Lost Time Adjust (s) | | 0.0 | | | | | | 0.0 | | | 0.0 | |
| Total Lost Time (s) | | 7.4 | | | | | | 6.0 | | | 6.0 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Vehicle Extension (s) | 3.0 | 3.0 | | | | | 3.0 | 3.0 | | | 3.0 | |
| Recall Mode | None | None | | | | | C-Max | C-Max | | | C-Max | |
| Walk Time (s) | 9.0 | 9.0 | | | | | 7.0 | 7.0 | | | 7.0 | |
| Flash Dont Walk (s) | 33.0 | 33.0 | | | | | 24.0 | 24.0 | | | 24.0 | |
| Pedestrian Calls (#/hr) | 0 | 0 | | | | | 0 | 0 | | | 0 | |
| Act Effct Green (s) | | 13.6 | | | | | | 63.0 | | | 63.0 | |
| Actuated g/C Ratio | | 0.15 | | | | | | 0.70 | | | 0.70 | |
| v/c Ratio | | 0.54 | | | | | | 0.20 | | | 0.18 | |
| Control Delay | | 35.6 | | | | | | 1.3 | | | 4.9 | |
| Queue Delay | | 0.0 | | | | | | 0.0 | | | 0.0 | |
| Total Delay | | 35.6 | | | | | | 1.3 | | | 4.9 | |
| LOS | | D | | | | | | A | | | A | |
| Approach Delay | | 35.6 | | | | | | 1.3 | | | 4.9 | |
| Approach LOS | | D | | | | | | A | | | A | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 90 | | | |
| Actuated Cycle Length: 90 | | | |
| Offset: 5 (6%), Referenced to phase 2:NWT and 6:SETL, Start of Green | | | |
| Natural Cycle: 95 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.54 | | | |
| Intersection Signal Delay: 12.6 | | Intersection LOS: B | |
| Intersection Capacity Utilization 45.3% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 1093: Grand River Ave & Jeffries Service Dr

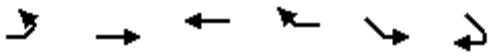


| Lane Group | WBL2 | WBL | WBT | WBR | SET | SER | SER2 | NWL | NWT |
|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | |
| Traffic Volume (vph) | 51 | 6 | 235 | 391 | 523 | 131 | 8 | 75 | 451 |
| Future Volume (vph) | 51 | 6 | 235 | 391 | 523 | 131 | 8 | 75 | 451 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | | 0 | | 0 | | 140 | | 260 | |
| Storage Lanes | | 0 | | 1 | | 1 | | 1 | |
| Taper Length (ft) | | 65 | | | | | | 65 | |
| Lane Util. Factor | 0.91 | 0.91 | 0.86 | 0.86 | 0.86 | 0.86 | 0.91 | 1.00 | 0.91 |
| Frt | | | 0.940 | 0.850 | 0.994 | 0.850 | | | |
| Flt Protected | | | 0.994 | | | | | 0.950 | |
| Satd. Flow (prot) | 0 | 0 | 4394 | 1335 | 4725 | 1317 | 0 | 1805 | 5036 |
| Flt Permitted | | | 0.994 | | | | | 0.950 | |
| Satd. Flow (perm) | 0 | 0 | 4394 | 1335 | 4725 | 1317 | 0 | 1805 | 5036 |
| Right Turn on Red | | | | Yes | | | Yes | | |
| Satd. Flow (RTOR) | | | 205 | 212 | | 126 | | | |
| Link Speed (mph) | | | 35 | | 35 | | | | 35 |
| Link Distance (ft) | | | 675 | | 427 | | | | 582 |
| Travel Time (s) | | | 13.1 | | 8.3 | | | | 11.3 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.93 | 0.74 | 0.50 | 0.78 | 0.89 |
| Heavy Vehicles (%) | 2% | 2% | 5% | 4% | 3% | 6% | 0% | 0% | 3% |
| Adj. Flow (vph) | 55 | 7 | 255 | 425 | 562 | 177 | 16 | 96 | 507 |
| Shared Lane Traffic (%) | | | | 50% | | 14% | | | |
| Lane Group Flow (vph) | 0 | 0 | 530 | 212 | 587 | 168 | 0 | 96 | 507 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Left | Right | Left | Right | Right | Left | Left |
| Median Width(ft) | | | 0 | | 12 | | | | 12 |
| Link Offset(ft) | | | 0 | | 0 | | | | 0 |
| Crosswalk Width(ft) | | | 16 | | 16 | | | | 16 |
| Two way Left Turn Lane | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | 15 | | 9 | | 9 | 9 | 15 | |
| Number of Detectors | 1 | 1 | 2 | 1 | 2 | 1 | | 1 | 2 |
| Detector Template | Left | Left | Thru | Right | Thru | Right | | Left | Thru |
| Leading Detector (ft) | 20 | 20 | 100 | 20 | 100 | 20 | | 20 | 100 |
| Trailing Detector (ft) | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 |
| Detector 1 Position(ft) | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 |
| Detector 1 Size(ft) | 20 | 20 | 6 | 20 | 6 | 20 | | 20 | 6 |
| Detector 1 Type | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex |
| Detector 1 Channel | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Detector 1 Queue (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Detector 1 Delay (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Detector 2 Position(ft) | | | 94 | | 94 | | | | 94 |
| Detector 2 Size(ft) | | | 6 | | 6 | | | | 6 |
| Detector 2 Type | | | Cl+Ex | | Cl+Ex | | | | Cl+Ex |
| Detector 2 Channel | | | | | | | | | |
| Detector 2 Extend (s) | | | 0.0 | | 0.0 | | | | 0.0 |
| Turn Type | Perm | Perm | NA | Perm | NA | Perm | | Prot | NA |
| Protected Phases | | | 4 | | 6 | | | 5 | 2 |

| Lane Group | WBL2 | WBL | WBT | WBR | SET | SER | SER2 | NWL | NWT |
|---|---|---|---|---|---|---|---|---|---|
| Permitted Phases | 4 | 4 | | 4 | | 6 | | | |
| Detector Phase | 4 | 4 | 4 | 4 | 6 | 6 | | 5 | 2 |
| Switch Phase | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | | 7.0 | 10.0 |
| Minimum Split (s) | 55.5 | 55.5 | 55.5 | 55.5 | 37.9 | 37.9 | | 12.9 | 37.9 |
| Total Split (s) | 38.0 | 38.0 | 38.0 | 38.0 | 35.6 | 35.6 | | 16.4 | 52.0 |
| Total Split (%) | 42.2% | 42.2% | 42.2% | 42.2% | 39.6% | 39.6% | | 18.2% | 57.8% |
| Maximum Green (s) | 30.5 | 30.5 | 30.5 | 30.5 | 29.7 | 29.7 | | 10.5 | 46.1 |
| Yellow Time (s) | 3.0 | 3.0 | 3.0 | 3.0 | 3.6 | 3.6 | | 3.6 | 3.6 |
| All-Red Time (s) | 4.5 | 4.5 | 4.5 | 4.5 | 2.3 | 2.3 | | 2.3 | 2.3 |
| Lost Time Adjust (s) | | | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Total Lost Time (s) | | | 7.5 | 7.5 | 5.9 | 5.9 | | 5.9 | 5.9 |
| Lead/Lag | | | | | Lead | Lead | | Lag | |
| Lead-Lag Optimize? | | | | | Yes | Yes | | Yes | |
| Vehicle Extension (s) | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | | 3.0 | 3.0 |
| Recall Mode | None | None | None | None | C-Max | C-Max | | None | C-Max |
| Walk Time (s) | 9.0 | 9.0 | 9.0 | 9.0 | 7.0 | 7.0 | | | 7.0 |
| Flash Dont Walk (s) | 39.0 | 39.0 | 39.0 | 39.0 | 25.0 | 25.0 | | | 25.0 |
| Pedestrian Calls (#/hr) | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 |
| Act Effct Green (s) | | | 14.5 | 14.5 | 49.0 | 49.0 | | 9.8 | 62.1 |
| Actuated g/C Ratio | | | 0.16 | 0.16 | 0.54 | 0.54 | | 0.11 | 0.69 |
| v/c Ratio | | | 0.60 | 0.54 | 0.23 | 0.22 | | 0.49 | 0.15 |
| Control Delay | | | 23.7 | 10.1 | 9.6 | 3.0 | | 42.0 | 1.2 |
| Queue Delay | | | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Total Delay | | | 23.7 | 10.1 | 9.6 | 3.0 | | 42.0 | 1.2 |
| LOS | | | C | B | A | A | | D | A |
| Approach Delay | | | 19.8 | | 8.1 | | | | 7.7 |
| Approach LOS | | | B | | A | | | | A |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 90 | | | |
| Actuated Cycle Length: 90 | | | |
| Offset: 88 (98%), Referenced to phase 2:NWT and 6:SET, Start of Green | | | |
| Natural Cycle: 110 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.60 | | | |
| Intersection Signal Delay: 12.1 | | Intersection LOS: B | |
| Intersection Capacity Utilization 41.7% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 1193: Left Turn Bridge & Grand River Ave & I-96 WB Service Rd/I-96 WB Service Dr

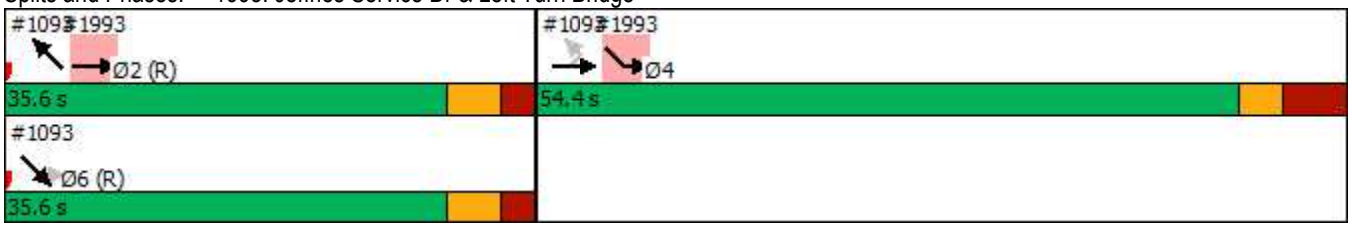


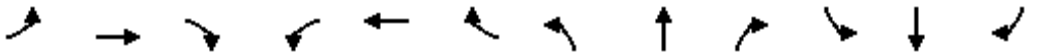
| Lane Group | EBL | EBT | WBT | WBR | SEL | SER | Ø6 |
|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | |
| Traffic Volume (vph) | 0 | 347 | 0 | 0 | 137 | 0 | |
| Future Volume (vph) | 0 | 347 | 0 | 0 | 137 | 0 | |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | |
| Storage Length (ft) | 0 | | | 0 | 50 | 0 | |
| Storage Lanes | 0 | | | 0 | 0 | 0 | |
| Taper Length (ft) | 65 | | | | 65 | | |
| Lane Util. Factor | 1.00 | 0.91 | 1.00 | 1.00 | 0.97 | 1.00 | |
| Frt | | | | | | | |
| Flt Protected | | | | | 0.950 | | |
| Satd. Flow (prot) | 0 | 5085 | 0 | 0 | 3433 | 0 | |
| Flt Permitted | | | | | 0.950 | | |
| Satd. Flow (perm) | 0 | 5085 | 0 | 0 | 3433 | 0 | |
| Right Turn on Red | | | | Yes | Yes | Yes | |
| Satd. Flow (RTOR) | | | | | 474 | | |
| Link Speed (mph) | | 35 | 35 | | 30 | | |
| Link Distance (ft) | | 184 | 329 | | 419 | | |
| Travel Time (s) | | 3.6 | 6.4 | | 9.5 | | |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | |
| Adj. Flow (vph) | 0 | 377 | 0 | 0 | 149 | 0 | |
| Shared Lane Traffic (%) | | | | | | | |
| Lane Group Flow (vph) | 0 | 377 | 0 | 0 | 149 | 0 | |
| Enter Blocked Intersection | No | No | No | No | No | No | |
| Lane Alignment | Left | Left | Left | Right | Left | Right | |
| Median Width(ft) | | 0 | 0 | | 24 | | |
| Link Offset(ft) | | 0 | 0 | | 0 | | |
| Crosswalk Width(ft) | | 16 | 16 | | 16 | | |
| Two way Left Turn Lane | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | |
| Turning Speed (mph) | 15 | | | 9 | 15 | 9 | |
| Number of Detectors | | 2 | | | 1 | | |
| Detector Template | | Thru | | | Left | | |
| Leading Detector (ft) | | 100 | | | 20 | | |
| Trailing Detector (ft) | | 0 | | | 0 | | |
| Detector 1 Position(ft) | | 0 | | | 0 | | |
| Detector 1 Size(ft) | | 6 | | | 20 | | |
| Detector 1 Type | | Cl+Ex | | | Cl+Ex | | |
| Detector 1 Channel | | | | | | | |
| Detector 1 Extend (s) | | 0.0 | | | 0.0 | | |
| Detector 1 Queue (s) | | 0.0 | | | 0.0 | | |
| Detector 1 Delay (s) | | 0.0 | | | 0.0 | | |
| Detector 2 Position(ft) | | 94 | | | | | |
| Detector 2 Size(ft) | | 6 | | | | | |
| Detector 2 Type | | Cl+Ex | | | | | |
| Detector 2 Channel | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | | | |
| Turn Type | | NA | | | Prot | | |
| Protected Phases | | 2 | | | 4 | | 6 |
| Permitted Phases | | | | | | | |

| Lane Group | EBL | EBT | WBT | WBR | SEL | SER | Ø6 |
|---|---|---|---|---|---|---|---|
| Detector Phase | | 2 | | | 4 | | |
| Switch Phase | | | | | | | |
| Minimum Initial (s) | | 10.0 | | | 10.0 | | 10.0 |
| Minimum Split (s) | | 37.0 | | | 57.4 | | 37.0 |
| Total Split (s) | | 35.6 | | | 54.4 | | 35.6 |
| Total Split (%) | | 39.6% | | | 60.4% | | 40% |
| Maximum Green (s) | | 29.6 | | | 47.0 | | 29.6 |
| Yellow Time (s) | | 3.6 | | | 3.0 | | 3.6 |
| All-Red Time (s) | | 2.4 | | | 4.4 | | 2.4 |
| Lost Time Adjust (s) | | 0.0 | | | 0.0 | | |
| Total Lost Time (s) | | 6.0 | | | 7.4 | | |
| Lead/Lag | | | | | | | |
| Lead-Lag Optimize? | | | | | | | |
| Vehicle Extension (s) | | 3.0 | | | 3.0 | | 3.0 |
| Recall Mode | | C-Max | | | None | | C-Max |
| Walk Time (s) | | 7.0 | | | 9.0 | | 7.0 |
| Flash Dont Walk (s) | | 24.0 | | | 33.0 | | 24.0 |
| Pedestrian Calls (#/hr) | | 0 | | | 0 | | 0 |
| Act Effct Green (s) | | 63.0 | | | 13.6 | | |
| Actuated g/C Ratio | | 0.70 | | | 0.15 | | |
| v/c Ratio | | 0.11 | | | 0.16 | | |
| Control Delay | | 4.5 | | | 3.8 | | |
| Queue Delay | | 0.0 | | | 0.0 | | |
| Total Delay | | 4.5 | | | 3.8 | | |
| LOS | | A | | | A | | |
| Approach Delay | | 4.5 | | | 3.8 | | |
| Approach LOS | | A | | | A | | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 90 | | | |
| Actuated Cycle Length: 90 | | | |
| Offset: 5 (6%), Referenced to phase 2:NWT and 6:SETL, Start of Green | | | |
| Natural Cycle: 95 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.54 | | | |
| Intersection Signal Delay: 4.3 | | Intersection LOS: A | |
| Intersection Capacity Utilization 27.8% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 1993: Jeffries Service Dr & Left Turn Bridge





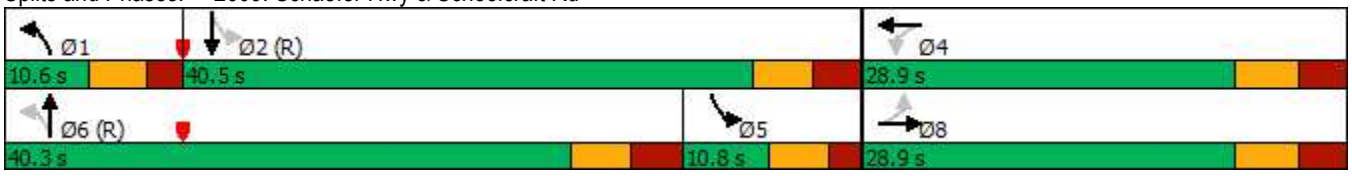
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 50 | 113 | 17 | 60 | 98 | 55 | 20 | 586 | 70 | 43 | 543 | 42 |
| Future Volume (vph) | 50 | 113 | 17 | 60 | 98 | 55 | 20 | 586 | 70 | 43 | 543 | 42 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 60 | | 0 | 60 | | 0 | 80 | | 250 | 80 | | 0 |
| Storage Lanes | 1 | | 0 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 65 | | | 65 | | | 65 | | | 65 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped Bike Factor | | | | | | | | 1.00 | | 1.00 | | |
| Frt | | 0.971 | | | 0.950 | | | 0.982 | | | 0.986 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1378 | 1830 | 0 | 1656 | 1713 | 0 | 1805 | 1771 | 0 | 1530 | 1696 | 0 |
| Flt Permitted | 0.606 | | | 0.656 | | | 0.139 | | | 0.224 | | |
| Satd. Flow (perm) | 879 | 1830 | 0 | 1143 | 1713 | 0 | 264 | 1771 | 0 | 360 | 1696 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 15 | | | 32 | | | 11 | | | 8 | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 699 | | | 1470 | | | 1209 | | | 229 | |
| Travel Time (s) | | 15.9 | | | 33.4 | | | 27.5 | | | 5.2 | |
| Confl. Peds. (#/hr) | | | | | | | | | 4 | 4 | | |
| Peak Hour Factor | 0.63 | 0.88 | 0.54 | 0.84 | 0.71 | 0.79 | 0.57 | 0.94 | 0.81 | 0.66 | 0.91 | 0.68 |
| Heavy Vehicles (%) | 31% | 1% | 0% | 9% | 1% | 14% | 0% | 5% | 5% | 18% | 8% | 34% |
| Adj. Flow (vph) | 79 | 128 | 31 | 71 | 138 | 70 | 35 | 623 | 86 | 65 | 597 | 62 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 79 | 159 | 0 | 71 | 208 | 0 | 35 | 709 | 0 | 65 | 659 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 12 | | | 12 | | | 12 | | | 12 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | Yes | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | | 1 | 2 | | 1 | 2 | | 1 | 2 | |
| Detector Template | Left | Thru | | Left | Thru | | Left | Thru | | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | | 20 | 100 | | 20 | 100 | | 20 | 100 | |
| Trailing Detector (ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Detector 1 Position(ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Detector 1 Size(ft) | 20 | 6 | | 20 | 6 | | 20 | 6 | | 20 | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Queue (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Delay (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | 6 | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |

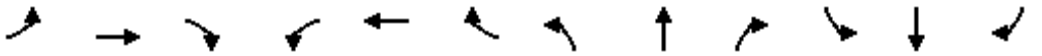
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Turn Type | Perm | NA | | Perm | NA | | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | | 8 | | | 4 | | 1 | 6 | | 5 | 2 | |
| Permitted Phases | 8 | | | 4 | | | 6 | | | 2 | | |
| Detector Phase | 8 | 8 | | 4 | 4 | | 1 | 6 | | 5 | 2 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 6.0 | 6.0 | | 6.0 | 6.0 | | 5.0 | 9.0 | | 5.0 | 9.0 | |
| Minimum Split (s) | 28.8 | 28.8 | | 28.8 | 28.8 | | 10.6 | 26.6 | | 10.6 | 26.6 | |
| Total Split (s) | 28.9 | 28.9 | | 28.9 | 28.9 | | 10.6 | 40.3 | | 10.8 | 40.5 | |
| Total Split (%) | 36.1% | 36.1% | | 36.1% | 36.1% | | 13.3% | 50.4% | | 13.5% | 50.6% | |
| Maximum Green (s) | 22.1 | 22.1 | | 22.1 | 22.1 | | 5.0 | 33.7 | | 5.2 | 33.9 | |
| Yellow Time (s) | 3.8 | 3.8 | | 3.8 | 3.8 | | 3.5 | 3.6 | | 3.5 | 3.6 | |
| All-Red Time (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 2.1 | 3.0 | | 2.1 | 3.0 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 6.8 | 6.8 | | 6.8 | 6.8 | | 5.6 | 6.6 | | 5.6 | 6.6 | |
| Lead/Lag | | | | | | | Lead | Lead | | Lag | Lag | |
| Lead-Lag Optimize? | | | | | | | Yes | Yes | | Yes | Yes | |
| Vehicle Extension (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | |
| Recall Mode | Max | Max | | Max | Max | | Max | C-Max | | Max | C-Max | |
| Walk Time (s) | 7.0 | 7.0 | | 7.0 | 7.0 | | | 7.0 | | | 7.0 | |
| Flash Dont Walk (s) | 15.0 | 15.0 | | 15.0 | 15.0 | | | 13.0 | | | 13.0 | |
| Pedestrian Calls (#/hr) | 0 | 0 | | 0 | 0 | | | 0 | | | 0 | |
| Act Effct Green (s) | 22.1 | 22.1 | | 22.1 | 22.1 | | 34.7 | 33.7 | | 34.9 | 33.9 | |
| Actuated g/C Ratio | 0.28 | 0.28 | | 0.28 | 0.28 | | 0.43 | 0.42 | | 0.44 | 0.42 | |
| v/c Ratio | 0.33 | 0.31 | | 0.23 | 0.42 | | 0.17 | 0.94 | | 0.28 | 0.91 | |
| Control Delay | 27.6 | 22.6 | | 24.7 | 23.0 | | 15.0 | 45.4 | | 13.5 | 35.3 | |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 27.6 | 22.6 | | 24.7 | 23.0 | | 15.0 | 45.4 | | 13.5 | 35.3 | |
| LOS | C | C | | C | C | | B | D | | B | D | |
| Approach Delay | | 24.3 | | | 23.4 | | | 44.0 | | | 33.4 | |
| Approach LOS | | C | | | C | | | D | | | C | |

**Intersection Summary**

Area Type: Other
Cycle Length: 80
Actuated Cycle Length: 80
Offset: 33 (41%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
Natural Cycle: 80
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.94
Intersection Signal Delay: 34.9 Intersection LOS: C
Intersection Capacity Utilization 66.1% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 2609: Schaefer Hwy & Schoolcraft Rd





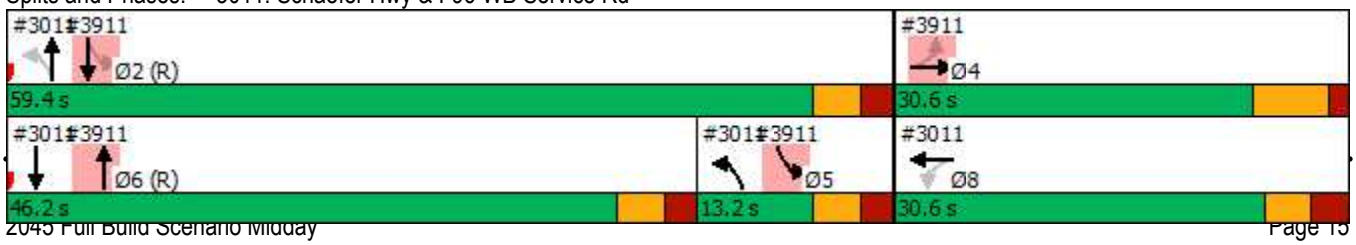
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 0 | 0 | 0 | 156 | 158 | 4 | 234 | 524 | 0 | 0 | 368 | 268 |
| Future Volume (vph) | 0 | 0 | 0 | 156 | 158 | 4 | 234 | 524 | 0 | 0 | 368 | 268 |
| Ideal Flow (vphpl) | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 |
| Lane Width (ft) | 12 | 12 | 12 | 12 | 11 | 12 | 11 | 11 | 12 | 12 | 11 | 12 |
| Storage Length (ft) | 0 | | 0 | 0 | | 0 | 250 | | 0 | 0 | | 0 |
| Storage Lanes | 0 | | 0 | 1 | | 0 | 1 | | 0 | 0 | | 0 |
| Taper Length (ft) | 65 | | | 65 | | | 65 | | | 65 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 0.95 |
| Ped Bike Factor | | | | | | | 1.00 | | | | 0.99 | |
| Frt | | | | | 0.997 | | | | | | 0.936 | |
| Flt Protected | | | | 0.950 | | | 0.950 | | | | | |
| Satd. Flow (prot) | 0 | 0 | 0 | 1863 | 3566 | 0 | 1766 | 3566 | 0 | 0 | 3227 | 0 |
| Flt Permitted | | | | 0.950 | | | 0.354 | | | | | |
| Satd. Flow (perm) | 0 | 0 | 0 | 1863 | 3566 | 0 | 657 | 3566 | 0 | 0 | 3227 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | | | 2 | | | | | | 274 | |
| Link Speed (mph) | | 25 | | | 25 | | | 25 | | | 35 | |
| Link Distance (ft) | | 298 | | | 364 | | | 384 | | | 332 | |
| Travel Time (s) | | 8.1 | | | 9.9 | | | 10.5 | | | 6.5 | |
| Confl. Peds. (#/hr) | | | | | | | 4 | | | | | 4 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.83 | 0.91 | 0.92 | 0.92 | 0.95 | 0.93 |
| Heavy Vehicles (%) | 2% | 2% | 2% | 2% | 2% | 33% | 4% | 3% | 2% | 2% | 7% | 4% |
| Adj. Flow (vph) | 0 | 0 | 0 | 170 | 172 | 4 | 282 | 576 | 0 | 0 | 387 | 288 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 0 | 0 | 170 | 176 | 0 | 282 | 576 | 0 | 0 | 675 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 12 | | | 12 | | | 12 | | | 12 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 0.94 | 0.94 | 0.94 | 0.94 | 0.98 | 0.94 | 0.98 | 0.98 | 0.94 | 0.94 | 0.98 | 0.94 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | | | | 1 | 2 | | 1 | 2 | | | 2 | |
| Detector Template | | | | Left | Thru | | Left | Thru | | | Thru | |
| Leading Detector (ft) | | | | 20 | 100 | | 20 | 100 | | | 100 | |
| Trailing Detector (ft) | | | | 0 | 0 | | 0 | 0 | | | 0 | |
| Detector 1 Position(ft) | | | | 0 | 0 | | 0 | 0 | | | 0 | |
| Detector 1 Size(ft) | | | | 20 | 6 | | 20 | 6 | | | 6 | |
| Detector 1 Type | | | | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | | | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | | | | 0.0 | 0.0 | | 0.0 | 0.0 | | | 0.0 | |
| Detector 1 Queue (s) | | | | 0.0 | 0.0 | | 0.0 | 0.0 | | | 0.0 | |
| Detector 1 Delay (s) | | | | 0.0 | 0.0 | | 0.0 | 0.0 | | | 0.0 | |
| Detector 2 Position(ft) | | | | | 94 | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | | | | 6 | | | 6 | | | 6 | |
| Detector 2 Type | | | | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |

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

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detector 2 Extend (s) | | | | | 0.0 | | | 0.0 | | | 0.0 | |
| Turn Type | | | | Perm | NA | | pm+pt | NA | | | NA | |
| Protected Phases | | | | | 8 | | 5 | 2 | | | 6 | |
| Permitted Phases | | | | 8 | | | 2 | | | | | |
| Detector Phase | | | | 8 | 8 | | 5 | 2 | | | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | | | | 10.0 | 10.0 | | 7.0 | 10.0 | | | 10.0 | |
| Minimum Split (s) | | | | 28.7 | 28.7 | | 12.4 | 23.4 | | | 23.4 | |
| Total Split (s) | | | | 30.6 | 30.6 | | 13.2 | 59.4 | | | 46.2 | |
| Total Split (%) | | | | 34.0% | 34.0% | | 14.7% | 66.0% | | | 51.3% | |
| Maximum Green (s) | | | | 24.9 | 24.9 | | 7.8 | 54.0 | | | 40.8 | |
| Yellow Time (s) | | | | 3.0 | 3.0 | | 3.2 | 3.2 | | | 3.2 | |
| All-Red Time (s) | | | | 2.7 | 2.7 | | 2.2 | 2.2 | | | 2.2 | |
| Lost Time Adjust (s) | | | | 0.0 | 0.0 | | 0.0 | 0.0 | | | 0.0 | |
| Total Lost Time (s) | | | | 5.7 | 5.7 | | 5.4 | 5.4 | | | 5.4 | |
| Lead/Lag | | | | | | | Lag | | | | Lead | |
| Lead-Lag Optimize? | | | | | | | Yes | | | | Yes | |
| Vehicle Extension (s) | | | | 3.0 | 3.0 | | 3.0 | 3.0 | | | 3.0 | |
| Recall Mode | | | | None | None | | None | C-Max | | | C-Max | |
| Walk Time (s) | | | | 7.0 | 7.0 | | | 7.0 | | | 7.0 | |
| Flash Dont Walk (s) | | | | 16.0 | 16.0 | | | 11.0 | | | 11.0 | |
| Pedestrian Calls (#/hr) | | | | 0 | 0 | | | 0 | | | 0 | |
| Act Effct Green (s) | | | | 19.3 | 19.3 | | 59.6 | 59.6 | | | 46.4 | |
| Actuated g/C Ratio | | | | 0.21 | 0.21 | | 0.66 | 0.66 | | | 0.52 | |
| v/c Ratio | | | | 0.43 | 0.23 | | 0.53 | 0.24 | | | 0.38 | |
| Control Delay | | | | 17.0 | 13.0 | | 8.3 | 3.5 | | | 4.5 | |
| Queue Delay | | | | 0.0 | 0.0 | | 0.0 | 0.0 | | | 0.1 | |
| Total Delay | | | | 17.0 | 13.0 | | 8.3 | 3.5 | | | 4.6 | |
| LOS | | | | B | B | | A | A | | | A | |
| Approach Delay | | | | | 15.0 | | | 5.1 | | | 4.6 | |
| Approach LOS | | | | | B | | | A | | | A | |

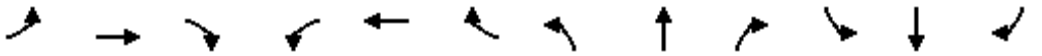
| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 90 | | | |
| Actuated Cycle Length: 90 | | | |
| Offset: 89 (99%), Referenced to phase 2:NBTL and 6:SBT, Start of Green | | | |
| Natural Cycle: 90 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.83 | | | |
| Intersection Signal Delay: 6.7 | | Intersection LOS: A | |
| Intersection Capacity Utilization 68.5% | | ICU Level of Service C | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 3011: Schaefer Hwy & I-96 WB Service Rd



| Lane Group | Ø4 |
|---|---|
| Detector 2 Extend (s) | |
| Turn Type | |
| Protected Phases | 4 |
| Permitted Phases | |
| Detector Phase | |
| Switch Phase | |
| Minimum Initial (s) | 10.0 |
| Minimum Split (s) | 30.5 |
| Total Split (s) | 30.6 |
| Total Split (%) | 34% |
| Maximum Green (s) | 24.1 |
| Yellow Time (s) | 5.0 |
| All-Red Time (s) | 1.5 |
| Lost Time Adjust (s) | |
| Total Lost Time (s) | |
| Lead/Lag | |
| Lead-Lag Optimize? | |
| Vehicle Extension (s) | 3.0 |
| Recall Mode | None |
| Walk Time (s) | 7.0 |
| Flash Dont Walk (s) | 17.0 |
| Pedestrian Calls (#/hr) | 0 |
| Act Effct Green (s) | |
| Actuated g/C Ratio | |
| v/c Ratio | |
| Control Delay | |
| Queue Delay | |
| Total Delay | |
| LOS | |
| Approach Delay | |
| Approach LOS | |

| Intersection Summary |
|---|



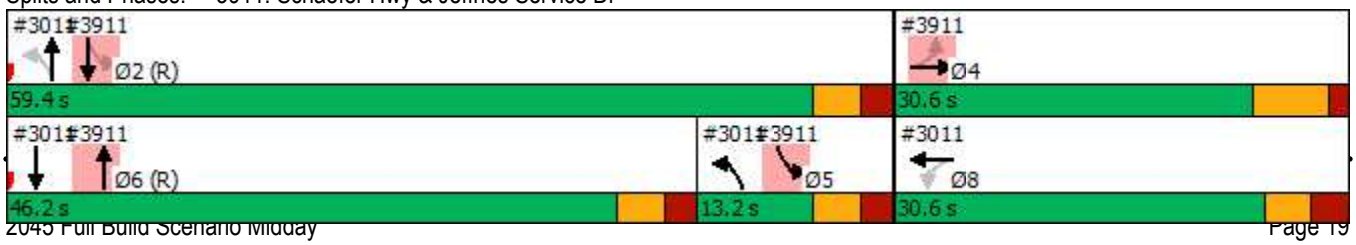
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 265 | 135 | 298 | 0 | 0 | 0 | 0 | 494 | 122 | 86 | 439 | 0 |
| Future Volume (vph) | 265 | 135 | 298 | 0 | 0 | 0 | 0 | 494 | 122 | 86 | 439 | 0 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 0 | | 0 | 0 | | 0 | 0 | | 0 | 90 | | 0 |
| Storage Lanes | 0 | | 0 | 0 | | 0 | 0 | | 0 | 1 | | 0 |
| Taper Length (ft) | 65 | | | 65 | | | 65 | | | 65 | | |
| Lane Util. Factor | 0.91 | 0.91 | 0.91 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 1.00 |
| Ped Bike Factor | | | | | | | | 1.00 | | | | |
| Frt | | 0.936 | | | | | | 0.972 | | | | |
| Flt Protected | | 0.981 | | | | | | | | 0.950 | | |
| Satd. Flow (prot) | 0 | 4550 | 0 | 0 | 0 | 0 | 0 | 1721 | 0 | 1703 | 3406 | 0 |
| Flt Permitted | | 0.981 | | | | | | | | 0.198 | | |
| Satd. Flow (perm) | 0 | 4550 | 0 | 0 | 0 | 0 | 0 | 1721 | 0 | 355 | 3406 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 203 | | | | | | 19 | | | | |
| Link Speed (mph) | | 35 | | | 35 | | | 30 | | | 30 | |
| Link Distance (ft) | | 417 | | | 372 | | | 621 | | | 384 | |
| Travel Time (s) | | 8.1 | | | 7.2 | | | 14.1 | | | 8.7 | |
| Confl. Peds. (#/hr) | | | | | | | | | 6 | 6 | | |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.84 | 0.80 | 0.80 | 0.92 | 0.92 |
| Heavy Vehicles (%) | 2% | 7% | 6% | 2% | 2% | 2% | 2% | 6% | 10% | 6% | 6% | 2% |
| Bus Blockages (#/hr) | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Adj. Flow (vph) | 288 | 147 | 324 | 0 | 0 | 0 | 0 | 588 | 153 | 108 | 477 | 0 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 759 | 0 | 0 | 0 | 0 | 0 | 741 | 0 | 108 | 477 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 0 | | | 0 | | | 12 | | | 12 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | Yes | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | | | | | | 2 | | 1 | 2 | |
| Detector Template | Left | Thru | | | | | | Thru | | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | | | | | | 100 | | 20 | 100 | |
| Trailing Detector (ft) | 0 | 0 | | | | | | 0 | | 0 | 0 | |
| Detector 1 Position(ft) | 0 | 0 | | | | | | 0 | | 0 | 0 | |
| Detector 1 Size(ft) | 20 | 6 | | | | | | 6 | | 20 | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | | | | | | Cl+Ex | | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | | | | | | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Queue (s) | 0.0 | 0.0 | | | | | | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Delay (s) | 0.0 | 0.0 | | | | | | 0.0 | | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | | | | 6 | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |

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

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detector 2 Extend (s) | | 0.0 | | | | | | 0.0 | | | 0.0 | |
| Turn Type | Perm | NA | | | | | | NA | | pm+pt | NA | |
| Protected Phases | | 4 | | | | | | 6 | | 5 | 2 | |
| Permitted Phases | 4 | | | | | | | | | 2 | | |
| Detector Phase | 4 | 4 | | | | | | 6 | | 5 | 2 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | | | | | | 10.0 | | 7.0 | 10.0 | |
| Minimum Split (s) | 30.5 | 30.5 | | | | | | 23.4 | | 12.4 | 23.4 | |
| Total Split (s) | 30.6 | 30.6 | | | | | | 46.2 | | 13.2 | 59.4 | |
| Total Split (%) | 34.0% | 34.0% | | | | | | 51.3% | | 14.7% | 66.0% | |
| Maximum Green (s) | 24.1 | 24.1 | | | | | | 40.8 | | 7.8 | 54.0 | |
| Yellow Time (s) | 5.0 | 5.0 | | | | | | 3.2 | | 3.2 | 3.2 | |
| All-Red Time (s) | 1.5 | 1.5 | | | | | | 2.2 | | 2.2 | 2.2 | |
| Lost Time Adjust (s) | | 0.0 | | | | | | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | | 6.5 | | | | | | 5.4 | | 5.4 | 5.4 | |
| Lead/Lag | | | | | | | | Lead | | Lag | | |
| Lead-Lag Optimize? | | | | | | | | Yes | | Yes | | |
| Vehicle Extension (s) | 3.0 | 3.0 | | | | | | 3.0 | | 3.0 | 3.0 | |
| Recall Mode | None | None | | | | | | C-Max | | None | C-Max | |
| Walk Time (s) | 7.0 | 7.0 | | | | | | 7.0 | | | 7.0 | |
| Flash Dont Walk (s) | 17.0 | 17.0 | | | | | | 11.0 | | | 11.0 | |
| Pedestrian Calls (#/hr) | 0 | 0 | | | | | | 0 | | | 0 | |
| Act Effct Green (s) | | 18.5 | | | | | | 46.4 | | 59.6 | 59.6 | |
| Actuated g/C Ratio | | 0.21 | | | | | | 0.52 | | 0.66 | 0.66 | |
| v/c Ratio | | 0.69 | | | | | | 0.83 | | 0.31 | 0.21 | |
| Control Delay | | 27.0 | | | | | | 29.1 | | 12.0 | 6.6 | |
| Queue Delay | | 0.0 | | | | | | 0.0 | | 0.0 | 0.0 | |
| Total Delay | | 27.0 | | | | | | 29.1 | | 12.0 | 6.6 | |
| LOS | | C | | | | | | C | | B | A | |
| Approach Delay | | 27.0 | | | | | | 29.1 | | | 7.6 | |
| Approach LOS | | C | | | | | | C | | | A | |

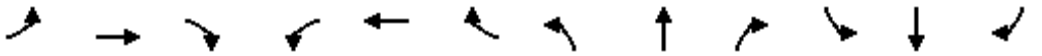
| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 90 | | | |
| Actuated Cycle Length: 90 | | | |
| Offset: 89 (99%), Referenced to phase 2:NBTL and 6:SBT, Start of Green | | | |
| Natural Cycle: 90 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.83 | | | |
| Intersection Signal Delay: 22.3 | | Intersection LOS: C | |
| Intersection Capacity Utilization 68.5% | | ICU Level of Service C | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 3911: Schaefer Hwy & Jeffries Service Dr



| Lane Group | Ø8 |
|---|---|
| Detector 2 Extend (s) | |
| Turn Type | |
| Protected Phases | 8 |
| Permitted Phases | |
| Detector Phase | |
| Switch Phase | |
| Minimum Initial (s) | 10.0 |
| Minimum Split (s) | 28.7 |
| Total Split (s) | 30.6 |
| Total Split (%) | 34% |
| Maximum Green (s) | 24.9 |
| Yellow Time (s) | 3.0 |
| All-Red Time (s) | 2.7 |
| Lost Time Adjust (s) | |
| Total Lost Time (s) | |
| Lead/Lag | |
| Lead-Lag Optimize? | |
| Vehicle Extension (s) | 3.0 |
| Recall Mode | None |
| Walk Time (s) | 7.0 |
| Flash Dont Walk (s) | 16.0 |
| Pedestrian Calls (#/hr) | 0 |
| Act Effct Green (s) | |
| Actuated g/C Ratio | |
| v/c Ratio | |
| Control Delay | |
| Queue Delay | |
| Total Delay | |
| LOS | |
| Approach Delay | |
| Approach LOS | |

| Intersection Summary |
|---|



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 28 | 146 | 36 | 71 | 99 | 33 | 45 | 570 | 66 | 57 | 454 | 43 |
| Future Volume (vph) | 28 | 146 | 36 | 71 | 99 | 33 | 45 | 570 | 66 | 57 | 454 | 43 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 80 | | 0 | 80 | | 0 | 80 | | 0 | 80 | | 0 |
| Storage Lanes | 1 | | 0 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 65 | | | 65 | | | 65 | | | 65 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 |
| Ped Bike Factor | | 1.00 | | 1.00 | | | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Frt | | 0.970 | | | 0.963 | | | 0.982 | | | 0.983 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1805 | 1781 | 0 | 1656 | 1812 | 0 | 1752 | 3328 | 0 | 1770 | 3212 | 0 |
| Flt Permitted | 0.563 | | | 0.441 | | | 0.413 | | | 0.332 | | |
| Satd. Flow (perm) | 1070 | 1781 | 0 | 767 | 1812 | 0 | 758 | 3328 | 0 | 617 | 3212 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 16 | | | 21 | | | 23 | | | 21 | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 648 | | | 545 | | | 853 | | | 685 | |
| Travel Time (s) | | 14.7 | | | 12.4 | | | 19.4 | | | 15.6 | |
| Confl. Peds. (#/hr) | | | 2 | 2 | | | 6 | | 5 | 5 | | 6 |
| Peak Hour Factor | 0.69 | 0.76 | 0.75 | 0.75 | 0.70 | 0.72 | 0.67 | 0.88 | 0.73 | 0.75 | 0.88 | 0.65 |
| Heavy Vehicles (%) | 0% | 3% | 4% | 9% | 0% | 4% | 3% | 7% | 0% | 2% | 11% | 3% |
| Adj. Flow (vph) | 41 | 192 | 48 | 95 | 141 | 46 | 67 | 648 | 90 | 76 | 516 | 66 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 41 | 240 | 0 | 95 | 187 | 0 | 67 | 738 | 0 | 76 | 582 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 12 | | | 12 | | | 12 | | | 12 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | | 1 | 2 | | 1 | 2 | | 1 | 2 | |
| Detector Template | Left | Thru | | Left | Thru | | Left | Thru | | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | | 20 | 100 | | 20 | 100 | | 20 | 100 | |
| Trailing Detector (ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Detector 1 Position(ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Detector 1 Size(ft) | 20 | 6 | | 20 | 6 | | 20 | 6 | | 20 | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Queue (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Delay (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | 6 | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Turn Type | Perm | NA | | Perm | NA | | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | | 4 | | | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | | 8 | | | 2 | | | 6 | | |
| Detector Phase | 4 | 4 | | 8 | 8 | | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | | 10.0 | 10.0 | | 4.0 | 15.0 | | 4.0 | 15.0 | |
| Minimum Split (s) | 24.6 | 24.6 | | 24.6 | 24.6 | | 9.6 | 26.6 | | 9.6 | 26.6 | |
| Total Split (s) | 29.0 | 29.0 | | 29.0 | 29.0 | | 13.0 | 38.0 | | 13.0 | 38.0 | |
| Total Split (%) | 36.3% | 36.3% | | 36.3% | 36.3% | | 16.3% | 47.5% | | 16.3% | 47.5% | |
| Maximum Green (s) | 23.4 | 23.4 | | 23.4 | 23.4 | | 7.4 | 32.4 | | 7.4 | 32.4 | |
| Yellow Time (s) | 3.5 | 3.5 | | 3.5 | 3.5 | | 3.5 | 3.5 | | 3.5 | 3.5 | |
| All-Red Time (s) | 2.1 | 2.1 | | 2.1 | 2.1 | | 2.1 | 2.1 | | 2.1 | 2.1 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 5.6 | 5.6 | | 5.6 | 5.6 | | 5.6 | 5.6 | | 5.6 | 5.6 | |
| Lead/Lag | | | | | | | Lag | Lead | | Lag | Lead | |
| Lead-Lag Optimize? | | | | | | | Yes | Yes | | Yes | Yes | |
| Vehicle Extension (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | |
| Recall Mode | Min | Min | | Min | Min | | None | C-Max | | None | C-Max | |
| Walk Time (s) | 7.0 | 7.0 | | 7.0 | 7.0 | | | 7.0 | | | 7.0 | |
| Flash Dont Walk (s) | 12.0 | 12.0 | | 12.0 | 12.0 | | | 14.0 | | | 14.0 | |
| Pedestrian Calls (#/hr) | 0 | 0 | | 0 | 0 | | | 0 | | | 0 | |
| Act Effct Green (s) | 15.6 | 15.6 | | 15.6 | 15.6 | | 49.8 | 44.1 | | 49.8 | 44.1 | |
| Actuated g/C Ratio | 0.20 | 0.20 | | 0.20 | 0.20 | | 0.62 | 0.55 | | 0.62 | 0.55 | |
| v/c Ratio | 0.20 | 0.67 | | 0.64 | 0.51 | | 0.12 | 0.40 | | 0.16 | 0.33 | |
| Control Delay | 27.2 | 36.4 | | 47.9 | 29.3 | | 4.1 | 4.4 | | 7.8 | 11.6 | |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 27.2 | 36.4 | | 47.9 | 29.3 | | 4.1 | 4.4 | | 7.8 | 11.6 | |
| LOS | C | D | | D | C | | A | A | | A | B | |
| Approach Delay | | 35.0 | | | 35.6 | | | 4.4 | | | 11.2 | |
| Approach LOS | | D | | | D | | | A | | | B | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 80 | | | |
| Actuated Cycle Length: 80 | | | |
| Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green | | | |
| Natural Cycle: 65 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.67 | | | |
| Intersection Signal Delay: 15.2 | | Intersection LOS: B | |
| Intersection Capacity Utilization 58.5% | | ICU Level of Service B | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 4001: Schaefer Hwy & Lyndon St

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

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 6 | 218 | 3 | 1 | 204 | 5 | 1 | 0 | 8 | 6 | 0 | 8 |
| Future Vol, veh/h | 6 | 218 | 3 | 1 | 204 | 5 | 1 | 0 | 8 | 6 | 0 | 8 |
| Conflicting Peds, #/hr | 3 | 0 | 1 | 1 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 63 | 94 | 50 | 25 | 86 | 50 | 25 | 25 | 50 | 63 | 25 | 50 |
| Heavy Vehicles, % | 0 | 7 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 10 | 232 | 6 | 4 | 237 | 10 | 4 | 0 | 16 | 10 | 0 | 16 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 250 | 0 | 0 | 239 | 0 | 0 | 514 | 514 | 236 | 516 | 512 | 245 |
| Stage 1 | - | - | - | - | - | - | 256 | 256 | - | 253 | 253 | - |
| Stage 2 | - | - | - | - | - | - | 258 | 258 | - | 263 | 259 | - |
| Critical Hdwy | 4.1 | - | - | 4.1 | - | - | 7.1 | 6.5 | 6.2 | 7.1 | 6.5 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.1 | 5.5 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.1 | 5.5 | - |
| Follow-up Hdwy | 2.2 | - | - | 2.2 | - | - | 3.5 | 4 | 3.3 | 3.5 | 4 | 3.3 |
| Pot Cap-1 Maneuver | 1327 | - | - | 1340 | - | - | 474 | 467 | 808 | 473 | 468 | 799 |
| Stage 1 | - | - | - | - | - | - | 753 | 699 | - | 756 | 701 | - |
| Stage 2 | - | - | - | - | - | - | 751 | 698 | - | 747 | 697 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 1323 | - | - | 1339 | - | - | 460 | 460 | 807 | 458 | 461 | 797 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 460 | 460 | - | 458 | 461 | - |
| Stage 1 | - | - | - | - | - | - | 745 | 692 | - | 747 | 697 | - |
| Stage 2 | - | - | - | - | - | - | 734 | 694 | - | 726 | 690 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0.3 | 0.1 | 10.3 | 11 |
| HCM LOS | | | B | B |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 701 | 1323 | - | - | 1339 | - | - | 625 |
| HCM Lane V/C Ratio | 0.029 | 0.007 | - | - | 0.003 | - | - | 0.041 |
| HCM Control Delay (s) | 10.3 | 7.7 | 0 | - | 7.7 | 0 | - | 11 |
| HCM Lane LOS | B | A | A | - | A | A | - | B |
| HCM 95th %tile Q(veh) | 0.1 | 0 | - | - | 0 | - | - | 0.1 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 1.4 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 4 | 1 | 10 | 9 | 8 | 9 | 3 | 368 | 13 | 9 | 344 | 1 |
| Future Vol, veh/h | 4 | 1 | 10 | 9 | 8 | 9 | 3 | 368 | 13 | 9 | 344 | 1 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 1 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | 50 | - | - | 50 | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 60 | 60 | 60 | 60 | 60 | 60 | 100 | 85 | 63 | 60 | 87 | 60 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 3 | 0 |
| Mvmt Flow | 7 | 2 | 17 | 15 | 13 | 15 | 3 | 433 | 21 | 15 | 395 | 2 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 891 | 888 | 397 | 887 | 879 | 445 | 398 | 0 | 0 | 455 | 0 | 0 |
| Stage 1 | 427 | 427 | - | 451 | 451 | - | - | - | - | - | - | - |
| Stage 2 | 464 | 461 | - | 436 | 428 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.1 | 6.5 | 6.2 | 7.1 | 6.5 | 6.2 | 4.1 | - | - | 4.1 | - | - |
| Critical Hdwy Stg 1 | 6.1 | 5.5 | - | 6.1 | 5.5 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.1 | 5.5 | - | 6.1 | 5.5 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.5 | 4 | 3.3 | 3.5 | 4 | 3.3 | 2.2 | - | - | 2.2 | - | - |
| Pot Cap-1 Maneuver | 265 | 285 | 657 | 267 | 288 | 617 | 1172 | - | - | 1116 | - | - |
| Stage 1 | 610 | 589 | - | 592 | 574 | - | - | - | - | - | - | - |
| Stage 2 | 582 | 569 | - | 603 | 588 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | 246 | 280 | 656 | 256 | 283 | 616 | 1171 | - | - | 1115 | - | - |
| Mov Cap-2 Maneuver | 246 | 280 | - | 256 | 283 | - | - | - | - | - | - | - |
| Stage 1 | 608 | 581 | - | 590 | 572 | - | - | - | - | - | - | - |
| Stage 2 | 553 | 567 | - | 578 | 580 | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 13.9 | 17.4 | 0.1 | 0.3 |
| HCM LOS | B | C | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 1171 | - | - | 428 | 333 | 1115 | - | - |
| HCM Lane V/C Ratio | 0.003 | - | - | 0.058 | 0.13 | 0.013 | - | - |
| HCM Control Delay (s) | 8.1 | - | - | 13.9 | 17.4 | 8.3 | - | - |
| HCM Lane LOS | A | - | - | B | C | A | - | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 0.2 | 0.4 | 0 | - | - |

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

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 4 | 3 | 688 | 4 | 3 | 625 |
| Future Vol, veh/h | 4 | 3 | 688 | 4 | 3 | 625 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | 0 | - | - | - | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 100 | 100 | 2 | 100 | 100 | 2 |
| Mvmt Flow | 4 | 3 | 748 | 4 | 3 | 679 |

| Major/Minor | Minor1 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 1096 | 376 | 0 | 0 | 752 | 0 |
| Stage 1 | 750 | - | - | - | - | - |
| Stage 2 | 346 | - | - | - | - | - |
| Critical Hdwy | 8.8 | 8.9 | - | - | 6.1 | - |
| Critical Hdwy Stg 1 | 7.8 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 7.8 | - | - | - | - | - |
| Follow-up Hdwy | 4.5 | 4.3 | - | - | 3.2 | - |
| Pot Cap-1 Maneuver | 101 | 410 | - | - | 431 | - |
| Stage 1 | 243 | - | - | - | - | - |
| Stage 2 | 466 | - | - | - | - | - |
| Platoon blocked, % | | | - | - | | - |
| Mov Cap-1 Maneuver | 100 | 410 | - | - | 431 | - |
| Mov Cap-2 Maneuver | 100 | - | - | - | - | - |
| Stage 1 | 243 | - | - | - | - | - |
| Stage 2 | 461 | - | - | - | - | - |

| Approach | WB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 30.3 | 0 | 0.2 |
| HCM LOS | D | | |

| Minor Lane/Major Mvmt | NBT | NBR | WBLn1 | WBLn2 | SBL | SBT |
|---|---|---|---|---|---|---|
| Capacity (veh/h) | - | - | 100 | 410 | 431 | - |
| HCM Lane V/C Ratio | - | - | 0.043 | 0.008 | 0.008 | - |
| HCM Control Delay (s) | - | - | 42.6 | 13.9 | 13.4 | 0.1 |
| HCM Lane LOS | - | - | E | B | B | A |
| HCM 95th %tile Q(veh) | - | - | 0.1 | 0 | 0 | - |

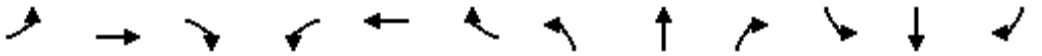
| Intersection | |
|---|---|
| Int Delay, s/veh | 2 |

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 76 | 23 | 658 | 33 | 9 | 552 |
| Future Vol, veh/h | 76 | 23 | 658 | 33 | 9 | 552 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | 150 | - | - | - | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 0 | 0 | 7 | 0 | 0 | 8 |
| Mvmt Flow | 83 | 25 | 715 | 36 | 10 | 600 |

| Major/Minor | Minor1 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 1053 | 376 | 0 | 0 | 751 | 0 |
| Stage 1 | 733 | - | - | - | - | - |
| Stage 2 | 320 | - | - | - | - | - |
| Critical Hdwy | 6.8 | 6.9 | - | - | 4.1 | - |
| Critical Hdwy Stg 1 | 5.8 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.8 | - | - | - | - | - |
| Follow-up Hdwy | 3.5 | 3.3 | - | - | 2.2 | - |
| Pot Cap-1 Maneuver | 225 | 627 | - | - | 868 | - |
| Stage 1 | 442 | - | - | - | - | - |
| Stage 2 | 715 | - | - | - | - | - |
| Platoon blocked, % | | | - | - | | - |
| Mov Cap-1 Maneuver | 221 | 627 | - | - | 868 | - |
| Mov Cap-2 Maneuver | 221 | - | - | - | - | - |
| Stage 1 | 442 | - | - | - | - | - |
| Stage 2 | 703 | - | - | - | - | - |

| Approach | WB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 26.1 | 0 | 0.2 |
| HCM LOS | D | | |

| Minor Lane/Major Mvmt | NBT | NBR | WBLn1 | WBLn2 | SBL | SBT |
|---|---|---|---|---|---|---|
| Capacity (veh/h) | - | - | 221 | 627 | 868 | - |
| HCM Lane V/C Ratio | - | - | 0.374 | 0.04 | 0.011 | - |
| HCM Control Delay (s) | - | - | 30.7 | 11 | 9.2 | 0.1 |
| HCM Lane LOS | - | - | D | B | A | A |
| HCM 95th %tile Q(veh) | - | - | 1.6 | 0.1 | 0 | - |



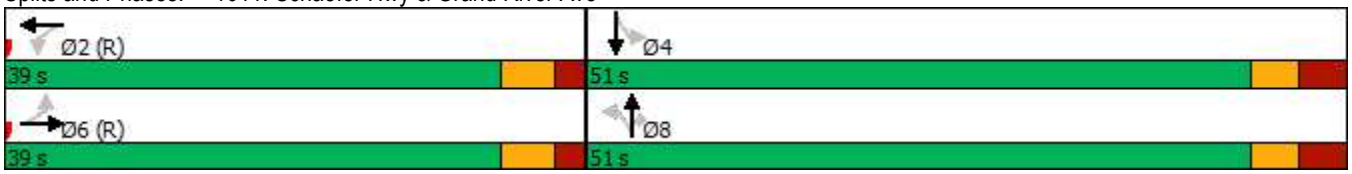
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 48 | 528 | 80 | 24 | 545 | 130 | 67 | 311 | 23 | 78 | 350 | 29 |
| Future Volume (vph) | 48 | 528 | 80 | 24 | 545 | 130 | 67 | 311 | 23 | 78 | 350 | 29 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 115 | | 0 | 95 | | 0 | 155 | | 0 | 80 | | 240 |
| Storage Lanes | 1 | | 0 | 0 | | 0 | 1 | | 1 | 1 | | 1 |
| Taper Length (ft) | 65 | | | 65 | | | 25 | | | 65 | | |
| Lane Util. Factor | 1.00 | 0.91 | 0.91 | 1.00 | 0.91 | 0.91 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 |
| Ped Bike Factor | | 1.00 | | 1.00 | | | | | 0.99 | 1.00 | | |
| Frt | | 0.977 | | | 0.968 | | | | 0.850 | | 0.988 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1805 | 5014 | 0 | 1805 | 4917 | 0 | 1805 | 1827 | 1615 | 1736 | 3502 | 0 |
| Flt Permitted | 0.345 | | | 0.363 | | | 0.446 | | | 0.286 | | |
| Satd. Flow (perm) | 656 | 5014 | 0 | 689 | 4917 | 0 | 847 | 1827 | 1593 | 522 | 3502 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 47 | | | 85 | | | | 46 | | 14 | |
| Link Speed (mph) | | 35 | | | 35 | | | 30 | | | 30 | |
| Link Distance (ft) | | 932 | | | 422 | | | 332 | | | 1209 | |
| Travel Time (s) | | 18.2 | | | 8.2 | | | 7.5 | | | 27.5 | |
| Confl. Peds. (#/hr) | | | 2 | 2 | | | | | 2 | 2 | | |
| Peak Hour Factor | 0.80 | 0.88 | 0.72 | 0.59 | 0.92 | 0.82 | 0.74 | 0.74 | 0.50 | 0.76 | 0.86 | 0.80 |
| Heavy Vehicles (%) | 0% | 1% | 0% | 0% | 0% | 10% | 0% | 4% | 0% | 4% | 2% | 0% |
| Adj. Flow (vph) | 60 | 600 | 111 | 41 | 592 | 159 | 91 | 420 | 46 | 103 | 407 | 36 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 60 | 711 | 0 | 41 | 751 | 0 | 91 | 420 | 46 | 103 | 443 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 12 | | | 12 | | | 12 | | | 12 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | Yes | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | | 1 | 2 | | 1 | 2 | 1 | 1 | 2 | |
| Detector Template | Left | Thru | | Left | Thru | | Left | Thru | Right | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | | 20 | 100 | | 20 | 100 | 20 | 20 | 100 | |
| Trailing Detector (ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | |
| Detector 1 Position(ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | |
| Detector 1 Size(ft) | 20 | 6 | | 20 | 6 | | 20 | 6 | 20 | 20 | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Detector 1 Queue (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Detector 1 Delay (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | 6 | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Turn Type | Perm | NA | | Perm | NA | | Perm | NA | Perm | Perm | NA | |
| Protected Phases | | 6 | | | 2 | | | 8 | | | 4 | |
| Permitted Phases | 6 | | | 2 | | | 8 | | 8 | 4 | | |
| Detector Phase | 6 | 6 | | 2 | 2 | | 8 | 8 | 8 | 4 | 4 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | | 10.0 | 10.0 | | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | |
| Minimum Split (s) | 35.8 | 35.8 | | 35.8 | 35.8 | | 46.5 | 46.5 | 46.5 | 46.5 | 46.5 | |
| Total Split (s) | 39.0 | 39.0 | | 39.0 | 39.0 | | 51.0 | 51.0 | 51.0 | 51.0 | 51.0 | |
| Total Split (%) | 43.3% | 43.3% | | 43.3% | 43.3% | | 56.7% | 56.7% | 56.7% | 56.7% | 56.7% | |
| Maximum Green (s) | 33.2 | 33.2 | | 33.2 | 33.2 | | 44.5 | 44.5 | 44.5 | 44.5 | 44.5 | |
| Yellow Time (s) | 3.6 | 3.6 | | 3.6 | 3.6 | | 3.2 | 3.2 | 3.2 | 3.2 | 3.2 | |
| All-Red Time (s) | 2.2 | 2.2 | | 2.2 | 2.2 | | 3.3 | 3.3 | 3.3 | 3.3 | 3.3 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Total Lost Time (s) | 5.8 | 5.8 | | 5.8 | 5.8 | | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Vehicle Extension (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | |
| Recall Mode | C-Max | C-Max | | C-Max | C-Max | | None | None | None | None | None | |
| Walk Time (s) | 7.0 | 7.0 | | 7.0 | 7.0 | | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | |
| Flash Dont Walk (s) | 23.0 | 23.0 | | 23.0 | 23.0 | | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 | |
| Pedestrian Calls (#/hr) | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | |
| Act Effct Green (s) | 49.9 | 49.9 | | 49.9 | 49.9 | | 27.8 | 27.8 | 27.8 | 27.8 | 27.8 | |
| Actuated g/C Ratio | 0.55 | 0.55 | | 0.55 | 0.55 | | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | |
| v/c Ratio | 0.17 | 0.25 | | 0.11 | 0.27 | | 0.35 | 0.74 | 0.09 | 0.64 | 0.41 | |
| Control Delay | 14.2 | 11.0 | | 11.1 | 8.7 | | 16.0 | 26.1 | 4.2 | 43.5 | 23.8 | |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | |
| Total Delay | 14.2 | 11.0 | | 11.1 | 8.7 | | 16.0 | 26.3 | 4.2 | 43.5 | 23.8 | |
| LOS | B | B | | B | A | | B | C | A | D | C | |
| Approach Delay | | 11.3 | | | 8.8 | | | 22.8 | | | 27.5 | |
| Approach LOS | | B | | | A | | | C | | | C | |

**Intersection Summary**

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 90
Offset: 61 (68%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green
Natural Cycle: 85
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.74
Intersection Signal Delay: 16.3 Intersection LOS: B
Intersection Capacity Utilization 77.1% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 1011: Schaefer Hwy & Grand River Ave

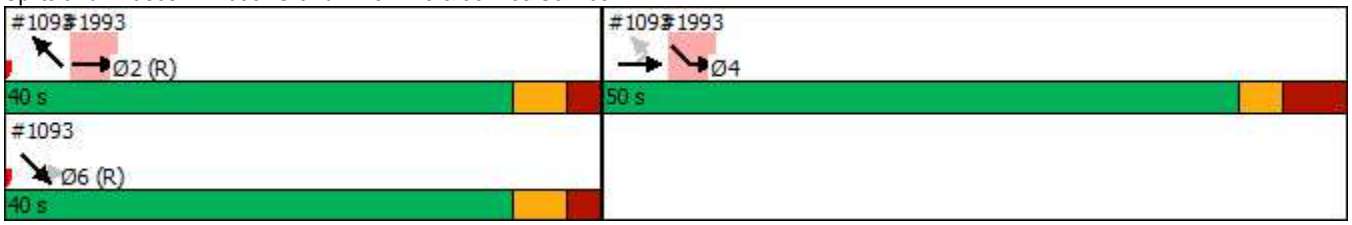


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | SEL | SET | SER | NWL | NWT | NWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 5 | 338 | 79 | 0 | 0 | 0 | 11 | 521 | 0 | 0 | 422 | 17 |
| Future Volume (vph) | 5 | 338 | 79 | 0 | 0 | 0 | 11 | 521 | 0 | 0 | 422 | 17 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Util. Factor | 0.86 | 0.86 | 0.86 | 1.00 | 1.00 | 1.00 | 0.91 | 0.91 | 1.00 | 1.00 | 0.91 | 0.91 |
| Ped Bike Factor | | | | | | | | 1.00 | | | 1.00 | |
| Frt | | 0.972 | | | | | | | | | 0.994 | |
| Flt Protected | | 0.999 | | | | | | 0.998 | | | | |
| Satd. Flow (prot) | 0 | 6296 | 0 | 0 | 0 | 0 | 0 | 5127 | 0 | 0 | 5039 | 0 |
| Flt Permitted | | 0.999 | | | | | | 0.908 | | | | |
| Satd. Flow (perm) | 0 | 6296 | 0 | 0 | 0 | 0 | 0 | 4665 | 0 | 0 | 5039 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 86 | | | | | | | | | 8 | |
| Link Speed (mph) | | 35 | | | 35 | | | 35 | | | 35 | |
| Link Distance (ft) | | 342 | | | 379 | | | 587 | | | 812 | |
| Travel Time (s) | | 6.7 | | | 7.4 | | | 11.4 | | | 15.8 | |
| Confl. Peds. (#/hr) | | | | | | | 3 | | | | | 3 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.56 | 0.96 | 0.92 | 0.92 | 0.71 | 0.65 |
| Heavy Vehicles (%) | 0% | 1% | 0% | 2% | 2% | 2% | 0% | 1% | 2% | 2% | 2% | 8% |
| Adj. Flow (vph) | 5 | 367 | 86 | 0 | 0 | 0 | 20 | 543 | 0 | 0 | 594 | 26 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 458 | 0 | 0 | 0 | 0 | 0 | 563 | 0 | 0 | 620 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 0 | | | 0 | | | 12 | | | 12 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | | | | | 1 | 2 | | | 2 | |
| Detector Template | Left | Thru | | | | | Left | Thru | | | Thru | |
| Leading Detector (ft) | 20 | 100 | | | | | 20 | 100 | | | 100 | |
| Trailing Detector (ft) | 0 | 0 | | | | | 0 | 0 | | | 0 | |
| Detector 1 Position(ft) | 0 | 0 | | | | | 0 | 0 | | | 0 | |
| Detector 1 Size(ft) | 20 | 6 | | | | | 20 | 6 | | | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | | | | | Cl+Ex | Cl+Ex | | | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | | | | | 0.0 | 0.0 | | | 0.0 | |
| Detector 1 Queue (s) | 0.0 | 0.0 | | | | | 0.0 | 0.0 | | | 0.0 | |
| Detector 1 Delay (s) | 0.0 | 0.0 | | | | | 0.0 | 0.0 | | | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | | | | 6 | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | | | | 0.0 | | | 0.0 | |
| Turn Type | Perm | NA | | | | | Perm | NA | | | NA | |
| Protected Phases | | 4 | | | | | | 6 | | | 2 | |
| Permitted Phases | 4 | | | | | | 6 | | | | | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | SEL | SET | SER | NWL | NWT | NWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detector Phase | 4 | 4 | | | | | 6 | 6 | | | 2 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | | | | | 10.0 | 10.0 | | | 10.0 | |
| Minimum Split (s) | 49.4 | 49.4 | | | | | 37.0 | 37.0 | | | 37.0 | |
| Total Split (s) | 50.0 | 50.0 | | | | | 40.0 | 40.0 | | | 40.0 | |
| Total Split (%) | 55.6% | 55.6% | | | | | 44.4% | 44.4% | | | 44.4% | |
| Maximum Green (s) | 42.6 | 42.6 | | | | | 34.0 | 34.0 | | | 34.0 | |
| Yellow Time (s) | 3.0 | 3.0 | | | | | 3.6 | 3.6 | | | 3.6 | |
| All-Red Time (s) | 4.4 | 4.4 | | | | | 2.4 | 2.4 | | | 2.4 | |
| Lost Time Adjust (s) | | 0.0 | | | | | | 0.0 | | | 0.0 | |
| Total Lost Time (s) | | 7.4 | | | | | | 6.0 | | | 6.0 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Vehicle Extension (s) | 3.0 | 3.0 | | | | | 3.0 | 3.0 | | | 3.0 | |
| Recall Mode | None | None | | | | | C-Max | C-Max | | | C-Max | |
| Walk Time (s) | 9.0 | 9.0 | | | | | 7.0 | 7.0 | | | 7.0 | |
| Flash Dont Walk (s) | 33.0 | 33.0 | | | | | 24.0 | 24.0 | | | 24.0 | |
| Pedestrian Calls (#/hr) | 0 | 0 | | | | | 0 | 0 | | | 0 | |
| Act Effct Green (s) | | 12.3 | | | | | | 64.3 | | | 64.3 | |
| Actuated g/C Ratio | | 0.14 | | | | | | 0.71 | | | 0.71 | |
| v/c Ratio | | 0.49 | | | | | | 0.17 | | | 0.17 | |
| Control Delay | | 36.8 | | | | | | 1.3 | | | 4.5 | |
| Queue Delay | | 0.0 | | | | | | 0.0 | | | 0.0 | |
| Total Delay | | 36.8 | | | | | | 1.3 | | | 4.5 | |
| LOS | | D | | | | | | A | | | A | |
| Approach Delay | | 36.8 | | | | | | 1.3 | | | 4.5 | |
| Approach LOS | | D | | | | | | A | | | A | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 90 | | | |
| Actuated Cycle Length: 90 | | | |
| Offset: 75 (83%), Referenced to phase 2:NWT and 6:SETL, Start of Green | | | |
| Natural Cycle: 90 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.49 | | | |
| Intersection Signal Delay: 12.4 | | Intersection LOS: B | |
| Intersection Capacity Utilization 45.3% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 1093: Grand River Ave & Jeffries Service Dr

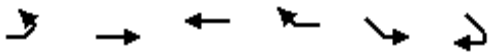


| Lane Group | WBL2 | WBL | WBT | WBR | SET | SER | SER2 | NWL | NWT |
|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | |
| Traffic Volume (vph) | 29 | 8 | 237 | 330 | 503 | 122 | 4 | 58 | 369 |
| Future Volume (vph) | 29 | 8 | 237 | 330 | 503 | 122 | 4 | 58 | 369 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | | 0 | | 0 | | 140 | | 260 | |
| Storage Lanes | | 0 | | 1 | | 1 | | 1 | |
| Taper Length (ft) | | 65 | | | | | | 65 | |
| Lane Util. Factor | 0.91 | 0.91 | 0.86 | 0.86 | 0.86 | 0.86 | 0.91 | 1.00 | 0.91 |
| Frt | | | 0.944 | 0.850 | 0.996 | 0.850 | | | |
| Flt Protected | | | 0.996 | | | | | 0.950 | |
| Satd. Flow (prot) | 0 | 0 | 4544 | 1362 | 4834 | 1376 | 0 | 1805 | 5085 |
| Flt Permitted | | | 0.996 | | | | | 0.950 | |
| Satd. Flow (perm) | 0 | 0 | 4544 | 1362 | 4834 | 1376 | 0 | 1805 | 5085 |
| Right Turn on Red | | | | Yes | | | Yes | | |
| Satd. Flow (RTOR) | | | 179 | 179 | | 126 | | | |
| Link Speed (mph) | | | 35 | | 35 | | | | 35 |
| Link Distance (ft) | | | 480 | | 422 | | | | 587 |
| Travel Time (s) | | | 9.4 | | 8.2 | | | | 11.4 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.94 | 0.83 | 0.75 | 0.58 | 0.73 |
| Heavy Vehicles (%) | 2% | 0% | 1% | 2% | 1% | 1% | 0% | 0% | 2% |
| Adj. Flow (vph) | 32 | 9 | 258 | 359 | 535 | 147 | 5 | 100 | 505 |
| Shared Lane Traffic (%) | | | | 50% | | 10% | | | |
| Lane Group Flow (vph) | 0 | 0 | 479 | 179 | 550 | 137 | 0 | 100 | 505 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Left | Right | Left | Right | Right | Left | Left |
| Median Width(ft) | | | 0 | | 12 | | | | 12 |
| Link Offset(ft) | | | 0 | | 0 | | | | 0 |
| Crosswalk Width(ft) | | | 16 | | 16 | | | | 16 |
| Two way Left Turn Lane | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | 15 | | 9 | | 9 | 9 | 15 | |
| Number of Detectors | 1 | 1 | 2 | 1 | 2 | 1 | | 1 | 2 |
| Detector Template | Left | Left | Thru | Right | Thru | Right | | Left | Thru |
| Leading Detector (ft) | 20 | 20 | 100 | 20 | 100 | 20 | | 20 | 100 |
| Trailing Detector (ft) | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 |
| Detector 1 Position(ft) | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 |
| Detector 1 Size(ft) | 20 | 20 | 6 | 20 | 6 | 20 | | 20 | 6 |
| Detector 1 Type | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex |
| Detector 1 Channel | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Detector 1 Queue (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Detector 1 Delay (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Detector 2 Position(ft) | | | 94 | | 94 | | | | 94 |
| Detector 2 Size(ft) | | | 6 | | 6 | | | | 6 |
| Detector 2 Type | | | Cl+Ex | | Cl+Ex | | | | Cl+Ex |
| Detector 2 Channel | | | | | | | | | |
| Detector 2 Extend (s) | | | 0.0 | | 0.0 | | | | 0.0 |
| Turn Type | Perm | Perm | NA | Perm | NA | Perm | | Prot | NA |
| Protected Phases | | | 4 | | 6 | | | 5 | 2 |

| Lane Group | WBL2 | WBL | WBT | WBR | SET | SER | SER2 | NWL | NWT |
|---|---|---|---|---|---|---|---|---|---|
| Permitted Phases | 4 | 4 | | 4 | | 6 | | | |
| Detector Phase | 4 | 4 | 4 | 4 | 6 | 6 | | 5 | 2 |
| Switch Phase | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | | 7.0 | 10.0 |
| Minimum Split (s) | 55.5 | 55.5 | 55.5 | 55.5 | 37.9 | 37.9 | | 12.9 | 37.9 |
| Total Split (s) | 36.0 | 36.0 | 36.0 | 36.0 | 35.6 | 35.6 | | 18.4 | 54.0 |
| Total Split (%) | 40.0% | 40.0% | 40.0% | 40.0% | 39.6% | 39.6% | | 20.4% | 60.0% |
| Maximum Green (s) | 28.5 | 28.5 | 28.5 | 28.5 | 29.7 | 29.7 | | 12.5 | 48.1 |
| Yellow Time (s) | 3.0 | 3.0 | 3.0 | 3.0 | 3.6 | 3.6 | | 3.6 | 3.6 |
| All-Red Time (s) | 4.5 | 4.5 | 4.5 | 4.5 | 2.3 | 2.3 | | 2.3 | 2.3 |
| Lost Time Adjust (s) | | | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Total Lost Time (s) | | | 7.5 | 7.5 | 5.9 | 5.9 | | 5.9 | 5.9 |
| Lead/Lag | | | | | Lead | Lead | | Lag | |
| Lead-Lag Optimize? | | | | | Yes | Yes | | Yes | |
| Vehicle Extension (s) | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | | 3.0 | 3.0 |
| Recall Mode | None | None | None | None | C-Max | C-Max | | None | C-Max |
| Walk Time (s) | 9.0 | 9.0 | 9.0 | 9.0 | 7.0 | 7.0 | | | 7.0 |
| Flash Dont Walk (s) | 39.0 | 39.0 | 39.0 | 39.0 | 25.0 | 25.0 | | | 25.0 |
| Pedestrian Calls (#/hr) | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 |
| Act Effct Green (s) | | | 13.2 | 13.2 | 48.7 | 48.7 | | 11.4 | 63.4 |
| Actuated g/C Ratio | | | 0.15 | 0.15 | 0.54 | 0.54 | | 0.13 | 0.70 |
| v/c Ratio | | | 0.58 | 0.51 | 0.21 | 0.17 | | 0.44 | 0.14 |
| Control Delay | | | 24.7 | 10.6 | 7.5 | 1.1 | | 37.6 | 0.5 |
| Queue Delay | | | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Total Delay | | | 24.7 | 10.6 | 7.5 | 1.1 | | 37.6 | 0.5 |
| LOS | | | C | B | A | A | | D | A |
| Approach Delay | | | 20.9 | | 6.2 | | | | 6.6 |
| Approach LOS | | | C | | A | | | | A |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 90 | | | |
| Actuated Cycle Length: 90 | | | |
| Offset: 72 (80%), Referenced to phase 2:NWT and 6:SET, Start of Green | | | |
| Natural Cycle: 110 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.58 | | | |
| Intersection Signal Delay: 11.3 | | Intersection LOS: B | |
| Intersection Capacity Utilization 40.9% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 1193: Left Turn Bridge & Grand River Ave & I-96 Service Dr

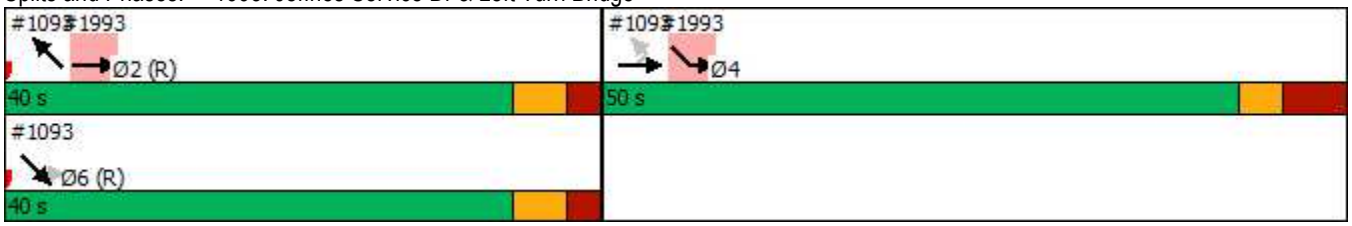


| Lane Group | EBL | EBT | WBT | WBR | SEL | SER | Ø6 |
|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | |
| Traffic Volume (vph) | 0 | 292 | 0 | 0 | 130 | 0 | |
| Future Volume (vph) | 0 | 292 | 0 | 0 | 130 | 0 | |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | |
| Lane Util. Factor | 1.00 | 0.91 | 1.00 | 1.00 | 0.97 | 1.00 | |
| Frt | | | | | | | |
| Flt Protected | | | | | 0.950 | | |
| Satd. Flow (prot) | 0 | 5085 | 0 | 0 | 3433 | 0 | |
| Flt Permitted | | | | | 0.950 | | |
| Satd. Flow (perm) | 0 | 5085 | 0 | 0 | 3433 | 0 | |
| Right Turn on Red | | | | Yes | Yes | Yes | |
| Satd. Flow (RTOR) | | | | | 715 | | |
| Link Speed (mph) | | 35 | 35 | | 30 | | |
| Link Distance (ft) | | 191 | 342 | | 422 | | |
| Travel Time (s) | | 3.7 | 6.7 | | 9.6 | | |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | |
| Adj. Flow (vph) | 0 | 317 | 0 | 0 | 141 | 0 | |
| Shared Lane Traffic (%) | | | | | | | |
| Lane Group Flow (vph) | 0 | 317 | 0 | 0 | 141 | 0 | |
| Enter Blocked Intersection | No | No | No | No | No | No | |
| Lane Alignment | Left | Left | Left | Right | Left | Right | |
| Median Width(ft) | | 0 | 0 | | 24 | | |
| Link Offset(ft) | | 0 | 0 | | 0 | | |
| Crosswalk Width(ft) | | 16 | 16 | | 16 | | |
| Two way Left Turn Lane | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | |
| Turning Speed (mph) | 15 | | | 9 | 15 | 9 | |
| Number of Detectors | | 2 | | | 1 | | |
| Detector Template | | Thru | | | Left | | |
| Leading Detector (ft) | | 100 | | | 20 | | |
| Trailing Detector (ft) | | 0 | | | 0 | | |
| Detector 1 Position(ft) | | 0 | | | 0 | | |
| Detector 1 Size(ft) | | 6 | | | 20 | | |
| Detector 1 Type | | Cl+Ex | | | Cl+Ex | | |
| Detector 1 Channel | | | | | | | |
| Detector 1 Extend (s) | | 0.0 | | | 0.0 | | |
| Detector 1 Queue (s) | | 0.0 | | | 0.0 | | |
| Detector 1 Delay (s) | | 0.0 | | | 0.0 | | |
| Detector 2 Position(ft) | | 94 | | | | | |
| Detector 2 Size(ft) | | 6 | | | | | |
| Detector 2 Type | | Cl+Ex | | | | | |
| Detector 2 Channel | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | | | |
| Turn Type | | NA | | | Prot | | |
| Protected Phases | | 2 | | | 4 | | 6 |
| Permitted Phases | | | | | | | |
| Detector Phase | | 2 | | | 4 | | |
| Switch Phase | | | | | | | |
| Minimum Initial (s) | | 10.0 | | | 10.0 | | 10.0 |

| Lane Group | EBL | EBT | WBT | WBR | SEL | SER | Ø6 |
|---|---|---|---|---|---|---|---|
| Minimum Split (s) | | 37.0 | | | 49.4 | | 37.0 |
| Total Split (s) | | 40.0 | | | 50.0 | | 40.0 |
| Total Split (%) | | 44.4% | | | 55.6% | | 44% |
| Maximum Green (s) | | 34.0 | | | 42.6 | | 34.0 |
| Yellow Time (s) | | 3.6 | | | 3.0 | | 3.6 |
| All-Red Time (s) | | 2.4 | | | 4.4 | | 2.4 |
| Lost Time Adjust (s) | | 0.0 | | | 0.0 | | |
| Total Lost Time (s) | | 6.0 | | | 7.4 | | |
| Lead/Lag | | | | | | | |
| Lead-Lag Optimize? | | | | | | | |
| Vehicle Extension (s) | | 3.0 | | | 3.0 | | 3.0 |
| Recall Mode | | C-Max | | | None | | C-Max |
| Walk Time (s) | | 7.0 | | | 9.0 | | 7.0 |
| Flash Dont Walk (s) | | 24.0 | | | 33.0 | | 24.0 |
| Pedestrian Calls (#/hr) | | 0 | | | 0 | | 0 |
| Act Effct Green (s) | | 64.3 | | | 12.3 | | |
| Actuated g/C Ratio | | 0.71 | | | 0.14 | | |
| v/c Ratio | | 0.09 | | | 0.13 | | |
| Control Delay | | 2.6 | | | 1.0 | | |
| Queue Delay | | 0.0 | | | 0.0 | | |
| Total Delay | | 2.6 | | | 1.0 | | |
| LOS | | A | | | A | | |
| Approach Delay | | 2.6 | | | 1.0 | | |
| Approach LOS | | A | | | A | | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 90 | | | |
| Actuated Cycle Length: 90 | | | |
| Offset: 75 (83%), Referenced to phase 2:NWT and 6:SETL, Start of Green | | | |
| Natural Cycle: 90 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.49 | | | |
| Intersection Signal Delay: 2.1 | | Intersection LOS: A | |
| Intersection Capacity Utilization 27.8% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 1993: Jeffries Service Dr & Left Turn Bridge



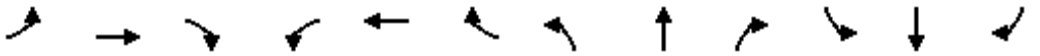
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 28 | 109 | 5 | 29 | 114 | 42 | 17 | 417 | 55 | 47 | 423 | 35 |
| Future Volume (vph) | 28 | 109 | 5 | 29 | 114 | 42 | 17 | 417 | 55 | 47 | 423 | 35 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 60 | | 0 | 60 | | 0 | 80 | | 250 | 80 | | 0 |
| Storage Lanes | 1 | | 0 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 65 | | | 65 | | | 65 | | | 65 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped Bike Factor | 1.00 | 1.00 | | 0.99 | 0.99 | | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Frt | | 0.988 | | | 0.963 | | | 0.979 | | | 0.984 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1228 | 1839 | 0 | 1805 | 1734 | 0 | 1805 | 1747 | 0 | 1671 | 1789 | 0 |
| Flt Permitted | 0.637 | | | 0.639 | | | 0.296 | | | 0.285 | | |
| Satd. Flow (perm) | 822 | 1839 | 0 | 1204 | 1734 | 0 | 562 | 1747 | 0 | 499 | 1789 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 5 | | | 20 | | | 13 | | | 9 | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 699 | | | 1470 | | | 1209 | | | 215 | |
| Travel Time (s) | | 15.9 | | | 33.4 | | | 27.5 | | | 4.9 | |
| Confl. Peds. (#/hr) | 1 | | 6 | 6 | | 1 | 1 | | 6 | 6 | | 1 |
| Peak Hour Factor | 0.53 | 0.63 | 0.33 | 0.72 | 0.80 | 0.89 | 0.75 | 0.91 | 0.72 | 0.88 | 0.90 | 0.63 |
| Heavy Vehicles (%) | 47% | 2% | 0% | 0% | 1% | 17% | 0% | 7% | 0% | 8% | 2% | 23% |
| Adj. Flow (vph) | 53 | 173 | 15 | 40 | 143 | 47 | 23 | 458 | 76 | 53 | 470 | 56 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 53 | 188 | 0 | 40 | 190 | 0 | 23 | 534 | 0 | 53 | 526 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 12 | | | 12 | | | 12 | | | 12 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | Yes | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | | 1 | 2 | | 1 | 2 | | 1 | 2 | |
| Detector Template | Left | Thru | | Left | Thru | | Left | Thru | | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | | 20 | 100 | | 20 | 100 | | 20 | 100 | |
| Trailing Detector (ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Detector 1 Position(ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Detector 1 Size(ft) | 20 | 6 | | 20 | 6 | | 20 | 6 | | 20 | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Queue (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Delay (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | 6 | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Turn Type | Perm | NA | | Perm | NA | | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | | 8 | | | 4 | | 1 | 6 | | 5 | 2 | |
| Permitted Phases | 8 | | | 4 | | | 6 | | | 2 | | |
| Detector Phase | 8 | 8 | | 4 | 4 | | 1 | 6 | | 5 | 2 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 6.0 | 6.0 | | 6.0 | 6.0 | | 5.0 | 9.0 | | 5.0 | 9.0 | |
| Minimum Split (s) | 28.8 | 28.8 | | 28.8 | 28.8 | | 10.6 | 26.6 | | 10.6 | 26.6 | |
| Total Split (s) | 29.0 | 29.0 | | 29.0 | 29.0 | | 10.7 | 40.2 | | 10.8 | 40.3 | |
| Total Split (%) | 36.3% | 36.3% | | 36.3% | 36.3% | | 13.4% | 50.3% | | 13.5% | 50.4% | |
| Maximum Green (s) | 22.2 | 22.2 | | 22.2 | 22.2 | | 5.1 | 33.6 | | 5.2 | 33.7 | |
| Yellow Time (s) | 3.8 | 3.8 | | 3.8 | 3.8 | | 3.5 | 3.6 | | 3.5 | 3.6 | |
| All-Red Time (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 2.1 | 3.0 | | 2.1 | 3.0 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 6.8 | 6.8 | | 6.8 | 6.8 | | 5.6 | 6.6 | | 5.6 | 6.6 | |
| Lead/Lag | | | | | | | Lead | Lag | | Lead | Lag | |
| Lead-Lag Optimize? | | | | | | | Yes | Yes | | Yes | Yes | |
| Vehicle Extension (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | |
| Recall Mode | Max | Max | | Max | Max | | Max | C-Max | | Max | C-Max | |
| Walk Time (s) | 7.0 | 7.0 | | 7.0 | 7.0 | | | 7.0 | | | 7.0 | |
| Flash Dont Walk (s) | 15.0 | 15.0 | | 15.0 | 15.0 | | | 13.0 | | | 13.0 | |
| Pedestrian Calls (#/hr) | 0 | 0 | | 0 | 0 | | | 0 | | | 0 | |
| Act Effct Green (s) | 22.2 | 22.2 | | 22.2 | 22.2 | | 39.7 | 33.6 | | 39.9 | 33.7 | |
| Actuated g/C Ratio | 0.28 | 0.28 | | 0.28 | 0.28 | | 0.50 | 0.42 | | 0.50 | 0.42 | |
| v/c Ratio | 0.23 | 0.37 | | 0.12 | 0.38 | | 0.06 | 0.72 | | 0.16 | 0.69 | |
| Control Delay | 25.6 | 25.1 | | 22.9 | 23.6 | | 8.2 | 25.5 | | 9.2 | 24.5 | |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 25.6 | 25.1 | | 22.9 | 23.6 | | 8.2 | 25.5 | | 9.2 | 24.5 | |
| LOS | C | C | | C | C | | A | C | | A | C | |
| Approach Delay | | 25.2 | | | 23.4 | | | 24.8 | | | 23.1 | |
| Approach LOS | | C | | | C | | | C | | | C | |

**Intersection Summary**

Area Type: Other
Cycle Length: 80
Actuated Cycle Length: 80
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
Natural Cycle: 70
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.72
Intersection Signal Delay: 24.1 Intersection LOS: C
Intersection Capacity Utilization 68.6% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 2609: Schaefer Hwy & Schoolcraft Rd



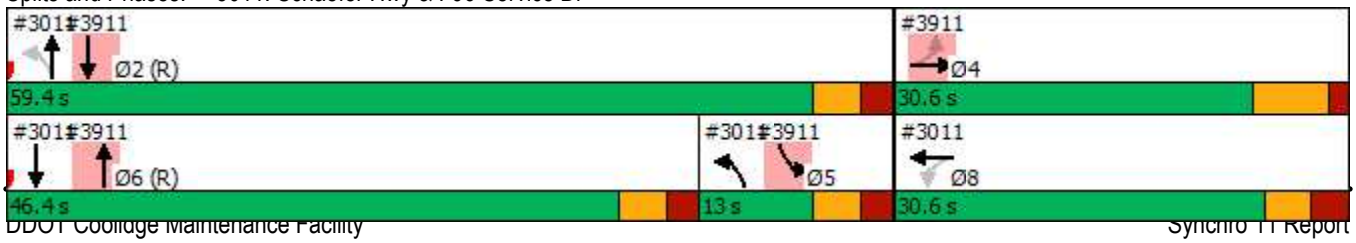
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 0 | 0 | 0 | 119 | 176 | 4 | 180 | 397 | 0 | 0 | 253 | 202 |
| Future Volume (vph) | 0 | 0 | 0 | 119 | 176 | 4 | 180 | 397 | 0 | 0 | 253 | 202 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 0 | | 0 | 0 | | 0 | 90 | | 0 | 0 | | 0 |
| Storage Lanes | 0 | | 0 | 1 | | 0 | 1 | | 0 | 0 | | 0 |
| Taper Length (ft) | 65 | | | 65 | | | 65 | | | 65 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 0.95 |
| Ped Bike Factor | | | | | | | 1.00 | | | | 0.99 | |
| Frt | | | | | 0.997 | | | | | | 0.932 | |
| Flt Protected | | | | 0.950 | | | 0.950 | | | | | |
| Satd. Flow (prot) | 0 | 0 | 0 | 1787 | 3564 | 0 | 1752 | 3471 | 0 | 0 | 3283 | 0 |
| Flt Permitted | | | | 0.950 | | | 0.431 | | | | | |
| Satd. Flow (perm) | 0 | 0 | 0 | 1787 | 3564 | 0 | 793 | 3471 | 0 | 0 | 3283 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | | | 2 | | | | | | 249 | |
| Link Speed (mph) | | 35 | | | 35 | | | 30 | | | 30 | |
| Link Distance (ft) | | 298 | | | 375 | | | 384 | | | 332 | |
| Travel Time (s) | | 5.8 | | | 7.3 | | | 8.7 | | | 7.5 | |
| Confl. Peds. (#/hr) | | | | | | | 4 | | | | | 4 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.87 | 0.76 | 0.92 | 0.92 | 0.84 | 0.81 |
| Heavy Vehicles (%) | 2% | 2% | 2% | 1% | 1% | 0% | 3% | 4% | 2% | 2% | 3% | 0% |
| Adj. Flow (vph) | 0 | 0 | 0 | 129 | 191 | 4 | 207 | 522 | 0 | 0 | 301 | 249 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 0 | 0 | 129 | 195 | 0 | 207 | 522 | 0 | 0 | 550 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 12 | | | 12 | | | 12 | | | 12 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | | | | 1 | 2 | | 1 | 2 | | | 2 | |
| Detector Template | | | | Left | Thru | | Left | Thru | | | Thru | |
| Leading Detector (ft) | | | | 20 | 100 | | 20 | 100 | | | 100 | |
| Trailing Detector (ft) | | | | 0 | 0 | | 0 | 0 | | | 0 | |
| Detector 1 Position(ft) | | | | 0 | 0 | | 0 | 0 | | | 0 | |
| Detector 1 Size(ft) | | | | 20 | 6 | | 20 | 6 | | | 6 | |
| Detector 1 Type | | | | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | | | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | | | | 0.0 | 0.0 | | 0.0 | 0.0 | | | 0.0 | |
| Detector 1 Queue (s) | | | | 0.0 | 0.0 | | 0.0 | 0.0 | | | 0.0 | |
| Detector 1 Delay (s) | | | | 0.0 | 0.0 | | 0.0 | 0.0 | | | 0.0 | |
| Detector 2 Position(ft) | | | | | 94 | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | | | | 6 | | | 6 | | | 6 | |
| Detector 2 Type | | | | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | | | | 0.0 | | | 0.0 | | | 0.0 | |

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

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Turn Type | | | | Perm | NA | | pm+pt | NA | | | NA | |
| Protected Phases | | | | | 8 | | 5 | 2 | | | 6 | |
| Permitted Phases | | | | 8 | | | 2 | | | | | |
| Detector Phase | | | | 8 | 8 | | 5 | 2 | | | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | | | | 10.0 | 10.0 | | 7.0 | 10.0 | | | 10.0 | |
| Minimum Split (s) | | | | 28.7 | 28.7 | | 12.4 | 23.4 | | | 23.4 | |
| Total Split (s) | | | | 30.6 | 30.6 | | 13.0 | 59.4 | | | 46.4 | |
| Total Split (%) | | | | 34.0% | 34.0% | | 14.4% | 66.0% | | | 51.6% | |
| Maximum Green (s) | | | | 24.9 | 24.9 | | 7.6 | 54.0 | | | 41.0 | |
| Yellow Time (s) | | | | 3.0 | 3.0 | | 3.2 | 3.2 | | | 3.2 | |
| All-Red Time (s) | | | | 2.7 | 2.7 | | 2.2 | 2.2 | | | 2.2 | |
| Lost Time Adjust (s) | | | | 0.0 | 0.0 | | 0.0 | 0.0 | | | 0.0 | |
| Total Lost Time (s) | | | | 5.7 | 5.7 | | 5.4 | 5.4 | | | 5.4 | |
| Lead/Lag | | | | | | | Lag | | | | Lead | |
| Lead-Lag Optimize? | | | | | | | Yes | | | | Yes | |
| Vehicle Extension (s) | | | | 3.0 | 3.0 | | 3.0 | 3.0 | | | 3.0 | |
| Recall Mode | | | | None | None | | None | C-Max | | | C-Max | |
| Walk Time (s) | | | | 7.0 | 7.0 | | | 7.0 | | | 7.0 | |
| Flash Dont Walk (s) | | | | 16.0 | 16.0 | | | 11.0 | | | 11.0 | |
| Pedestrian Calls (#/hr) | | | | 0 | 0 | | | 0 | | | 0 | |
| Act Effct Green (s) | | | | 14.5 | 14.5 | | 64.4 | 64.4 | | | 51.4 | |
| Actuated g/C Ratio | | | | 0.16 | 0.16 | | 0.72 | 0.72 | | | 0.57 | |
| v/c Ratio | | | | 0.45 | 0.34 | | 0.32 | 0.21 | | | 0.28 | |
| Control Delay | | | | 23.8 | 19.3 | | 3.7 | 2.4 | | | 3.1 | |
| Queue Delay | | | | 0.0 | 0.0 | | 0.0 | 0.0 | | | 0.2 | |
| Total Delay | | | | 23.8 | 19.3 | | 3.7 | 2.4 | | | 3.2 | |
| LOS | | | | C | B | | A | A | | | A | |
| Approach Delay | | | | | 21.1 | | | 2.8 | | | 3.2 | |
| Approach LOS | | | | | C | | | A | | | A | |

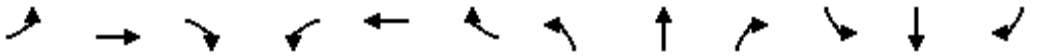
| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 90 | | | |
| Actuated Cycle Length: 90 | | | |
| Offset: 80 (89%), Referenced to phase 2:NBTL and 6:SBT, Start of Green | | | |
| Natural Cycle: 80 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.66 | | | |
| Intersection Signal Delay: 6.6 | | Intersection LOS: A | |
| Intersection Capacity Utilization 57.8% | | ICU Level of Service B | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 3011: Schaefer Hwy & I-96 Service Dr



| Lane Group | Ø4 |
|---|---|
| Turn Type | |
| Protected Phases | 4 |
| Permitted Phases | |
| Detector Phase | |
| Switch Phase | |
| Minimum Initial (s) | 10.0 |
| Minimum Split (s) | 30.5 |
| Total Split (s) | 30.6 |
| Total Split (%) | 34% |
| Maximum Green (s) | 24.1 |
| Yellow Time (s) | 5.0 |
| All-Red Time (s) | 1.5 |
| Lost Time Adjust (s) | |
| Total Lost Time (s) | |
| Lead/Lag | |
| Lead-Lag Optimize? | |
| Vehicle Extension (s) | 3.0 |
| Recall Mode | None |
| Walk Time (s) | 7.0 |
| Flash Dont Walk (s) | 17.0 |
| Pedestrian Calls (#/hr) | 0 |
| Act Effct Green (s) | |
| Actuated g/C Ratio | |
| v/c Ratio | |
| Control Delay | |
| Queue Delay | |
| Total Delay | |
| LOS | |
| Approach Delay | |
| Approach LOS | |

| Intersection Summary |
|---|



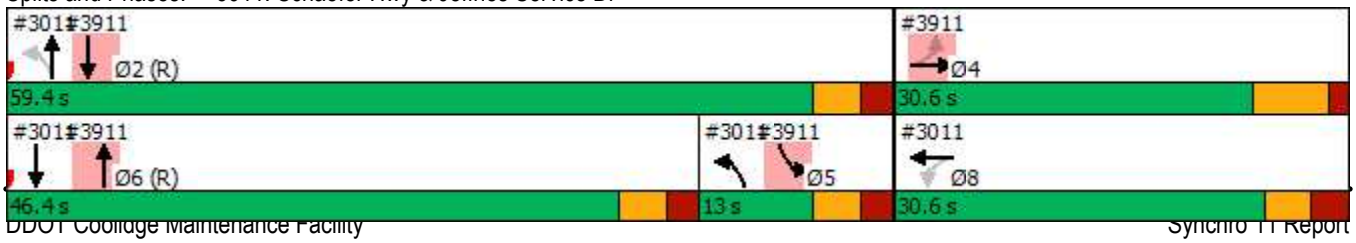
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 179 | 135 | 189 | 0 | 0 | 0 | 0 | 398 | 99 | 58 | 314 | 0 |
| Future Volume (vph) | 179 | 135 | 189 | 0 | 0 | 0 | 0 | 398 | 99 | 58 | 314 | 0 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 0 | | 0 | 0 | | 0 | 0 | | 0 | 90 | | 0 |
| Storage Lanes | 0 | | 0 | 0 | | 0 | 0 | | 0 | 1 | | 0 |
| Taper Length (ft) | 65 | | | 65 | | | 65 | | | 65 | | |
| Lane Util. Factor | 0.91 | 0.91 | 0.91 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 1.00 |
| Ped Bike Factor | | | | | | | | 1.00 | | 1.00 | | |
| Frt | | 0.944 | | | | | | 0.972 | | | | |
| Flt Protected | | 0.982 | | | | | | | | 0.950 | | |
| Satd. Flow (prot) | 0 | 4736 | 0 | 0 | 0 | 0 | 0 | 1766 | 0 | 1770 | 3505 | 0 |
| Flt Permitted | | 0.982 | | | | | | | | 0.950 | | |
| Satd. Flow (perm) | 0 | 4736 | 0 | 0 | 0 | 0 | 0 | 1766 | 0 | 1765 | 3505 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 165 | | | | | | 19 | | | | |
| Link Speed (mph) | | 35 | | | 35 | | | 30 | | | 30 | |
| Link Distance (ft) | | 417 | | | 354 | | | 621 | | | 384 | |
| Travel Time (s) | | 8.1 | | | 6.9 | | | 14.1 | | | 8.7 | |
| Confl. Peds. (#/hr) | | | | | | | | | 4 | 4 | | |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.75 | 0.72 | 0.81 | 0.79 | 0.92 |
| Heavy Vehicles (%) | 1% | 3% | 1% | 2% | 2% | 2% | 2% | 5% | 1% | 2% | 3% | 2% |
| Adj. Flow (vph) | 195 | 147 | 205 | 0 | 0 | 0 | 0 | 531 | 138 | 72 | 397 | 0 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 547 | 0 | 0 | 0 | 0 | 0 | 669 | 0 | 72 | 397 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 0 | | | 0 | | | 12 | | | 12 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | Yes | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | | | | | | 2 | | 1 | 2 | |
| Detector Template | Left | Thru | | | | | | Thru | | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | | | | | | 100 | | 20 | 100 | |
| Trailing Detector (ft) | 0 | 0 | | | | | | 0 | | 0 | 0 | |
| Detector 1 Position(ft) | 0 | 0 | | | | | | 0 | | 0 | 0 | |
| Detector 1 Size(ft) | 20 | 6 | | | | | | 6 | | 20 | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | | | | | | Cl+Ex | | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | | | | | | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Queue (s) | 0.0 | 0.0 | | | | | | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Delay (s) | 0.0 | 0.0 | | | | | | 0.0 | | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | | | | 6 | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | | | | 0.0 | | | 0.0 | |

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

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Turn Type | Perm | NA | | | | | | NA | | Prot | NA | |
| Protected Phases | | 4 | | | | | | 6 | | 5 | 2 | |
| Permitted Phases | 4 | | | | | | | | | | | |
| Detector Phase | 4 | 4 | | | | | | 6 | | 5 | 2 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | | | | | | 10.0 | | 7.0 | 10.0 | |
| Minimum Split (s) | 30.5 | 30.5 | | | | | | 23.4 | | 12.4 | 23.4 | |
| Total Split (s) | 30.6 | 30.6 | | | | | | 46.4 | | 13.0 | 59.4 | |
| Total Split (%) | 34.0% | 34.0% | | | | | | 51.6% | | 14.4% | 66.0% | |
| Maximum Green (s) | 24.1 | 24.1 | | | | | | 41.0 | | 7.6 | 54.0 | |
| Yellow Time (s) | 5.0 | 5.0 | | | | | | 3.2 | | 3.2 | 3.2 | |
| All-Red Time (s) | 1.5 | 1.5 | | | | | | 2.2 | | 2.2 | 2.2 | |
| Lost Time Adjust (s) | | 0.0 | | | | | | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | | 6.5 | | | | | | 5.4 | | 5.4 | 5.4 | |
| Lead/Lag | | | | | | | | Lead | | Lag | | |
| Lead-Lag Optimize? | | | | | | | | Yes | | Yes | | |
| Vehicle Extension (s) | 3.0 | 3.0 | | | | | | 3.0 | | 3.0 | 3.0 | |
| Recall Mode | None | None | | | | | | C-Max | | None | C-Max | |
| Walk Time (s) | 7.0 | 7.0 | | | | | | 7.0 | | | 7.0 | |
| Flash Dont Walk (s) | 17.0 | 17.0 | | | | | | 11.0 | | | 11.0 | |
| Pedestrian Calls (#/hr) | 0 | 0 | | | | | | 0 | | | 0 | |
| Act Effct Green (s) | | 13.7 | | | | | | 51.4 | | 7.6 | 64.4 | |
| Actuated g/C Ratio | | 0.15 | | | | | | 0.57 | | 0.08 | 0.72 | |
| v/c Ratio | | 0.64 | | | | | | 0.66 | | 0.48 | 0.16 | |
| Control Delay | | 27.9 | | | | | | 17.5 | | 48.7 | 4.6 | |
| Queue Delay | | 0.0 | | | | | | 0.0 | | 0.0 | 0.0 | |
| Total Delay | | 27.9 | | | | | | 17.5 | | 48.7 | 4.6 | |
| LOS | | C | | | | | | B | | D | A | |
| Approach Delay | | 27.9 | | | | | | 17.5 | | | 11.4 | |
| Approach LOS | | C | | | | | | B | | | B | |

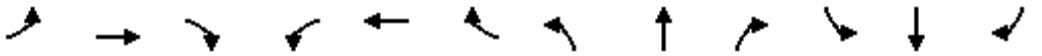
| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 90 | | | |
| Actuated Cycle Length: 90 | | | |
| Offset: 80 (89%), Referenced to phase 2:NBTL and 6:SBT, Start of Green | | | |
| Natural Cycle: 80 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.66 | | | |
| Intersection Signal Delay: 19.2 | | Intersection LOS: B | |
| Intersection Capacity Utilization 57.8% | | ICU Level of Service B | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 3911: Schaefer Hwy & Jeffries Service Dr



| Lane Group | Ø8 |
|---|---|
| Turn Type | |
| Protected Phases | 8 |
| Permitted Phases | |
| Detector Phase | |
| Switch Phase | |
| Minimum Initial (s) | 10.0 |
| Minimum Split (s) | 28.7 |
| Total Split (s) | 30.6 |
| Total Split (%) | 34% |
| Maximum Green (s) | 24.9 |
| Yellow Time (s) | 3.0 |
| All-Red Time (s) | 2.7 |
| Lost Time Adjust (s) | |
| Total Lost Time (s) | |
| Lead/Lag | |
| Lead-Lag Optimize? | |
| Vehicle Extension (s) | 3.0 |
| Recall Mode | None |
| Walk Time (s) | 7.0 |
| Flash Dont Walk (s) | 16.0 |
| Pedestrian Calls (#/hr) | 0 |
| Act Effct Green (s) | |
| Actuated g/C Ratio | |
| v/c Ratio | |
| Control Delay | |
| Queue Delay | |
| Total Delay | |
| LOS | |
| Approach Delay | |
| Approach LOS | |

| Intersection Summary |
|---|



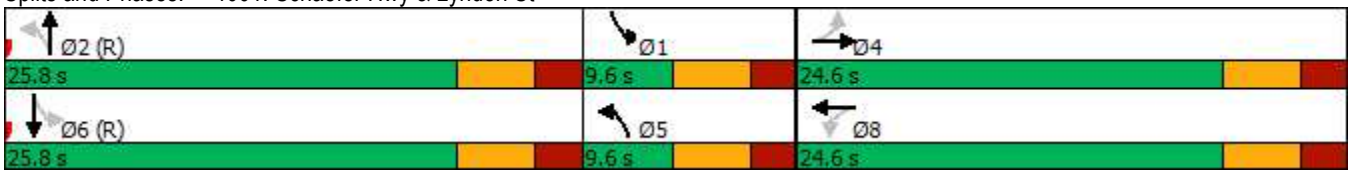
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 37 | 103 | 32 | 57 | 130 | 29 | 39 | 386 | 54 | 39 | 382 | 32 |
| Future Volume (vph) | 37 | 103 | 32 | 57 | 130 | 29 | 39 | 386 | 54 | 39 | 382 | 32 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 80 | | 0 | 80 | | 0 | 80 | | 0 | 80 | | 0 |
| Storage Lanes | 1 | | 0 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 65 | | | 65 | | | 65 | | | 65 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 |
| Ped Bike Factor | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | |
| Frt | | 0.958 | | | 0.975 | | | 0.979 | | | 0.981 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1805 | 1811 | 0 | 1805 | 1848 | 0 | 1805 | 3365 | 0 | 1752 | 3246 | 0 |
| Flt Permitted | 0.642 | | | 0.658 | | | 0.477 | | | 0.471 | | |
| Satd. Flow (perm) | 1218 | 1811 | 0 | 1244 | 1848 | 0 | 902 | 3365 | 0 | 868 | 3246 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 34 | | | 17 | | | 33 | | | 29 | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 648 | | | 545 | | | 1423 | | | 685 | |
| Travel Time (s) | | 14.7 | | | 12.4 | | | 32.3 | | | 15.6 | |
| Confl. Peds. (#/hr) | 2 | | 6 | 6 | | 2 | 6 | | 1 | 1 | | 6 |
| Peak Hour Factor | 0.73 | 0.92 | 0.72 | 0.73 | 0.85 | 0.96 | 0.68 | 0.91 | 0.77 | 0.60 | 0.91 | 0.52 |
| Heavy Vehicles (%) | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 5% | 3% | 3% | 10% | 0% |
| Adj. Flow (vph) | 51 | 112 | 44 | 78 | 153 | 30 | 57 | 424 | 70 | 65 | 420 | 62 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 51 | 156 | 0 | 78 | 183 | 0 | 57 | 494 | 0 | 65 | 482 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) | | 12 | | | 12 | | | 12 | | | 12 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | | 1 | 2 | | 1 | 2 | | 1 | 2 | |
| Detector Template | Left | Thru | | Left | Thru | | Left | Thru | | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | | 20 | 100 | | 20 | 100 | | 20 | 100 | |
| Trailing Detector (ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Detector 1 Position(ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Detector 1 Size(ft) | 20 | 6 | | 20 | 6 | | 20 | 6 | | 20 | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Queue (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 1 Delay (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | 94 | | | 94 | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | 6 | | | 6 | | | 6 | | | 6 | |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Turn Type | Perm | NA | | Perm | NA | | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | | 4 | | | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | | 8 | | | 2 | | | 6 | | |
| Detector Phase | 4 | 4 | | 8 | 8 | | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 10.0 | 10.0 | | 10.0 | 10.0 | | 4.0 | 15.0 | | 4.0 | 15.0 | |
| Minimum Split (s) | 24.6 | 24.6 | | 24.6 | 24.6 | | 9.6 | 26.6 | | 9.6 | 26.6 | |
| Total Split (s) | 24.6 | 24.6 | | 24.6 | 24.6 | | 9.6 | 25.8 | | 9.6 | 25.8 | |
| Total Split (%) | 41.0% | 41.0% | | 41.0% | 41.0% | | 16.0% | 43.0% | | 16.0% | 43.0% | |
| Maximum Green (s) | 19.0 | 19.0 | | 19.0 | 19.0 | | 4.0 | 20.2 | | 4.0 | 20.2 | |
| Yellow Time (s) | 3.5 | 3.5 | | 3.5 | 3.5 | | 3.5 | 3.5 | | 3.5 | 3.5 | |
| All-Red Time (s) | 2.1 | 2.1 | | 2.1 | 2.1 | | 2.1 | 2.1 | | 2.1 | 2.1 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 5.6 | 5.6 | | 5.6 | 5.6 | | 5.6 | 5.6 | | 5.6 | 5.6 | |
| Lead/Lag | | | | | | | Lag | Lead | | Lag | Lead | |
| Lead-Lag Optimize? | | | | | | | Yes | Yes | | Yes | Yes | |
| Vehicle Extension (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | |
| Recall Mode | Min | Min | | Min | Min | | None | C-Max | | None | C-Max | |
| Walk Time (s) | 7.0 | 7.0 | | 7.0 | 7.0 | | | 7.0 | | | 7.0 | |
| Flash Dont Walk (s) | 12.0 | 12.0 | | 12.0 | 12.0 | | | 14.0 | | | 14.0 | |
| Pedestrian Calls (#/hr) | 0 | 0 | | 0 | 0 | | | 0 | | | 0 | |
| Act Effct Green (s) | 11.8 | 11.8 | | 11.8 | 11.8 | | 35.2 | 31.2 | | 35.2 | 31.2 | |
| Actuated g/C Ratio | 0.20 | 0.20 | | 0.20 | 0.20 | | 0.59 | 0.52 | | 0.59 | 0.52 | |
| v/c Ratio | 0.21 | 0.41 | | 0.32 | 0.49 | | 0.10 | 0.28 | | 0.11 | 0.28 | |
| Control Delay | 21.5 | 19.1 | | 23.6 | 23.4 | | 6.1 | 9.5 | | 6.3 | 9.7 | |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 21.5 | 19.1 | | 23.6 | 23.4 | | 6.1 | 9.5 | | 6.3 | 9.7 | |
| LOS | C | B | | C | C | | A | A | | A | A | |
| Approach Delay | | 19.7 | | | 23.5 | | | 9.2 | | | 9.3 | |
| Approach LOS | | B | | | C | | | A | | | A | |

**Intersection Summary**

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 65
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.49
Intersection Signal Delay: 13.0 Intersection LOS: B
Intersection Capacity Utilization 57.5% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 4001: Schaefer Hwy & Lyndon St



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

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 10 | 197 | 5 | 0 | 175 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| Future Vol, veh/h | 10 | 197 | 5 | 0 | 175 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 |
| Heavy Vehicles, % | 0 | 2 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 40 | 788 | 20 | 0 | 700 | 0 | 0 | 0 | 0 | 0 | 0 | 40 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 700 | 0 | 0 | 808 | 0 | 0 | 1598 | 1578 | 798 | 1578 | 1588 | 700 |
| Stage 1 | - | - | - | - | - | - | 878 | 878 | - | 700 | 700 | - |
| Stage 2 | - | - | - | - | - | - | 720 | 700 | - | 878 | 888 | - |
| Critical Hdwy | 4.1 | - | - | 4.1 | - | - | 7.1 | 6.5 | 6.2 | 7.1 | 6.5 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.1 | 5.5 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.1 | 5.5 | - |
| Follow-up Hdwy | 2.2 | - | - | 2.2 | - | - | 3.5 | 4 | 3.3 | 3.5 | 4 | 3.3 |
| Pot Cap-1 Maneuver | 906 | - | - | 826 | - | - | 87 | 110 | 389 | 90 | 109 | 443 |
| Stage 1 | - | - | - | - | - | - | 345 | 368 | - | 433 | 444 | - |
| Stage 2 | - | - | - | - | - | - | 422 | 444 | - | 345 | 365 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 906 | - | - | 826 | - | - | 74 | 101 | 389 | 85 | 100 | 443 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 74 | 101 | - | 85 | 100 | - |
| Stage 1 | - | - | - | - | - | - | 317 | 339 | - | 398 | 444 | - |
| Stage 2 | - | - | - | - | - | - | 384 | 444 | - | 317 | 336 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0.4 | 0 | 0 | 13.9 |
| HCM LOS | | | A | B |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | - | 906 | - | - | 826 | - | - | 443 |
| HCM Lane V/C Ratio | - | 0.044 | - | - | - | - | - | 0.09 |
| HCM Control Delay (s) | 0 | 9.2 | 0 | - | 0 | - | - | 13.9 |
| HCM Lane LOS | A | A | A | - | A | - | - | B |
| HCM 95th %tile Q(veh) | - | 0.1 | - | - | 0 | - | - | 0.3 |

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

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 3 | 1 | 8 | 4 | 1 | 9 | 5 | 254 | 20 | 6 | 300 | 4 |
| Future Vol, veh/h | 3 | 1 | 8 | 4 | 1 | 9 | 5 | 254 | 20 | 6 | 300 | 4 |
| Conflicting Peds, #/hr | 0 | 0 | 1 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 2 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | 50 | - | - | 50 | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 60 | 60 | 60 | 60 | 60 | 60 | 100 | 81 | 60 | 60 | 95 | 75 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 5 | 2 | 13 | 7 | 2 | 15 | 5 | 314 | 33 | 10 | 316 | 5 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 690 | 698 | 322 | 688 | 684 | 331 | 323 | 0 | 0 | 347 | 0 | 0 |
| Stage 1 | 341 | 341 | - | 341 | 341 | - | - | - | - | - | - | - |
| Stage 2 | 349 | 357 | - | 347 | 343 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.1 | 6.5 | 6.2 | 7.1 | 6.5 | 6.2 | 4.1 | - | - | 4.1 | - | - |
| Critical Hdwy Stg 1 | 6.1 | 5.5 | - | 6.1 | 5.5 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.1 | 5.5 | - | 6.1 | 5.5 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.5 | 4 | 3.3 | 3.5 | 4 | 3.3 | 2.2 | - | - | 2.2 | - | - |
| Pot Cap-1 Maneuver | 362 | 367 | 724 | 363 | 374 | 715 | 1248 | - | - | 1223 | - | - |
| Stage 1 | 678 | 642 | - | 678 | 642 | - | - | - | - | - | - | - |
| Stage 2 | 671 | 632 | - | 673 | 641 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | 349 | 362 | 722 | 351 | 369 | 715 | 1246 | - | - | 1223 | - | - |
| Mov Cap-2 Maneuver | 349 | 362 | - | 351 | 369 | - | - | - | - | - | - | - |
| Stage 1 | 674 | 636 | - | 675 | 639 | - | - | - | - | - | - | - |
| Stage 2 | 653 | 629 | - | 653 | 635 | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 12 | 12.2 | 0.1 | 0.2 |
| HCM LOS | B | B | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 1246 | - | - | 535 | 524 | 1223 | - | - |
| HCM Lane V/C Ratio | 0.004 | - | - | 0.037 | 0.045 | 0.008 | - | - |
| HCM Control Delay (s) | 7.9 | - | - | 12 | 12.2 | 8 | - | - |
| HCM Lane LOS | A | - | - | B | B | A | - | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 0.1 | 0.1 | 0 | - | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.1 |

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 1 | 0 | 480 | 7 | 5 | 503 |
| Future Vol, veh/h | 1 | 0 | 480 | 7 | 5 | 503 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | 0 | - | - | - | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 100 | 100 | 2 | 100 | 100 | 2 |
| Mvmt Flow | 1 | 0 | 522 | 8 | 5 | 547 |

| Major/Minor | Minor1 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 810 | 265 | 0 | 0 | 530 | 0 |
| Stage 1 | 526 | - | - | - | - | - |
| Stage 2 | 284 | - | - | - | - | - |
| Critical Hdwy | 8.8 | 8.9 | - | - | 6.1 | - |
| Critical Hdwy Stg 1 | 7.8 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 7.8 | - | - | - | - | - |
| Follow-up Hdwy | 4.5 | 4.3 | - | - | 3.2 | - |
| Pot Cap-1 Maneuver | 176 | 507 | - | - | 575 | - |
| Stage 1 | 349 | - | - | - | - | - |
| Stage 2 | 514 | - | - | - | - | - |
| Platoon blocked, % | | | - | - | | - |
| Mov Cap-1 Maneuver | 174 | 507 | - | - | 575 | - |
| Mov Cap-2 Maneuver | 174 | - | - | - | - | - |
| Stage 1 | 349 | - | - | - | - | - |
| Stage 2 | 508 | - | - | - | - | - |

| Approach | WB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 25.8 | 0 | 0.2 |
| HCM LOS | D | | |

| Minor Lane/Major Mvmt | NBT | NBR | WBLn1 | WBLn2 | SBL | SBT |
|---|---|---|---|---|---|---|
| Capacity (veh/h) | - | - | 174 | - | 575 | - |
| HCM Lane V/C Ratio | - | - | 0.006 | - | 0.009 | - |
| HCM Control Delay (s) | - | - | 25.8 | 0 | 11.3 | 0.1 |
| HCM Lane LOS | - | - | D | A | B | A |
| HCM 95th %tile Q(veh) | - | - | 0 | - | 0 | - |

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

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 41 | 12 | 467 | 13 | 4 | 467 |
| Future Vol, veh/h | 41 | 12 | 467 | 13 | 4 | 467 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | 0 | - | - | - | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 0 | 0 | 6 | 0 | 0 | 4 |
| Mvmt Flow | 45 | 13 | 508 | 14 | 4 | 508 |

| Major/Minor | Minor1 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 777 | 261 | 0 | 0 | 522 | 0 |
| Stage 1 | 515 | - | - | - | - | - |
| Stage 2 | 262 | - | - | - | - | - |
| Critical Hdwy | 6.8 | 6.9 | - | - | 4.1 | - |
| Critical Hdwy Stg 1 | 5.8 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.8 | - | - | - | - | - |
| Follow-up Hdwy | 3.5 | 3.3 | - | - | 2.2 | - |
| Pot Cap-1 Maneuver | 338 | 744 | - | - | 1055 | - |
| Stage 1 | 570 | - | - | - | - | - |
| Stage 2 | 764 | - | - | - | - | - |
| Platoon blocked, % | | | - | - | | - |
| Mov Cap-1 Maneuver | 336 | 744 | - | - | 1055 | - |
| Mov Cap-2 Maneuver | 336 | - | - | - | - | - |
| Stage 1 | 570 | - | - | - | - | - |
| Stage 2 | 760 | - | - | - | - | - |

| Approach | WB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 15.6 | 0 | 0.1 |
| HCM LOS | C | | |

| Minor Lane/Major Mvmt | NBT | NBR | WBLn1 | WBLn2 | SBL | SBT |
|---|---|---|---|---|---|---|
| Capacity (veh/h) | - | - | 336 | 744 | 1055 | - |
| HCM Lane V/C Ratio | - | - | 0.133 | 0.018 | 0.004 | - |
| HCM Control Delay (s) | - | - | 17.3 | 9.9 | 8.4 | 0 |
| HCM Lane LOS | - | - | C | A | A | A |
| HCM 95th %tile Q(veh) | - | - | 0.5 | 0.1 | 0 | - |

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# CONSOLIDATED ACCESS

| Lane Group | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 160 | 68 | 581 | 90 | 45 | 487 |
| Future Volume (vph) | 160 | 68 | 581 | 90 | 45 | 487 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 0 | 0 | | 0 | 150 | |
| Storage Lanes | 1 | 1 | | 0 | 1 | |
| Taper Length (ft) | 65 | | | | 65 | |
| Lane Util. Factor | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 |
| Frt | | 0.850 | 0.980 | | | |
| Flt Protected | 0.950 | | | | 0.950 | |
| Satd. Flow (prot) | 1456 | 1099 | 3291 | 0 | 1043 | 3539 |
| Flt Permitted | 0.950 | | | | 0.215 | |
| Satd. Flow (perm) | 1456 | 1099 | 3291 | 0 | 236 | 3539 |
| Right Turn on Red | | Yes | | Yes | | |
| Satd. Flow (RTOR) | | 74 | 33 | | | |
| Link Speed (mph) | 30 | | 30 | | | 30 |
| Link Distance (ft) | 221 | | 600 | | | 1664 |
| Travel Time (s) | 5.0 | | 13.6 | | | 37.8 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Heavy Vehicles (%) | 24% | 47% | 2% | 43% | 73% | 2% |
| Adj. Flow (vph) | 174 | 74 | 632 | 98 | 49 | 529 |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 174 | 74 | 730 | 0 | 49 | 529 |
| Enter Blocked Intersection | No | No | No | No | No | No |
| Lane Alignment | Left | Right | Left | Right | Left | Left |
| Median Width(ft) | 12 | | 0 | | | 12 |
| Link Offset(ft) | 0 | | 0 | | | 0 |
| Crosswalk Width(ft) | 16 | | 16 | | | 16 |
| Two way Left Turn Lane | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | 9 | | 9 | 15 | |
| Turn Type | Prot | Perm | NA | | pm+pt | NA |
| Protected Phases | 8 | | 2 | | 1 | 6 |
| Permitted Phases | | 8 | | | 6 | |
| Minimum Split (s) | 22.5 | 22.5 | 22.5 | | 9.5 | 22.5 |
| Total Split (s) | 22.5 | 22.5 | 23.0 | | 9.5 | 32.5 |
| Total Split (%) | 40.9% | 40.9% | 41.8% | | 17.3% | 59.1% |
| Maximum Green (s) | 15.6 | 15.6 | 18.1 | | 5.0 | 27.6 |
| Yellow Time (s) | 3.0 | 3.0 | 3.2 | | 3.5 | 3.2 |
| All-Red Time (s) | 3.9 | 3.9 | 1.7 | | 1.0 | 1.7 |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Total Lost Time (s) | 6.9 | 6.9 | 4.9 | | 4.5 | 4.9 |
| Lead/Lag | | | Lag | | Lead | |
| Lead-Lag Optimize? | | | Yes | | Yes | |
| Walk Time (s) | | | 4.0 | | | 4.0 |
| Flash Dont Walk (s) | | | 9.0 | | | 9.0 |
| Pedestrian Calls (#/hr) | | | 0 | | | 0 |
| Act Effct Green (s) | 15.6 | 15.6 | 18.1 | | 28.0 | 27.6 |
| Actuated g/C Ratio | 0.28 | 0.28 | 0.33 | | 0.51 | 0.50 |

| Lane Group | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| v/c Ratio | 0.42 | 0.20 | 0.66 | | 0.25 | 0.30 |
| Control Delay | 19.9 | 6.2 | 18.5 | | 10.4 | 8.6 |
| Queue Delay | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Total Delay | 19.9 | 6.2 | 18.5 | | 10.4 | 8.6 |
| LOS | B | A | B | | B | A |
| Approach Delay | 15.8 | | 18.5 | | | 8.7 |
| Approach LOS | B | | B | | | A |
| Queue Length 50th (ft) | 46 | 0 | 100 | | 8 | 48 |
| Queue Length 95th (ft) | 93 | 24 | 151 | | 21 | 74 |
| Internal Link Dist (ft) | 141 | | 520 | | | 1584 |
| Turn Bay Length (ft) | | | | | 150 | |
| Base Capacity (vph) | 412 | 364 | 1105 | | 193 | 1775 |
| Starvation Cap Reductn | 0 | 0 | 0 | | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | 0 | | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | | 0 | 0 |
| Reduced v/c Ratio | 0.42 | 0.20 | 0.66 | | 0.25 | 0.30 |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 55 | | | |
| Actuated Cycle Length: 55 | | | |
| Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green | | | |
| Natural Cycle: 55 | | | |
| Control Type: Pretimed | | | |
| Maximum v/c Ratio: 0.66 | | | |
| Intersection Signal Delay: 14.5 | | Intersection LOS: B | |
| Intersection Capacity Utilization 45.5% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 2610: Schaefer Hwy & Coolidge Driveway

| Lane Group | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 116 | 42 | 415 | 65 | 39 | 411 |
| Future Volume (vph) | 116 | 42 | 415 | 65 | 39 | 411 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 0 | 0 | | 0 | 150 | |
| Storage Lanes | 1 | 1 | | 0 | 1 | |
| Taper Length (ft) | 65 | | | | 65 | |
| Lane Util. Factor | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 |
| Frt | | 0.850 | 0.980 | | | |
| Flt Protected | 0.950 | | | | 0.950 | |
| Satd. Flow (prot) | 1556 | 1188 | 3219 | 0 | 992 | 3539 |
| Flt Permitted | 0.950 | | | | 0.332 | |
| Satd. Flow (perm) | 1556 | 1188 | 3219 | 0 | 347 | 3539 |
| Right Turn on Red | | Yes | | Yes | | |
| Satd. Flow (RTOR) | | 46 | 31 | | | |
| Link Speed (mph) | 30 | | 30 | | | 30 |
| Link Distance (ft) | 208 | | 600 | | | 1664 |
| Travel Time (s) | 4.7 | | 13.6 | | | 37.8 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Heavy Vehicles (%) | 16% | 36% | 2% | 60% | 82% | 2% |
| Adj. Flow (vph) | 126 | 46 | 451 | 71 | 42 | 447 |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 126 | 46 | 522 | 0 | 42 | 447 |
| Enter Blocked Intersection | No | No | No | No | No | No |
| Lane Alignment | Left | Right | Left | Right | Left | Left |
| Median Width(ft) | 12 | | 12 | | | 12 |
| Link Offset(ft) | 0 | | 0 | | | 0 |
| Crosswalk Width(ft) | 16 | | 16 | | | 16 |
| Two way Left Turn Lane | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | 9 | | 9 | 15 | |
| Turn Type | Prot | Perm | NA | | pm+pt | NA |
| Protected Phases | 8 | | 2 | | 1 | 6 |
| Permitted Phases | | 8 | | | 6 | |
| Minimum Split (s) | 24.9 | 24.9 | 22.6 | | 9.5 | 22.6 |
| Total Split (s) | 25.0 | 25.0 | 25.0 | | 10.0 | 35.0 |
| Total Split (%) | 41.7% | 41.7% | 41.7% | | 16.7% | 58.3% |
| Maximum Green (s) | 18.1 | 18.1 | 20.1 | | 5.5 | 30.1 |
| Yellow Time (s) | 3.0 | 3.0 | 3.2 | | 3.5 | 3.2 |
| All-Red Time (s) | 3.9 | 3.9 | 1.7 | | 1.0 | 1.7 |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Total Lost Time (s) | 6.9 | 6.9 | 4.9 | | 4.5 | 4.9 |
| Lead/Lag | | | Lag | | Lead | |
| Lead-Lag Optimize? | | | Yes | | Yes | |
| Walk Time (s) | | | 4.0 | | | 4.0 |
| Flash Dont Walk (s) | | | 9.0 | | | 9.0 |
| Pedestrian Calls (#/hr) | | | 0 | | | 0 |
| Act Effct Green (s) | 18.1 | 18.1 | 20.1 | | 30.5 | 30.1 |
| Actuated g/C Ratio | 0.30 | 0.30 | 0.34 | | 0.51 | 0.50 |

| Lane Group | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| v/c Ratio | 0.27 | 0.12 | 0.48 | | 0.18 | 0.25 |
| Control Delay | 17.9 | 6.4 | 16.5 | | 4.7 | 5.4 |
| Queue Delay | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Total Delay | 17.9 | 6.4 | 16.5 | | 4.7 | 5.4 |
| LOS | B | A | B | | A | A |
| Approach Delay | 14.8 | | 16.5 | | | 5.4 |
| Approach LOS | B | | B | | | A |
| Queue Length 50th (ft) | 34 | 0 | 72 | | 3 | 43 |
| Queue Length 95th (ft) | 72 | 19 | 111 | | 4 | 14 |
| Internal Link Dist (ft) | 128 | | 520 | | | 1584 |
| Turn Bay Length (ft) | | | | | 150 | |
| Base Capacity (vph) | 469 | 390 | 1098 | | 235 | 1775 |
| Starvation Cap Reductn | 0 | 0 | 0 | | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | 0 | | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | | 0 | 0 |
| Reduced v/c Ratio | 0.27 | 0.12 | 0.48 | | 0.18 | 0.25 |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 60 | | | |
| Actuated Cycle Length: 60 | | | |
| Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green | | | |
| Natural Cycle: 60 | | | |
| Control Type: Pretimed | | | |
| Maximum v/c Ratio: 0.48 | | | |
| Intersection Signal Delay: 11.7 | | Intersection LOS: B | |
| Intersection Capacity Utilization 37.7% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 2610: Schaefer Hwy & Coolidge Driveway

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# EMERGENCY BUS EXIT SCENARIO

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

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | ⇕ | | | ⇕ | | | ⇕ | | | ⇕ | |
| Traffic Vol, veh/h | 6 | 195 | 2 | 1 | 188 | 5 | 1 | 0 | 7 | 11 | 0 | 26 |
| Future Vol, veh/h | 6 | 195 | 2 | 1 | 188 | 5 | 1 | 0 | 7 | 11 | 0 | 26 |
| Conflicting Peds, #/hr | 3 | 0 | 1 | 1 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 63 | 94 | 50 | 25 | 86 | 50 | 25 | 25 | 50 | 63 | 25 | 50 |
| Heavy Vehicles, % | 0 | 7 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 45 | 0 | 73 |
| Mvmt Flow | 10 | 207 | 4 | 4 | 219 | 10 | 4 | 0 | 14 | 17 | 0 | 52 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 232 | 0 | 0 | 212 | 0 | 0 | 488 | 470 | 210 | 471 | 467 | 227 |
| Stage 1 | - | - | - | - | - | - | 230 | 230 | - | 235 | 235 | - |
| Stage 2 | - | - | - | - | - | - | 258 | 240 | - | 236 | 232 | - |
| Critical Hdwy | 4.1 | - | - | 4.1 | - | - | 7.1 | 6.5 | 6.2 | 7.55 | 6.5 | 6.93 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.55 | 5.5 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.55 | 5.5 | - |
| Follow-up Hdwy | 2.2 | - | - | 2.2 | - | - | 3.5 | 4 | 3.3 | 3.905 | 4 | 3.957 |
| Pot Cap-1 Maneuver | 1348 | - | - | 1370 | - | - | 493 | 495 | 835 | 438 | 496 | 664 |
| Stage 1 | - | - | - | - | - | - | 777 | 718 | - | 681 | 714 | - |
| Stage 2 | - | - | - | - | - | - | 751 | 711 | - | 680 | 716 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 1344 | - | - | 1369 | - | - | 450 | 488 | 834 | 426 | 489 | 662 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 450 | 488 | - | 426 | 489 | - |
| Stage 1 | - | - | - | - | - | - | 770 | 712 | - | 674 | 710 | - |
| Stage 2 | - | - | - | - | - | - | 690 | 707 | - | 663 | 710 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0.3 | 0.1 | 10.3 | 12 |
| HCM LOS | | | B | B |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 701 | 1344 | - | - | 1369 | - | - | 581 |
| HCM Lane V/C Ratio | 0.026 | 0.007 | - | - | 0.003 | - | - | 0.12 |
| HCM Control Delay (s) | 10.3 | 7.7 | 0 | - | 7.6 | 0 | - | 12 |
| HCM Lane LOS | B | A | A | - | A | A | - | B |
| HCM 95th %tile Q(veh) | 0.1 | 0 | - | - | 0 | - | - | 0.4 |

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

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 26 | 1 | 12 | 8 | 7 | 8 | 2 | 327 | 11 | 8 | 305 | 1 |
| Future Vol, veh/h | 26 | 1 | 12 | 8 | 7 | 8 | 2 | 327 | 11 | 8 | 305 | 1 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 1 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | 50 | - | - | 50 | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 60 | 60 | 60 | 60 | 60 | 60 | 100 | 85 | 63 | 60 | 87 | 60 |
| Heavy Vehicles, % | 88 | 0 | 25 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 3 | 0 |
| Mvmt Flow | 43 | 2 | 20 | 13 | 12 | 13 | 2 | 385 | 17 | 13 | 351 | 2 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 789 | 786 | 353 | 788 | 779 | 395 | 354 | 0 | 0 | 403 | 0 | 0 |
| Stage 1 | 379 | 379 | - | 399 | 399 | - | - | - | - | - | - | - |
| Stage 2 | 410 | 407 | - | 389 | 380 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.98 | 6.5 | 6.45 | 7.1 | 6.5 | 6.2 | 4.1 | - | - | 4.1 | - | - |
| Critical Hdwy Stg 1 | 6.98 | 5.5 | - | 6.1 | 5.5 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.98 | 5.5 | - | 6.1 | 5.5 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 4.292 | 4 | 3.525 | 3.5 | 4 | 3.3 | 2.2 | - | - | 2.2 | - | - |
| Pot Cap-1 Maneuver | 225 | 326 | 642 | 311 | 330 | 659 | 1216 | - | - | 1167 | - | - |
| Stage 1 | 500 | 618 | - | 631 | 606 | - | - | - | - | - | - | - |
| Stage 2 | 479 | 601 | - | 639 | 617 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | 212 | 321 | 641 | 297 | 325 | 658 | 1215 | - | - | 1166 | - | - |
| Mov Cap-2 Maneuver | 212 | 321 | - | 297 | 325 | - | - | - | - | - | - | - |
| Stage 1 | 499 | 611 | - | 629 | 604 | - | - | - | - | - | - | - |
| Stage 2 | 459 | 599 | - | 610 | 610 | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 22.5 | 15.6 | 0 | 0.3 |
| HCM LOS | C | C | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 1215 | - | - | 270 | 379 | 1166 | - | - |
| HCM Lane V/C Ratio | 0.002 | - | - | 0.241 | 0.101 | 0.011 | - | - |
| HCM Control Delay (s) | 8 | - | - | 22.5 | 15.6 | 8.1 | - | - |
| HCM Lane LOS | A | - | - | C | C | A | - | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 0.9 | 0.3 | 0 | - | - |

DLZ
ARCHITECTURE • ENGINEERING • PLANNING
SURVEYING • CONSTRUCTION SERVICES

INNOVATIVE IDEAS
EXCEPTIONAL DESIGN
UNMATCHED CLIENT SERVICE

# APPENDIX C
# SHIFT ANALYSIS

# Space Needs Program
# Employee Shift Analysis

Begin Shift Start | End Shift

| | 1/29/2020 | Arrive | Shift Start | Shift End | Depart | Projected Number of Staff | 12:00 AM | 12:30 AM | 1:00 AM | 1:30 AM | 2:00 AM | 2:30 AM | 3:00 AM | 3:30 AM | 4:00 AM | 4:30 AM | 5:00 AM | 5:30 AM | 6:00 AM | 6:30 AM | 7:00 AM | 7:30 AM | 8:00 AM | 8:30 AM | 9:00 AM | 9:30 AM | 10:00 AM | 10:30 AM | 11:00 AM | 11:30 AM | 12:00 PM | 12:30 PM | 1:00 PM | 1:30 PM | 2:00 PM | 2:30 PM | 3:00 PM | 3:30 PM | 4:00 PM | 4:30 PM | 5:00 PM | 5:30 PM | 6:00 PM | 6:30 PM | 7:00 PM | 7:30 PM | 8:00 PM | 8:30 PM | 9:00 PM | 9:30 PM | 10:00 PM | 10:30 PM | 11:00 PM | 11:30 PM | 12:00 AM |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **BUS OPERATIONS** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | **Existing 2020 Staff** | **Gilbert** | **Weekday** | **Schedule** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | **District Superintendent (Terminal)** | *5:30 AM* | 6:00 AM | 3:00 PM | *3:30 PM* | **1** | | | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | | | | | | | | |
| 2 | **District Superintendent (Terminal)** | *1:30 PM* | 2:00 PM | 11:00 PM | *11:30 PM* | **1** | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| 3 | **Transportation Terminal Supervisor** | | | | | **5** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Transportation Terminal Supervisor | *4:30 AM* | 5:00 AM | 2:00 PM | *2:30 PM* | 1 | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | | | | | | | | |
| | Transportation Terminal Supervisor | *7:30 AM* | 8:00 AM | 5:00 PM | *5:30 PM* | 1 | | | | | | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | | | | | | |
| | Transportation Terminal Supervisor | *1:30 PM* | 2:00 PM | 11:00 PM | *11:30 PM* | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| | Transportation Terminal Supervisor | *4:30 PM* | 5:00 PM | 2:00 AM | *2:30 AM* | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 4 | **Road Supervisor** | | | | | **12** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Road Supervisor Shift 1 - Weekday | *3:30 AM* | 4:00 AM | 1:00 PM | *1:30 PM* | 3 | | | | | | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | | | | | | | | | | | | | | | | | | | | |
| | Road Supervisor Shift 2 - Weekday | *10:30 AM* | 11:00 AM | 8:00 PM | *8:30 PM* | 3 | | | | | | | | | | | | | | | | | | | | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | |
| | Road Supervisor Shift 3 - Weekday | *3:00 PM* | 3:30 PM | 12:30 AM | *1:00 AM* | 3 | 3 | 3 | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 5 | **Office Assistant** | *7:30 AM* | 8:00 AM | 5:00 PM | *5:30 PM* | **1** | | | | | | | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| 6 | **Administrative Assistant (Training)** | *7:30 AM* | 8:00 AM | 5:00 PM | *5:30 PM* | 0 | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 7 | Terminal Instructors | | | | | **0** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Terminal Instructors | *7:30 AM* | 8:00 AM | 5:00 PM | *5:30 PM* | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Terminal Instructors | *1:30 PM* | 2:00 PM | 11:00 PM | *11:30 PM* | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 8 | **Bus Operators** | | | | | **268** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | *Bus Pull-Out* | | | | | *124* | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Bus Operators Shift 1 - Weekday | *3:30 AM* | 4:00 AM | 1:00 PM | *1:30 PM* | 31 | | | | | | | | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | | | | | | | | | | | | | | | | | | | |
| | Bus Operators Shift 1 - Weekday | *4:00 AM* | 4:30 AM | 1:30 PM | *2:00 PM* | 31 | | | | | | | | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | | | | | | | | | | | | | | | | | | |
| | Bus Operators Shift 1 - Weekday | *4:30 AM* | 5:00 AM | 2:00 PM | *2:30 PM* | 31 | | | | | | | | | | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | | | | | | | | | | | | | | | | | |
| | Bus Operators Shift 1 - Weekday | *5:00 AM* | 5:30 AM | 2:30 PM | *3:00 PM* | 31 | | | | | | | | | | | | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | | | | | | | | | | | | | | | | | |
| | *Bus Pull-Out* | | | | | *124* | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Bus Operators Shift 2 - Weekday | *10:30 AM* | 11:00 AM | 8:00 PM | *8:30 PM* | 31 | | | | | | | | | | | | | | | | | | | | | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | |
| | Bus Operators Shift 2 - Weekday | *11:00 AM* | 11:30 AM | 8:30 PM | *9:00 PM* | 31 | | | | | | | | | | | | | | | | | | | | | | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | |
| | Bus Operators Shift 2 - Weekday | *11:30 AM* | 12:00 PM | 9:00 PM | *9:30 PM* | 31 | | | | | | | | | | | | | | | | | | | | | | | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | |
| | Bus Operators Shift 2 - Weekday | *12:00 PM* | 12:30 PM | 9:30 PM | *10:00 PM* | 31 | | | | | | | | | | | | | | | | | | | | | | | | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | |
| | *Bus Pull-Out* | | | | | *62* | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Bus Operators Shift 3 - Weekday | *3:00 PM* | 3:30 PM | 12:30 AM | *1:00 AM* | 18 | 18 | 18 | 18 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 |
| | Bus Operators Shift 3 - Weekday | *3:30 PM* | 4:00 PM | 1:00 AM | *1:30 AM* | 18 | 18 | 18 | 18 | 18 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 |
| | Bus Operators Shift 3 - Weekday | *4:00 PM* | 4:30 PM | 1:30 AM | *2:00 AM* | 18 | 18 | 18 | 18 | 18 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 |
| | Bus Operators Shift 3 - Weekday | *4:30 PM* | 5:00 PM | 2:00 AM | *2:30 AM* | 18 | 18 | 18 | 18 | 18 | 18 | 18 | | | | | | | | | | | | | | | | | | | | | | | | | | | | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 |
| 9 | **Transportation Station Worker** | | | | | **8** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Transportation Station Worker - Shift 1 Weekday | *4:30 AM* | 5:00 AM | 2:00 PM | *2:30 PM* | 2 | | | | | | | | | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | | | | | | | | | | | | | | | | | |
| | Transportation Station Worker - Shift 2 Weekday | *7:30 AM* | 8:00 AM | 5:00 PM | *5:30 PM* | 2 | | | | | | | | | | | | | | | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | |
| | Transportation Station Worker - Shift 3 Weekday | *1:30 PM* | 2:00 PM | 11:00 PM | *11:30 PM* | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | |
| | *keep this row blank* | | | | | 296 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | **Existing 2020 Staff** | | | | | **296** | **76** | **76** | **76** | **55** | **19** | **19** | **0** | **34** | **65** | **99** | **130** | **131** | **131** | **131** | **131** | **135** | **135** | **135** | **135** | **135** | **135** | **169** | **200** | **231** | **262** | **262** | **262** | **266** | **232** | **201** | **188** | **175** | **192** | **211** | **211** | **211** | **207** | **207** | **207** | **207** | **207** | **207** | **173** | **142** | **111** | **80** | **80** | **80** | **76** |
| | **250 BUS Program** | **Coolidge** | **Weekday** | **Schedule** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | **District Superintendent (Terminal)** | *5:30 AM* | 6:00 AM | 3:00 PM | *3:30 PM* | **1** | | | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | | | | | | | | |
| 2 | **District Superintendent (Terminal)** | *1:30 PM* | 2:00 PM | 11:00 PM | *11:30 PM* | **1** | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| 3 | Transportation Terminal Supervisor | | | | | **8** | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| | Transportation Terminal Supervisor | *4:30 AM* | 5:00 AM | 2:00 PM | *2:30 PM* | 1 | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | | | | | | | | |
| | Transportation Terminal Supervisor | *7:30 AM* | 8:00 AM | 5:00 PM | *5:30 PM* | 1 | | | | | | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | | | | | | |
| | Transportation Terminal Supervisor | *1:30 PM* | 2:00 PM | 11:00 PM | *11:30 PM* | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| | Transportation Terminal Supervisor | *4:30 PM* | 5:00 PM | 2:00 AM | *2:30 AM* | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 4 | **Road Supervisor** | | | | | **21** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Road Supervisor Shift 1 - Weekday | *3:30 AM* | 4:00 AM | 1:00 PM | *1:30 PM* | 6 | | | | | | | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | | | | | | | | | | | | | | | | | | | | |
| | Road Supervisor Shift 2 - Weekday | *10:30 AM* | 11:00 AM | 8:00 PM | *8:30 PM* | 6 | | | | | | | | | | | | | | | | | | | | | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | |
| | Road Supervisor Shift 3 - Weekday | *3:00 PM* | 3:30 PM | 12:30 AM | *1:00 AM* | 6 | 6 | 6 | 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| 5 | **Office Assistant** | *7:30 AM* | 8:00 AM | 5:00 PM | *5:30 PM* | **1** | | | | | | | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| 6 | **Administrative Assistant (Training)** | *7:30 AM* | 8:00 AM | 5:00 PM | *5:30 PM* | **1** | | | | | | | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| 7 | **Terminal Instructors** | ######## | 12:00 AM | 12:00 AM | *12:30 AM* | **11** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Terminal Instructors | *7:30 AM* | 8:00 AM | 5:00 PM | *5:30 PM* | 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Terminal Instructors | *1:30 PM* | 2:00 PM | 11:00 PM | *11:30 PM* | 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | |
| 8 | **Bus Operators** | | | | | **750** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | *Bus Pull-Out* | | | | | *184* | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Bus Operators Shift 1 - Weekday | *3:30 AM* | 4:00 AM | 1:00 PM | *1:30 PM* | 46 | | | | | | | | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | | | | | | | | | | | | | | | | | | |
| | Bus Operators Shift 1 - Weekday | *4:00 AM* | 4:30 AM | 1:30 PM | *2:00 PM* | 46 | | | | | | | | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | | | | | | | | | | | | | | | | | | |
| | Bus Operators Shift 1 - Weekday | *4:30 AM* | 5:00 AM | 2:00 PM | *2:30 PM* | 46 | | | | | | | | | | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | | | | | | | | | | | | | | | | | |
| | Bus Operators Shift 1 - Weekday | *5:00 AM* | 5:30 AM | 2:30 PM | *3:00 PM* | 46 | | | | | | | | | | | | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | | | | | | | | | | | | | | | | | |
| | *Bus Pull-Out* | | | | | *184* | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Bus Operators Shift 2 - Weekday | *10:30 AM* | 11:00 AM | 8:00 PM | *8:30 PM* | 46 | | | | | | | | | | | | | | | | | | | | | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | |
| | Bus Operators Shift 2 - Weekday | *11:00 AM* | 11:30 AM | 8:30 PM | *9:00 PM* | 46 | | | | | | | | | | | | | | | | | | | | | | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | |
| | Bus Operators Shift 2 - Weekday | *11:30 AM* | 12:00 PM | 9:00 PM | *9:30 PM* | 46 | | | | | | | | | | | | | | | | | | | | | | | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | |
| | Bus Operators Shift 2 - Weekday | *12:00 PM* | 12:30 PM | 9:30 PM | *10:00 PM* | 46 | | | | | | | | | | | | | | | | | | | | | | | | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | |
| | *Bus Pull-Out* | | | | | *92* | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Bus Operators Shift 3 - Weekday | *3:00 PM* | 3:30 PM | 12:30 AM | *1:00 AM* | 23 | 23 | 23 | 23 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 23 | 23 | 23 | 23 | 23 | 23 | 23 | 23 | 23 | 23 | 23 | 23 | 23 | 23 | 23 | 23 | 23 |
| | Bus Operators Shift 3 - Weekday | *3:30 PM* | 4:00 PM | 1:00 AM | *1:30 AM* | 23 | 23 | 23 | 23 | 23 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 23 | 23 | 23 | 23 | 23 | 23 | 23 | 23 | 23 | 23 | 23 | 23 | 23 | 23 | 23 | 23 |
| | Bus Operators Shift 3 - Weekday | *4:00 PM* | 4:30 PM | 1:30 AM | *2:00 AM* | 23 | 23 | 23 | 23 | 23 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 23 | 23 | 23 | 23 | 23 | 23 | 23 | 23 | 23 | 23 | 23 | 23 | 23 | 23 | 23 | 23 |
| | Bus Operators Shift 3 - Weekday | *4:30 PM* | 5:00 PM | 2:00 AM | *2:30 AM* | 23 | 23 | 23 | 23 | 23 | 23 | 23 | | | | | | | | | | | | | | | | | | | | | | | | | | | | 23 | 23 | 23 | 23 | 23 | 23 | 23 | 23 | 23 | 23 | 23 | 23 | 23 | 23 | 23 | 23 |
| 9 | **Transportation Station Worker** | | | | | **10** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Transportation Station Worker - Shift 1 Weekday | *4:30 AM* | 5:00 AM | 2:00 PM | *2:30 PM* | 5 | | | | | | | | | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | | | | | | | | | | | | | | | | | | |
| | Transportation Station Worker - Shift 2 Weekday | *7:30 AM* | 8:00 AM | 5:00 PM | *5:30 PM* | 5 | | | | | | | | | | | | | | | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | |
| | *keep this row blank* | | | | | 804 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | **250 BUS Program** | | | | | **804** | **107** | **107** | **107** | **78** | **32** | **32** | **8** | **60** | **106** | **158** | **204** | **205** | **205** | **205** | **205** | **213** | **213** | **213** | **213** | **213** | **213** | **265** | **311** | **357** | **403** | **403** | **403** | **410** | **358** | **312** | **289** | **266** | **288** | **312** | **312** | **312** | **304** | **304** | **304** | **304** | **304** | **304** | **252** | **206** | **160** | **114** | **114** | **114** | **107** |

# Space Needs Program
# Employee Shift Analysis

| 1/29/2020 | Arrive | Shift Start | Shift End | Depart | Projected Number of Staff | 12:00 AM | 12:30 AM | 1:00 AM | 1:30 AM | 2:00 AM | 2:30 AM | 3:00 AM | 3:30 AM | 4:00 AM | 4:30 AM | 5:00 AM | 5:30 AM | 6:00 AM | 6:30 AM | 7:00 AM | 7:30 AM | 8:00 AM | 8:30 AM | 9:00 AM | 9:30 AM | 10:00 AM | 10:30 AM | 11:00 AM | 11:30 AM | 12:00 PM | 12:30 PM | 1:00 PM | 1:30 PM | 2:00 PM | 2:30 PM | 3:00 PM | 3:30 PM | 4:00 PM | 4:30 PM | 5:00 PM | 5:30 PM | 6:00 PM | 6:30 PM | 7:00 PM | 7:30 PM | 8:00 PM | 8:30 PM | 9:00 PM | 9:30 PM | 10:00 PM | 10:30 PM | 11:00 PM | 11:30 PM | 12:00 AM |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FLEET MAINTENANCE** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Existing 2020 Staff** | **Gilbert** | **Weekday** | **Schedule** | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 **Rolling Stock Superintendent** | 7:30 AM | 8:00 AM | 5:00 PM | 5:30 PM | **1** | | | | | | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | |
| 2 **Office Assistant** | 7:30 AM | 8:00 AM | 5:00 PM | 5:30 PM | **1** | | | | | | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | |
| 3 **Auto Repair Foreman** | | | | | **4** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| GAM Shift 1 - Weekday | 3:30 AM | 4:00 AM | 1:00 PM | 1:30 PM | 1 | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | | | | | | | | | |
| GAM Shift 2 - Weekday | 10:30 AM | 11:00 AM | 8:00 PM | 8:30 PM | 1 | | | | | | | | | | | | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | |
| GAM Shift 3 - Weekday | 4:30 PM | 5:00 PM | 2:00 AM | 2:30 AM | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 4 **General Machinist** | | | | | **0** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5 **Sheet Metal Worker** | | | | | **0** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6 **Floor Operations Maintenance (GAM)** | | | | | **43** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| GAM Shift 1 - Weekday | 3:30 AM | 4:00 AM | 1:00 PM | 1:30 PM | 15 | | | | | | | | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 |
| GAM Shift 2 - Weekday | 10:30 AM | 11:00 AM | 8:00 PM | 8:30 PM | 15 | | | | | | | | | | | | | | | | | | | | | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 |
| GAM Shift 3 - Weekday | 4:30 PM | 5:00 PM | 2:00 AM | 2:30 AM | 9 | 9 | 9 | 9 | 9 | 9 | 9 | | | | | | | | | | | | | | | | | | | | | | | | | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
| 7 **Automotive Research Assistant** | | | | | **0** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8 **Vehicle Maintenance Instructor** | | | | | **0** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9 **Rolling Stock Superintendent (Body Shop)** | | | | | **0** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10 **Foreman (Body Shop)** | | | | | **0** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11 **General Mechanic (Body Shop)** | | | | | **0** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12 **Vehicle Painter & Letterer (Body Shop)** | | | | | **0** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 13 **Manager (Electronics)** | | | | | **0** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 14 **Supervisor (Electronics)** | | | | | **0** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 15 **Repair (Electronics)** | | | | | **0** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 16 **Manager (Sign Shop)** | | | | | **0** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 17 **Supervisor (Sign Shop)** | | | | | **0** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 18 **Repair (Sign Shop)** | | | | | **0** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *keep this row blank* | | | | | 49 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Existing 2020 Staff** | | | | | **49** | **10** | **10** | **10** | **10** | **10** | **10** | **0** | **16** | **16** | **16** | **16** | **16** | **16** | **16** | **16** | **18** | **18** | **18** | **18** | **18** | **18** | **18** | **34** | **34** | **34** | **34** | **34** | **34** | **34** | **18** | **18** | **18** | **18** | **18** | **28** | **28** | **28** | **26** | **26** | **26** | **26** | **26** | **26** | **10** | **10** | **10** | **10** | **10** |
| **250 BUS Program** | **Coolidge** | **Weekday** | **Schedule** | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 **Rolling Stock Superintendent** | 7:30 AM | 8:00 AM | 5:00 PM | 5:30 PM | **1** | | | | | | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | |
| 2 **Office Assistant** | 7:30 AM | 8:00 AM | 5:00 PM | 5:30 PM | **1** | | | | | | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | |
| 3 **Auto Repair Foreman** | | | | | **4** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| GAM Shift 1 - Weekday | 3:30 AM | 4:00 AM | 1:00 PM | 1:30 PM | 1 | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | | | | | | | | | |
| GAM Shift 2 - Weekday | 10:30 AM | 11:00 AM | 8:00 PM | 8:30 PM | 1 | | | | | | | | | | | | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | |
| GAM Shift 3 - Weekday | 4:30 PM | 5:00 PM | 2:00 AM | 2:30 AM | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 4 **General Machinist** | 3:30 AM | 4:00 AM | 1:00 PM | 1:30 PM | **1** | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | | | | | | | | | |
| 5 **Sheet Metal Worker** | 10:30 AM | 11:00 AM | 8:00 PM | 8:30 PM | **1** | | | | | | | | | | | | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | |
| 6 **Floor Operations Maintenance (GAM)** | | | | | **100** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| GAM Shift 1 - Weekday | 3:30 AM | 4:00 AM | 1:00 PM | 1:30 PM | 30 | | | | | | | | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| GAM Shift 2 - Weekday | 10:30 AM | 11:00 AM | 8:00 PM | 8:30 PM | 30 | | | | | | | | | | | | | | | | | | | | | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| GAM Shift 3 - Weekday | 4:30 PM | 5:00 PM | 2:00 AM | 2:30 AM | 20 | 20 | 20 | 20 | 20 | 20 | 20 | | | | | | | | | | | | | | | | | | | | | | | | | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 |
| 7 **Automotive Research Assistant** | 7:30 AM | 8:00 AM | 5:00 PM | 5:30 PM | **3** | | | | | | | | | | | | | | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | | | | | | | | | | | |
| 8 **Vehicle Maintenance Instructor** | 7:30 AM | 8:00 AM | 5:00 PM | 5:30 PM | **1** | | | | | | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | |
| 9 **Rolling Stock Superintendent (Body Shop)** | 6:30 AM | 7:00 AM | 4:00 PM | 4:30 PM | **1** | | | | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | |
| 10 **Foreman (Body Shop)** | 10:30 AM | 11:00 AM | 8:00 PM | 8:30 PM | **1** | | | | | | | | | | | | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | |
| 11 **General Mechanic (Body Shop)** | | | | | **13** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| GAM Shift 1 - Weekday | 3:30 AM | 4:00 AM | 1:00 PM | 1:30 PM | 5 | | | | | | | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| GAM Shift 2 - Weekday | 10:30 AM | 11:00 AM | 8:00 PM | 8:30 PM | 5 | | | | | | | | | | | | | | | | | | | | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| GAM Shift 3 - Weekday | 4:30 PM | 5:00 PM | 2:00 AM | 2:30 AM | 3 | 3 | 3 | 3 | 3 | 3 | 3 | | | | | | | | | | | | | | | | | | | | | | | | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 12 **Vehicle Painter & Letterer (Body Shop)** | 7:30 AM | 8:00 AM | 5:00 PM | 5:30 PM | **1** | | | | | | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | |
| 13 **Manager (Electronics)** | 7:30 AM | 8:00 AM | 5:00 PM | 5:30 PM | **1** | | | | | | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | |
| 14 **Supervisor (Electronics)** | 7:30 AM | 8:00 AM | 5:00 PM | 5:30 PM | **1** | | | | | | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | |
| 15 **Repair (Electronics)** | | | | | **15** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Shift 1 - Weekday | 3:30 AM | 4:00 AM | 1:00 PM | 1:30 PM | 5 | | | | | | | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| Shift 2 - Weekday | 10:30 AM | 11:00 AM | 8:00 PM | 8:30 PM | 5 | | | | | | | | | | | | | | | | | | | | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| Shift 3 - Weekday | 4:30 PM | 5:00 PM | 2:00 AM | 2:30 AM | 3 | 3 | 3 | 3 | 3 | 3 | 3 | | | | | | | | | | | | | | | | | | | | | | | | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 16 **Manager (Sign Shop)** | 7:30 AM | 8:00 AM | 5:00 PM | 5:30 PM | **1** | | | | | | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | |
| 17 **Supervisor (Sign Shop)** | 7:30 AM | 8:00 AM | 5:00 PM | 5:30 PM | **1** | | | | | | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | |
| 18 **Repair (Sign Shop)** | 7:30 AM | 8:00 AM | 5:00 PM | 5:30 PM | **4** | | | | | | | | | | | | | | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | | | | | | | | | | |
| *keep this row blank* | | | | | 151 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **250 BUS Program** | | | | | **151** | **27** | **27** | **27** | **27** | **27** | **27** | **0** | **42** | **42** | **42** | **42** | **42** | **42** | **43** | **43** | **57** | **57** | **57** | **57** | **57** | **57** | **57** | **100** | **100** | **100** | **100** | **100** | **100** | **100** | **58** | **58** | **58** | **58** | **58** | **85** | **84** | **84** | **70** | **70** | **70** | **70** | **70** | **70** | **27** | **27** | **27** | **27** | **42** | **42** | **42** |

**Space Needs Program**
**Employee Shift Analysis**

Begin Shift Start | End Shift

| 1/29/2020 | Arrive | Shift Start | Shift End | Depart | Projected Number of Staff | 12:00 AM | 12:30 AM | 1:00 AM | 1:30 AM | 2:00 AM | 2:30 AM | 3:00 AM | 3:30 AM | 4:00 AM | 4:30 AM | 5:00 AM | 5:30 AM | 6:00 AM | 6:30 AM | 7:00 AM | 7:30 AM | 8:00 AM | 8:30 AM | 9:00 AM | 9:30 AM | 10:00 AM | 10:30 AM | 11:00 AM | 11:30 AM | 12:00 PM | 12:30 PM | 1:00 PM | 1:30 PM | 2:00 PM | 2:30 PM | 3:00 PM | 3:30 PM | 4:00 PM | 4:30 PM | 5:00 PM | 5:30 PM | 6:00 PM | 6:30 PM | 7:00 PM | 7:30 PM | 8:00 PM | 8:30 PM | 9:00 PM | 9:30 PM | 10:00 PM | 10:30 PM | 11:00 PM | 11:30 PM | 12:00 AM |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **PARTS STOREROOM** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Existing 2020 Staff** | **Central** | **Weekday** | **Schedule** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 **Materials Management Manager** | *7:30 AM* | 8:00 AM | 5:00 PM | *5:30 PM* | **1** | | | | | | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | | | |
| 2 **Store Operations Supervisor** | *7:30 AM* | 8:00 AM | 5:00 PM | *5:30 PM* | **1** | | | | | | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | | | |
| 3 **Storekeeper** | | | | | **6** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Storekeeper - Shift 1 Weekday | *3:30 AM* | 4:00 AM | 1:00 PM | *1:30 PM* | 2 | | | | | | | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | | | | | | | | | | | | | | | | | | | |
| Storekeeper - Shift 2 Weekday | *10:30 AM* | 11:00 AM | 8:00 PM | *8:30 PM* | 2 | | | | | | | | | | | | | | | | | | | | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | | | | | | |
| Storekeeper - Shift 3 Weekday | *4:30 PM* | 5:00 PM | 2:00 AM | *2:30 AM* | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 4 **Vehicle Operator** | *7:30 AM* | 8:00 AM | 5:00 PM | *5:30 PM* | **2** | | | | | | | | | | | | | | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | | | | | | | | | | | | |
| Vehicle Operator | *10:30 AM* | 11:00 AM | 8:00 PM | *8:30 PM* | | | | | | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | |
| *keep this row blank* | | | | | 10 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Existing 2020 Staff** | | | | | **10** | **1** | **1** | **1** | **1** | **1** | **1** | **0** | **2** | **2** | **2** | **2** | **2** | **2** | **2** | **6** | **6** | **6** | **6** | **6** | **6** | **8** | **8** | **8** | **8** | **8** | **8** | **8** | **6** | **6** | **6** | **6** | **6** | **7** | **7** | **7** | **3** | **3** | **3** | **3** | **3** | **3** | **1** | **1** | **1** | **1** | **1** | **1** | **1** |
| **250 BUS Program** | **Coolidge** | **Weekday** | **Schedule** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 **Materials Management Manager** | *7:30 AM* | 8:00 AM | 5:00 PM | *5:30 PM* | **1** | | | | | | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | | | |
| 2 **Store Operations Supervisor** | *7:30 AM* | 8:00 AM | 5:00 PM | *5:30 PM* | **1** | | | | | | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | | | |
| 3 **Storekeeper** | | | | | **10** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Storekeeper - Shift 1 Weekday | *3:30 AM* | 4:00 AM | 1:00 PM | *1:30 PM* | 3 | | | | | | | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | | | | | | | | | | | | | | | | | | | | |
| Storekeeper - Shift 2 Weekday | *10:30 AM* | 11:00 AM | 8:00 PM | *8:30 PM* | 3 | | | | | | | | | | | | | | | | | | | | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | | | | | | | |
| Storekeeper - Shift 3 Weekday | *4:30 PM* | 5:00 PM | 2:00 AM | *2:30 AM* | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 4 **Vehicle Operator** | *7:30 AM* | 8:00 AM | 5:00 PM | *5:30 PM* | **1** | | | | | | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | | | |
| *keep this row blank* | | | | | 13 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **250 BUS Program** | | | | | **13** | **2** | **2** | **2** | **2** | **2** | **2** | **0** | **3** | **3** | **3** | **3** | **3** | **3** | **3** | **6** | **6** | **6** | **6** | **6** | **6** | **9** | **9** | **9** | **9** | **9** | **9** | **9** | **6** | **6** | **6** | **6** | **6** | **8** | **8** | **8** | **5** | **5** | **5** | **5** | **5** | **5** | **2** | **2** | **2** | **2** | **2** | **2** | **2** |
| **COACH SERVICES** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Existing 2020 Staff** | **Gilbert** | **Weekday** | **Schedule** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 Supervisor | *4:30 PM* | 5:00 PM | 2:00 AM | *2:30 AM* | **1** | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 2 Attendant (CSA) | | | | | **17** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CSA - Shift 1 Weekday | | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CSA - Shift 2 Weekday | *10:30 AM* | 11:00 AM | 8:00 PM | *8:30 PM* | 2 | | | | | | | | | | | | | | | | | | | | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | | | | | | |
| CSA - Shift 3 Weekday | *4:30 PM* | 5:00 PM | 2:00 AM | *2:30 AM* | 12 | 12 | 12 | 12 | 12 | 12 | 12 | | | | | | | | | | | | | | | | | | | | | | | | | | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 |
| *keep this row blank* | | | | | 18 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Existing 2020 Staff** | | | | | **18** | **13** | **13** | **13** | **13** | **13** | **13** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **2** | **2** | **2** | **2** | **2** | **2** | **2** | **2** | **2** | **2** | **2** | **15** | **15** | **15** | **15** | **15** | **15** | **15** | **15** | **15** | **13** | **13** | **13** | **13** | **13** | **13** | **13** |
| **250 BUS Program** | **Coolidge** | **Weekday** | **Schedule** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 **Supervisor** | *4:30 PM* | 5:00 PM | 2:00 AM | *2:30 AM* | **1** | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 2 **Attendant (CSA)** | | | | | **30** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CSA - Shift 1 Weekday | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CSA - Shift 2 Weekday | *10:30 AM* | 11:00 AM | 8:00 PM | *8:30 PM* | 3 | | | | | | | | | | | | | | | | | | | | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | | | | | | | |
| CSA - Shift 3 Weekday | *4:30 PM* | 5:00 PM | 2:00 AM | *2:30 AM* | 21 | 21 | 21 | 21 | 21 | 21 | 21 | | | | | | | | | | | | | | | | | | | | | | | | | | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 |
| *keep this row blank* | | | | | 31 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **250 BUS Program** | | | | | **31** | **22** | **22** | **22** | **22** | **22** | **22** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **3** | **3** | **3** | **3** | **3** | **3** | **3** | **3** | **3** | **3** | **3** | **25** | **25** | **25** | **25** | **25** | **25** | **25** | **25** | **25** | **22** | **22** | **22** | **22** | **22** | **22** | **22** |
| **PLANT MAINTENANCE/SIGN SHOP** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Existing 2020 Staff** | **Central** | **Weekday** | **Schedule** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 **Manager** | *6:30 AM* | 7:00 AM | 4:00 PM | *4:30 PM* | **1** | | | | | | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | | | | | |
| 2 **Electrician** | *6:30 AM* | 7:00 AM | 4:00 PM | *4:30 PM* | **1** | | | | | | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | | | | | |
| 3 **Plumber** | *6:30 AM* | 7:00 AM | 4:00 PM | *4:30 PM* | **1** | | | | | | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | | | | | |
| 4 **Millwrights** | *6:30 AM* | 7:00 AM | 4:00 PM | *4:30 PM* | **1** | | | | | | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | | | | | |
| 5 **Manager (Sign Shop)** | *6:30 AM* | 7:00 AM | 4:00 PM | *4:30 PM* | **1** | | | | | | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | | | | | |
| 6 **Supervisor (Sign Shop)** | *6:30 AM* | 7:00 AM | 4:00 PM | *4:30 PM* | **1** | | | | | | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | | | | | |
| 7 **Repair (Sign Shop)** | *6:30 AM* | 7:00 AM | 4:00 PM | *4:30 PM* | **4** | | | | | | | | | | | | | | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | | | | | | | | | | | | | | |
| *keep this row blank* | | | | | 10 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Existing 2020 Staff** | | | | | **10** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **10** | **10** | **10** | **10** | **10** | **10** | **10** | **10** | **10** | **10** | **10** | **10** | **10** | **10** | **10** | **10** | **10** | **10** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** |
| **250 BUS Program** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 **Manager** | *6:30 AM* | 7:00 AM | 4:00 PM | *4:30 PM* | **1** | | | | | | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | | | | | |
| 2 **Electrician** | *6:30 AM* | 7:00 AM | 4:00 PM | *4:30 PM* | **1** | | | | | | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | | | | | |
| 3 **Plumber** | *6:30 AM* | 7:00 AM | 4:00 PM | *4:30 PM* | **1** | | | | | | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | | | | | |
| 4 **Millwrights** | *6:30 AM* | 7:00 AM | 4:00 PM | *4:30 PM* | **2** | | | | | | | | | | | | | | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | | | | | | | | | | | | | | |
| 5 **Manager (Sign Shop)** | *6:30 AM* | 7:00 AM | 4:00 PM | *4:30 PM* | **1** | | | | | | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | | | | | |
| 6 **Supervisor (Sign Shop)** | *6:30 AM* | 7:00 AM | 4:00 PM | *4:30 PM* | **1** | | | | | | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | | | | | |
| 7 **Repair (Sign Shop)** | *6:30 AM* | 7:00 AM | 4:00 PM | *4:30 PM* | **6** | | | | | | | | | | | | | | | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | | | | | | | | | | | | | | | |
| *keep this row blank* | | | | | 13 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **250 BUS Program** | | | | | **13** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **13** | **13** | **13** | **13** | **13** | **13** | **13** | **13** | **13** | **13** | **13** | **13** | **13** | **13** | **13** | **13** | **13** | **13** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** |
| **MAXIMUM STAFF ONSITE - EXISTING STAFF** | | | | | **383** | 100 | 100 | 100 | 79 | 43 | 43 | 0 | 52 | 83 | 117 | 148 | 149 | 149 | 159 | 159 | 169 | 169 | 169 | 169 | 169 | 169 | 223 | 254 | 285 | 316 | 316 | 316 | 320 | 268 | 237 | 224 | 211 | 228 | 271 | 261 | 261 | 251 | 251 | 251 | 251 | 251 | 197 | 166 | 135 | 104 | 104 | 104 | 100 |
| **MAXIMUM STAFF ONSITE - 250 BUS PROGRAM** | | | | | **1012** | 158 | 158 | 158 | 129 | 83 | 83 | 8 | 105 | 151 | 203 | 249 | 250 | 250 | 264 | 264 | 289 | 289 | 289 | 289 | 289 | 289 | 390 | 436 | 482 | 528 | 528 | 528 | 535 | 438 | 392 | 369 | 346 | 368 | 443 | 429 | 429 | 404 | 404 | 404 | 404 | 404 | 303 | 257 | 211 | 165 | 180 | 180 | 173 |

# Space Needs Program
# Employee Shift Analysis

**Coolidge Bus Terminal**

**12/15/2020**

| | | Arrive | Begin Shift Start | End Shift | Depart | Projected Number of Staff | 12:00 AM | 12:30 AM | 1:00 AM | 1:30 AM | 2:00 AM | 2:30 AM | 3:00 AM | 3:30 AM | 4:00 AM | 4:30 AM | 5:00 AM | 5:30 AM | 6:00 AM | 6:30 AM | 7:00 AM | 7:30 AM | 8:00 AM | 8:30 AM | 9:00 AM | 9:30 AM | 10:00 AM | 10:30 AM | 11:00 AM | 11:30 AM | 12:00 PM | 12:30 PM | 1:00 PM | 1:30 PM | 2:00 PM | 2:30 PM | 3:00 PM | 3:30 PM | 4:00 PM | 4:30 PM | 5:00 PM | 5:30 PM | 6:00 PM | 6:30 PM | 7:00 PM | 7:30 PM | 8:00 PM | 8:30 PM | 9:00 PM | 9:30 PM | 10:00 PM | 10:30 PM | 11:00 PM | 11:30 PM | 12:00 AM |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **BUS OPERATIONS** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **216 BUS PROGRAM** | **Coolidge** | **Weekday** | **Schedule** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | **District Superintendent (Admin/HR)** | | | | | **3** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Shift 1 | *11:30 PM* | 12:00 AM | 8:00 AM | *8:30 AM* | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Shift 2 | *7:30 AM* | 8:00 AM | 4:00 PM | *4:30 PM* | 1 | | | | | | | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | | | | |
| | Shift 3 | *3:30 PM* | 4:00 PM | 12:00 AM | *12:30 AM* | 0 | 0 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7 | **Asst. Superintendent (Admin/HR)** | *7:30 AM* | 8:00 AM | 4:00 PM | *4:30 PM* | **1** | | | | | | | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | | | | |
| 8 | **Transportation Emergency Dispatchers** | | | | | **20** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Shift 1 | *3:30 AM* | 4:00 AM | 3:00 PM | *3:30 PM* | 5 | | | | | | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | | | | | | | | | | | | | | |
| | Shift 2 | *4:30 AM* | 5:00 AM | 4:00 PM | *4:30 PM* | 5 | | | | | | | | | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | | | | | | | | | | | | | | |
| | Shift 3 | *5:30 AM* | 6:00 AM | 5:00 PM | *5:30 PM* | 5 | | | | | | | | | | | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | | | | | | | | | | | | | |
| 9 | **District Superintendent (Terminal)** | | | | | **2** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | District Superintendent (Terminal) | *3:30 AM* | 4:00 AM | 3:00 PM | *3:30 PM* | **1** | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | | | | |
| | District Superintendent (Terminal) | *1:30 PM* | 2:00 PM | 11:00 PM | *11:30 PM* | **1** | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| 10 | **Transportation Terminal Supervisor** | | | | | **7** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Transportation Terminal Supervisor | *4:30 AM* | 5:00 AM | 2:00 PM | *2:30 PM* | 1 | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | | | | | | | | |
| | Transportation Terminal Supervisor | *7:30 AM* | 8:00 AM | 5:00 PM | *5:30 PM* | 1 | | | | | | | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | | | |
| | Transportation Terminal Supervisor | *1:30 PM* | 2:00 PM | 11:00 PM | *11:30 PM* | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Transportation Terminal Supervisor | *5:30 PM* | 6:00 PM | 2:00 AM | *2:30 AM* | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | **Road Supervisor** | | | | | **38** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Road Supervisor Shift 1 - Weekday | *3:30 AM* | 4:00 AM | 12:30 PM | *1:00 PM* | 12 | | | | | | | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | | | | | | | | | | | | | | | | | | | | |
| | Road Supervisor Shift 2 - Weekday | *11:30 AM* | 12:00 PM | 8:30 PM | *9:00 PM* | 12 | | | | | | | | | | | | | | | | | | | | | | | | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | | | | | | |
| | Road Supervisor Shift 3 - Weekday | *7:30 PM* | 8:00 PM | 4:30 AM | *5:00 AM* | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | | | | | | | | | | | | | | | | | | | | | | | | | | | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 |
| 12 | **Office Assistant** | *7:30 AM* | 8:00 AM | 5:00 PM | *5:30 PM* | **1** | | | | | | | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | | | |
| 13 | **Administrative Assistant (Training)** | *7:30 AM* | 8:00 AM | 5:00 PM | *5:30 PM* | **1** | | | | | | | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | | | |
| 14 | **Terminal Instructors** | | | | | **11** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Terminal Instructors | *7:30 AM* | 8:00 AM | 5:00 PM | *5:30 PM* | 4 | | | | | | | | | | | | | | | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | | | | | | | | | | | | |
| | Terminal Instructors | *1:30 PM* | 2:00 PM | 11:00 PM | *11:30 PM* | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | |
| 15 | **Bus Operators** | | | | | **648** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | **158** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | *Bus Pull-Out (Number of Buses)* | | | | | *139* | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Bus Operators Shift 1 - Weekday | *3:30 AM* | 4:00 AM | 12:30 PM | *1:00 PM* | 35 | | | | | | | 35 | **35** | **35** | **35** | **35** | **35** | **35** | **35** | **35** | **35** | **35** | **35** | **35** | **35** | **35** | **35** | **35** | **35** | **35** | 35 | 35 | | | | | | | | | | | | | | | | | | | | |
| | Bus Operators Shift 1 - Weekday | *4:00 AM* | 4:30 AM | 1:00 PM | *1:30 PM* | 35 | | | | | | | | 35 | **35** | **35** | **35** | **35** | **35** | **35** | **35** | **35** | **35** | **35** | **35** | **35** | **35** | **35** | **35** | **35** | **35** | **35** | 35 | 35 | | | | | | | | | | | | | | | | | | | |
| | Bus Operators Shift 1 - Weekday | *4:30 AM* | 5:00 AM | 1:30 PM | *2:00 PM* | 35 | | | | | | | | | 35 | **35** | **35** | **35** | **35** | **35** | **35** | **35** | **35** | **35** | **35** | **35** | **35** | **35** | **35** | **35** | **35** | **35** | **35** | 35 | 35 | | | | | | | | | | | | | | | | | | |
| | Bus Operators Shift 1 - Weekday | *5:00 AM* | 5:30 AM | 2:00 PM | *2:30 PM* | 34 | | | | | | | | | | 34 | **34** | **34** | **34** | **34** | **34** | **34** | **34** | **34** | **34** | **34** | **34** | **34** | **34** | **34** | **34** | **34** | **34** | 34 | 34 | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | *Bus Pull-Out (Number of Buses)* | | | | | *139* | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Bus Operators Shift 2 - Weekday | *11:30 AM* | 12:00 PM | 8:30 PM | *9:00 PM* | 35 | | | | | | | | | | | | | | | | | | | | | | | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | | | | | |
| | Bus Operators Shift 2 - Weekday | *12:00 PM* | 12:30 PM | 9:00 PM | *9:30 PM* | 35 | | | | | | | | | | | | | | | | | | | | | | | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | | | | |
| | Bus Operators Shift 2 - Weekday | *12:30 PM* | 1:00 PM | 9:30 PM | *10:00 PM* | 35 | | | | | | | | | | | | | | | | | | | | | | | | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | | |
| | Bus Operators Shift 2 - Weekday | *1:00 PM* | 1:30 PM | 10:00 PM | *10:30 PM* | 34 | | | | | | | | | | | | | | | | | | | | | | | | | | 34 | 34 | 34 | 34 | 34 | 34 | 34 | 34 | 34 | 34 | 34 | 34 | 34 | 34 | 34 | 34 | 34 | 34 | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | *Bus Pull-Out (Number of Buses)* | | | | | *70* | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Bus Operators Shift 3 - Weekday | *7:00 PM* | 7:30 PM | 12:30 AM | *1:00 AM* | 18 | 18 | 18 | 18 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 |
| | Bus Operators Shift 3 - Weekday | *7:30 PM* | 8:00 PM | 1:00 AM | *1:30 AM* | 18 | 18 | 18 | 18 | 18 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 |
| | Bus Operators Shift 3 - Weekday | *8:00 PM* | 8:30 PM | 2:00 AM | *2:30 AM* | 17 | 17 | 17 | 17 | 17 | 17 | 17 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 17 | 17 | 17 | 17 | 17 | 17 | 17 | 17 | 17 | 17 | 17 |
| | Bus Operators Shift 3 - Weekday | *8:30 PM* | 9:00 PM | 2:00 AM | *2:30 AM* | 17 | 17 | 17 | 17 | 17 | 17 | 17 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 17 | 17 | 17 | 17 | 17 | 17 | 17 | 17 | 17 | 17 | 17 |
| 16 | **Transportation Station Worker** | | | | | **10** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Transportation Station Worker - Shift 1 Weekday | *3:30 AM* | 4:00 AM | 12:30 PM | *1:00 PM* | 3 | | | | | | | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | | | | | | | | | | | | | | | | | | | | |
| | Transportation Station Worker - Shift 2 Weekday | *11:30 AM* | 12:00 PM | 8:30 PM | *9:00 PM* | 3 | | | | | | | | | | | | | | | | | | | | | | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | | | | | |
| *keep this row blank* | | | | | | 742 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **216 BUS PROGRAM** | | | | | | **742** | **83** | **83** | **83** | **65** | **47** | **47** | **12** | **68** | **103** | **144** | **178** | **171** | **171** | **171** | **171** | **180** | **180** | **180** | **180** | **180** | **180** | **180** | **180** | **230** | **265** | **300** | **334** | **289** | **254** | **219** | **184** | **184** | **178** | **178** | **171** | **167** | **160** | **160** | **178** | **208** | **225** | **242** | **242** | **192** | **157** | **122** | **88** | **88** | **83** |

| | | | |
|---|---|---|---|
| **Total Buses** | 198 | Based a 25% Artic Buses | |
| **Less Spare Ratio** | 158 | 20% | |
| **Drivers using alternatate forms of travel** | 139 | 12% | |

**Space Needs Program**
**Employee Shift Analysis**

**Coolidge Bus Terminal**

| | | | Begin Shift Start | End Shift | | Projected Number of Staff | 12:00 AM | 12:30 AM | 1:00 AM | 1:30 AM | 2:00 AM | 2:30 AM | 3:00 AM | 3:30 AM | 4:00 AM | 4:30 AM | 5:00 AM | 5:30 AM | 6:00 AM | 6:30 AM | 7:00 AM | 7:30 AM | 8:00 AM | 8:30 AM | 9:00 AM | 9:30 AM | 10:00 AM | 10:30 AM | 11:00 AM | 11:30 AM | 12:00 PM | 12:30 PM | 1:00 PM | 1:30 PM | 2:00 PM | 2:30 PM | 3:00 PM | 3:30 PM | 4:00 PM | 4:30 PM | 5:00 PM | 5:30 PM | 6:00 PM | 6:30 PM | 7:00 PM | 7:30 PM | 8:00 PM | 8:30 PM | 9:00 PM | 9:30 PM | 10:00 PM | 10:30 PM | 11:00 PM | 11:30 PM | 12:00 AM |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **12/15/2020** | *Arrive* | Shift Start | Shift End | *Depart* | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **FLEET MAINTENANCE** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **216 BUS PROGRAM** | **Coolidge** | **Weekday** | **Schedule** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 **Rolling Stock Superintendent** | *7:30 AM* | 8:00 AM | 5:00 PM | *5:30 PM* | **1** | | | | | | | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | | | |
| 7 **Office Assistant** | *7:30 AM* | 8:00 AM | 5:00 PM | *5:30 PM* | **1** | | | | | | | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | | | |
| 8 **Auto Repair Foreman** | | | | | **4** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| GAM Shift 1 - Weekday | *3:30 AM* | 4:00 AM | 1:00 PM | *1:30 PM* | 1 | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | | | | | | | |
| GAM Shift 2 - Weekday | *11:30 AM* | 12:00 PM | 9:00 PM | *9:30 PM* | 1 | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | |
| GAM Shift 3 - Weekday | *7:30 PM* | 8:00 PM | 2:00 AM | *2:30 AM* | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 9 **General Machinist** | *3:30 AM* | 4:00 AM | 1:00 PM | *1:30 PM* | **1** | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | | | | | | | |
| 10 **Sheet Metal Worker** | *11:30 AM* | 12:00 PM | 9:00 PM | *9:30 PM* | **1** | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | |
| 11 **Floor Operations Maintenance (GAM)** | | | | | **87** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| GAM Shift 1 - Weekday | *6:30 AM* | 7:00 AM | 3:30 PM | *4:00 PM* | 13 | | | | | | | | | | | | | | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | | | | | | | | | | | | | | | | | | |
| GAM Shift 2 - Weekday | *2:00 PM* | 2:30 PM | 11:00 PM | *11:30 PM* | 20 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | |
| GAM Shift 3 - Weekday | *10:00 PM* | 10:30 PM | 7:30 AM | *8:00 AM* | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | | | | | | | | | | | | | | | | | | | | | | | | | | | 20 | 20 | 20 | 20 | 20 |
| 12 **Automotive Research Assistant** | *7:30 AM* | 8:00 AM | 5:00 PM | *5:30 PM* | **2** | | | | | | | | | | | | | | | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | | | | | | | | | | | | |
| 13 **Vehicle Maintenance Instructor** | *7:30 AM* | 8:00 AM | 5:00 PM | *5:30 PM* | **1** | | | | | | | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | | | |
| 15 **Manager (Electronics)** | *7:30 AM* | 8:00 AM | 5:00 PM | *5:30 PM* | **1** | | | | | | | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | | | |
| 16 **Supervisor (Electronics)** | *7:30 AM* | 8:00 AM | 5:00 PM | *5:30 PM* | **1** | | | | | | | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | | | |
| 17 **Repair (Electronics)** | *7:30 AM* | 8:00 AM | 5:00 PM | *5:30 PM* | **11** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Shift 1 - Weekday | *3:30 AM* | 4:00 AM | 12:30 PM | *1:00 PM* | 3 | | | | | | | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | | | | | | | | | | | | | | | | | | |
| Shift 2 - Weekday | *11:30 AM* | 12:00 PM | 8:30 PM | *9:00 PM* | 3 | | | | | | | | | | | | | | | | | | | | | | | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | | | | |
| Shift 3 - Weekday | *7:30 PM* | 8:00 PM | 1:30 AM | *2:00 AM* | 3 | 3 | 3 | 3 | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| *keep this row blank* | | | | | 111 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **216 BUS PROGRAM** | | | | | **111** | **24** | **24** | **24** | **24** | **21** | **21** | **20** | **25** | **25** | **25** | **25** | **25** | **25** | **38** | **38** | **45** | **45** | **25** | **25** | **25** | **25** | **25** | **25** | **30** | **30** | **30** | **27** | **45** | **45** | **45** | **45** | **45** | **32** | **32** | **32** | **25** | **25** | **25** | **29** | **29** | **29** | **29** | **26** | **44** | **44** | **44** | **44** | **24** |
| **REHAB** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **216 BUS PROGRAM** | **Coolidge** | **12:00 AM** | **12:00 AM** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 **Rolling Stock Superintendent (Body Shop)** | *7:30 AM* | 8:00 AM | 5:00 PM | *5:30 PM* | **1** | | | | | | | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | | | |
| 2 **Foreman (Body Shop)** | *7:30 AM* | 8:00 AM | 5:00 PM | *5:30 PM* | **1** | | | | | | | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | | | |
| 3 **General Mechanic (Body Shop)** | | | | | **8** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| GAM Shift 1 - Weekday | *3:30 AM* | 4:00 AM | 1:00 PM | *1:30 PM* | 3 | | | | | | | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | | | | | | | | | | | | | | | | | | |
| GAM Shift 2 - Weekday | *11:30 AM* | 12:00 PM | 9:00 PM | *9:30 PM* | 2 | | | | | | | | | | | | | | | | | | | | | | | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | | | |
| GAM Shift 3 - Weekday | *7:30 PM* | 8:00 PM | 2:00 AM | *2:30 AM* | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 4 **Vehicle Painter & Leterer (Body Shop)** | *3:30 AM* | 4:00 AM | 1:00 PM | *1:30 PM* | **1** | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | | | | | | | | |
| *keep this row blank* | | | | | 11 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **216 BUS PROGRAM** | | | | | **11** | **2** | **2** | **2** | **2** | **2** | **2** | **0** | **4** | **4** | **4** | **4** | **4** | **4** | **4** | **4** | **6** | **6** | **6** | **6** | **6** | **6** | **6** | **6** | **8** | **8** | **8** | **8** | **4** | **4** | **4** | **4** | **4** | **4** | **4** | **4** | **2** | **2** | **2** | **4** | **4** | **4** | **4** | **4** | **2** | **2** | **2** | **2** | **2** |

# Space Needs Program
# Employee Shift Analysis

**Coolidge Bus Terminal**

**12/15/2020**

| | Arrive | Shift Start | Shift End | Depart | Projected Number of Staff | 12:00 AM | 12:30 AM | 1:00 AM | 1:30 AM | 2:00 AM | 2:30 AM | 3:00 AM | 3:30 AM | 4:00 AM | 4:30 AM | 5:00 AM | 5:30 AM | 6:00 AM | 6:30 AM | 7:00 AM | 7:30 AM | 8:00 AM | 8:30 AM | 9:00 AM | 9:30 AM | 10:00 AM | 10:30 AM | 11:00 AM | 11:30 AM | 12:00 PM | 12:30 PM | 1:00 PM | 1:30 PM | 2:00 PM | 2:30 PM | 3:00 PM | 3:30 PM | 4:00 PM | 4:30 PM | 5:00 PM | 5:30 PM | 6:00 PM | 6:30 PM | 7:00 PM | 7:30 PM | 8:00 PM | 8:30 PM | 9:00 PM | 9:30 PM | 10:00 PM | 10:30 PM | 11:00 PM | 11:30 PM | 12:00 AM |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **PARTS STOREROOM** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **216 BUS PROGRAM** | **Coolidge** | **Weekday** | **Schedule** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 **Materials Management Manager** | *7:30 AM* | 8:00 AM | 5:00 PM | *5:30 PM* | **1** | | | | | | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | |
| 2 **Store Operations Supervisor** | *7:30 AM* | 8:00 AM | 5:00 PM | *5:30 PM* | **1** | | | | | | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | |
| 3 **Storekeeper** | | | | | **8** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Storekeeper - Shift 1 Weekday | *3:30 AM* | 4:00 AM | 1:00 PM | *1:30 PM* | 2 | | | | | | | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | | | | | | | | | | | | | | | | | | |
| Storekeeper - Shift 2 Weekday | *11:30 AM* | 12:00 PM | 9:00 PM | *9:30 PM* | 2 | | | | | | | | | | | | | | | | | | | | | | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | | | | |
| Storekeeper - Shift 3 Weekday | *7:30 PM* | 8:00 PM | 2:00 AM | *2:30 AM* | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 4 **Vehicle Operator** | *7:30 AM* | 8:00 AM | 5:00 PM | *5:30 PM* | **1** | | | | | | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | |
| *keep this row blank* | | | | | 11 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **216 BUS PROGRAM** | | | | | **11** | **2** | **2** | **2** | **2** | **2** | **2** | **0** | **2** | **2** | **2** | **2** | **2** | **2** | **2** | **5** | **5** | **5** | **5** | **5** | **5** | **5** | **7** | **7** | **7** | **7** | **5** | **5** | **5** | **5** | **5** | **5** | **5** | **5** | **2** | **2** | **2** | **4** | **4** | **4** | **4** | **4** | **2** | **2** | **2** | **2** | **2** |
| **COACH SERVICES** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **216 BUS PROGRAM** | **Coolidge** | **Weekday** | **Schedule** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 **Supervisor** | *5:30 PM* | 6:00 PM | 2:00 AM | *2:30 AM* | **1** | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 2 **Attendant (CSA)** | | | | | **24** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CSA - Shift 1 Weekday | *2:00 AM* | 2:30 AM | 11:00 AM | *11:30 AM* | 3 | | | | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | | | | | | | | | | | | | | | | | | | | | | | |
| CSA - Shift 2 Weekday | *10:30 AM* | 11:00 AM | 6:00 PM | *6:30 PM* | 3 | | | | | | | | | | | | | | | | | | | | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | | | | | | | | | | |
| CSA - Shift 3 Weekday | *5:30 PM* | 6:00 PM | 2:30 AM | *3:00 AM* | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 |
| *keep this row blank* | | | | | 25 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **216 BUS PROGRAM** | | | | | **25** | **21** | **21** | **21** | **21** | **24** | **24** | **23** | **3** | **3** | **3** | **3** | **3** | **3** | **3** | **3** | **3** | **3** | **3** | **3** | **3** | **6** | **6** | **6** | **3** | **3** | **3** | **3** | **3** | **3** | **3** | **3** | **3** | **3** | **24** | **24** | **24** | **21** | **21** | **21** | **21** | **21** | **21** | **21** | **21** | **21** | **21** |
| **PLANT MAINTENANCE** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **216 BUS PROGRAM** | | | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 **Manager** | *6:30 AM* | 7:00 AM | 4:00 PM | *4:30 PM* | **1** | | | | | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | |
| 2 **Administravie Assistant** | *6:30 AM* | 7:00 AM | 4:00 PM | *4:30 PM* | **1** | | | | | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | |
| 3 **Quality Manager** | *6:30 AM* | 7:00 AM | 4:00 PM | *4:30 PM* | **1** | | | | | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | |
| 4 **Electrician** | *6:30 AM* | 7:00 AM | 4:00 PM | *4:30 PM* | **2** | | | | | | | | | | | | | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | | | | | | | | | | |
| 5 **Carpenter** | *6:30 AM* | 7:00 AM | 4:00 PM | *4:30 PM* | **1** | | | | | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | |
| 6 **Millwrights** | *6:30 AM* | 7:00 AM | 4:00 PM | *4:30 PM* | **1** | | | | | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | |
| 7 **Storekeeper** | *6:30 AM* | 7:00 AM | 4:00 PM | *4:30 PM* | **1** | | | | | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | |
| *keep this row blank* | | | | | 8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **216 BUS PROGRAM** | | | | | **8** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **8** | **8** | **8** | **8** | **8** | **8** | **8** | **8** | **8** | **8** | **8** | **8** | **8** | **8** | **8** | **8** | **8** | **8** | **8** | **8** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** |
| **BUS STOP MAINTENANCE** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **216 BUS PROGRAM** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 **Manager (Bus Stop Maintenance)** | *6:30 AM* | 7:00 AM | 4:00 PM | *4:30 PM* | **1** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2 **Supervisor (Bus Stop Maintenance)** | *6:30 AM* | 7:00 AM | 4:00 PM | *4:30 PM* | **1** | | | | | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | |
| 3 **Repair (Bus Stop Maintenance)** | *6:30 AM* | 7:00 AM | 4:00 PM | *4:30 PM* | **12** | | | | | | | | | | | | | | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | | | | | | | | | | | |
| *keep this row blank* | | | | | 14 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **216 BUS PROGRAM** | | | | | **14** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **14** | **14** | **14** | **14** | **14** | **14** | **14** | **14** | **14** | **14** | **14** | **14** | **14** | **14** | **14** | **14** | **14** | **14** | **14** | **14** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** |
| **MAXIMUM STAFF ONSITE - 216 BUS PROGRAM** | | | | | **922** | 132 | 132 | 132 | 114 | 96 | 96 | 55 | 102 | 137 | 178 | 212 | 205 | 205 | 240 | 240 | 261 | 261 | 241 | 241 | 241 | 241 | 244 | 244 | 303 | 335 | 370 | 404 | 356 | 333 | 298 | 263 | 263 | 257 | 244 | 215 | 232 | 213 | 213 | 228 | 266 | 283 | 300 | 300 | 247 | 226 | 191 | 157 | 157 | 132 |