MEDC M-96: Final Traffic Impact Study and Preliminary Project Scoping Reports

Prepared for: Calhoun County, Michigan Department of Transportation (MDOT), and Michigan Economic Development Corporation (MEDC) in relation to the Marshall Mega Site Project.

Cincar Consulting Group, LLC
17199 N. LAUREL PARK DRIVE, SUITE 204, LIVONIA, MI 48152

Burns & McDonnell
9400 WARD PARKWAY, KANSAS CITY, MO 64114

Michael Baker International
835 MASON STREET, SUITE A290, DEARBORN, MI 48124

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1 Project Description

The Marshall Mega Site in Emmett and Marshall Townships, Michigan, has had various developers, requiring large-scale operation ('Mega'), express interest in developing the site. The site is approximately 1,934 acres. The purpose of this study is twofold:

1. Traffic Impact Study: will analyze existing and future traffic conditions to determine what roadway improvements would be necessary to mitigate the additional traffic volumes to/from the proposed Mega sites. The analysis includes existing conditions, crash analyses, trip generation/distribution, alternative modeling, build operational analyses, and proposed mitigations.
2. Preliminary Scoping Report: will document the recommended geometric improvements that resulted from the traffic study including alternatives developed and vetted during the process, establish preliminary design layouts, cost and design hours estimates and provide schematic cross-sections and plan diagrams to aid in future design. A high-level Environmental review was also conducted.

The subsequent report compiles the overarching project narrative and findings. Detailed Appendices accompany this document to support the traffic and design outcome presented here.

2 Project Limits

The project is located in Emmett and Marshall Townships in Calhoun County. The following study area shown in **Figure 2-1**Error! Reference source not found. encompasses both the Marshall Mega Site and the potential Sackrider Mega Site. The analysis study limits include:

- I-94 from Beadle Lake to Partello Road
- I-69 from just north of I-94 to M-96 (Michigan Avenue)
- M-96 (Michigan Avenue) from Wheatfield Parkway to West Drive
- The following local roadways:
  - Verona Road from 15 Mile Road to 11 Mile Road
  - 11 Mile Road from Verona Road to B Drive
  - 15 Mile Road from Verona Road to M-96 (Michigan Avenue)
  - C Drive
  - Wheatfield Parkway

Figure 2-1: Study Area

2.1 Existing Land Use

Currently, both proposed site locations consist of primarily farmland or rural residential. The majority of land uses along the M-96 (Michigan Avenue) corridor are similar in nature. Some significant trip generators that exist within the project area include multiple major truck stop/gas stations at the I-94 and M-311 (11 Mile Road) interchange, which bring considerable truck traffic through that location. In addition, the Firekeeper's Casino and Hotel is located on M-96 (Michigan Avenue) just east of the M-311 (11 Mile Road) intersection, and there is a Flex-N-Gate facility on F Drive North. The City of Marshall is just east of the I-69 and M-96 (Michigan Avenue) interchange on the east end of the project limits.

2.2 Existing Freeway Segments (I-94 and I-69)

The existing I-94 cross-section is an interstate with two 12-foot-wide lanes, a 10-foot outside shoulder, and an 8-foot inside shoulder (5-foot paved) in both the eastbound and westbound directions. The roadway is drained through a median ditch and ditches along the outside of the roadway. There are intermediate culverts to drain the median to the outside ditches. Interchange entrance and exit ramp lanes are present at the I-94 at M-96/M-311 (11 Mile Road), Exit 104 interchange as well as entrance and exit ramp lanes, and collector-distributor roads at the I-94/I-69 interchange. The crown point is located between the two mainline travel lanes with a cross slope of 1.5% to 2.0%.

The I-94/I-69 interchange, collector-distributor roads, and a portion of I-94 extending 350-feet west of 15 Mile Road was reconstructed in 2022/2023. The I-94 geometrics remained the same, while the interchange ramps were brought up to current standards.

Based on the available as-built plans and field reviews, the existing pavement consists of 10-inch reinforced concrete with an HMA overlay. The recently reconstructed pavement consists of 11-inch HMA pavement.

The existing I-69 cross-section is an interstate with two 12-foot-wide lanes, a 11-foot outside shoulder, and an 8-foot inside shoulder (4-foot paved) in both the northbound and southbound directions. The roadway is drained through a median ditch and ditches along the outside of the roadway. There are intermediate culverts to drain the median to the outside ditches. Interchange entrance and exit ramp lanes are present at the I-69 at M-96 (Michigan Ave), Exit 36 as well as entrance and exit ramp lanes, and collector-distributor roads at the I-94/I-69 interchange. The crown point is located between the two mainline travel lanes with a cross slope of 2.0%.

Based on the available as-built plans and field reviews, the existing pavement consists of 11½-inch non-reinforced concrete.

2.3 Existing Non-Freeway Segments (M-96 and M-311 (11 Mile Road))

The existing M-96 (Michigan Ave) cross-section is a 2-lane major connector from M-311 (11 Mile Road) to the I-69 at M-96 (Michigan Avenue), Exit 36 interchange. East and west of this segment the roadway is classified as an Other Principal Arterial. West of the Firekeepers Casino the cross section widens to 4-5-lanes with a center left-turn lane. At the east end of the corridor, a 4-lane boulevard is developed that crosses I-69 and proceeds easterly to the City of Marshall. All lanes within the corridor are 12-foot wide. The majority of the roadway is flanked by 8-foot paved shoulders and open ditches, although intermittent curb and gutter with enclosed drainage is present, particularly at the east and west ends of this segment. The crown point is located between the two bounds with a cross slope of 2.0% and in the boulevard section the crown point is located between the two travel lanes. Based on the available as-built plans and field reviews, the existing pavement is HMA of various thickness. There are three bridge structures within this segment: S05 of 13082 I-94BL crossing I-94, S16 of 13073 (I-69 crossing I-94BL (EB)) and S08 of 13073 (I-69 crossing I-94BL (WB)).

The existing M-311 (11 Mile Road) cross-section varies from 2-lanes to 5 lanes and is classified as an Other Principal Arterial. All lanes are 12-foot wide. The crown point is located between the two bounds with a cross slope of 2.0% and in the boulevard section the crown point is located between the two travel lanes. Based on the available as-built plans and field reviews, the existing pavement is HMA of various thickness. There is one bridge structure within this segment: S06 of 13082 M-311 (11 Mile Road) crossing I-94.

2.4 Existing Interchanges

I-94 at M-294 (Beadle Lake Road), Exit 100 is a full access diamond interchange. All existing ramps are a single lane with widenings at the ramp terminals for the exit ramps. The existing ramp widths are 16-feet wide with 10-foot outside shoulders and 4-foot inside paved shoulders. There is curb and gutter at the ramp terminals with open ditching throughout the remainder of the ramp.

The intersection of M-294 (Beadle Lake Road) at the I-94 EB/WB Ramps is controlled by STOP signs at the off ramps. Where the eastbound ramps meet Beadle Lake Road, the eastbound off ramp has two (2) lanes, one (1) right-turn lane and one (1) left-turn lane. The northbound approach on Beadle Lake Road has a single through-right turn lane and the southbound approach has two (2) lanes, one (1) left-turn lane and one (1) through lane. Where the westbound ramps cross Beadle Lake Road, the westbound off ramp has two (2) lanes, one (1) right-turn and one (1) left-turn lane.

I-94 at M-96/M-311 (11 Mile Road), Exit 104 is a full access interchange with two slip ramps and two loop ramps all on the east side of M-311 (11 Mile Road). All existing ramps are a single lane with widenings at the ramp terminals for the exit ramps. The existing ramp widths are 16-feet wide with 7-foot outside shoulders and 6-foot inside shoulders (3-foot paved). There is curb and gutter at the ramp terminals with open ditching throughout the remainder of the ramp.

The intersection of I-94 WB Ramps/Wheatfield Parkway at M-311 (11 Mile Road) is controlled by a two-phase traffic signal. All approaches to the intersection are marked as two (2) lanes with a left-turn lane and a through-right turn lane. Field observations noted that the northbound through/right-turn lane on M-311 (11 Mile Road) was being driven as a 2-lane approach with one (1) through lane and one (1) right-turn lane for a short length for passenger vehicles. The Synchro model was designed to account for this driver behavior. Field observations also noted heavy truck traffic volumes that completed left turns on red, particularly for the southbound left. The posted speed limit on both M-311 (11 Mile Road) and Wheatfield Parkway is 35 MPH.

I-94/I-69 interchange is a full system to system interchange with four slip ramps, 4 loop ramps, and collector-distributor roads along I-94. All existing ramps are single lane free flow ramps that are 16-foot wide, with 7-foot inside and 6-foot outside shoulders (4-foot paved). The existing interchange was reconstructed during the 2022/2023 construction seasons.

I-69 at M-96 (Michigan Avenue), Exit 36 is a full access diamond interchange. All existing ramps are a single lane with widenings at the ramp terminals for the exit ramps. The existing ramp widths are 16-feet wide with 7-foot outside shoulders and 6-foot inside shoulders (3-foot paved). There is curb and gutter at the ramp terminals with open ditching throughout the remainder of the ramp.

The intersection of M-96 (Michigan Avenue) at the I-69 SB Ramps is controlled by a STOP sign on the southbound approach of the I-69 SB Off Ramp, as well as YIELD control for the southbound direction in the median. The M-96 (Michigan Avenue) corridor is a boulevard section with two (2) lanes eastbound and two (2) lanes westbound. On eastbound M-96, at the I-69 SB Ramps, there is a right-turn taper that allows vehicles to leave the travel lane to complete their right turn. The westbound approach on M-96 (Michigan Avenue), at the I-69 SB ramps, is marked as one (1) left-turn lane and two (2) through lanes. The I-69 SB Ramp has two (2) approach lanes, one (1) through/left lane and one (1) right-turn lane. M-96 (Michigan Avenue) is posted 45 MPH.

The intersection of M-96 (Michigan Avenue) at the I-69 NB Ramps is controlled by a STOP sign on the northbound approach of the I-69 NB Off Ramp, as well as YIELD control for the northbound direction in the median. The M-96 (Michigan Avenue) corridor is a boulevard section with two (2) lanes eastbound and two (2) lanes westbound. The eastbound approach on M-96 (Michigan Avenue) is marked as one (1) left-turn lane and two (2) through lanes. On westbound M-96, just east of the I-69 NB Ramps, there is a right-turn slip ramp that allows westbound access onto the freeway. The I-69 NB Ramp has two (2) approach lanes, one (1) through/left lane and one (1) right-turn lane. M-96 (Michigan Avenue) is posted 45 MPH.

<u>I-94 and Old US-27, Exit 110</u> is a full access interchange with four slip ramps and one loop ramp on the east side of Old US-27. All existing ramps are a single lane with widenings at the ramp terminals for the exit ramps. The existing ramp widths are 16-feet wide with 8-foot outside shoulders and 6-foot inside shoulders (3-foot paved). There is curb and gutter at the ramp terminals with open ditching throughout the remainder of the ramp.

The I-94 at Old US-27 interchange is controlled by STOP signs at the off ramps. Where the eastbound ramps meet Old US-27, the eastbound off ramp has two (2) lanes; one (1) right-turn and one (1) left-turn lane. The northbound approach on Old US-27 has three (3) lanes with two (2) through lanes and one (1) right-turn lane. The southbound approach has two (2) lanes with one (1) left-through lane and one (1) through lane. Where the westbound ramps cross Old US-27, the westbound off ramp has two (2) lanes; one (1) right-turn and one (1) left-turn lane. On northbound Old US-27, just south of the I-94 WB off ramp, there is a right-turn slip ramp that allows northbound access to the freeway. The southbound approach has three (3) lanes with one (1) right-turn lane and two (2) through lanes. Old US-27 has an unposted prima facie speed 55 MPH.

<u>I-94 and I-94BL (Partello Road), Exit 112</u> is a full access interchange with four slip ramps and one loop ramp on the west side of I-94BL (Partello Road). All existing ramps are a single lane with widenings at the ramp terminals for the exit ramps. The existing ramp widths are 16-feet wide with 8-foot outside shoulders and 6-foot inside shoulders (3-foot paved). There is curb and gutter at the ramp terminals with open ditching throughout the remainder of the ramp.

The I-94 at I-94BL (Partello Road) interchange is controlled by STOP signs at the off ramps. Where the eastbound ramps meet I-94BL (Partello Road), the eastbound off ramp has two (2) lanes; one (1) right-turn and one (1) left-turn lane. The northbound approach on I-94BL (Partello Road) has two (2) lanes with one (1) through lane and one (1) right-turn lane and the southbound approach has one (1) left-through lane. Where the westbound ramps cross I-94BL (Partello Road), the westbound off ramp has two (2) lanes, with one (1) right-turn and one (1) left-turn lane. The northbound approach on I-94BL (Partello Road) has one (1) left-through lane, while the southbound approach has two (2) lanes with one (1) through lane and one (1) right-turn lane. The posted speed on I-94BL (Partello Road) is 45 MPH.

2.5 Existing Intersections

M-96 (Michigan Avenue) and Wheatfield Parkway

The intersection of M-96 (Michigan Avenue) at Wheatfield Parkway is controlled by a STOP sign on Wheatfield Parkway. The M-96 (Michigan Avenue) corridor is a 3-lane cross section with one (1) through lane eastbound, one (1) two-way left-turn lane, and one (1) through lane westbound. On M-96 (Michigan Avenue), at Wheatfield Parkway, there is a short right-turn taper that allows vehicles to leave the travel lane to complete their right turn. On the Wheatfield Parkway approach, there are two (2) lanes, a left-turn lane, and a right-turn lane. M-96 (Michigan Avenue) is posted 55 MPH and Wheatfield Parkway is posted 35 MPH.

M-96 (Michigan Avenue) and M-311 (11 Mile Road)

The intersection of M-96 (Michigan Avenue) at M-311 (11 Mile Road) is controlled by a traffic signal with protected leading northbound/southbound left turns. The northbound approach on M-311 (11 Mile Road) has a 3-lane approach with one (1) left-turn lane, one (1) through lane, and one (1) right-turn lane. The southbound approach on M-311 (11 Mile Road) has a 4-lane approach with dual left-turn lanes, one (1) through lane, and one (1) right-turn lane. The westbound approach on M-96 (Michigan Avenue) has three (3) lanes with one (1) left-turn lane, one (1) through lane, and one (1) right-turn lane. The eastbound approach has three (3) lanes with one (1) left-turn lane, one (1) through lane, and one (1) through-right turn lane. The posted speed limit on M-311 (11 Mile Road) is 35 MPH north of M-96 (Michigan Avenue) and 55 MPH south of M-96 (Michigan Avenue). M-96 (Michigan Avenue) is posted 55 MPH.

M-96 (Michigan Avenue) and Firekeeper’s Casino Main Entrance

The intersection of M-96 (Michigan Avenue) at the Firekeeper’s Casino main entrance is controlled by a STOP sign on the casino driveway. The M-96 (Michigan Avenue) corridor is a 4-lane cross section in this area with two (2) through lanes eastbound, one (1) two-way left-turn lane, and one (1) through lane westbound. On M-96, at the Firekeeper’s Casino main entrance, there is a short right-turn taper that allows vehicles to leave the travel lane to complete their right turn. On the Firekeeper’s Casino main entrance approach, there are two (2) lanes, a left-turn lane, and a right-turn lane. For modeling, this was designed as a left-through lane and a right-turn lane. There is a private development to the south which has a two (2) lane approach with one (1) right-turn lane and one (1) left-turn lane. M-96 (Michigan Avenue) is posted 55 MPH.

M-96 (Michigan Avenue) and Firekeeper’s Middle Access Driveway/Pit Stop Gas Station Access Drive

The intersection of M-96 (Michigan Avenue) at the Firekeeper’s middle access driveway and Pit Stop Gas Station Access Drive is controlled by a STOP sign on the casino driveway. The M-96 (Michigan Avenue) corridor is a 3-lane cross section in this area with one (1) through lane eastbound, one (1) two-way left-turn lane, and one (1) through lane westbound. On M-96 (Michigan Avenue), between the Firekeeper's middle entrance and the Firekeeper's east entrance, there is a full width marked shoulder that allows vehicles to leave the travel lane to complete their right turn. On the Firekeeper's middle entrance approach, there are two (2) lanes, a left-turn lane, and a right-turn lane. M-96 (Michigan Avenue) is posted 55 MPH.

M-96 (Michigan Avenue) and Firekeeper's Casino East Entrance

The intersection of M-96 (Michigan Avenue) at the Firekeeper's Casino east entrance is controlled by a STOP sign on the casino driveway. The M-96 (Michigan Avenue) corridor is a 3-lane cross section west of this intersection with one (1) through lane eastbound, one (1) two-way left-turn lane, and one (1) through lane westbound. East of this location, the M-96 (Michigan Avenue) corridor is two (2) lanes with one (1) eastbound and one (1) westbound lane. On M-96 (Michigan Avenue), at the Firekeeper's Casino east entrance, there is a short right-turn taper that allows vehicles to leave the travel lane to complete their right turn. On the Firekeeper's Casino east entrance approach, there is one (1) left-right turn lane. M-96 (Michigan Avenue) is posted 55 MPH.

M-96 (Michigan Avenue) and Ackerson Drive

The intersection of M-96 (Michigan Avenue) at Ackerson Drive is controlled by a STOP sign on southbound Ackerson Drive. The M-96 (Michigan Avenue) corridor is a 2-lane cross section with one (1) eastbound and one (1) westbound lane. On M-96 (Michigan Avenue), at Ackerson Drive, there is a short right-turn taper that allows vehicles to leave the travel lane to complete their right turn. Ackerson Drive has one (1) left-right turn lane. M-96 (Michigan Avenue) is posted 55 MPH and Ackerson Drive is posted 25 MPH.

M-96 (Michigan Avenue) and Ceresco Road (12 Mile Road)

The intersection of M-96 (Michigan Avenue) at Ceresco Road (12 Mile Road) is controlled by a STOP sign on northbound Ceresco Road (12 Mile Road). The M-96 (Michigan Avenue) corridor is a 2-lane cross section with one (1) eastbound and one (1) westbound lane. On M-96 (Michigan Avenue), at Ceresco Road (12 Mile Road), there is a short right-turn taper that allows vehicles to leave the travel lane to complete their right turn. Ceresco Road (12 Mile Road) has one (1) left-right turn lane. M-96 (Michigan Avenue) is posted 55 MPH and Ceresco Road (12 Mile Road) has an unposted prima facie speed 55 MPH.

M-96 (Michigan Avenue) and 13 Mile Road

The intersection of M-96 (Michigan Avenue) at 13 Mile Road is controlled by STOP signs on northbound and southbound 13 Mile Road. The M-96 (Michigan Avenue) corridor is a 2-lane cross section with one (1) eastbound and one (1) westbound lane. On M-96 (Michigan Avenue), at 13 Mile Road, there is a short right-turn taper that allows vehicles to leave the travel lane to complete their right turn for both eastbound and westbound traffic. The northbound and southbound approaches on 13 Mile Road have one (1) left-through-right turn lane. M-96

(Michigan Avenue) is posted 55 MPH and 13 Mile Road has an unposted prima facie speed 55 MPH.

M-96 (Michigan Avenue) and Eden Street

The intersection of M-96 (Michigan Avenue) at Eden Street is controlled by a STOP sign on northbound Eden Street. The M-96 (Michigan Avenue) corridor is a 2-lane cross section with one (1) eastbound and one (1) westbound lane. On M-96 (Michigan Avenue), at Eden Street, there is a short right-turn taper that allows vehicles to leave the travel lane to complete their right turn. Eden Street has no pavement markings at the approach and was modeled as a single left-right turn lane. M-96 (Michigan Avenue) is posted 55 MPH. Eden Street does not have a posted speed limit but is residential in nature; therefore, a prima facie speed of 25 MPH was utilized in the modeling. This roadway/intersection will be removed and included in the proposed Marshall Mega site.

M-96 (Michigan Avenue) and 15 Mile Road North

The intersection of M-96 (Michigan Avenue) at 15 Mile Road North is controlled by STOP signs on northbound and southbound 15 Mile Road North. The M-96 (Michigan Avenue) corridor is a 2-lane cross section with one (1) eastbound and one (1) westbound lane. On M-96 (Michigan Avenue), at 15 Mile Road North, there is a right-turn taper that allows vehicles to leave the travel lane to complete their right turn for both eastbound and westbound traffic. The northbound and southbound approaches on 15 Mile Road North are unmarked but are wide enough for a short two (2) lane section which was modeled as one (1) left-through lane and one (1) right-turn lane. M-96 (Michigan Avenue) is posted 45 MPH. North of M-96 (Michigan Avenue), 15 Mile Road North is posted 45 MPH. South of M-96 (Michigan Avenue), 15 Mile Road North continues for 500 feet before it ends at C Drive North. This section of roadway is unposted, but due to the short length and businesses on both sides of the road, it was modeled as 25 MPH.

M-96 (Michigan Avenue) and C Drive North

The intersection of M-96 (Michigan Avenue) at C Drive North is controlled by a STOP sign on northbound C Drive North. The M-96 (Michigan Avenue) corridor transitions to a boulevard section at C Drive North with two (2) lanes eastbound and two (2) lanes westbound. On eastbound M-96 (Michigan Avenue), at C Drive North, the travel lane widens so that there are two (2) receiving lanes on the east end of the intersection; therefore, the eastbound approach was modeled as two (2) lanes with one (1) through lane and one (1) short right-turn lane. The westbound approach on M-96 (Michigan Avenue) is marked as one (1) left-turn lane, one (1) through lane, and one (1) lane is dropping as part of the lane merge. The lane drop was modeled as occurring just after C Drive North as the roadway width is wide enough for 2 through westbound lanes at the intersection. C Drive North has one (1) left-right turn approach lane. M-96 (Michigan Avenue) is posted 45 MPH and C Drive North has an unposted prima facie speed 55 MPH.

M-96 (Michigan Avenue) and 15 Mile Road South

The intersection of M-96 (Michigan Avenue) at 15 Mile Road South is controlled by a STOP sign on northbound 15 Mile Road South, as well as STOP control for both directions in the median. The M-96 (Michigan Avenue) corridor is a boulevard section with two (2) lanes eastbound and two (2) lanes westbound. On eastbound M-96 (Michigan Avenue), at 15 Mile Road South, there is a right-turn taper that allows vehicles to leave the travel lane to complete their right turn. The westbound approach on M-96 (Michigan Avenue) is marked as one (1) left-turn lane and two (2) through lanes. 15 Mile Road South widens as it approaches M-96 (Michigan Avenue) which allows for two (2) approach lanes, one (1) through lane and one (1) right-turn lane, which is how it was modeled. M-96 (Michigan Avenue) is posted 45 MPH and 15 Mile Road South has an unposted prima facie speed 55 MPH.

M-96 (Michigan Avenue) and the Crossovers West of M-227 (West Road)

There are two (2) crossovers on M-96 (Michigan Avenue) west of M-227 (West Road), and both are controlled by a YIELD sign. In this area, the M-96 (Michigan Avenue) corridor is a boulevard section with two (2) lanes eastbound and three (3) lanes westbound. Both crossovers are single lane. M-96 (Michigan Avenue) is posted 45 MPH.

M-96 (Michigan Avenue) and M-227 (West Road)

The intersection of M-96 (Michigan Avenue) at M-227 (West Road) is controlled by a traffic signal. On eastbound M-96 (Michigan Avenue), at M-227 (West Road), there are three (3) lanes; two (2) through lanes and one (1) right-turn lane. The westbound approach on M-96 (Michigan Avenue) is marked as two (2) through lanes and one (1) through-right turn lane. Northbound M-227 (West Road) has two (2) approach lanes, one (1) through lane and one (1) through-right-turn lane. Southbound M-227 (West Road) has two (2) approach lanes, one (1) through lane and one (1) right-turn lane. The eastbound, westbound, and southbound approaches are marked that no left turns are allowed. M-96 (Michigan Avenue) is posted 45 MPH and M-227 (West Road) is posted 35 MPH.

M-96 (Michigan Avenue) and the Crossovers East of M-227 (West Road)

There are two (2) crossovers on M-96 (Michigan Avenue) east of M-227 (West Road), and both are controlled by a YEILD sign. In this area, the M-96 (Michigan Avenue) corridor is a boulevard section with two (2) lanes eastbound and two (2) lanes westbound. Both crossovers are single lane. M-96 (Michigan Avenue) is posted 45 MPH.

3 Existing Conditions

3.1 Existing Crash Analysis

A crash analysis of the study area was performed for a five-year period ranging from January 1, 2016 to December 31, 2020 and is presented in **Appendix E**. Crashes were obtained from Michigan Traffic Crash Facts (michigantrafficcrashfacts.org) for the following segments:

- I-94 East from mile marker (MM) 99 to MM 113
- I-94 West from MM 113 to MM 99
- I-69 North from MM 35 to MM 40
- I-69 South from MM 40 to MM 35
- M-96 (Michigan Avenue) from west of Wheatfield Parkway to east of West Drive
- I-94 at M-294 (Beadle Lake Road), Exit 100 Interchange
- I-94 at M-96/M-311 (11 Mile Road), Exit 104 Interchange
- I-94/I-69 Interchange
- I-94 at Old US-27, Exit 110 Interchange
- I-94 at I-94BL (Partello Rd), Exit 112 Interchange

3.2 Existing Traffic Conditions

An existing conditions analysis was prepared using Synchro 11 and MDOT "Electronic Traffic Control Device Guidelines" methodology. Data was collected at each of the study intersections. Given that the sites developed will have one (1) hour of traffic entering and exiting the site during a peak shift change, a single peak hour for M-96 (Michigan Avenue) was chosen. The surrounding freeway network also selected the same peak hour. The locations within the study area were tallied and the highest total volume on the network system occurred from 16:15 PM-17:15 PM.

The complete Traffic Impact Study and supplemental documentation supporting its development is presented in **Appendix H.**

4 Geometric Alternative Development

A No Build model, which is typical with traffic studies, was not completed due to the expedited way the Mega sites would be developed/constructed/fully implemented and its impacts to the existing roadway network. A broader approach of capacity identification, interchange alternative analysis, and traffic modeling was undertaken in conjunction with safety, environmental impacts, and cost.

A Matrix of the geometric alternatives **(Appendix A)** was developed, and each alternative was ranked using a 1 (low) – 3 (high) scale in the supporting criteria. Cursory schematics of the alternatives were also developed. Alternatives 1-19 were vetted across the criteria presented, whereas Alternatives "a-m" all presented a fatal flaw during the vetting process and are included for reference only.

5 Proposed Conditions

Driven by traffic operational results and environmental constraints a final proposed configuration of the network was established. This includes the following phased improvements:

- Diverging Diamond Interchange at I-69/M-96 (Michigan Avenue)
- 3 lane boulevard (3x3) with indirect left turns along M-96 (Michigan Avenue) between site entry at C Drive and I-69 interchange
- Reroute of M-96 just west of 15 Mile Road (North leg) to accommodate direct access into the Marshall Mega site for trucks and passenger vehicles
- Direct access off C Drive
- Improvements at adjacent local roadway intersections to handle inbound/outbound traffic
- Widening of I-69 to 3-lanes between I-94 and M-96
- System interchange improvements at I-69 and I-94 including widening the EB I-94 to SB I-69; NB I-69 to EB I-69 and build a fly-over ramp for NB I-69 to WB I-94.
- 2 lane boulevard (2x2) with indirect left turns along M-96 (Michigan Avenue) between M-311/11 Mile Rd and M-96/Main Entrance to site.
- Pedestrian enhancements along M-96 (Michigan Avenue)
- Diverging Diamond Interchange at I-94/M-96 (Michigan Avenue)/M-311 (11 Mile Road)
    - Combination of 11 Mile Road and M-96 (Michigan Avenue) over I-94
- 3 lane boulevard with indirect left turns along M-96 (Michigan Avenue)/11 Mile Road between I-94 interchange and M-96 east leg connection
- Widening of 11 Mile Road (2x2 lanes)
- Widening of I-94 to 3-lanes (in each direction) between M-311 and I-69 with median barrier. MDOT is anticipating a subsequent separate future widening to 3-lanes (in each direction) from Calhoun County Line to M-311 when Sackrider site is developed
- Wheatfield connection to existing truck stop facilities along 11 Mile Road
- Verona at 11 Mile Road: Dual northbound left-turn lane

The proposed configuration of the study area can be found in **Appendix F.** The following sections document the proposed improvements in further detail.

5.1 Proposed Freeway Segments (I-94 and I-69)

I-94 will be reconstructed to accommodate three 12-foot-wide travel lanes with a 12-foot inside shoulder (including the 4-foot valley gutter) and a 12-foot outside shoulder (10' paved). The median will be replaced with an enclosed drainage system and double-faced concrete barrier wall between the eastbound and westbound directions. The 2% crown point will be located on the lane line between the two inside lanes.

I-69 will be widened to include a third travel lane within the median and a 10-foot shoulder (8-foot paved). The transition areas south of I-69 at M-96 (Michigan Avenue), Exit 36 and at the I-94/I-69 interchange will be fully reconstructed. The existing drainage patterns within this segment will be maintained.

All freeway segments will be designed to meet a design speed of 75 mph. The proposed pavement section consists of 11-inches of non-reinforced concrete on 16-inches open graded drainage course with open-graded underdrains throughout. **Appendix B** presents Final Design Criteria for freeway segments.

5.2 Proposed Non-Freeway Segments (M-96 and M-311 (11 Mile Road))

M-96 (Michigan Avenue) will be reconstructed to a 4-lane boulevard, include single and double lane median crossovers throughout the corridor, based on traffic needs. The travel lanes and median crossover lanes will be 12-foot wide. Curb and gutter will be constructed on the inside of the boulevard with an 8-foot paved shoulder on the outside. Median crossovers will be designed per MDOT GEO-670. A 5-foot concrete sidewalk will extend from West Drive easterly through the I-69 at M-96 (Michigan Avenue), Exit 36 interchange and terminate at 15 Mile Road.

The design speed for this segment varies. From M-311 (11 Mile Road) to 15 Mile Road the design speed is 55 mph, east of 15 Mile Road the design speed is 45 mph. The proposed pavement section consists of 11-inches of non-reinforced concrete on 16-inches open graded drainage course, with open-graded underdrains throughout.

M-311 (11 Mile Road) will be realigned and reconstructed to a 4-lane boulevard between F Drive and the tie in point on M-96 approximately 2,000 feet northwest of I-94. The segment includes single lane median crossovers throughout, as well as direct turning access to the proposed M-96. The travel lanes and median crossover lanes will be 12-foot wide. Curb and gutter will be constructed on the inside of the boulevard with an 8-foot paved shoulder on the outside. Median crossovers will be designed per MDOT GEO-670.

The design speed for this segment is 55 mph, except for the first curve north of the interchange, this curve will have a design speed of 30 mph to limit impacts to the surrounding properties. The proposed pavement section consists of 11-inches of non-reinforced concrete on 16-inches open-graded drainage course with open-graded underdrains throughout.

Two lane roadways will be constructed to maintain access to the existing network on M-311 (11 Mile Road) both north and south of I-94. **Appendix B** presents Final Design Criteria for non-freeway segments.

5.3 Proposed Interchanges

The I-94/I-69 interchange will be modified to include a two-lane ramp from eastbound I-94 to southbound I-69, both lanes will be 12-foot-wide with and 8-foot outside shoulder (7-foot paved) and 6-foot inside shoulder (4-foot paved). The northbound I-69 to westbound I-94 loop ramp will be eliminated and replaced with a two-lane flyover ramp between the northbound I-69 to eastbound I-94 ramp and the southbound I-69 to westbound I-94 ramp. Both lanes for this ramp will be 12-foot wide with an 8-foot outside shoulder and 6-foot inside shoulder; new bridge structures will be constructed over I-94 and I-69 to accommodate this ramp. Portions of the northbound and westbound collector-distributor roads will be removed where they are no longer needed. The remaining interchange ramps will remain however may be relocated to provide optimal geometrics.

The I-94 at M-96/M-311 (11 Mile Road), Exit 104 interchange will be reconstructed between the two existing structures for M-96 and M-311 (11 Mile Road) over I-94 as a diverging diamond interchange. The existing structures will be demolished allowing for the construction of two-lane exit ramps and single lane entrance ramps for each bound. Single lane ramps will be 16-foot wide, while two lane ramps will have 12-foot-wide lanes, shoulder widths will be 8-foot outside shoulder (7-foot paved) and 6-foot inside shoulder (4-foot paved). Three 12-foot lanes will cross through the interchange in each direction with curb and gutter on both sides. Two new structures will be constructed to carry the interchange over I-94. The structures must extend north of the Dickson Creek to prevent impacts. Culverts beneath the ramps servicing westbound I-94 will be constructed with culverts to accommodate the Dickinson Creek, the culvert lengths will be minimized to prevent unnecessary enclosure of the Creek.

The I-69 at M-96 (Michigan Avenue), Exit 36 interchange will be modified to a diverging diamond interchange. The ramps along southbound I-69 will be realigned closer to the interstate to accommodate boulevard median crossovers to the west of the interchange. Ramps will be reconstructed to allow two lane ramps north of M-96 (Michigan Avenue) and single lane ramps to the south. Single lane ramps will be 16-foot-wide, while two lane ramps will have 12-foot-wide lanes, shoulder widths will be 8-foot outside shoulder (7-foot paved) and 6-foot inside shoulder (4-foot paved). Two 12-foot lanes will cross through the interchange in each direction, with an additional auxiliary lane between the ramp terminals; curb and gutter will be present on both sides of the road. The existing structures over I-69 will be widened to accommodate the additional travel lane and shoulder widths of the interchange. The existing park-n-ride lot in the southwest quadrant will be removed, while the Marshall TSC, located in the southeast quadrant will be retained with a modified driveway location.

The proposed section for all interchange pavement consists of 11-inches of non-reinforced concrete on 16-inches open graded drainage course with open-graded underdrains throughout.

See **Appendix F** for existing and proposed cross sections.

6 Other Safety Improvements

Due to the nature of crashes as inherently random, a guarantee of collision free access is impossible anywhere. However, there are a number of proven strategies and designs to reduce the likelihood of crashes overall as well as the severity of those crashes that do occur. The proposed infrastructure improvements focus on providing a roadway network that promotes safety and mobility using a boulevard section with indirect lefts, diverging diamond interchanges, and additional safety enhancements along the surrounding local road network.

Boulevard sections, an example of which is shown in Error! Reference source not found. promote safety by physically separating the two opposing directions of traffic, limiting full access points, and encouraging access management along the route. One of the most common crash types on the existing facility is head on. By providing a separated boulevard section, these crashes will be prevented. The boulevard section also reduces the number of left-turn conflicts that will occur as left turns will be in the form of indirect lefts. Indirect lefts require vehicles to make a right turn and then, at a point further up the road, make a U-turn or, make a U-turn followed by a left turn to execute the original left-turn maneuver. By utilizing the boulevard section with indirect left turns, the area can expect to see fewer and less severe crashes.

Figure 6-1: Boulevard Section of M-96

In addition to the boulevard section, upgrades to existing key intersections are planned:

- 15 Mile Road at Verona Road, the intersection is being expanded to include an eastbound right-turn lane. Turn lanes help to remove slower traffic from the main flow of traffic and remove potential rear-end crashes as well as facilitate operations.
- 11 Mile Road at Verona Road, add northbound dual lefts onto westbound Verona Road. This will reduce queues and potential rear-end crashes on 11 Mile Road.

Both interchanges along M-96 (I-69 and I-94) will be reconstructed to Diverging Diamond Interchanges (DDI). By changing the interchange type, the number of conflict points, or points where two vehicles have the potential to collide, are reduced. **Table 6-1** compares the number of conflict points of a typical signalized intersection, traditional diamond interchange and diverging diamond interchange.

Table 6-1: Conflict Points within Interchanges

Facility	Conflict Points
Signalized Intersection	32
Diamond Interchange	18
Diverging Diamond Interchange (DDI)	14

At the interchange of I-94 at M-96 (Michigan Avenue)/M-311/11 Mile Road, the existing interchange ramp terminals each have 32 conflict points due to the parclo configuration. With the new DDI configuration, the points where vehicles can collide is reduced to 14 total for the interchange. At the interchange of I-69 at M-96 (Michigan Avenue) the existing interchange has a total of 18 conflict points. This is reduced to 14 with the reconfiguration as a DDI. An additional safety benefit of the DDI is that it lowers speeds, which could reduce the severity and number of crashes.

Additional safety enhancements recommended for the corridor include upgrading the signals to box-span style signal heads with continuous lighting, centerline striping, edge line striping, lowering the existing speed limit, rumble strips, addition of two-foot shoulders, and safety edge. The upgrades to signals with reflectorized backplates help to decrease the number of crashes by calling attention to the signal. Centerline and edge line striping on the nearby local roads will provide added guidance to traffic on where they should be driving. This is particularly important on 15 Mile Road, where it is currently marked as a 45 MPH road and does not have shoulders, edge line or centerline striping.

Safety includes more than just engineering, a key component of safety is the golden hour, which is the hour that begins when a crash occurs to when medical services arrive on site. If that time is within an hour, the likelihood of the injured party surviving increases. The site is located within an hour of at least three hospitals with emergency services, with one being a regional hospital and the other two being within 30 minutes of the site.

On the interstate system, recommendations for upgrades to the system-to-system interchanges will provide a smoother flow of traffic while also increasing safety and redundancy. At the I-94/I-69 system interchange the northbound to westbound ramp will be two lanes wide and changed from a loop ramp to a flyover. This removes a weaving area and provides a larger curve which is easier to navigate. Also at this interchange, the eastbound I-94 to southbound I-69 ramp will be widened to two lanes, providing both redundancy as well as allowing for an auxiliary lane from this interchange to the I-69 at M-96 (Michigan Avenue) interchange. This configuration results in lower weaving maneuvers and, according to NCHRP Report 687, 20% fewer crashes can be expected compared with traditional acceleration lanes. Similarly, between the I-69 at M-96 (Michigan Avenue) interchange and I-94 at I-69 northbound interchange there will be an auxiliary lane that will reduce the weaving maneuver. On I-94, the interstate will eventually be widened to a 6-lane interstate with a median barrier (of any type). According to FHWA, median barriers on rural freeways reduce 97% of cross-median crashes.

7 Drainage

The existing M-96(Michigan Avenue) roadway is primarily a 2-lane rural section with 3-foot shoulders along most of its length. As Michigan Avenue approaches I-69 at the east end of the project, the roadway transitions to a divided four-lane rural boulevard section. Near the west limits between 11 Mile Road and Ackerson Drive, the roadway transitions to a partial urban section with two eastbound lanes and a median-turn lane to accommodate traffic near Firekeepers Casino.

Throughout the corridor, existing ditches are very shallow and appear to have filled in since the original construction of the roadway. It is anticipated that several driveway culverts have also been buried as a result.

The project limits are within three major subwatersheds. The area from the west limits to Sackrider Farms, east of Ackerson Drive, drains to Dickinson Creek. From Sackrider Farms to 15 Mile Road it drains to Pigeon Creek, and to the east limits drains to Bear Creek. See **Appendix G.1** for the Drainage Overview Map.

Where available, drainage information was compiled from existing plans and as-builts. Culverts were surveyed at the following major drainage crossings:

- Dickinson Creek at Michigan Avenue
- Dickinson Creek at 11 Mile Road
- Dickinson Creek at 11 Mile Road to I-94 WB Loop
- Dickinson Creek at I-94 WB to 11 Mile Road Ramp
- Pigeon Creek at Michigan Avenue
- Pigeon Creek at 13 Mile Road
- Bear Creek at Michigan Avenue

For the Bear Creek crossing at M-96 (Michigan Avenue), the existing design was found to be adequate. The culvert passes both the 50 and 100-year storms while maintaining freeboard, and the outlet velocities for the 50-year storm are less than 6 feet/second. The Pigeon Creek crossing at M-96 (Michigan Avenue) provided adequate freeboard for the 50 and 100-year storms but failed to provide adequate capacity. The Pigeon Creek crossing at 13 Mile Road did not meet both capacity and freeboard requirements. For both culverts, outlet velocities during the 50-year storm were greater than 6 feet/second. Along Dickinson Creek, all four culverts failed to provide adequate freeboard during the 50-year design storm, with all but the crossing at M-96 exceeding the shoulder elevation during the design event, and all culverts impacting the roadway during the 100-year event. Additionally, outlet velocities exceeded 6 feet/second at all but one location during the 50-year storm. Results from the existing conditions analysis are summarized in **Table 7-1**.

Table 7-1: Existing Culvert Result Summary

Location	Size (inch)	Length (ft)	50-Year Check			100-Year Check
			Headwater 1.5-ft from Shoulder?	Pressure Flow	Velocity (fps)	Velocity (fps)
Dickinson Creek at M-96	84	254.4	NO	YES	9.3	10.69
Dickinson Creek at 11 Mile Road	84	154.6	NO	YES	6.76	5.05
Dickinson Creek at I-94 WB Loop Ramp	84	106.9	NO	YES	6.33	5.67
Dickinson Creek at I-94 WB Ramp	84	103.4	NO	YES	5.92	5.62
Pigeon Creek at M-96	84X60	131.7	YES	YES	10.14	12.13
Pigeon Creek at 13 Mile Road	36	55.4	NO	YES	13.99	14.27
Bear Creek at M-96	144X60	163.31	YES	NO	9.3	10.1

To provide a more accurate cost estimate for improvements at these locations, proposed culverts were sized at these locations. Lengths were estimated based on the increased width of the proposed section, and all culverts were assumed to have a 2-foot embedment below the flow line to provide a natural flow surface.

At Bear Creek, the existing size provides adequate design for both capacity and outlet velocities. Accounting for a 2-foot embedment, the proposed size was increased to 12-foot x 7-foot. At Pigeon Creek, both existing culvert sizes failed to provide sufficient capacity to not cause impacts to the roadway. Additionally, excessive outlet velocities during the design event may pose an erosion concern. Hence, the crossing at M-96 was increased to 12-foot x 8-foot with a 2-foot embedment. No improvements were made to the culvert at 13 Mile Road along Pigeon Creek as it will most likely fall beyond the project area. At Dickinson Creek, due to the change in the alignment of the proposed roadway corridor, the number of culvert crossings was reduced from four to two. To meet headwater and outlet velocity design requirements recommended sizes were increased to 12-foot x 8-foot with a 2-foot embedment for both locations. Culvert performance for these proposed sizes is summarized in **Table 7-2.**

Table 7-2: Proposed Culvert Result Summary

Location	Size (inch)	Length (ft)	50-Year Check			100-Year Check
			Headwater 1.5-ft from Shoulder?	Pressure Flow	Velocity (fps)	Velocity (fps)
Dickinson Creek at I-94 WB Merging Ramp	144X96	46.0	YES	NO	5.09	6.22
Dickinson Creek at I-94 WB off Ramp	144X96	87.0	YES	NO	4.94	5.73
Pigeon Creek at M-96	144X96	173.0	YES	NO	6.14	7.26
Bear Creek at M-96	144x84	205.0	YES	NO	4.15	5.09

The project also has the potential to greatly increase the impervious area from expanding the roadway infrastructure in each of the three subwatersheds noted earlier. Sizing of the detention facilities was completed by computing the total additional impervious area that will be added to each of the subwatersheds. The detention was sized to detail any increase in stormwater discharge over the existing condition for the 100-year/24-hour event. Approximate sizes are provided in **Table 7-3** and an exhibit showing the size and potential location of the detention facilities is provided in **Appendix G.1**.

Table 7-3: Detention Summary Table

DETENTION FACILITY	STATIONING	REQUIRED FLOW TO BE DETAINED Q100 (cfs)	REQUIRED AREA OF DETENTION FACILITY (AC)
Dickinson Creek	I-94 Ramp B Sta 6+00 to 10+00	25.32	1.02
Pigeon Creek	M-96 Sta 180+00 to 183+00	9.37	0.37
Bear Creek	I-69 Ramp B Sta 64+00 to 70+00	43.84	1.63

A full summary of the drainage design assumptions is provided in **Appendix G.1** in the Drainage Technical Memo.

8 Environmental Issues

A preliminary environmental review was completed for M-96's project area and initial coordination with EGLE (Environment, Great Lakes, and Energy), the primary environmental permitting agency for Michigan was conducted. The team performed these initial reviews of the following items to identify any overarching concerns should the project area be developed.

- Wetlands and Inland Lakes & Streams
- Threatened and Endangered Species
- Noise Assessment
- Desktop State Historic Preservation Office (SHPO)/Archaeological Review

At one point, adding a new interchange at I-94 and 13 Mile Road was being evaluated to determine the feasibility for infrastructure improvements for the development. 13 Mile Road has prevalent wetlands and the Pigeon Creek stream crossing. Initial coordination with EGLE noted that Dickinson Creek at 11 Mile Road and I-94 is a high-quality cold-water stream. They asked the team to evaluate the environmental impact differences between 11 Mile Road and 13 Mile Road at I-94.

The preliminary design of the 11 Mile Road interchange took into consideration options that would reduce impacts to Dickinson Creek. EGLE reviewed the preferred design alternative at 11 Mile Road and noted that stream mitigation will be likely at 11 Mile Road but overall would have fewer resource impacts at 11 Mile Road in comparison to 13 Mile Road, should an interchange and roadway widening be developed there.

It is recommended that the next study phase include further evaluation of Dickinson Creek to identify the potential stream mitigation measures and continue coordination with EGLE to make sure the proposed interchange improvements will address EGLE's concerns minimizing environmental impacts.

See **Appendix G.1, G.2, G.3. and G.4** for the:

- Drainage Technical Memo
- Michigan Avenue Cultural Resources Red Flag report
- Wetland Technical Memo
- M-96 Scoping – Summary of Potential Environmental Impacts for Future Permitting

9 Right-of-Way Needs

The existing right-of-way varies throughout the project.

Permanent right-of-way will need to be acquired to accommodate the new I-94 at M-96/M-311 (11 Mile Road), Exit 104 interchange, including:

- The agricultural field in the northwest quadrant of the interchange and behind the Pilot Travel Center.
- The abandoned property in the southwest quadrant of the interchange and behind the existing Citgo gas station.

Permanent right-of-way along M-96 (Michigan Avenue) is located on the south side of the roadway and will be included in the property acquisition for the proposed development. Additional properties that will be impacted include:

- Residential properties south of M-96 (Michigan Avenue) near 15 Mile Road
- Imperial Motel (14978 W. Michigan Avenue)
- Tire City Tire Pros & Auto Repair (13550 Myron Avery Drive)
- DIY Equipment Rental and Storage (15100 W Michigan Avenue)
- Calhoun County Farm Bureau (15151 C Drive N)
- Highway Horticulture (15325 W. Michigan Avenue)
- Arbor Inn of Historic Marshall (15435 W. Michigan Avenue)

Additional Consents to Grade may be needed throughout out the project based on the detail design.

10 Detail Cost Summary

The total cost of the project construction (including Preliminary Engineering (PE) & Construction Engineering (CE) costs) in 2023 dollars is approximately $253,500,000. This cost includes the immediate construction needs for the proposed development that are the responsibility of the Michigan Department of Transportation. In Table 10.1, Tasks 1E and 5A will be necessary as the entire development is built out, which would bring the project construction cost to $387,000,000.

Detailed cost estimates for each task can be seen in **Appendix C**. A breakdown of anticipated design hours is presented in **Appendix D**.

Table 10-1: Design Cost by Phase & Construction Phasing

Design Phasing - Marshall, Michigan Site			
	Number	**Design Stage Description**	**Approximate Cost**
Project Design	A	Consultant Authorization	$ 0
	B	NEPA Environmental Assessment	$ 1.5M
	C	Survey and Preliminary Design	$ 1.5M
	D	Secure D/B & Award	$ 0
	E	Project Design	$ 30.0M
	F	Ring Road Design	$ 4.5M
	G	Property Acquisition	N/A
	H	Construction Engineering	$ 31.0M
	I	Ring Road Construction Engineering	$ 5.0M

Estimated Engineering Phase Total **$ 64.0M**

Estimated Engineering Including Ring Road ***$ 73.5M***

Construction Phasing - Marshall, Michigan Site				
Construction Segment	**Number**	**Construction Stage Description**	**Description of Necessary Improvements**	**Approximate Cost**
1 (Michigan Ave Extension & I-69 DDI)	A	Site Preparation for access during construction	Add temporary signal at SB I-69 to WB M-96 and at site entrance at M-96 and first Entrance Drive. Construct by-pass lane for WB M-96. *Recommend that MDOT procure separately through as-needed contracts.*	$ 1.0M
	B	Build out M-96 to newly realigned boulevard from 15 Mile Road west to Marshall Mega Main Entrance. Build new M-96 connection.	Build boulevard along the existing C Drive North to route full traffic to final built condition. Work includes the 15 Mile Road intersection and the new connection of M-96 into the boulevard north to the existing M-96 alignment.	$ 15.0M
	C	Widen existing M-96 bridges for DDI	Widen existing bridges through winter in anticipation of spring interchange construction.	$ 11.0M

	D	Build DDI at M-96 and I-69 and complete boulevard to 15 Mile Road	Complete the interchange upgrade to a diverging diamond interchange to accommodate full traffic in final built condition.	$ 16.0M
	E	*Build ring road around Marshall Mega Site*	*Complete the 2 by 2 boulevard section around the Marshall Mega Site (approx 3.5 miles)*	$ 38.0M
2 (I-69 & I-94 Widening and I-69/I-94 Interchange)	A	Widen I-69 to 3-lanes between I-94 and M-96.	Widen I-69 to 3-lanes to accommodate the interchange work at I-94 and the M-96 DDI for the additional traffic.	$ 12.0M
	B	Widen three slip ramps at the I-69 and I-94 interchange.	Widen the EB I-94 to SB I-69; NB I-69 to EB I-69; and SB I-69 to WB I-94 ramps.	$ 8.0M
	C	Build fly-over ramp for NB I-69 to WB I-94	Build a fly-over ramp for NB I-69 to WB I-94, includes curved steel bridge elements.	$ 19.0M
	D	Widen I-94 to 3-lanes between M-311 and I-69	Widen I-94 to 3-lanes to accommodate traffic volumes along the I-94 corridor for developments.	$ 68.0M
3 (Michigan Avenue Widening)	A	Build EB M-96 into a boulevard section from M-96/Marshall Mega Main Entrance to Firekeepers Casino	Construct EB M-96 into a 2-lane boulevard between M-311 and the new M-96/Marshall Mega Main Entrance. Build at the same time as I-94 work.	$ 19.0M
	B	Rehabilitate WB M-96 into a boulevard section from M-96/Marshall Mega Main Entrance to Firekeepers Casino	Rehabilitate WB M-96 into a boulevard between M-311 and the new M-96/Marshall Mega Main Entrance.	$ 22.0M
4 (M-311/ I-94 Improvements)	A	Build DDI bridges offline	Build new interchange bridges offline allowing for traffic to continue in existing pattern.	$ 23.0M
	B	Build southern half of DDI interchange	Build southern half of interchange, allow for existing traffic to be maintained on existing 11 Mile roadway.	$ 16.5M
	C	Build northern half of DDI interchange	Build northern half of interchange, closing the existing roadways and completing the geometric upgrades.	$ 17.0M
	D	Widen out local roads at 11 Mile and I-94 to accommodate DDI and S2 traffic	Build out local roadways and connections at M-96 to the east of 11 Mile Road, F Dr N, H Dr N and M-311. Will most likely happen with DDI interchange construction.	$ 6.0M
5 (Complete regional work)	*A*	*Widen I-94 to 3-lanes between I-194 and M-311 DDI.*	*Widen I-94 to 3-lanes to accommodate traffic volumes*	*$ 95.5M*

			along the I-94 corridor and developments.	

Estimated Construction Total Excluding Ring Road and Regional Work **$ 253.5M**

Estimated Construction Total Including Ring Road and Regional Work **$ 387.0M**

Appendix A: Geometric Element Report and Recommendations

400 Renaissance Center
Suite 2600
Detroit, MI 48243

17199 N. Laurel Park Drive
Suite 204
Livonia, MI 48152

Re: Appendix A

Appendix A summarizes the geometric interchange options for the two interchanges in the vicinity of the Marshall Mega Site:

- I-69 and M-96 (Michigan Avenue) interchange
- I-94 and M-96 (Michigan Avenue)/M-311 (11 Mile Rd) interchange

Alternatives 1-19 were vetted across the criteria including traffic operations, safety, environmental impacts, single crossing over I-94 (if applicable, and construction costs. each alternative was ranked using a 1 (low) – 3 (high) scale in the supporting criteria. Cursory schematics of the alternatives were also developed. Alternatives “a-m” all presented a fatal flaw during the vetting process and are included for reference only.

Alternative Number	Alternative Name	Interchange Location	Description	Ranking: Traffic Operations	Safety	Environmental Impacts	Single Crossing (location) Over I-94	Construction Cost	Remarks
1	Parclo	I-69 and M-96 (Michigan Avenue)	Remove direct through and left-turn movement at ramp terminals, modify existing conditions, and add dual loop ramps from M-96 to I-69.	1	1	1	N/A	1	• Cannot accommodate heavy movements (I-69 SB off / NB on ramp) • Heavy right-turn traffic induces queue spillback on the M-96 mainline • Safety concerns with Parclo
2	SPUI	I-69 and M-96 (Michigan Avenue)	Redesign of the existing infrastructure	2	1	1	N/A	3	• Require more than 3 left-turn/right-turn lanes.
3	Roundabouts	I-69 and M-96 (Michigan Avenue)	Double-lane roundabouts with right-turn bypass lanes at both ramp terminal locations.	1	2	1	N/A	2	• Capacity analysis shows dual lane roundabouts fail due to heavy conflicting movements.
4	Signalize Interchange Ramps	I-69 and M-96 (Michigan Avenue)	On the boulevard, eliminated thru movements at: 15 Mile S, I-69 NB Ramp, I-69 SB Ramp	1	1	1	N/A	2	• Near capacity at M1+S1 scenario • Not a viable long-term solution for future alternatives
5	DDI	I-69 and M-96 (Michigan Avenue)	Utilizes a lot of existing infrastructure; may need an extra lane on the north bridge for EB to NB movement	3	3	1	N/A	3	• Accommodates heavy movements (I-69 SB off / NB on ramp) • Eliminates more than 3 left-turn lane requirements.
6	Wide Diamond with Five (5) Roundabouts	I-94 and 11 Mile/M-96 (Michigan Avenue)	Modify the existing roadway geometry configurations	1	1	3	No	2	• Roundabouts fail due to heavy conflicting movements
7	DDI	I-94 and M-96 (Michigan Avenue)	Remove the loop ramps and modify the existing roadway geometry configurations	1	3	2	No	2	• Does not solve the capacity issue along 11-Mile Rd • Might require twin structures to accommodate geometrics
8	DDI	I-94 and 11 Mile Rd	Remove the loop ramps and modify the existing roadway geometry configurations	1	3	2	No	2	• Very tightly spaced. So, queuing could cause issues in future alternatives. • Might require twin structures to accommodate geometrics
9	SPUI	I-94 and 11 Mile Rd	Remove the loop ramps and modify the existing roadway geometry configurations	2	1	2	No	2	• Serves heavy volumes to both north and south • Gas station driveway on 11 Mile may need to be closed (or right in only), and the signal would be removed. • Need more than 2 left-turn lanes for future alternatives.
10	Wide Diamond –with signals	I-94 and 11 Mile/M-96 (Michigan Avenue)	Remove the loop ramps, modify the interchange and the existing roadway geometry configurations	1	1	3	No	1	• Cannot accommodate heavy movements (I-94 EB/WB on & off ramp) for future alternatives • Would require both Michigan Ave and 11 Mile structures to be replaced/improved
11	Wide Diamond –with signals	I-94 and M-96 (Michigan Avenue)	Remove 11 Mile Rd over I-94	2	1	3	Yes	1	• Need more than 2 left-turn/right-turn lanes for future alternatives.
12	Wide Diamond –with signals	I-94 and New 11 Mile Rd	Remove both 11 Mile Rd and Michigan Avenue over I-94. Realign 11-Mile Rd	2	1	2	Yes	2	• Need more than 2 left-turn/right-turn lanes for future alternatives.
13	Roundabouts	I-94 and New 11 Mile Rd	Remove both 11 Mile Rd and Michigan Avenue over I-94. Realign 11-Mile Rd	1	2	2	Yes	2	• Two lane Roundabouts fail due to heavy conflicting movements for future alternatives. • Might require 3 lanes roundabouts for future alternatives, which are not recommended by MDOT.
14	SPUI	I-94 and New 11 Mile Rd	Remove both 11 Mile Rd and Michigan Avenue over I-94. Realign 11-Mile Rd	2	1	2	Yes	3	• Need more than 2 left-turn/right-turn lanes for future alternatives.
15	DDI	I-94 and New 11 Mile Rd	Remove both 11 Mile Rd and Michigan Avenue over I-94. Realign 11-Mile Rd	3	3	2	Yes	3	• Need 4 thru lanes (SB-11 Mile Rd) over I-94 for future alternatives.
16	MDOT - DDI	I-94 and New 11 Mile Rd	Remove 11-Mile Rd and M-96, realign 11-Mile Rd further west from the cemetery and add boulevard with DDI	3	3	2	Yes	3	• Need 4 thru lanes (SB-11 Mile Rd) over I-94 for future alternatives.

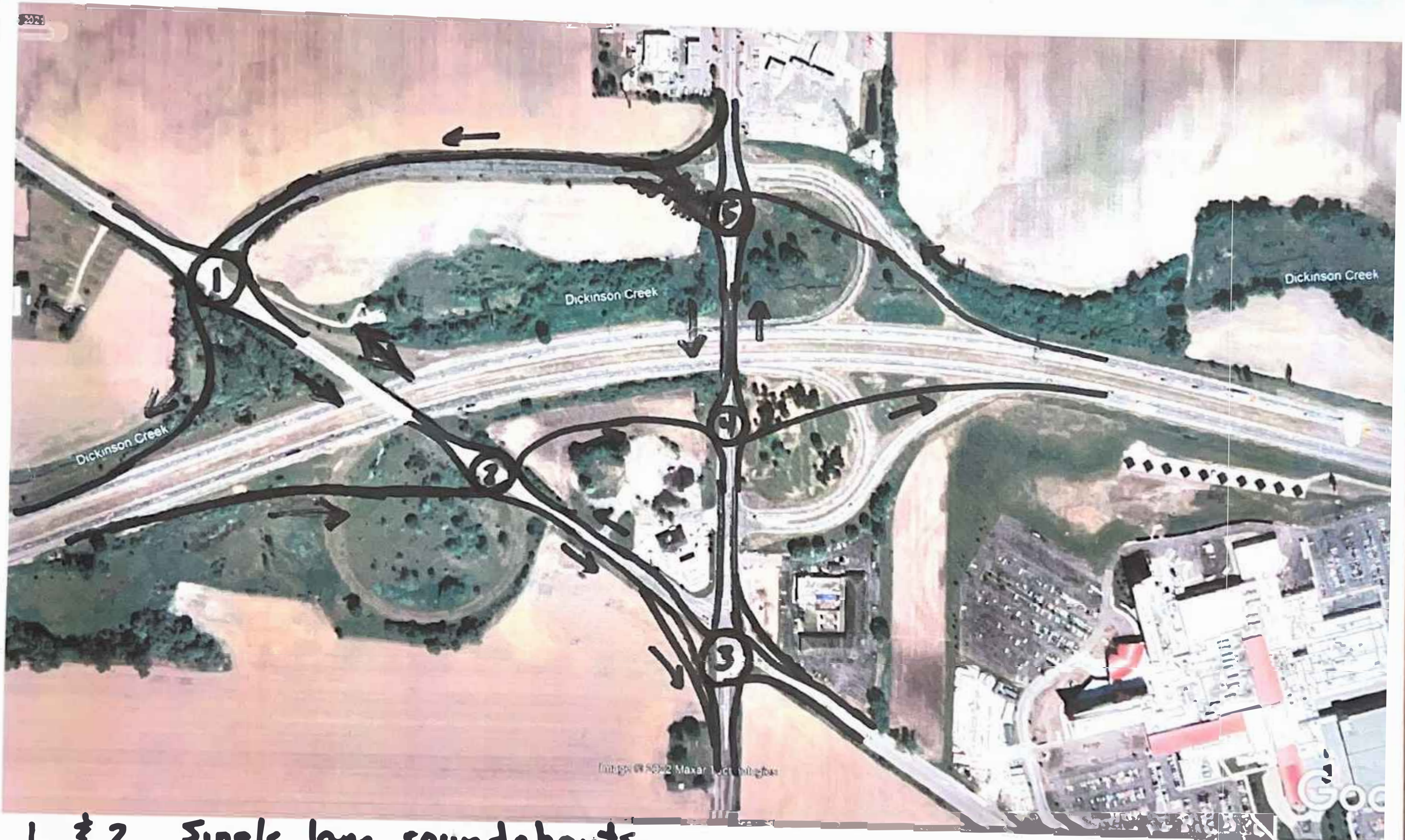
Alternative Number	Alternative Name	Interchange Location	Description	Ranking: Traffic Operations	Ranking: Safety	Ranking: Environmental Impacts	Ranking: Single Crossing (location) Over I-94	Ranking: Construction Cost	Remarks
17	MDOT - DDI	I-94 and New 11 Mile Rd	Remove 11-Mile Rd and M-96, realign 11-Mile Rd further east from the cemetery and add boulevard with DDI	3	3	2	Yes	3	• Traffic operations are similar to Alternative 16. The only difference is the geometric alignment of 11-Mile Rd.
18	MDOT (DDI-2)	I-94 and New 11 Mile Rd	Remove 11-Mile Rd and M-96, realign 11-Mile Rd & M-96 and add boulevard with DDI	3	3	2	Yes	3	• Traffic operations are similar to Alternative 16. The only difference is the geometric alignment of 11-Mile Rd.
19	MDOT (DDI-4)	I-94 and New M-96	Remove 11-Mile Rd, M-96, and Wheatfield Pkwy, realign M-96 and add boulevard with DDI	2	2	2	Yes	3	• Need more than 2 left-turn lanes for future alternatives.
Other Concepts									
a	Wide Diamond –with signals	11-Mile Rd/M-96 & I-94	Similar to Alternative 11 but with direct connection from WB I-94 to M-96			3	Yes	1	• Need more than 2 left-turn/right-turn lanes for future alternatives.
b	Wide Diamond –with signals	11-Mile Rd/M-96 & I-94	Similar to Alternative 11, but with 11 Mile cutoff			3	Yes	1	• Two signals (11-Mile Rd/Michigan Avenue and I-94 EB off-ramp/Michigan Avenue) are very tightly spaced. Due to the heavy turning movements at both intersections, queuing could cause issues in future alternatives. • Need more than 2 left-turn/right-turn lanes for future alternatives.
c	Traffic circle	11-Mile Rd/M-96 & I-94	Traffic circle with traffic signal, realign 11 Mile			2	Yes	3	• Traffic circle fails due to heavy conflicting movements • Might require twin structures to accommodate geometrics
d	Traffic circle	11-Mile Rd/M-96 & I-94	Traffic circle with traffic signal, limit movements from 11 Mile to M-96			2	Yes	3	• Traffic circle fails due to heavy conflicting movements • Might require twin structures to accommodate geometrics
e	Traffic circle	11-Mile Rd/M-96 & I-94	Similar to alternative c, but with more capacity on north leg of 11 Mile			2	Yes	3	• Traffic circle fails due to heavy conflicting movements • Might require twin structures to accommodate geometrics
f	Wide Diamond –with signals	11-Mile Rd/M-96 & I-94	Michigan left-turn at all interchange intersections			3	No	1	• Cannot accommodate heavy left turning movements which will induce queue spillback on the M-96 mainline
g	Wide Diamond –with signals	11-Mile Rd/M-96 & I-94	Similar to alternative f, but with additional capacity			3	Yes	1	• Cannot accommodate heavy left turning movements which will induce queue spillback on the M-96 mainline
h	PVP1	11-Mile Rd/M-96 & I-94	Maintain 11 Mile interchange and add M-96 with CD Road			3	No	1	• MDOT prefers to remove existing loop ramps and doesn’t want any loop ramps in the future. • Might require twin structures to accommodate geometrics
i	PVP2	11-Mile Rd/M-96 & I-94	Remove 11 Mile interchange, add M-96 interchange			3	Yes	1	• MDOT prefers to remove existing loop ramps and doesn’t want any loop ramps in the future. • Need more than 2 left-turn/right-turn lanes for future alternatives.
j	PVP3	11-Mile Rd/M-96 & I-94	Similar to MDOT alternative, but with Wheatfield Drive being the stem of the T-intersection			3	Yes	2	• Need more than 2 left-turn/right-turn lanes for future alternatives.
k	MDOT	11-Mile Rd/M-96 & I-94	Remove 11 Mile interchange, add M-96 interchange with T-intersection at Wheatfield Drive			2	Yes	2	• Cannot accommodate heavy left turning movements at T intersection (New M-96/Wheatfield Pkwy)
l	MB - 11-Mile Interchange Option-1a	11-Mile Rd/M-96 & I-94	Redesign 11 Mile-Rd interchange with a big Traffic circle			2	Yes	3	• Traffic circle fails due to heavy conflicting movements • Might require twin structures to accommodate geometrics
m	MB - 11-Mile Interchange Option2_peanut	11-Mile Rd/M-96 & I-94	Adding roundabouts along 11-Mile Rd			2	No	2	• Roundabouts fail due to heavy conflicting movements • Roundabout will not fit within ROW at Michigan/11 Mile

Michael Baker INTERNATIONAL	0 (FT) 100	I-69/M-96 (MICHIGAN AVE) INTERCHANGE	DRAWING	SHEET
		ALTERNATIVE 1	1	1
		7/15/2022		

1. & 2. Double Lane Roundabout w/ Right turn bypass lanes

Bear Creek
W Michigan Ave
69
94

ar Creek
W Michigan Ave
W Michigan Ave
Bus
Bus
69
69

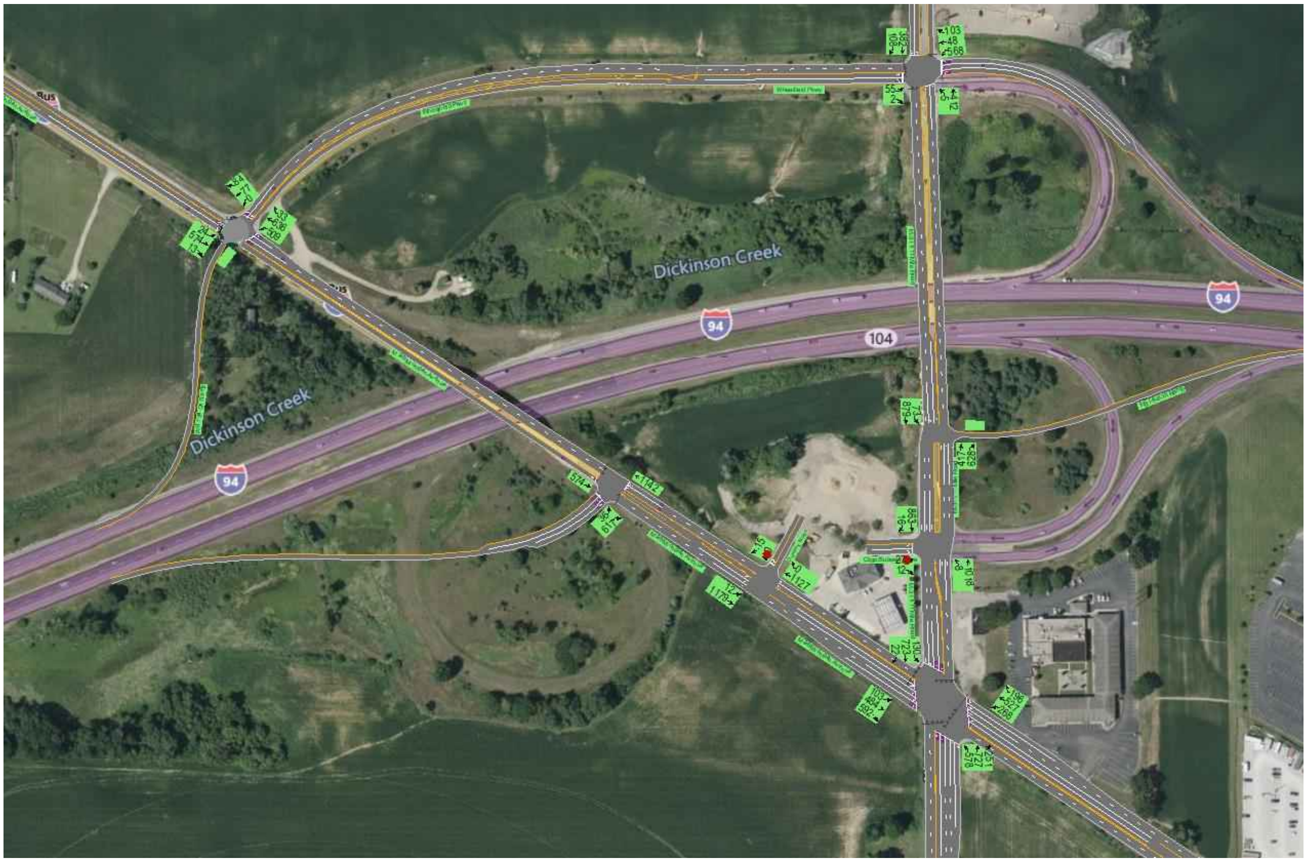


1. & 2. Single lane roundabouts
3. Double lane roundabout w/ bypass in NE & SW quads
4. & 5. Double lane roundabouts

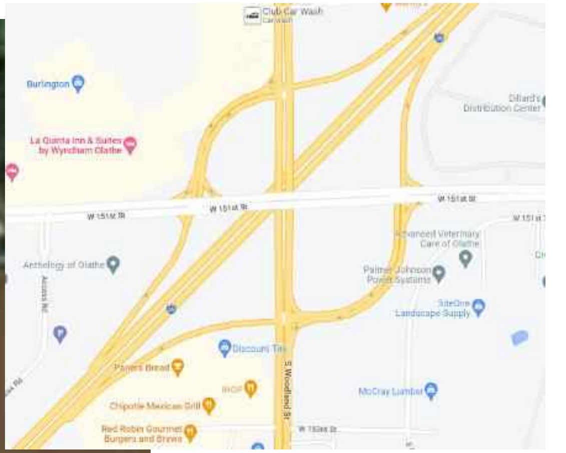

M-96 & I-94
Interchange
Alternative: 7
N
Michael Baker
INTERNATIONAL
0 (FT) 100
I-94/M-96 (MICHIGAN AVE) INTERCHANGE
DDI ALTERNATIVE
7/15/2022
DRAWING SHEET
1 1

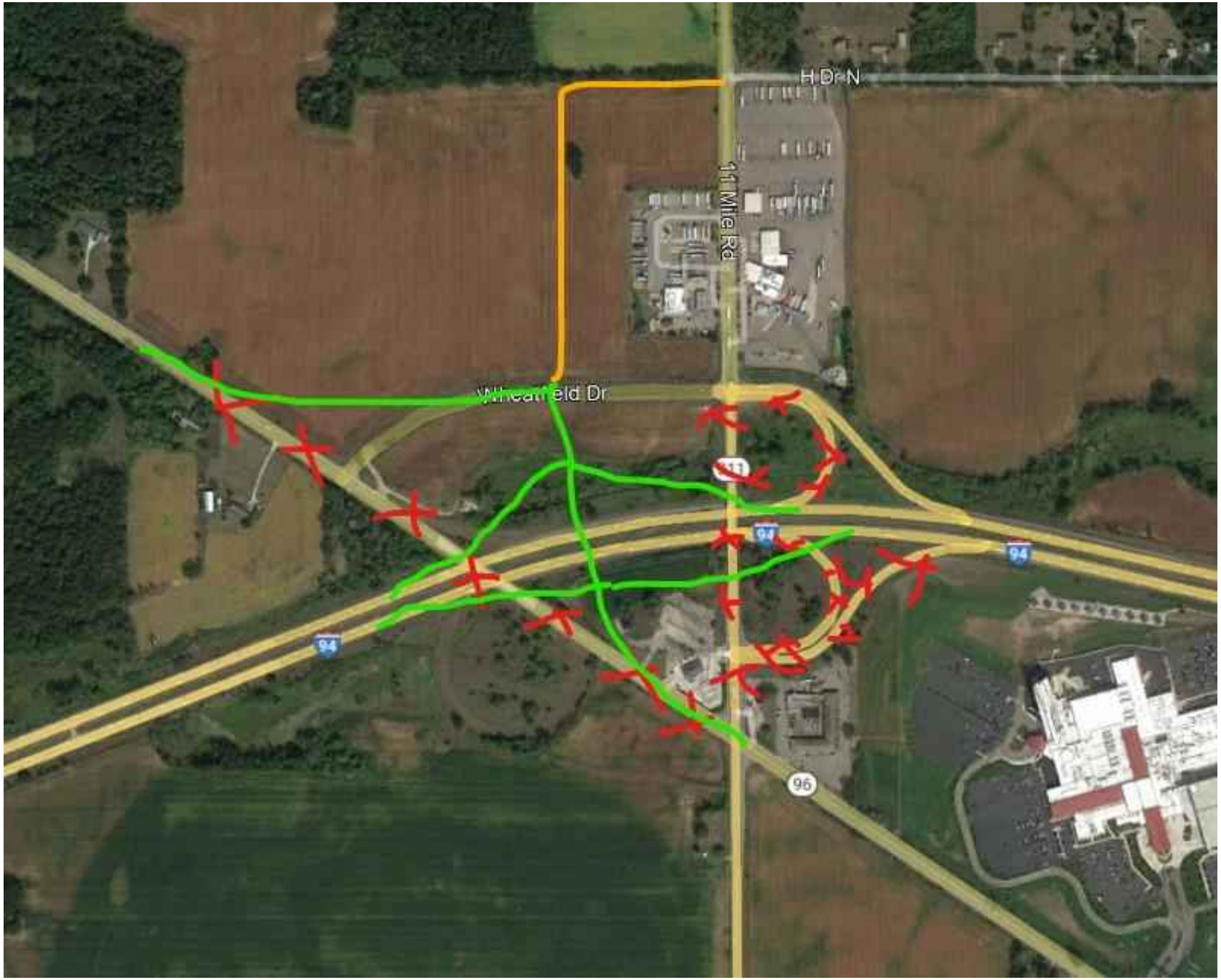
Michael Baker INTERNATIONAL	0 (FT) 100	I-94/M-311 (11 MILE RD) INTERCHANGE	DRAWING	SHEET
		DDI ALTERNATIVE AT 11 MILE	1	1
		08/03/2022		

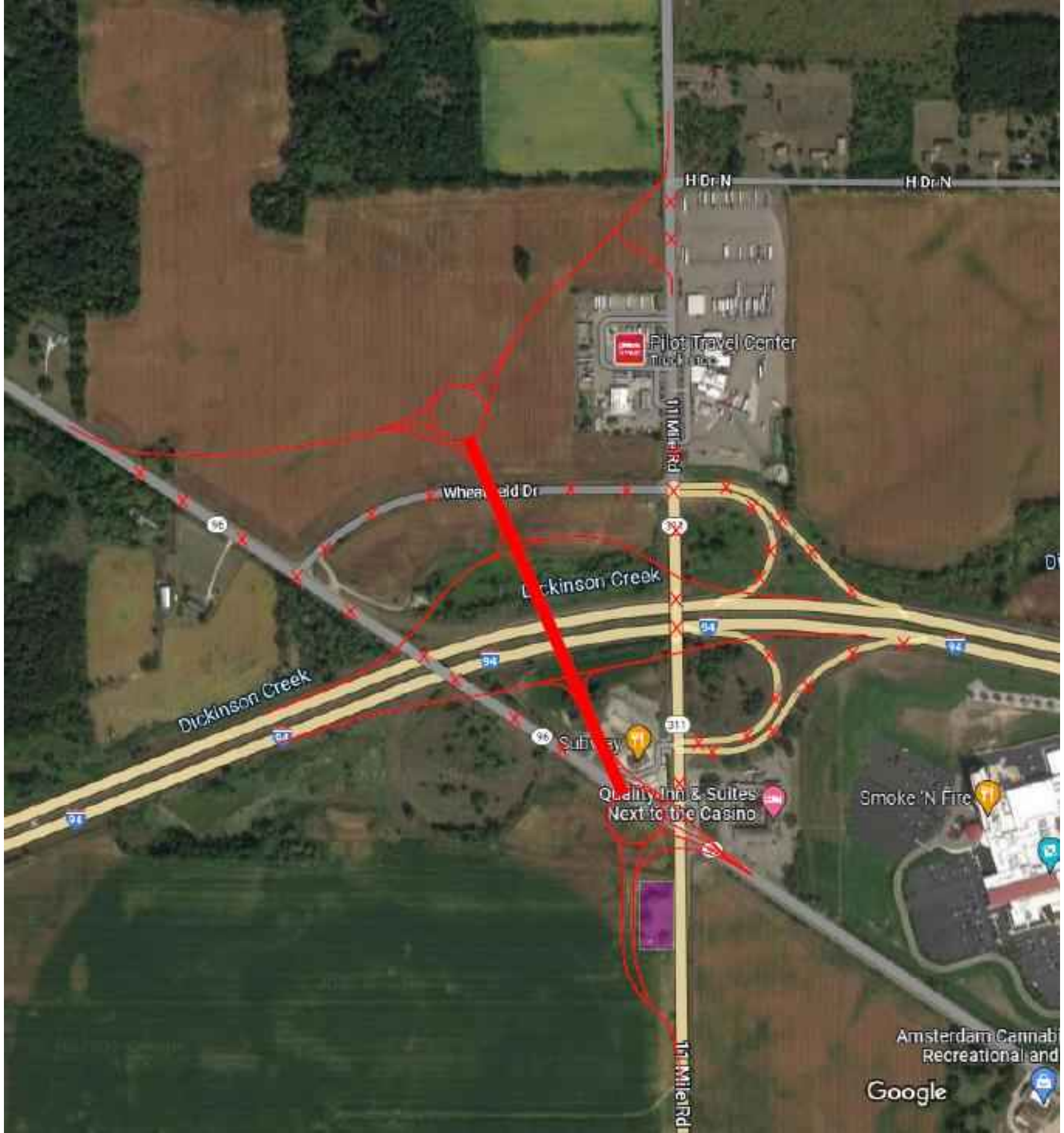
11-Mile Rd & I-94
Interchange
Alternative: 9
N
Michael Baker
INTERNATIONAL
0
(FT)
100
I-94/M-311 (11 MILE RD) INTERCHANGE
SPUI ALTERNATIVE
7/15/2022
DRAWING
1
SHEET
1



Dickinson Creek
Dickinson Creek
94
94
94
104

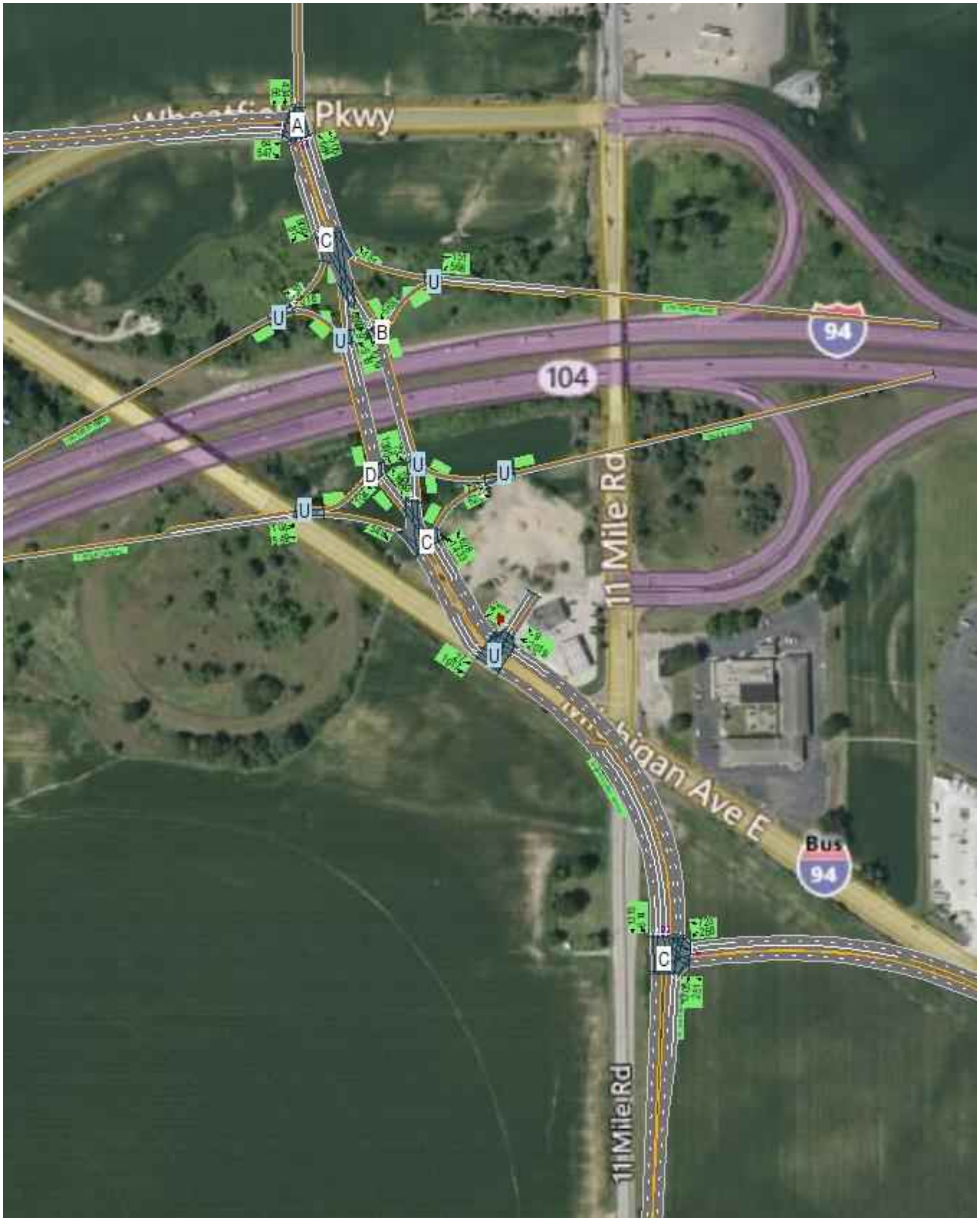

94
96

Club Car Wash
Burlington
Dillard's Distribution Center
La Quinta Inn & Suites by Wyndham Olathe
W 151st St
Anthology of Olathe
Advanced Veterinary Care of Olathe
Palmer Johnson Power Systems
SiteOne Landscape Supply
Discount Tire
Panera Bread
IHOP
Chipotle Mexican Grill
Red Robin Gourmet Burgers and Brews
S Woodland St
McCray Lumber


H Dr N
11 Mile Rd
Wheatfield Dr
94
94
94
96



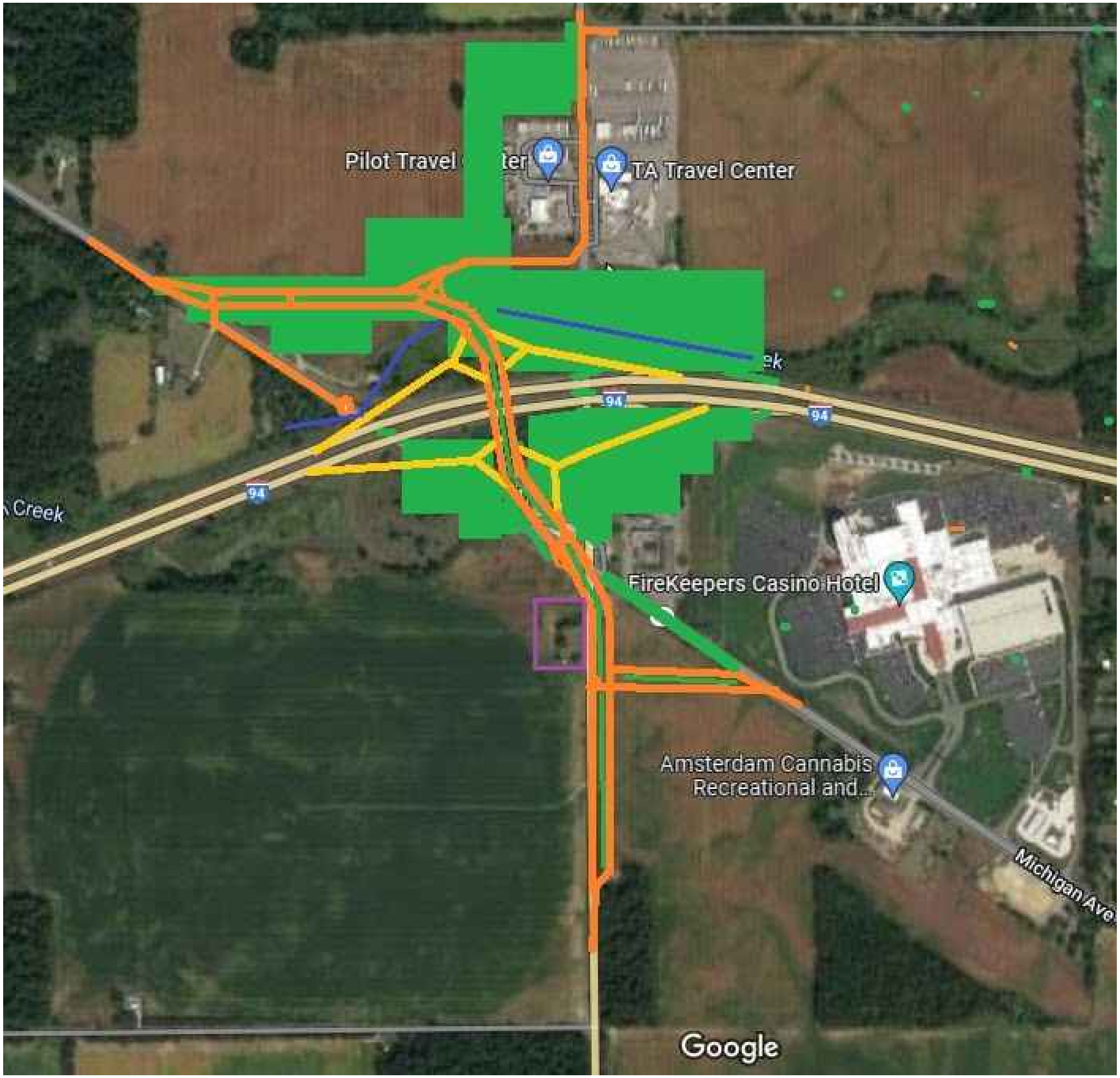
H Dr N
H Dr N
Pilot Travel Center
11 Mile Rd
Wheatfield Dr
Dickinson Creek
Dickinson Creek
94
94
94
94
96
96
311
Subway
Quality Inn & Suites Next to the Casino
Smoke 'N Fire
11 Mile Rd
Google

Pkwy
11 Mile Rd
104
94
Bus
94
igan Ave E
11 Mile Rd
B
C
U
C



Pkwy
94
104
11 Mile Rd
A
B
C
D
U
Michigan Ave E
Bus
94
C
11 Mile Rd

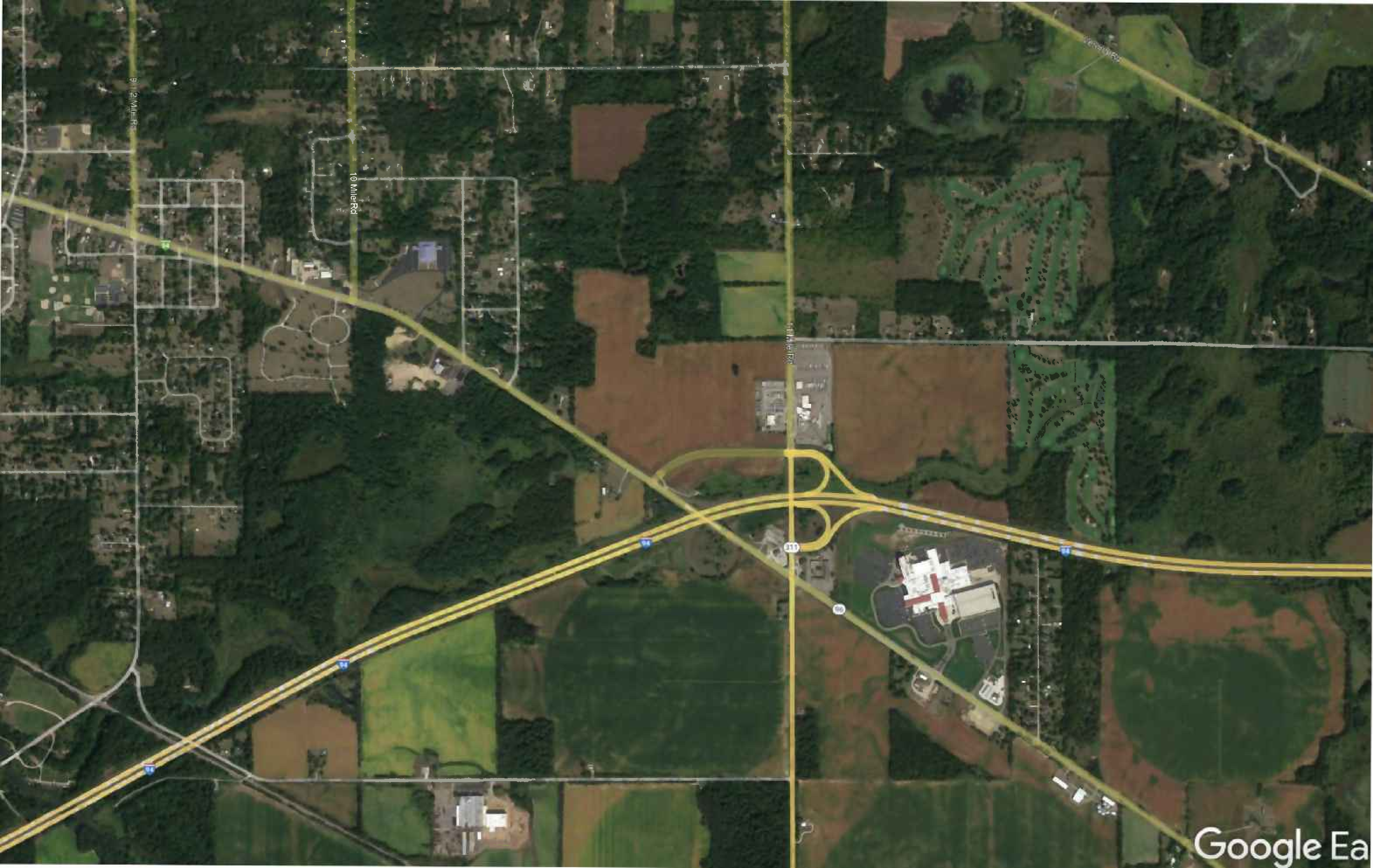

Midwest Truck & Hydraulic
Pilot Travel Center
TA Travel Center
Dickinson Creek
Dickinson Creek
Subway
Amsterdam Cannabis
Googl

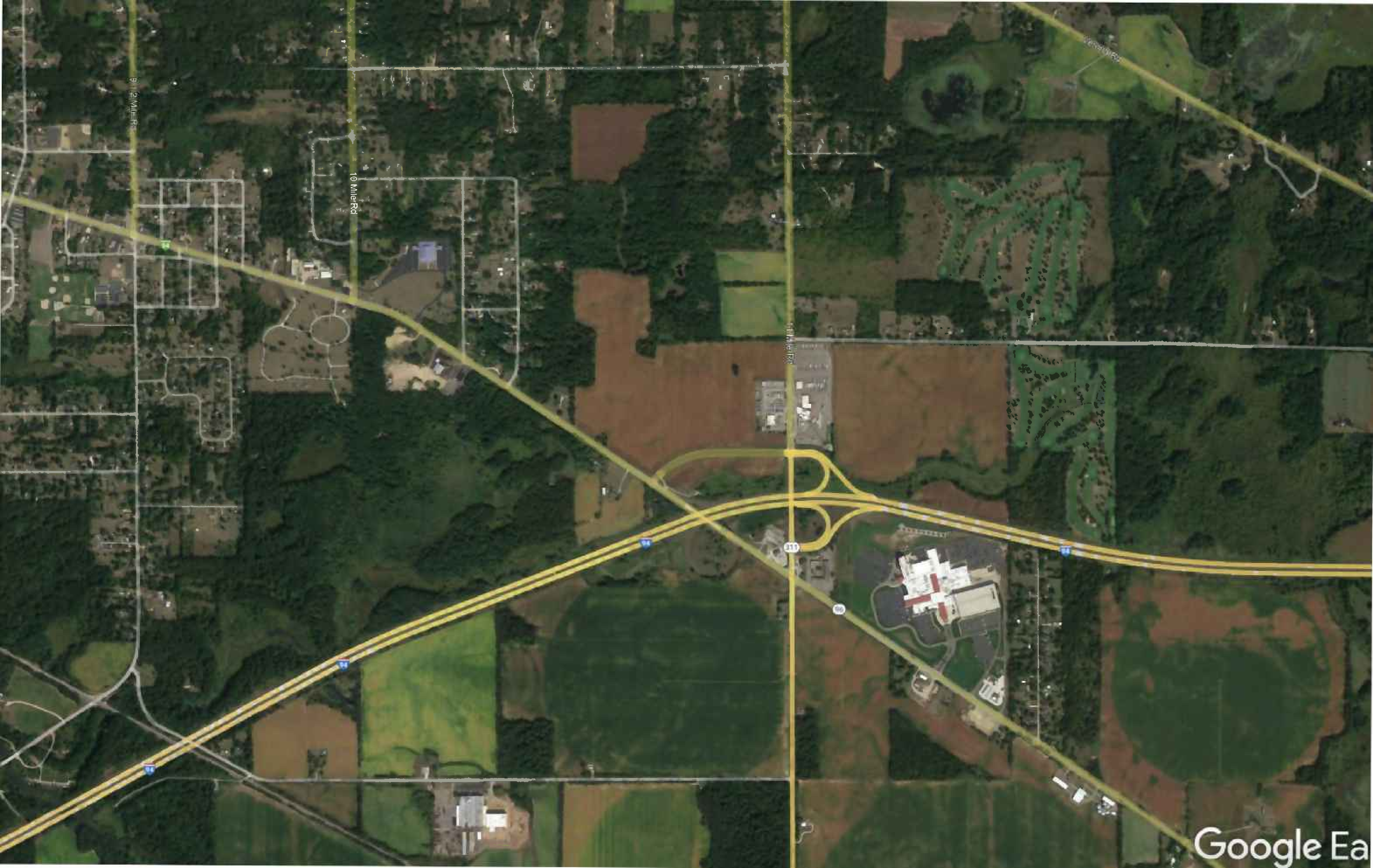


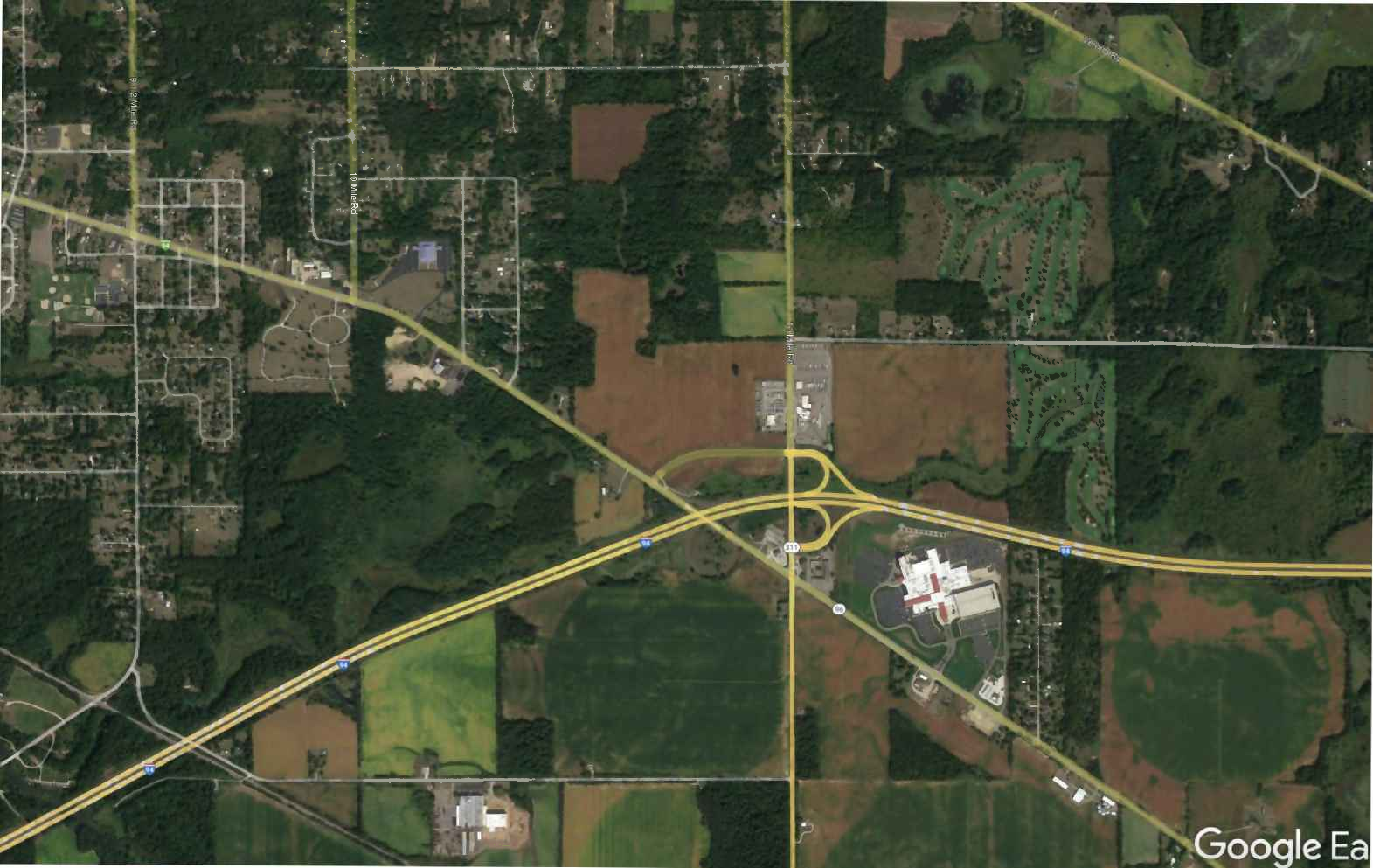
Pilot Travel Center
TA Travel Center
94
94
94
Creek
FireKeepers Casino Hotel
Amsterdam Cannabis
Recreational and...
Michigan Ave
Google

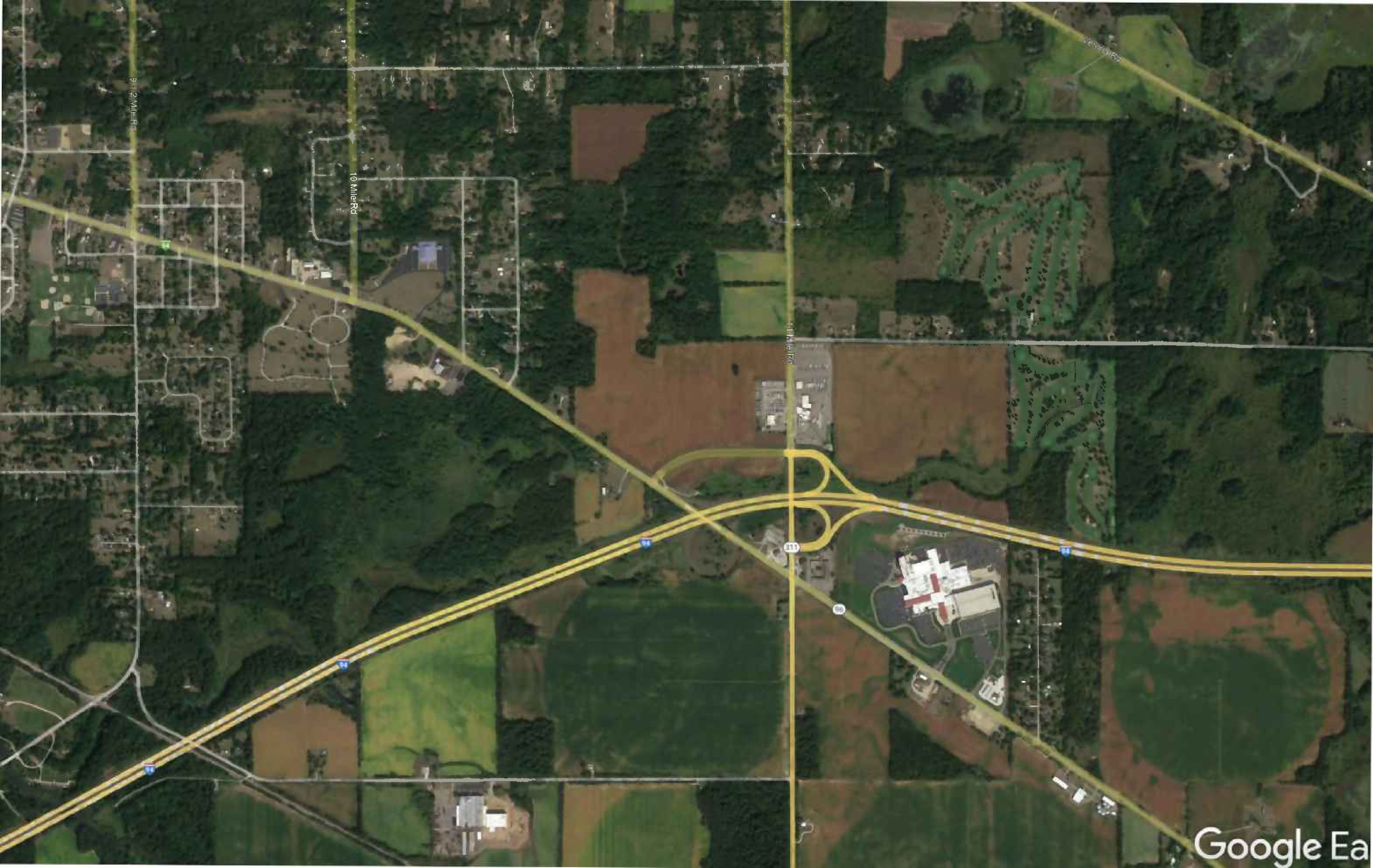
Midwest Truck & Hydraulic
Pilot Travel Center
TA Travel Center
Dickinson Creek
Dickinson Creek
Subway
FireKeepers Casino H
Amsterdam Cannabis
Googl


Midwest Truck & Hydraulic
Pilot Travel Center
TA Travel Center
Dickinson Creek
Dickinson Creek
Subway
FireKeepers Casino H
Amsterdam Cannabis F
Googl

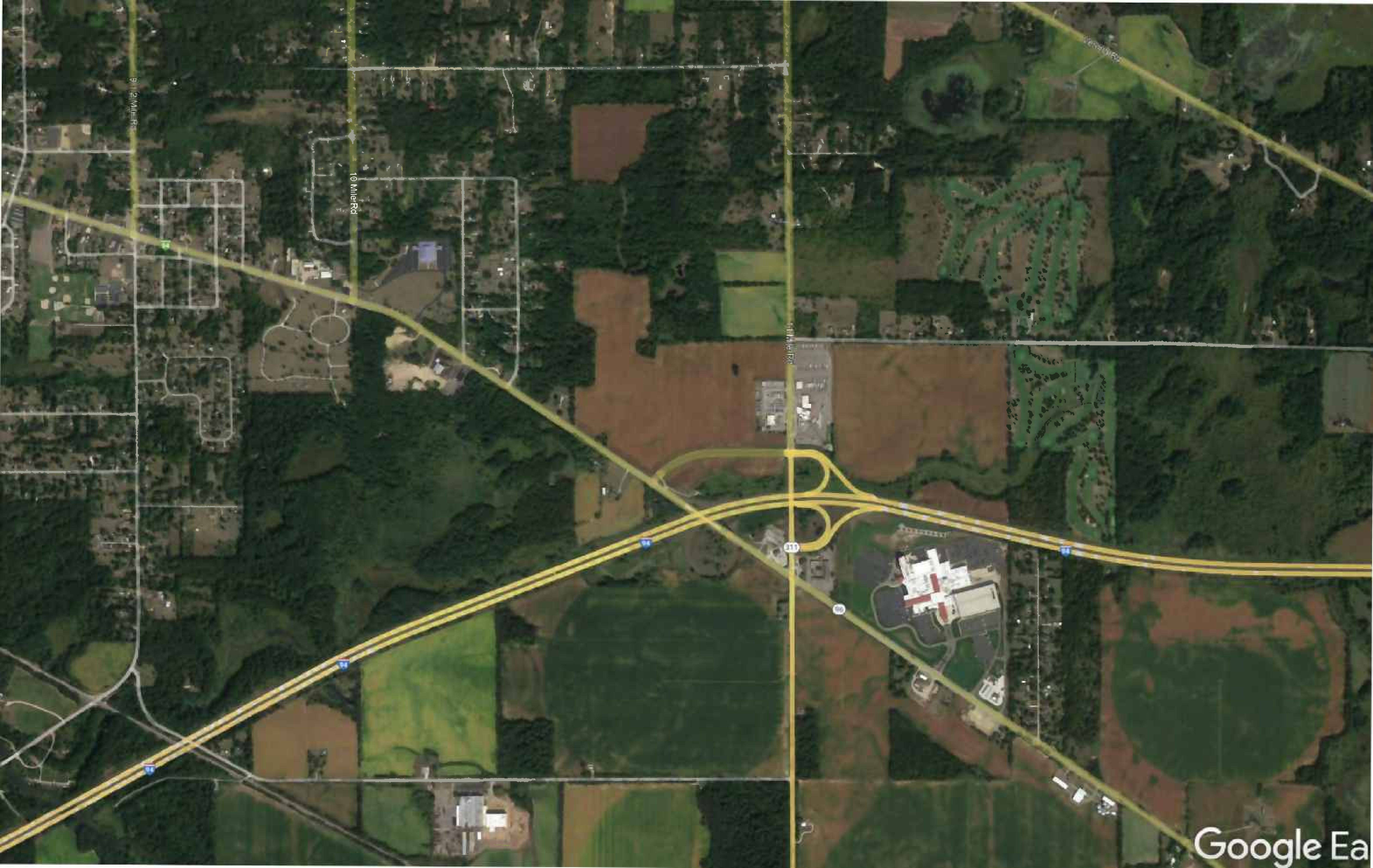

10 Mile Rd
Google Ea


10 Mile Rd
Google Ea

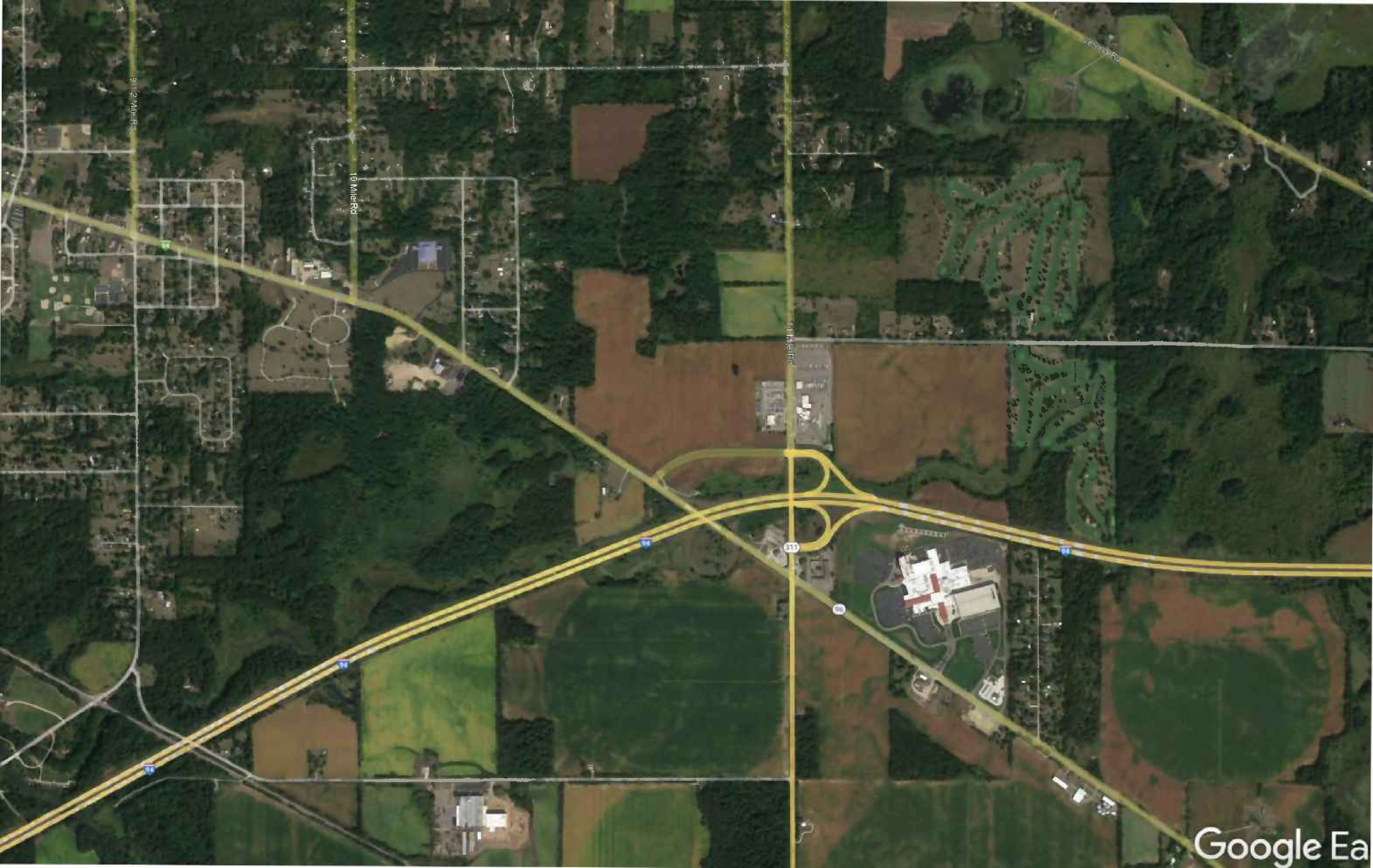

10 Mile Rd
94
Google Ea

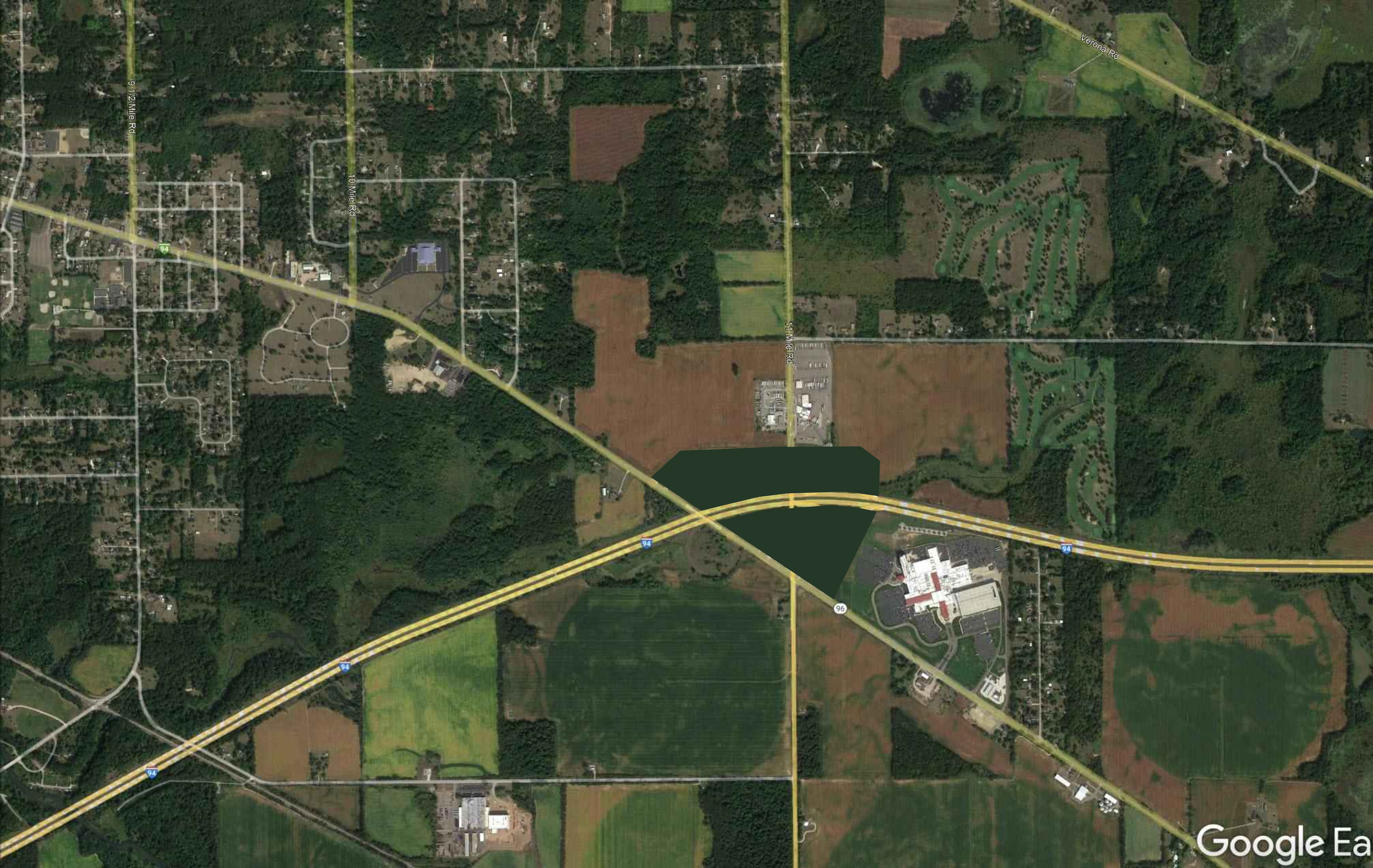


10 Mile Rd
Google Ea



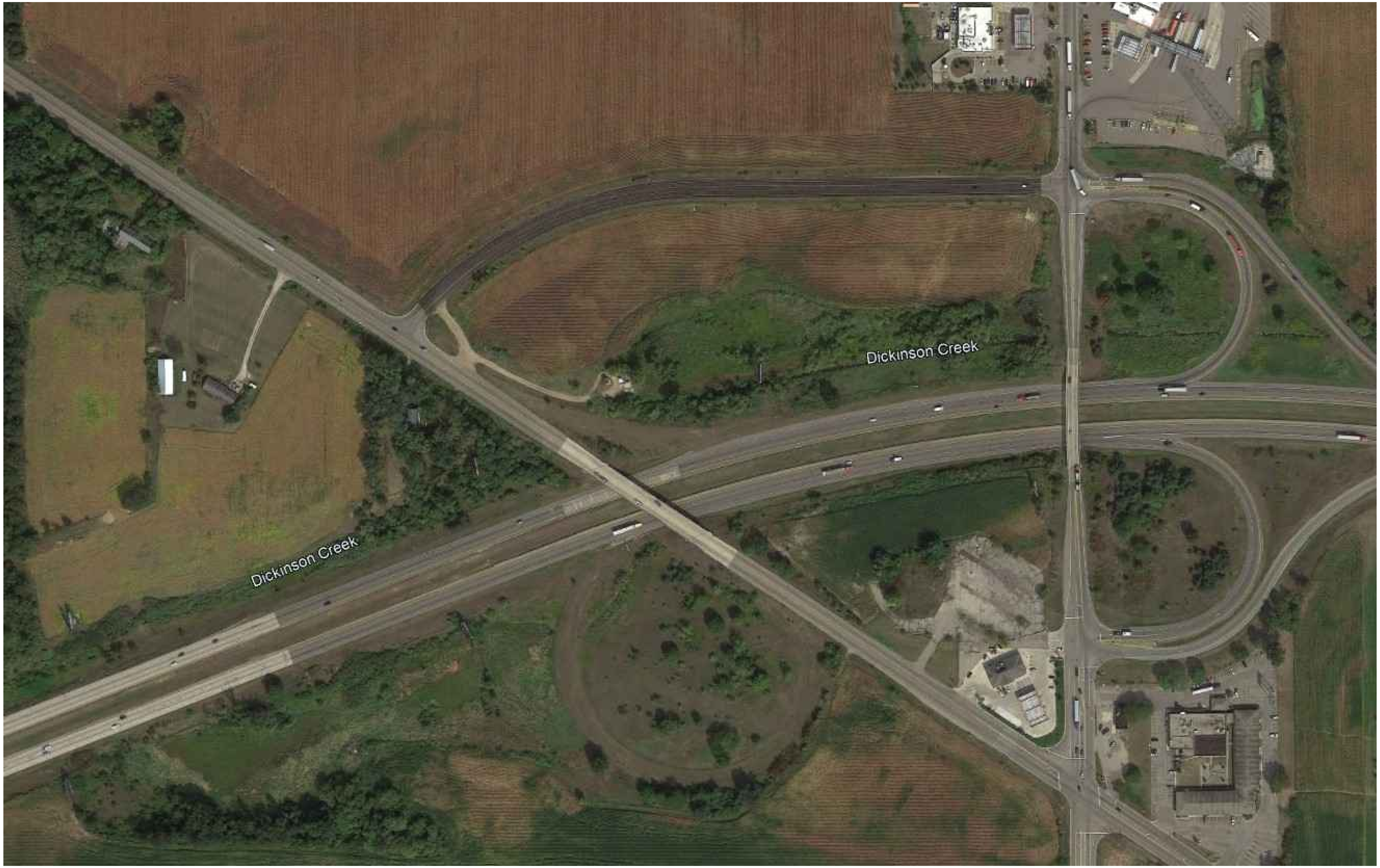
10 Mile Rd
94
311

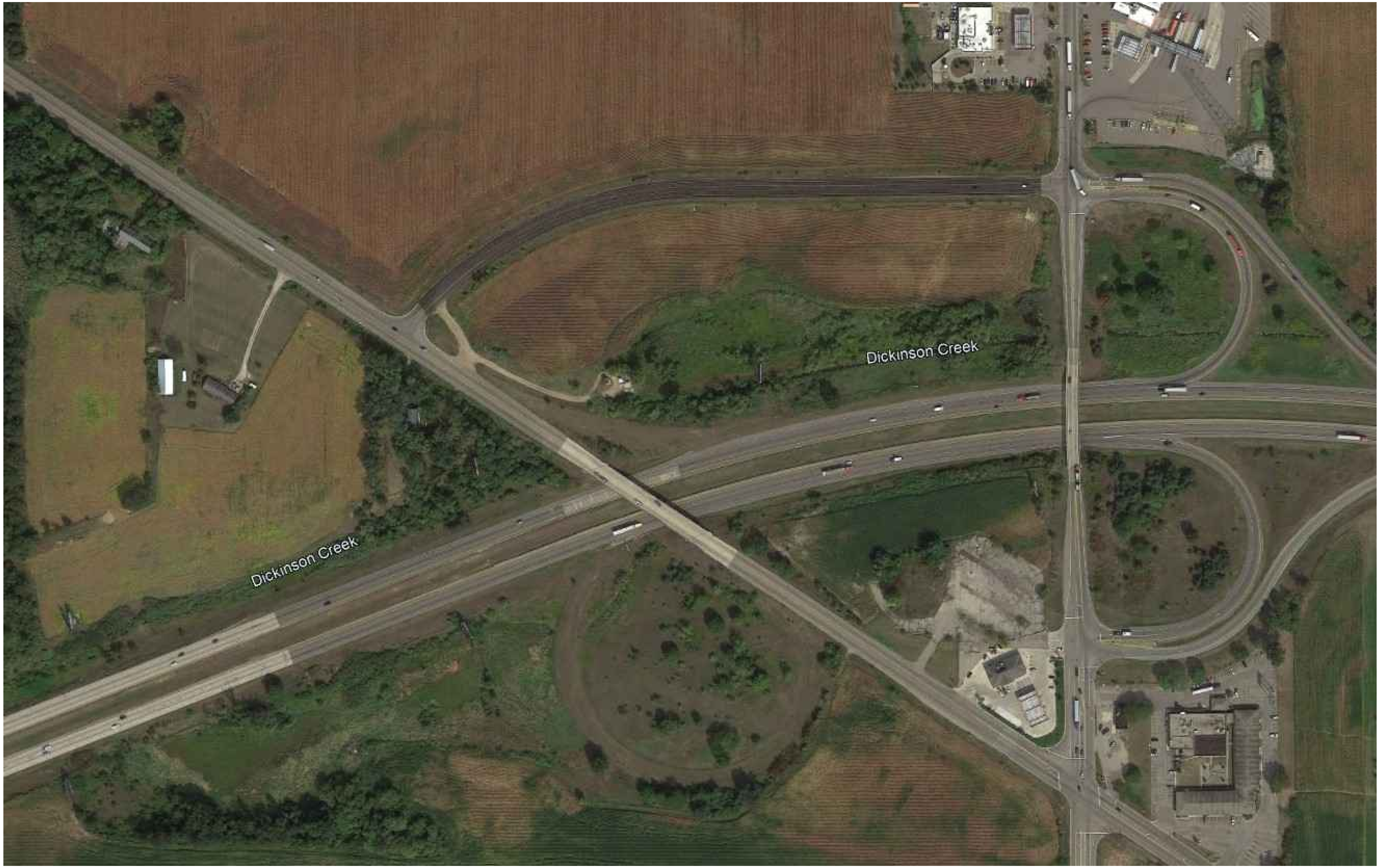

10 Mile Rd
94
311
Google Ea

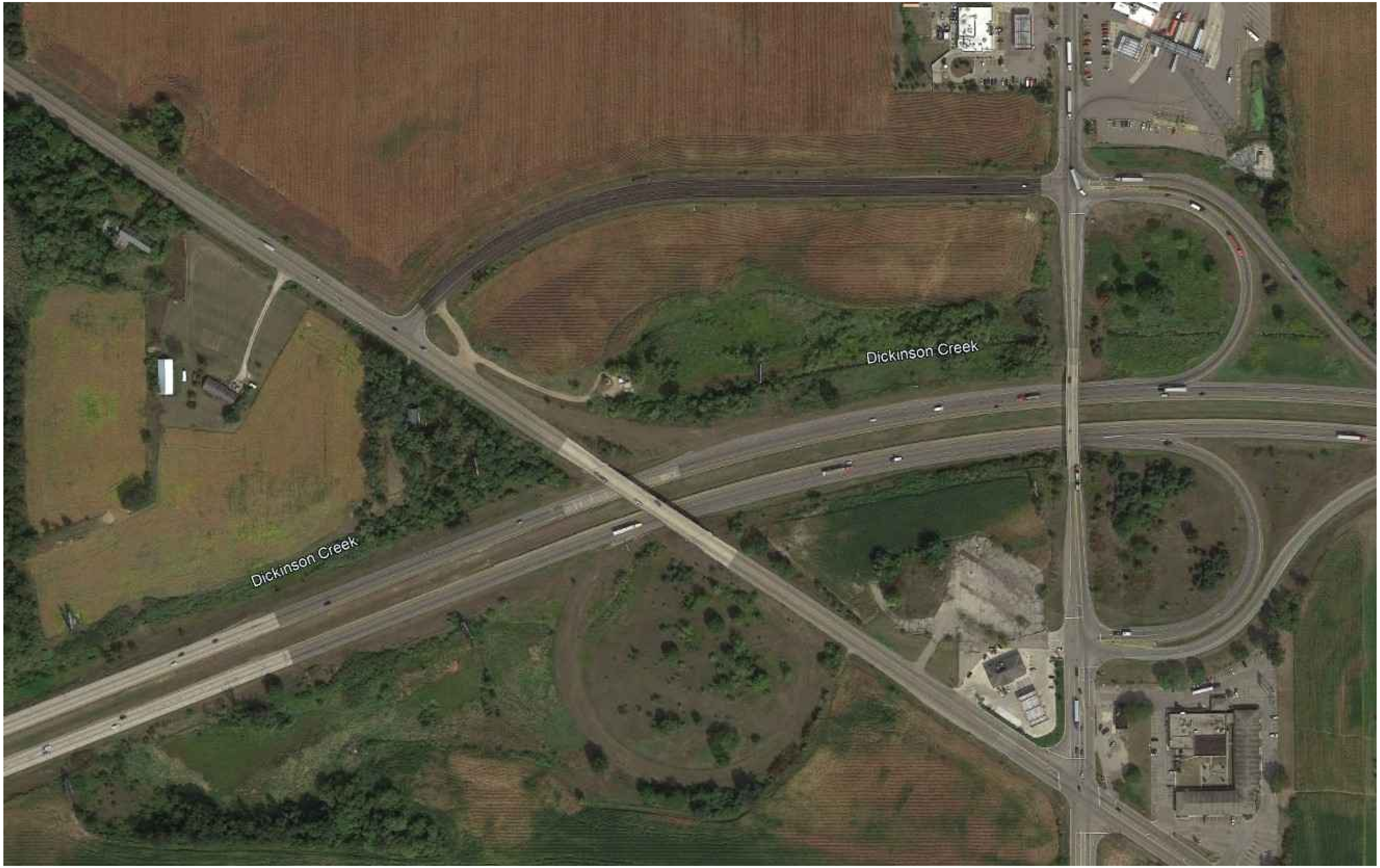


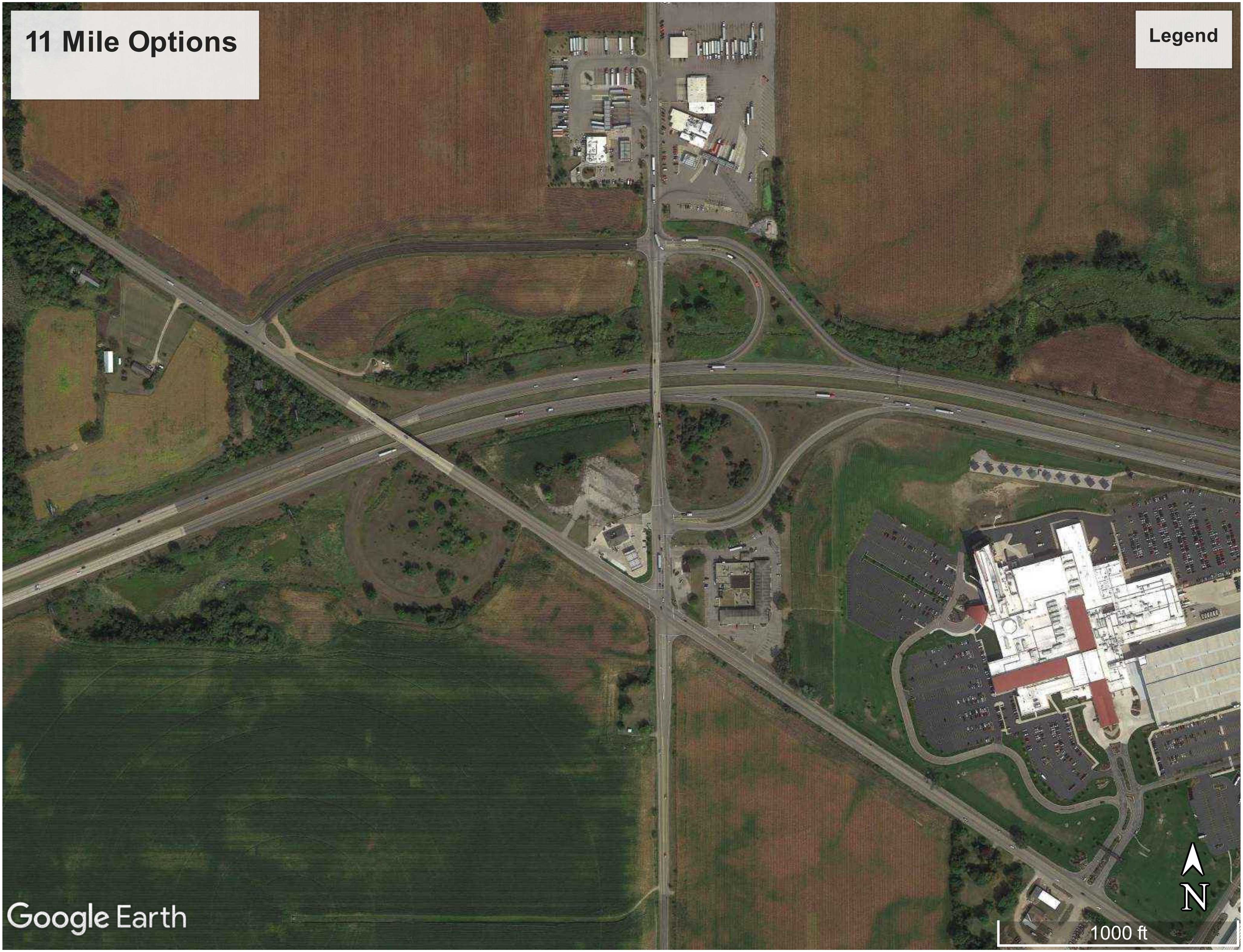
9 1/2 Mile Rd
10 Mile Rd
11 Mile Rd
Verona Rd
94
94
94
94
94
96
Google Ea

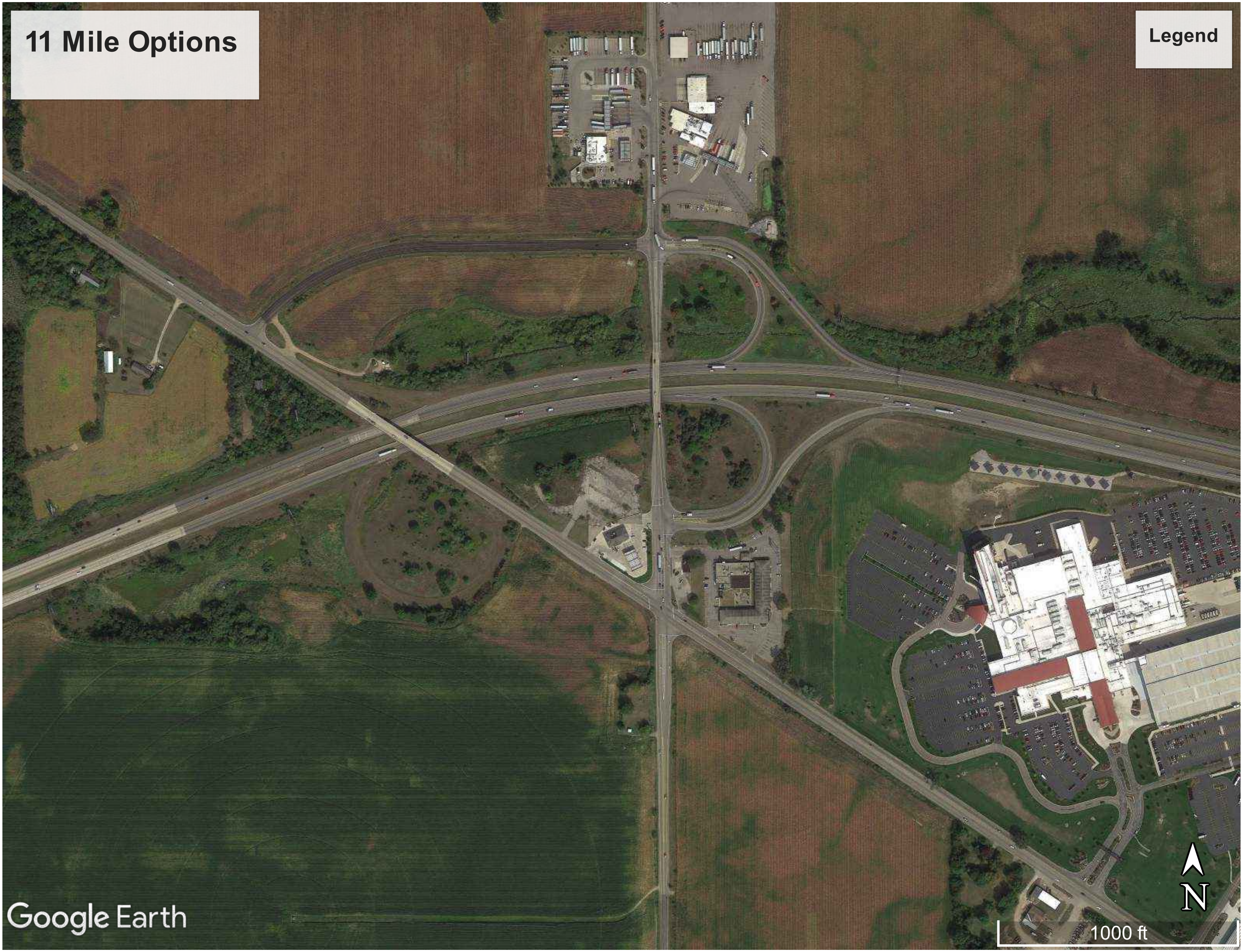
Dickinson Creek
Dickinson Creek
94
94
94
104


Dickinson Creek
Dickinson Creek


Dickinson Creek
Dickinson Creek


Dickinson Creek
Dickinson Creek


11 Mile Options
Legend
Google Earth
1000 ft
N


11 Mile Options
Legend
Google Earth
N
1000 ft

Appendix B: Final Design Criteria

Michael Baker International
835 Mason Street, Suite A290, Dearborn, MI 48124 Phone: 313.203.4400 Fax: 313.203.4401
Project: Marshall Megasite Traffic Study
Location:Marshall, Calhoun County, MI
Type of Work: Full Reconstruction
MDOT Job Number:
Baker Job Number: 190215
Prepared By: Shelby Wojno Date Prepared: 07/07/2022
Checked By: Jeremy Curtis Date Checked: 07/12/2022

Roadway Design Criteria for Marshall Megasite Traffic Study

Design Criteria	Reference Materials	I-94 Mainline	I-69 Mainline	Reconstruct Ramps
General				
Design Guideline Designation	RDM	4R	4R	4R
NHS/non-NHS	N/A	NHS	NHS	NHS
Design Units	NAVD88 MI SIF	English	English	English
Roadway Classification	AASHTO pgs 1.3.4, RDM 3.09	Non-Interstate Freeway	Non-Interstate Freeway	Non-Interstate Freeway Ramps
Design Speed	AASHTO 8.2.1, RDM 3.06, 12.01, Appendix 3A, R107H	70 mph	70 mph	Posted + 5mph (30 mph to 55 mph)
Posted Speed	Field verified existing information	70 mph	70 mph	Varies
Peak Cars per Hour Existing/Proposed				
Total ADT for Year 2021	MDOT AADT Map	51,232	20,563	Varies by Ramp
Typical Section				
Pavement Design	MDOT Provided	MDOT Provided	MDOT Provided	MDOT Provided
Crown	RDM 6.09, AASHTO 4.9.1 pg 358	2%	2%	2%
Crown Location	RDM 6.09.01, AASHTO pgs 4.2.2 pgs 332-333	One lane in from the outside (3-lane); Center (4-lane)	One lane in from the outside (3-lane); Center (4-lane)	N/A
PGL Location	AASHTO 3.5.3 pgs 312-317	Inside Edge of Pavement	Inside Edge of Pavement	Outside Edge of Pavement
Total Number of Lanes	Field Information/Survey	4 to 6 Lanes	4 to 6 Lanes	1 to 2 Lanes
Point of Rotation for Superelevation	RDM 3.04.01	Crown Point	Crown Point	PGL
Curb Type	RDM Chptr 6, STD Plan R-30, AASHTO pgs 4.7.2	Valley Gutter	Valley Gutter	D Curb
Lane Width	RDM Appendix 3A, AASHTO pgs 311, 425, 433, 448, 455, 472, 504	12 ft	12 ft	12 ft or 16 ft
Parking Lane Width	AASHTO 4.20 pgs 403-405	N/A	N/A	N/A
Bike Lane Width	RDM 12.12.09 E, AASHTO 7.3.9 pgs 507-508	N/A	N/A	N/A
Shoulder Widths	RDM Appendix 3A, AASHTO 3-106, 4.4, 7.5, pgs 100, 139, 250, 253, 342-344, 471	8' (4' paved) inside / 11' (10' paved) outside	8' (4' paved) inside / 11' (10' paved) outside	6' (4' paved) inside / 8' (7'paved) outside
Shoulder Slope	RDM Appendix 3A, AASHTO 4.4.1, 5.2.2, pgs 339-341, 359-360,	4%	4%	4%
Maximum Rollover	STD Plan R-107, AASHTO 4.9.2, 9.6.6 pgs 359, 691-692	6%	6%	6%
Maximum Superelevation	STD Plan R107, RDM 3.04.03, AASHTO 3.3.3, 3.3.5, 3.3.7, 9.6.6 pgs 177-178, 190-199, 204-205, 684-685	7%	7%	7%
Clear Zone (1:6 Fill Slope)	RDM 7.01.10, 7.01.11 C, AASHTO 2.8.1, 3.6.4, 3.6.5, 4.6.1, 5.2.4, pgs 139-140, 322-323, 325, 346-347, 417-418	30' to 34' See RDM for other slope conditions	30' to 34' See RDM for other slope conditions	12' to 14' (≤40 mph) / 20' to 22' (55 mph) See RDM for other slope conditions
Clear Zone (1:6 Cut Slope)	RDM 7.01.10, 7.01.11 C, AASHTO 2.8.1, 3.6.4, 3.6.5, 4.6.1, 5.2.4, pgs 139-140, 322-323, 325, 346-347, 417-418	28' - 30' See RDM for other slope conditions	28' - 30' See RDM for other slope conditions	14' to 16 (≤40 mph) / 20' to 22' (55 mph) See RDM for other slope conditions
Vertical Alignment				
Minimum Grade	RDM 2.02.01, AASHTO pg 266	0.5% desired min (0.3% may be used)	0.5% desired min (0.3% may be used)	0.5% desired min (0.3% may be used)
Maximum Grade	RDM 2.02.01, AASHTO pg 266	3%	3%	4%
Maximum deflection without curve	RDM 3.03 C, AASHTO pg 276	1%	1%	1%
Stopping Sight Distance	RDM 3.03.02 C, AASHTO 3.2.2	730 ft	730 ft	Varies with speed, See Table 3-1 in AASHTO 2011
Passing Sight Distance	RDM 3.03.02 E, AASHTO pgs 155-156	N/A	N/A	N/A
K-Value Crest	RDM 3.03.02, AASHTO 3.4.6 pgs 298-304	247	247	Varies with speed, See Table 3-35 in AASHTO 2011
K-Value Sag	RDM 3.03.02, AASHTO 3.4.6 pgs 304-310	181	181	Varies with speed, See Table 3-34 in AASHTO 2011
Structure Vertical Clearance (Route Classification Under Structure)	RDM 3.12 G, Appendix 3A, BDM 7.01.08, BDG 2.24.3-04, AASHTO pgs 417, 429, 440, 453, 462, 504, 527, 534, 792	16'-0", 16'-3"(Desired)	16'-0", 16'-3"(Desired)	14'-6"

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835 Mason Street, Suite A290, Dearborn, MI 48124 Phone: 313.203.4400 Fax: 313.203.4401
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Location:Marshall, Calhoun County, MI
Type of Work: Full Reconstruction
MDOT Job Number:
Baker Job Number: 190215
Prepared By: Shelby Wojno Date Prepared: 07/07/2022
Checked By: Jeremy Curtis Date Checked: 07/12/2022

Roadway Design Criteria for Marshall Megasite Traffic Study

Horizontal Alignment				
Type of Alignment	Specify: Legal or Non-Legal	Non-Legal	Non-Legal	Non-Legal
Minimum Return Radius	GEO 650, AASHTO pgs 625-658	N/A	N/A	N/A
Minimum Radius	RDM 3.03.01 A, AASHTO pgs 175, 178, R-107H	1922 ft	1922 ft	Varies See Table in R-107H
Maximum deflection without curve	RDM 3.03.01 A, AASHTO pgs 258-259	N/A	N/A	N/A
Minimum Length of Curve	RDM 3.03.01 B, STD Plan R 107, AASHTO pg 258	15 * Design Speed (min), 30 * Design Speed (Desirable)	15 * Design Speed (min), 30 * Design Speed (Desirable)	15 * Design Speed (min), 30 * Design Speed (Desirable)
Spirals Req'd - Y/N	STD Plan R 107, AASHTO pgs 206, 215-220	No	No	Yes (Loop Ramps) / No (Slip Ramps)
Intersection Sight Distance	RDM, 3.03.01AASHTO pgs 650-677	N/A	N/A	N/A

NOTES:
These guildlines and standards shall be considered as minimum criteria.

Reference Materials
1. *AASHTO refers to the AASHTO's "A Policy on Geometric Design of Highways and Streets" - 2011 Edition*
2. *RDM Refers to the Michigan Road Desgin Manual*
3. *STD Plan refers to MDOT Standard Plan Index number*
4. *HCM refers to the Highway Capacity Manual*
5. *BDM refers to the MDOT Bridge Design Manual*
6. *BDG refers to the MDOT Bridge Design Guidelines*
7. *GEO refers to MDOT Transporation Standard Geometric Design Guide*

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MDOT Job Number:
Baker Job Number: 190215
Prepared By: Shelby Wojno Date Prepared: 07/07/2022
Checked By: Jeremy Curtis Date Checked: 07/12/2022

Roadway Design Criteria for Marshall Megasite Traffic Study

Design Criteria	Reference Materials	M-96 Mainline
General		
Design Guideline Designation	RDM	4R
NHS/non-NHS	N/A	non-NHS
Design Units	NAVD88 MI SIF	English
Roadway Classification	AASHTO pgs 1.3.4, RDM 3.09	Non-Interstate Freeway
Design Speed	AASHTO 8.2.1, RDM 3.06, 12.01, Appendix 3A, R107H	50
Posted Speed	Field verified existing information	
Peak Volumes Existing/Proposed		
Total ADT for Year 2021	MDOT AADT Map	15,039
Typical Section		
Pavement Design	MDOT Provided	MDOT Provided
Crown	RDM 6.09, AASHTO 4.9.1 pg 358	2%
Crown Location	RDM 6.09.01, AASHTO pgs 4.2.2 pgs 332-333	Center (2-lane)
PGL Location	AASHTO 3.5.3 pgs 312-317	Center (2-lane)
Total Number of Lanes	Field Information/Survey	2 to 5 Lanes
Point of Rotation for Superelevation	RDM 3.04.01	Crown Point
Curb Type	RDM Chptr 6, STD Plan R-30, AASHTO pgs 4.7.2	Detail B
Lane Width	RDM Appendix 3A, AASHTO pgs 311, 425, 433, 448, 455, 472, 504	12 ft
Parking Lane Width	AASHTO 4.20 pgs 403-405	N/A
Bike Lane Width	RDM 12.12.09 E, AASHTO 7.3.9 pgs 507-508	N/A
Shoulder Widths	RDM Appendix 3A, AASHTO 3-106, 4.4, 7.5, pgs 100, 139, 250, 253, 342-344, 471	8'
Shoulder Slope	RDM Appendix 3A, AASHTO 4.4.1, 5.2.2, pgs 339-341, 359-360,	4%
Maximum Rollover	STD Plan R-107, AASHTO 4.9.2, 9.6.6 pgs 359, 691-692	6%
Maximum Superelevation	STD Plan R107, RDM 3.04.03, AASHTO 3.3.3, 3.3.5, 3.3.7, 9.6.6 pgs 177-178, 190-199, 204-205, 684-685	7%
Clear Zone (1:6 Fill Slope)	RDM 7.01.10, 7.01.11 C, AASHTO 2.8.1, 3.6.4, 3.6.5, 4.6.1, 5.2.4, pgs 139-140, 322-323, 325, 346-347, 417-418	20' to 22' See RDM for other slope conditions
Clear Zone (1:6 Cut Slope)	RDM 7.01.10, 7.01.11 C, AASHTO 2.8.1, 3.6.4, 3.6.5, 4.6.1, 5.2.4, pgs 139-140, 322-323, 325, 346-347, 417-418	20' to 22' See RDM for other slope conditions
Vertical Alignment		
Minimum Grade	RDM 2.02.01, AASHTO pg 266	0.5% desired min (0.3% may be used)
Maximum Grade	RDM 2.02.01, AASHTO pg 266	4%
Maximum deflection without curve	RDM 3.03 C, AASHTO pg 276	1%
Stopping Sight Distance	RDM 3.03.02 C, AASHTO 3.2.2	425 ft
Passing Sight Distance	RDM 3.03.02 E, AASHTO pgs 155-156	800 ft
K-Value Crest	RDM 3.03.02, AASHTO 3.4.6 pgs 298-304	84
K-Value Sag	RDM 3.03.02, AASHTO 3.4.6 pgs 304-310	96
Structure Vertical Clearance (Route Classification Under Structure)	RDM 3.12 G, Appendix 3A, BDM 7.01.08, BDG 2.24.3-04, AASHTO pgs 417, 429, 440, 453, 462, 504, 527, 534, 792	16'-0", 16'-3"(Desired)

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Baker Job Number: 190215
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Checked By: Jeremy Curtis Date Checked: 07/12/2022

Roadway Design Criteria for Marshall Megasite Traffic Study

Horizontal Alignment		
Type of Alignment	Specify: Legal or Non-Legal	Non-Legal
Minimum Return Radius	GEO 650, AASHTO pgs 625-658	N/A
Minimum Radius	RDM 3.03.01 A, AASHTO pgs 175, 178, R-107H	833 ft
Maximum deflection without curve	RDM 3.03.01 A, AASHTO pgs 258-259	N/A
Minimum Length of Curve	RDM 3.03.01 B, STD Plan R 107, AASHTO pg 258	15 * Design Speed (min), 30 * Design Speed (Desirable)
Spirals Req'd - Y/N	STD Plan R 107, AASHTO pgs 206, 215-220	No
Intersection Sight Distance	RDM, 3.03.01, AASHTO pgs 650-677	555 ft

NOTES:
These guildlines and standards shall be considered as minimum criteria.

Reference Materials
1. AASHTO refers to the AASHTO's "A Policy on Geometric Design of Highways and Streets" - 2011 Edition
2. RDM Refers to the Michigan Road Desgin Manual
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5. BDM refers to the MDOT Bridge Design Manual
6. BDG refers to the MDOT Bridge Design Guidelines
7. GEO refers to MDOT Transporation Standard Geometric Design Guide

Appendix C: Detailed Cost Estimate

Appendix C Summary

Appendix C includes detailed cost estimates for the improvements identified as part of the study. These improvements have been separated into five different segments each with numbered sequences for order of work.

Page 3 is the Proposed Construction Sequencing Map which is color-coded for each Segment.

Pages 4-18 are the detailed cost estimates for each Segment/Number Stage.

Page 19 is the Summary of Total Cost.


N
5A
4C
4A
4B
4D
3B
3A
2D
2B
2C
2A
1A
1B
1C
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94
69
Michael Baker
INTERNATIONAL
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(FT)
500
CONCEPTUAL SITE MAP
MARSHALL MEGA SITE
12/07/2022

Segment 1 - Michigan Ave Extension and I-69 DDI

***Number B:** Build out M-96 to newly realigned boulevard from 15 Mile Road west to Marshall Mega Main Entrance. Build new M-96 connection.*

Pay Items				M-96 & 15 Mile	
Item	**Unit**	**Unit Price**	**10% Inflation**	**Quantity**	**Item Total**
Existing Pavement Removal	Syd	$ 12.50	$ 13.75	32637	$ 448,761.81
11" Concrete Pavement	Syd	$ 50.00	$ 55.00	53027	$ 2,916,503.33
11" Concrete Shoulder	Syd	$ 50.00	$ 55.00	12817	$ 704,941.11
Aggregate Base, (16 inch OGDC)	Syd	$ 20.00	$ 22.00	65844	$ 1,448,577.78
Aggregate Shoulder	Syd	$ 12.00	$ 13.20	4272	$ 56,395.29
Embankment	Cyd	$ 7.00	$ 7.70	85463	$ 658,067.24
Excavation	Cyd	$ 12.00	$ 13.20	85463	$ 1,128,115.27
Guardrail (Inc. Terminals)	Lft	$ 40.00	$ 44.00	0	$ -
Concrete Barrier	Lft	$ 300.00	$ 330.00	0	$ -
Concrete Curb	Lft	$ 30.00	$ 33.00	11850	$ 391,050.00
Existing Structure(s) Removal	Sft	$ 65.00	$ 71.50	0	$ -
Proposed Structure(s)	Sft	$ 330.00	$ 363.00	0	$ -
Structure Widening	Sft	$ 550.00	$ 605.00	0	$ -
Noisewall	Sft	$ 45.00	$ 49.50	0	$ -
Signal(s) - Box Span	LSUM		VARIES	1	$ 1,800,000.00
Large Culverts (Drain Relocation)	LSUM		VARIES	1	$ 500,000.00
Drainage, MOT, Signs, Striping (25%)	LSUM		VARIES	1	$ 1,938,102.96
Right-of-Way Impacts	LSUM		VARIES	0	$ -
			Total		**$11,990,514.78**
			25% Contingency		*$2,997,628.69*
			Total w/ Contingency		**$14,988,143.47**

Total	***$14,988,143.47***

Assumptions

4' and 8' Shoulders along ramps

8' Shoulders on local roads, boulevards

Matched existing shoulder widths for I-69 and I-94 mainline

All structure widening was 12'

Segment 1 - Michigan Ave Extension and I-69 DDI

Number C: *Widen existing M-96 bridges for DDI*

Pay Items				M-96	
Item	**Unit**	**Unit Price**	**10% Inflation**	**Quantity**	**Item Total**
Existing Pavement Removal	Syd	$ 12.50	$ 13.75	0	$ -
11" Concrete Pavement	Syd	$ 50.00	$ 55.00	0	$ -
11" Concrete Shoulder	Syd	$ 50.00	$ 55.00	0	$ -
Aggregate Base, (16 inch OGDC)	Syd	$ 20.00	$ 22.00	0	$ -
Aggregate Shoulder	Syd	$ 12.00	$ 13.20	0	$ -
Embankment	Cyd	$ 7.00	$ 7.70	0	$ -
Excavation	Cyd	$ 12.00	$ 13.20	0	$ -
Guardrail (Inc. Terminals)	Lft	$ 40.00	$ 44.00	0	$ -
Concrete Barrier	Lft	$ 300.00	$ 330.00	0	$ -
Concrete Curb	Lft	$ 30.00	$ 33.00	0	$ -
Existing Structure(s) Removal	Sft	$ 65.00	$ 71.50	0	$ -
Proposed Structure(s)	Sft	$ 330.00	$ 363.00	24464	$ 8,880,432.00
Structure Widening	Sft	$ 550.00	$ 605.00	0	$ -
Noisewall	Sft	$ 45.00	$ 49.50	0	$ -
Signal(s) - Box Span	LSUM		VARIES	1	$ -
Large Culverts (Drain Relocation)	LSUM		VARIES	1	$ -
Drainage, MOT, Signs, Striping (25%)	LSUM		VARIES	1	$ -
Right-of-Way Impacts	LSUM		VARIES	1	$ -
			Total		**$8,880,432.00**
			25% Contingency		*$2,220,108.00*
			Total w/ Contingency		**$11,100,540.00**

Total	***$11,100,540.00***

Assumptions

4' and 8' Shoulders along ramps

8' Shoulders on local roads, boulevards

Matched existing shoulder widths for I-69 and I-94 mainline

All structure widening was 12'

Segment 1 - Michigan Ave Extension and I-69 DDI

***Number D:** Build DDI at M-96 and I-69 and complete boulevard to 15 Mile Road*

Pay Items				I-69 & Ramps		M-96		Carpool Lot	
Item	**Unit**	**Unit Price**	**10% Inflation**	**Quantity**	**Item Total**	**Quantity**	**Item Total**	**Quantity**	**Item Total**
Existing Pavement Removal	Syd	$ 12.50	$ 13.75	33312	$ 458,044.58	21662	$ 297,850.97	5141	$ 70,691.81
11" Concrete Pavement	Syd	$ 50.00	$ 55.00	23244	$ 1,278,420.00	19012	$ 1,045,653.89	5141	$ 282,767.22
11" Concrete Shoulder	Syd	$ 50.00	$ 55.00	12757	$ 701,641.11	4892	$ 269,041.67	0	$ -
Aggregate Base, (16 inch OGDC)	Syd	$ 20.00	$ 22.00	36001	$ 792,024.44	23904	$ 525,878.22	5141	$ 113,106.89
Aggregate Shoulder	Syd	$ 12.00	$ 13.20	6379	$ 84,196.93	1631	$ 21,523.33	0	$ -
Sidewalk (4" Agg Base + 6" Conc)	Sft	$ 12.00	$ 13.20	0	$ -	31200	$ 411,840.00	0	$ -
Embankment	Cyd	$ 7.00	$ 7.70	36001	$ 277,208.56	34133	$ 262,824.96	5141	$ 39,587.41
Excavation	Cyd	$ 12.00	$ 13.20	36001	$ 475,214.67	34133	$ 450,557.07	5141	$ 67,864.13
Guardrail (Inc. Terminals)	Lft	$ 40.00	$ 44.00	0	$ -	0	$ -	0	$ -
Concrete Barrier	Lft	$ 300.00	$ 330.00	0	$ -	0	$ -	0	$ -
Concrete Curb	Lft	$ 30.00	$ 33.00	0	$ -	3700	$ 122,100.00	1000	$ 33,000.00
Existing Structure(s) Removal	Sft	$ 65.00	$ 71.50	0	$ -	0	$ -	0	$ -
Proposed Structure(s)	Sft	$ 330.00	$ 363.00	0	$ -	0	$ -	0	$ -
Structure Widening	Sft	$ 550.00	$ 605.00	0	$ -	0	$ -	0	$ -
Noisewall	Sft	$ 45.00	$ 49.50	0	$ -	0	$ -	0	$ -
Signal(s) - Box Span	LSUM		VARIES	0	$ -	1	$ 2,650,000.00	1	$ -
Large Culverts (Drain Relocation)	LSUM		VARIES	0	$ -	0	$ -	0	$ -
Drainage, MOT, Signs, Striping (25%)	LSUM		VARIES	1	$ 1,016,687.57	1	$ 851,817.53	1	$ 151,754.37
Right-of-Way Impacts	LSUM		VARIES	0	$ 100.00	0	$ -	0	$ 500,000.00
			Total		**$5,083,537.87**		**$6,909,087.63**		**$1,258,771.83**
			25% Contingency		*$1,270,884.47*		*$1,727,271.91*		*$314,692.96*
			Total w/ Contingency		**$6,354,422.34**		**$8,636,359.54**		**$1,573,464.78**

Total	***$16,564,246.66***

Assumptions

4' and 8' Shoulders along ramps

8' Shoulders on local roads, boulevards

Matched existing shoulder widths for I-69 and I-94 mainline

All structure widening was 12'

Segment 1 - Michigan Ave Extension and I-69 DDI

Number E: *Build ring road around Marshall Mega Site*

Pay Items				Ring Road - 3.5 Miles	
Item	**Unit**	**Unit Price**	**10% Inflation**	**Quantity**	**Item Total**
Existing Pavement Removal	Syd	$ 12.50	$ 13.75	0	$ -
11" Concrete Pavement	Syd	$ 50.00	$ 55.00	208110	$ 11,446,050.00
11" Concrete Shoulder	Syd	$ 50.00	$ 55.00	32853	$ 1,806,933.33
Aggregate Base, (16 inch OGDC)	Syd	$ 20.00	$ 22.00	240963	$ 5,301,193.33
Aggregate Shoulder	Syd	$ 12.00	$ 13.20	4107	$ 54,208.00
Embankment	Cyd	$ 7.00	$ 7.70	160642	$ 1,236,945.11
Excavation	Cyd	$ 12.00	$ 13.20	204496	$ 2,699,346.22
Guardrail (Inc. Terminals)	Lft	$ 40.00	$ 44.00	0	$ -
Concrete Barrier	Lft	$ 300.00	$ 330.00	0	$ -
Concrete Curb	Lft	$ 30.00	$ 33.00	36960	$ 1,219,680.00
Existing Structure(s) Removal	Sft	$ 65.00	$ 71.50	0	$ -
Proposed Structure(s)	Sft	$ 330.00	$ 363.00	0	$ -
Structure Widening	Sft	$ 550.00	$ 605.00	0	$ -
Noisewall	Sft	$ 45.00	$ 49.50	0	$ -
Signal(s) - Box Span	LSUM		VARIES	1	$ 750,000.00
Large Culverts (Drain Relocation)	LSUM		VARIES	0	$ -
Drainage, MOT, Signs, Striping (25%)	LSUM		VARIES	1	$ 5,941,089.00
Right-of-Way Impacts	LSUM		VARIES	0	$ -
				Total	**$30,455,445.00**
				25% Contingency	*$7,613,861.25*
				Total w/ Contingency	**$38,069,306.25**

Total	***$38,069,306.25***

Assumptions

4' and 8' Shoulders along ramps

8' Shoulders on local roads, boulevards

Matched existing shoulder widths for I-69 and I-94 mainline

All structure widening was 12'

Segment 2 - I-69 and I-94

***Number A:** Widen I-69 to 3-lanes between I-94 and M-96.*

Pay Items				I-69 NB		I-69 SB	
Item	**Unit**	**Unit Price**	**10% Inflation**	**Quantity**	**Item Total**	**Quantity**	**Item Total**
Existing Pavement Removal	Syd	$ 12.50	$ 13.75	17639	$ 242,531.67	25311	$ 348,021.67
11" Concrete Pavement	Syd	$ 50.00	$ 55.00	19719	$ 1,084,526.67	20100	$ 1,105,481.67
11" Concrete Shoulder	Syd	$ 50.00	$ 55.00	7599	$ 417,926.67	7294	$ 401,157.78
Aggregate Base, (16 inch OGDC)	Syd	$ 20.00	$ 22.00	27317	$ 600,981.33	27393	$ 602,655.78
Aggregate Shoulder	Syd	$ 12.00	$ 13.20	4283	$ 56,535.60	4076	$ 53,804.67
Embankment	Cyd	$ 7.00	$ 7.70	27317	$ 210,343.47	27393	$ 210,929.52
Excavation	Cyd	$ 12.00	$ 13.20	27317	$ 360,588.80	27393	$ 361,593.47
Guardrail (Inc. Terminals)	Lft	$ 40.00	$ 44.00	7973	$ 350,812.00	7989	$ 351,516.00
Concrete Barrier	Lft	$ 300.00	$ 330.00	0	$ -	0	$ -
Concrete Curb	Lft	$ 30.00	$ 33.00	0	$ -	0	$ -
Existing Structure(s) Removal	Sft	$ 65.00	$ 71.50	0	$ -	0	$ -
Proposed Structure(s)	Sft	$ 330.00	$ 363.00	0	$ -	0	$ -
Structure Widening	Sft	$ 550.00	$ 605.00	0	$ -	0	$ -
Noisewall	Sft	$ 45.00	$ 49.50	0	$ -	0	$ -
Signal(s) - Box Span	LSUM		VARIES	1	$ -	1	$ -
Large Culverts (Drain Relocation)	LSUM		VARIES	1	$ 500,000.00	1	$ 500,000.00
Drainage, MOT, Signs, Striping (25%)	LSUM		VARIES	1	$ 831,061.55	1	$ 858,790.14
Right-of-Way Impacts	LSUM		VARIES	1	$ -	1	$ -
			Total		**$4,655,307.75**		**$4,793,950.68**
			25% Contingency		*$1,163,826.94*		*$1,198,487.67*
			Total w/ Contingency		**$5,819,134.69**		**$5,992,438.35**

Total	***$11,811,573.04***

Assumptions

4' and 8' Shoulders along ramps

8' Shoulders on local roads, boulevards

Matched existing shoulder widths for I-69 and I-94 mainline

All structure widening was 12'

Segment 2 - I-69 and I-94

Number B: *Widen three slip ramps at the I-69 and I-94 interchange.*

Pay Items				Ramps	
Item	**Unit**	**Unit Price**	**10% Inflation**	**Quantity**	**Item Total**
Existing Pavement Removal	Syd	$ 12.50	$ 13.75	34813	$ 478,683.33
11" Concrete Pavement	Syd	$ 50.00	$ 55.00	29506	$ 1,622,811.67
11" Concrete Shoulder	Syd	$ 50.00	$ 55.00	17356	$ 954,573.89
Aggregate Base, (16 inch OGDC)	Syd	$ 20.00	$ 22.00	46862	$ 1,030,954.22
Aggregate Shoulder	Syd	$ 12.00	$ 13.20	8678	$ 114,548.87
Embankment	Cyd	$ 7.00	$ 7.70	46862	$ 360,833.98
Excavation	Cyd	$ 12.00	$ 13.20	46862	$ 618,572.53
Guardrail (Inc. Terminals)	Lft	$ 40.00	$ 44.00	0	$ -
Concrete Barrier	Lft	$ 300.00	$ 330.00	0	$ -
Concrete Curb	Lft	$ 30.00	$ 33.00	0	$ -
Existing Structure(s) Removal	Sft	$ 65.00	$ 71.50	0	$ -
Proposed Structure(s)	Sft	$ 330.00	$ 363.00	0	$ -
Structure Widening	Sft	$ 550.00	$ 605.00	0	$ -
Noisewall	Sft	$ 45.00	$ 49.50	0	$ -
Signal(s) - Box Span	LSUM		VARIES	0	$ -
Large Culverts (Drain Relocation)	LSUM		VARIES	0	$ -
Drainage, MOT, Signs, Striping (25%)	LSUM		VARIES	1	$ 1,295,244.62
Right-of-Way Impacts	LSUM		VARIES	0	$ -
			Total		**$6,476,223.11**
			25% Contingency		*$1,619,055.78*
			Total w/ Contingency		**$8,095,278.89**

Total	***$8,095,278.89***

Assumptions

4' and 8' Shoulders along ramps

8' Shoulders on local roads, boulevards

Matched existing shoulder widths for I-69 and I-94 mainline

All structure widening was 12'

Segment 2 - I-69 and I-94

Number C: *Build fly-over ramp for NB I-69 to WB I-94.*

Pay Items				Flyover Ramp	
Item	**Unit**	**Unit Price**	**10% Inflation**	**Quantity**	**Item Total**
Existing Pavement Removal	Syd	$ 12.50	$ 13.75	13904	$ 191,186.11
11" Concrete Pavement	Syd	$ 50.00	$ 55.00	17045	$ 937,456.67
11" Concrete Shoulder	Syd	$ 50.00	$ 55.00	10423	$ 573,289.44
Aggregate Base, (16 inch OGDC)	Syd	$ 20.00	$ 22.00	27468	$ 604,298.44
Aggregate Shoulder	Syd	$ 12.00	$ 13.20	5212	$ 68,794.73
Embankment	Cyd	$ 7.00	$ 7.70	27468	$ 211,504.46
Excavation	Cyd	$ 12.00	$ 13.20	27468	$ 362,579.07
Guardrail (Inc. Terminals)	Lft	$ 40.00	$ 44.00	600	$ 26,400.00
Concrete Barrier	Lft	$ 300.00	$ 330.00	0	$ -
Concrete Curb	Lft	$ 30.00	$ 33.00	0	$ -
Existing Structure(s) Removal	Sft	$ 65.00	$ 71.50	0	$ -
Proposed Structure(s)	Sft	$ 330.00	$ 363.00	32716	$ 11,875,908.00
Structure Widening	Sft	$ 550.00	$ 605.00	0	$ -
Noisewall	Sft	$ 45.00	$ 49.50	0	$ -
Signal(s) - Box Span	LSUM		VARIES	0	$ -
Large Culverts (Drain Relocation)	LSUM		VARIES	0	$ -
Drainage, MOT, Signs, Striping (25%)	LSUM		VARIES	1	$ 743,877.23
Right-of-Way Impacts	LSUM		VARIES	0	$ -
			Total		**$15,595,294.15**
			25% Contingency		*$3,898,823.54*
			Total w/ Contingency		**$19,494,117.69**

Total	***$19,494,117.69***

Assumptions

4' and 8' Shoulders along ramps

8' Shoulders on local roads, boulevards

Matched existing shoulder widths for I-69 and I-94 mainline

All structure widening was 12'

Segment 2 - I-69 and I-94

***Number D:** Reconstruct I-94 to 3-lanes between M-311 and I-69.*

Pay Items				Guardrail		Median Barrier	
Item	**Unit**	**Unit Price**	**10% Inflation**	**Quantity**	**Item Total**	**Quantity**	**Item Total**
Existing Pavement Removal	Syd	$ 12.50	$ 13.75	47030	$ 646,659.44	47030	$ 646,659.44
11" Concrete Pavement	Syd	$ 50.00	$ 55.00	206728	$ 11,370,040.00	206728	$ 11,370,040.00
11" Concrete Shoulder	Syd	$ 50.00	$ 55.00	90599	$ 4,982,945.00	139197	$ 7,655,841.11
Aggregate Base, (16 inch OGDC)	Syd	$ 20.00	$ 22.00	297327	$ 6,541,194.00	345925	$ 7,610,352.44
Aggregate Shoulder	Syd	$ 12.00	$ 13.20	34454	$ 454,792.80	11485	$ 151,602.00
Embankment	Cyd	$ 7.00	$ 7.70	297327	$ 2,289,417.90	345925	$ 2,663,623.36
Excavation	Cyd	$ 12.00	$ 13.20	297327	$ 3,924,716.40	345925	$ 4,566,211.47
Guardrail (Inc. Terminals)	Lft	$ 40.00	$ 44.00	53926	$ 2,372,744.00	2195	$ 96,580.00
Concrete Barrier	Lft	$ 300.00	$ 330.00	0	$ -	25841	$ 8,527,530.00
Concrete Curb	Lft	$ 30.00	$ 33.00	0	$ -	0	$ -
Existing Structure(s) Removal	Sft	$ 65.00	$ 71.50	0	$ -	0	$ -
Proposed Structure(s)	Sft	$ 330.00	$ 363.00	0	$ -	0	$ -
Structure Widening	Sft	$ 550.00	$ 605.00	0	$ -	0	$ -
Noisewall	Sft	$ 45.00	$ 49.50	0	$ -	0	$ -
Signal(s) - Box Span	LSUM		VARIES	0	$ -	0	$ -
Large Culverts (Drain Relocation)	LSUM		VARIES	1	$ 500,000.00	1	$ 500,000.00
Drainage, MOT, Signs, Striping (25%)	LSUM		VARIES	1	$ 8,145,627.39	1	$ 10,822,109.96
Right-of-Way Impacts	LSUM		VARIES	0	$ -	0	$ -
			Total		**$41,228,136.93**		**$54,610,549.78**
			25% Contingency		*$10,307,034.23*		*$13,652,637.44*
			Total w/ Contingency		**$51,535,171.16**		**$68,263,187.22**

Assumptions

4' and 8' Shoulders along ramps

8' Shoulders on local roads, boulevards

Matched existing shoulder widths for I-69 and I-94 mainline

All structure widening was 12'

Segment 3 - Michigan Ave Widening

Number A: *Build EB M-96 into a boulevard section from M-96/Marshall Mega Main Entrance to Firekeepers Casino.*

Pay Items				Michigan Ave - Boulevard	
Item	**Unit**	**Unit Price**	**10% Inflation**	**Quantity**	**Item Total**
Existing Pavement Removal	Syd	$ 12.50	$ 13.75	0	$ -
11" Concrete Pavement	Syd	$ 50.00	$ 55.00	64834	$ 3,565,888.33
11" Concrete Shoulder	Syd	$ 50.00	$ 55.00	26261	$ 1,444,330.56
Aggregate Base, (16 inch OGDC)	Syd	$ 20.00	$ 22.00	91095	$ 2,004,087.56
Aggregate Shoulder	Syd	$ 12.00	$ 13.20	13130	$ 173,319.67
Embankment	Cyd	$ 7.00	$ 7.70	153133	$ 1,179,126.67
Excavation	Cyd	$ 12.00	$ 13.20	153133	$ 2,021,360.00
Guardrail (Inc. Terminals)	Lft	$ 40.00	$ 44.00	0	$ -
Concrete Barrier	Lft	$ 300.00	$ 330.00	0	$ -
Concrete Curb	Lft	$ 30.00	$ 33.00	11923	$ 393,442.50
Existing Structure(s) Removal	Sft	$ 65.00	$ 71.50	0	$ -
Proposed Structure(s)	Sft	$ 330.00	$ 363.00	0	$ -
Structure Widening	Sft	$ 550.00	$ 605.00	0	$ -
Noisewall	Sft	$ 45.00	$ 49.50	0	$ -
Signal(s) - Box Span	LSUM		VARIES	1	$ 750,000.00
Large Culverts (Drain Relocation)	LSUM		VARIES	1	$ 1,000,000.00
Drainage, MOT, Signs, Striping (25%)	LSUM		VARIES	1	$ 2,695,388.82
Right-of-Way Impacts	LSUM		VARIES	0	$ -
			Total		**$15,226,944.10**
			25% Contingency		*$3,806,736.02*
			Total w/ Contingency		**$19,033,680.12**

Total	***$19,033,680.12***

Assumptions

4' and 8' Shoulders along ramps

8' Shoulders on local roads, boulevards

Matched existing shoulder widths for I-69 and I-94 mainline

All structure widening was 12'

Assumed 70' wide medians and 36' wide cross overs to accomdate trucks

Segment 3 - Michigan Ave Widening							
Number B: *Build WB M-96 into a boulevard section from M-96/Marshall Mega Main Entrance to Firekeepers Casino.*							
Pay Items				**Michigan Ave - Boulevard**		**Old Michigan Ave**	
Item	**Unit**	**Unit Price**	**10% Inflation**	**Quantity**	**Item Total**	**Quantity**	**Item Total**
Existing Pavement Removal	Syd	$ 12.50	$ 13.75	56697	$ 779,579.17	16353	$ 224,855.28
11" Concrete Pavement	Syd	$ 50.00	$ 55.00	64834	$ 3,565,888.33	7337	$ 403,541.11
11" Concrete Shoulder	Syd	$ 50.00	$ 55.00	26261	$ 1,444,330.56	4407	$ 242,409.44
Aggregate Base, (16 inch OGDC)	Syd	$ 20.00	$ 22.00	91095	$ 2,004,087.56	11745	$ 258,380.22
Aggregate Shoulder	Syd	$ 12.00	$ 13.20	13130	$ 173,319.67	2204	$ 29,089.13
Embankment	Cyd	$ 7.00	$ 7.70	153133	$ 1,179,126.67	11745	$ 90,433.08
Excavation	Cyd	$ 12.00	$ 13.20	153133	$ 2,021,360.00	11745	$ 155,028.13
Guardrail (Inc. Terminals)	Lft	$ 40.00	$ 44.00	0	$ -	0	$ -
Concrete Barrier	Lft	$ 300.00	$ 330.00	0	$ -	0	$ -
Concrete Curb	Lft	$ 30.00	$ 33.00	11923	$ 393,442.50	1110	$ 36,630.00
Existing Structure(s) Removal	Sft	$ 65.00	$ 71.50	0	$ -	0	$ -
Proposed Structure(s)	Sft	$ 330.00	$ 363.00	0	$ -	0	$ -
Structure Widening	Sft	$ 550.00	$ 605.00	0	$ -	0	$ -
Noisewall	Sft	$ 45.00	$ 49.50	0	$ -	0	$ -
Signal(s) - Box Span	LSUM		VARIES	1	$ 250,000.00	0	$ -
Large Culverts (Drain Relocation)	LSUM		VARIES	1	$ 1,000,000.00	0	$ -
Drainage, MOT, Signs, Striping (25%)	LSUM		VARIES	1	$ 2,890,283.61	1	$ 360,091.60
Right-of-Way Impacts	LSUM		VARIES	0	$ -	0	$ -
			Total		**$15,701,418.06**		**$1,800,458.00**
			25% Contingency		*$3,925,354.51*		*$450,114.50*
			Total w/ Contingency		**$19,626,772.57**		**$2,250,572.50**

Total	***$21,877,345.07***

Assumptions

4' and 8' Shoulders along ramps

8' Shoulders on local roads, boulevards

Matched existing shoulder widths for I-69 and I-94 mainline

All structure widening was 12'

Assumed 70' wide medians and 36' wide cross overs to accomdate trucks

Segment 4 - M-311 and I-94 ***Number A:*** *Build DDI bridges offline and remove existing bridges.*									
Pay Items				**M-311 (New)**		**M-311 (Old)**		**M-96**	
Item	**Unit**	**Unit Price**	**10% Inflation**	**Quantity**	**Item Total**	**Quantity**	**Item Total**	**Quantity**	**Item Total**
Existing Pavement Removal	Syd	$ 12.50	$ 13.75	0	$ -	0	$ -	0	$ -
11" Concrete Pavement	Syd	$ 50.00	$ 55.00	0	$ -	0	$ -	0	$ -
11" Concrete Shoulder	Syd	$ 50.00	$ 55.00	0	$ -	0	$ -	0	$ -
Aggregate Base, (16 inch OGDC)	Syd	$ 20.00	$ 22.00	0	$ -	0	$ -	0	$ -
Aggregate Shoulder	Syd	$ 12.00	$ 13.20	0	$ -	0	$ -	0	$ -
Embankment	Cyd	$ 7.00	$ 7.70	0	$ -	0	$ -	0	$ -
Excavation	Cyd	$ 12.00	$ 13.20	0	$ -	0	$ -	0	$ -
Guardrail (Inc. Terminals)	Lft	$ 40.00	$ 44.00	0	$ -	0	$ -	0	$ -
Concrete Barrier	Lft	$ 300.00	$ 330.00	0	$ -	0	$ -	0	$ -
Concrete Curb	Lft	$ 30.00	$ 33.00	0	$ -	0	$ -	0	$ -
Existing Structure(s) Removal	Sft	$ 65.00	$ 71.50	0	$ -	13832	$ 988,988.00	27106	$ 1,938,079.00
Proposed Structure(s)	Sft	$ 330.00	$ 363.00	42155	$ 15,302,265.00	0	$ -	0	$ -
Structure Widening	Sft	$ 550.00	$ 605.00	0	$ -	0	$ -	0	$ -
Noisewall	Sft	$ 45.00	$ 49.50	0	$ -	0	$ -	0	$ -
Signal(s) - Box Span	LSUM		VARIES	0	$ -	0	$ -	0	$ -
Large Culverts (Drain Relocation)	LSUM		VARIES	0	$ -	0	$ -	0	$ -
Drainage, MOT, Signs, Striping (25%)	LSUM		VARIES	0	$ -	0	$ -	0	$ -
Right-of-Way Impacts	LSUM		VARIES	0	$ -	0	$ -	0	$ -
			Total		**$15,302,265.00**		**$988,988.00**		**$1,938,079.00**
			25% Contingency		*$3,825,566.25*		*$247,247.00*		*$484,519.75*
			Total w/ Contingency		**$19,127,831.25**		**$1,236,235.00**		**$2,422,598.75**

Total	***$22,786,665.00***

Assumptions

4' and 8' Shoulders along ramps

8' Shoulders on local roads, boulevards

Matched existing shoulder widths for I-69 and I-94 mainline

All structure widening was 12'

Segment 4 - M-311 and I-94

Number B: *Build southern half of DDI interchange.*

Pay Items				I-94 & Ramps		M-311		M-96 & Access Rd	
Item	**Unit**	**Unit Price**	**10% Inflation**	**Quantity**	**Item Total**	**Quantity**	**Item Total**	**Quantity**	**Item Total**
Existing Pavement Removal	Syd	$ 12.50	$ 13.75	19238	$ 264,519.44	17672	$ 242,985.42	19610	$ 269,639.03
11" Concrete Pavement	Syd	$ 50.00	$ 55.00	10624	$ 584,326.11	32194	$ 1,770,657.78	13896	$ 764,304.44
11" Concrete Shoulder	Syd	$ 50.00	$ 55.00	7574	$ 416,545.56	7137	$ 392,522.78	5879	$ 323,336.85
Aggregate Base, (16 inch OGDC)	Syd	$ 20.00	$ 22.00	18198	$ 400,348.67	39331	$ 865,272.22	19775	$ 435,056.52
Aggregate Shoulder	Syd	$ 12.00	$ 13.20	3787	$ 49,985.47	3568	$ 47,102.73	2939	$ 38,800.42
Embankment	Cyd	$ 7.00	$ 7.70	18198	$ 140,122.03	47194	$ 363,393.37	28869	$ 222,291.87
Excavation	Cyd	$ 12.00	$ 13.20	18198	$ 240,209.20	47194	$ 622,960.07	28869	$ 381,071.78
Guardrail (Inc. Terminals)	Lft	$ 40.00	$ 44.00	0	$ -	0	$ -	0	$ -
Concrete Barrier	Lft	$ 300.00	$ 330.00	0	$ -	0	$ -	0	$ -
Concrete Curb	Lft	$ 30.00	$ 33.00	0	$ -	2775	$ 91,575.00	5150	$ 169,950.00
Existing Structure(s) Removal	Sft	$ 65.00	$ 71.50	0	$ -	0	$ -	0	$ -
Proposed Structure(s)	Sft	$ 330.00	$ 363.00	0	$ -	0	$ -	0	$ -
Structure Widening	Sft	$ 550.00	$ 605.00	0	$ -	0	$ -	0	$ -
Noisewall	Sft	$ 45.00	$ 49.50	0	$ -	0	$ -	0	$ -
Signal(s) - Box Span	LSUM		VARIES	0	$ -	1	$ 1,950,000.00	0	$ -
Large Culverts (Drain Relocation)	LSUM		VARIES	0	$ -	0	$ -	0	$ -
Drainage, MOT, Signs, Striping (25%)	LSUM		VARIES	1	$ 524,014.12	1	$ 1,099,117.34	1	$ 651,112.73
Right-of-Way Impacts	LSUM		VARIES	0	$ -	0	$ -	0	$ -
			Total		**$2,620,070.60**		**$7,445,586.71**		**$3,255,563.64**
			25% Contingency		*$655,017.65*		*$1,861,396.68*		*$813,890.91*
			Total w/ Contingency		**$3,275,088.25**		**$9,306,983.39**		**$4,069,454.55**

Total	***$16,651,526.18***

Assumptions

4' and 8' Shoulders along ramps

8' Shoulders on local roads, boulevards

Matched existing shoulder widths for I-69 and I-94 mainline

All structure widening was 12'

Segment 4 - M-311 and I-94

Number C: *Build northern half of DDI interchange.*

Pay Items				I-94 & Ramps		M-96		11 Mile & Truck Access Rd	
Item	**Unit**	**Unit Price**	**10% Inflation**	**Quantity**	**Item Total**	**Quantity**	**Item Total**	**Quantity**	**Item Total**
Existing Pavement Removal	Syd	$ 12.50	$ 13.75	16183	$ 222,520.83	20748	$ 285,286.53	8029	$ 110,403.33
11" Concrete Pavement	Syd	$ 50.00	$ 55.00	11322	$ 622,710.00	26382	$ 1,451,010.00	12771	$ 702,398.89
11" Concrete Shoulder	Syd	$ 50.00	$ 55.00	7402	$ 407,091.67	8599	$ 472,945.00	7448	$ 409,658.33
Aggregate Base, (16 inch OGDC)	Syd	$ 20.00	$ 22.00	18724	$ 411,920.67	34981	$ 769,582.00	20219	$ 444,822.89
Aggregate Shoulder	Syd	$ 12.00	$ 13.20	3701	$ 48,851.00	4300	$ 56,753.40	3724	$ 49,159.00
Embankment	Cyd	$ 7.00	$ 7.70	18724	$ 144,172.23	42457	$ 326,920.61	20219	$ 155,688.01
Excavation	Cyd	$ 12.00	$ 13.20	18724	$ 247,152.40	42457	$ 560,435.33	20219	$ 266,893.73
Guardrail (Inc. Terminals)	Lft	$ 40.00	$ 44.00	0	$ -	0	$ -	0	$ -
Concrete Barrier	Lft	$ 300.00	$ 330.00	0	$ -	0	$ -	0	$ -
Concrete Curb	Lft	$ 30.00	$ 33.00	0	$ -	4630	$ 152,790.00	0	$ -
Existing Structure(s) Removal	Sft	$ 65.00	$ 71.50	0	$ -	0	$ -	0	$ -
Proposed Structure(s)	Sft	$ 330.00	$ 363.00	0	$ -	0	$ -	0	$ -
Structure Widening	Sft	$ 550.00	$ 605.00	0	$ -	0	$ -	0	$ -
Noisewall	Sft	$ 45.00	$ 49.50	0	$ -	0	$ -	0	$ -
Signal(s) - Box Span	LSUM		VARIES	0	$ -	1	$ 1,750,000.00	1	$ 400,000.00
Large Culverts (Drain Relocation)	LSUM		VARIES	0	$ 1,000,000.00	0	$ -	0	$ -
Drainage, MOT, Signs, Striping (25%)	LSUM		VARIES	1	$ 526,104.70	1	$ 1,018,930.72	1	$ 534,756.05
Right-of-Way Impacts	LSUM		VARIES	0	$ -	0	$ -	0	$ -
			Total		**$3,630,523.50**		**$6,844,653.59**		**$3,073,780.24**
			25% Contingency		*$907,630.88*		*$1,711,163.40*		*$768,445.06*
			Total w/ Contingency		**$4,538,154.38**		**$8,555,816.99**		**$3,842,225.30**

Total	***$16,936,196.66***

Assumptions

4' and 8' Shoulders along ramps

8' Shoulders on local roads, boulevards

Matched existing shoulder widths for I-69 and I-94 mainline

All structure widening was 12'

Segment 4 - M-311 and I-94

Number D: *Widen out local roads at 11 Mile and I-94 to accommodate DDI and S2 traffic.*

Pay Items				M-311	
Item	**Unit**	**Unit Price**	**10% Inflation**	**Quantity**	**Item Total**
Existing Pavement Removal	Syd	$ 12.50	$ 13.75	20360	$ 279,948.47
11" Concrete Pavement	Syd	$ 50.00	$ 55.00	19345	$ 1,063,999.44
11" Concrete Shoulder	Syd	$ 50.00	$ 55.00	5390	$ 296,425.56
Aggregate Base, (16 inch OGDC)	Syd	$ 20.00	$ 22.00	24735	$ 544,170.00
Aggregate Shoulder	Syd	$ 12.00	$ 13.20	2695	$ 35,571.07
Embankment	Cyd	$ 7.00	$ 7.70	24735	$ 190,459.50
Excavation	Cyd	$ 12.00	$ 13.20	24735	$ 326,502.00
Guardrail (Inc. Terminals)	Lft	$ 40.00	$ 44.00	0	$ -
Concrete Barrier	Lft	$ 300.00	$ 330.00	0	$ -
Concrete Curb	Lft	$ 30.00	$ 33.00	500	$ 16,500.00
Existing Structure(s) Removal	Sft	$ 65.00	$ 71.50	0	$ -
Proposed Structure(s)	Sft	$ 330.00	$ 363.00	0	$ -
Structure Widening	Sft	$ 550.00	$ 605.00	0	$ -
Noisewall	Sft	$ 45.00	$ 49.50	0	$ -
Signal(s) - Box Span	LSUM		VARIES	1	$ 1,200,000.00
Large Culverts (Drain Relocation)	LSUM		VARIES	0	$ -
Drainage, MOT, Signs, Striping (25%)	LSUM		VARIES	1	$ 688,394.01
Right-of-Way Impacts	LSUM		VARIES	0	$ -
			Total		**$4,641,970.05**
			25% Contingency		*$1,160,492.51*
			Total w/ Contingency		**$5,802,462.56**

Total	***$5,802,462.56***

Assumptions

4' and 8' Shoulders along ramps

8' Shoulders on local roads, boulevards

Matched existing shoulder widths for I-69 and I-94 mainline

All structure widening was 12'

Segment 5 - Regional Work

***Number A:** Reconstruct I-94 to 3-lanes between I-194 and M-311 DDI.*

Pay Items					Guardrail			Median Barrier		
Item	**Unit**	**Unit Price**		**10% Inflation**	**Quantity**	**Item Total**		**Quantity**	**Item Total**	
Existing Pavement Removal	Syd	$	12.50	$ 13.75	44874	$	617,017.50	44874	$	617,017.50
11" Concrete Pavement	Syd	$	50.00	$ 55.00	254400	$	13,992,000.00	254400	$	13,992,000.00
11" Concrete Shoulder	Syd	$	50.00	$ 55.00	113067	$	6,218,685.00	169600	$	9,328,000.00
Aggregate Base, (16 inch OGDC)	Syd	$	20.00	$ 22.00	367467	$	8,084,274.00	424000	$	9,328,000.00
Aggregate Shoulder	Syd	$	12.00	$ 13.20	37689	$	497,494.80	18302	$	241,589.33
Embankment	Cyd	$	7.00	$ 7.70	412341	$	3,175,025.70	468874	$	3,610,329.80
Excavation	Cyd	$	12.00	$ 13.20	412341	$	5,442,901.20	468874	$	6,189,136.80
Guardrail (Inc. Terminals)	Lft	$	40.00	$ 44.00	50134	$	2,205,896.00	2450	$	107,800.00
Concrete Barrier	Lft	$	300.00	$ 330.00	0	$	-	31800	$	10,494,000.00
Concrete Curb	Lft	$	30.00	$ 33.00	0	$	-	0	$	-
Existing Structure(s) Removal	Sft	$	65.00	$ 71.50	0	$	-	0	$	-
Proposed Structure(s)	Sft	$	330.00	$ 363.00	0	$	-	0	$	-
Structure Widening	Sft	$	550.00	$ 605.00	13410	$	8,113,050.00	13410	$	8,113,050.00
Noisewall	Sft	$	45.00	$ 49.50	0	$	-	0	$	-
Signal(s) - Box Span	LSUM			VARIES	0	$	-	0	$	-
Large Culverts (Drain Relocation)	LSUM			VARIES	1	$	1,000,000.00	1	$	1,000,000.00
Drainage, MOT, Signs, Striping (25%)	LSUM			VARIES	1	$	10,058,323.55	1	$	13,476,968.36
Right-of-Way Impacts	LSUM			VARIES	0	$	-	0	$	-
				Total			**$59,404,667.75**			**$76,497,891.79**
				25% Contingency			*$14,851,166.94*			*$19,124,472.95*
				Total w/ Contingency			**$74,255,834.69**			**$95,522,364.74**

Assumptions

4' and 8' Shoulders along ramps

8' Shoulders on local roads, boulevards

Matched existing shoulder widths for I-69 and I-94 mainline

All structure widening was 12'

Marshall Mega Site - Summary of Total Cost

Segment 1			Segment 2		Segment 3		Segment 4		Segment 5	
Number	Total	Total	Number	Total	Number	Total	Number	Total	Number	Total
A	$ 1,000,000.00	$1 M **	A	$12 M	A	$19 M	A	$23 M	A	$95.5 M *
B	$ 14,988,143.47	$15 M	B	$8 M	B	$22 M	B	$16.5 M		
C	$ 11,100,540.00	$11 M	C	$19 M			C	$17 M		
D	$ 16,564,246.66	$16.0 M	D	$68 M			D	$6 M		
E	$ 38,069,306.25	$38 M *								
Total	**$81,722,236.38**	**$43,000,000**	**Total**	**$107,000,000**	**Total**	**$41,000,000**	**Total**	**$62,500,000**	**Total**	**$95,500,000**

Total	***$253,500,000***

** Total cost does not include 1E and 5A. Stage 1E cost was developed for an on-site improvement. Stage 5A cost was developed for consideration for regional improvements on I-94 west of the study improvements.*

*** Total cost for 1A includes signal and roadway preparation for construction access. Individual cost breakdowns are not provided.*

Appendix E: Crash Analysis Data

1.0 Crash Analysis

A crash analysis of the study area was performed for a five-year period ranging from January 1, 2016 to December 31, 2020. Crashes were obtained from Michigan Traffic Crash Facts (michigantrafficcrashfacts.org) for the following segments:

- I-94 East from mile marker (MM) 99 to MM 113
- I-94 West from MM 113 to MM 99
- I-69 North from MM 35 to MM 40
- I-69 South from MM 40 to MM 35
- M-96 (Michigan Avenue) from west of Wheatfield Parkway to east of West Drive
- I-94 at M-294 (Beadle Lake Road), Exit 100 Interchange
- I-94 at M-96/M-311 (11 Mile Road), Exit 104 Interchange
- I-94/I-69 Interchange
- I-94 at Old US-27, Exit 110 Interchange
- I-94 at I-94BL (Partello Rd), Exit 112 Interchange

At the time the crash data was pulled the 2021 crash data was not available. Additionally, crash data from 2021 has presented anomalies due to the COVID-19 pandemic. Links for each of the data sets are presented in **Appendix E.1**. The findings of the crash analysis of each segment mentioned above are described below.

1.1 I-94 East from MM 99 to MM 113

Crash data were analyzed considering the type of crash, crash characteristics, and time of day. The summary of the findings is discussed below.

1.1.1 Crash Types

There were 562 crashes during the analysis period, of which 61.7% (347 total) were single motor vehicle crashes, 18.3% (103 total) were rear-end collisions, and 13.2% (74 total) were sideswipe - same direction crashes. The remainder of the crashes consisted of angle, head-on, rear-end-left turn, unknown, and other crashes. Crash types are summarized in **Figure 1**.

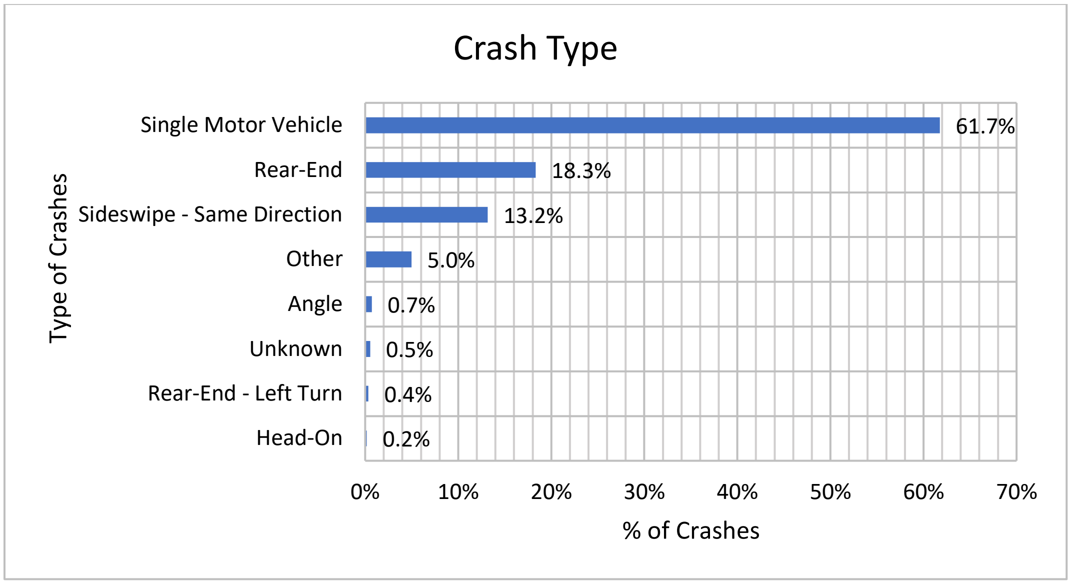


Figure 1: Crash Type along I-94 East from MM 99 to MM 113

1.1.2 Crash Characteristics

79 crashes (14.1%) of the 562 crashes resulted in injury. Two (2) crashes resulted in fatal (Type K) injuries and 7 crashes resulted in Suspected Serious (Type A) injuries. Fatal and Type A crashes represent approximately 1.6% of all crashes during the period and approximately 11.4% of all crashes that resulted in injury. A breakdown of crashes by severity is shown in **Figure 2**.

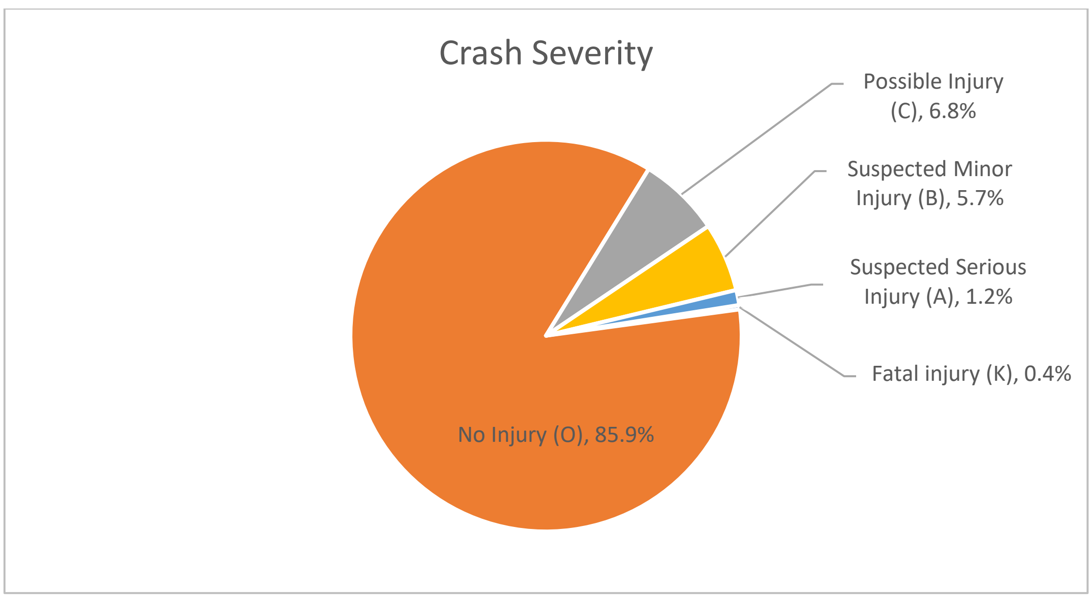


Figure 2: Crash Severity along I-94 East from MM 99 to MM 113

For additional context, UD-10s were reviewed for the K and A injury crashes. This information helped to ascertain some of the contributing factors to these types of crashes. The following summarizes the narrative for the 9 injury crashes reported.

- Rear-end crash on I-94 eastbound (EB) approach 100 feet east of 15 Mile Road involving careless driving, approximately 02:14 AM on 4/22/2016, Fatal Injury (Type K), Dark and Dry conditions.
- Angle crash on I-94 EB approach 80 feet west of 15 Mile Road involving careless driving, approximately 19:50 PM on 03/08/2019, Fatal Injury (Type K), Dark and Dry conditions.
- Single motor vehicle crash on I-94 EB approach 400 feet west of the Beadle Lake Road involving speed too fast driving, approximately 03:15 AM on 12/26/2017, Suspected Serious Injury (Type A), Dark and Snowy conditions.
- Angle crash on I-94 EB approach 100 feet east of the Beadle Lake Road involving speed too fast driving, approximately 11:25 AM on 01/15/2018, Suspected Serious Injury (Type A), Daylight and Snowy conditions.
- Other crash on I-94 EB approach 2,640 feet east of the I-69 interchange involving careless driving, approximately 04:00 AM on 05/29/2018, Suspected Serious Injury (Type A), Dark and Dry conditions.
- Rear-end-left-turn crash on I-94 EB approach 3,000 feet east of 11 Mile Road involving improper lane use driving, approximately 14:40 PM on 11/24/2018, Suspected Serious Injury (Type A), Daylight and Dry conditions.
- Sideswipe-same direction crash on I-94 EB approach 1,129 feet east of 9 Mile Road involving careless driving, approximately 18:56 PM on 12/31/2018, Suspected Serious Injury (Type A), Dark and Wet conditions.
- Single motor vehicle crash on I-94 EB approach 1,172 feet east of the Ramp 100B involving speed too fast driving, approximately 08:10 AM on 08/06/2019, Suspected Serious Injury (Type A), Daylight and Wet conditions.
- Single motor vehicle crash on I-94 EB approach 500 feet west of the Beadle Lake Road involving careless driving, approximately 15:45 PM on 10/08/2019, Suspected Serious Injury (Type A), Daylight and Dry conditions.

1.1.3 Crashes by time of day

Crashes by the time of day are displayed in **Figure 3**. The general time of day trends, which include the highest proportion of crashes occurring around PM peak hours. There is a peak from 9:00 – 10:00pm which could indicate a problem with unlit crashes along the corridor.

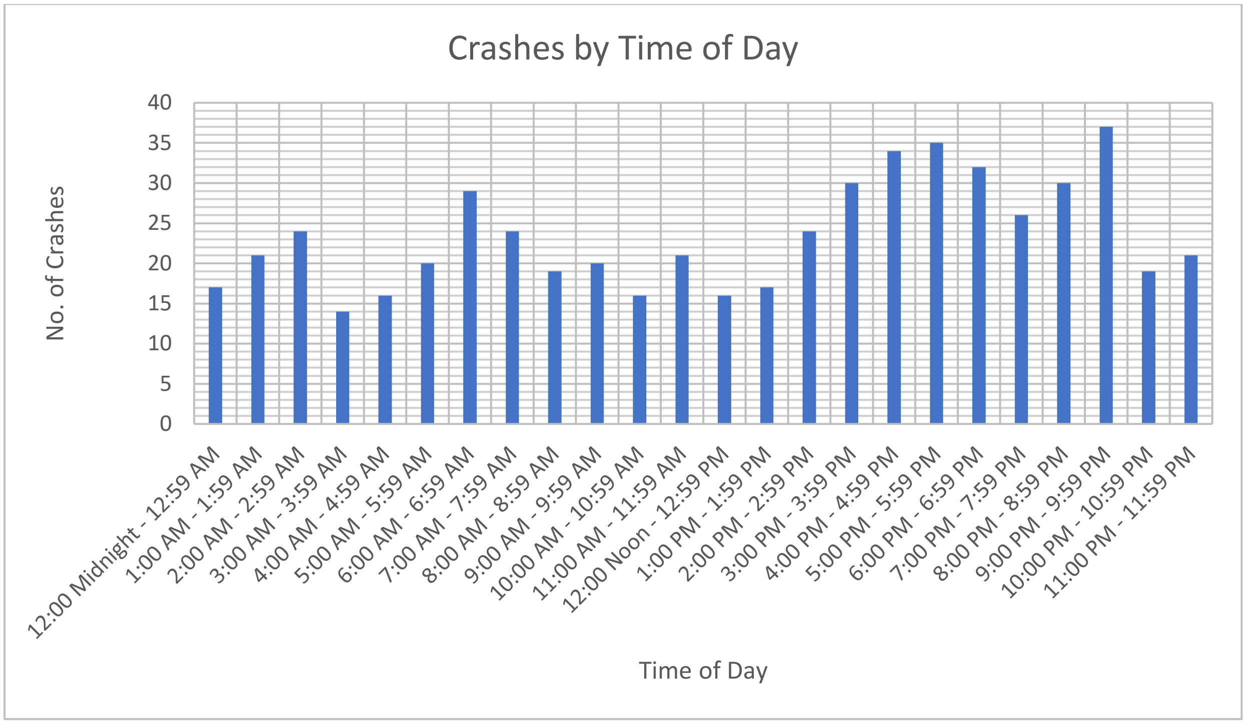


Figure 3: Crashes by Time of Day along I-94 East from MM 99 to MM 113

1.2 I-94 West from MM 113 to MM 99

Crash data were analyzed considering the type of crash, crash characteristics, and time of day. The summary of the findings is discussed below.

1.2.1 Crash Types

There were 458 crashes during the analysis period, of which 62.2% (285 total) were single motor vehicle crashes, 20.1% (92 total) were rear-end collisions, and 12.9% (59 total) were sideswipe - same direction crashes. The remainder of the crashes consisted of sideswipe – opposite direction, head-on, rear-end-left turn, unknown, and other crashes. Crash types are summarized in **Figure 4**.

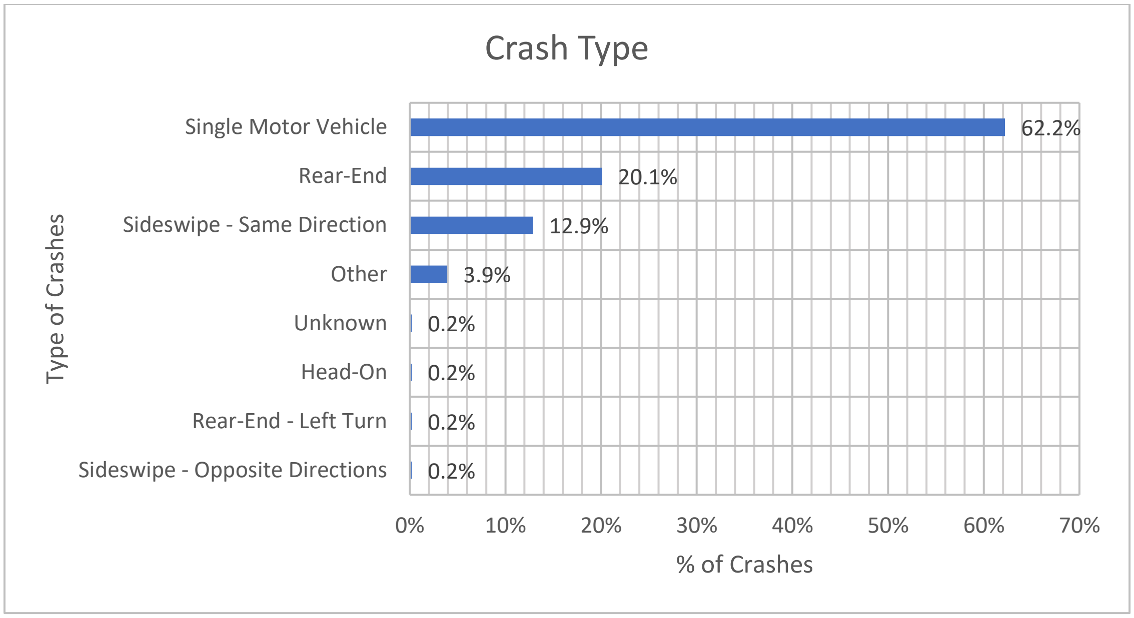


Figure 4: Crash Type along I-94 West from MM 113 to MM 99

1.2.2 Crash Characteristics

64 crashes (14%) of the 458 crashes resulted in injury. One (1) crash resulted in fatal (Type K) injuries and 8 crashes resulted in Type A injuries. Fatal and Type A crashes represent approximately 1.9% of all crashes during the period and approximately 14% of all crashes that resulted in injury. A breakdown of crashes by severity is shown in **Figure 5**.

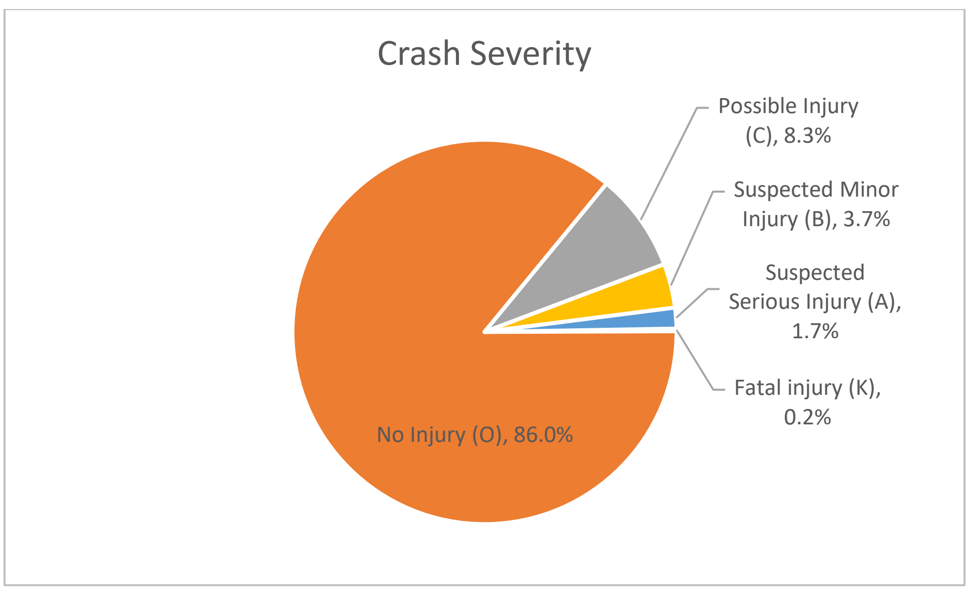


Figure 5: Crash Severity along I-94 West from MM 113 to MM 99

For additional context, UD-10s were reviewed for the K and A injury crashes. This information helped to ascertain some of the contributing factors to these types of crashes. The following summarizes the narrative for the 9 injury crashes reported.

- Rear-end crash on I-94 westbound (WB) approach 10 feet ER of M-96 (Michigan Avenue), Approximately 00:58 AM on 01/17/2019, Fatal Injury (Type K), Dark and Dry conditions.
- Single Motor Vehicle crash on I-94 WB approach 2,640 feet west of 15 Mile Road involving careless driving, approximately 12:30 PM on 09/03/2017, Suspected Serious Injury (Type A), Daylight and Dry conditions.
- Single Motor Vehicle crash on I-94 WB approach 1,320 feet east of 18 1/2 Mile Road involving speed too fast driving, approximately 06:40 AM on 02/26/2017, Suspected Serious Injury (Type A), Dawn and Dry conditions.
- Other crash on I-94 WB approach 2,640 feet east of Beadle Lake Road involving speed too fast driving, approximately 15:30 PM on 01/03/2018, Suspected Serious Injury (Type A), Daylight and Snowy conditions.
- Rear-end crash on I-94 WB approach 1.0 mile east of 11 Mile Road involving unable to stop driving, approximately 22:23 PM on 10/29/2019, Suspected Serious Injury (Type A), Dark and Dry conditions.
- Single Motor Vehicle on I-94 WB approach 1,000 feet east of US Old 27 Hwy involving careless driving, approximately 16:10 PM on 11/26/2019, Suspected Serious Injury (Type A), Daylight and Dry conditions.
- Other crash on I-94 WB approach 1,584 feet west of F Drive, approximately 17:30 PM on 12/01/2019, Suspected Serious Injury (Type A), Dark and Wet conditions.
- Other crash on I-94 WB approach 1.0 mile west of 11 Mile Road involving careless driving, approximately 18:20 PM on 10/03/2020, Suspected Serious Injury (Type A), Daylight and Dry conditions.
- Other crash on I-94 WB approach 1.0 mile east of 11 Mile Road, approximately 21:01 PM on 10/18/2020, Suspected Serious Injury (Type A), Dark and Dry conditions.

1.2.3 Crashes by time of day

Crashes by the time of day are displayed in **Figure 6**. The general time of day trends, which include the highest proportion of crashes occur around PM peak hours.

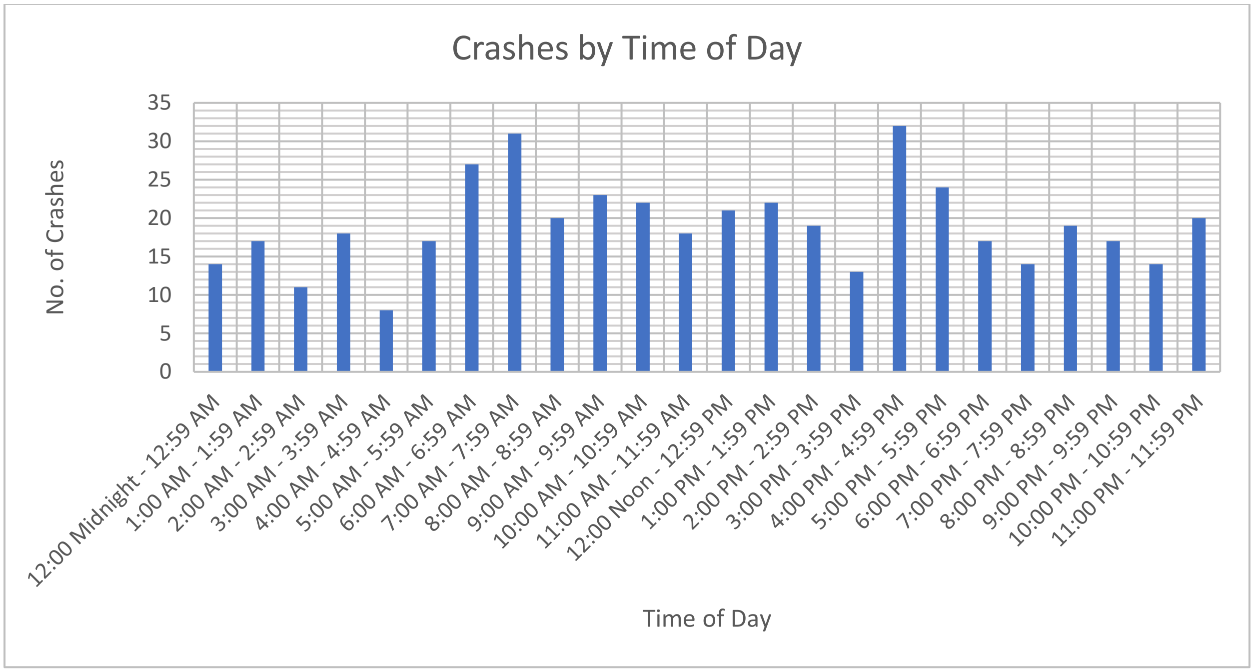


Figure 6: Crashes by Time of Day along I-94 West from MM 113 to MM 99

1.3 I-69 North from MM 35 to MM 40

Crash data were analyzed considering the type of crash, crash characteristics, and time of day. The summary of the findings is discussed below.

1.3.1 Crash Types

There were 102 crashes during the analysis period, of which 77.5% (79 total) were single motor vehicle crashes, and 13.7% (14 total) were sideswipe - same direction crashes. The remainder of the crashes consisted of rear-end collisions and other crashes. Crash types are summarized in **Figure 7**.

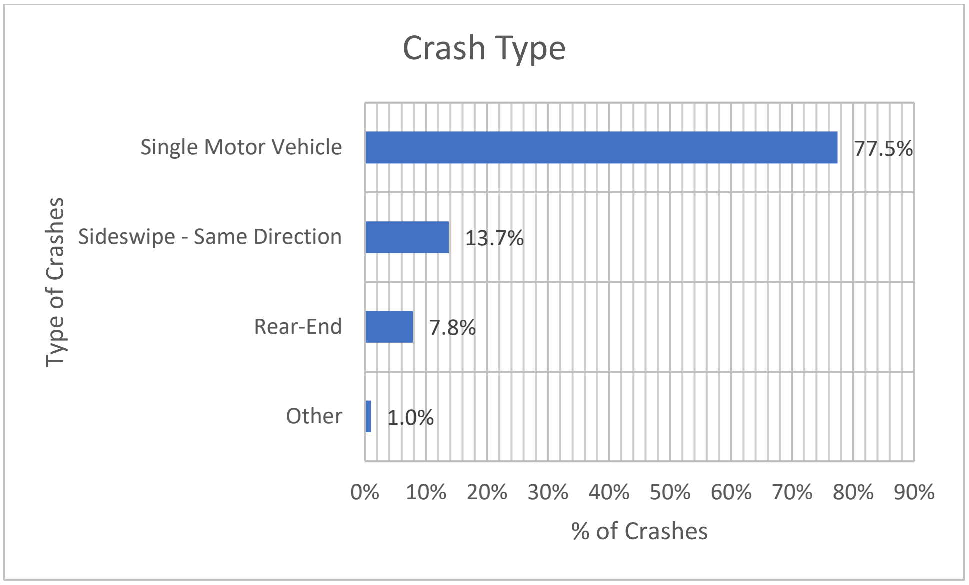


Figure 7: Crash Type along I-69 North from MM 35 to MM 40

1.3.2 Crash Characteristics

13 crashes (13%) of the 102 crashes resulted in injury. One (1) crash resulted in fatal (Type K) injuries and 2 crashes resulted in Type A injuries. Fatal and Type A crashes represent approximately 3% of all crashes during the period and approximately 23% of all crashes that resulted in injury. A breakdown of crashes by severity is shown in **Figure 8**.

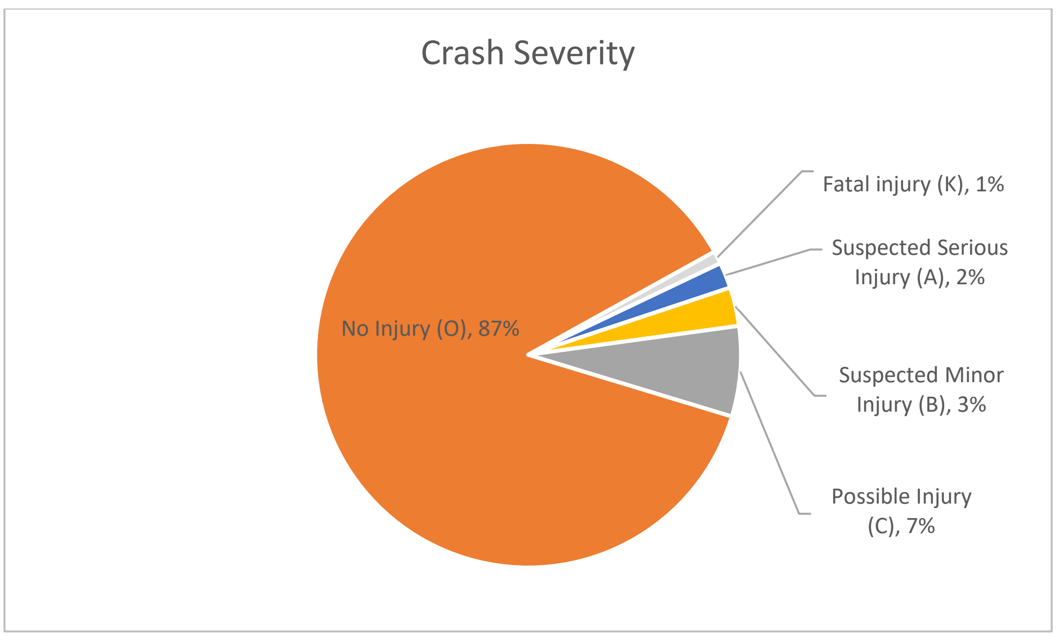


Figure 8: Crash Severity along I-69 North from MM 35 to MM 40

For additional context, UD-10s were reviewed for the K and A injury crashes. This information helped to ascertain some of the contributing factors to these types of crashes. The following summarizes the narrative for the 3 injury crashes reported.

- Rear-end crash on I-69 NB approach 1,584 feet south of J Drive involving unable to stop driving, approximately 00:06 AM on 05/24/2020, Fatal Injury (Type K), Dark and Dry conditions.
- Single Motor Vehicle crash on I-69 NB approach 4.0 miles north of F Drive, approximately 13:00 PM on 09/06/2016, Suspected Serious Injury (Type A), Daylight and Dry conditions.
- Single Motor Vehicle crash on I-69 NB approach 80 feet north of I-94, Approximately 18:34 PM on 07/18/2019, Suspected Serious Injury (Type A), Daylight and Dry conditions.

1.3.3 Crashes by time of day

Crashes by the time of day are displayed in **Figure 9**. The general time of day trends, which include the highest proportion of crashes occur around PM peak hours.

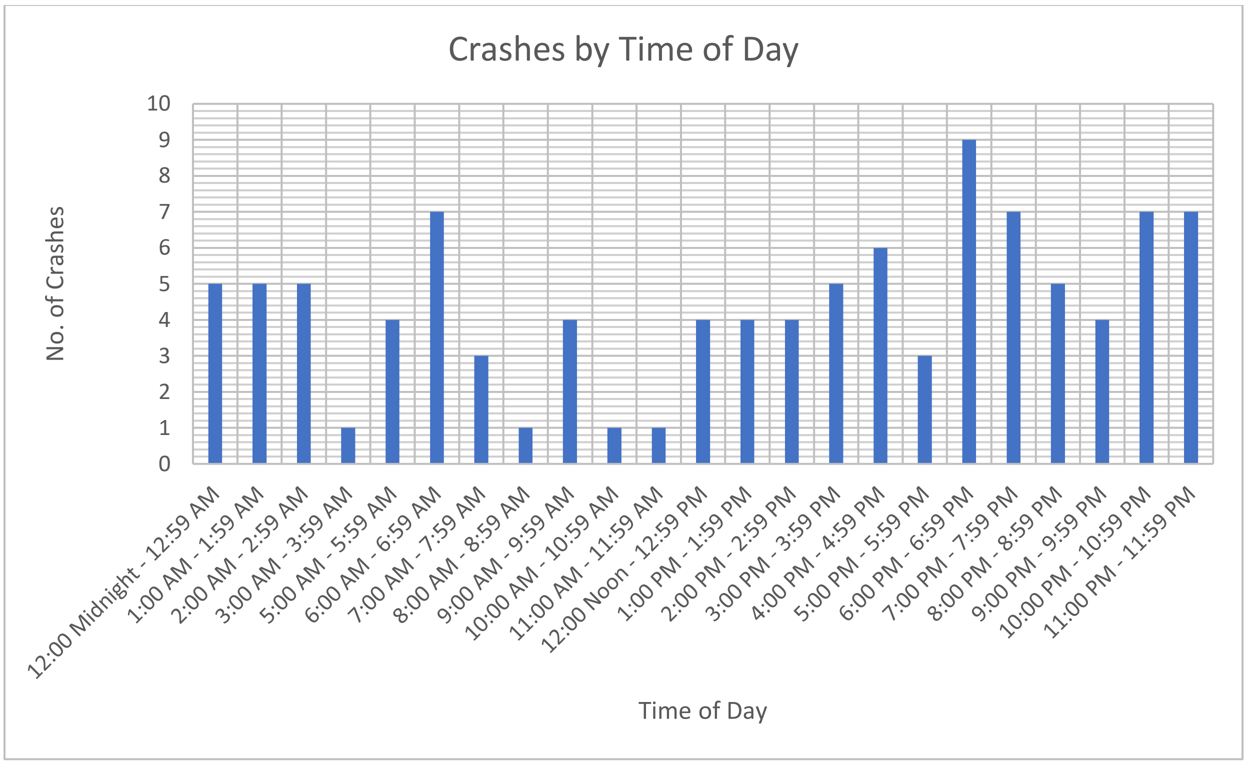


Figure 9: Crashes by Time of Day along I-69 North from MM 35 to MM 40

1.4 I-69 South from MM 40 to MM 35

Crash data were analyzed considering the type of crash, crash characteristics, and time of day. The summary of the findings is discussed below.

1.4.1 Crash Types

There were 74 crashes during the analysis period, of which 78.4% (58 total) were single motor vehicle crashes, and 12.2% (9 total) were rear-end collisions. The remainder of the crashes consisted of sideswipe - same direction crashes and other crashes. Crash types are summarized in **Figure 10**.

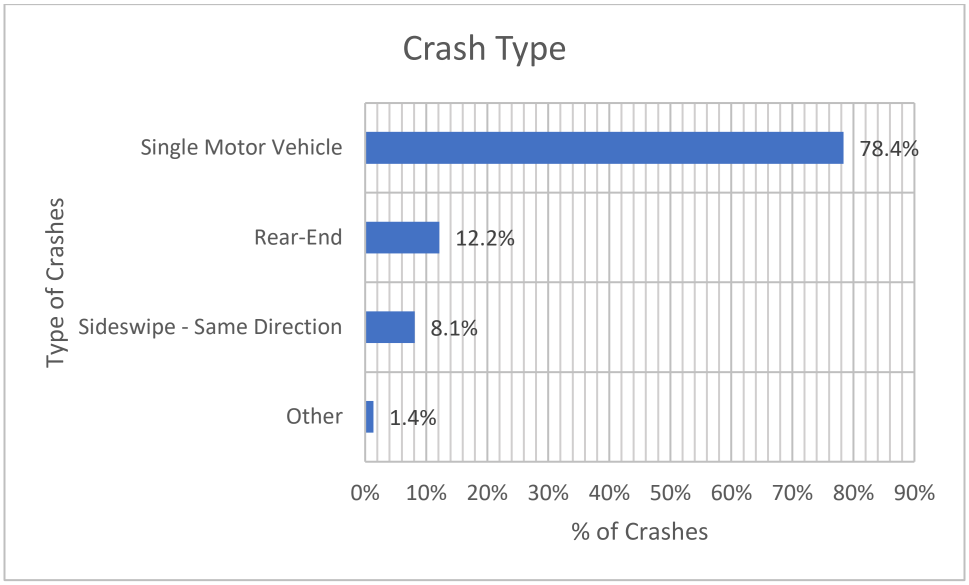


Figure 10: Crash Type along I-69 South from MM 40 to MM 35

1.4.2 Crash Characteristics

6 crashes (13%) of the 74 crashes resulted in injury. One (1) crash resulted in fatal (Type K) injuries and 1 crash resulted in Type B injuries. Fatal and Type B crashes represent approximately 2% of all crashes during the period and approximately 33% of all crashes that resulted in injury. A breakdown of crashes by severity is shown in **Figure 11**.

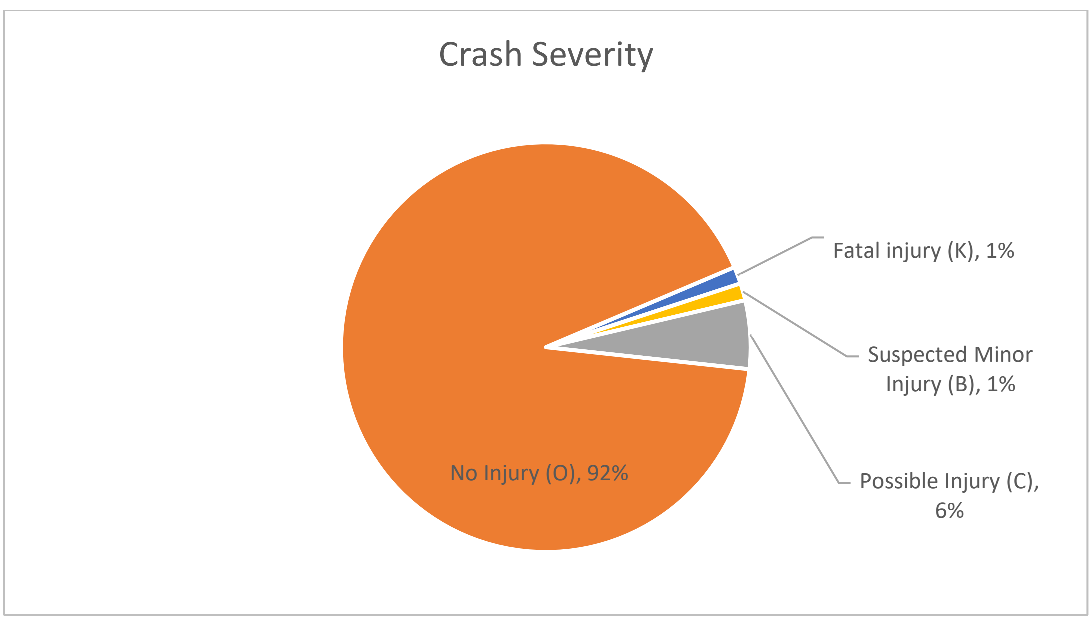


Figure 11: Crash Severity along I-69 South from MM 40 to MM 35

For additional context, UD-10s were reviewed for the K injury crashes. This information helped to ascertain some of the contributing factors to this type of crash. The following summarizes the narrative for the 1 injury crash reported.

- Single Motor Vehicle crash on I-69 southbound (SB) approach 2,112 feet south of A Drive involving careless driving, approximately 11:50 AM on 10/25/2018, Fatal Injury (Type K), Daylight and Dry conditions.

1.4.3 Crashes by time of day

Crashes by the time of day are displayed in **Figure 12**. The general time of day trends, which include the highest proportion of crashes occur around PM peak hours.

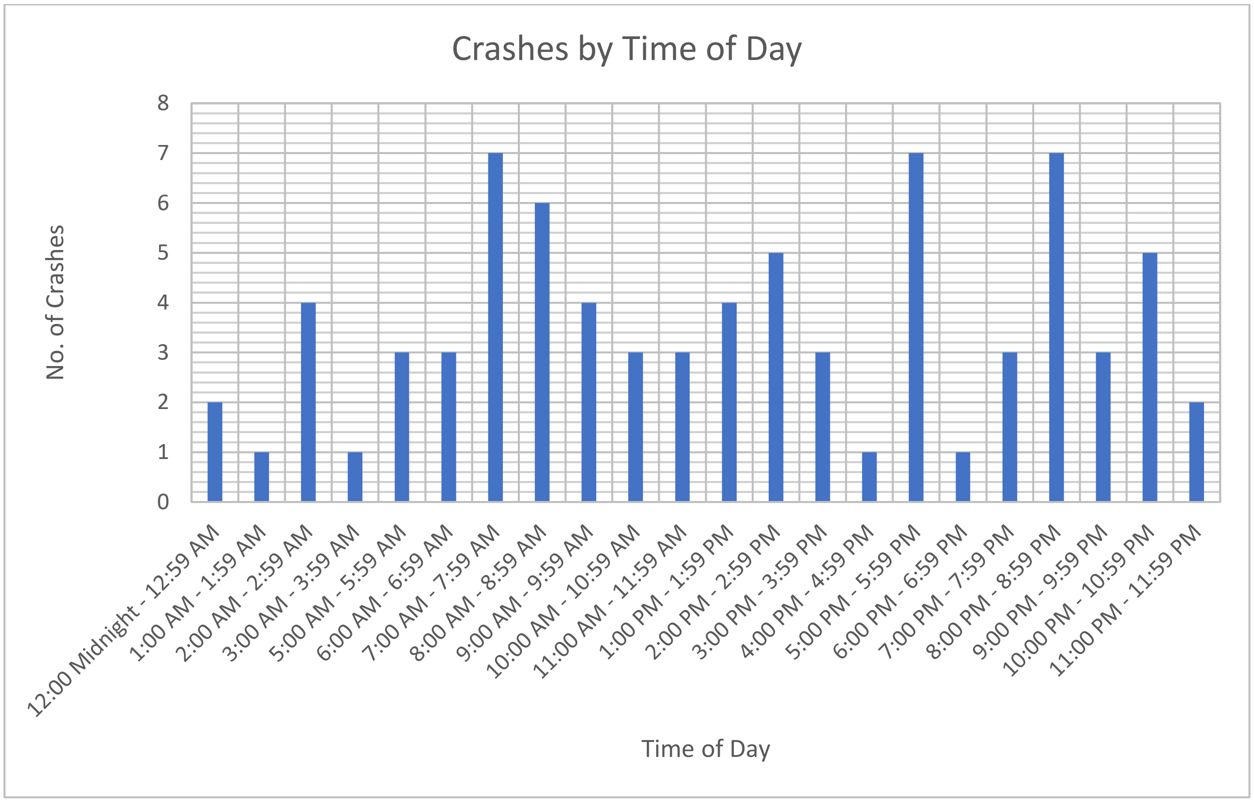


Figure 12: Crashes by Time of Day along I-69 South from MM 40 to MM 35

1.5 M-96 (Michigan Avenue) from west of Wheatfield Parkway to east of West Drive

Crash data were analyzed considering the type of crash, crash characteristics, and time of day. The summary of the findings is discussed below.

1.5.1 Crash Types

There were 231 crashes during the analysis period, of which 49% (114 total) were single motor vehicle crashes, 15% (34 total) were angle crashes, and 13% were rear-end collisions. The remainder of the crashes consisted of sideswipe - same direction, head-on-left-turn, head-on, rear-end-left-turn, rear-end-right-turn, sideswipe-opposite directions, and other crashes. Crash types are summarized in **Figure 13**.

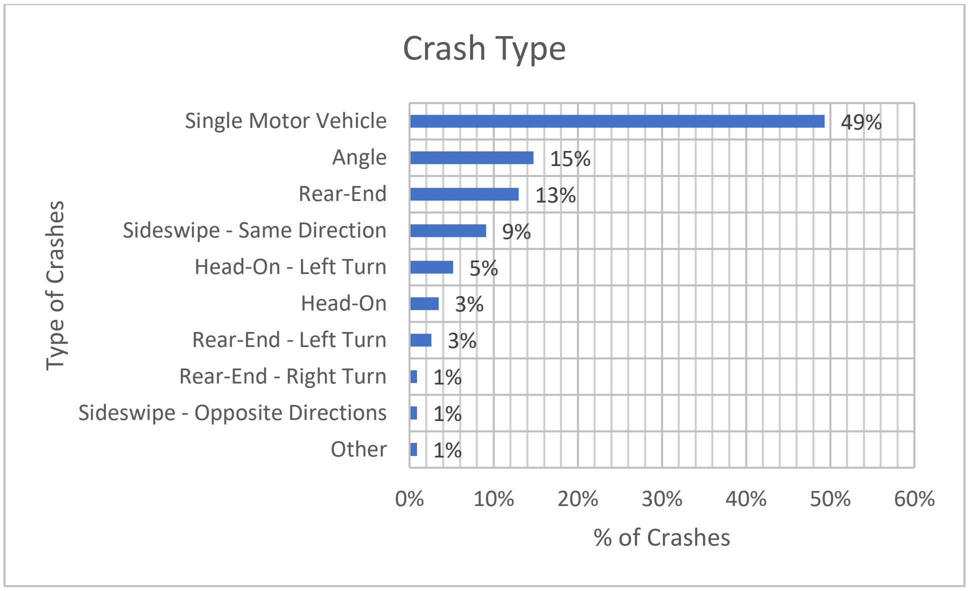


Figure 13: Crash Type along M-96 from west of Wheatfield Parkway to east of West Drive

1.5.2 Crash Characteristics

48 crashes (21%) of the 231 crashes resulted in injury. Two (2) crashes resulted in fatal (Type K) injuries and 6 crashes resulted in Type A injuries. Fatal and Type A crashes represent approximately 4% of all crashes during the period and approximately 17% of all crashes that resulted in injury. A breakdown of crashes by severity is shown in **Figure 14**.

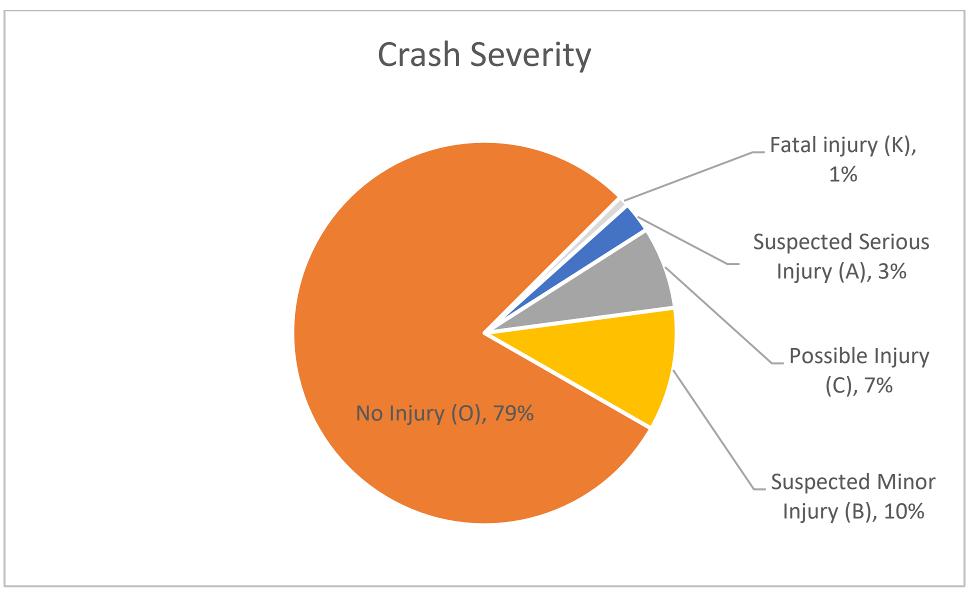


Figure 14: Crash Severity along M-96 (Michigan Avenue) from west of Wheatfield Parkway to east of West Drive

For additional context, UD-10s were reviewed for the K and A injury crashes. This information helped to ascertain some of the contributing factors to these types of crashes. The following summarizes the narrative for the 8 injury crashes reported.

- Head on crash on M-96 (Michigan Avenue) 200 feet east of 12 Mile Road, approximately 14:35 PM on 12/11/2016, Fatal Injury (Type K), Daylight and Snowy conditions.
- Head-on left-turn crash on M-96 (Michigan Avenue) 25 feet east of East Wheatfield Parkway involving improper turn driving, approximately 12:41 PM on 08/01/2017, Fatal Injury (Type K), Daylight and Dry conditions.
- Rear-end crash on M-96 (Michigan Avenue) 300 feet east of 11 Mile Road, approximately 22:53 PM on 05/21/2016, Suspected Serious Injury (Type A), Dark and Dry conditions.
- Head-on left-turn crash on M-96 (Michigan Avenue) near 11 Mile Road, approximately 00:11 AM on 04/30/2017, Suspected Serious Injury (Type A), Dark and Wet conditions.
- Angle crash on M-96 (Michigan Avenue) 10 feet south of 15 Mile Road involving failed to yield driving, approximately 13:04 PM on 05/30/2017, Suspected Serious Injury (Type A), Daylight and Dry conditions.
- Single Motor Vehicle crash on M-96 (Michigan Avenue) 600 feet east of Partello Road involving careless driving, approximately 23:15 PM on 07/27/2018, Suspected Serious Injury (Type A), Dark and Dry conditions.
- Single Motor Vehicle crash on M-96 (Michigan Avenue) 125 feet east of 15 Mile Road involving speed too fast driving, approximately 17:52 PM on 02/25/2018, Suspected Serious Injury (Type A), Daylight and Dry conditions.
- Rear-end crash on M-96 (Michigan Avenue) 200 feet east of W Drive involving careless driving, approximately 19:40 PM on 02/07/2020, Suspected Serious Injury (Type A), Dark and Snowy conditions.

1.5.3 Crashes by time of day

Crashes by the time of day are displayed in **Figure 15**. The general time of day trends, which include the highest proportion of crashes occur around PM peak hours.

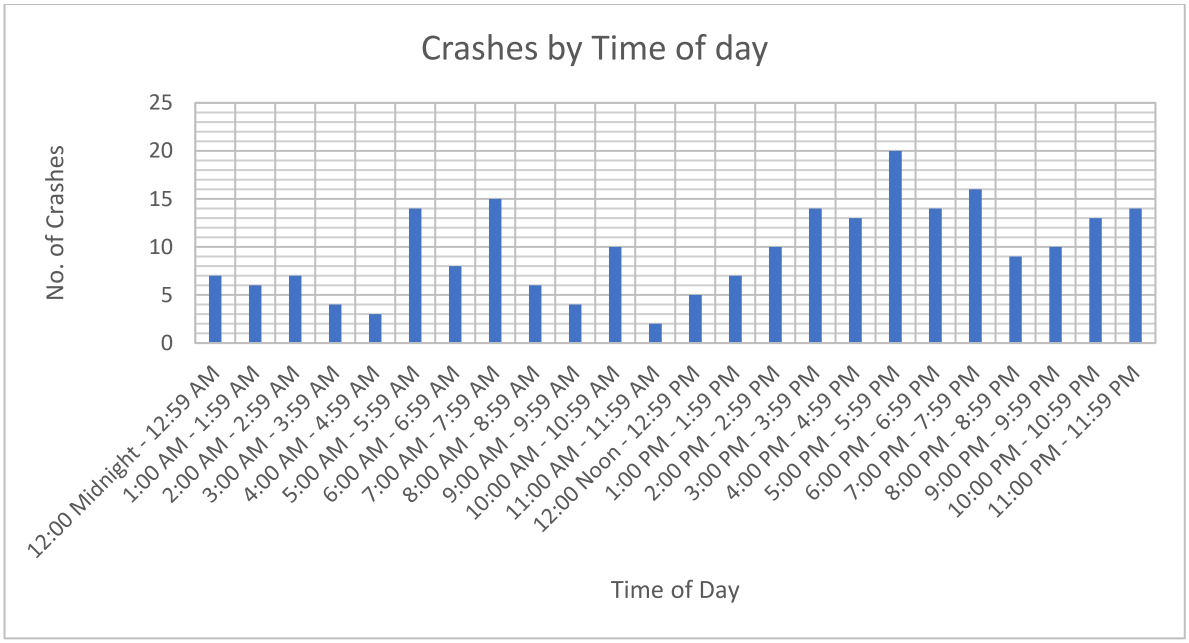


Figure 15: Crashes by Time of Day along M-96 from west of Wheatfield Parkway to east of West Drive

1.6 I-94 at M-294 (Beadle Lake Rd), Exit 100 Interchange

There were 17 crashes during the analysis period. No fatal and Type A crashes were identified in this interchange. A summary of crashes by crash type and crash severity is depicted in **Figures 16 & 17**.

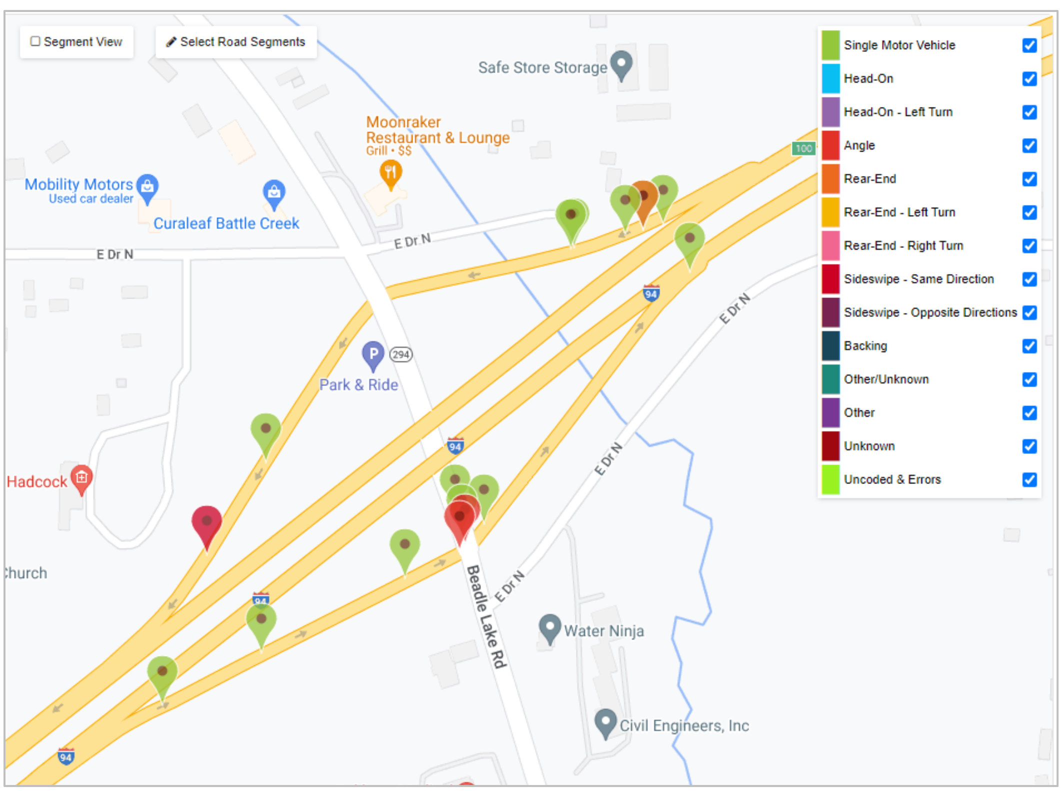


Figure 16: Crash Type at I-94 at M-294 (Beadle Lake Road), Exit 100 Interchange

Figure 17: Crash Severity at I-94 at M-294 (Beadle Lake Road), Exit 100 Interchange

1.7 I-94 at M-96/M-311 (11 Mile Rd), Exit 104 Interchange

There were 106 crashes during the analysis period. 15 crashes (14%) of the 106 crashes resulted in injury. One (1) crash resulted in Type A injuries and 7 crashes resulted in Type B injuries. A summary of crashes by crash type and crash severity is depicted in **Figures 18, 19, 20 & 21**.

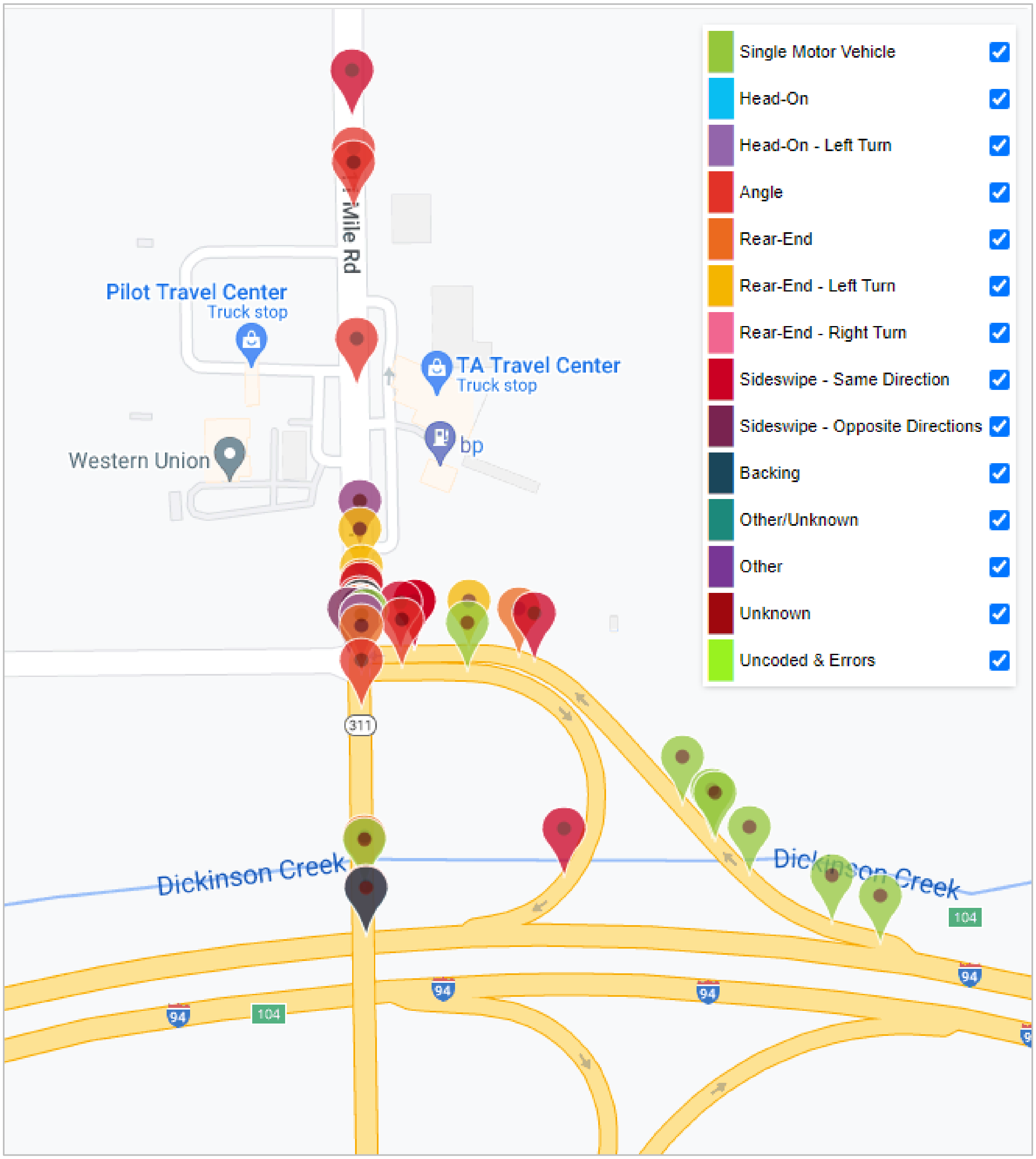


Figure 18: Crash Type at M-96/M-311 (11 Mile Road) Exit 104 Interchange North of I-94

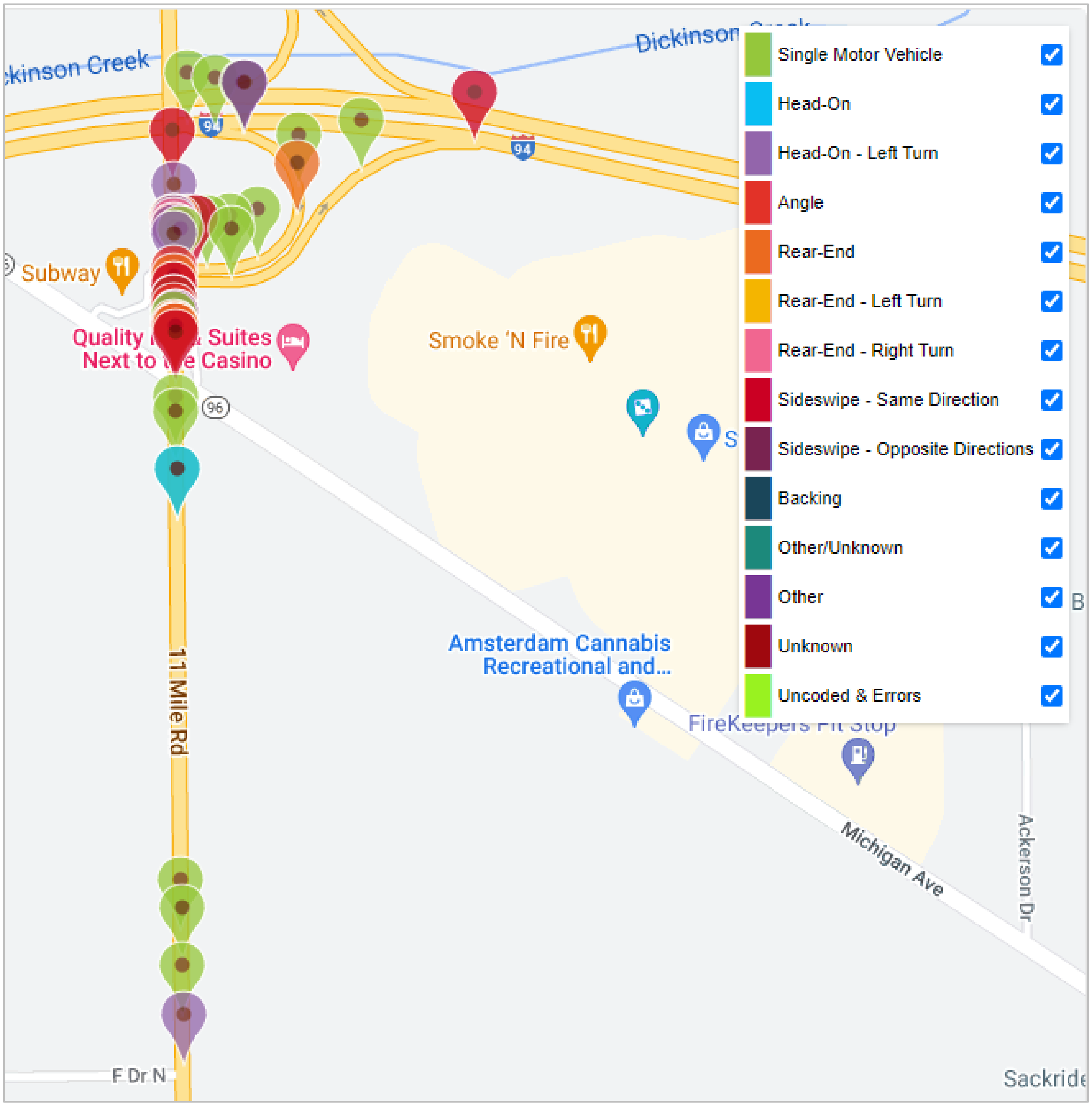


Figure 19: Crash Type at M-96/M-311 (11 Mile Road) Exit 104 South of I-94

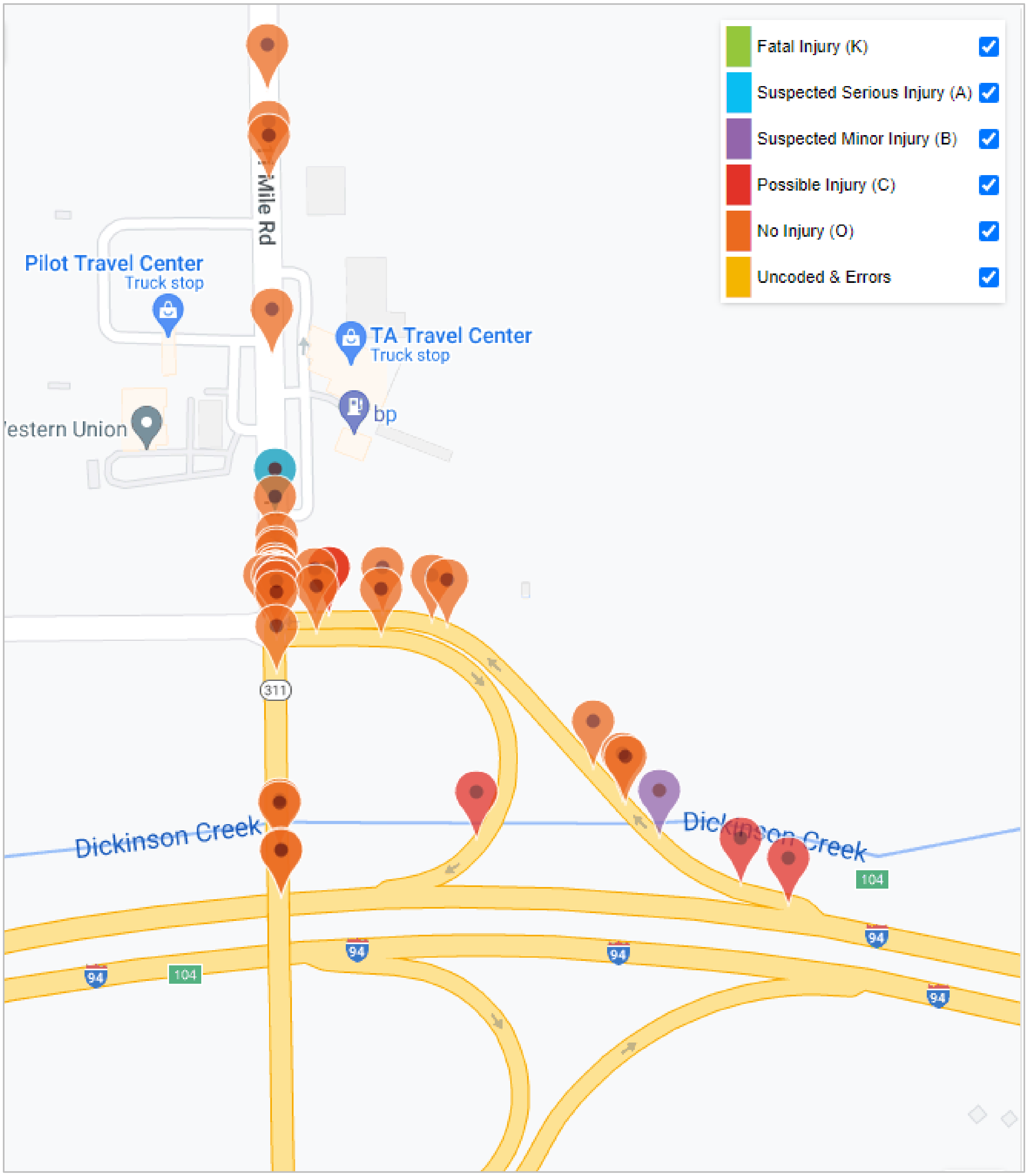


Figure 20: Crash Severity at M-96/M-311 (11 Mile Road) Exit 104 North of I-94

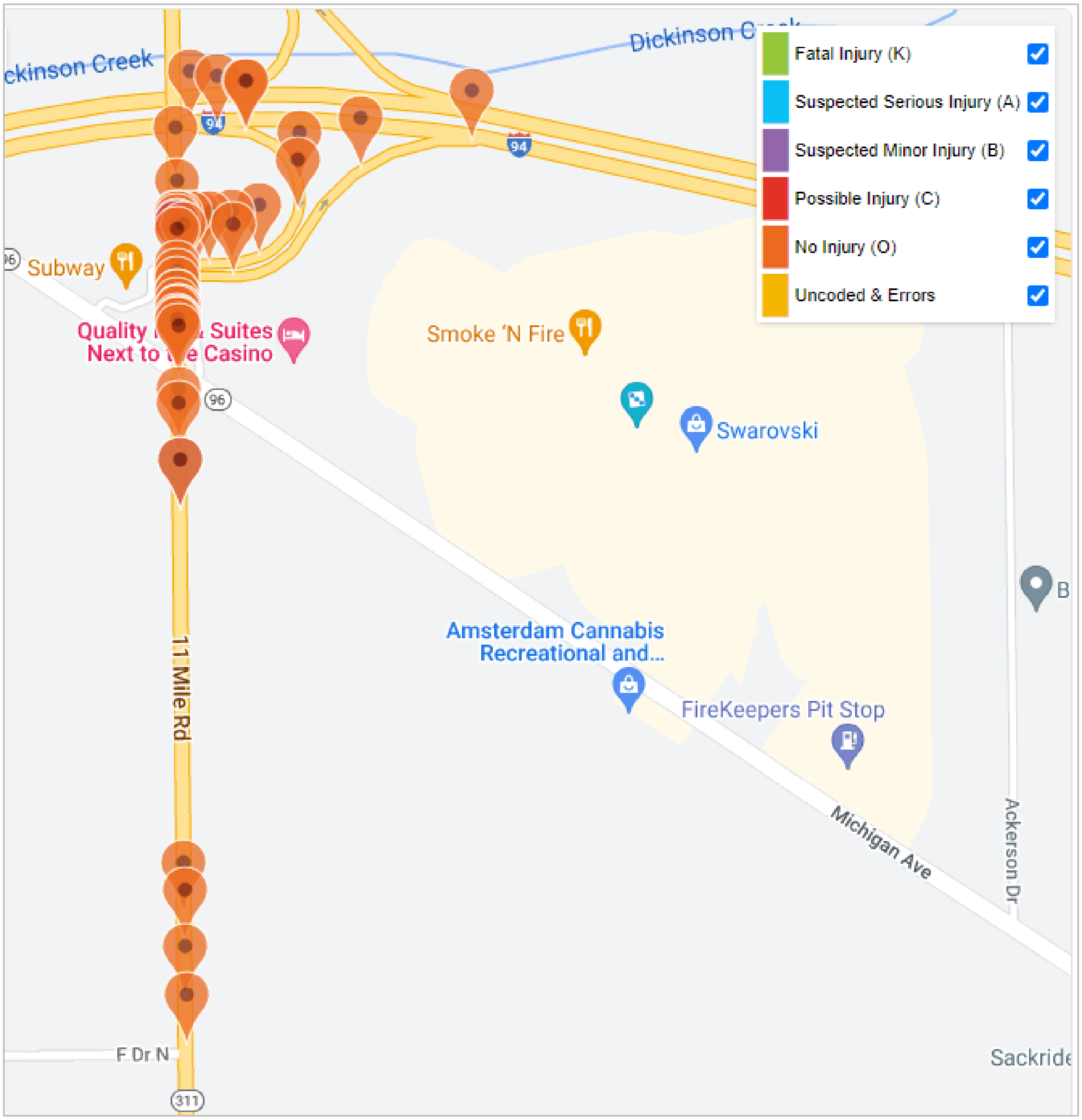


Figure 21: Crash Severity at M-96/M-311 (11 Mile Road) Exit 104 South of I-94

For additional context, UD-10s were reviewed for the A injury crash. This information helped to ascertain some of the contributing factors to this type of crash. The following summarizes the narrative for the 1 injury crash reported.

- Angle crash on 11 Mile Road 200 feet north of Wheatfield Parkway involving failed to yield driving, approximately 16:55 PM on 07/14/2020, Suspected Serious Injury (Type A), Daylight and Dry conditions.

1.8 I-94/I-69 Interchange

There were 140 crashes during the analysis period. 35 crashes (25%) of the 140 crashes resulted in injury. One (1) crash resulted in fatal (Type K) injuries and 2 crashes resulted in Type A injuries. A summary of crashes by crash type and crash severity is depicted in **Figures 22 & 23**.

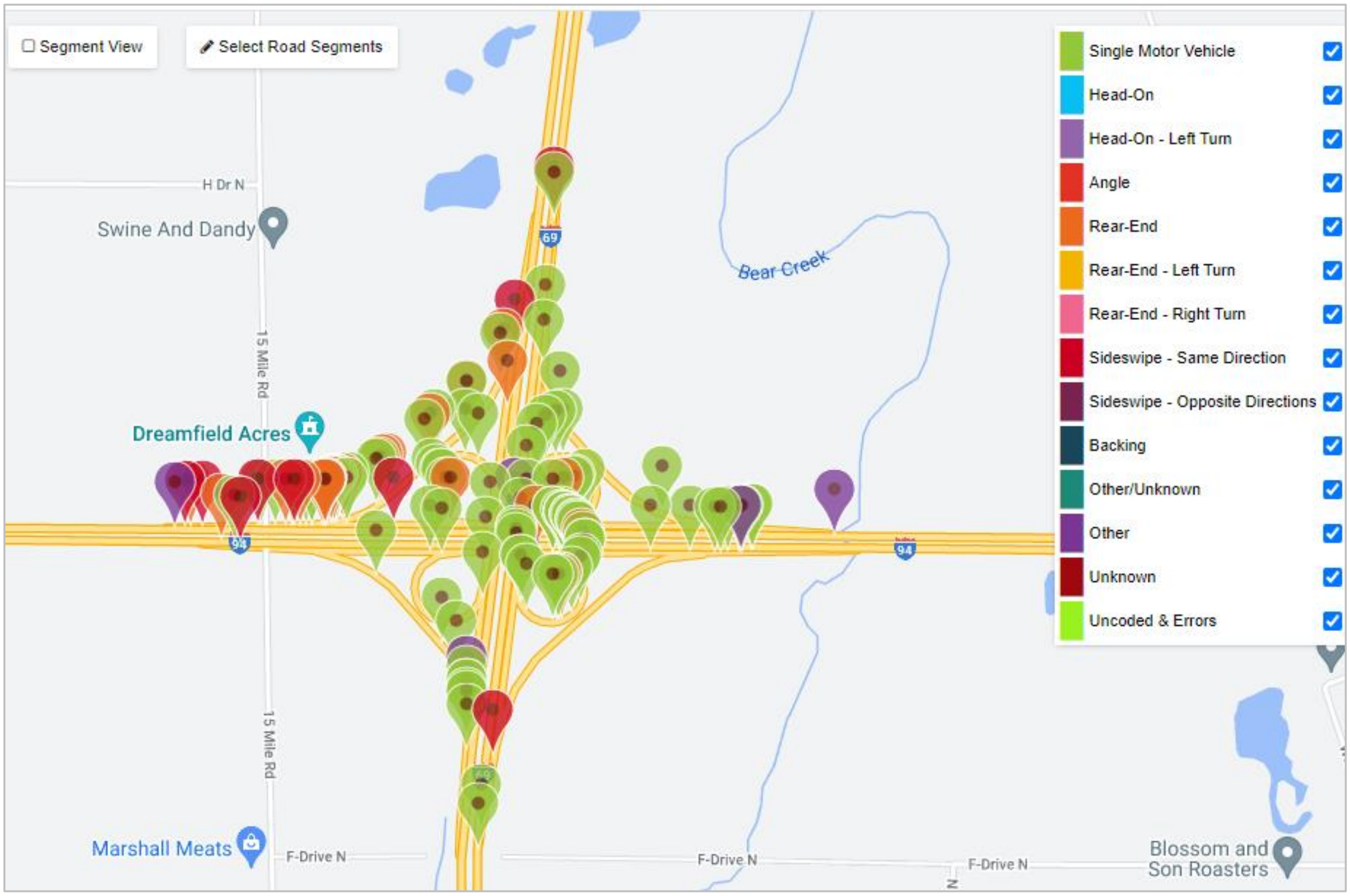


Figure 22: Crash Type at I-94/I-69 Interchange

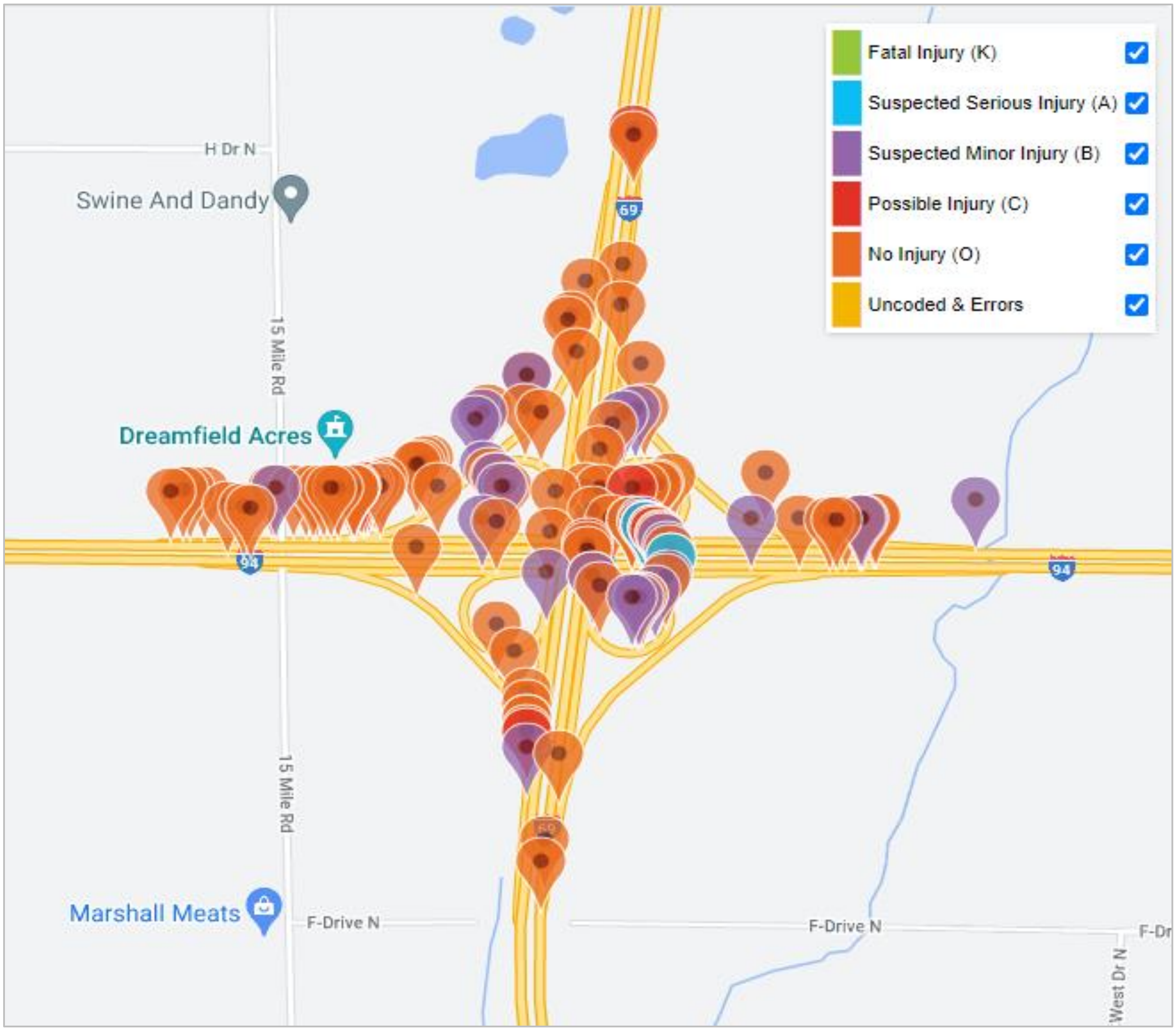


Figure 23: Crash Severity at I-94/I-69 Interchange

For additional context, UD-10s were reviewed for the K and A injury crashes. This information helped to ascertain some of the contributing factors to these types of crashes. The following summarizes the narrative for the 3 injury crashes reported.

- Single Motor Vehicle crash on I-94 WB/CD Road approach 50 feet away from entrance ramp (I-69 SB/CD Road to I-94 WB/CD Road) involving speed too fast driving, approximately 23:23 AM on 05/21/2020, Fatal Injury (Type K), Dark and Dry conditions.
- Single Motor Vehicle crash on the exit ramp from I-94 EB/CD to I-69 NB/CD Road 600 feet from the bridge ramp, approximately 22:13 PM on 08/05/2017, Suspected Serious Injury (Type A), Dark and Dry conditions.
- Single Motor Vehicle crash on the exit ramp from I-94 EB/CD to I-69 NB/CD Road 100 feet from the bridge ramp, approximately 21:45 PM on 10/11/2019, Suspected Serious Injury (Type A), Dark and Wet conditions.

1.9 I-94 at Old US-27, Exit 110 Interchange

There were 34 crashes during the analysis period. 10 crashes (29.41%) of the 34 crashes resulted in injury. Seven (7) crashes resulted in Type B injuries. A summary of crashes by crash type and crash severity is depicted in **Figures 24 & 25**.

Figure 24: Crash Type at I-94 at US-27, Exit 110 Interchange

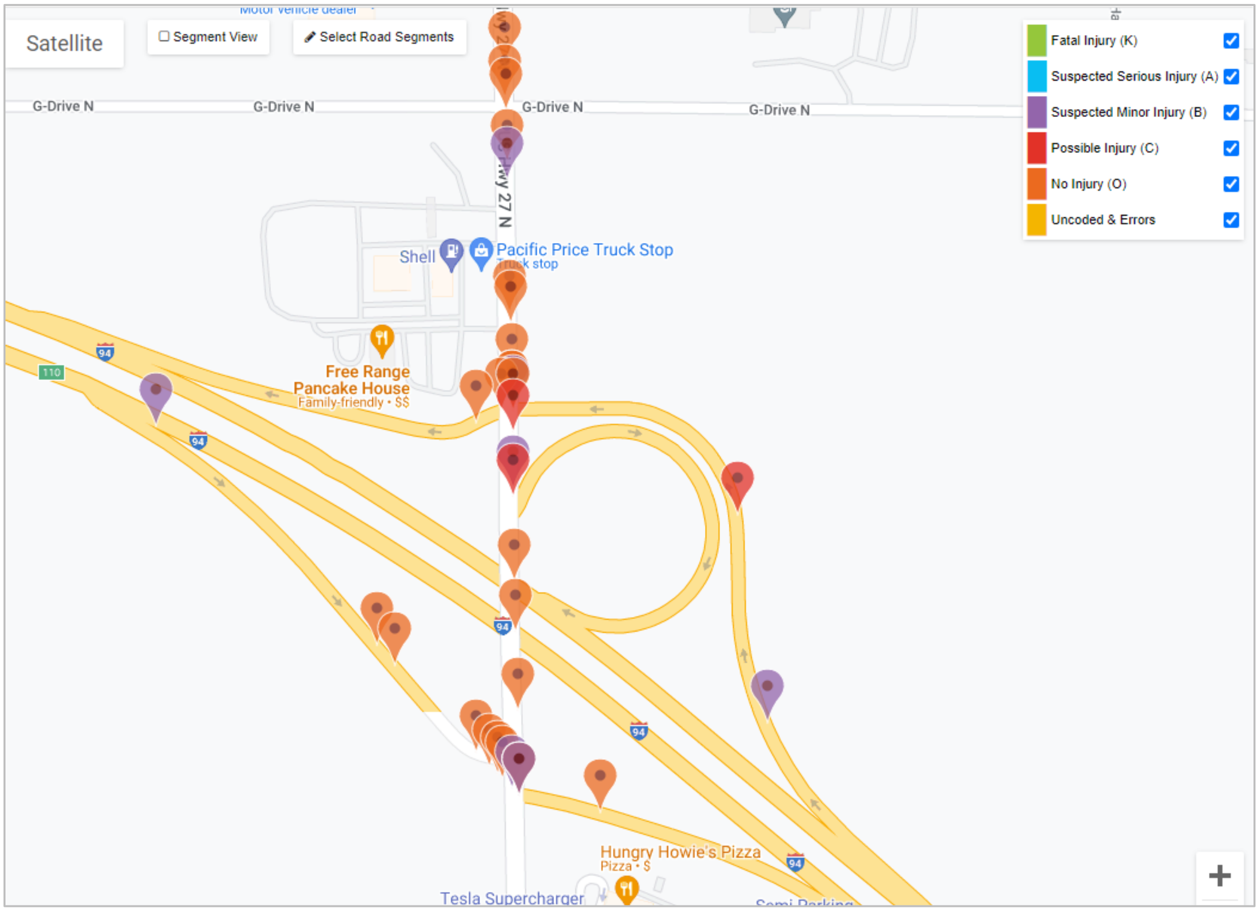


Figure 25: Crash Severity at I-94 at US-27, Exit 110 Interchange

1.10 I-94 at I-94BL (Partello Rd), Exit 112 Interchange

There were 29 crashes during the analysis period. 3 crashes (10.34%) of the 29 crashes resulted in injury. One (1) crash resulted in Type A injuries and 2 crashes resulted in Type B injuries. A summary of crashes by crash type and crash severity is depicted in **Figures 26 & 27**.

Figure 26: Crash Type at I-94 at I-94BL (Partello Road), Exit 112 Interchange

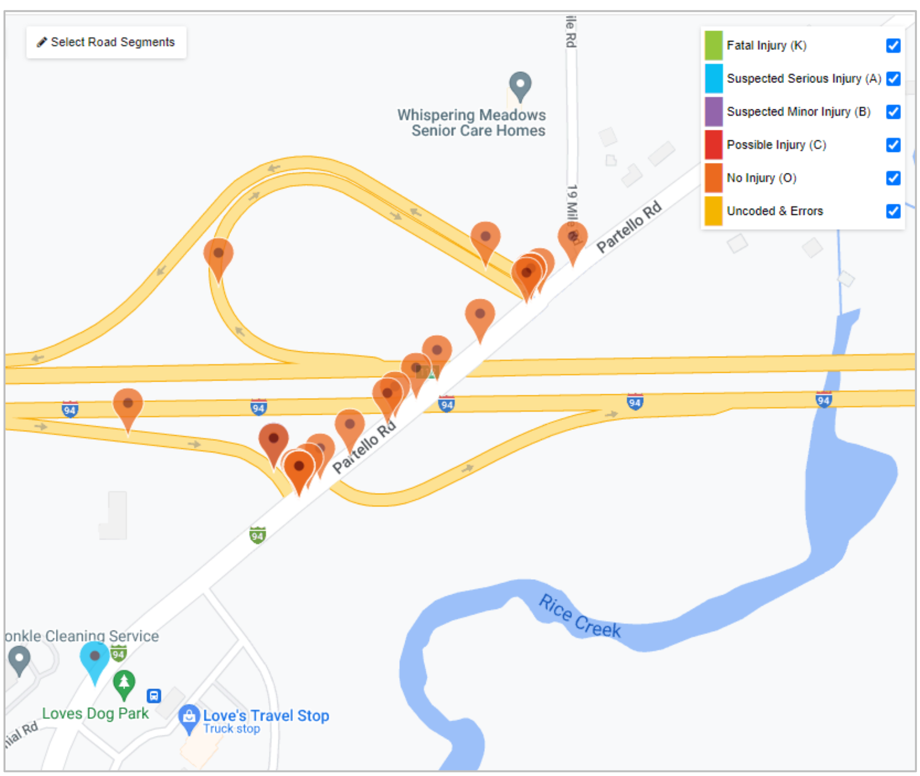


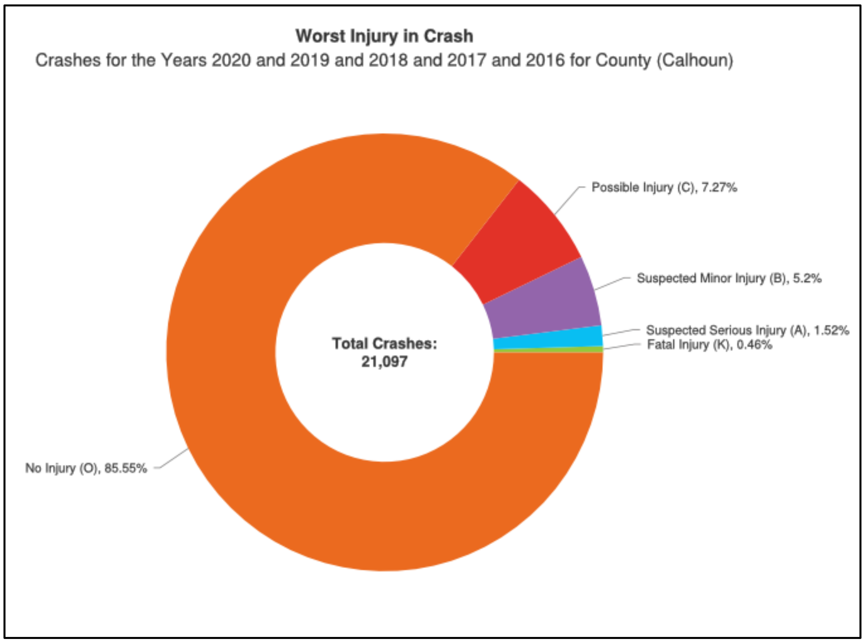
Figure 27: Crash Severity at I-94 at I-94BL (Partello Road), Exit 112 Interchange

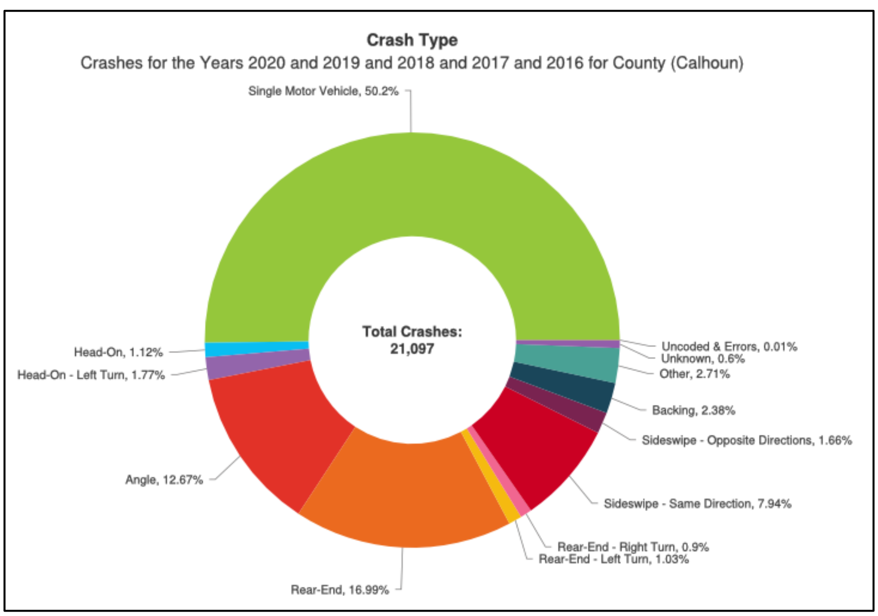
For additional context, UD-10s were reviewed for the A injury crash. This information helped to ascertain some of the contributing factors to this type of crash. The following summarizes the narrative for the 1 injury crash reported.

- Rear-end left-turn on Partello Road 100 feet east of Centennial Road, approximately 13:11 PM on 05/31/2016, Suspected Serious Injury (Type A), Daylight and Dry conditions.

1.11 Crash Comparisons

When comparing the crash types and distributions to those occurring within Calhoun County from 2016-2020 the following observations were made.





The proportion of injury vs non-injury crashes appear to be in line with Calhoun County totals except for:

- **M-96 (Michigan Avenue) from west of Wheatfield Parkway to east of West Drive** which shows an increase in the total of Type B crashes (10%) and reduction in the Type O crashes (79%). Upon further inspection the amount of Angle crashes (15%) and Head-On/Left crashes (8%) are also higher than county averages of 13% and 3% respectively.
    - M-96 is currently a two-lane arterial with no center-turn lane. Centerline and edge of pavement rumble strips have been installed along most of the corridor (2008 date of installation suggested, but exact date of installation unknown).
    - If M-96 is widened in any capacity a dedicated center-left turn lane could aid in the reduction of head-on and angle crashes.

Additional crash concentrations:

- **I-94/I-69 Interchange:**
    - The southeast loop ramp (I-94 EB to I-69 NB) shows 27 total crashes occurred in this loop including two Type A injury and eight (8) Type B injury crashes. UD-10s cite too high of speeds for the geometry and speed differential between vehicles. Almost all the crashes within this curve involved semi-tractor trailers and many overturned as a result of the crash. The curve is marked at 25mph and has warning chevrons. The curve radius and super-elevation of the ramp could be examined for improvements which may be currently under-way as part of the reconstruction project along I-69.
    - Merge between the I-69 SB to I-94 WB slip ramp and the I-94 CD road shows 25 crashes occurred. Crashes appear to be single motor vehicle and Type C or non-injury related. Crashes involving two vehicles cited small merge lengths. Extending this merge/acceleration lane is being done in conjunction with the current reconstruction project.

Appendix E.1: Crash Data Links

I-94E between 99 and 113
https://www.michigantrafficcrashfacts.org/querytool/lists/0#q1;0;2020,2019,2018,2017,2016;k9402,99,113;&p0,0:0,11:0,14:0,15:0,2:0,24:0,25:0,28:0,3:0,4:0,49:0,5:0,50:0,51:0,6:0,76:0,9|90|90|0,asc:1,asc:2,asc:3,asc:4,asc:5,asc:6,asc:7,asc:8,asc:9,asc:10,asc:11,asc:12,asc:13,asc:14,asc:15,asc:16,asc

I-94W between 99 and 113
https://www.michigantrafficcrashfacts.org/querytool/lists/0#q1;0;2020,2019,2018,2017,2016;k9403,99,113;&p0,0:0,11:0,14:0,15:0,2:0,24:0,25:0,28:0,3:0,4:0,49:0,5:0,50:0,51:0,6:0,76:0,9|360|90|0,asc:1,asc:2,asc:3,asc:4,asc:5,asc:6,asc:7,asc:8,asc:9,asc:10,asc:11,asc:12,asc:13,asc:14,asc:15,asc:16,asc

I-69N between 35 and 40
https://www.michigantrafficcrashfacts.org/querytool#q1;0;2020,2019,2018,2017,2016;k6900,35,40;

I-69S between 35 and 40
https://www.michigantrafficcrashfacts.org/querytool/map#q1;0;2020,2019,2018,2017,2016;k6901,35,40;&p13,42.250944,-84.985478

m-96
https://www.michigantrafficcrashfacts.org/querytool/road#q1;0;2020,2019,2018,2017,2016;ffdf05be71720841ca942ed0cc9586790660bd4bf;

Beadle Lake ramps
https://www.michigantrafficcrashfacts.org/querytool/lists/0#q1;0;2020,2019,2018,2017,2016;f12a21ec987af7b90315e49ba6a4922b8e3603121;&p0,0:0,11:0,14:0,15:0,2:0,24:0,25:0,28:0,3:0,4:0,49:0,5:0,50:0,51:0,6:0,76:0,9|0|90|0,asc:1,asc:2,asc:3,asc:4,asc:5,asc:6,asc:7,asc:8,asc:9,asc:10,asc:11,asc:12,asc:13,asc:14,asc:15,asc:16,asc

M-311
https://www.michigantrafficcrashfacts.org/querytool/lists/0#q1;0;2020,2019,2018,2017,2016;f23999fc19eddcaf8067a18550fc1bf793b625a9a;&p0,0:0,11:0,14:0,15:0,2:0,24:0,25:0,28:0,3:0,4:0,49:0,5:0,50:0,51:0,6:0,76:0,9|0|90|0,asc:1,asc:2,asc:3,asc:4,asc:5,asc:6,asc:7,asc:8,asc:9,asc:10,asc:11,asc:12,asc:13,asc:14,asc:15,asc:16,asc

US27
https://www.michigantrafficcrashfacts.org/querytool/lists/0#q1;0;2020,2019,2018,2017,2016;f3960e2fb9f5d0f36d7d202e1bbf3ff642b06232e;&p0,0:0,11:0,14:0,15:0,2:0,24:0,25:0,28:0,3:0,4:0,49:0,5:0,50:0,51:0,6:0,76:0,9|0|90|0,asc:1,asc:2,asc:3,asc:4,asc:5,asc:6,asc:7,asc:8,asc:9,asc:10,asc:11,asc:12,asc:13,asc:14,asc:15,asc:16,asc

Partello
https://www.michigantrafficcrashfacts.org/querytool/lists/0#q1;0;2020,2019,2018,2017,2016;fcd5d91c05adab3836e9bce58e41ba26a785ddd13;&p0,0:0,11:0,14:0,15:0,2:0,24:0,25:0,28:0,3:0,4:0,49:0,5:0,50:0,51:0,6:0,76:0,9|0|90|0,asc:1,asc:2,asc:3,asc:4,asc:5,asc:6,asc:7,asc:8,asc:9,asc:10,asc:11,asc:12,asc:13,asc:14,asc:15,asc:16,asc

I-69/I-94 Interchange
https://www.michigantrafficcrashfacts.org/querytool/lists/0#q1;0;2020,2019,2018,2017,2016;fc22b1c91687ca544825be03727c688c794d5236c;&p0,0:0,11:0,14:0,15:0,2:0,24:0,25:0,28:0,3:0,4:0,49:0,5:0,50:0,51:0,6:0,76:0,9|0|90|0,asc:1,asc:2,asc:3,asc:4,asc:5,asc:6,asc:7,asc:8,asc:9,asc:10,asc:11,asc:12,asc:13,asc:14,asc:15,asc:16,asc

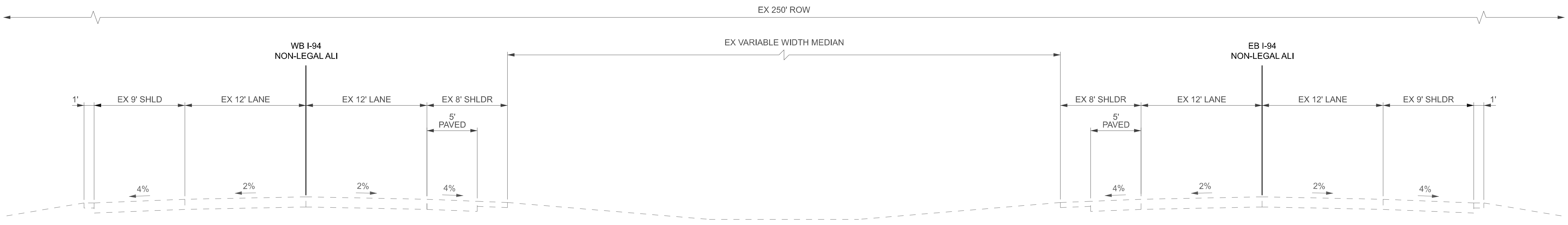
Appendix F: Plan Diagrams

Appendix F Summary

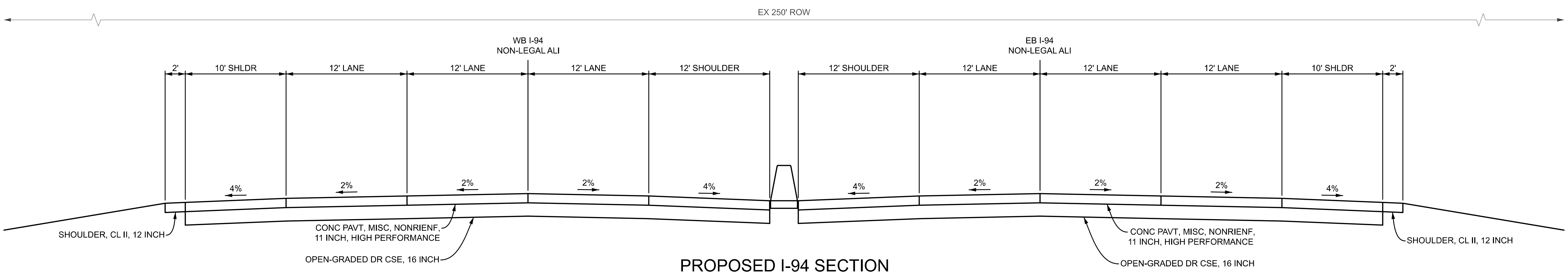
Appendix F includes the existing typical sections of the roadways involved in the study and the proposed typicals of the roadway improvements identified as part of the traffic impact study. These typical cross sections are provided in Pages 3-7.

Page 8 is the Final Roadway Improvement Layout studied as part of the traffic impact study.

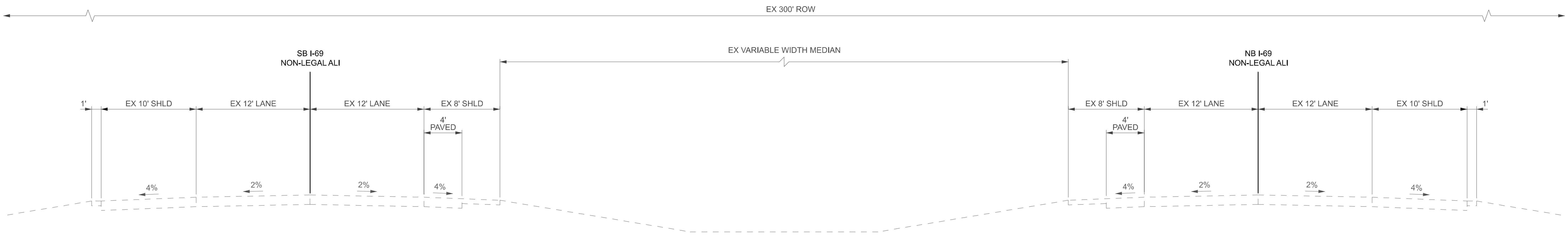
Page 9 is the Proposed Construction Sequencing utilized for the cost estimating purposes necessary to meet project deadlines.



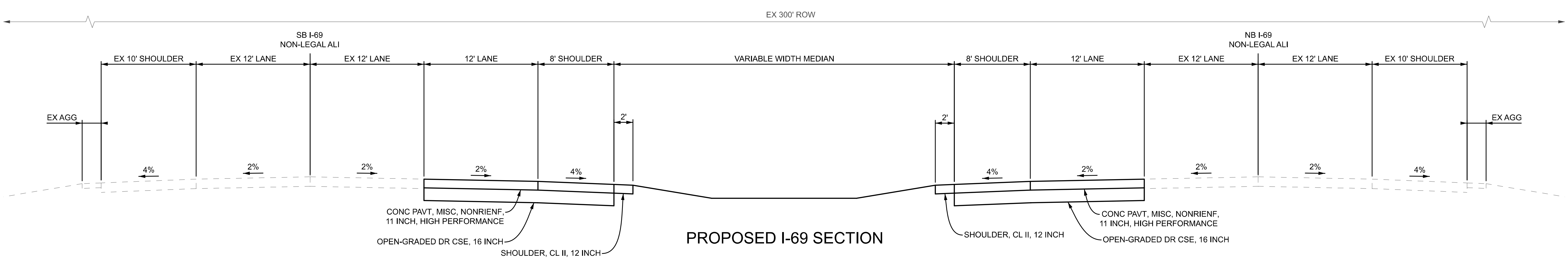
EXISTING I-94 SECTION



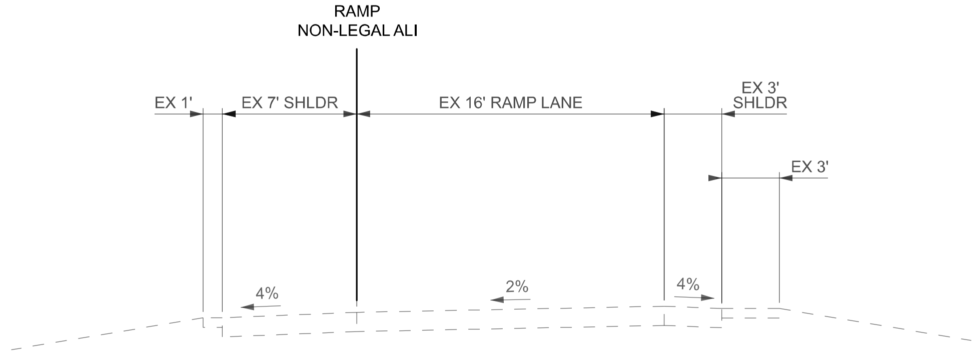
PROPOSED I-94 SECTION



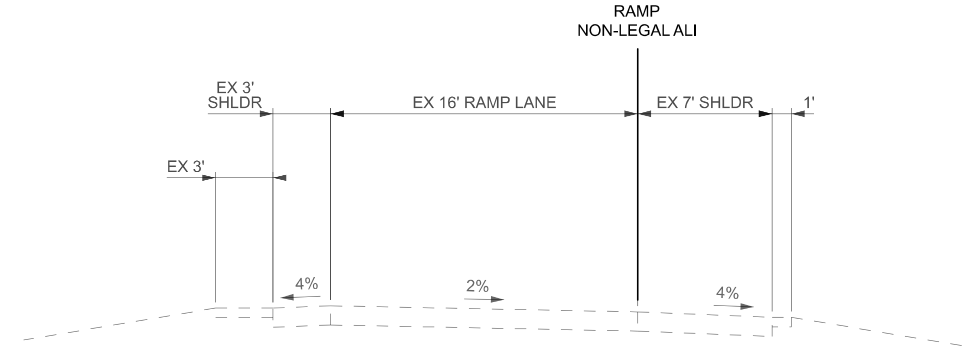
EXISTING I-69 SECTION



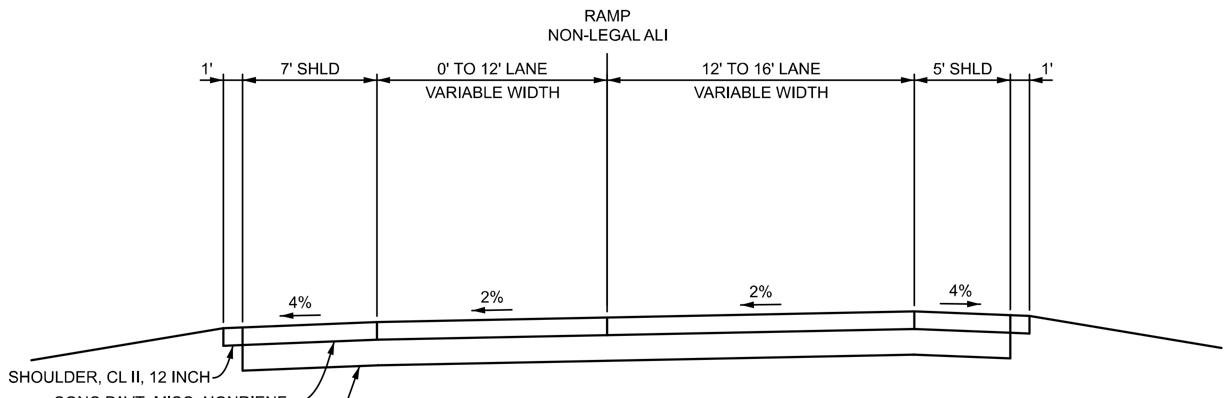
PROPOSED I-69 SECTION



EXISTING I-69 RAMP SECTION



EXISTING I-69 RAMP SECTION



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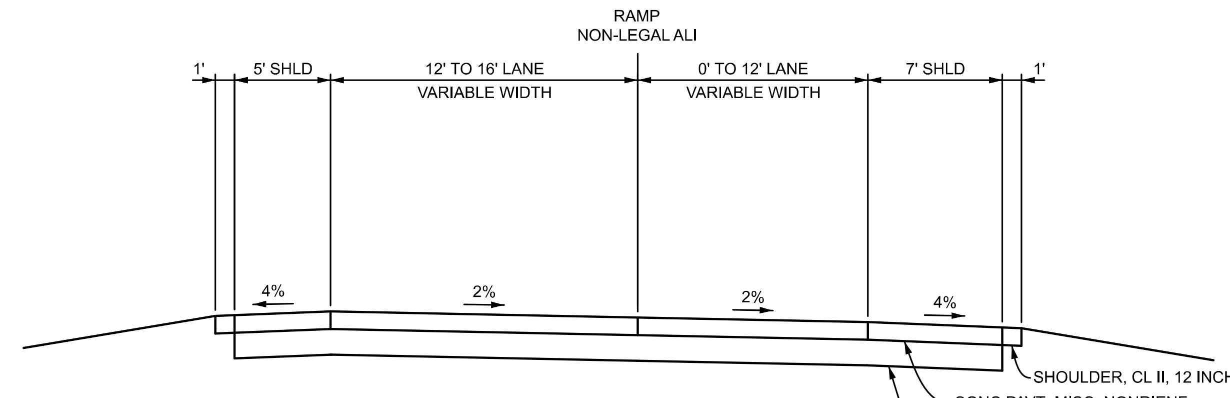

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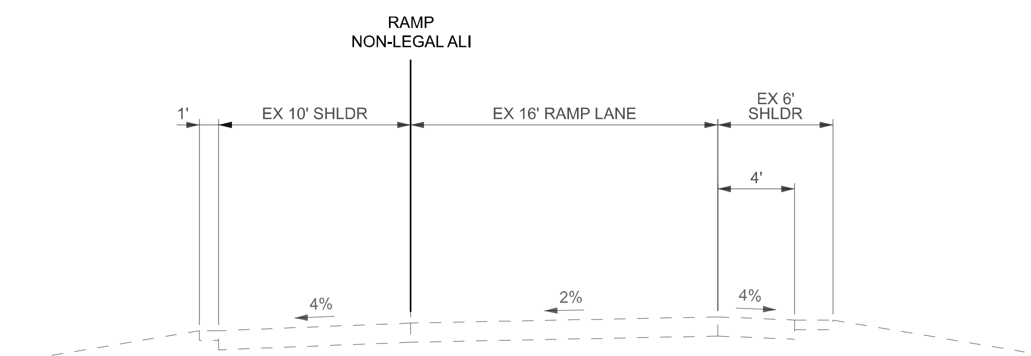

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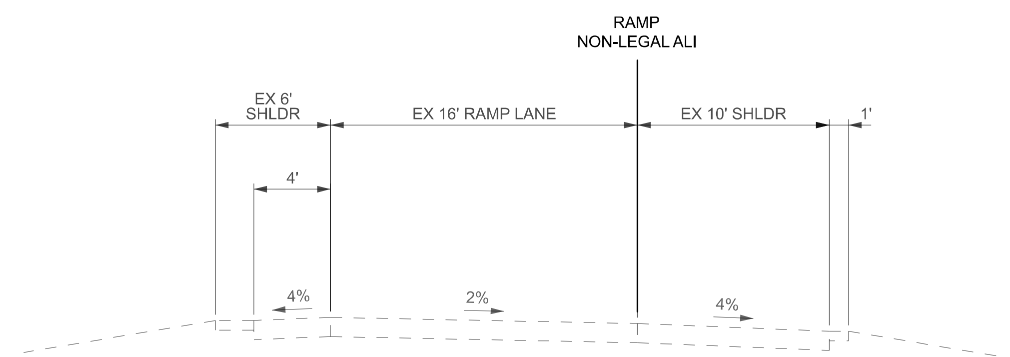

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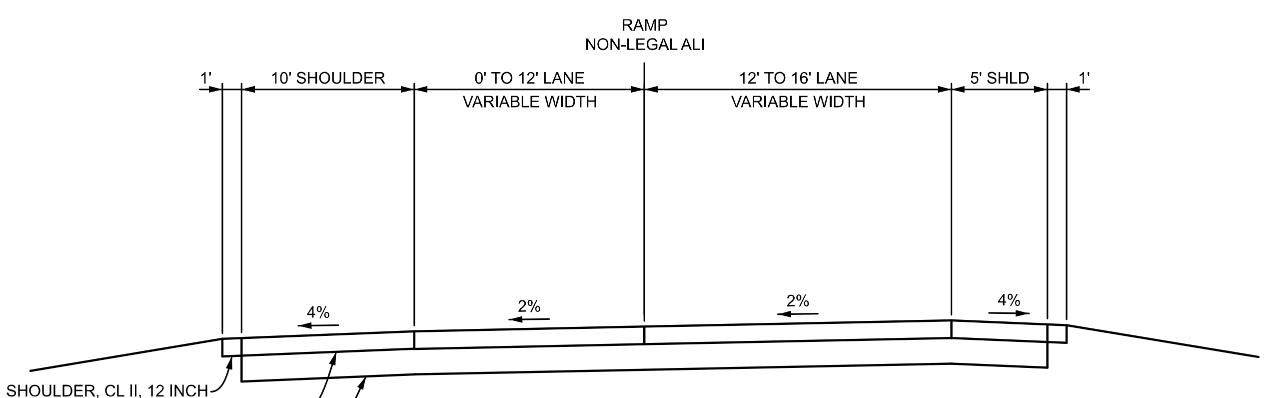

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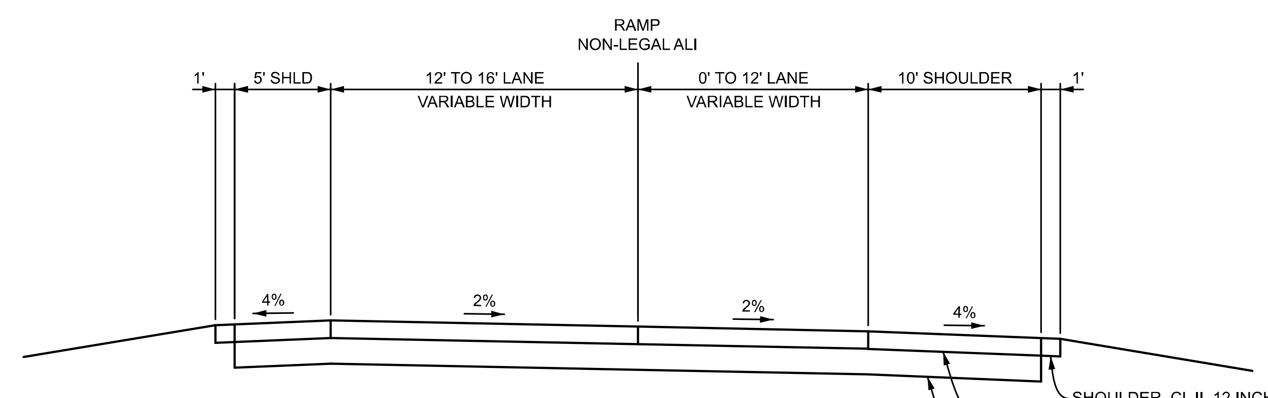

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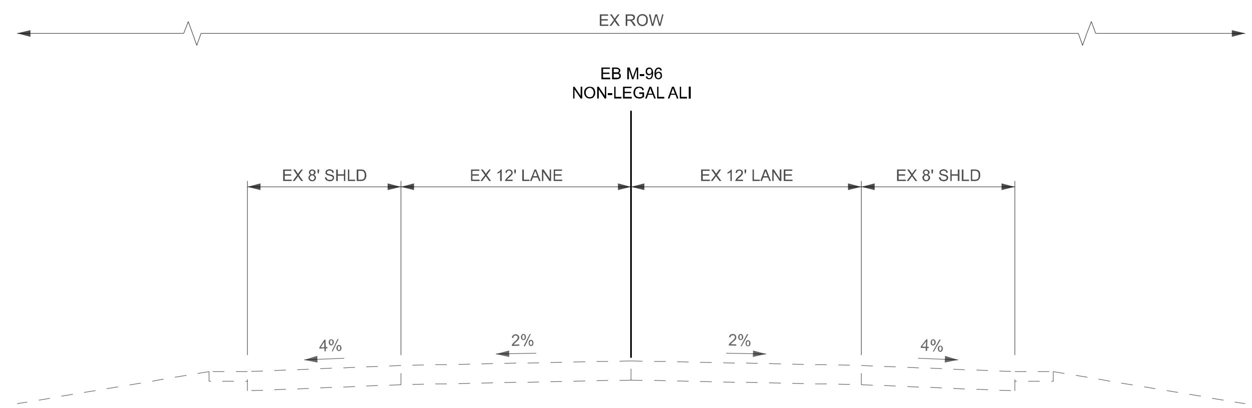
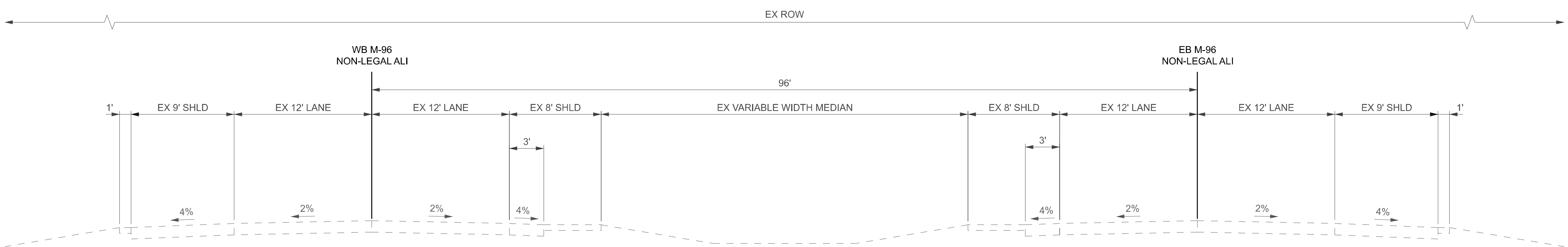


EXISTING M-96 SECTION



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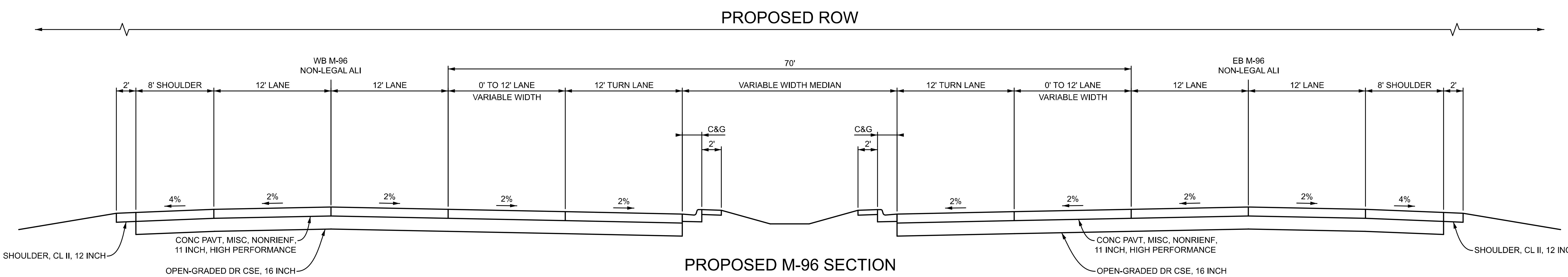

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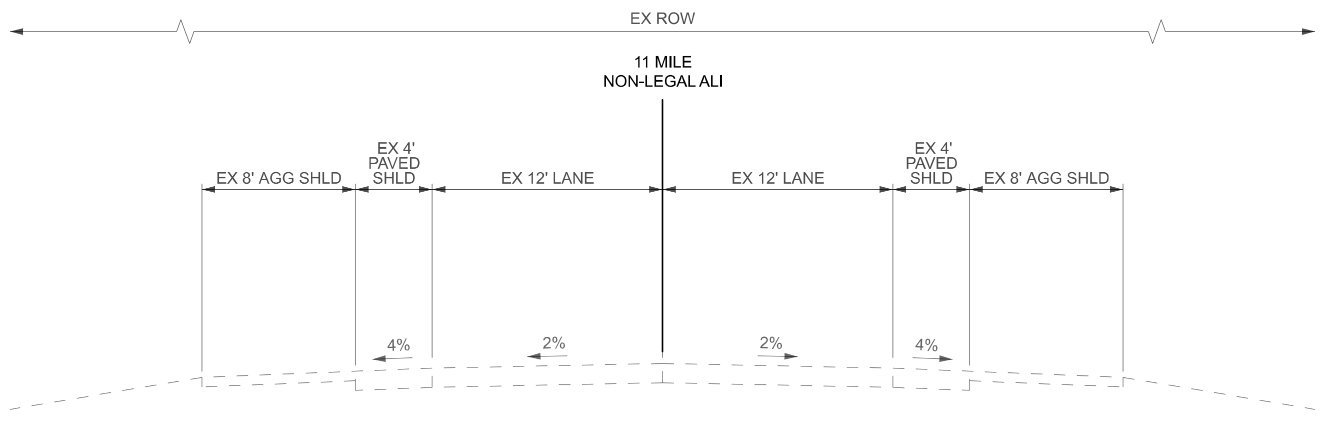
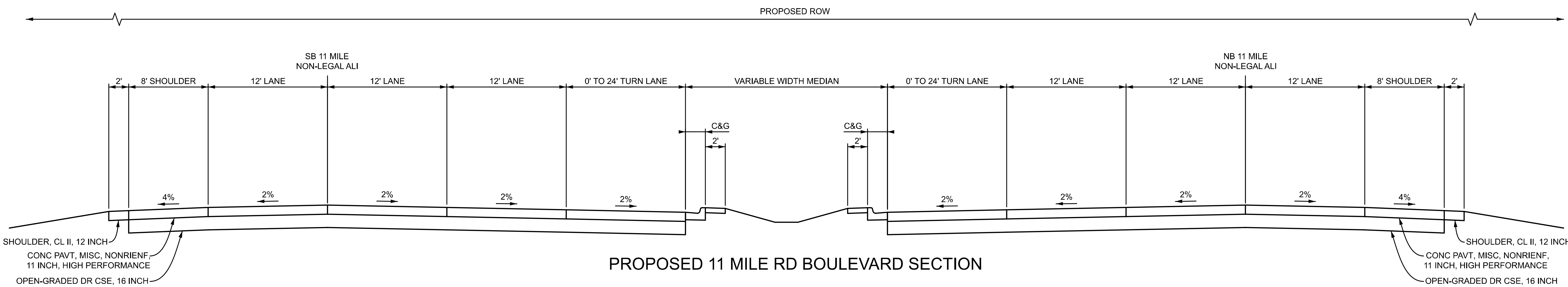


EXISTING 11 MILE RD SECTION



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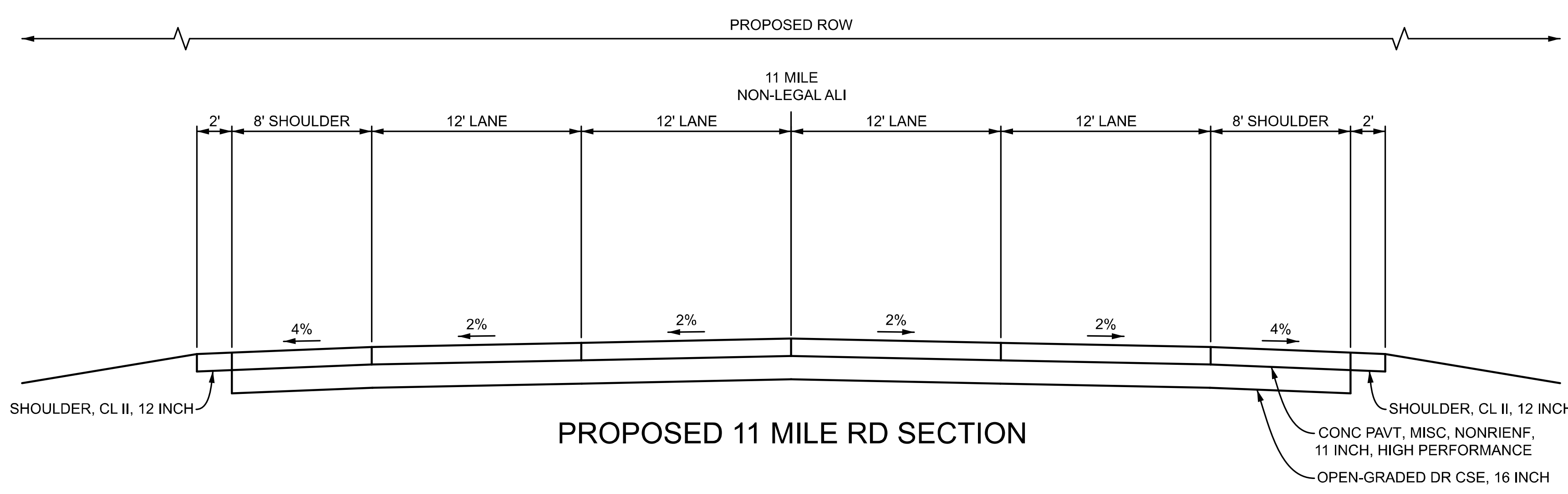


PROPOSED 11 MILE RD SECTION

N
94
69
Michael Baker
INTERNATIONAL
0
(FT)
500
CONCEPTUAL SITE MAP
MARSHALL MEGA SITE
12/07/2022

N
5A
4A
4B
4C
4D
3A
3B
2A
2B
2C
2D
1A
1B
1C
1D
94
69
Michael Baker
INTERNATIONAL
0
(FT)
500
CONCEPTUAL SITE MAP
MARSHALL MEGA SITE
12/07/2022

Appendix H.1: Data Verification Memo

06/06/2022

Michigan Department of Transportation
Attn: Dave Neubauer (MDOT PM)
From: Lauren Warren, PE, PTOE, PMP and Heather Zull, PE (C2G)

Re: MEDC/M-96 Data Verification

The data collection efforts were based on the scope of work outlined in the "Scope of Services: M-96/Michigan Avenue Corridor Traffic Impact Study and Preliminary Project Scope," dated March 3, 2022. Turning movement counts were collected on April 26, 2022, from 7:00 – 9:00 AM and 3:00 – 6:00 PM at the following intersections/interchanges:

- I-94 Ramps & M-294 (Beadle Lake Road) (Exit 100)
- I-94 Ramps & Old US-27 Ramps (Exit 110)
- I-94 Ramps & I-94BL (Partello Road) (Exit 112)
- M-96 (Michigan Avenue) & Wheatfield Parkway
- M-96 (Michigan Avenue) & M-311 (11 Mile Road)
- M-96 (Michigan Avenue) & Casino Main Entrance
- M-96 (Michigan Avenue) & Casino Gas Station
- M-96 (Michigan Avenue) & Casino East Driveway
- M-96 (Michigan Avenue) & Ackerson Drive
- M-96 (Michigan Avenue) & Ceresco Road (12 Mile Road)
- M-96 (Michigan Avenue) & Eden Street
- M-96 (Michigan Avenue) & Crossovers West of M-227
- M-96 (Michigan Avenue) & M-227 (West Drive)
- M-96 (Michigan Avenue) & Crossovers East of M-227

In addition, corridor counts were taken along the I-94 and I-69 corridors during the same time at the following locations:

- I-94 at I-69
- I-69 at I-94
- I-94 E of M-294 (Beadle Lake Road)
- I-94 E of M-311 (11 Mile Road)
- I-94 W of Old US-27
- I-94 W of I-94BL (Partello Road)
- I-69 N of M-96 (Michigan Avenue)

Per approval of the Michigan Department of Transportation (MDOT) via email, historic counts were utilized for the remaining intersections outlined in the scope of work. These counts were collected for Burns and McDonnell within the prior study on October 6, 2021, from 7:00 - 9:00 AM and 4:00 – 6:00 PM. Those locations are listed below:

- I-94 Ramps & M-311 (11 Mile Road) (Exit 104)
- M-96 (Michigan Avenue) & I-69 Ramps (Exit 36)
- M-96 (Michigan Avenue) & 13 Mile Road
- M-96 (Michigan Avenue) & 15 Mile Road North
- M-96 (Michigan Avenue) & C Drive North
- M-96 (Michigan Avenue) & 15 Mile Road South
- 15 Mile Road & Verona Road

The following table is a snapshot of the count locations and the years the data was collected.

Data Collection Comparison

Intersection	**2019 Counts**	**2021 Counts**	**2022 Counts**
I-94 Ramps & M-294/Beadle Lake Rd (Exit 100)			X
I-94 Ramps & M-311/11 Mile (Exit 104)	X	X	
I-94 at I-69			X
I-94 Ramps & Old US-27 Ramps (Exit 110)			X
I-94 Ramps & I-94BL/Partello Rd (Exit 112)			X
M-96/Michigan Ave & Wheatfield Pkwy			X
M-96/Michigan Ave & M-311/11 Mile	X	X	X
M-96/Michigan Ave & Casino Main Entrance		X	X
M-96/Michigan Ave & Casino Gas Station			X
M-96/Michigan Ave & Casino East Dr			X
M-96/Michigan Ave & Ackerson Dr			X
M-96/Michigan Ave & Ceresco Rd/12 Mile		X	X
M-96/Michigan Ave & 13 Mile		X	
M-96/Michigan Ave & Eden St			X
M-96/Michigan Ave & 15 Mile N		X	
M-96/Michigan Ave & C Drive N		X	
M-96/Michigan Ave & 15 Mile S		X	
M-96/Michigan Ave & I-69 Ramps (Exit 36)		X	
M-96/Michigan Ave & X-overs W of M-227			X
M-96/Michigan Ave & M-227/West Drive			X
M-96/Michigan Ave & X-overs E of M-227			X
15 Mile & Verona Road		X	

Peak Hour Selection

The MDOT "Electronic Traffic Control Devices Guidelines" states that peak hours of each intersection should be utilized for analysis. Given that the sites developed will have one (1) hour of traffic entering and exiting the site during a peak shift change, a single peak hour for M-96 (Michigan Avenue). The surrounding freeway network also selected the same peak hour. The locations within the study area were tallied and the highest total volume on the network system occurred from 4:15 PM-5:15 PM.

2021 and 2022 Volume Comparisons

EB M-96 (Michigan Avenue) Analysis

The area of largest discrepancy on EB M-96 (Michigan Avenue) was between the intersections of Ceresco Road (12 Mile Road) and 15 Mile Road North, as it is a location that mixes 2021 and 2022 counted intersections. Ceresco Road (12 Mile Road) and Eden Street were counted in 2022, while 13 Mile Road and 15 Mile Road North were both counted in 2021. The volumes from Ceresco Road (12 Mile Road) to 13 Mile Road decreased approximately 14%, and then the volumes increased approximately 13% to Eden Street. Volumes then dropped approximately 8% from Eden Street to 15 Mile Road North. Adjustments were made to balance out these locations between 2021 and 2022 counts.

Dummy nodes were added along EB M-96 (Michigan Avenue) to account for traffic volumes entering and exiting the corridor. There was an increase of 18 vehicles between the northbound and southbound ramps on EB M-96 (Michigan Avenue). In that area are a carpool lot and the MDOT TSC office; therefore, a dummy node was added to account for the additional traffic. There was another increase of 30 vehicles between the crossovers west of M-227 (West Drive). Winston Drive is located between the crossovers and it has several commercial uses south of M-96 (Michigan Avenue). A dummy node was created for this roadway. Lastly, between M-227 (West Drive) and the first crossover to the east, there was a loss of 10 vehicles. This was attributed to the commercial developments on the south side of the road and a dummy node was placed here.

WB M-96 (Michigan Avenue) Avenue Analysis

Along WB M-96 (Michigan Avenue), three (3) intersections within the study area were collected during both the 2021 and 2022 time periods. These include the following:

- M-96 (Michigan Avenue) at M-311 (11 Mile Road)
- M-96 (Michigan Avenue) at Casino Main Entrance
- M-96 (Michigan Avenue) at Ceresco Road (12 Mile Road)

The intersection of M-96 (Michigan Avenue) at M-311 (11 Mile Road) was also counted by the Michigan Department of Transportation (MDOT) in May 2019 providing a third recent data set.

The 2021 and 2022 counts at the three (3) intersections were compared to establish the validity of both data sets. An increase in volumes from 2021 to 2022 along WB M-96 (Michigan Avenue) was noticed. Upon a deeper evaluation by Burns and McDonnell (Memorandum to MDOT 5/17/22 and attached for reference). They noted that the discrepancy in volumes along WB M-96 (Michigan Avenue) is believed to be caused by detouring traffic from the closure of the I-69 NB to I-94 WB ramp and I-94 WB to I-69 SB ramp at the system interchange of I-94 and I-69 during the time that the counts were taken. The westbound through movement in the April 2022 counts along the M-96 (Michigan Avenue) corridor shows the greatest increase in traffic compared to the October 2021 counts. They summarize their findings as, "We strongly suspect that this difference is due to vehicles self-detouring to M-96 from I-94 construction in the area." This assumption was later supported based on local observations of trucks also detouring within the area from the freeway system. When balancing between intersections, this was considered.

Like the eastbound analysis, the area of largest discrepancy on WB M-96 (Michigan Avenue) was between the intersections of 15 Mile Road North and Ceresco Road (12 Mile Road), as Ceresco Road (12 Mile Road) and Eden Street were 2022 counts while 13 Mile Road and 15 Mile Road North were both counted in 2021. The volumes from 15 Mile Road North to Eden Street increased 27%, and then the volumes decreased by 46% to 13 Mile Road. Volumes then increased 29% from 13 Mile Road to Ceresco Road (12 Mile Road). When these discrepancies were balanced along the corridor, it was projected that there was an increase of approximately 130 vehicles in the peak hour due to self-detouring in the westbound direction.

Similar to eastbound traffic, dummy nodes were added along WB M-96 (Michigan Avenue). There was a discrepancy of 50 vehicles lost between the crossovers east of M-227 (West Drive). A dummy node was added here as there is a McDonald's and office driveway in that area. It should be noted that the entrance to the McDonald's was between the crossovers, but the exit to the crossover was close to the crossover and counted in the traffic volumes as a north leg at the crossover. Traffic exiting the McDonald's driveway totaled 77 vehicles.

There was an addition of 32 vehicles between the crossovers west of M-227 (West Drive) around a gas station and commercial development, thus a dummy node was added there. Finally, there was a dummy node added between M-311 (11 Mile Road) and Wheatfield to account for an additional 15 vehicles, which was attributed to the gas station in that area.

COVID-19 Factor Evaluation (Surface Streets)

At the M-96 (Michigan Avenue) and M-311 (11 Mile Road) intersection, the initial counts taken in May 2019, were prior to the COVID-19 pandemic, which had a significant impact on traffic volumes. When comparing subsequent counts at this intersection, the October 2021 counts showed a decrease in traffic of about 10%, which was attributed to fewer workers and motorists on the road during the pandemic timeframe. When counts were taken again in April 2022, that included the additional self-detouring, traffic volumes were approximately 10% higher than the 2019 traffic counts.

Once traffic was balanced between the 2021 and 2022 counts, and the presumptive self-detouring traffic was reduced, the peak hour traffic at the intersection of M-96 (Michigan Avenue) and M-311 (11 Mile Road) was compared to historical data. The May 2019 intersection count during the 4:15-5:15 PM time frame had a total of 1408 vehicles. The peak hour intersection count for the adjusted 2021/2022 volumes was 1392 vehicles. The difference between the historic count and the balanced volumes was a loss of approximately one percent (1%) of the traffic. It was determined that a 1% difference is likely an accurate representation of volumes normalizing to post-COVID volumes when considering additional opportunities to work remotely or work flexible schedules. Additionally, a 1% increase would result in a very small number of vehicles added to the network for the baseline. Therefore, a COVID-19 adjustment factor was not applied to the volumes.

A schematic of the proposed existing counts is attached to this memorandum.

Mainline Volumes

Corridor counts were obtained in both 2021 and 2022 along I-94 and I-69 at interchange locations within the study area. The 4:15-5:15pm peak hour counts were obtained and placed onto the network. Upon further examination of the counts several key items are worth noting:

- Ramps and Segments were closed:
    - I-69 NB to I-94 WB loop ramp
    - I-94 WB to I-69 SB loop ramp
    - I-94 WB collector-distributor (within interchange)
    - I-69 was reduced to one-lane north of I-94
- Detours were in place:
    - Posted detour using I-69 NB to N Drive and back south increased ramp volumes on I-94 WB to I-69 NB and I-69 SB to I-94 WB
    - Self-detour along M-96/Michigan westbound (as noted above)
    - Potential self-detours utilizing Hwy US-27 and Partello Road to avoid I-69 closures
    - Potential regional avoidance of I-69 due to construction/lane closures

Based on this information, additional counts were obtained from the MDOT Transportation Data Management System (TDMS) at all locations within the study area. The peak hour counts were taken from data collected in 2018 and 2019 (Tuesday/Wednesday). When comparing the 2018/2019 and 2021/2022 counts there is not an apparent trend in counts being lower or higher on the overall network. Instead increases and decreases are concentrated in pockets along I-69 and split along I-94 west or east of the I-69 interchange. It is believed these shifts are attributed to the closures and detours in place.

To determine the proposed counts for existing conditions modeling and analysis, the 2018/2019 data was used as the foundation. These counts were obtained without construction influence, include critical locations not taken in recent years and were obtained prior to the COVID-19 pandemic. Additional balancing notes:

- Mainline always started with a known/counted data point and balanced to the higher count.
- Ramp counts at I-94/Beadle Lake used 2022 data.
- Ramp counts at I-94/11 Mile and I-69/Michigan used 2021 data. Counts did not differ widely at these locations and were set to balance with the local network volumes.

- Ramp counts at I-94/Partello Road and I-94/Hwy US-27 used 2018/2019 counts. Between the two data sets it appears self-detouring vehicles might be skewing counts in 2022.

The following tables show the count locations and volumes by year, percent difference, and the proposed balanced counts that will be used in modeling.

Eastbound I-94				EXISTING				
Volume Location	***Segment From / To***	***Segment Type***	***Existing Lanes***	***2018/2019***	***2021***	***2022***	***Difference***	***Balanced***
Mainline	W. of Beadle Lake	Basic	2	2,180		1,839	-16%	2,180
Off-Ramp	Beadle Lake (I-94) Diverge	Diverge	1	132	128	167	27%	167
Mainline	Between Beadle Lake (I-94) Diverge and Merge	Basic	2	2,048		1,672	-18%	2,013
On-Ramp	Beadle Lake (I-94) Merge	Merge	1	112	119	106	-5%	106
Mainline	Beadle Lake to M-311/11 Mile	Basic	2	2,160		1,778	-18%	2,119
Off-Ramp	M-311/11 Mile (I-94) Diverge	Diverge	1	279	214	164	-41%	214
Mainline	Between M-311/11 Mile (I-94) Diverge and Merge	Basic	2	1,881		1,614	-14%	1,905
On-Ramp	M-311/11 Mile (I-94) Merge	Merge	1	303	232	232	-23%	232
Mainline	M-311/11 Mile to I-94 CD	Basic	2	2,184		1,846	-15%	2,137
Off-Ramp	I-94 CD Diverge	Diverge	1	1,240		783	-37%	1,193
Mainline	I-94 CD Diverge to I-94 CD Merge (I-94)	Basic	2	944		1,125	19%	944
Mainline	Between I-94 and I-69 SB Diverge (I-94 CD)	Basic	1	1,240		783	-37%	1,193
Off-Ramp	I-69 SB Diverge	Diverge	1	468		332	-29%	468
Mainline	Between I-69 SB Diverge and I-69 SB On-ramp (I-94 CD)	Basic	1	772		451	-42%	725
On-Ramp	Between I-69 SB On-Ramp to I-69 NB Off-Ramp (I-94 CD)	Weave	1	68		37	-46%	68
Mainline			2	840		488	-42%	793
Off-Ramp			1	776		451	-42%	725
Mainline	Between I-69 NB Off-ramp and I-69 NB Merge (I-94 CD)	Basic	1	68		37	-46%	68
On-Ramp	I-69 NB (I-94 CD) Merge	Merge	1	195		173	-11%	195
On-Ramp	I-94 CD (I-94) Merge	Merge	1	262		210	-20%	262
Mainline	Between I-69 (I-94) and US-27	Basic	2	1,206		1,335	11%	1,206
Off-Ramp	US-27 (I-94) Diverge	Diverge	1	296		327	10%	296
Mainline	Between US-27 (I-94) Diverge and Merge	Basic	2	910		1,009	11%	910
On-Ramp	US-27 (I-94) Merge	Merge	1	59		96	63%	59
Mainline	Between US-27 and Partello	Basic	2	969		1,105	14%	969
Off-Ramp	Partello (I-94) Diverge	Diverge	1	164		113	-31%	164
Mainline	Between Partello (I-94) Diverge and Merge	Basic	2	805		1,071	33%	805
On-Ramp	Partello (I-94) Merge	Merge	1	192		126	-34%	192
Mainline	E. of Partello	Basic	2	997		1,197	20%	997

Balanced count via calculation

Westbound I-94				EXISTING				
Volume Location	***Segment From / To***	***Segment Type***	***Existing Lanes***	***2018/2019***	***2021***	***2022***	***Difference***	***Balanced***
Mainline	E. of Partello	Basic	2	952		1,160	22%	1,160
Off-Ramp	Partello (I-94) Diverge	Diverge	1	111		103	-7%	111
Mainline	Between Partello (I-94) Diverge and Merge	Basic	2	841		1,057	26%	1,049
On-Ramp	Partello (I-94) Merge	Merge	1	103		69	-33%	103
Mainline	Between Partello and US-27	Basic	2	944		1,126	19%	1,152
Off-Ramp	US-27 (I-94) Diverge	Diverge	1	122		113	-7%	122
Mainline	Between US-27 (I-94) Diverge and Merge	Basic	2	822		1,013	23%	1,030
On-Ramp	US-27 (I-94) Merge	Merge	1	162		228	41%	162
Mainline	Between US-27 (I-94) Merge and Merge	Basic	2	984		1,071	9%	1,192
On-Ramp	US-27 (I-94) Merge	Merge	1	77		92	19%	77
Mainline	Between US-27 (I-94) and I-69	Basic	2	1,061		1,163	10%	1,269
Off-Ramp	I-94 CD Diverge	Diverge	1	220				220
Mainline	I-94 CD Diverge to I-94 CD Merge (I-94)	Basic	2	841		1,087	29%	1,049
Mainline	Between I-94 and I-69 NB Diverge (I-94 CD)	Basic	1	216				220
Off-Ramp	I-69 NB Diverge	Diverge	1	75		73	-3%	79
Mainline	Between I-69 NB Diverge and I-69 NB (I-94 CD)	Basic	1	141		-		141
On-Ramp	Between I-69 NB On-Ramp to I-69 SB Off-Ramp (I-94 CD)	Weave	1	468		-		468
Mainline			2	609		-		609
Off-Ramp			1	141		-		141
Mainline	Between I-69 SB Off-ramp and I-69 SB Merge (I-94 CD)	Basic	1	468		-		468
On-Ramp	I-69 SB (I-94 CD) Merge	Merge	1	790		413	-48%	790
On-Ramp	I-94 CD (I-94) Merge	Merge	1	1,226				1,258
Mainline	I-94 CD to M-311/11 Mile	Basic	2	2,067		1,283	-38%	2,307
Off-Ramp	M-311/11 Mile (I-94) Diverge	Diverge	1	271	243			250
Mainline	Between M-311/11 Mile (I-94) Diverge and Merge	Basic	2	1,796		1,283	-29%	2,057
On-Ramp	M-311/11 Mile (I-94) Merge	Merge	1	285	160			160
Mainline	M-311/11 Mile to Beadle Lake	Basic	2	2,081		1,283	-38%	2,217
Off-Ramp	Beadle Lake (I-94) Diverge	Diverge	1	110	176	123	12%	123
Mainline	Between Beadle Lake (I-94) Diverge and Merge	Basic	2	1,971		1,436	-27%	2,094
On-Ramp	Beadle Lake (I-94) Merge	Merge	1	89	142	112	26%	112
Mainline	W. of Beadle Lake	Basic	2	2,060		1,548	-25%	2,206

Balanced count via calculation

Northbound I-69				EXISTING				
Volume Location	***Segment From / To***	***Segment Type***	***Existing Lanes***	***2018/2019***	***2021***	***2022***	***Difference***	***Balanced***
Mainline	S. of M-96 (Michigan)	Basic	2	743				822
Off-Ramp	M-96 (Michigan)(I-69) Diverge	Diverge	1	131	179			179
Mainline	Between M-96 (Michigan)(I-69) Diverge and Merge	Basic	2	612		369	-40%	643
On-Ramp	M-96 (Michigan) (I-69) Merge	Merge	1	237	206			206
Mainline	M-96 (Michigan) to I-69 CD	Basic	2	849				849
Off-Ramp	I-69 CD Diverge	Diverge	1	645				645
Mainline	I-69 CD Diverge to I-69 CD Merge (I-69)	Basic	2	204		349	71%	204
Mainline	Between I-69 and I-94 EB Diverge (I-69 CD)	Basic	1	645		-		645
Off-Ramp	I-94 EB Diverge	Diverge	1	195		173	-11%	195
Mainline	Between I-94 EB Diverge and I-94 EB Merge (I-69 CD)	Basic	1	468		-		468
On-Ramp	Between I-94 EB On-Ramp to I-94 WB Off-Ramp	Weave	1	776		-		725
Mainline			2	1,244		-		1,193
Off-Ramp			1	468		451	-4%	468
Mainline	Between I-94 WB Off-ramp and I-94 WB Merge	Basic	1	776		-		725
On-Ramp	I-94 WB (I-69 CD) Merge	Merge	1	75		349	365%	79
On-Ramp	I-69 CD (I-69) Merge	Merge	1	820				804
Mainline	N. of I-94	Basic	2	1,024				1,008

Balanced count via calculation

Southbound I-69				EXISTING				
Volume Location	***Segment From / To***	***Segment Type***	***Existing Lanes***	***2018/2019***	***2021***	***2022***	***Difference***	***Balanced***
Mainline	N. of I-94	Basic	2	1,116				1,116
Off-Ramp	I-69 CD Diverge	Diverge	1	847				847
Mainline	I-69 CD Diverge to I-69 CD Merge (I-69)	Basic	2	269				269
Mainline	Between I-69 and I-94 WB Diverge (I-69 CD)	Basic	1	847				847
Off-Ramp	I-69 WB Diverge	Diverge	1	790		413	-48%	790
Mainline	Between I-94 WB Diverge and I-94 WB Merge (I-69 CD	Basic	1	68				68
On-Ramp	Between I-94 WB On-Ramp to I-94 EB Off-Ramp	Weave	1	141		-		141
Mainline			2	209		-		209
Off-Ramp			1	68		37	-46%	68
Mainline	Between I-94 EB Off-ramp and I-94 EB Merge	Basic	1	141		-		141
On-Ramp	I-94 EB (I-69 CD) Merge	Merge	1	468		-		468
On-Ramp	I-69 CD (I-69) Merge	Merge	1	608		332	-45%	608
Mainline	I-69 CD to M-96 (Michigan)	Basic	2	877				877
Off-Ramp	M-96 (Michigan)(I-69) Diverge	Diverge	1	192	148	-		148
Mainline	Between M-96 (Michigan)(I-69) Diverge and Merge	Basic	2	685		453	-34%	729
On-Ramp	M-96 (Michigan) (I-69) Merge	Merge	1	166	207	-		207
Mainline	S. of M-96 (Michigan)	Basic	2	851				936

Balanced count via calculation

Appendix H.2: Synchro model output (Existing)

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	292	23	55	346	256	23	41	38	201	51	25
Future Volume (veh/h)	41	292	23	55	346	256	23	41	38	201	51	25
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1796	1900	1841	1900	1885	1752	1841	1678	1856	1856	1826	1693
Adj Flow Rate, veh/h	44	311	24	58	364	269	27	48	45	228	58	28
Peak Hour Factor	0.94	0.94	0.94	0.95	0.95	0.95	0.85	0.85	0.85	0.88	0.88	0.88
Percent Heavy Veh, %	7	0	4	0	1	10	4	15	3	3	5	14
Cap, veh/h	164	920	71	299	511	531	630	612	573	1346	753	591
Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.04	0.36	0.36	0.09	0.41	0.41
Sat Flow, veh/h	763	3397	261	1062	1885	1485	1753	1678	1572	3428	1826	1434
Grp Volume(v), veh/h	44	164	171	58	364	269	27	48	45	228	58	28
Grp Sat Flow(s),veh/h/ln	763	1805	1853	1062	1885	1485	1753	1678	1572	1714	1826	1434
Q Serve(g_s), s	4.4	5.8	5.9	3.7	14.0	11.4	0.7	1.5	1.5	3.1	1.5	0.9
Cycle Q Clear(g_c), s	18.4	5.8	5.9	9.6	14.0	11.4	0.7	1.5	1.5	3.1	1.5	0.9
Prop In Lane	1.00		0.14	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	164	489	502	299	511	531	630	612	573	1346	753	591
V/C Ratio(X)	0.27	0.34	0.34	0.19	0.71	0.51	0.04	0.08	0.08	0.17	0.08	0.05
Avail Cap(c_a), veh/h	243	677	695	410	707	686	745	612	573	1751	753	591
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.96	0.96	0.96
Uniform Delay (d), s/veh	34.7	23.4	23.4	27.3	26.4	20.1	14.4	16.6	16.6	12.9	14.3	14.1
Incr Delay (d2), s/veh	0.9	0.4	0.4	0.3	2.1	0.7	0.0	0.3	0.3	0.1	0.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	2.3	2.3	0.9	5.8	3.5	0.3	0.5	0.5	1.1	0.6	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.5	23.8	23.8	27.6	28.4	20.9	14.5	16.9	16.9	13.0	14.5	14.2
LnGrp LOS	D	C	C	C	C	C	B	B	B	B	B	B
Approach Vol, veh/h		379			691			120			314	
Approach Delay, s/veh		25.2			25.4			16.3			13.4	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	14.6	36.8		28.7	10.8	40.6		28.7
Change Period (Y+Rc), s	7.6	7.6		7.0	7.6	7.6		7.0
Max Green Setting (Gmax), s	16.4	11.4		30.0	8.4	19.4		30.0
Max Q Clear Time (g_c+I1), s	5.1	0.0		20.4	2.7	0.0		16.0
Green Ext Time (p_c), s	0.6	0.0		1.3	0.0	0.0		3.5

Intersection Summary			
HCM 6th Ctrl Delay			22.1
HCM 6th LOS			C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	4	1	99	48	103	5	217	79	77	155	31
Future Volume (veh/h)	23	4	1	99	48	103	5	217	79	77	155	31
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1900	1900	1826	1752	1441	1900	1648	1826	1174	1589	1678
Adj Flow Rate, veh/h	38	7	2	118	57	123	6	249	91	86	172	34
Peak Hour Factor	0.60	0.60	0.60	0.84	0.84	0.84	0.87	0.87	0.87	0.90	0.90	0.90
Percent Heavy Veh, %	10	0	0	5	10	31	0	17	5	49	21	15
Cap, veh/h	156	238	68	314	83	179	826	1100	1033	487	860	170
Arrive On Green	0.17	0.17	0.17	0.17	0.17	0.17	0.67	0.67	0.67	0.67	0.67	0.67
Sat Flow, veh/h	1128	1421	406	1373	494	1066	1195	1648	1547	653	1288	255
Grp Volume(v), veh/h	38	0	9	118	0	180	6	249	91	86	0	206
Grp Sat Flow(s),veh/h/ln	1128	0	1827	1373	0	1560	1195	1648	1547	653	0	1543
Q Serve(g_s), s	2.6	0.0	0.3	6.3	0.0	8.7	0.2	4.7	1.7	4.8	0.0	4.1
Cycle Q Clear(g_c), s	11.3	0.0	0.3	6.6	0.0	8.7	4.3	4.7	1.7	9.5	0.0	4.1
Prop In Lane	1.00		0.22	1.00		0.68	1.00		1.00	1.00		0.17
Lane Grp Cap(c), veh/h	156	0	306	314	0	261	826	1100	1033	487	0	1030
V/C Ratio(X)	0.24	0.00	0.03	0.38	0.00	0.69	0.01	0.23	0.09	0.18	0.00	0.20
Avail Cap(c_a), veh/h	369	0	651	573	0	556	826	1100	1033	487	0	1030
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	36.7	0.0	27.9	30.6	0.0	31.3	5.9	5.2	4.7	7.1	0.0	5.1
Incr Delay (d2), s/veh	0.8	0.0	0.0	0.7	0.0	3.2	0.0	0.5	0.2	0.8	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	0.1	2.1	0.0	3.5	0.0	1.4	0.5	0.7	0.0	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.5	0.0	27.9	31.4	0.0	34.6	5.9	5.7	4.9	7.9	0.0	5.5
LnGrp LOS	D	A	C	C	A	C	A	A	A	A	A	A
Approach Vol, veh/h		47			298			346			292	
Approach Delay, s/veh		35.6			33.3			5.5			6.2	
Approach LOS		D			C			A			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		60.1		19.9		60.1		19.9				
Change Period (Y+Rc), s		6.7		6.5		6.7		6.5				
Max Green Setting (Gmax), s		38.3		28.5		38.3		28.5				
Max Q Clear Time (g_c+I1), s		0.0		10.7		0.0		13.3				
Green Ext Time (p_c), s		0.0		1.7		0.0		0.1				
Intersection Summary												
HCM 6th Ctrl Delay			15.6									
HCM 6th LOS			B									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	17	12	98	12	104	9	187	142	73	167	15
Future Volume (veh/h)	10	17	12	98	12	104	9	187	142	73	167	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1826	1781	1441	1841	1841	1841	1366	1826	1707
Adj Flow Rate, veh/h	11	19	13	120	15	127	10	199	151	78	180	16
Peak Hour Factor	0.89	0.89	0.89	0.82	0.82	0.82	0.94	0.94	0.94	0.93	0.93	0.93
Percent Heavy Veh, %	10	10	10	5	8	31	4	4	4	36	5	13
Cap, veh/h	154	138	94	258	23	195	876	1298	1100	621	1288	1020
Arrive On Green	0.14	0.14	0.14	0.14	0.14	0.14	1.00	1.00	1.00	0.71	0.71	0.71
Sat Flow, veh/h	1167	969	663	1344	162	1372	1168	1841	1560	753	1826	1447
Grp Volume(v), veh/h	11	0	32	120	0	142	10	199	151	78	180	16
Grp Sat Flow(s),veh/h/ln	1167	0	1632	1344	0	1534	1168	1841	1560	753	1826	1447
Q Serve(g_s), s	0.7	0.0	1.4	6.9	0.0	7.0	0.0	0.0	0.0	2.7	2.6	0.3
Cycle Q Clear(g_c), s	7.7	0.0	1.4	8.2	0.0	7.0	2.6	0.0	0.0	2.7	2.6	0.3
Prop In Lane	1.00		0.41	1.00		0.89	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	154	0	232	258	0	218	876	1298	1100	621	1288	1020
V/C Ratio(X)	0.07	0.00	0.14	0.46	0.00	0.65	0.01	0.15	0.14	0.13	0.14	0.02
Avail Cap(c_a), veh/h	407	0	586	549	0	550	876	1298	1100	621	1288	1020
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.97	0.97	0.97	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.1	0.0	30.0	33.6	0.0	32.4	0.1	0.0	0.0	3.9	3.9	3.5
Incr Delay (d2), s/veh	0.2	0.0	0.3	1.3	0.0	3.2	0.0	0.2	0.3	0.4	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.6	2.3	0.0	2.8	0.0	0.1	0.1	0.4	0.8	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.3	0.0	30.3	34.9	0.0	35.7	0.1	0.2	0.3	4.3	4.1	3.5
LnGrp LOS	D	A	C	C	A	D	A	A	A	A	A	A
Approach Vol, veh/h		43			262			360			274	
Approach Delay, s/veh		31.8			35.3			0.2			4.1	
Approach LOS		C			D			A			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		62.3		17.7		62.3		17.7				
Change Period (Y+Rc), s		* 5.9		* 6.3		* 5.9		* 6.3				
Max Green Setting (Gmax), s		* 39		* 29		* 39		* 29				
Max Q Clear Time (g_c+I1), s		0.0		9.7		0.0		10.2				
Green Ext Time (p_c), s		0.0		0.1		0.0		1.2				

Intersection Summary	
HCM 6th Ctrl Delay	12.6
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	2.8

Movement	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	SWL	SWR
Lane Configurations										
Traffic Vol, veh/h	0	112	0	270	52	54	358	0	0	0
Future Vol, veh/h	0	112	0	270	52	54	358	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	-	None	-	-	None	-	-
Storage Length	0	240	-	-	-	105	-	-	-	-
Veh in Median Storage, #	0	-	-	0	-	-	0	-	0	-
Grade, %	0	-	-	0	-	-	0	-	0	-
Peak Hour Factor	93	93	91	91	91	95	95	95	92	92
Heavy Vehicles, %	0	0	2	2	2	3	3	3	2	2
Mvmt Flow	0	120	0	297	57	57	377	0	0	0

Major/Minor	Minor2		Major1			Major2		
Conflicting Flow All	817	377	-	0	0	354	0	0
Stage 1	491	-	-	-	-	-	-	-
Stage 2	326	-	-	-	-	-	-	-
Critical Hdwy	6.47	6.2	-	-	-	4.13	-	-
Critical Hdwy Stg 1	5.47	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.47	-	-	-	-	-	-	-
Follow-up Hdwy	3.563	3.3	-	-	-	2.227	-	-
Pot Cap-1 Maneuver	339	674	0	-	-	1199	-	0
Stage 1	605	-	0	-	-	-	-	0
Stage 2	720	-	0	-	-	-	-	0
Platoon blocked, %				-	-		-	
Mov Cap-1 Maneuver	323	674	-	-	-	1199	-	-
Mov Cap-2 Maneuver	429	-	-	-	-	-	-	-
Stage 1	605	-	-	-	-	-	-	-
Stage 2	685	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.6	0	1.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	EBLn2	SBL	SBT
Capacity (veh/h)	-	-	429	674	1199	-
HCM Lane V/C Ratio	-	-	0.138	0.179	0.047	-
HCM Control Delay (s)	-	-	14.7	11.5	8.2	-
HCM Lane LOS	-	-	B	B	A	-
HCM 95th %tile Q(veh)	-	-	0.5	0.6	0.1	-

Intersection	
Int Delay, s/veh	2.7

Movement	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NER
Lane Configurations										
Traffic Vol, veh/h	0	57	61	264	0	0	346	50	0	0
Future Vol, veh/h	0	57	61	264	0	0	346	50	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	-	None	-	-	None	-	-
Storage Length	0	185	165	-	-	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	-	-	0	-	0	-
Grade, %	0	-	-	0	-	-	0	-	0	-
Peak Hour Factor	81	81	87	87	87	92	92	92	92	92
Heavy Vehicles, %	0	11	3	3	3	3	3	3	2	2
Mvmt Flow	0	70	70	303	0	0	376	54	0	0

Major/Minor	Minor1		Major1			Major2		
Conflicting Flow All	846	303	430	0	-	-	-	0
Stage 1	443	-	-	-	-	-	-	-
Stage 2	403	-	-	-	-	-	-	-
Critical Hdwy	6.4	6.31	4.13	-	-	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	3.399	2.227	-	-	-	-	-
Pot Cap-1 Maneuver	335	716	1124	-	0	0	-	-
Stage 1	651	-	-	-	0	0	-	-
Stage 2	679	-	-	-	0	0	-	-
Platoon blocked, %				-			-	-
Mov Cap-1 Maneuver	314	716	1124	-	-	-	-	-
Mov Cap-2 Maneuver	422	-	-	-	-	-	-	-
Stage 1	611	-	-	-	-	-	-	-
Stage 2	679	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.3	1.6	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	WBLn1	WBLn2	SBT	SBR
Capacity (veh/h)	1124	-	422	716	-	-
HCM Lane V/C Ratio	0.062	-	0.193	0.098	-	-
HCM Control Delay (s)	8.4	-	15.6	10.6	-	-
HCM Lane LOS	A	-	C	B	-	-
HCM 95th %tile Q(veh)	0.2	-	0.7	0.3	-	-

Intersection						
Int Delay, s/veh	4.8					

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	184	140	0	396	272	0
Future Vol, veh/h	184	140	0	396	272	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	82	82	92	92
Heavy Vehicles, %	17	4	0	3	7	0
Mvmt Flow	198	151	0	483	296	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	538	148	-	0	-	0
Stage 1	296	-	-	-	-	-
Stage 2	242	-	-	-	-	-
Critical Hdwy	7.14	6.98	-	-	-	-
Critical Hdwy Stg 1	6.14	-	-	-	-	-
Critical Hdwy Stg 2	6.14	-	-	-	-	-
Follow-up Hdwy	3.67	3.34	-	-	-	-
Pot Cap-1 Maneuver	438	866	0	-	-	0
Stage 1	686	-	0	-	-	0
Stage 2	733	-	0	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	438	866	-	-	-	-
Mov Cap-2 Maneuver	438	-	-	-	-	-
Stage 1	686	-	-	-	-	-
Stage 2	733	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	15.6	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	EBLn1	EBLn2	SBT
Capacity (veh/h)	-	438	866	-
HCM Lane V/C Ratio	-	0.452	0.174	-
HCM Control Delay (s)	-	19.8	10	-
HCM Lane LOS	-	C	B	-
HCM 95th %tile Q(veh)	-	2.3	0.6	-

Intersection	
Int Delay, s/veh	1.8

Movement	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NER
Lane Configurations										
Traffic Vol, veh/h	0	60	0	352	0	0	220	86	0	0
Future Vol, veh/h	0	60	0	352	0	0	220	86	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	-	None	-	-	None	-	-
Storage Length	0	205	-	-	-	-	-	135	-	-
Veh in Median Storage, #	0	-	-	0	-	-	0	-	0	-
Grade, %	0	-	-	0	-	-	0	-	0	-
Peak Hour Factor	88	88	88	88	88	95	95	95	92	92
Heavy Vehicles, %	0	17	0	5	0	0	8	27	2	2
Mvmt Flow	0	68	0	400	0	0	232	91	0	0

Major/Minor	Minor1		Major1			Major2		
Conflicting Flow All	516	200	-	0	-	-	-	0
Stage 1	400	-	-	-	-	-	-	-
Stage 2	116	-	-	-	-	-	-	-
Critical Hdwy	6.88	7.24	-	-	-	-	-	-
Critical Hdwy Stg 1	5.88	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.88	-	-	-	-	-	-	-
Follow-up Hdwy	3.54	3.47	-	-	-	-	-	-
Pot Cap-1 Maneuver	484	763	0	-	0	0	-	-
Stage 1	640	-	0	-	0	0	-	-
Stage 2	890	-	0	-	0	0	-	-
Platoon blocked, %				-			-	-
Mov Cap-1 Maneuver	484	763	-	-	-	-	-	-
Mov Cap-2 Maneuver	484	-	-	-	-	-	-	-
Stage 1	640	-	-	-	-	-	-	-
Stage 2	890	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.7	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	WBLn1	WBLn2	SBT	SBR
Capacity (veh/h)	-	484	763	-	-
HCM Lane V/C Ratio	-	0.122	0.089	-	-
HCM Control Delay (s)	-	13.5	10.2	-	-
HCM Lane LOS	-	B	B	-	-
HCM 95th %tile Q(veh)	-	0.4	0.3	-	-

Intersection						
Int Delay, s/veh	2.7					

Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Vol, veh/h	33	80	0	270	154	0
Future Vol, veh/h	33	80	0	270	154	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	74	74	93	93	89	89
Heavy Vehicles, %	3	50	17	17	12	12
Mvmt Flow	45	108	0	290	173	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	463	173	-	0	-	0
Stage 1	173	-	-	-	-	-
Stage 2	290	-	-	-	-	-
Critical Hdwy	6.43	6.7	-	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.75	-	-	-	-
Pot Cap-1 Maneuver	555	760	0	-	-	0
Stage 1	855	-	0	-	-	0
Stage 2	757	-	0	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	555	760	-	-	-	-
Mov Cap-2 Maneuver	555	-	-	-	-	-
Stage 1	855	-	-	-	-	-
Stage 2	757	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s	11	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NET	SELn1	SELn2	SWT
Capacity (veh/h)	-	555	760	-
HCM Lane V/C Ratio	-	0.08	0.142	-
HCM Control Delay (s)	-	12.1	10.5	-
HCM Lane LOS	-	B	B	-
HCM 95th %tile Q(veh)	-	0.3	0.5	-

Intersection	
Int Delay, s/veh	4

Movement	EBL	EBR	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Vol, veh/h	6	97	58	124	60	11
Future Vol, veh/h	6	97	58	124	60	11
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	195	0	-	-	-	90
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	83	83	91	91	78	78
Heavy Vehicles, %	15	15	43	3	7	7
Mvmt Flow	7	117	64	136	77	14

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	341	77	91	0	-	0
Stage 1	77	-	-	-	-	-
Stage 2	264	-	-	-	-	-
Critical Hdwy	6.55	6.35	4.53	-	-	-
Critical Hdwy Stg 1	5.55	-	-	-	-	-
Critical Hdwy Stg 2	5.55	-	-	-	-	-
Follow-up Hdwy	3.635	3.435	2.587	-	-	-
Pot Cap-1 Maneuver	629	949	1282	-	-	-
Stage 1	914	-	-	-	-	-
Stage 2	751	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	595	949	1282	-	-	-
Mov Cap-2 Maneuver	595	-	-	-	-	-
Stage 1	865	-	-	-	-	-
Stage 2	751	-	-	-	-	-

Approach	EB	NE	SW
HCM Control Delay, s	9.4	2.5	0
HCM LOS	A		

Minor Lane/Major Mvmt	NEL	NET	EBLn1	EBLn2	SWT	SWR
Capacity (veh/h)	1282	-	595	949	-	-
HCM Lane V/C Ratio	0.05	-	0.012	0.123	-	-
HCM Control Delay (s)	8	0	11.1	9.3	-	-
HCM Lane LOS	A	A	B	A	-	-
HCM 95th %tile Q(veh)	0.2	-	0	0.4	-	-

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Vol, veh/h	28	356	409	0	0	84
Future Vol, veh/h	28	356	409	0	0	84
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	500	-	-	50	500	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	86	86	92	92	72	72
Heavy Vehicles, %	7	1	2	2	0	8
Mvmt Flow	33	414	445	0	0	117

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	445	0	-	0	925	445
Stage 1	-	-	-	-	445	-
Stage 2	-	-	-	-	480	-
Critical Hdwy	4.17	-	-	-	6.4	6.28
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.263	-	-	-	3.5	3.372
Pot Cap-1 Maneuver	1089	-	-	-	301	601
Stage 1	-	-	-	-	650	-
Stage 2	-	-	-	-	627	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1089	-	-	-	292	601
Mov Cap-2 Maneuver	-	-	-	-	420	-
Stage 1	-	-	-	-	631	-
Stage 2	-	-	-	-	627	-

Approach	EB	WB	SW
HCM Control Delay, s	0.6	0	12.4
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SWLn1	SWLn2
Capacity (veh/h)	1089	-	-	-	-	601
HCM Lane V/C Ratio	0.03	-	-	-	-	0.194
HCM Control Delay (s)	8.4	-	-	-	0	12.4
HCM Lane LOS	A	-	-	-	A	B
HCM 95th %tile Q(veh)	0.1	-	-	-	-	0.7

Intersection	
Int Delay, s/veh	3.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	138	393	559	28	34	98
Future Vol, veh/h	138	393	559	28	34	98
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	250	-	-	50	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	93	93	95	95	67	67
Heavy Vehicles, %	1	1	6	0	0	0
Mvmt Flow	148	423	588	29	51	146

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	617	0	-	0	1096	588
Stage 1	-	-	-	-	588	-
Stage 2	-	-	-	-	508	-
Critical Hdwy	4.115	-	-	-	6.6	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2095	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	967	-	-	-	224	513
Stage 1	-	-	-	-	559	-
Stage 2	-	-	-	-	575	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	967	-	-	-	190	513
Mov Cap-2 Maneuver	-	-	-	-	322	-
Stage 1	-	-	-	-	473	-
Stage 2	-	-	-	-	575	-

Approach	EB	WB	SB
HCM Control Delay, s	2.4	0	15.7
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	967	-	-	-	322	513
HCM Lane V/C Ratio	0.153	-	-	-	0.158	0.285
HCM Control Delay (s)	9.4	-	-	-	18.3	14.8
HCM Lane LOS	A	-	-	-	C	B
HCM 95th %tile Q(veh)	0.5	-	-	-	0.6	1.2

Intersection	
Int Delay, s/veh	4.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	97	330	419	46	63	168
Future Vol, veh/h	97	330	419	46	63	168
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	300	245	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	88	88	91	91	79	79
Heavy Vehicles, %	1	1	7	0	0	0
Mvmt Flow	110	375	460	51	80	213

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	511	0	-	0	1055	460
Stage 1	-	-	-	-	460	-
Stage 2	-	-	-	-	595	-
Critical Hdwy	4.11	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.209	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1059	-	-	-	252	605
Stage 1	-	-	-	-	640	-
Stage 2	-	-	-	-	555	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1059	-	-	-	226	605
Mov Cap-2 Maneuver	-	-	-	-	360	-
Stage 1	-	-	-	-	573	-
Stage 2	-	-	-	-	555	-

Approach	EB	WB	SB
HCM Control Delay, s	2	0	15.1
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1059	-	-	-	360	605
HCM Lane V/C Ratio	0.104	-	-	-	0.222	0.352
HCM Control Delay (s)	8.8	-	-	-	17.8	14.1
HCM Lane LOS	A	-	-	-	C	B
HCM 95th %tile Q(veh)	0.3	-	-	-	0.8	1.6

Intersection	
Int Delay, s/veh	4.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	32	361	367	11	59	98
Future Vol, veh/h	32	361	367	11	59	98
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	175	-	-	50	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	95	95	70	70
Heavy Vehicles, %	1	1	7	0	5	5
Mvmt Flow	36	401	386	12	84	140

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	398	0	-	0	859	386
Stage 1	-	-	-	-	386	-
Stage 2	-	-	-	-	473	-
Critical Hdwy	4.11	-	-	-	6.45	6.25
Critical Hdwy Stg 1	-	-	-	-	5.45	-
Critical Hdwy Stg 2	-	-	-	-	5.45	-
Follow-up Hdwy	2.209	-	-	-	3.545	3.345
Pot Cap-1 Maneuver	1166	-	-	-	323	655
Stage 1	-	-	-	-	681	-
Stage 2	-	-	-	-	621	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1166	-	-	-	313	655
Mov Cap-2 Maneuver	-	-	-	-	313	-
Stage 1	-	-	-	-	660	-
Stage 2	-	-	-	-	621	-

Approach	EB	WB	SB
HCM Control Delay, s	0.7	0	19.8
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1166	-	-	-	464
HCM Lane V/C Ratio	0.03	-	-	-	0.483
HCM Control Delay (s)	8.2	-	-	-	19.8
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	2.6

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Vol, veh/h	10	410	374	2	3	4
Future Vol, veh/h	10	410	374	2	3	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	50	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	83	83	92	92	60	60
Heavy Vehicles, %	10	1	7	0	33	0
Mvmt Flow	12	494	407	2	5	7

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	409	0	-	0	925	407
Stage 1	-	-	-	-	407	-
Stage 2	-	-	-	-	518	-
Critical Hdwy	4.2	-	-	-	6.73	6.2
Critical Hdwy Stg 1	-	-	-	-	5.73	-
Critical Hdwy Stg 2	-	-	-	-	5.73	-
Follow-up Hdwy	2.29	-	-	-	3.797	3.3
Pot Cap-1 Maneuver	1108	-	-	-	263	648
Stage 1	-	-	-	-	610	-
Stage 2	-	-	-	-	540	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1108	-	-	-	259	648
Mov Cap-2 Maneuver	-	-	-	-	259	-
Stage 1	-	-	-	-	601	-
Stage 2	-	-	-	-	540	-

Approach	EB	WB	SW
HCM Control Delay, s	0.2	0	14.4
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SWLn1
Capacity (veh/h)	1108	-	-	-	394
HCM Lane V/C Ratio	0.011	-	-	-	0.03
HCM Control Delay (s)	8.3	0	-	-	14.4
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	0.6

Movement	EBT	EBR	WBL	WBT	NEL	NER
Lane Configurations						
Traffic Vol, veh/h	388	25	14	367	9	23
Future Vol, veh/h	388	25	14	367	9	23
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	50	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	93	93	89	89
Heavy Vehicles, %	1	1	0	7	11	0
Mvmt Flow	456	29	15	395	10	26

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	485	0	881	456
Stage 1	-	-	-	-	456	-
Stage 2	-	-	-	-	425	-
Critical Hdwy	-	-	4.1	-	6.51	6.2
Critical Hdwy Stg 1	-	-	-	-	5.51	-
Critical Hdwy Stg 2	-	-	-	-	5.51	-
Follow-up Hdwy	-	-	2.2	-	3.599	3.3
Pot Cap-1 Maneuver	-	-	1088	-	306	609
Stage 1	-	-	-	-	620	-
Stage 2	-	-	-	-	641	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1088	-	300	609
Mov Cap-2 Maneuver	-	-	-	-	300	-
Stage 1	-	-	-	-	620	-
Stage 2	-	-	-	-	629	-

Approach	EB	WB	NE
HCM Control Delay, s	0	0.3	13.3
HCM LOS			B

Minor Lane/Major Mvmt	NELn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	472	-	-	1088	-
HCM Lane V/C Ratio	0.076	-	-	0.014	-
HCM Control Delay (s)	13.3	-	-	8.4	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0	-

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	3	407	1	5	374	3	4	2	6	2	2	3
Future Vol, veh/h	3	407	1	5	374	3	4	2	6	2	2	3
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	-	-	50	-	-	50	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	93	93	93	75	75	75	60	60	60
Heavy Vehicles, %	1	1	1	0	3	33	0	0	0	0	0	0
Mvmt Flow	3	447	1	5	402	3	5	3	8	3	3	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	405	0	0	448	0	0	871	868	447	871	866	402
Stage 1	-	-	-	-	-	-	453	453	-	412	412	-
Stage 2	-	-	-	-	-	-	418	415	-	459	454	-
Critical Hdwy	4.11	-	-	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	2.209	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1159	-	-	1123	-	-	274	293	616	274	293	653
Stage 1	-	-	-	-	-	-	590	573	-	621	598	-
Stage 2	-	-	-	-	-	-	616	596	-	586	573	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1159	-	-	1123	-	-	268	290	616	267	290	653
Mov Cap-2 Maneuver	-	-	-	-	-	-	268	290	-	267	290	-
Stage 1	-	-	-	-	-	-	588	571	-	619	594	-
Stage 2	-	-	-	-	-	-	604	592	-	574	571	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.1	14.9	15.1
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	380	1159	-	-	1123	-	-	369
HCM Lane V/C Ratio	0.042	0.003	-	-	0.005	-	-	0.032
HCM Control Delay (s)	14.9	8.1	0	-	8.2	0	-	15.1
HCM Lane LOS	B	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.1

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	412	3	1	382	0	4
Future Vol, veh/h	412	3	1	382	0	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	50	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	89	89	60	60
Heavy Vehicles, %	1	1	0	7	0	0
Mvmt Flow	474	3	1	429	0	7

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	477	0	905	474
Stage 1	-	-	-	-	474	-
Stage 2	-	-	-	-	431	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1096	-	309	595
Stage 1	-	-	-	-	630	-
Stage 2	-	-	-	-	660	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1096	-	309	595
Mov Cap-2 Maneuver	-	-	-	-	309	-
Stage 1	-	-	-	-	630	-
Stage 2	-	-	-	-	659	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	11.1
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	595	-	-	1096	-
HCM Lane V/C Ratio	0.011	-	-	0.001	-
HCM Control Delay (s)	11.1	-	-	8.3	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

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	4	403	9	6	378	86	3	3	6	53	3	2
Future Vol, veh/h	4	403	9	6	378	86	3	3	6	53	3	2
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	-	-	50	-	-	50	-	-	50	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	86	86	86	60	60	60	85	85	85
Heavy Vehicles, %	2	2	2	3	3	3	0	33	0	6	33	0
Mvmt Flow	5	458	10	7	440	100	5	5	10	62	4	2

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	540	0	0	468	0	0	975	1022	458	935	932	440
Stage 1	-	-	-	-	-	-	468	468	-	454	454	-
Stage 2	-	-	-	-	-	-	507	554	-	481	478	-
Critical Hdwy	4.12	-	-	4.13	-	-	7.1	6.83	6.2	7.16	6.83	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.83	-	6.16	5.83	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.83	-	6.16	5.83	-
Follow-up Hdwy	2.218	-	-	2.227	-	-	3.5	4.297	3.3	3.554	4.297	3.3
Pot Cap-1 Maneuver	1028	-	-	1088	-	-	233	209	607	242	237	621
Stage 1	-	-	-	-	-	-	579	512	-	578	520	-
Stage 2	-	-	-	-	-	-	552	467	-	559	507	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1028	-	-	1088	-	-	227	206	607	231	233	621
Mov Cap-2 Maneuver	-	-	-	-	-	-	227	206	-	231	233	-
Stage 1	-	-	-	-	-	-	575	508	-	574	515	-
Stage 2	-	-	-	-	-	-	541	463	-	541	503	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.1	16.8	26.2
HCM LOS			C	D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	216	607	1028	-	-	1088	-	-	231	621
HCM Lane V/C Ratio	0.046	0.016	0.004	-	-	0.006	-	-	0.285	0.004
HCM Control Delay (s)	22.5	11	8.5	0	-	8.3	0	-	26.7	10.8
HCM Lane LOS	C	B	A	A	-	A	A	-	D	B
HCM 95th %tile Q(veh)	0.1	0.1	0	-	-	0	-	-	1.1	0

Intersection	
Int Delay, s/veh	0.9

Movement	EBT	EBR	WBL	WBT	NEL	NER
Lane Configurations						
Traffic Vol, veh/h	462	0	39	470	0	46
Future Vol, veh/h	462	0	39	470	0	46
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	150	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	87	87	77	77
Heavy Vehicles, %	2	2	2	2	0	0
Mvmt Flow	497	0	45	540	0	60

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	497	0	857	249
Stage 1	-	-	-	-	497	-
Stage 2	-	-	-	-	360	-
Critical Hdwy	-	-	4.14	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.22	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1063	-	300	757
Stage 1	-	-	-	-	582	-
Stage 2	-	-	-	-	683	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1063	-	287	757
Mov Cap-2 Maneuver	-	-	-	-	287	-
Stage 1	-	-	-	-	582	-
Stage 2	-	-	-	-	654	-

Approach	EB	WB	NE
HCM Control Delay, s	0	0.7	10.2
HCM LOS			B

Minor Lane/Major Mvmt	NELn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	757	-	-	1063	-
HCM Lane V/C Ratio	0.079	-	-	0.042	-
HCM Control Delay (s)	10.2	-	-	8.5	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.3	-	-	0.1	-

Intersection	
Int Delay, s/veh	4.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	471	36	0	0	0	0	43	111	2	117	0
Future Vol, veh/h	1	471	36	0	0	0	0	43	111	2	117	0
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	-	-	50	-	-	-	-	-	35	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	88	88	88	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	1	1	1	2	2	2
Mvmt Flow	1	512	39	0	0	0	0	49	126	2	130	0

Major/Minor	Major1			Minor1			Minor2		
Conflicting Flow All	0	0	0	-	514	256	283	553	-
Stage 1	-	-	-	-	514	-	0	0	-
Stage 2	-	-	-	-	0	-	283	553	-
Critical Hdwy	4.14	-	-	-	6.52	6.92	7.54	6.54	-
Critical Hdwy Stg 1	-	-	-	-	5.52	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	-	4.01	3.31	3.52	4.02	-
Pot Cap-1 Maneuver	-	-	-	0	465	746	647	440	0
Stage 1	-	-	-	0	536	-	-	-	0
Stage 2	-	-	-	0	-	-	700	513	0
Platoon blocked, %		-	-						
Mov Cap-1 Maneuver	-	-	-	-	465	746	494	440	-
Mov Cap-2 Maneuver	-	-	-	-	465	-	494	440	-
Stage 1	-	-	-	-	536	-	-	-	-
Stage 2	-	-	-	-	-	-	529	513	-

Approach	EB	NB	SB
HCM Control Delay, s		11.6	16.6
HCM LOS		B	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	SBLn1
Capacity (veh/h)	465	746	-	-	-	441
HCM Lane V/C Ratio	0.105	0.169	-	-	-	0.3
HCM Control Delay (s)	13.6	10.8	-	-	-	16.6
HCM Lane LOS	B	B	-	-	-	C
HCM 95th %tile Q(veh)	0.3	0.6	-	-	-	1.2

Intersection	
Int Delay, s/veh	1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	0	0	119	465	44	0
Future Vol, veh/h	0	0	119	465	44	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	255	-	0	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	90	90	88	88
Heavy Vehicles, %	2	2	2	2	1	1
Mvmt Flow	0	0	132	517	50	0

Major/Minor		Major2		Minor1	
Conflicting Flow All		0	0	523	-
Stage 1		-	-	0	-
Stage 2		-	-	523	-
Critical Hdwy		4.14	-	6.82	-
Critical Hdwy Stg 1		-	-	-	-
Critical Hdwy Stg 2		-	-	5.82	-
Follow-up Hdwy		2.22	-	3.51	-
Pot Cap-1 Maneuver		-	-	486	0
Stage 1		-	-	-	0
Stage 2		-	-	562	0
Platoon blocked, %			-		
Mov Cap-1 Maneuver		-	-	486	-
Mov Cap-2 Maneuver		-	-	486	-
Stage 1		-	-	-	-
Stage 2		-	-	562	-

Approach		WB		NB
HCM Control Delay, s				13.3
HCM LOS				B

Minor Lane/Major Mvmt	NBLn1	WBL	WBT
Capacity (veh/h)	486	-	-
HCM Lane V/C Ratio	0.103	-	-
HCM Control Delay (s)	13.3	-	-
HCM Lane LOS	B	-	-
HCM 95th %tile Q(veh)	0.3	-	-

Intersection	
Int Delay, s/veh	4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	492	92	0	0	0	0	0	0	116	115	0
Future Vol, veh/h	0	492	92	0	0	0	0	0	0	116	115	0
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	-	-	50	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	92	92	92	92	92	92	84	84	84
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	3	3	3
Mvmt Flow	0	547	102	0	0	0	0	0	0	138	137	0

Major/Minor	Major1			Minor2		
Conflicting Flow All	-	0	0	274	649	-
Stage 1	-	-	-	0	0	-
Stage 2	-	-	-	274	649	-
Critical Hdwy	-	-	-	6.86	6.56	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	5.86	5.56	-
Follow-up Hdwy	-	-	-	3.53	4.03	-
Pot Cap-1 Maneuver	0	-	-	690	385	0
Stage 1	0	-	-	-	-	0
Stage 2	0	-	-	744	461	0
Platoon blocked, %		-	-			
Mov Cap-1 Maneuver	-	-	-	690	0	-
Mov Cap-2 Maneuver	-	-	-	690	0	-
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	744	0	-

Approach	EB	SB
HCM Control Delay, s	0	13.6
HCM LOS		B

Minor Lane/Major Mvmt	EBT	EBR	SBLn1
Capacity (veh/h)	-	-	690
HCM Lane V/C Ratio	-	-	0.399
HCM Control Delay (s)	-	-	13.6
HCM Lane LOS	-	-	B
HCM 95th %tile Q(veh)	-	-	1.9

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	119	548	0	0	0	0	0	112	36
Future Vol, veh/h	0	0	0	119	548	0	0	0	0	0	112	36
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	-	-	-	285	-	-	-	-	-	-	-	260
Veh in Median Storage, #	-	1	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	84	84	84
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	3	3	3
Mvmt Flow	0	0	0	129	596	0	0	0	0	0	133	43

Major/Minor	Major2			Minor2		
Conflicting Flow All	0	0	0	-	854	298
Stage 1	-	-	-	-	854	-
Stage 2	-	-	-	-	0	-
Critical Hdwy	4.14	-	-	-	6.56	6.96
Critical Hdwy Stg 1	-	-	-	-	5.56	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	-	4.03	3.33
Pot Cap-1 Maneuver	-	-	0	0	293	695
Stage 1	-	-	0	0	371	-
Stage 2	-	-	0	0	-	-
Platoon blocked, %		-				
Mov Cap-1 Maneuver	-	-	-	-	0	695
Mov Cap-2 Maneuver	-	-	-	-	0	-
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-

Approach	WB	SB
HCM Control Delay, s		
HCM LOS		-

Minor Lane/Major Mvmt	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	-	-	-	695
HCM Lane V/C Ratio	-	-	-	0.062
HCM Control Delay (s)	-	-	-	10.5
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.2

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	40	586	0	0	0	0	0	79	100	0	0	0
Future Vol, veh/h	40	586	0	0	0	0	0	79	100	0	0	0
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	275	-	-	-	-	-	-	-	185	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	92	92	92	93	93	93	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	6	6	6	2	2	2
Mvmt Flow	47	681	0	0	0	0	0	85	108	0	0	0

Major/Minor	Major1			Minor1		
Conflicting Flow All	0	0	-	-	775	341
Stage 1	-	-	-	-	775	-
Stage 2	-	-	-	-	0	-
Critical Hdwy	4.14	-	-	-	6.62	7.02
Critical Hdwy Stg 1	-	-	-	-	5.62	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	-	4.06	3.36
Pot Cap-1 Maneuver	-	-	0	0	320	643
Stage 1	-	-	0	0	397	-
Stage 2	-	-	0	0	-	-
Platoon blocked, %		-				
Mov Cap-1 Maneuver	-	-	-	-	0	643
Mov Cap-2 Maneuver	-	-	-	-	0	-
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-

Approach	EB	NB
HCM Control Delay, s		
HCM LOS		-

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT
Capacity (veh/h)	-	643	-	-
HCM Lane V/C Ratio	-	0.167	-	-
HCM Control Delay (s)	-	11.7	-	-
HCM Lane LOS	-	B	-	-
HCM 95th %tile Q(veh)	-	0.6	-	-

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	0	0	0	0	586	0	81	38	0	0	0	0
Future Vol, veh/h	0	0	0	0	586	0	81	38	0	0	0	0
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, #	-	2	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	91	91	91	93	93	93	92	92	92
Heavy Vehicles, %	2	2	2	1	1	1	6	6	6	2	2	2
Mvmt Flow	0	0	0	0	644	0	87	41	0	0	0	0

Major/Minor	Major2			Minor1		
Conflicting Flow All	-	-	0	322	644	-
Stage 1	-	-	-	0	0	-
Stage 2	-	-	-	322	644	-
Critical Hdwy	-	-	-	6.92	6.62	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	5.92	5.62	-
Follow-up Hdwy	-	-	-	3.56	4.06	-
Pot Cap-1 Maneuver	0	-	0	636	382	0
Stage 1	0	-	0	-	-	0
Stage 2	0	-	0	695	456	0
Platoon blocked, %		-				
Mov Cap-1 Maneuver	-	-	-	636	0	-
Mov Cap-2 Maneuver	-	-	-	636	0	-
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	695	0	-

Approach	WB	NB
HCM Control Delay, s	0	12.1
HCM LOS		B

Minor Lane/Major Mvmt	NBLn1	WBT
Capacity (veh/h)	636	-
HCM Lane V/C Ratio	0.201	-
HCM Control Delay (s)	12.1	-
HCM Lane LOS	B	-
HCM 95th %tile Q(veh)	0.7	-

Intersection	
Int Delay, s/veh	2.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	686	0	0	159	0
Future Vol, veh/h	0	686	0	0	159	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	86	86	92	92	87	87
Heavy Vehicles, %	3	3	2	2	1	1
Mvmt Flow	0	798	0	0	183	0

Major/Minor	Major1				Minor2	
Conflicting Flow All	-	0			399	-
Stage 1	-	-			0	-
Stage 2	-	-			399	-
Critical Hdwy	-	-			6.82	-
Critical Hdwy Stg 1	-	-			-	-
Critical Hdwy Stg 2	-	-			5.82	-
Follow-up Hdwy	-	-			3.51	-
Pot Cap-1 Maneuver	0	-			581	0
Stage 1	0	-			-	0
Stage 2	0	-			650	0
Platoon blocked, %		-				
Mov Cap-1 Maneuver	-	-			581	-
Mov Cap-2 Maneuver	-	-			581	-
Stage 1	-	-			-	-
Stage 2	-	-			650	-

Approach	EB				SB	
HCM Control Delay, s	0				14	
HCM LOS					B	

Minor Lane/Major Mvmt	EBT	SBLn1
Capacity (veh/h)	-	581
HCM Lane V/C Ratio	-	0.315
HCM Control Delay (s)	-	14
HCM Lane LOS	-	B
HCM 95th %tile Q(veh)	-	1.3

Intersection	
Int Delay, s/veh	2.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	699	182	0
Future Vol, veh/h	0	0	0	699	182	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	3	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	89	89	94	94
Heavy Vehicles, %	2	2	3	3	2	2
Mvmt Flow	0	0	0	785	194	0

Major/Minor			Major2		Minor1	
Conflicting Flow All			-	-	314	-
Stage 1			-	-	0	-
Stage 2			-	-	314	-
Critical Hdwy			-	-	5.74	-
Critical Hdwy Stg 1			-	-	-	-
Critical Hdwy Stg 2			-	-	6.04	-
Follow-up Hdwy			-	-	3.82	-
Pot Cap-1 Maneuver			0	-	672	0
Stage 1			0	-	-	0
Stage 2			0	-	654	0
Platoon blocked, %				-		
Mov Cap-1 Maneuver			-	-	672	-
Mov Cap-2 Maneuver			-	-	672	-
Stage 1			-	-	-	-
Stage 2			-	-	654	-

Approach	WB	NB
HCM Control Delay, s	0	12.5
HCM LOS		B

Minor Lane/Major Mvmt	NBLn1	WBT
Capacity (veh/h)	672	-
HCM Lane V/C Ratio	0.288	-
HCM Control Delay (s)	12.5	-
HCM Lane LOS	B	-
HCM 95th %tile Q(veh)	1.2	-

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑			↰	
Traffic Vol, veh/h	0	664	0	0	80	0
Future Vol, veh/h	0	664	0	0	80	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	1080	0803328	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	92	92	92	92
Heavy Vehicles, %	1	1	2	2	1	1
Mvmt Flow	0	699	0	0	87	0

Major/Minor	Major1				Minor2	
Conflicting Flow All	-	0			350	-
Stage 1	-	-			0	-
Stage 2	-	-			350	-
Critical Hdwy	-	-			6.82	-
Critical Hdwy Stg 1	-	-			-	-
Critical Hdwy Stg 2	-	-			5.82	-
Follow-up Hdwy	-	-			3.51	-
Pot Cap-1 Maneuver	0	-			624	0
Stage 1	0	-			-	0
Stage 2	0	-			687	0
Platoon blocked, %		-				
Mov Cap-1 Maneuver	-	-			624	-
Mov Cap-2 Maneuver	-	-			624	-
Stage 1	-	-			-	-
Stage 2	-	-			687	-

Approach	EB				SB
HCM Control Delay, s	0				11.7
HCM LOS					B

Minor Lane/Major Mvmt	EBT	SBLn1
Capacity (veh/h)	-	624
HCM Lane V/C Ratio	-	0.139
HCM Control Delay (s)	-	11.7
HCM Lane LOS	-	B
HCM 95th %tile Q(veh)	-	0.5

Intersection	
Int Delay, s/veh	1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑	↰	
Traffic Vol, veh/h	0	0	0	718	65	0
Future Vol, veh/h	0	0	0	718	65	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	88	88	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	816	69	0

Major/Minor		Major2		Minor1	
Conflicting Flow All		-	-	408	-
Stage 1		-	-	0	-
Stage 2		-	-	408	-
Critical Hdwy		-	-	6.84	-
Critical Hdwy Stg 1		-	-	-	-
Critical Hdwy Stg 2		-	-	5.84	-
Follow-up Hdwy		-	-	3.52	-
Pot Cap-1 Maneuver		0	-	571	0
Stage 1		0	-	-	0
Stage 2		0	-	640	0
Platoon blocked, %			-		
Mov Cap-1 Maneuver		-	-	571	-
Mov Cap-2 Maneuver		-	-	571	-
Stage 1		-	-	-	-
Stage 2		-	-	640	-

Approach	WB	NB
HCM Control Delay, s	0	12.2
HCM LOS		B

Minor Lane/Major Mvmt	NBLn1	WBT
Capacity (veh/h)	571	-
HCM Lane V/C Ratio	0.121	-
HCM Control Delay (s)	12.2	-
HCM Lane LOS	B	-
HCM 95th %tile Q(veh)	0.4	-

Intersection	
Int Delay, s/veh	3.4

Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Vol, veh/h	51	13	13	5	9	4	0	87	31	6	118	14
Future Vol, veh/h	51	13	13	5	9	4	0	87	31	6	118	14
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	70	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	60	60	60	89	89	89	86	86	86
Heavy Vehicles, %	1	1	1	0	0	25	0	3	16	1	1	1
Mvmt Flow	64	16	16	8	15	7	0	98	35	7	137	16

Major/Minor	Minor1			Minor2			Major1			Major2		
Conflicting Flow All	268	265	98	291	292	145	153	0	0	133	0	0
Stage 1	98	98	-	159	159	-	-	-	-	-	-	-
Stage 2	170	167	-	132	133	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.21	7.1	6.5	6.45	4.1	-	-	4.11	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	3.5	4	3.525	2.2	-	-	2.209	-	-
Pot Cap-1 Maneuver	687	642	961	665	622	845	1440	-	-	1458	-	-
Stage 1	911	816	-	848	770	-	-	-	-	-	-	-
Stage 2	834	762	-	876	790	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	666	639	961	638	619	845	1440	-	-	1458	-	-
Mov Cap-2 Maneuver	666	639	-	638	619	-	-	-	-	-	-	-
Stage 1	911	816	-	848	766	-	-	-	-	-	-	-
Stage 2	807	758	-	844	790	-	-	-	-	-	-	-

Approach	NB	SB	SE	NW
HCM Control Delay, s	11	10.7	0	0.3
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBLn1	NWL	NWT	NWR	SEL	SET	SER	SBLn1
Capacity (veh/h)	697	1458	-	-	1440	-	-	664
HCM Lane V/C Ratio	0.138	0.005	-	-	-	-	-	0.045
HCM Control Delay (s)	11	7.5	0	-	0	-	-	10.7
HCM Lane LOS	B	A	A	-	A	-	-	B
HCM 95th %tile Q(veh)	0.5	0	-	-	0	-	-	0.1

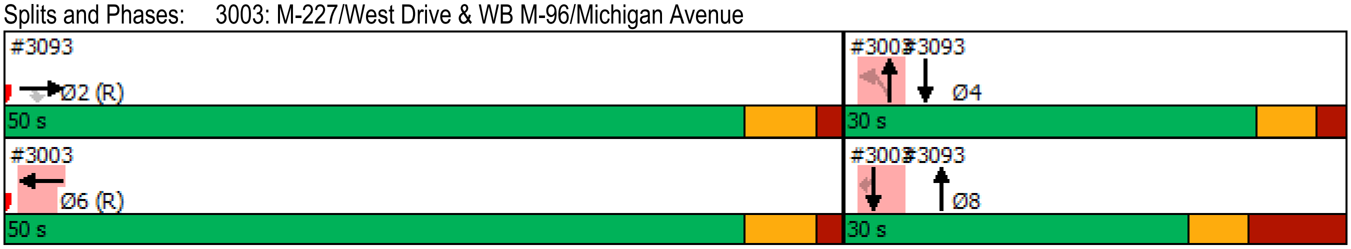
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	538	192	76	50	0	0	84	85
Future Volume (vph)	0	0	0	0	538	192	76	50	0	0	84	85
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		80	0		0	0		0
Storage Lanes	0		0	0		1	1		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.960							0.850
Flt Protected							0.950					
Satd. Flow (prot)	0	0	0	0	4930	0	1671	1863	0	0	1845	1568
Flt Permitted							0.687					
Satd. Flow (perm)	0	0	0	0	4930	0	1209	1863	0	0	1845	1568
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					180							110
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		152			212			101			1197	
Travel Time (s)		2.3			3.2			2.0			23.3	
Peak Hour Factor	0.92	0.92	0.92	0.87	0.87	0.87	0.67	0.67	0.67	0.77	0.77	0.77
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	8%	2%	2%	3%	3%	3%
Adj. Flow (vph)	0	0	0	0	618	221	113	75	0	0	109	110
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	839	0	113	75	0	0	109	110
Turn Type					NA		Perm	NA			NA	Perm
Protected Phases					6			4			8	
Permitted Phases							4					8
Minimum Split (s)					31.0		17.0	17.0			17.0	17.0
Total Split (s)					50.0		30.0	30.0			30.0	30.0
Total Split (%)					62.5%		37.5%	37.5%			37.5%	37.5%
Yellow Time (s)					4.3		3.6	3.6			3.6	3.6
All-Red Time (s)					1.7		1.9	1.9			5.9	5.9
Lost Time Adjust (s)					0.0		0.0	0.0			0.0	0.0
Total Lost Time (s)					6.0		5.5	5.5			9.5	9.5
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)					44.0		24.5	24.5			20.5	20.5
Actuated g/C Ratio					0.55		0.31	0.31			0.26	0.26
v/c Ratio					0.30		0.31	0.13			0.23	0.23
Control Delay					7.7		6.9	4.2			25.1	6.5
Queue Delay					0.0		0.0	0.0			0.0	0.0
Total Delay					7.7		6.9	4.2			25.1	6.5
LOS					A		A	A			C	A
Approach Delay					7.7			5.8			15.8	
Approach LOS					A			A			B	
Queue Length 50th (ft)					58		9	6			43	0
Queue Length 95th (ft)					76		9	7			71	25
Internal Link Dist (ft)		72			132			21			1117	
Turn Bay Length (ft)												
Base Capacity (vph)					2792		370	570			472	483

Lane Group	Ø2
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	2
Permitted Phases	
Minimum Split (s)	16.0
Total Split (s)	50.0
Total Split (%)	63%
Yellow Time (s)	4.3
All-Red Time (s)	1.7
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
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)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
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					0.30		0.31	0.13			0.23	0.23

Intersection Summary	
Area Type: Other	
Cycle Length: 80	
Actuated Cycle Length: 80	
Offset: 68 (85%), Referenced to phase 2:EBT and 6:, Start of Green	
Natural Cycle: 50	
Control Type: Pretimed	
Maximum v/c Ratio: 0.34	
Intersection Signal Delay: 8.9	Intersection LOS: A
Intersection Capacity Utilization 43.9%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 3003: M-227/West Drive & WB M-96/Michigan Avenue



Lane Group	Ø2
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

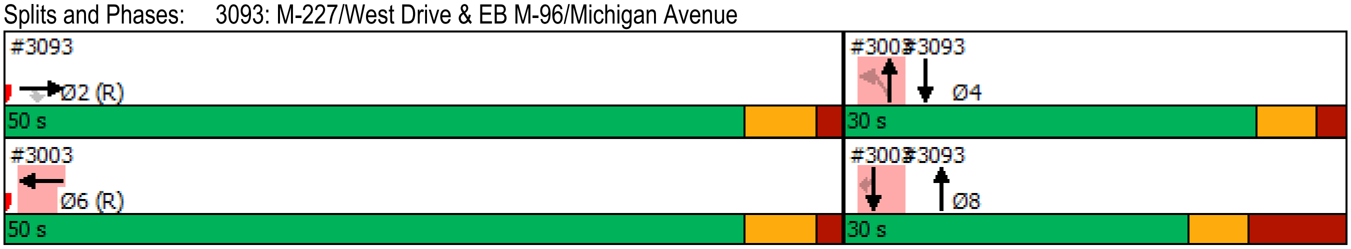
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	634	59	0	0	0	0	126	30	0	84	0
Future Volume (vph)	0	634	59	0	0	0	0	126	30	0	84	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		65	0		0	100		0	0		0
Storage Lanes	0		1	0		0	1		0	0		0
Taper Length (ft)	25			25			70			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Frt			0.850					0.971				
Flt Protected												
Satd. Flow (prot)	0	3574	1442	0	0	0	0	3344	0	0	1881	0
Flt Permitted												
Satd. Flow (perm)	0	3574	1442	0	0	0	0	3344	0	0	1881	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			89					35				
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		161			222			1117			101	
Travel Time (s)		2.4			3.4			21.8			2.0	
Peak Hour Factor	0.95	0.95	0.95	0.92	0.92	0.92	0.72	0.72	0.72	0.83	0.83	0.83
Heavy Vehicles (%)	2%	1%	12%	2%	2%	2%	2%	6%	0%	2%	1%	2%
Adj. Flow (vph)	0	667	62	0	0	0	0	175	42	0	101	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	667	62	0	0	0	0	217	0	0	101	0
Turn Type		NA	Perm					NA			NA	
Protected Phases		2						8			4	
Permitted Phases			2									
Minimum Split (s)		16.0	16.0					17.0			17.0	
Total Split (s)		50.0	50.0					30.0			30.0	
Total Split (%)		62.5%	62.5%					37.5%			37.5%	
Yellow Time (s)		4.3	4.3					3.6			3.6	
All-Red Time (s)		1.7	1.7					5.9			1.9	
Lost Time Adjust (s)		0.0	0.0					0.0			0.0	
Total Lost Time (s)		6.0	6.0					9.5			5.5	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		44.0	44.0					20.5			24.5	
Actuated g/C Ratio		0.55	0.55					0.26			0.31	
v/c Ratio		0.34	0.07					0.25			0.18	
Control Delay		10.6	1.3					20.6			0.7	
Queue Delay		0.0	0.0					0.0			0.0	
Total Delay		10.6	1.3					20.6			0.7	
LOS		B	A					C			A	
Approach Delay		9.8						20.6			0.7	
Approach LOS		A						C			A	
Queue Length 50th (ft)		90	0					37			0	
Queue Length 95th (ft)		123	10					50			0	
Internal Link Dist (ft)		81			142			1037			21	
Turn Bay Length (ft)			65									
Base Capacity (vph)		1965	833					882			576	

Lane Group	Ø6
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	6
Permitted Phases	
Minimum Split (s)	31.0
Total Split (s)	50.0
Total Split (%)	63%
Yellow Time (s)	4.3
All-Red Time (s)	1.7
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
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)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn		0	0					0			0	
Spillback Cap Reductn		0	0					22			0	
Storage Cap Reductn		0	0					0			0	
Reduced v/c Ratio		0.34	0.07					0.25			0.18	

Intersection Summary	
Area Type: Other	
Cycle Length: 80	
Actuated Cycle Length: 80	
Offset: 68 (85%), Referenced to phase 2:EBT and 6:, Start of Green	
Natural Cycle: 50	
Control Type: Pretimed	
Maximum v/c Ratio: 0.34	
Intersection Signal Delay: 11.1	Intersection LOS: B
Intersection Capacity Utilization 43.9%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 3093: M-227/West Drive & EB M-96/Michigan Avenue



Lane Group	Ø6
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

1002: M-311/11 Mile Road & M-96/Michigan Avenue Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.1	2.6	0.0	0.2
Total Del/Veh (s)	21.2	18.0	12.5	9.6	16.8

2001: M-311/11 Mile Road & Wheatfield Pkwy/I-94 WB Exit Ramp Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0	1.3	0.4
Total Del/Veh (s)	32.1	21.5	4.2	7.1	11.1

2101: M-311/11 Mile Road & Citgo/Subway Drive/I-94 EB Ramp Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.0	0.0	0.0	0.0
Total Del/Veh (s)	23.1	20.0	3.5	3.8	8.6

3003: M-227/West Drive & WB M-96/Michigan Avenue Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.2	0.0
Total Del/Veh (s)	7.1	5.1	13.0	7.8

3093: M-227/West Drive & EB M-96/Michigan Avenue Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	0.0	2.0	0.0	0.4
Total Del/Veh (s)	7.2	22.1	2.8	9.4

9000: M-96/Michigan Avenue & Wheatfield Pkwy Performance by approach

Approach	EB	WB	SW	All
Denied Del/Veh (s)	0.6	0.0	0.0	0.3
Total Del/Veh (s)	0.7	2.1	5.4	1.8

9001: M-96/Michigan Avenue & Firekeepers Main Drive Performance by approach

Approach	EB	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.1	0.0
Total Del/Veh (s)	7.6	0.9	22.8	6.1

9002: M-96/Michigan Avenue & Firekeepers Gas Station Driveway Performance by approach

Approach	EB	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	1.4	0.3
Total Del/Veh (s)	1.3	1.5	9.2	3.0

9003: M-96/Michigan Avenue & Firekeepers E Drive Performance by approach

Approach	EB	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0
Total Del/Veh (s)	1.0	1.7	8.5	2.5

9004: M-96/Michigan Avenue & Ackerson Drive Performance by approach

Approach	EB	WB	SW	All
Denied Del/Veh (s)	0.0	0.0	0.1	0.0
Total Del/Veh (s)	0.7	2.6	5.9	1.6

9005: Ceresco Road/12 Mile & M-96/Michigan Avenue Performance by approach

Approach	EB	WB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.1	0.0
Total Del/Veh (s)	1.3	1.1	3.0	1.2

9006: 13 Mile & M-96/Michigan Avenue Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	4.1	1.0	5.5	5.1	2.7

9007: Eden Street & M-96/Michigan Avenue Performance by approach

Approach	EB	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.1	0.0
Total Del/Veh (s)	0.8	8.7	2.4	4.6

9008: 15 Mile North & M-96/Michigan Avenue Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	2.5	0.4	0.1
Total Del/Veh (s)	2.1	1.1	9.4	13.6	2.4

9009: C Drive North & EB M-96/Michigan Avenue Performance by approach

Approach	EB	WB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0
Total Del/Veh (s)	0.1	1.2	2.4	0.7

9011: 15 Mile Road South/M-96/MI Ave @ 15 Mile S X-over & EB M-96/Michigan Avenue Performance by

Approach	EB	NB	SB	All
Denied Del/Veh (s)	0.0	2.9	0.0	0.5
Total Del/Veh (s)	0.4	5.9	6.4	2.4

9012: M-96/MI Ave @ 15 Mile S X-over & WB M-96/Michigan Avenue Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.9	8.0	1.4

9013: I-69 SB Off-Ramp & EB M-96/Michigan Avenue Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.7	7.4	2.6

9014: I-69 SB Off-Ramp & WB M-96/Michigan Avenue Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.9	0.2
Total Del/Veh (s)	1.1	8.1	2.5

9015: EB M-96/Michigan Avenue & M-96/MI Ave @ I-69 NB X-over Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	1.2	0.3
Total Del/Veh (s)	0.7	6.7	2.0

9016: M-96/MI Ave @ I-69 NB X-over/NB I-69 On Ramp & WB M-96/Michigan Avenue Performance by ap

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.2	7.5	1.5

9017: WB M-96/Michigan Avenue Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.2	0.2

9018: EB M-96/Michigan Avenue & WB to EB x-over W of M-227 Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.6	6.3	1.7

9019: EB to WB x-over W of M-227 & WB M-96/Michigan Avenue Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.6	6.7	2.6

9020: EB M-96/Michigan Avenue & WB to EB Xover E of M-227 Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.0	6.5	2.5

9021: EB to WB Xover E of M-227 & WB M-96/Michigan Avenue Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.2	0.0	0.2
Total Del/Veh (s)	1.1	7.0	1.6

9022: 15 Mile N & Verona Road Performance by approach

Approach	NB	SB	SE	NW	All
Denied Del/Veh (s)	0.1	0.1	1.2	0.2	0.5
Total Del/Veh (s)	5.3	7.1	0.4	0.6	2.0

9025: Beadle Lake & EB I-94 Off Ramp & EB I-94 On Ramp Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	2.5	0.3	0.0	0.5
Total Del/Veh (s)	6.3	1.2	1.5	2.2

9026: WB I-94 On Ramp & Beadle Lake & WB I-94 Off Ramp Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	1.9	0.0	0.3	0.4
Total Del/Veh (s)	7.0	1.3	1.2	2.1

9027: Old US-27 & EB I-94 to Old US-27 Off Ramp Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0
Total Del/Veh (s)	7.0	0.2	1.0	2.7

9028: Old US-27 & NB Old US-27 to EB I-94 On Ramp Performance by approach

Approach	NB	SB	All
Denied Del/Veh (s)	0.6	0.0	0.3
Total Del/Veh (s)	0.8	0.4	0.6

9029: SB Old US-27 WB I-94 On Ramp & Old US-27 & WB I-94 to Old US-27 Off Ramp Performance by

Approach	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	1.2	0.5
Total Del/Veh (s)	4.6	0.2	0.8	1.1

9030: I-94BL/Partello Rd & EB I-94 to I-94BL/Partello Off Ramp Performance by approach

Approach	SE	NE	SW	All
Denied Del/Veh (s)	0.0	0.2	0.0	0.1
Total Del/Veh (s)	4.4	1.5	0.2	1.8

9031: I-94BL/Partello Rd & I-94/Partello Rd to EB I-94 On Ramp Performance by approach

Approach	NE	SW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.2	0.7	0.4

9032: I-94BL/Partello Rd & WB I-94 to I-94/Partello Rd Performance by approach

Approach	EB	NE	SW	All
Denied Del/Veh (s)	0.0	0.0	0.8	0.2
Total Del/Veh (s)	3.4	1.2	0.6	1.7

9033: M-96/Michigan Avenue & Dummy Node Performance by approach

Approach	EB	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.1	0.0
Total Del/Veh (s)	1.2	4.5	4.0	2.9

9034: Dummy Node & EB M-96/Michigan Avenue Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	0.4	4.0	0.5

9035: Dummy Node & EB M-96/Michigan Avenue Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	0.4	5.5	0.5

9036: WB M-96/Michigan Avenue & Dummy Node Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	0.6	4.8	0.7

9037: WB M-96/Michigan Avenue & Dummy Node Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.4	0.4

9040: Old US-27 & NB Old US-27 to WB I-94 On Ramp Performance by approach

Approach	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.0	0.3	0.8

9041: WB to EB Xover E of M-227/McDonald's Dr & WB M-96/Michigan Avenue Performance by approac

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	1.1	10.5	1.9

9104: I-94 EB Ramp Performance by approach

Approach	EB	SW	All
Denied Del/Veh (s)	0.0	0.2	0.1
Total Del/Veh (s)	0.6	0.6	0.6

9106: I-94 WB Exit Ramp Performance by approach

Approach	EB	WB	All
Denied Del/Veh (s)	0.0	0.2	0.1
Total Del/Veh (s)	0.8	0.6	0.7

9133: EB M-96/Michigan Avenue & WB M-96/Michigan Avenue Performance by approach

Approach	EB	SW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.5	0.4	0.4

9143: NB I-69 On Ramp & I-69 NB Slip On Ramp & I-69 NB On Ramp Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.3	4.9	1.1

9146: WB to EB x-over W of M-227 & WB M-96/Michigan Avenue Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.7	0.7

9147: EB M-96/Michigan Avenue & EB to WB x-over W of M-227 Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.1	2.1

9151: EB M-96/Michigan Avenue & EB to WB Xover E of M-227 Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.6	0.6

9178: WB I-94 to BL-94/Partello Rd Off Ramp/WB I-94 to I-94/Partello Rd & BL-94/Partello Rd to WB I-94

Approach	EB	WB	All
Denied Del/Veh (s)	0.2	0.0	0.1
Total Del/Veh (s)	0.2	0.5	0.3

Total Network Performance

Denied Del/Veh (s)	0.7
Total Del/Veh (s)	19.0

Appendix H.3: HCS model output (Existing)

HCS Freeway Facilities Report

Project Information

Analyst	Md Ahsanul Islam	Date	6/14/2022
Agency	Cincar Consulting Group (C2G)	Analysis Year	2022
Jurisdiction	MDOT	Time Analyzed	4:15 to 5:15 PM
Project Description	MEDC M-96 MI Ave TIS (I-69 Northbound)	Units	U.S. Customary

Facility Global Input

Jam Density, pc/mi/ln	190.0	Density at Capacity, pc/mi/ln	45.0
Queue Discharge Capacity Drop, %	7	Total Segments	9
Total Analysis Periods	1	Analysis Period Duration, min	15
Facility Length, mi	9.33		

Facility Segment Data

No.	Coded	Analyzed	Name	Length, ft	Lanes
1	Basic	Basic	S. of M-96 (Michigan)	19155	2
2	Diverge	Diverge	M-96 (Michigan)(I-69) Diverge	928	2
3	Basic	Basic	Between M-96 (Michigan)(I-69) Diverge and Merge	3174	2
4	Merge	Merge	M-96 (Michigan) (I-69) Merge	962	2
5	Basic	Basic	M-96 (Michigan) to I-69 CD	4500	2
6	Diverge	Diverge	I-69 CD Diverge	885	2
7	Basic	Basic	I-69 CD Diverge to I-69 CD Merge (I-69)	5206	2
8	Merge	Merge	I-69 CD (I-69) Merge	708	2
9	Basic	Basic	N. of I-94	13733	2

Facility Segment Data

Segment 1: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.82	0.776	1298	4507	0.29	70.0	9.3	A

Segment 2: Diverge

AP	PHF		fHV		Flow Rate (pc/h)		Capacity (pc/h)		d/c Ratio		Speed (mi/h)		Density (pc/mi/ln)		LOS
	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R Infl.	F	R Infl.	
1	0.82	0.86	0.776	0.975	1292	213	4413	2033	0.29	0.10	61.8	61.8	10.5	7.0	A

Segment 3: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.82	0.735	1067	4490	0.24	68.8	7.7	A

Segment 4: Merge

AP	PHF	fHV	Flow Rate	Capacity	d/c	Speed	Density	LOS

					(pc/h)		(pc/h)		Ratio		(mi/h)		(pc/mi/ln)		
	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R Infl.	F	R Infl.	
1	0.82	0.87	0.735	0.977	1308	241	4413	2033	0.30	0.12	62.5	62.5	10.5	9.6	A

Segment 5: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.82	0.782	1324	4490	0.29	69.0	9.6	A

Segment 6: Diverge

AP	PHF		fHV		Flow Rate (pc/h)		Capacity (pc/h)		d/c Ratio		Speed (mi/h)		Density (pc/mi/ln)		LOS
	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R Infl.	F	R Infl.	
1	0.82	0.87	0.782	0.780	1324	956	4413	2033	0.30	0.47	60.0	60.0	11.0	7.7	A

Segment 7: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.79	0.789	329	4490	0.07	69.0	2.4	A

Segment 8: Merge

AP	PHF		fHV		Flow Rate (pc/h)		Capacity (pc/h)		d/c Ratio		Speed (mi/h)		Density (pc/mi/ln)		LOS
	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R Infl.	F	R Infl.	
1	0.79	0.65	0.789	0.670	2167	1840	4413	2033	0.49	0.91	61.3	61.3	17.7	17.2	B

Segment 9: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.79	0.690	1849	4507	0.41	70.0	13.2	B

Facility Analysis Results

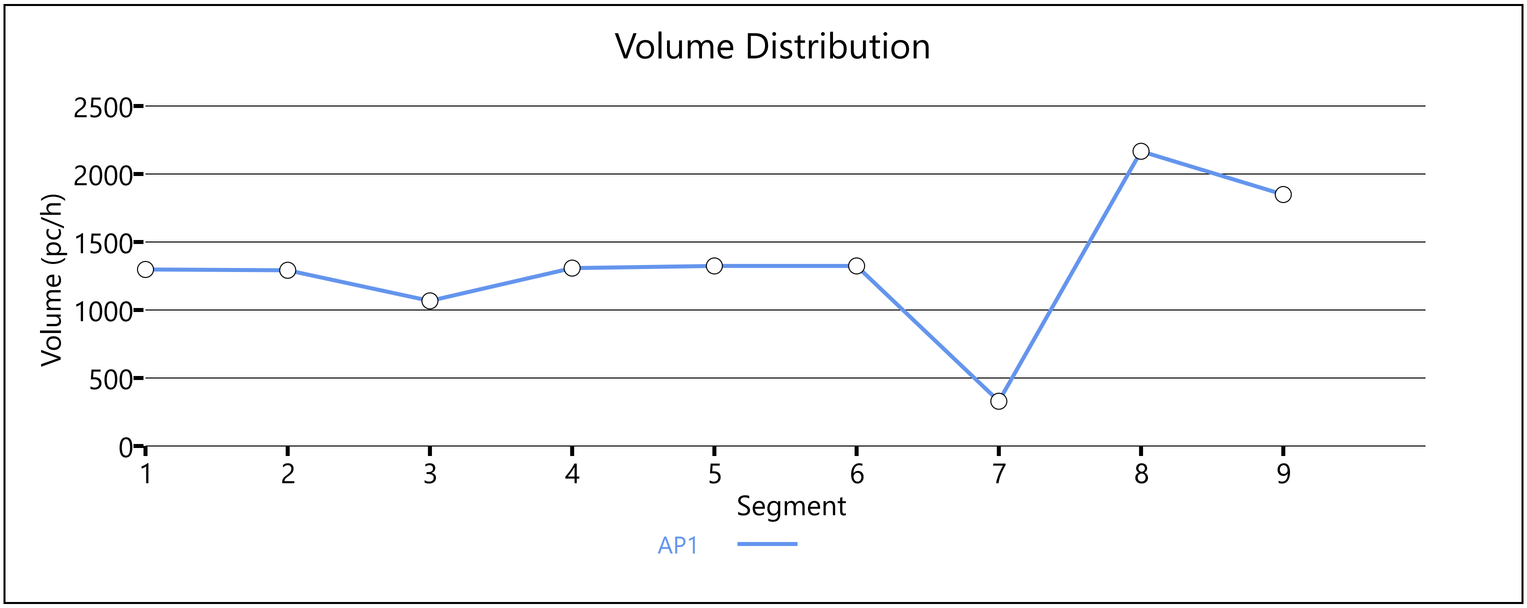
AP	VMT veh-mi/p	VMT-Demand veh-mi/p	VHD veh-h/p	Speed mi/h	Density pc/mi/ln	Density veh/mi/ln	TT min	LOS
1	2334	1837	0.35	69.0	9.8	7.3	8.10	A

Facility Overall Results

Space Mean Speed, mi/h	69.0	Density, veh/mi/ln	7.3
Average Travel Time, min	8.10	Density, pc/mi/ln	9.8

Messages

Comments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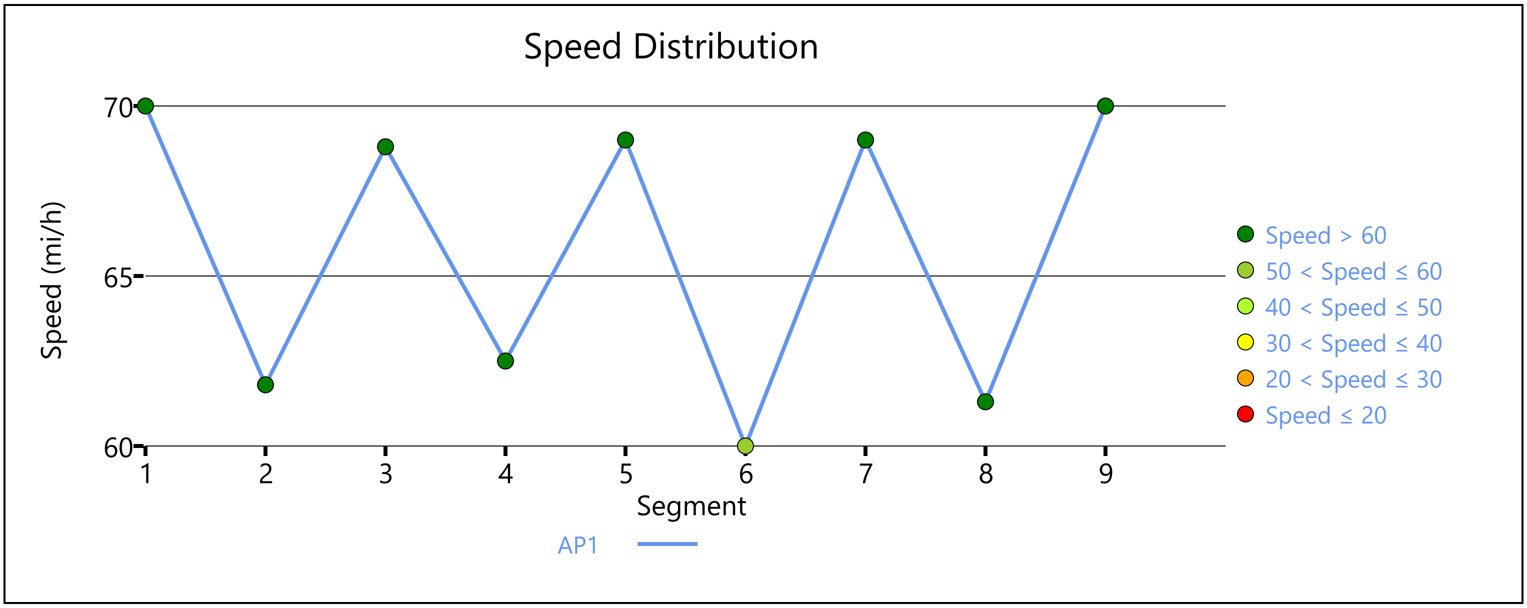
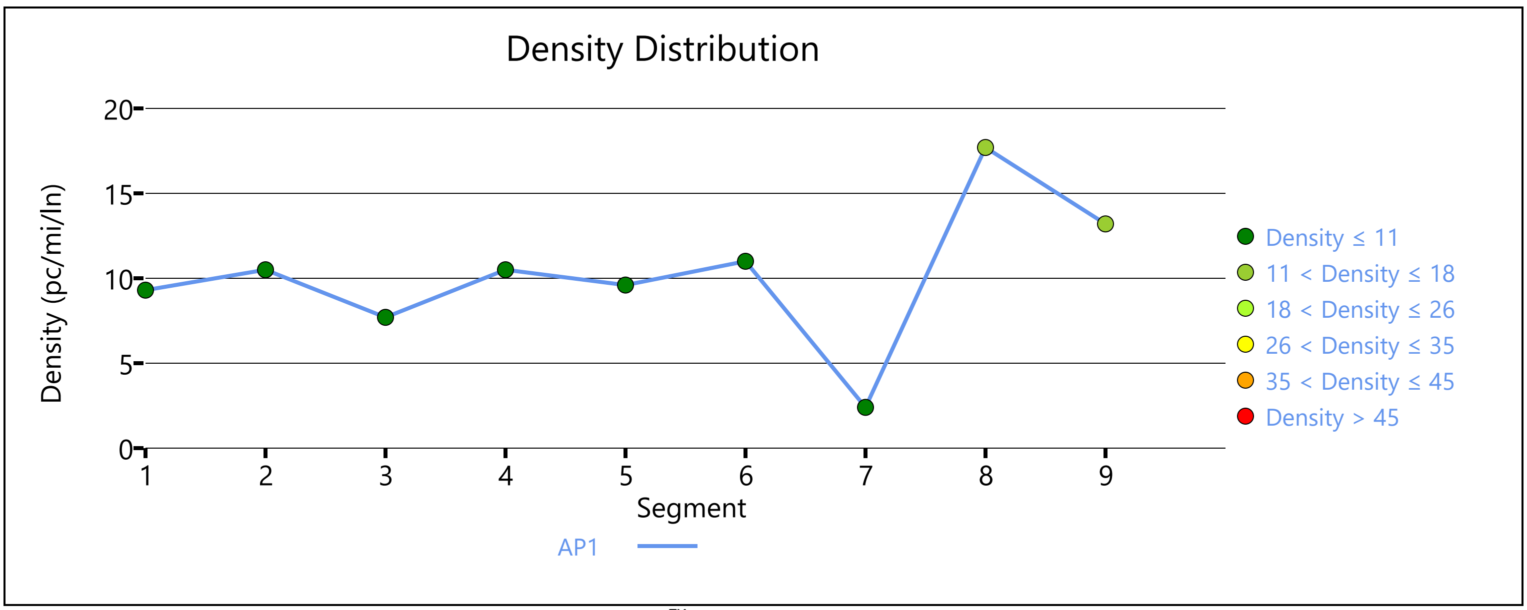
2500
2000
1500
1000
500
0
Volume (pc/h)
1 2 3 4 5 6 7 8 9
Segment
AP1


Speed Distribution
70
65
60
Speed (mi/h)
1 2 3 4 5 6 7 8 9
Segment
AP1
Speed > 60
50 < Speed ≤ 60
40 < Speed ≤ 50
30 < Speed ≤ 40
20 < Speed ≤ 30
Speed ≤ 20


Density Distribution
20
15
10
5
0
Density (pc/mi/ln)
1 2 3 4 5 6 7 8 9
Segment
AP1
Density ≤ 11
11 < Density ≤ 18
18 < Density ≤ 26
26 < Density ≤ 35
35 < Density ≤ 45
Density > 45

HCS Freeway Facilities Report

Project Information

Analyst	Md Ahsanul Islam	Date	6/14/2022
Agency	Cincar Consulting Group (C2G)	Analysis Year	2022
Jurisdiction	MDOT	Time Analyzed	4:15 to 5:15 PM
Project Description	MEDC M-96 MI Ave TIS (I-69 Southbound)	Units	U.S. Customary

Facility Global Input

Jam Density, pc/mi/ln	190.0	Density at Capacity, pc/mi/ln	45.0
Queue Discharge Capacity Drop, %	7	Total Segments	9
Total Analysis Periods	1	Analysis Period Duration, min	15
Facility Length, mi	7.84		

Facility Segment Data

No.	Coded	Analyzed	Name	Length, ft	Lanes
1	Basic	Basic	N. of I-94	5704	2
2	Diverge	Diverge	I-69 CD Diverge	827	2
3	Basic	Basic	I-69 CD Diverge to I-69 CD Merge (I-69)	5108	2
4	Merge	Merge	I-69 CD (I-69) Merge	668	2
5	Basic	Basic	I-69 CD to M-96 (Michigan)	4369	2
6	Diverge	Diverge	M-96 (Michigan)(I-69) Diverge	800	2
7	Basic	Basic	Between M-96 (Michigan)(I-69) Diverge and Merge	3313	2
8	Merge	Merge	M-96 (Michigan) (I-69) Merge	959	2
9	Basic	Basic	S. of M-96 (Michigan)	19658	2

Facility Segment Data

Segment 1: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.88	0.755	1680	4498	0.37	69.5	12.1	B

Segment 2: Diverge

AP	PHF		fHV		Flow Rate (pc/h)		Capacity (pc/h)		d/c Ratio		Speed (mi/h)		Density (pc/mi/ln)		LOS
	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R Infl.	F	R Infl.	
1	0.88	0.89	0.755	0.762	1680	1249	4413	2033	0.38	0.61	59.3	59.3	14.2	11.3	B

Segment 3: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.88	0.733	418	4490	0.09	69.0	3.0	A

Segment 4: Merge

AP	PHF	fHV	Flow Rate	Capacity	d/c	Speed	Density	LOS

					(pc/h)		(pc/h)		Ratio		(mi/h)		(pc/mi/ln)		
	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R Infl.	F	R Infl.	
1	0.88	0.88	0.733	0.796	1282	865	4413	2033	0.29	0.43	61.8	61.8	10.4	11.0	B

Segment 5: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.88	0.775	1286	4490	0.29	69.0	9.3	A

Segment 6: Diverge

AP	PHF		fHV		Flow Rate (pc/h)		Capacity (pc/h)		d/c Ratio		Speed (mi/h)		Density (pc/mi/ln)		LOS
	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R Infl.	F	R Infl.	
1	0.88	0.87	0.775	0.977	1286	174	4413	2033	0.29	0.09	61.9	61.9	10.4	8.1	A

Segment 7: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.88	0.745	1112	4490	0.25	68.8	8.0	A

Segment 8: Merge

AP	PHF		fHV		Flow Rate (pc/h)		Capacity (pc/h)		d/c Ratio		Speed (mi/h)		Density (pc/mi/ln)		LOS
	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R Infl.	F	R Infl.	
1	0.88	0.87	0.745	0.976	1356	244	4413	2033	0.31	0.12	62.5	62.5	10.8	10.0	A

Segment 9: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.88	0.786	1353	4507	0.30	70.0	9.7	A

Facility Analysis Results

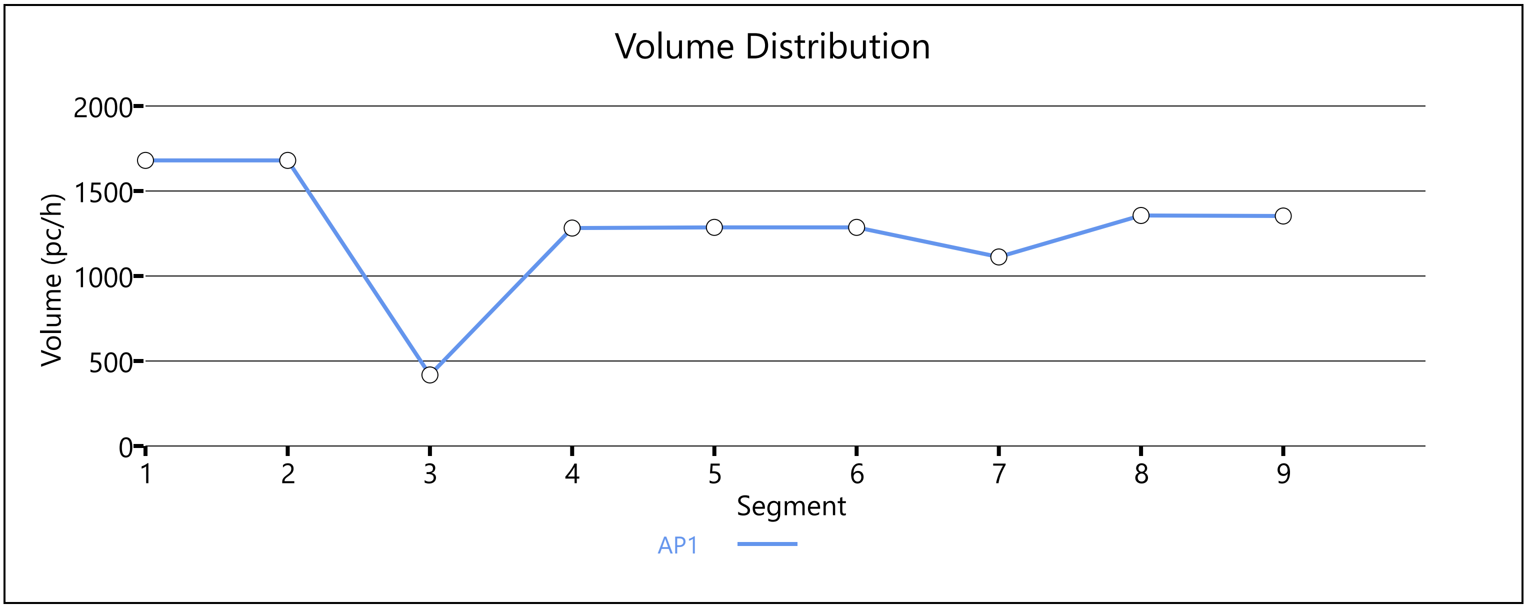
AP	VMT veh-mi/p	VMT-Demand veh-mi/p	VHD veh-h/p	Speed mi/h	Density pc/mi/ln	Density veh/mi/ln	TT min	LOS
1	1905	1652	0.32	68.8	9.2	7.1	6.80	A

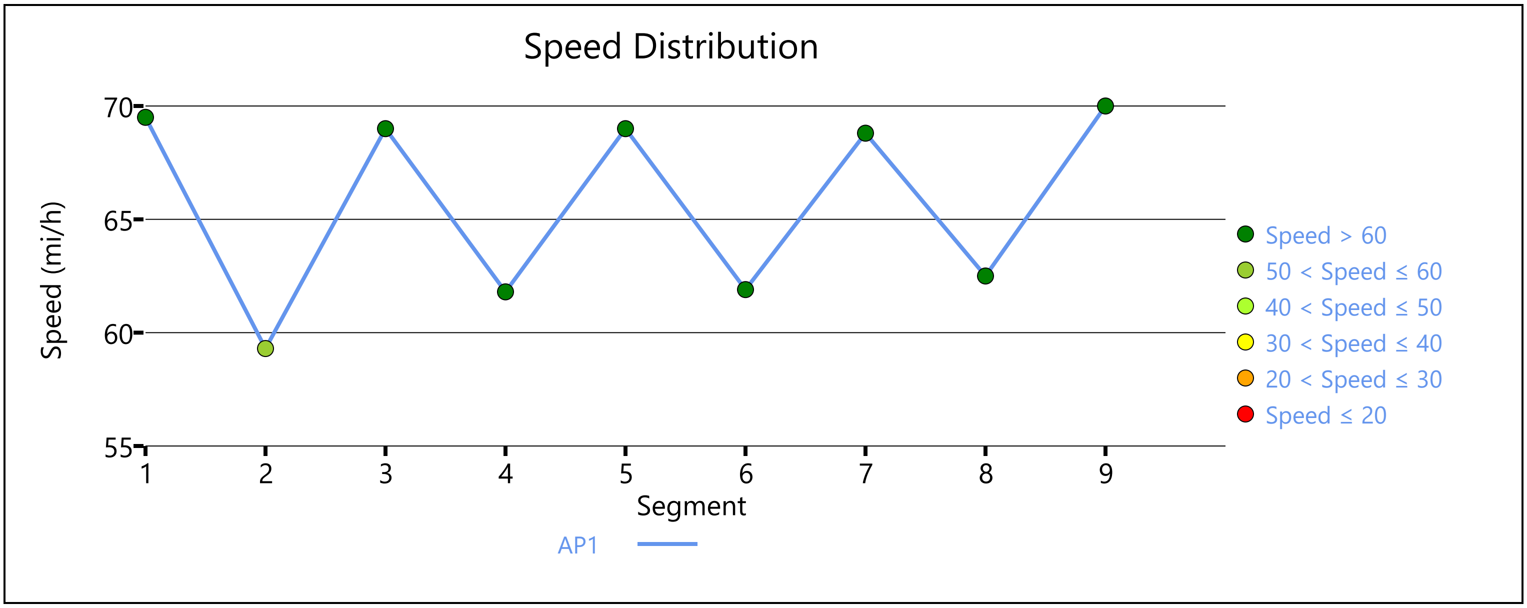
Facility Overall Results

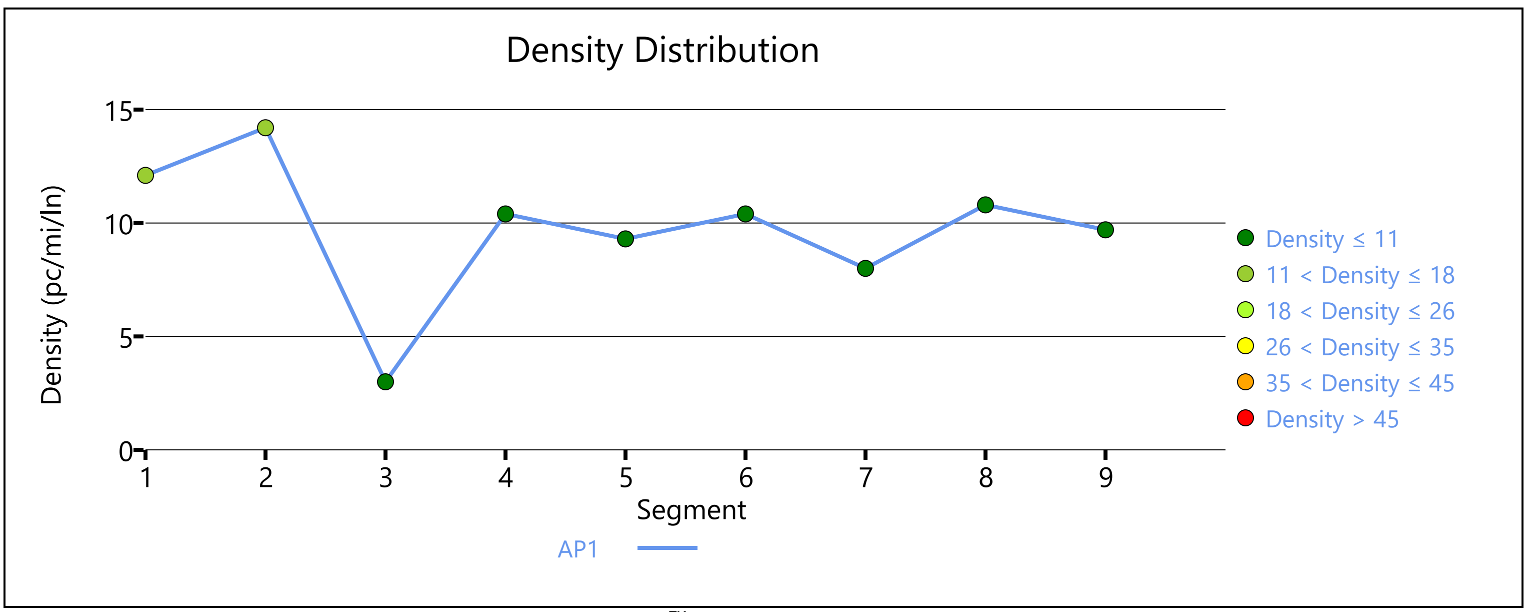
Space Mean Speed, mi/h	68.8	Density, veh/mi/ln	7.1
Average Travel Time, min	6.80	Density, pc/mi/ln	9.2

Messages

Comments


Volume Distribution
Volume (pc/h)
2000
1500
1000
500
0
1
2
3
4
5
6
7
8
9
Segment
AP1


Speed Distribution
Speed (mi/h)
70
65
60
55
1
2
3
4
5
6
7
8
9
Segment
AP1
Speed > 60
50 < Speed ≤ 60
40 < Speed ≤ 50
30 < Speed ≤ 40
20 < Speed ≤ 30
Speed ≤ 20


Density Distribution
Density (pc/mi/ln)
15
10
5
0
1
2
3
4
5
6
7
8
9
Segment
AP1
Density ≤ 11
11 < Density ≤ 18
18 < Density ≤ 26
26 < Density ≤ 35
35 < Density ≤ 45
Density > 45

HCS Freeway Facilities Report

Project Information

Analyst	Md Ahsanul Islam	Date	6/14/2022
Agency	Cincar Consulting Group (C2G)	Analysis Year	2022
Jurisdiction	MDOT	Time Analyzed	4:15 to 5:15 PM
Project Description	MEDC M-96 MI Ave TIS (I-94 Eastbound)	Units	U.S. Customary

Facility Global Input

Jam Density, pc/mi/ln	190.0	Density at Capacity, pc/mi/ln	45.0
Queue Discharge Capacity Drop, %	7	Total Segments	21
Total Analysis Periods	1	Analysis Period Duration, min	15
Facility Length, mi	16.18		

Facility Segment Data

No.	Coded	Analyzed	Name	Length, ft	Lanes
1	Basic	Basic	W. of Beadle Lake	3005	2
2	Diverge	Diverge	Beadle Lake (I-94) Diverge	734	2
3	Basic	Basic	Between Beadle Lake (I-94) Diverge and Merge	2189	2
4	Merge	Merge	Beadle Lake (I-94) Merge	849	2
5	Basic	Basic	Beadle Lake to M-311/11 Mile	18719	2
6	Diverge	Diverge	M-311/11 Mile (I-94) Diverge	1163	2
7	Basic	Basic	Between M-311/11 Mile (I-94) Diverge and Merge	1013	2
8	Merge	Merge	M-311/11 Mile (I-94) Merge	1387	2
9	Basic	Basic	M-311/11 Mile to I-94 CD	17345	2
10	Diverge	Diverge	I-94 CD Diverge	808	2
11	Basic	Basic	I-94 CD Diverge to I-94 CD Merge (I-94)	5201	2
12	Merge	Merge	I-94 CD (I-94) Merge	563	2
13	Basic	Basic	Between I-69 (I-94) and US-27	3707	2
14	Diverge	Diverge	US-27 (I-94) Diverge	704	2
15	Basic	Basic	Between US-27 (I-94) Diverge and Merge	2315	2
16	Merge	Merge	US-27 (I-94) Merge	981	2
17	Basic	Basic	Between US-27 and Partello	6899	2
18	Diverge	Diverge	Partello (I-94) Diverge	811	2
19	Basic	Basic	Between Partello (I-94) Diverge and Merge	2153	2
20	Merge	Merge	Partello (I-94) Merge	1408	2
21	Basic	Basic	E. of Partello	13480	2

Facility Segment Data

Segment 1: Basic								
AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.97	0.792	2841	4507	0.63	68.2	20.8	C

Segment 2: Diverge														
AP	PHF		fHV		Flow Rate (pc/h)		Capacity (pc/h)		d/c Ratio		Speed (mi/h)		Density (pc/mi/ln)	LOS
	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R Infl.	F	R Infl.	
1	0.97	0.93	0.792	0.971	2838	185	4507	2033	0.63	0.09	62.6	62.6	22.7	22.1	C

Segment 3: Basic								
AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.97	0.781	2657	4507	0.59	69.0	19.2	C

Segment 4: Merge															
AP	PHF		fHV		Flow Rate (pc/h)		Capacity (pc/h)		d/c Ratio		Speed (mi/h)		Density (pc/mi/ln)		LOS
	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R Infl.	F	R Infl.	
1	0.97	0.91	0.781	0.963	2779	122	4507	2033	0.62	0.06	61.6	61.6	22.6	21.8	C

Segment 5: Basic								
AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.97	0.788	2772	4490	0.62	67.8	20.4	C

Segment 6: Diverge															
AP	PHF		fHV		Flow Rate (pc/h)		Capacity (pc/h)		d/c Ratio		Speed (mi/h)		Density (pc/mi/ln)		LOS
	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R Infl.	F	R Infl.	
1	0.97	0.82	0.788	0.849	2772	306	4507	1936	0.62	0.16	56.9	56.9	24.4	17.6	B

Segment 7: Basic								
AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.92	0.789	2613	4507	0.58	67.8	18.9	C

Segment 8: Merge															
AP	PHF		fHV		Flow Rate (pc/h)		Capacity (pc/h)		d/c Ratio		Speed (mi/h)		Density (pc/mi/ln)		LOS
	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R Infl.	F	R Infl.	
1	0.92	0.81	0.789	0.885	2950	326	4507	1936	0.65	0.17	61.6	61.6	23.9	19.7	B

Segment 9: Basic								
AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.92	0.799	2907	4490	0.65	67.2	21.6	C

Segment 10: Diverge															
AP	PHF		fHV		Flow Rate (pc/h)		Capacity (pc/h)		d/c Ratio		Speed (mi/h)		Density (pc/mi/ln)		LOS
	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R Infl.	F	R Infl.	

1	0.92	0.88	0.799	0.790	2907	1710	4413	2033	0.66	0.84	58.2	58.2	25.0	22.0	C

Segment 11: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.92	0.810	1267	4490	0.28	69.0	9.2	A

Segment 12: Merge

AP	PHF		fHV		Flow Rate (pc/h)		Capacity (pc/h)		d/c Ratio		Speed (mi/h)		Density (pc/mi/ln)		LOS
	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R Infl.	F	R Infl.	
1	0.92	0.87	0.810	0.776	1657	390	4413	2033	0.38	0.19	61.0	61.0	13.6	14.8	B

Segment 13: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.96	0.796	1586	4473	0.35	68.0	11.6	B

Segment 14: Diverge

AP	PHF		fHV		Flow Rate (pc/h)		Capacity (pc/h)		d/c Ratio		Speed (mi/h)		Density (pc/mi/ln)		LOS
	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R Infl.	F	R Infl.	
1	0.96	0.93	0.796	0.895	1578	356	4413	2033	0.36	0.17	60.8	60.8	13.0	11.5	B

Segment 15: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.96	0.769	1233	4473	0.28	67.6	9.0	A

Segment 16: Merge

AP	PHF		fHV		Flow Rate (pc/h)		Capacity (pc/h)		d/c Ratio		Speed (mi/h)		Density (pc/mi/ln)		LOS
	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R Infl.	F	R Infl.	
1	0.96	0.56	0.769	0.914	1348	115	4413	2033	0.31	0.06	61.9	61.9	10.9	9.9	A

Segment 17: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.88	0.776	1427	4481	0.32	68.6	10.4	A

Segment 18: Diverge

AP	PHF		fHV		Flow Rate (pc/h)		Capacity (pc/h)		d/c Ratio		Speed (mi/h)		Density (pc/mi/ln)		LOS
	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R Infl.	F	R Infl.	
1	0.88	0.74	0.776	0.734	1427	301	4413	2033	0.32	0.15	61.3	61.3	11.6	9.2	A

Segment 19: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.88	0.785	1165	4490	0.26	68.4	8.4	A

Segment 20: Merge

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS

	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R Infl.	F	R Infl.	
1	0.88	0.90	0.785	0.846	1417	252	4413	2033	0.32	0.12	63.7	63.7	11.1	7.7	A

Segment 21: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.88	0.796	1423	4507	0.32	70.0	10.2	A

Facility Analysis Results

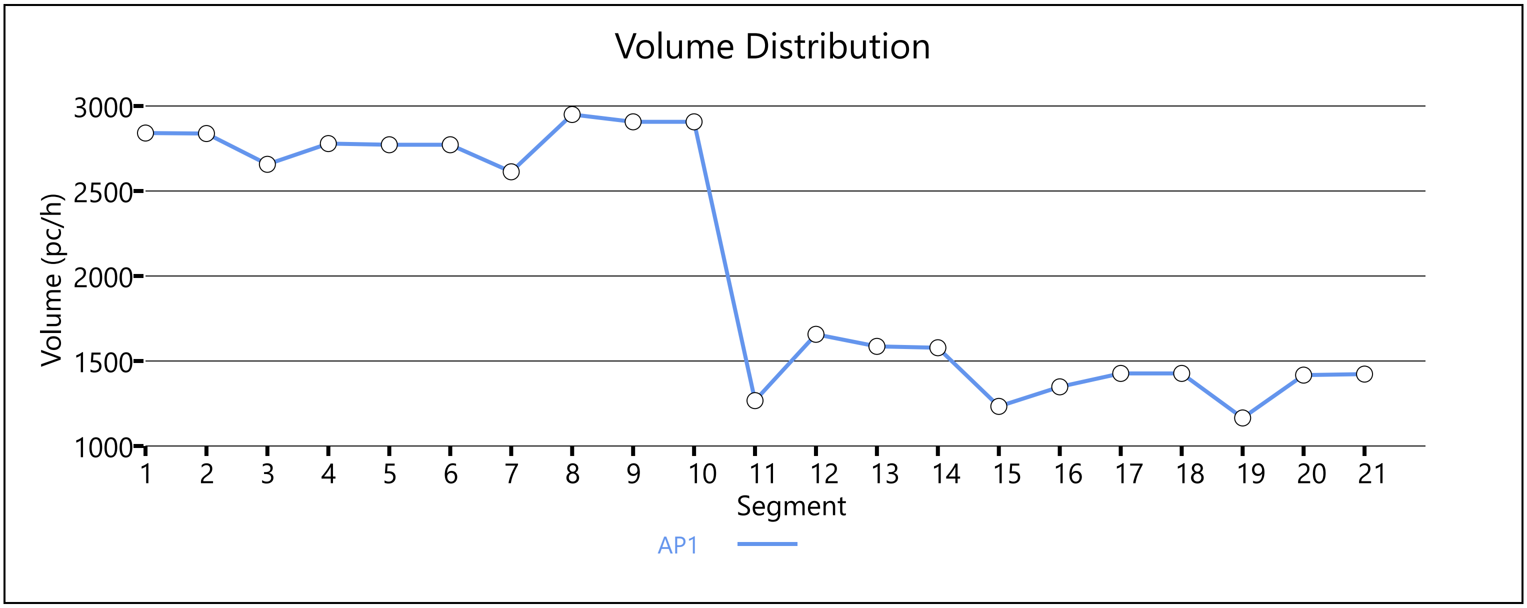
AP	VMT veh-mi/p	VMT-Demand veh-mi/p	VHD veh-h/p	Speed mi/h	Density pc/mi/ln	Density veh/mi/ln	TT min	LOS
1	7004	6501	3.19	67.1	16.3	12.9	14.50	B

Facility Overall Results

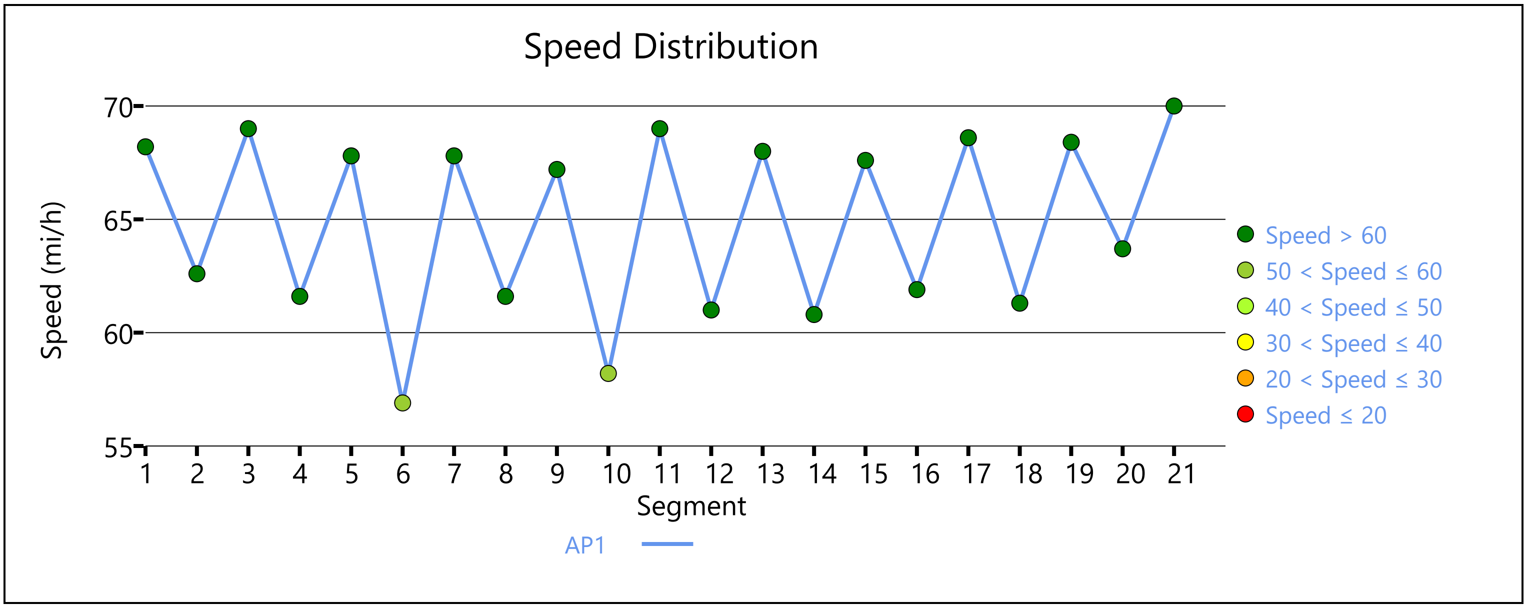
Space Mean Speed, mi/h	67.1	Density, veh/mi/ln	12.9
Average Travel Time, min	14.50	Density, pc/mi/ln	16.3

Messages

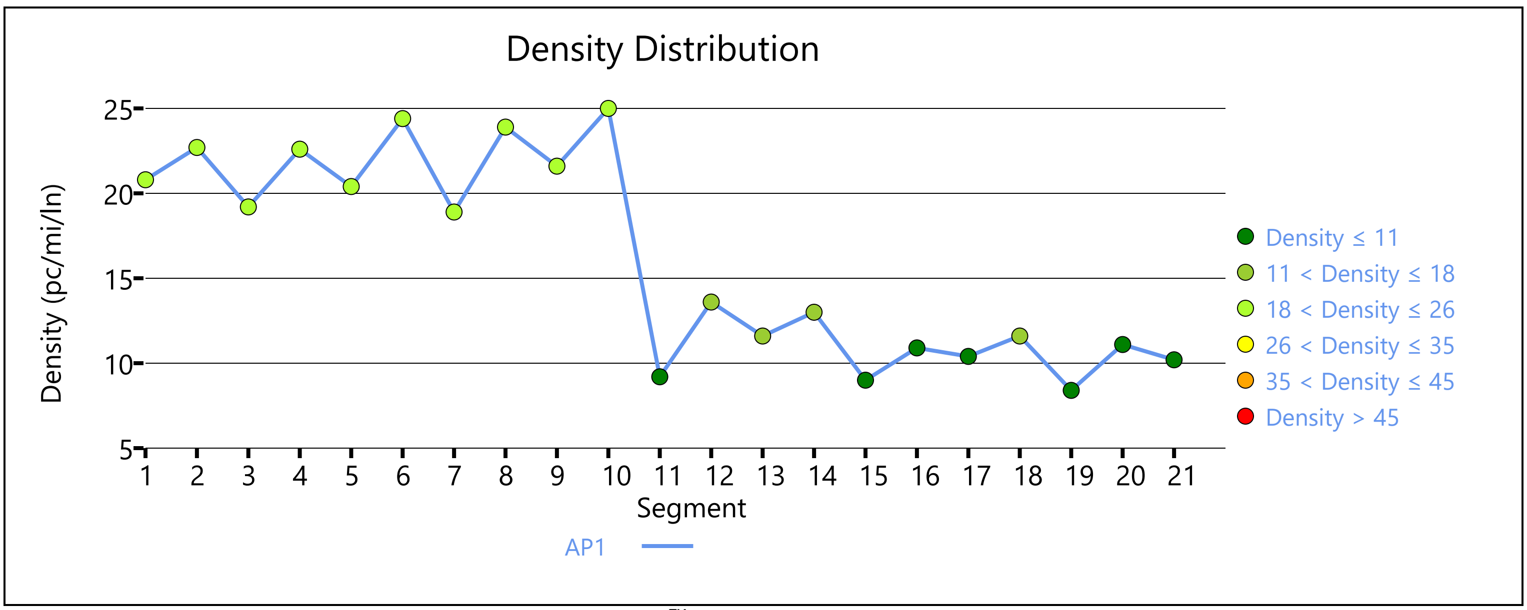
Comments



Volume Distribution
3000
2500
2000
1500
1000
Volume (pc/h)
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21
Segment
AP1



Speed Distribution
70
65
60
55
Speed (mi/h)
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21
Segment
AP1
Speed > 60
50 < Speed ≤ 60
40 < Speed ≤ 50
30 < Speed ≤ 40
20 < Speed ≤ 30
Speed ≤ 20



Density Distribution
25
20
15
10
5
Density (pc/mi/ln)
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21
Segment
AP1
Density ≤ 11
11 < Density ≤ 18
18 < Density ≤ 26
26 < Density ≤ 35
35 < Density ≤ 45
Density > 45

HCS Freeway Facilities Report

Project Information

Analyst	Md Ahsanul Islam	Date	6/14/2022
Agency	Cincar Consulting Group (C2G)	Analysis Year	2022
Jurisdiction	MDOT	Time Analyzed	4:15 to 5:15 PM
Project Description	MEDC M-96 MI Ave TIS (I-94 Westbound)	Units	U.S. Customary

Facility Global Input

Jam Density, pc/mi/ln	190.0	Density at Capacity, pc/mi/ln	45.0
Queue Discharge Capacity Drop, %	7	Total Segments	23
Total Analysis Periods	1	Analysis Period Duration, min	15
Facility Length, mi	13.71		

Facility Segment Data

No.	Coded	Analyzed	Name	Length, ft	Lanes
1	Basic	Basic	E. of Partello	2011	2
2	Diverge	Diverge	Partello (I-94) Diverge	200	2
3	Basic	Basic	Between Partello (I-94) Diverge and Merge	1188	2
4	Merge	Merge	Partello (I-94) Merge	782	2
5	Basic	Basic	Between Partello and US-27	7096	2
6	Diverge	Diverge	US-27 (I-94) Diverge	746	2
7	Basic	Basic	Between US-27 (I-94) Diverge and Merge	1201	2
8	Merge	Merge	US-27 (I-94) Merge	735	2
9	Basic	Basic	Between US-27 (I-94) Merge and Merge	663	2
10	Merge	Merge	US-27 (I-94) Merge	596	2
11	Basic	Basic	Between US-27 (I-94) and I-69	3619	2
12	Diverge	Diverge	I-94 CD Diverge	761	2
13	Basic	Basic	I-94 CD Diverge to I-94 CD Merge (I-94)	5334	2
14	Merge	Merge	I-94 CD (I-94) Merge	617	2
15	Basic	Basic	I-94 CD to M-311/11 Mile	17824	2
16	Diverge	Diverge	M-311/11 Mile (I-94) Diverge	883	2
17	Basic	Basic	Between M-311/11 Mile (I-94) Diverge and Merge	816	2
18	Merge	Merge	M-311/11 Mile (I-94) Merge	1398	2
19	Basic	Basic	M-311/11 Mile to Beadle Lake	18631	2
20	Diverge	Diverge	Beadle Lake (I-94) Diverge	636	2
21	Basic	Basic	Between Beadle Lake (I-94) Diverge and Merge	2203	2
22	Merge	Merge	Beadle Lake (I-94) Merge	885	2

23	Basic	Basic	W. of Beadle Lake	3549	2

Facility Segment Data

Segment 1: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.99	0.807	1458	4481	0.33	68.6	10.6	A

Segment 2: Diverge

AP	PHF		fHV		Flow Rate (pc/h)		Capacity (pc/h)		d/c Ratio		Speed (mi/h)		Density (pc/mi/ln)		LOS
	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R Infl.	F	R Infl.	
1	0.99	0.83	0.807	0.873	1458	153	4413	1936	0.33	0.08	56.6	56.6	12.9	15.0	B

Segment 3: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.99	0.807	1313	4481	0.29	64.7	9.6	A

Segment 4: Merge

AP	PHF		fHV		Flow Rate (pc/h)		Capacity (pc/h)		d/c Ratio		Speed (mi/h)		Density (pc/mi/ln)		LOS
	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R Infl.	F	R Infl.	
1	0.99	0.78	0.807	0.726	1494	181	4413	1936	0.34	0.09	60.7	60.7	12.3	12.2	B

Segment 5: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.99	0.799	1456	4473	0.33	68.2	10.7	A

Segment 6: Diverge

AP	PHF		fHV		Flow Rate (pc/h)		Capacity (pc/h)		d/c Ratio		Speed (mi/h)		Density (pc/mi/ln)		LOS
	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R Infl.	F	R Infl.	
1	0.99	0.88	0.799	0.904	1456	153	4413	1936	0.33	0.08	56.1	56.1	13.0	10.1	B

Segment 7: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.99	0.788	1320	4466	0.30	65.4	9.7	A

Segment 8: Merge

AP	PHF		fHV		Flow Rate (pc/h)		Capacity (pc/h)		d/c Ratio		Speed (mi/h)		Density (pc/mi/ln)		LOS
	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R Infl.	F	R Infl.	
1	0.95	0.76	0.788	0.905	1612	236	4413	1936	0.37	0.12	60.3	60.3	13.4	13.4	B

Segment 9: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.95	0.803	1563	4466	0.35	65.4	11.5	B

Segment 10: Merge

AP	PHF		fHV		Flow Rate (pc/h)		Capacity (pc/h)		d/c Ratio		Speed (mi/h)		Density (pc/mi/ln)		LOS
	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R Infl.	F	R Infl.	
1	0.95	0.76	0.803	0.799	1690	127	4550	2033	0.37	0.06	61.8	61.8	13.7	14.9	B

Segment 11: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.97	0.803	1629	4466	0.36	67.6	12.0	B

Segment 12: Diverge

AP	PHF		fHV		Flow Rate (pc/h)		Capacity (pc/h)		d/c Ratio		Speed (mi/h)		Density (pc/mi/ln)		LOS
	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R Infl.	F	R Infl.	
1	0.97	0.65	0.803	0.777	1629	434	4413	2033	0.37	0.21	60.7	60.7	13.4	11.4	B

Segment 13: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.97	0.807	1340	4481	0.30	68.5	9.8	A

Segment 14: Merge

AP	PHF		fHV		Flow Rate (pc/h)		Capacity (pc/h)		d/c Ratio		Speed (mi/h)		Density (pc/mi/ln)		LOS
	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R Infl.	F	R Infl.	
1	0.97	0.89	0.807	0.784	3143	1803	4413	2033	0.71	0.89	59.3	59.3	26.5	25.4	C

Segment 15: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.95	0.794	3055	4490	0.68	66.3	23.0	C

Segment 16: Diverge

AP	PHF		fHV		Flow Rate (pc/h)		Capacity (pc/h)		d/c Ratio		Speed (mi/h)		Density (pc/mi/ln)		LOS
	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R Infl.	F	R Infl.	
1	0.95	0.84	0.794	0.855	3058	346	4507	2033	0.68	0.17	62.2	62.2	24.6	22.6	C

Segment 17: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.95	0.794	2727	4507	0.61	68.0	19.9	C

Segment 18: Merge

AP	PHF		fHV		Flow Rate (pc/h)		Capacity (pc/h)		d/c Ratio		Speed (mi/h)		Density (pc/mi/ln)		LOS
	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R Infl.	F	R Infl.	
1	0.95	0.93	0.794	0.792	2944	217	4507	1936	0.65	0.11	61.6	61.6	23.9	19.6	B

Segment 19: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.95	0.794	2939	4490	0.65	67.0	21.9	C

Segment 20: Diverge

AP	PHF		fHV		Flow Rate (pc/h)		Capacity (pc/h)		d/c Ratio		Speed (mi/h)		Density (pc/mi/ln)		LOS
	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R Infl.	F	R Infl.	
1	0.95	0.81	0.794	0.953	2939	160	4507	2033	0.65	0.08	62.6	62.6	23.5	23.8	C

Segment 21: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.97	0.782	2761	4507	0.61	68.6	20.1	C

Segment 22: Merge

AP	PHF		fHV		Flow Rate (pc/h)		Capacity (pc/h)		d/c Ratio		Speed (mi/h)		Density (pc/mi/ln)		LOS
	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R Infl.	F	R Infl.	
1	0.97	0.82	0.782	0.980	2901	140	4507	2033	0.64	0.07	61.4	61.4	23.6	22.6	C

Segment 23: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.97	0.782	2908	4507	0.65	67.8	21.4	C

Facility Analysis Results

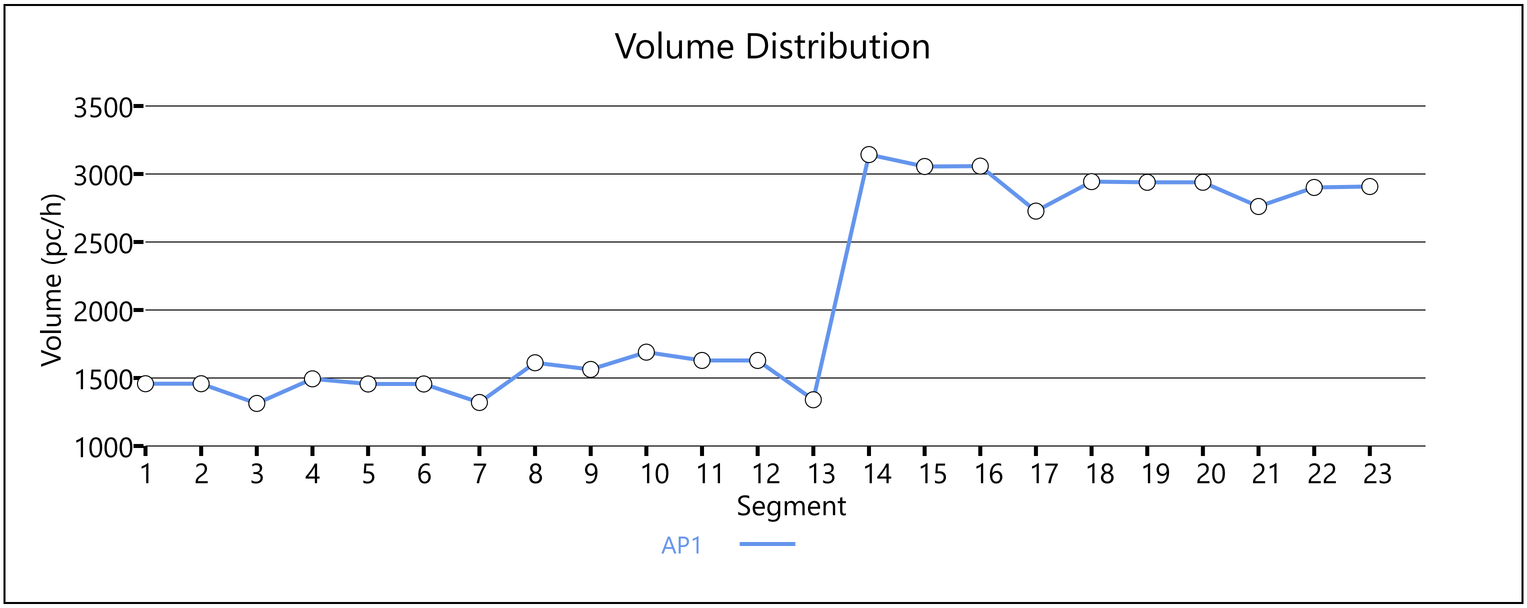
AP	VMT veh-mi/p	VMT-Demand veh-mi/p	VHD veh-h/p	Speed mi/h	Density pc/mi/ln	Density veh/mi/ln	TT min	LOS
1	6678	6330	4.02	66.3	18.5	14.7	12.40	C

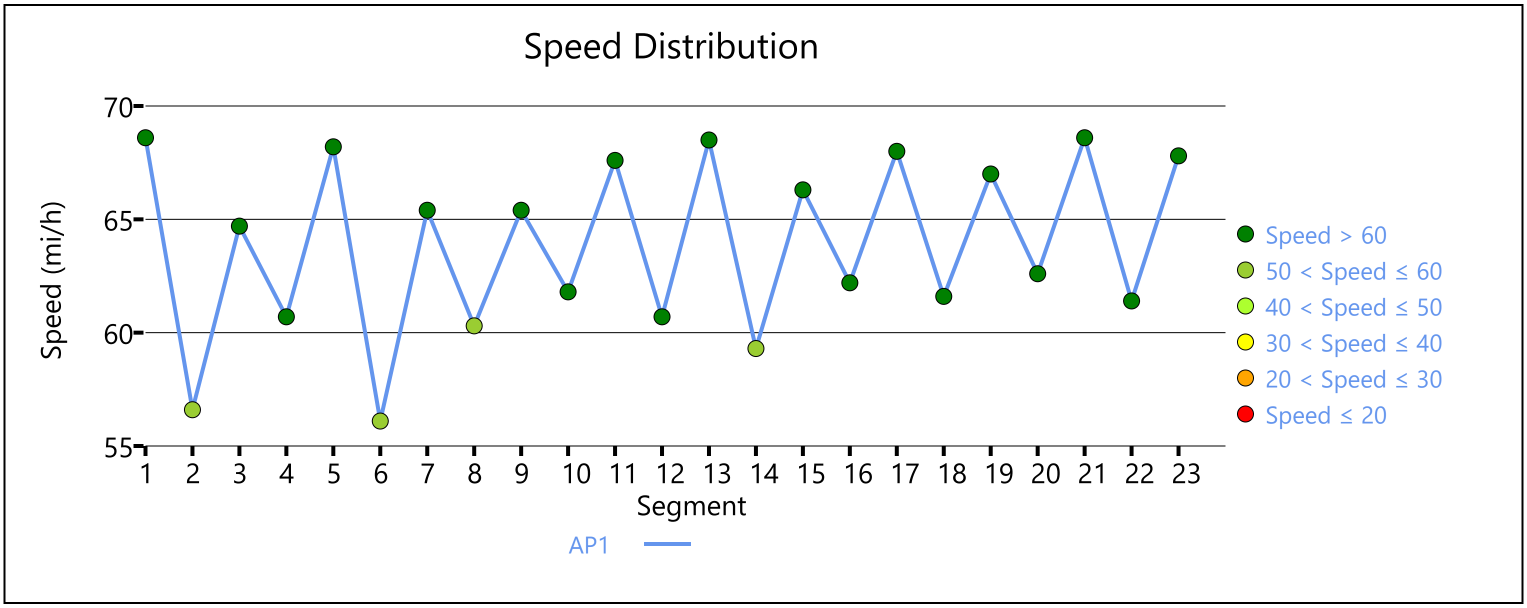
Facility Overall Results

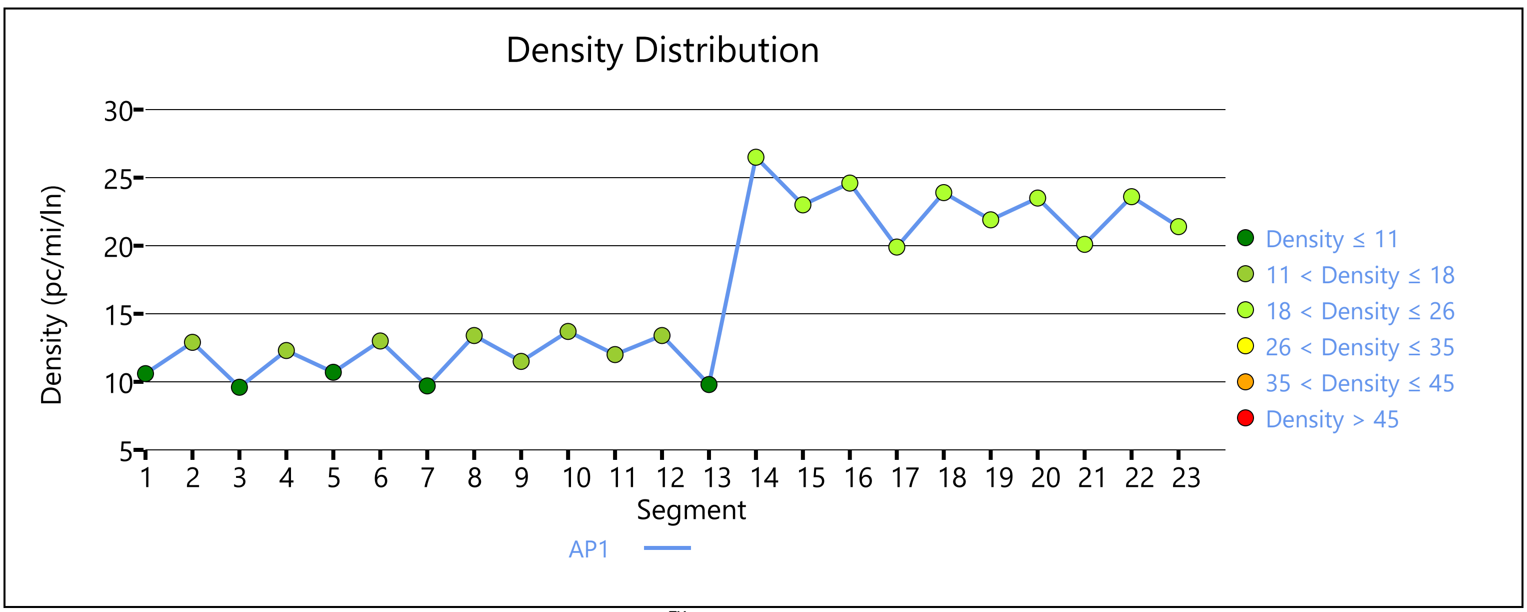
Space Mean Speed, mi/h	66.3	Density, veh/mi/ln	14.7
Average Travel Time, min	12.40	Density, pc/mi/ln	18.5

Messages

Comments


Volume Distribution
Volume (pc/h)
3500
3000
2500
2000
1500
1000
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23
Segment
AP1


Speed Distribution
Speed (mi/h)
70
65
60
55
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23
Segment
AP1
Speed > 60
50 < Speed ≤ 60
40 < Speed ≤ 50
30 < Speed ≤ 40
20 < Speed ≤ 30
Speed ≤ 20


Density Distribution
Density (pc/mi/ln)
30
25
20
15
10
5
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23
Segment
AP1
Density ≤ 11
11 < Density ≤ 18
18 < Density ≤ 26
26 < Density ≤ 35
35 < Density ≤ 45
Density > 45

CD Road HCS Analysis Outputs						
Segment Number	I-94 Eastbound (Segment Description)	Segment Type	Flow rate (pc/h/ln)	Average Speed (mph)	Density (pc/mi/ln)	LOS
1	Exit ramp from I-94 EB to Exit ramp to I-69 SB/CD Rd	Basic	1716	47.5	36.13	E
2	Exit ramp to I-69 SB/CD Rd	Diverge	1716	45.8	16.80	B
3	Exit ramp to I-69 SB/CD Rd to Entrance ramp from I-69 SB/CD Rd	Basic	1044	47.5	21.98	C
4	Entrance ramp from I-69 SB/CD Rd to Exit ramp to I-69 NB/CD Rd	Weave	588	38.7	15.18	B
5	Exit ramp to I-69 NB/CD Rd to Entrance ramp from I-69 NB/CD Rd	Basic	132	47.5	2.78	A
6	Entrance ramp from I-69 NB/CD Rd	Merge	421	45.8	4.60	A
Segment Number	I-94 Westbound (Segment Description)	Segment Type	Flow rate (pc/h/ln)	Average Speed (mph)	Density (pc/mi/ln)	LOS
1	Exit ramp from I-94 WB to Exit ramp to I-69 NB/CD Rd	Basic	436	47.5	9.18	A
2	Exit ramp to I-69 NB/CD Rd	Diverge	436	46	5.20	A
3	Exit ramp to I-69 NB/CD Rd to Entrance ramp from I-69 NB/CD Rd	Basic	280	47.5	5.89	A
4	Entrance ramp from I-69 NB/CD Rd to Exit ramp to I-69 SB/CD Rd	Weave	603	38.6	15.62	B
5	Exit ramp to I-69 SB/CD Rd to Entrance ramp from I-69 SB/CD Rd	Basic	928	47.5	19.54	C
6	Entrance ramp from I-69 SB/CD Rd	Merge	927	45.7	19.80	B
Segment Number	I-69 Northbound (Segment Description)	Segment Type	Flow rate (pc/h/ln)	Average Speed (mph)	Density (pc/mi/ln)	LOS
1	Exit ramp from I-69 NB to Exit ramp to I-94 EB/CD Rd	Basic	950	47.5	20.00	C
2	Exit ramp to I-94 EB/CD Rd	Diverge	950	46	10.3	B
3	Exit ramp to I-94 EB/CD Rd to Entrance ramp from I-94 EB/CD Rd	Basic	692	47.5	14.57	B
4	Entrance ramp from I-94 EB/CD Rd to Exit ramp to I-94 WB/CD Rd	Weave	868	36.7	23.64	C
5	Exit ramp to I-94 WB/CD Rd to Entrance ramp from I-94 WB/CD Rd	Basic	1044	47.5	21.98	C
6	Entrance ramp from I-94 WB/CD Rd	Merge	1043	45.8	13.4	B
Segment Number	I-69 Southbound (Segment Description)	Segment Type	Flow rate (pc/h/ln)	Average Speed (mph)	Density (pc/mi/ln)	LOS
1	Exit ramp from I-69 SB to Exit ramp to I-94 WB/CD Rd	Basic	1248	47.5	26.27	D
2	Exit ramp to I-94 EB/CD Rd	Diverge	1249	45.6	12.8	B
3	Exit ramp to I-94 WB/CD Rd to Entrance ramp from I-94 WB/CD Rd	Basic	280	47.5	5.89	A
4	Entrance ramp from I-94 WB/CD Rd to Exit ramp to I-94 EB/CD Rd	Weave	206	42.8	4.80	A
5	Exit ramp to I-94 EB/CD Rd to Entrance ramp from I-94 EB/CD Rd	Basic	132	47.5	2.78	A
6	Entrance ramp from I-94 EB/CD Rd	Merge	279	45.8	11.1	B

Appendix H.4: Trip Distribution and Generation Memorandum

6/10/22

Michigan Department of Transportation
Attn: Dave Neubauer (MDOT PM)
From: Lauren Warren, PE, PTOE, PMP and Heather Zull, PE (C2G)

Re: MEDC/M-96 Trip Distribution and Generation Update

Site Location:

The proposed Marshall Mega Site is located on the south side of M-96 (Michigan Avenue) between 12 Mile Road and 15 Mile Road South. The Sackrider Site is also located on the south side of M-96 (Michigan Avenue) between I-94 and west of 12 Mile Road.

Project Site Aerial

Trip Generation:

For the purposes of this study, the Michigan Department of Transportation (MDOT) developed proposed trip generation scenarios for the two sites at varying trip generation ranges. These trips were developed based on possible site occupiers, workers on site at a given time, and known shift changes. It is important to note the scenarios are not the exact number of trips and the peak shift change(s) may vary between the final site developer. The trips generated were included in the Scope of Work as Attachment B and are shown again here with noted assumptions. The PM peak hour of the adjacent roadway network will be identified, and the trips applied to create a worst-case traffic scenario. Final findings of the peak hour will be presented in the Data Verification Memorandum and Existing Conditions Analysis.

ATTACHMENT B: ALTERNATIVE TRAFFIC VOLUME SCENARIOS

MARSHALL MEGA SITE SCENARIOS

Scenario	Employees / Day	Vehicles / Day	1-Hour Peak Volume (Car + Truck)	24-Hour Truck Volumes
M1	5,000	11,000	3,400 + 50 = 3,450	500
M2	8,000	17,600	5,280 + 75 = 5,355	750
M3	12,000	26,400	7,920 + 100 = 8,020	1,000
M4	15,000	33,000	9,900 +125 = 10,025	1,250

Table C-1: Marshall Mega Site Traffic Volume Scenarios

Scenario Assumptions:

- The development will work on **24-hour / 7-day** schedule.
- The development will have **3, 8-hour work shifts**.30% of the vehicles per day will arrive/depart in the peak 1-hour.
  - Employees will arrive in the 30-minute period prior to start of their work shift.
  - Employees will depart in the 30-minute period after the end of their work shift.
- The peak hour volumes, as provided, are the estimated number of vehicles arriving and departing during a shift change.
- Trucks volumes assumed to arrive and depart evenly during each shift. Assume 10% peak hour.
- Additional assumptions to be provided by MDOT Project Manager.

SACKRIDER MEGA SITE SCENARIOS

Scenario	Employees / Day	Vehicles / Day	1-Hour Peak Volume (Car + Truck)	24-Hour Truck Volumes
S1	3,000	6,600	3,000 + 30 = 3,030	300
S2	6,000	13,200	6,000 + 60 = 6,060	600

Table C-2: Sackrider Mega Site Traffic Volume Scenarios

Scenario Assumptions:

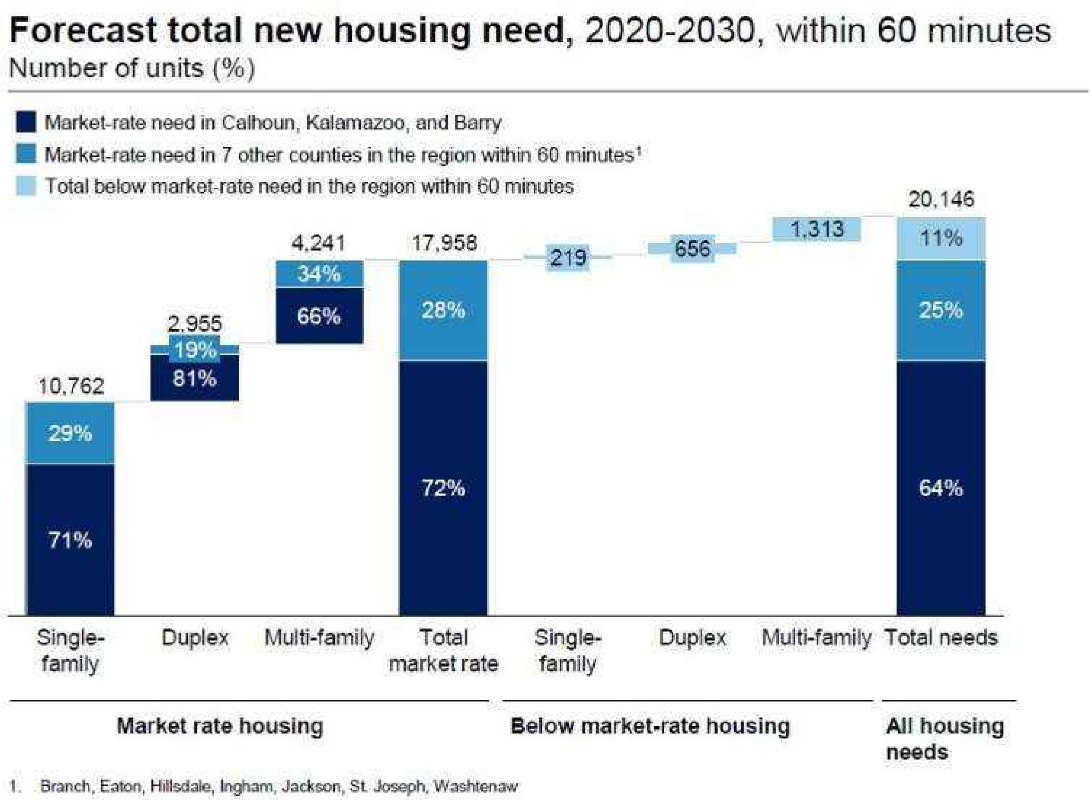
- The development will work on **16-hour / 5-day** schedule.
- The development will have **2, 8-hour work shifts**.
  - Employees will arrive in the 30-minute period prior to start of their work shift.
  - Employees will depart in the 30-minute period after the end of their work shift.
- **All access points to the site are on M-311** and all traffic will come from I-94.
- The peak hour volumes, as provided, are the estimated number of vehicles arriving and departing during a shift change.
- Trucks volumes assumed to arrive and depart evenly during each shift. Assume 10% peak hour.
- Additional assumptions to be provided by MDOT Project Manager.

Background Study:

The Michigan Economic Development Corporation (MEDC) Megaproject Community Impact Study (November 19, 2021) evaluated the workforce, housing, placemaking, existing transportation options and other supporting factors in conjunction with the proposed site. The following presents items for consideration in support of the traffic distribution to/from the site. As it relates to housing needs, the MEDC focused its study on the 10 counties within a one (1) hour drive of the proposed site.

Housing:

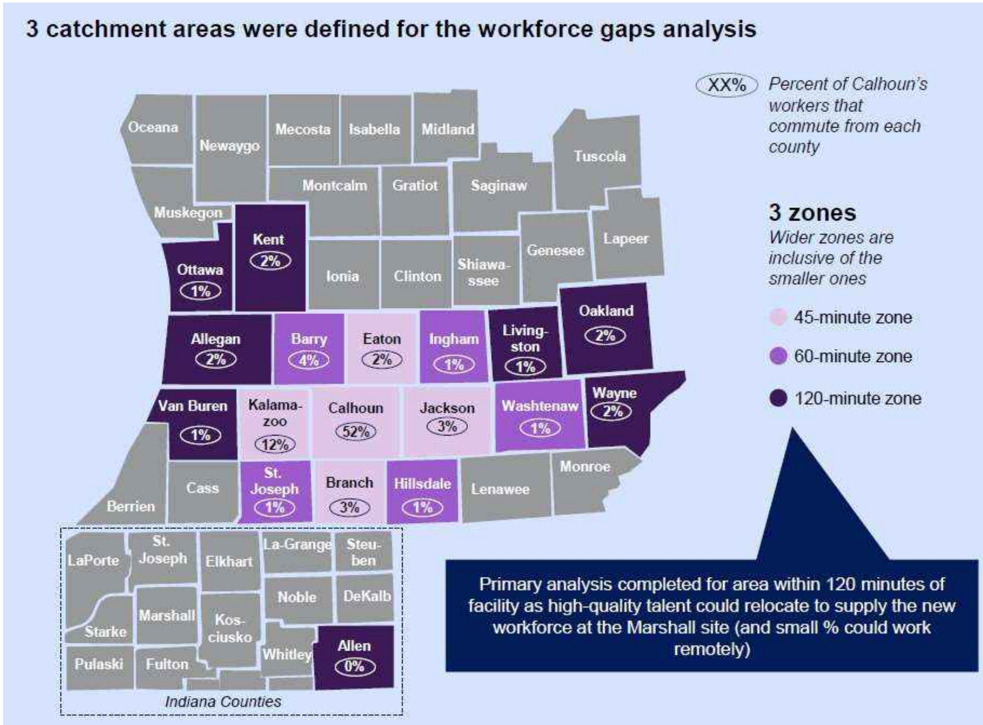
The report forecasts that of the new housing that will be needed from 2020-2030, 89% will be market rate housing and 11% will be below market rate housing. Of the 89% market rate, the report estimates 64% of that will come from within Calhoun, Kalamazoo, and Barry Counties, and the remaining 25% will come from the other seven (7) neighboring counties. The 11% below market rate housing will need to be distributed across all 10 counties included within the study area. The MEDC report does not provide an exact distribution; thus, the 11% below market rate housing was distributed with the same ratio (approximately 70/30) as the market rate housing for the purposes of this study. This leads to approximately 70% of the housing coming from Calhoun, Kalamazoo, and Barry counties, and the remaining 30% from the other seven (7) counties.



Source: MEDC Megaproject Community Impact Study, pg 36

Existing Commuting Patterns:

The 2018 commuting patterns for workers in Calhoun County were presented in three increments of travel time to the proposed sites: 45-minutes, one (1) hour, and two (2) hours.

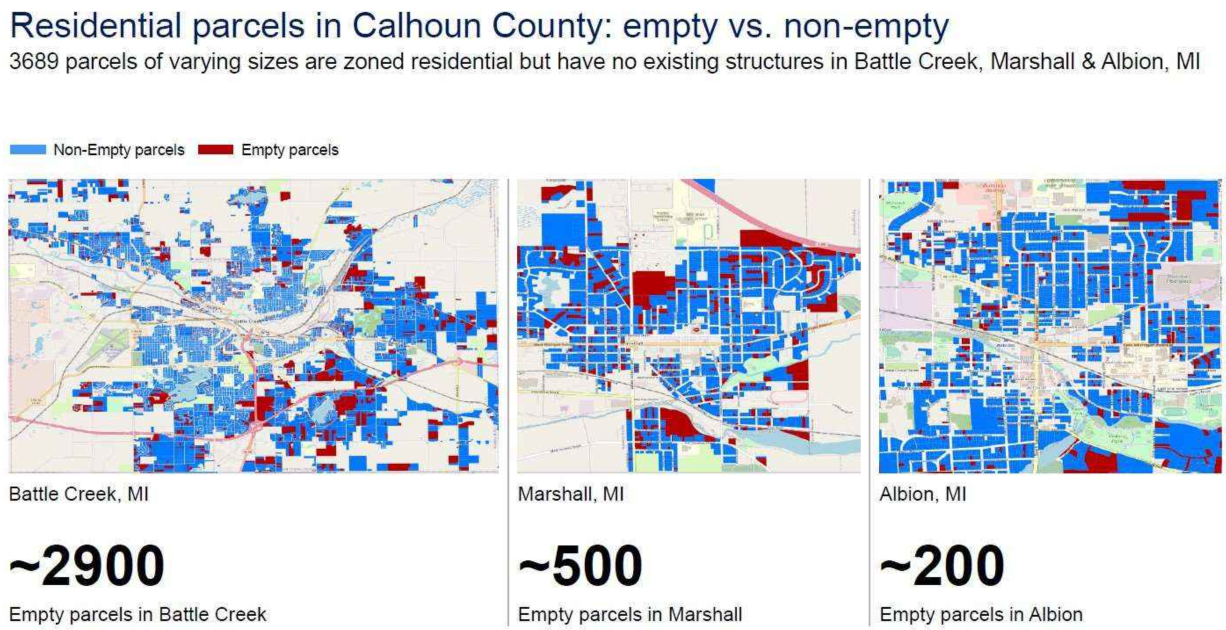


Source: MEDC Megaproject Community Impact Study, pg 66

The commuters that lived within a one (1) hour travel time from the site lived within the closest 10 counties, but only accounted for 80% of the workers in Calhoun County. The total for the three (3) counties with the highest percentages were Calhoun, Kalamazoo, and Barry Counties, which are home to 68% of the workers in Calhoun County. Staying in line with the previously described housing distribution (70/30), the three (3) main counties were increased to total 70% and the remaining seven (7) counties were adjusted to account for 30%, such that the ten (10) counties the MEDC report utilized for housing then totaled up to 100%.

County	2018 Origin	Adjusted Origin
Calhoun	52%	54%
Kalamazoo	12%	12%
Barry	4%	4%
Jackson	3%	7%
Branch	3%	7%
Eaton	2%	5%
Ingham	1%	3%
St Joseph	1%	3%
Hillsdale	1%	3%
Washtenaw	1%	2%
Total	**80%**	**100%**

This distribution creates the highest percentage of traffic from the five (5) closest counties, within a 45-minute drive of the site, which are Calhoun, Kalamazoo, Jackson, Branch, and Eaton Counties. The remaining five (5) counties within an hour drive include Barry, Ingham, St Joseph, Hillsdale, and Washtenaw Counties.



Source: MEDC Megaproject Community Impact Study, pg 86

Battle Creek, Marshall, and Albion were chosen as the locations for additional residential growth due to available vacant parcels currently zoned residential and the number of vacant parcels, which are summarized as followed:

City	Vacant Parcels	Percent
Battle Creek	2,900	81%
Marshall	500	14%
Albion	200	5%
Total	**3600**	**100%**

Additional Stakeholder Input and Local Knowledge:

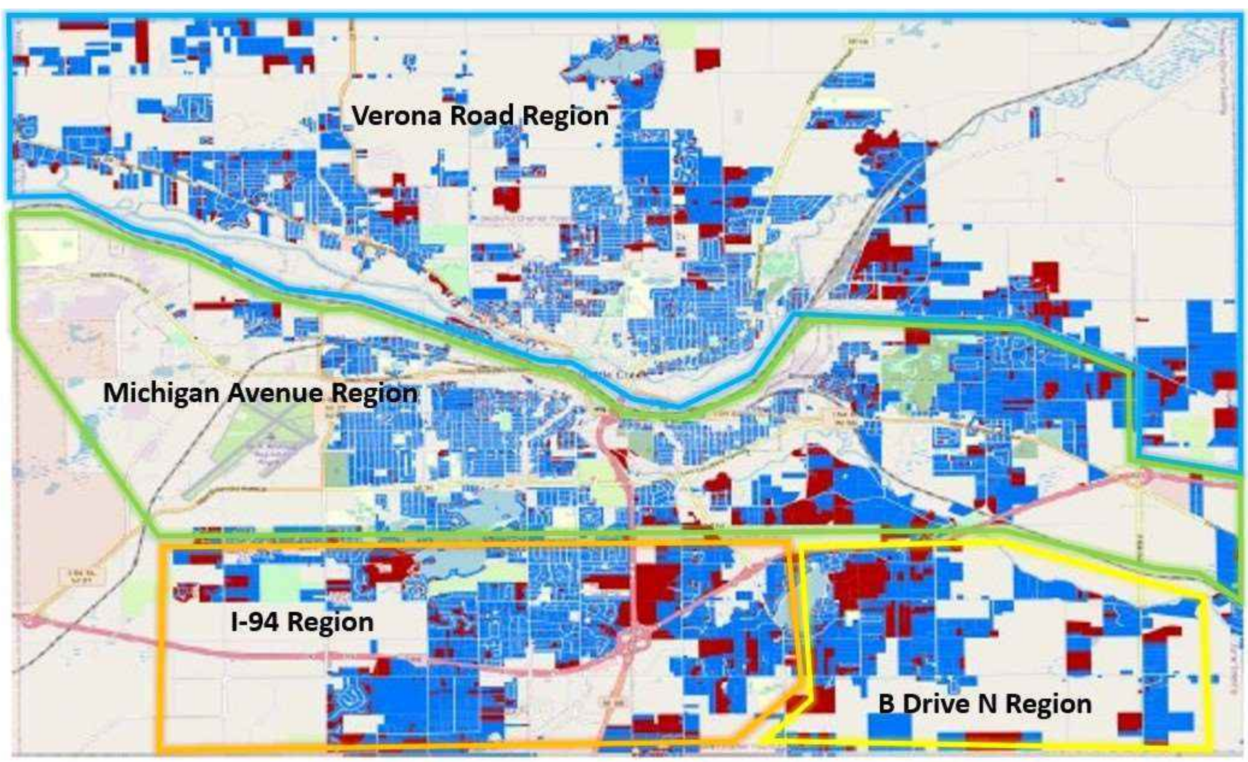
Preliminary findings were discussed with the Michigan Department of Transportation (MDOT) and other stakeholders in the area for their review. The MEDC study projected approximately 70% of the site traffic would be from Calhoun, Kalamazoo, and Barry Counties. The discussion and review comments received from MDOT indicated that this distribution was likely a little high based on the team's experience with the roadway system and knowledge of the area. It was suggested that the distribution would be closer to a 60% split. Upon redistribution this split was supported with approximate distributions by county and by local distributions from the Battle Creek area. These comments were incorporated into the original estimates and what follows is a hybrid of the MEDC information and the MDOT/Stakeholder review comments.

Proposed Distribution:

A distribution was determined based on the three (3) cities in Calhoun County as a starting point, as the largest amount of traffic was estimated to be generated in this area. Distribution also considered the available vacant parcels in each area, as outlined in the MEDC report.

Battle Creek was determined to have the greatest capacity for residential growth. It was determined that the northern portion of the city would utilize Verona Road to access the sites. For the southeast side of the city, south of I-94 and east of Beadle Lake Road, the shortest route was along B Drive North to 11 Mile Road for the Sackrider site. Marshall Mega site employees would be more likely to continue east to 12 Mile Road, travel south to A Drive North, and then travel north up 15 Mile Road to enter the site from the east on M-96/Michigan Avenue. This route would be shortened if the proposed site has an entrance onto 12 Mile Road.

Motorists along and west of Beadle Lake Road, south of I-94, as well as those along the I-94 corridor, were most likely to take I-94 to the 11 Mile Road exit to the Sackrider site. For the Marshall Mega site, due to capacity limitations at the 11 Mile Road exit, traffic would likely continue down I-94 to I-69 where they would turn south and exit at Michigan Avenue to enter the site from the east. The remaining locations within the city would utilize different streets to ultimately take Michigan Avenue to the site. Following is a graphic representation of approximate distribution areas.



Battle Creek Distribution Map

Based on that information, the following distribution was determined for the Battle Creek area.

Battle Creek	Marshall Mega	Sackrider
EB Verona Road	40%	40%
EB Michigan Ave	25%	25%
EB I-94 to SB I-69 to Michigan Ave	20%	
EB I-94 to 11 Mile		20%
EB B Drive to 15 Mile	15%	
EB B Drive to 11 Mile		15%
Total	100%	100%

For the City of Marshall, every location within the city was directed to Michigan Avenue to access the Marshall Mega site. When traveling to the Sackrider site, only locations close to I-94 were directed to I-94 and then the 11 Mile Road exit. The following estimates were generated based on those findings.

Marshall	Marshall Mega	Sackrider
WB Michigan Ave	100%	80%
WB I-94 to 11 Mile		20%
Total	100%	100%

The City of Albion motorists were projected to utilize I-94 westbound to the 11 Mile Road exit when utilizing the Sackrider site. For the Marshall Mega site, the travel routes included local roads to Michigan Avenue.

Albion	Marshall Mega	Sackrider
WB Michigan Ave	100%	
WB I-94 to 11 Mile		100%
Total	100%	100%

Based on the detailed information for Calhoun County, in addition to the routes for the other nine (9) counties, the following distribution was determined:

County of Origin	Marshall Mega	Sackrider
Calhoun County - 35%		
EB Verona Road	11%	11%
EB Michigan Ave	7%	7%
EB I-94 to SB I-69 to Michigan Ave	6%	
EB I-94 to 11 Mile		6%
EB B Drive to 15 Mile	4%	
EB B Drive to 11 Mile		4%
WB Michigan Ave	7%	4%
WB I-94 to 11 Mile		3%
Kalamazoo County - 20%		
EB I-94 to SB I-69 to Michigan Ave	20%	
EB I-94 to 11 Mile		20%
Barry County - 4%		
EB Verona Road	4%	4%
Jackson County - 10%		
WB I-94 to SB I-69 to Michigan Ave	10%	
WB I-94 to 11 Mile		10%
Branch County - 7%		
NB I-69 to Michigan Ave	7%	7%
Eaton County - 8%		
SB I-69 to Michigan Ave	8%	
SB I-69 to WB I-94 to 11 Mile		8%
Ingham County - 8%		
SB I-69 to Michigan Ave	8%	
SB I-69 to WB I-94 to 11 Mile		8%
St Joseph County - 3%		
EB I-94 to SB I-69 to Michigan Ave	3%	
EB I-94 to 11 Mile		3%
Hillsdale County - 3%		
NB I-69 to Michigan Ave	3%	3%
Washtenaw County - 2%		
WB I-94 to SB I-69 to Michigan Ave	2%	
WB I-94 to 11 Mile		2%

Further distribution was conducted for basic driveway location based on the potential site plans. Numerous driveway locations were presented for each development however for this analysis, three (3) driveways were analyzed for each site. For the Marshall Mega site, two (2) driveways were added on M-96 (Michigan Avenue) and C Drive North was considered the third access point. For the Sackrider site, one (1) driveway was placed on the east side of M-311 (11 Mile Road), one (1) driveway on the west side of M-311 (11 Mile Road) and F Drive North was considered the third access point.

Distribution at each site was based on potential building locations and available parking. For the Marshall Mega site, the distribution was estimated as follows:

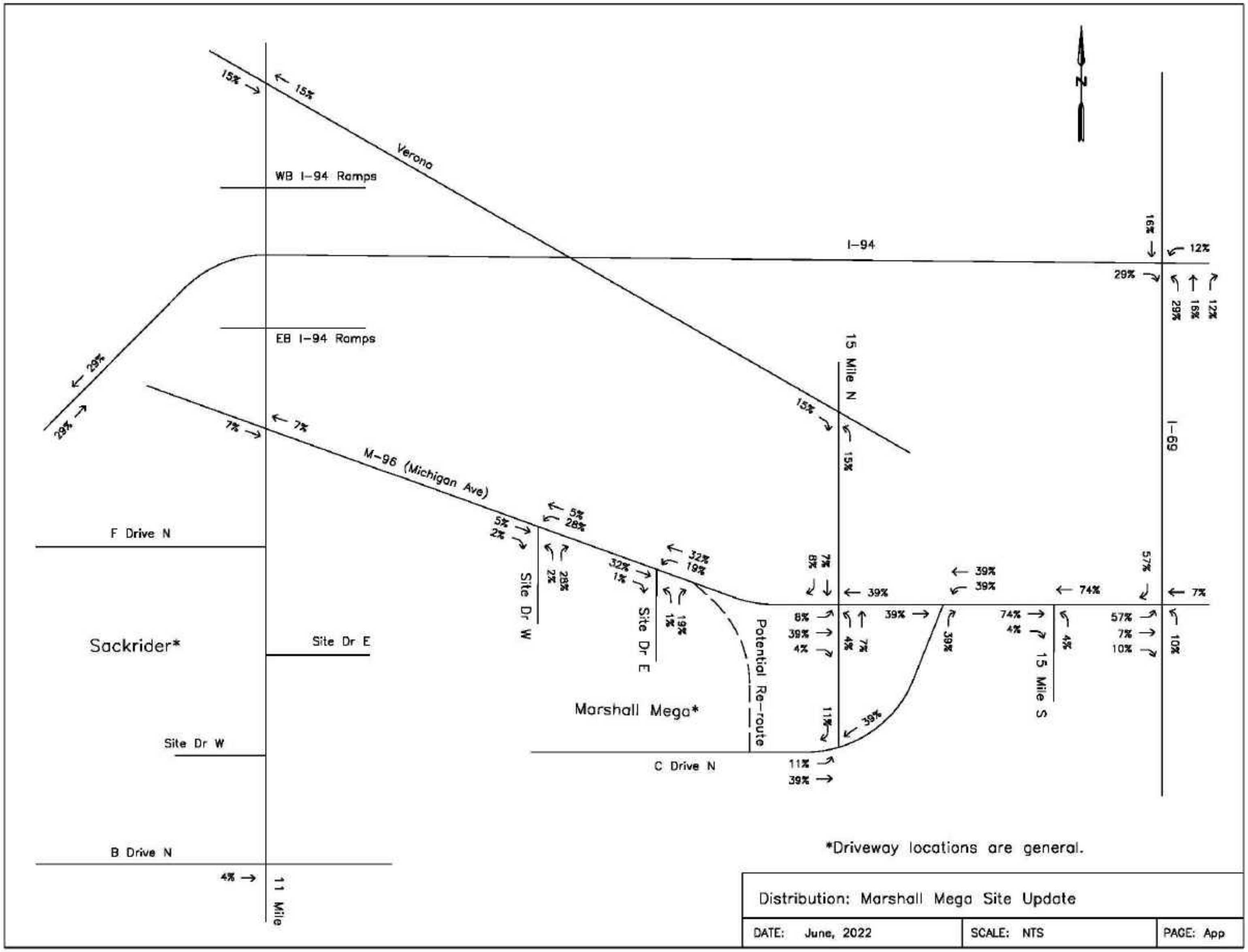
- Site Driveway West on M-96 (Michigan Avenue) – 30%
- Site Driveway East on M-96 (Michigan Avenue) – 20%
- C Drive North Access – 50%

Distribution at the Sackrider site was projected as follows:

- F Drive North Access – 35%
- Site Driveway East on M-311 (11 Mile Road) – 25%
- Site Driveway West on M-311 (11 Mile Road) – 40%

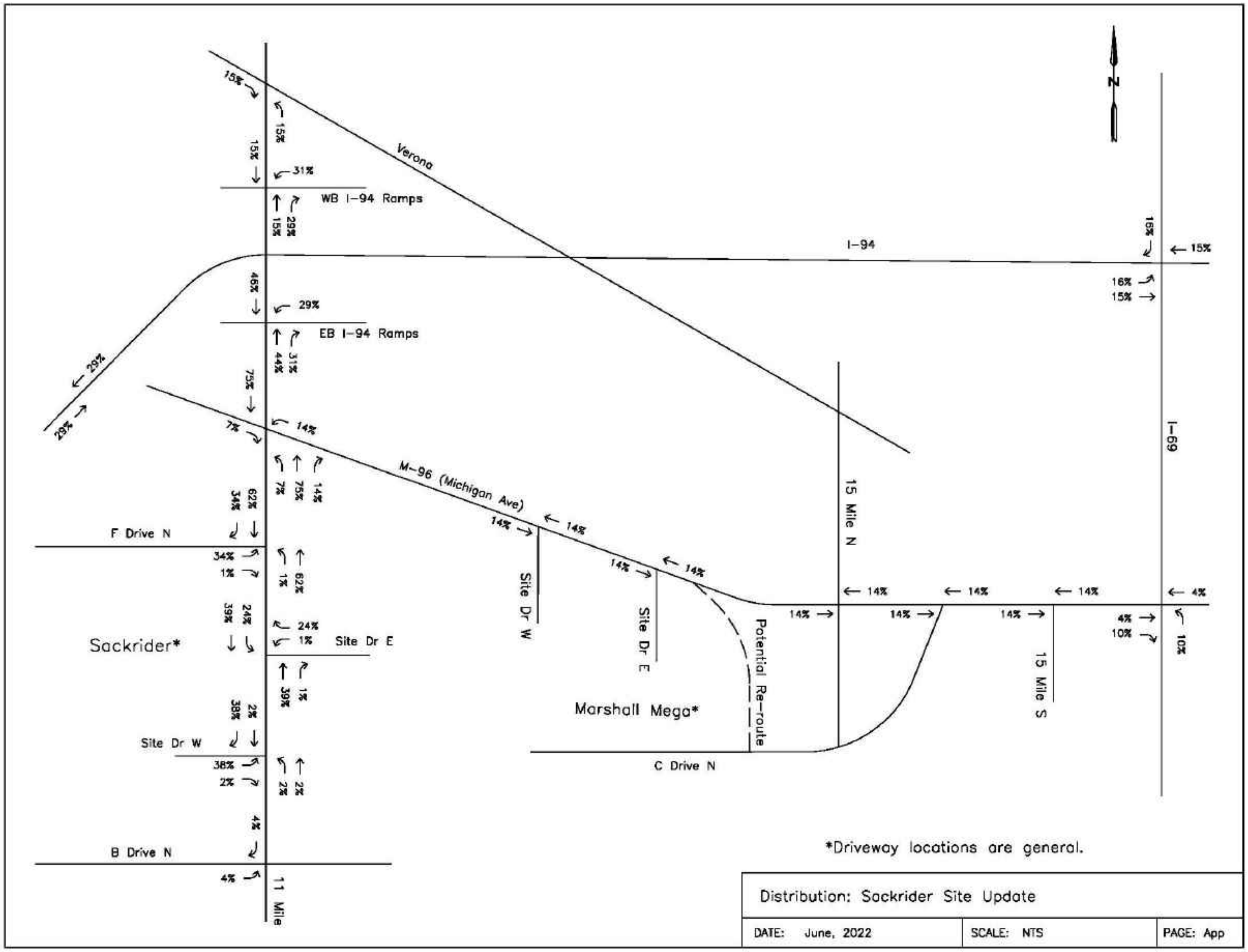
Figures are included that show the above distribution. Driveway locations have not been finalized at this point; therefore, the site locations depicted on the figures are correlated to the properties for presentation purposes only. As alternatives are modeled driveway locations may shift/change distribution slightly. A potential geometric re-alignment of M-96 (Michigan Avenue) is shown in the dashed line. As alternatives are developed the viability of this option will be evaluated from both an operations and geometric standpoint. If re-aligned through distributions along M-96 (Michigan Ave) will also be revised to follow the new route.

As the site is industrial in nature, no pass-by or diverted link trips were included in this trip distribution analysis. It was expected that all trips would start at an origin (home), access the destination (Marshall Mega or Sackrider sites) and return to the origin (home).



Marshall Mega Distribution

![C2G Cincar Consulting Group logo]



Sackrider Distribution

Appendix H.5: Synchro Model Output (Build)

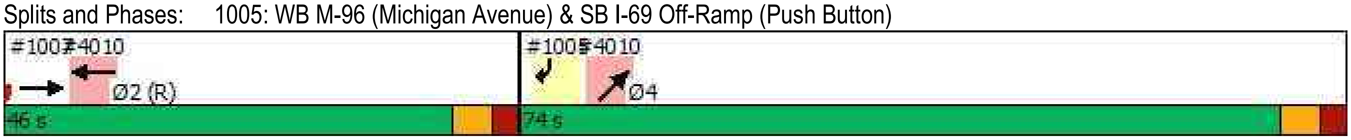
Scenario M1

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø2
Lane Configurations							
Traffic Volume (vph)	0	0	841	0	0	1019	
Future Volume (vph)	0	0	841	0	0	1019	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	0.91	1.00	1.00	0.76	
Frt						0.850	
Flt Protected							
Satd. Flow (prot)	0	0	5085	0	0	3610	
Flt Permitted							
Satd. Flow (perm)	0	0	5085	0	0	3610	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)						761	
Link Speed (mph)		45	45		25		
Link Distance (ft)		275	194		266		
Travel Time (s)		4.2	2.9		7.3		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.84	0.75	
Heavy Vehicles (%)	2%	2%	2%	2%	3%	2%	
Adj. Flow (vph)	0	0	914	0	0	1359	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	914	0	0	1359	
Turn Type			NA			Prot	
Protected Phases			Free!			4!	2
Permitted Phases							
Minimum Split (s)						17.0	17.0
Total Split (s)						74.0	46.0
Total Split (%)						61.7%	38%
Yellow Time (s)						3.5	3.5
All-Red Time (s)						2.5	2.5
Lost Time Adjust (s)						0.0	
Total Lost Time (s)						6.0	
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)			120.0			68.0	
Actuated g/C Ratio			1.00			0.57	
v/c Ratio			0.18			0.57	
Control Delay			0.1			7.5	
Queue Delay			0.0			0.0	
Total Delay			0.1			7.5	
LOS			A			A	
Approach Delay			0.1		7.5		
Approach LOS			A		A		
Queue Length 50th (ft)			0			112	
Queue Length 95th (ft)			0			88	
Internal Link Dist (ft)		195	114		186		
Turn Bay Length (ft)							
Base Capacity (vph)			5085			2375	
Starvation Cap Reductn			0			0	
Spillback Cap Reductn			428			64	
Storage Cap Reductn			0			0	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø2
Reduced v/c Ratio			0.20			0.59	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 100 (83%), Referenced to phase 2:EBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.62	
Intersection Signal Delay: 4.5	Intersection LOS: A
Intersection Capacity Utilization 57.1%	ICU Level of Service B
Analysis Period (min) 15	
! Phase conflict between lane groups.	

Splits and Phases: 1005: WB M-96 (Michigan Avenue) & SB I-69 Off-Ramp (Push Button)

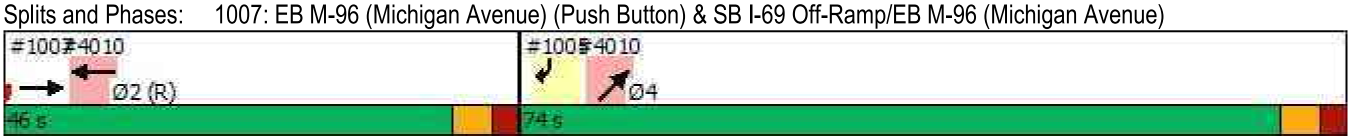


Lane Group	EBT	EBR	WBL	WBT	NEL	NER	Ø4
Lane Configurations							
Traffic Volume (vph)	112	0	0	0	0	1596	
Future Volume (vph)	112	0	0	0	0	1596	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Storage Length (ft)		260	285		0	0	
Storage Lanes		0	0		0	3	
Taper Length (ft)			240		25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.76	
Frt						0.850	
Flt Protected							
Satd. Flow (prot)	1863	0	0	0	0	3610	
Flt Permitted							
Satd. Flow (perm)	1863	0	0	0	0	3610	
Right Turn on Red		Yes				Yes	
Satd. Flow (RTOR)						2086	
Link Speed (mph)	25			45	45		
Link Distance (ft)	301			619	190		
Travel Time (s)	8.2			9.4	2.9		
Peak Hour Factor	0.75	0.84	0.92	0.92	0.90	0.90	
Heavy Vehicles (%)	2%	3%	2%	2%	2%	2%	
Adj. Flow (vph)	149	0	0	0	0	1773	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	149	0	0	0	0	1773	
Turn Type	NA					Free	
Protected Phases	2						4
Permitted Phases						Free	
Minimum Split (s)	17.0						17.0
Total Split (s)	46.0						74.0
Total Split (%)	38.3%						62%
Yellow Time (s)	3.5						3.5
All-Red Time (s)	2.5						2.5
Lost Time Adjust (s)	0.0						
Total Lost Time (s)	6.0						
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)	40.0					120.0	
Actuated g/C Ratio	0.33					1.00	
v/c Ratio	0.24					0.49	
Control Delay	30.3					4.3	
Queue Delay	0.0					0.0	
Total Delay	30.3					4.3	
LOS	C					A	
Approach Delay	30.3				4.3		
Approach LOS	C				A		
Queue Length 50th (ft)	83					140	
Queue Length 95th (ft)	111					191	
Internal Link Dist (ft)	221			539	110		
Turn Bay Length (ft)							
Base Capacity (vph)	621					3610	

Lane Group	EBT	EBR	WBL	WBT	NEL	NER	Ø4
Starvation Cap Reductn	0					0	
Spillback Cap Reductn	0					0	
Storage Cap Reductn	0					0	
Reduced v/c Ratio	0.24					0.49	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 100 (83%), Referenced to phase 2:EBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.62	
Intersection Signal Delay: 6.3	Intersection LOS: A
Intersection Capacity Utilization 31.5%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 1007: EB M-96 (Michigan Avenue) (Push Button) & SB I-69 Off-Ramp/EB M-96 (Michigan Avenue)

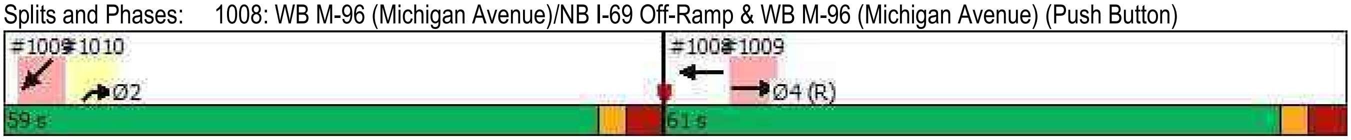


Lane Group	EBL	EBT	WBT	WBR	SWL	SWR	Ø2
Lane Configurations							
Traffic Volume (vph)	0	0	253	0	0	707	
Future Volume (vph)	0	0	253	0	0	707	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.88	
Frt						0.850	
Flt Protected							
Satd. Flow (prot)	0	0	3539	0	0	2787	
Flt Permitted							
Satd. Flow (perm)	0	0	3539	0	0	2787	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)						1321	
Link Speed (mph)		45	25		45		
Link Distance (ft)		217	252		223		
Travel Time (s)		3.3	6.9		3.4		
Peak Hour Factor	0.92	0.92	0.75	0.93	0.92	0.92	
Heavy Vehicles (%)	2%	2%	2%	6%	2%	2%	
Adj. Flow (vph)	0	0	337	0	0	768	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	337	0	0	768	
Turn Type			NA			Free	
Protected Phases			4				2
Permitted Phases						Free	
Minimum Split (s)			16.0				16.0
Total Split (s)			61.0				59.0
Total Split (%)			50.8%				49%
Yellow Time (s)			2.5				2.5
All-Red Time (s)			3.5				3.5
Lost Time Adjust (s)			0.0				
Total Lost Time (s)			6.0				
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)			55.0			120.0	
Actuated g/C Ratio			0.46			1.00	
v/c Ratio			0.21			0.28	
Control Delay			19.9			2.4	
Queue Delay			0.0			0.0	
Total Delay			19.9			2.4	
LOS			B			A	
Approach Delay			19.9		2.4		
Approach LOS			B		A		
Queue Length 50th (ft)			80			52	
Queue Length 95th (ft)			91			55	
Internal Link Dist (ft)		137	172		143		
Turn Bay Length (ft)							
Base Capacity (vph)			1622			2787	
Starvation Cap Reductn			0			0	
Spillback Cap Reductn			0			0	
Storage Cap Reductn			0			0	

Lane Group	EBL	EBT	WBT	WBR	SWL	SWR	Ø2
Reduced v/c Ratio			0.21			0.28	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 92 (77%), Referenced to phase 4:WBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.50	
Intersection Signal Delay: 7.8	Intersection LOS: A
Intersection Capacity Utilization 23.8%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 1008: WB M-96 (Michigan Avenue)/NB I-69 Off-Ramp & WB M-96 (Michigan Avenue) (Push Button)



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	0	685	0	0	0	0	0	0	0	0	707	0
Future Volume (vph)	0	685	0	0	0	0	0	0	0	0	707	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	3539	0	0	0	0	0	0	0	0	3539	0
Flt Permitted												
Satd. Flow (perm)	0	3539	0	0	0	0	0	0	0	0	3539	0
Right Turn on Red			Yes			Yes			Yes	Yes		Yes
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		209			206			223			213	
Travel Time (s)		3.2			3.1			3.4			3.2	
Peak Hour Factor	0.86	0.86	0.86	0.92	0.92	0.92	0.92	0.92	0.92	0.91	0.91	0.91
Adj. Flow (vph)	0	797	0	0	0	0	0	0	0	0	777	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	797	0	0	0	0	0	0	0	0	777	0
Turn Type		NA									NA	
Protected Phases		4									2	
Permitted Phases												
Minimum Split (s)		16.0									16.0	
Total Split (s)		61.0									59.0	
Total Split (%)		50.8%									49.2%	
Yellow Time (s)		2.5									2.5	
All-Red Time (s)		3.5									3.5	
Lost Time Adjust (s)		0.0									0.0	
Total Lost Time (s)		6.0									6.0	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		55.0									53.0	
Actuated g/C Ratio		0.46									0.44	
v/c Ratio		0.49									0.50	
Control Delay		31.3									24.2	
Queue Delay		0.0									0.0	
Total Delay		31.3									24.2	
LOS		C									C	
Approach Delay		31.3									24.2	
Approach LOS		C									C	
Queue Length 50th (ft)		321									237	
Queue Length 95th (ft)		368									302	
Internal Link Dist (ft)		129			126			143			133	
Turn Bay Length (ft)												
Base Capacity (vph)		1622									1563	
Starvation Cap Reductn		0									0	
Spillback Cap Reductn		0									0	
Storage Cap Reductn		0									0	
Reduced v/c Ratio		0.49									0.50	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 92 (77%), Referenced to phase 4:WBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.50	
Intersection Signal Delay: 27.8	Intersection LOS: C
Intersection Capacity Utilization 48.5%	ICU Level of Service A
Analysis Period (min) 15	

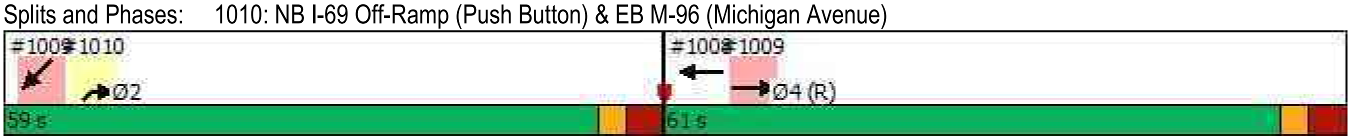
Splits and Phases: 1009: WB M-96 (Michigan Avenue) (Push Button)/WB M-96 (Michigan Avenue) & EB M-96 (Michigan Avenue)

Lane Group	EBT	EBR	WBL	WBT	NEL	NER	Ø4
Lane Configurations	↑↑					↱	
Traffic Volume (vph)	685	0	0	0	0	122	
Future Volume (vph)	685	0	0	0	0	122	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	0.95	1.00	1.00	1.00	1.00	1.00	
Frt						0.865	
Flt Protected							
Satd. Flow (prot)	3539	0	0	0	0	1611	
Flt Permitted							
Satd. Flow (perm)	3539	0	0	0	0	1611	
Right Turn on Red		Yes				Yes	
Satd. Flow (RTOR)						390	
Link Speed (mph)	45			45	25		
Link Distance (ft)	206			309	315		
Travel Time (s)	3.1			4.7	8.6		
Peak Hour Factor	0.86	0.86	0.92	0.92	0.93	0.75	
Heavy Vehicles (%)	2%	2%	2%	2%	6%	2%	
Adj. Flow (vph)	797	0	0	0	0	163	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	797	0	0	0	0	163	
Turn Type	NA					Prot	
Protected Phases	Free!					2!	4
Permitted Phases							
Minimum Split (s)						16.0	16.0
Total Split (s)						59.0	61.0
Total Split (%)						49.2%	51%
Yellow Time (s)						2.5	2.5
All-Red Time (s)						3.5	3.5
Lost Time Adjust (s)						0.0	
Total Lost Time (s)						6.0	
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)	120.0					53.0	
Actuated g/C Ratio	1.00					0.44	
v/c Ratio	0.23					0.18	
Control Delay	0.2					0.4	
Queue Delay	0.0					0.0	
Total Delay	0.2					0.4	
LOS	A					A	
Approach Delay	0.2				0.4		
Approach LOS	A				A		
Queue Length 50th (ft)	0					0	
Queue Length 95th (ft)	0					0	
Internal Link Dist (ft)	126			229	235		
Turn Bay Length (ft)							
Base Capacity (vph)	3539					929	
Starvation Cap Reductn	0					0	
Spillback Cap Reductn	0					0	
Storage Cap Reductn	0					0	

Lane Group	EBT	EBR	WBL	WBT	NEL	NER	Ø4
Reduced v/c Ratio	0.23					0.18	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 92 (77%), Referenced to phase 4:WBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.50	
Intersection Signal Delay: 0.2	Intersection LOS: A
Intersection Capacity Utilization 48.5%	ICU Level of Service A
Analysis Period (min) 15	
! Phase conflict between lane groups.	

Splits and Phases: 1010: NB I-69 Off-Ramp (Push Button) & EB M-96 (Michigan Avenue)



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	659	192	76	50	0	0	84	85
Future Volume (vph)	0	0	0	0	659	192	76	50	0	0	84	85
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		80	0		0	0		0
Storage Lanes	0		0	0		1	1		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.966							0.850
Flt Protected							0.950					
Satd. Flow (prot)	0	0	0	0	4961	0	1671	1863	0	0	1845	1568
Flt Permitted							0.687					
Satd. Flow (perm)	0	0	0	0	4961	0	1209	1863	0	0	1845	1568
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					112							110
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		152			212			101			1197	
Travel Time (s)		2.3			3.2			2.0			23.3	
Peak Hour Factor	0.92	0.92	0.92	0.87	0.87	0.87	0.67	0.67	0.67	0.77	0.77	0.77
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	8%	2%	2%	3%	3%	3%
Adj. Flow (vph)	0	0	0	0	757	221	113	75	0	0	109	110
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	978	0	113	75	0	0	109	110
Turn Type					NA		Perm	NA			NA	Perm
Protected Phases					6			4			8	
Permitted Phases							4					8
Minimum Split (s)					31.0		17.0	17.0			17.0	17.0
Total Split (s)					79.0		41.0	41.0			41.0	41.0
Total Split (%)					65.8%		34.2%	34.2%			34.2%	34.2%
Yellow Time (s)					3.5		3.5	3.5			3.5	3.5
All-Red Time (s)					2.5		2.5	2.5			6.0	6.0
Lost Time Adjust (s)					0.0		0.0	0.0			0.0	0.0
Total Lost Time (s)					6.0		6.0	6.0			9.5	9.5
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)					73.0		35.0	35.0			31.5	31.5
Actuated g/C Ratio					0.61		0.29	0.29			0.26	0.26
v/c Ratio					0.32		0.32	0.14			0.23	0.22
Control Delay					10.3		8.6	5.5			36.2	7.5
Queue Delay					0.0		0.0	0.0			0.0	0.0
Total Delay					10.3		8.6	5.5			36.2	7.5
LOS					B		A	A			D	A
Approach Delay					10.3			7.4			21.8	
Approach LOS					B			A			C	
Queue Length 50th (ft)					110		11	7			66	0
Queue Length 95th (ft)					129		11	8			98	28
Internal Link Dist (ft)		72			132			21			1117	
Turn Bay Length (ft)												
Base Capacity (vph)					3061		352	543			484	492

Lane Group	Ø2
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	2
Permitted Phases	
Minimum Split (s)	16.0
Total Split (s)	79.0
Total Split (%)	66%
Yellow Time (s)	3.5
All-Red Time (s)	2.5
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
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)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
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					0.32		0.32	0.14			0.23	0.22

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 112 (93%), Referenced to phase 2:EBT and 6:, Start of Green

Natural Cycle: 50

Control Type: Pretimed

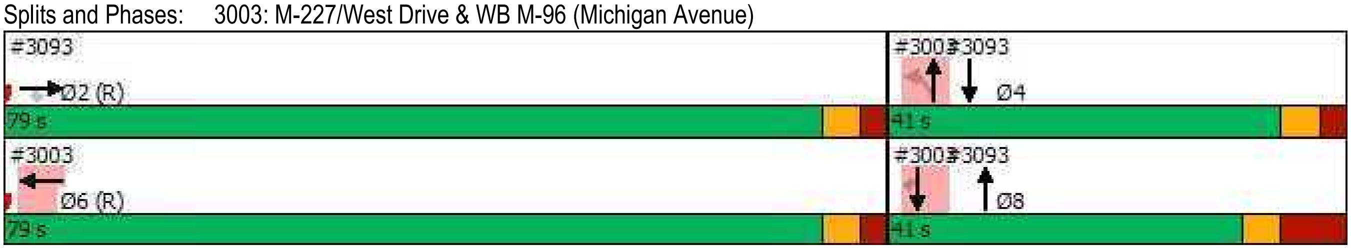
Maximum v/c Ratio: 0.37

Intersection Signal Delay: 11.7 Intersection LOS: B

Intersection Capacity Utilization 46.6% ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 3003: M-227/West Drive & WB M-96 (Michigan Avenue)



Lane Group	Ø2
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

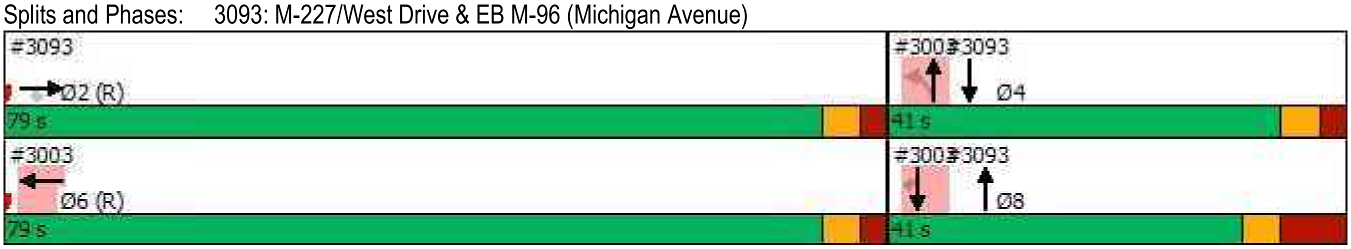
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	755	59	0	0	0	0	126	30	0	84	0
Future Volume (vph)	0	755	59	0	0	0	0	126	30	0	84	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		65	0		0	100		0	0		0
Storage Lanes	0		1	0		0	1		0	0		0
Taper Length (ft)	25			25			70			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Frt			0.850					0.971				
Flt Protected												
Satd. Flow (prot)	0	3574	1442	0	0	0	0	3344	0	0	1881	0
Flt Permitted												
Satd. Flow (perm)	0	3574	1442	0	0	0	0	3344	0	0	1881	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			59					24				
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		161			222			1117			101	
Travel Time (s)		2.4			3.4			21.8			2.0	
Peak Hour Factor	0.95	0.95	0.95	0.92	0.92	0.92	0.72	0.72	0.72	0.83	0.83	0.83
Heavy Vehicles (%)	2%	1%	12%	2%	2%	2%	2%	6%	0%	2%	1%	2%
Adj. Flow (vph)	0	795	62	0	0	0	0	175	42	0	101	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	795	62	0	0	0	0	217	0	0	101	0
Turn Type		NA	Perm					NA			NA	
Protected Phases		2						8			4	
Permitted Phases			2									
Minimum Split (s)		16.0	16.0					17.0			17.0	
Total Split (s)		79.0	79.0					41.0			41.0	
Total Split (%)		65.8%	65.8%					34.2%			34.2%	
Yellow Time (s)		3.5	3.5					3.5			3.5	
All-Red Time (s)		2.5	2.5					6.0			2.5	
Lost Time Adjust (s)		0.0	0.0					0.0			0.0	
Total Lost Time (s)		6.0	6.0					9.5			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		73.0	73.0					31.5			35.0	
Actuated g/C Ratio		0.61	0.61					0.26			0.29	
v/c Ratio		0.37	0.07					0.24			0.18	
Control Delay		4.6	0.2					31.7			0.7	
Queue Delay		0.0	0.0					0.0			0.0	
Total Delay		4.6	0.2					31.7			0.7	
LOS		A	A					C			A	
Approach Delay		4.3						31.7			0.7	
Approach LOS		A						C			A	
Queue Length 50th (ft)		42	1					61			0	
Queue Length 95th (ft)		50	0					73			0	
Internal Link Dist (ft)		81			142			1037			21	
Turn Bay Length (ft)			65									
Base Capacity (vph)		2174	900					895			548	

Lane Group	Ø6
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	6
Permitted Phases	
Minimum Split (s)	31.0
Total Split (s)	79.0
Total Split (%)	66%
Yellow Time (s)	3.5
All-Red Time (s)	2.5
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
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)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn		0	0					0			0	
Spillback Cap Reductn		0	0					18			0	
Storage Cap Reductn		0	0					0			0	
Reduced v/c Ratio		0.37	0.07					0.25			0.18	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 112 (93%), Referenced to phase 2:EBT and 6:, Start of Green	
Natural Cycle: 50	
Control Type: Pretimed	
Maximum v/c Ratio: 0.37	
Intersection Signal Delay: 9.1	Intersection LOS: A
Intersection Capacity Utilization 46.6%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 3093: M-227/West Drive & EB M-96 (Michigan Avenue)



Lane Group	Ø6
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

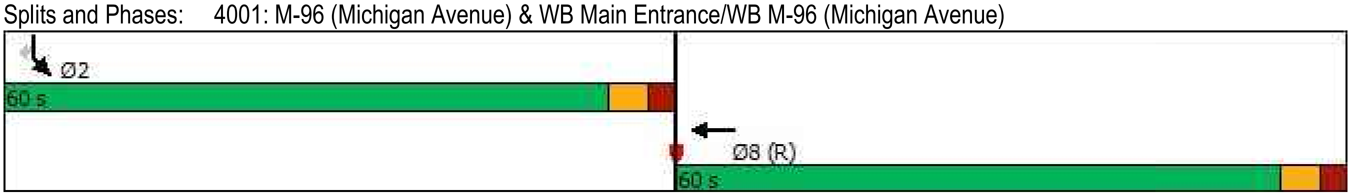
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations										
Traffic Volume (vph)	0	0	0	0	1100	1004	959	78	0	0
Future Volume (vph)	0	0	0	0	1100	1004	959	78	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	300		300	0	200	0	0
Storage Lanes	0		0	0		1	2	1	0	0
Taper Length (ft)	25			25			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.88	0.97	1.00	1.00	1.00
Frt						0.850		0.850		
Flt Protected							0.950			
Satd. Flow (prot)	0	0	0	0	3539	2787	3433	1583	0	0
Flt Permitted							0.950			
Satd. Flow (perm)	0	0	0	0	3539	2787	3433	1583	0	0
Right Turn on Red			Yes	Yes		Yes		Yes		
Satd. Flow (RTOR)						572		30		
Link Speed (mph)		45			45		55		45	
Link Distance (ft)		858			894		434		215	
Travel Time (s)		13.0			13.5		5.4		3.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	1196	1091	1042	85	0	0
Shared Lane Traffic (%)										
Lane Group Flow (vph)	0	0	0	0	1196	1091	1042	85	0	0
Turn Type					NA	Free	Prot	Perm		
Protected Phases					8		2			
Permitted Phases						Free		2		
Minimum Split (s)					16.0		16.0	16.0		
Total Split (s)					60.0		60.0	60.0		
Total Split (%)					50.0%		50.0%	50.0%		
Yellow Time (s)					3.5		3.5	3.5		
All-Red Time (s)					2.5		2.5	2.5		
Lost Time Adjust (s)					0.0		0.0	0.0		
Total Lost Time (s)					6.0		6.0	6.0		
Lead/Lag										
Lead-Lag Optimize?										
Act Effct Green (s)					54.0	120.0	54.0	54.0		
Actuated g/C Ratio					0.45	1.00	0.45	0.45		
v/c Ratio					0.75	0.39	0.67	0.12		
Control Delay					28.7	0.3	20.3	5.7		
Queue Delay					0.0	0.0	0.0	0.0		
Total Delay					28.7	0.3	20.3	5.7		
LOS					C	A	C	A		
Approach Delay					15.2		19.2			
Approach LOS					B		B			
Queue Length 50th (ft)					418	0	321	18		
Queue Length 95th (ft)					545	0	405	47		
Internal Link Dist (ft)		778			814		354		135	
Turn Bay Length (ft)						300		200		
Base Capacity (vph)					1592	2787	1544	728		
Starvation Cap Reductn					0	0	0	0		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Spillback Cap Reductn					0	0	0	0		
Storage Cap Reductn					0	0	0	0		
Reduced v/c Ratio					0.75	0.39	0.67	0.12		

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 36 (30%), Referenced to phase 8:WBT, Start of Green
Natural Cycle: 55
Control Type: Pretimed
Maximum v/c Ratio: 0.75
Intersection Signal Delay: 16.5 Intersection LOS: B
Intersection Capacity Utilization 67.8% ICU Level of Service C
Analysis Period (min) 15

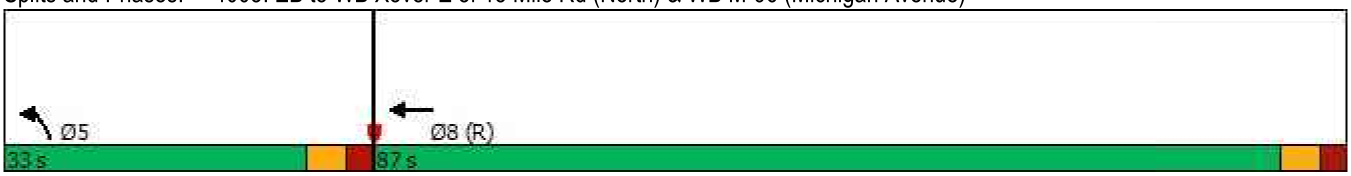
Splits and Phases: 4001: M-96 (Michigan Avenue) & WB Main Entrance/WB M-96 (Michigan Avenue)



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑↑	↰↰	
Traffic Volume (vph)	0	0	0	1854	338	0
Future Volume (vph)	0	0	0	1854	338	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	0.97	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	5085	3433	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	5085	3433	0
Right Turn on Red		Yes			Yes	Yes
Satd. Flow (RTOR)					36	
Link Speed (mph)	45			45	25	
Link Distance (ft)	660			254	113	
Travel Time (s)	10.0			3.8	3.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.70	0.92
Adj. Flow (vph)	0	0	0	2015	483	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	2015	483	0
Turn Type				NA	Prot	
Protected Phases				8	5	
Permitted Phases						
Minimum Split (s)				16.0	13.0	
Total Split (s)				87.0	33.0	
Total Split (%)				72.5%	27.5%	
Yellow Time (s)				3.5	3.5	
All-Red Time (s)				2.5	2.5	
Lost Time Adjust (s)				0.0	0.0	
Total Lost Time (s)				6.0	6.0	
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)				81.0	27.0	
Actuated g/C Ratio				0.68	0.22	
v/c Ratio				0.59	0.60	
Control Delay				5.7	47.8	
Queue Delay				0.0	0.0	
Total Delay				5.7	47.8	
LOS				A	D	
Approach Delay				5.7	47.8	
Approach LOS				A	D	
Queue Length 50th (ft)				113	173	
Queue Length 95th (ft)				145	171	
Internal Link Dist (ft)	580			174	33	
Turn Bay Length (ft)						
Base Capacity (vph)				3432	800	
Starvation Cap Reductn				0	0	
Spillback Cap Reductn				0	0	
Storage Cap Reductn				0	0	
Reduced v/c Ratio				0.59	0.60	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 116 (97%), Referenced to phase 8:WBT, Start of Green	
Natural Cycle: 45	
Control Type: Pretimed	
Maximum v/c Ratio: 0.60	
Intersection Signal Delay: 13.8	Intersection LOS: B
Intersection Capacity Utilization 71.0%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 4003: EB to WB Xover E of 15 Mile Rd (North) & WB M-96 (Michigan Avenue)

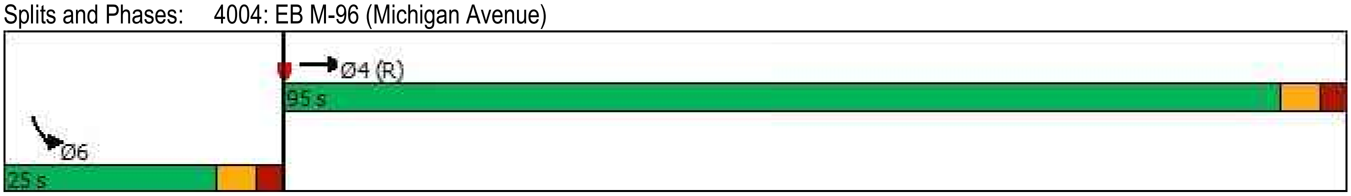


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	856	0	0	198	0
Future Volume (vph)	0	856	0	0	198	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	0.97	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	3433	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	3433	0
Right Turn on Red				Yes	Yes	Yes
Satd. Flow (RTOR)					411	
Link Speed (mph)		55	55		25	
Link Distance (ft)		2678	669		109	
Travel Time (s)		33.2	8.3		3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	930	0	0	215	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	930	0	0	215	0
Turn Type		NA			Prot	
Protected Phases		4			6	
Permitted Phases						
Detector Phase		4			6	
Switch Phase						
Minimum Initial (s)		10.0			7.0	
Minimum Split (s)		16.0			13.0	
Total Split (s)		95.0			25.0	
Total Split (%)		79.2%			20.8%	
Yellow Time (s)		3.5			3.5	
All-Red Time (s)		2.5			2.5	
Lost Time Adjust (s)		0.0			0.0	
Total Lost Time (s)		6.0			6.0	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode		C-Max			None	
Act Effct Green (s)		101.0			7.0	
Actuated g/C Ratio		0.84			0.06	
v/c Ratio		0.31			0.37	
Control Delay		1.2			2.3	
Queue Delay		0.0			0.0	
Total Delay		1.2			2.3	
LOS		A			A	
Approach Delay		1.2			2.3	
Approach LOS		A			A	
Queue Length 50th (ft)		27			1	
Queue Length 95th (ft)		28			7	
Internal Link Dist (ft)		2598	589		29	
Turn Bay Length (ft)						
Base Capacity (vph)		2978			889	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Starvation Cap Reductn		0			0	
Spillback Cap Reductn		0			0	
Storage Cap Reductn		0			0	
Reduced v/c Ratio		0.31			0.24	

Intersection Summary		
Area Type: Other		
Cycle Length: 120		
Actuated Cycle Length: 120		
Offset: 20 (17%), Referenced to phase 4:EBT, Start of Green		
Natural Cycle: 40		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.37		
Intersection Signal Delay: 1.4		Intersection LOS: A
Intersection Capacity Utilization 54.7%		ICU Level of Service A
Analysis Period (min) 15		

Splits and Phases: 4004: EB M-96 (Michigan Avenue)

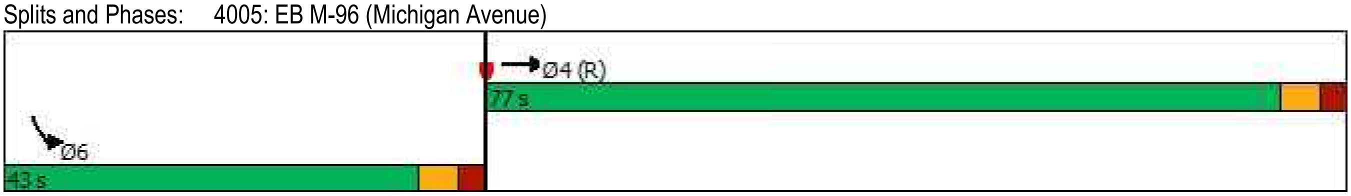


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	537	0	0	354	0
Future Volume (vph)	0	537	0	0	354	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	0.97	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	3433	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	3433	0
Right Turn on Red				Yes	Yes	Yes
Satd. Flow (RTOR)					588	
Link Speed (mph)		55	55		25	
Link Distance (ft)		1786	608		109	
Travel Time (s)		22.1	7.5		3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	584	0	0	385	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	584	0	0	385	0
Turn Type		NA			Prot	
Protected Phases		4			6	
Permitted Phases						
Detector Phase		4			6	
Switch Phase						
Minimum Initial (s)		10.0			7.0	
Minimum Split (s)		16.0			13.0	
Total Split (s)		77.0			43.0	
Total Split (%)		64.2%			35.8%	
Yellow Time (s)		3.5			3.5	
All-Red Time (s)		2.5			2.5	
Lost Time Adjust (s)		0.0			0.0	
Total Lost Time (s)		6.0			6.0	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode		C-Max			Max	
Act Effct Green (s)		71.0			37.0	
Actuated g/C Ratio		0.59			0.31	
v/c Ratio		0.28			0.26	
Control Delay		12.4			3.4	
Queue Delay		0.0			0.0	
Total Delay		12.4			3.4	
LOS		B			A	
Approach Delay		12.4			3.4	
Approach LOS		B			A	
Queue Length 50th (ft)		110			7	
Queue Length 95th (ft)		142			26	
Internal Link Dist (ft)		1706	528		29	
Turn Bay Length (ft)						
Base Capacity (vph)		2093			1465	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Starvation Cap Reductn		0			0	
Spillback Cap Reductn		0			0	
Storage Cap Reductn		0			0	
Reduced v/c Ratio		0.28			0.26	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 112 (93%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 40	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.28	
Intersection Signal Delay: 8.8	Intersection LOS: A
Intersection Capacity Utilization 37.1%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4005: EB M-96 (Michigan Avenue)

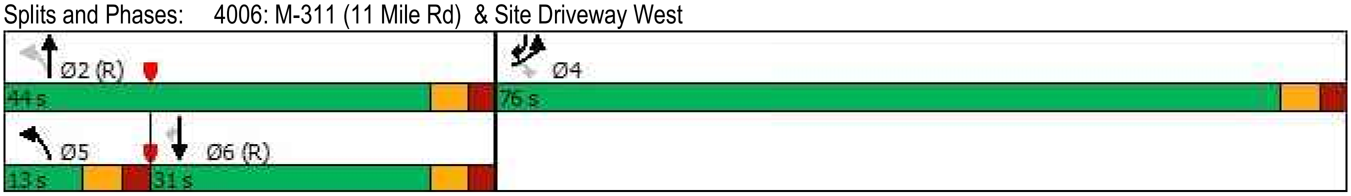


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	102	129	0
Future Volume (vph)	0	0	0	102	129	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	250	250			0
Storage Lanes	2	1	1			1
Taper Length (ft)	25		25			
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	3614	1863	1863	1863	1863	1863
Flt Permitted						
Satd. Flow (perm)	3614	1863	1863	1863	1863	1863
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)						
Link Speed (mph)	25			55	55	
Link Distance (ft)	1178			1461	940	
Travel Time (s)	32.1			18.1	11.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	111	140	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	111	140	0
Turn Type	Prot	Perm	pm+pt	NA	NA	pm+ov
Protected Phases	4		5	2	6	4
Permitted Phases		4	2			6
Detector Phase	4	4	5	2	6	4
Switch Phase						
Minimum Initial (s)	7.0	7.0	7.0	10.0	10.0	7.0
Minimum Split (s)	14.0	14.0	13.0	17.0	17.0	14.0
Total Split (s)	76.0	76.0	13.0	44.0	31.0	76.0
Total Split (%)	63.3%	63.3%	10.8%	36.7%	25.8%	63.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.5	2.5	2.5	2.5	2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None	None	Min	C-Max	C-Max	None
Act Effct Green (s)				120.0	101.0	
Actuated g/C Ratio				1.00	0.84	
v/c Ratio				0.06	0.09	
Control Delay				0.1	1.8	
Queue Delay				0.0	0.0	
Total Delay				0.1	1.8	
LOS				A	A	
Approach Delay				0.1	1.8	
Approach LOS				A	A	
Queue Length 50th (ft)				0	14	
Queue Length 95th (ft)				0	23	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Internal Link Dist (ft)	1098			1381	860	
Turn Bay Length (ft)						
Base Capacity (vph)				1863	1568	
Starvation Cap Reductn				0	0	
Spillback Cap Reductn				0	0	
Storage Cap Reductn				0	0	
Reduced v/c Ratio				0.06	0.09	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 60 (50%), Referenced to phase 2:NBTL and 6:SBT, Start of Green	
Natural Cycle: 45	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.09	
Intersection Signal Delay: 1.0	Intersection LOS: A
Intersection Capacity Utilization 13.3%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4006: M-311 (11 Mile Rd) & Site Driveway West

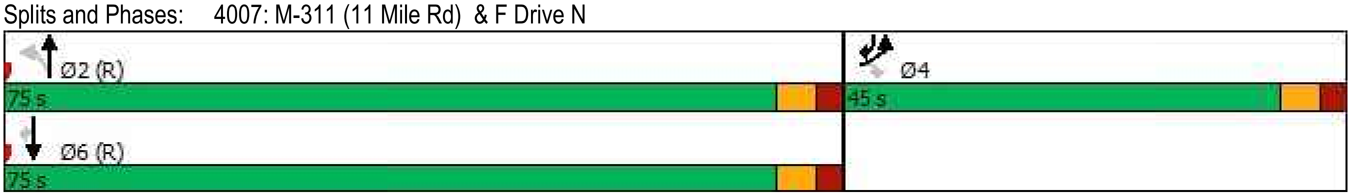


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	102	129	0
Future Volume (vph)	0	0	0	102	129	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	250	400			0
Storage Lanes	2	1	1			1
Taper Length (ft)	25		25			
Lane Util. Factor	0.97	1.00	1.00	0.95	0.95	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	3614	1863	1863	3539	3539	1863
Flt Permitted						
Satd. Flow (perm)	3614	1863	1863	3539	3539	1863
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)						
Link Speed (mph)	45			55	55	
Link Distance (ft)	1846			974	1093	
Travel Time (s)	28.0			12.1	13.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	111	140	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	111	140	0
Turn Type	Prot	Perm	Perm	NA	NA	pm+ov
Protected Phases	4			2	6	4
Permitted Phases		4	2			6
Detector Phase	4	4	2	2	6	4
Switch Phase						
Minimum Initial (s)	7.0	7.0	10.0	10.0	10.0	7.0
Minimum Split (s)	13.0	13.0	16.0	16.0	16.0	13.0
Total Split (s)	45.0	45.0	75.0	75.0	75.0	45.0
Total Split (%)	37.5%	37.5%	62.5%	62.5%	62.5%	37.5%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.5	2.5	2.5	2.5	2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None	None	C-Max	C-Max	C-Max	None
Act Effct Green (s)				120.0	120.0	
Actuated g/C Ratio				1.00	1.00	
v/c Ratio				0.03	0.04	
Control Delay				0.0	0.0	
Queue Delay				0.0	0.0	
Total Delay				0.0	0.0	
LOS				A	A	
Approach Delay						
Approach LOS						
Queue Length 50th (ft)				0	0	
Queue Length 95th (ft)				0	0	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Internal Link Dist (ft)	1766			894	1013	
Turn Bay Length (ft)						
Base Capacity (vph)				3539	3539	
Starvation Cap Reductn				0	0	
Spillback Cap Reductn				0	0	
Storage Cap Reductn				0	0	
Reduced v/c Ratio				0.03	0.04	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 20 (17%), Referenced to phase 2:NBTL and 6:SBT, Start of Green	
Natural Cycle: 40	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.04	
Intersection Signal Delay: 0.0	Intersection LOS: A
Intersection Capacity Utilization 13.3%	ICU Level of Service A
Analysis Period (min) 15	

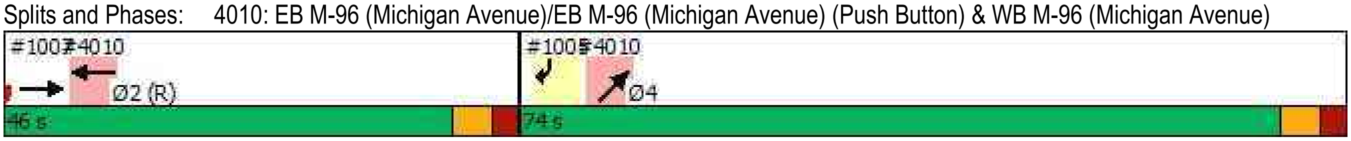
Splits and Phases: 4007: M-311 (11 Mile Rd) & F Drive N



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	841	0	0	1596	0	0	0	0
Future Volume (vph)	0	0	0	0	841	0	0	1596	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.91	1.00	1.00	1.00	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	0	0	0	5085	0	0	5085	0	0	0	0
Flt Permitted												
Satd. Flow (perm)	0	0	0	0	5085	0	0	5085	0	0	0	0
Right Turn on Red			Yes			Yes	Yes		Yes			Yes
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		194			183			156			190	
Travel Time (s)		2.9			2.8			2.4			2.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.90	0.90	0.90	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	914	0	0	1773	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	914	0	0	1773	0	0	0	0
Turn Type					NA			NA				
Protected Phases					2			4				
Permitted Phases												
Minimum Split (s)					17.0			17.0				
Total Split (s)					46.0			74.0				
Total Split (%)					38.3%			61.7%				
Yellow Time (s)					3.5			3.5				
All-Red Time (s)					2.5			2.5				
Lost Time Adjust (s)					0.0			0.0				
Total Lost Time (s)					6.0			6.0				
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)					40.0			68.0				
Actuated g/C Ratio					0.33			0.57				
v/c Ratio					0.54			0.62				
Control Delay					35.7			10.3				
Queue Delay					0.0			0.0				
Total Delay					35.7			10.3				
LOS					D			B				
Approach Delay					35.7			10.3				
Approach LOS					D			B				
Queue Length 50th (ft)					260			226				
Queue Length 95th (ft)					306			256				
Internal Link Dist (ft)		114			103			76			110	
Turn Bay Length (ft)												
Base Capacity (vph)					1695			2881				
Starvation Cap Reductn					0			0				
Spillback Cap Reductn					0			0				
Storage Cap Reductn					0			0				
Reduced v/c Ratio					0.54			0.62				

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 100 (83%), Referenced to phase 2:EBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.62	
Intersection Signal Delay: 19.0	Intersection LOS: B
Intersection Capacity Utilization 57.1%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 4010: EB M-96 (Michigan Avenue)/EB M-96 (Michigan Avenue) (Push Button) & WB M-96 (Michigan Avenue)



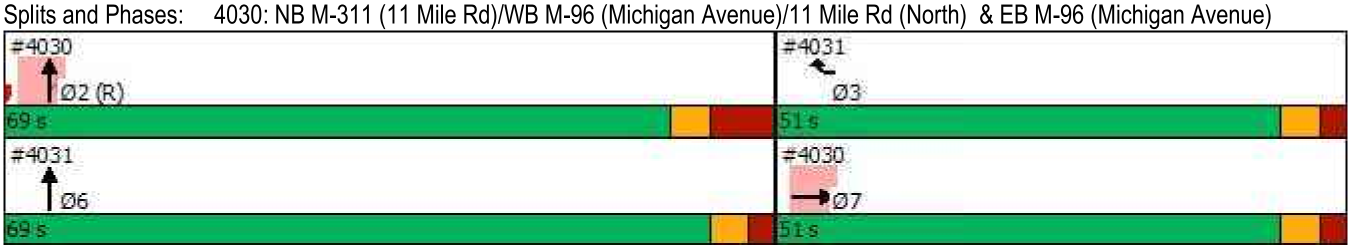
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑						↑↑↑	↱			
Traffic Volume (vph)	0	641	0	0	0	0	0	64	38	0	0	0
Future Volume (vph)	0	641	0	0	0	0	0	64	38	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		250	0		0
Storage Lanes	0		0	0		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	1.00	1.00
Frt									0.850			
Flt Protected												
Satd. Flow (prot)	0	3539	0	0	0	0	0	5085	1583	0	0	0
Flt Permitted												
Satd. Flow (perm)	0	3539	0	0	0	0	0	5085	1583	0	0	0
Right Turn on Red	Yes		Yes			Yes			Yes			Yes
Satd. Flow (RTOR)									41			
Link Speed (mph)		55			55			55			30	
Link Distance (ft)		167			316			655			182	
Travel Time (s)		2.1			3.9			8.1			4.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	697	0	0	0	0	0	70	41	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	697	0	0	0	0	0	70	41	0	0	0
Turn Type		NA						NA	Perm			
Protected Phases		7						2				
Permitted Phases									2			
Minimum Split (s)		16.0						19.5	19.5			
Total Split (s)		51.0						69.0	69.0			
Total Split (%)		42.5%						57.5%	57.5%			
Yellow Time (s)		3.5						3.5	3.5			
All-Red Time (s)		2.5						6.0	6.0			
Lost Time Adjust (s)		0.0						0.0	0.0			
Total Lost Time (s)		6.0						9.5	9.5			
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		45.0						59.5	59.5			
Actuated g/C Ratio		0.38						0.50	0.50			
v/c Ratio		0.53						0.03	0.05			
Control Delay		36.4						15.5	4.8			
Queue Delay		0.0						0.0	0.0			
Total Delay		36.4						15.5	4.8			
LOS		D						B	A			
Approach Delay		36.4						11.6				
Approach LOS		D						B				
Queue Length 50th (ft)		291						9	0			
Queue Length 95th (ft)		355						18	19			
Internal Link Dist (ft)		87			236			575			102	
Turn Bay Length (ft)									250			
Base Capacity (vph)		1327						2521	805			
Starvation Cap Reductn		0						0	0			

Lane Group	Ø3	Ø6
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Ideal Flow (vphpl)		
Storage Length (ft)		
Storage Lanes		
Taper Length (ft)		
Lane Util. Factor		
Frt		
Flt Protected		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Peak Hour Factor		
Adj. Flow (vph)		
Shared Lane Traffic (%)		
Lane Group Flow (vph)		
Turn Type		
Protected Phases	3	6
Permitted Phases		
Minimum Split (s)	16.0	16.0
Total Split (s)	51.0	69.0
Total Split (%)	43%	58%
Yellow Time (s)	3.5	3.5
All-Red Time (s)	2.5	2.5
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag		
Lead-Lag Optimize?		
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		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn		0						0	0			
Storage Cap Reductn		0						0	0			
Reduced v/c Ratio		0.53						0.03	0.05			

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 88 (73%), Referenced to phase 2:NBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.53	
Intersection Signal Delay: 33.0	Intersection LOS: C
Intersection Capacity Utilization 39.0%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4030: NB M-311 (11 Mile Rd)/WB M-96 (Michigan Avenue)/11 Mile Rd (North) & EB M-96 (Michigan Avenue)



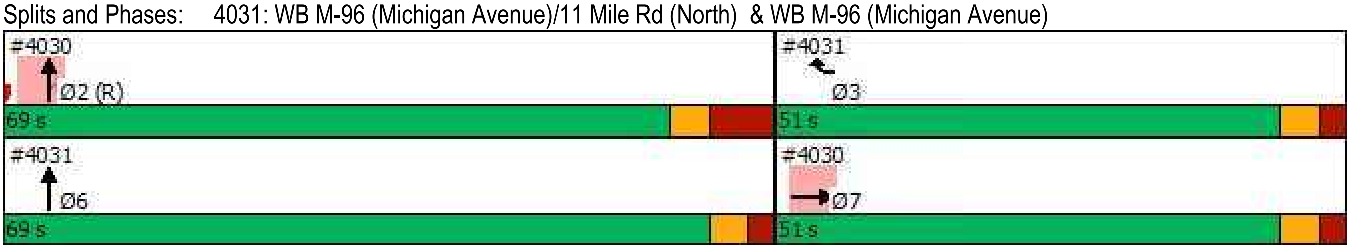
Lane Group	Ø3	Ø6
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		

Intersection Summary

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø2	Ø7
Lane Configurations								
Traffic Volume (vph)	0	823	64	0	0	0		
Future Volume (vph)	0	823	64	0	0	0		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Lane Util. Factor	1.00	0.76	0.91	1.00	1.00	1.00		
Frt		0.850						
Flt Protected								
Satd. Flow (prot)	0	3610	5085	0	0	0		
Flt Permitted								
Satd. Flow (perm)	0	3610	5085	0	0	0		
Right Turn on Red		Yes		Yes				
Satd. Flow (RTOR)		2101						
Link Speed (mph)	55		55			55		
Link Distance (ft)	405		182			493		
Travel Time (s)	5.0		2.3			6.1		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Adj. Flow (vph)	0	895	70	0	0	0		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	0	895	70	0	0	0		
Turn Type		Prot	NA					
Protected Phases		3	6				2	7
Permitted Phases								
Minimum Split (s)		16.0	16.0				19.5	16.0
Total Split (s)		51.0	69.0				69.0	51.0
Total Split (%)		42.5%	57.5%				58%	43%
Yellow Time (s)		3.5	3.5				3.5	3.5
All-Red Time (s)		2.5	2.5				6.0	2.5
Lost Time Adjust (s)		0.0	0.0					
Total Lost Time (s)		6.0	6.0					
Lead/Lag								
Lead-Lag Optimize?								
Act Effct Green (s)		45.0	63.0					
Actuated g/C Ratio		0.38	0.52					
v/c Ratio		0.34	0.03					
Control Delay		0.5	0.0					
Queue Delay		0.0	0.0					
Total Delay		0.5	0.0					
LOS		A	A					
Approach Delay	0.5							
Approach LOS	A							
Queue Length 50th (ft)		2	0					
Queue Length 95th (ft)		5	1					
Internal Link Dist (ft)	325		102			413		
Turn Bay Length (ft)								
Base Capacity (vph)		2666	2669					
Starvation Cap Reductn		0	0					
Spillback Cap Reductn		0	0					
Storage Cap Reductn		0	0					
Reduced v/c Ratio		0.34	0.03					

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 88 (73%), Referenced to phase 2:NBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.53	
Intersection Signal Delay: 0.5	Intersection LOS: A
Intersection Capacity Utilization 39.0%	ICU Level of Service A
Analysis Period (min) 15	

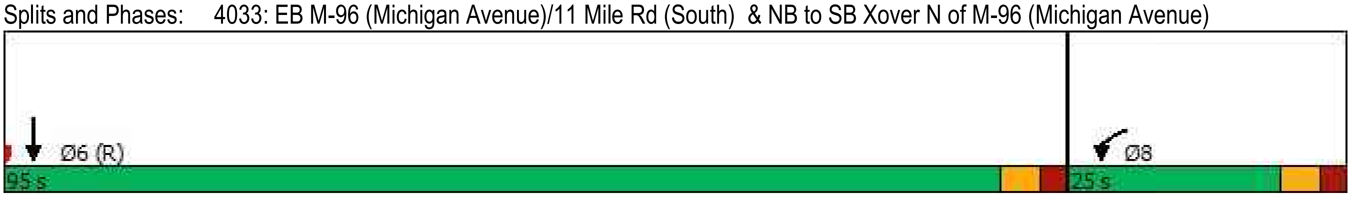
Splits and Phases: 4031: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & WB M-96 (Michigan Avenue)



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	67	0	0	0	0	703
Future Volume (vph)	67	0	0	0	0	703
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	0.91
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	3433	0	0	0	0	5085
Flt Permitted	0.950					
Satd. Flow (perm)	3433	0	0	0	0	5085
Right Turn on Red	Yes	Yes		Yes		
Satd. Flow (RTOR)	555					
Link Speed (mph)	25		55			30
Link Distance (ft)	105		587			495
Travel Time (s)	2.9		7.3			11.3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	73	0	0	0	0	764
Shared Lane Traffic (%)						
Lane Group Flow (vph)	73	0	0	0	0	764
Turn Type	Prot					NA
Protected Phases	8					6
Permitted Phases						
Minimum Split (s)	13.0					16.0
Total Split (s)	25.0					95.0
Total Split (%)	20.8%					79.2%
Yellow Time (s)	3.5					3.5
All-Red Time (s)	2.5					2.5
Lost Time Adjust (s)	0.0					0.0
Total Lost Time (s)	6.0					6.0
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)	19.0					89.0
Actuated g/C Ratio	0.16					0.74
v/c Ratio	0.07					0.20
Control Delay	0.1					0.9
Queue Delay	0.0					0.0
Total Delay	0.1					0.9
LOS	A					A
Approach Delay	0.1					0.9
Approach LOS	A					A
Queue Length 50th (ft)	0					7
Queue Length 95th (ft)	0					9
Internal Link Dist (ft)	25		507			415
Turn Bay Length (ft)						
Base Capacity (vph)	1010					3771
Starvation Cap Reductn	0					0
Spillback Cap Reductn	0					0
Storage Cap Reductn	0					0
Reduced v/c Ratio	0.07					0.20

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 89 (74%), Referenced to phase 6:SBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.20	
Intersection Signal Delay: 0.8	Intersection LOS: A
Intersection Capacity Utilization 37.8%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4033: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & NB to SB Xover N of M-96 (Michigan Avenue)



Lane Group	NBL	NBT	SBT	SBR	SEL	SER	Ø2
Lane Configurations							
Traffic Volume (vph)	0	0	593	0	0	110	
Future Volume (vph)	0	0	593	0	0	110	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	0.91	1.00	1.00	0.88	
Frt						0.850	
Flt Protected							
Satd. Flow (prot)	0	0	5085	0	0	2787	
Flt Permitted							
Satd. Flow (perm)	0	0	5085	0	0	2787	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)						837	
Link Speed (mph)		30	30		30		
Link Distance (ft)		495	145		346		
Travel Time (s)		11.3	3.3		7.9		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	0	0	645	0	0	120	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	645	0	0	120	
Turn Type			NA			Prot	
Protected Phases			Free!			4!	2
Permitted Phases							
Minimum Split (s)						16.0	16.0
Total Split (s)						60.0	60.0
Total Split (%)						50.0%	50%
Yellow Time (s)						3.5	3.5
All-Red Time (s)						2.5	2.5
Lost Time Adjust (s)						0.0	
Total Lost Time (s)						6.0	
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)			120.0			54.0	
Actuated g/C Ratio			1.00			0.45	
v/c Ratio			0.13			0.07	
Control Delay			0.1			0.1	
Queue Delay			0.0			0.0	
Total Delay			0.1			0.1	
LOS			A			A	
Approach Delay			0.1		0.1		
Approach LOS			A		A		
Queue Length 50th (ft)			0			0	
Queue Length 95th (ft)			0			0	
Internal Link Dist (ft)		415	65		266		
Turn Bay Length (ft)							
Base Capacity (vph)			5085			1714	
Starvation Cap Reductn			0			0	
Spillback Cap Reductn			0			0	
Storage Cap Reductn			0			0	
Reduced v/c Ratio			0.13			0.07	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 27 (23%), Referenced to phase 4:SER, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.31	
Intersection Signal Delay: 0.1	Intersection LOS: A
Intersection Capacity Utilization 34.2%	ICU Level of Service A
Analysis Period (min) 15	

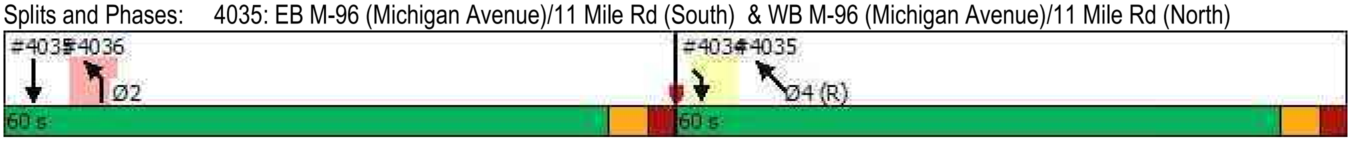
! Phase conflict between lane groups.

Splits and Phases: 4034: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & EB I-94 Off-ramp

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	593	0	0	0	0	0	661	0
Future Volume (vph)	0	0	0	0	593	0	0	0	0	0	661	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.91	1.00	1.00	1.00	1.00	1.00	0.91	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	0	0	0	5085	0	0	0	0	0	5085	0
Flt Permitted												
Satd. Flow (perm)	0	0	0	0	5085	0	0	0	0	0	5085	0
Right Turn on Red			Yes			Yes			Yes	Yes		Yes
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		145			194			233			108	
Travel Time (s)		3.3			4.4			5.3			2.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	645	0	0	0	0	0	718	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	645	0	0	0	0	0	718	0
Turn Type					NA						NA	
Protected Phases					2						4	
Permitted Phases												
Minimum Split (s)					16.0						16.0	
Total Split (s)					60.0						60.0	
Total Split (%)					50.0%						50.0%	
Yellow Time (s)					3.5						3.5	
All-Red Time (s)					2.5						2.5	
Lost Time Adjust (s)					0.0						0.0	
Total Lost Time (s)					6.0						6.0	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)					54.0						54.0	
Actuated g/C Ratio					0.45						0.45	
v/c Ratio					0.28						0.31	
Control Delay					23.3						21.6	
Queue Delay					0.0						0.0	
Total Delay					23.3						21.6	
LOS					C						C	
Approach Delay					23.3						21.6	
Approach LOS					C						C	
Queue Length 50th (ft)					159						123	
Queue Length 95th (ft)					198						150	
Internal Link Dist (ft)		65			114			153			28	
Turn Bay Length (ft)												
Base Capacity (vph)					2288						2288	
Starvation Cap Reductn					0						0	
Spillback Cap Reductn					0						0	
Storage Cap Reductn					0						0	
Reduced v/c Ratio					0.28						0.31	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 27 (23%), Referenced to phase 4:SER, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.31	
Intersection Signal Delay: 22.4	Intersection LOS: C
Intersection Capacity Utilization 32.4%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4035: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & WB M-96 (Michigan Avenue)/11 Mile Rd (North)



Lane Group	NBL	NBR	SET	SER	NWL	NWT	Ø4
Lane Configurations							
Traffic Volume (vph)	104	0	0	0	0	661	
Future Volume (vph)	104	0	0	0	0	661	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.91	
Frt							
Flt Protected	0.950						
Satd. Flow (prot)	1719	0	0	0	0	5085	
Flt Permitted	0.950						
Satd. Flow (perm)	1719	0	0	0	0	5085	
Right Turn on Red	Yes	Yes		Yes			
Satd. Flow (RTOR)	432						
Link Speed (mph)	30		30			30	
Link Distance (ft)	271		337			233	
Travel Time (s)	6.2		7.7			5.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Heavy Vehicles (%)	5%	2%	2%	2%	2%	2%	
Adj. Flow (vph)	113	0	0	0	0	718	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	113	0	0	0	0	718	
Turn Type	Prot					NA	
Protected Phases	2!					Free!	4
Permitted Phases							
Minimum Split (s)	16.0						16.0
Total Split (s)	60.0						60.0
Total Split (%)	50.0%						50%
Yellow Time (s)	3.5						3.5
All-Red Time (s)	2.5						2.5
Lost Time Adjust (s)	0.0						
Total Lost Time (s)	6.0						
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)	54.0					120.0	
Actuated g/C Ratio	0.45					1.00	
v/c Ratio	0.11					0.14	
Control Delay	0.2					0.1	
Queue Delay	0.0					0.0	
Total Delay	0.2					0.1	
LOS	A					A	
Approach Delay	0.2					0.1	
Approach LOS	A					A	
Queue Length 50th (ft)	0					0	
Queue Length 95th (ft)	0					0	
Internal Link Dist (ft)	191		257			153	
Turn Bay Length (ft)							
Base Capacity (vph)	1011					5085	
Starvation Cap Reductn	0					0	
Spillback Cap Reductn	0					0	
Storage Cap Reductn	0					0	

Lane Group	NBL	NBR	SET	SER	NWL	NWT	Ø4
Reduced v/c Ratio	0.11					0.14	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 27 (23%), Referenced to phase 4:SER, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.31	
Intersection Signal Delay: 0.1	Intersection LOS: A
Intersection Capacity Utilization 29.4%	ICU Level of Service A
Analysis Period (min) 15	
! Phase conflict between lane groups.	

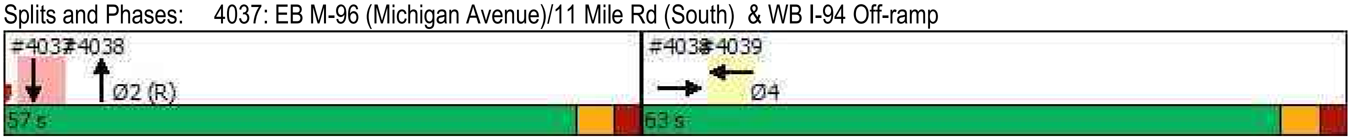
Splits and Phases: 4036: EB I-94 Off-ramp & WB M-96 (Michigan Avenue)/11 Mile Rd (North)

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø4
Lane Configurations							
Traffic Volume (vph)	0	567	0	0	99	0	
Future Volume (vph)	0	567	0	0	99	0	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	0.88	1.00	1.00	0.95	1.00	
Frt		0.850					
Flt Protected							
Satd. Flow (prot)	0	2707	0	0	3438	0	
Flt Permitted							
Satd. Flow (perm)	0	2707	0	0	3438	0	
Right Turn on Red		Yes				Yes	
Satd. Flow (RTOR)		1670					
Link Speed (mph)	30			30	30		
Link Distance (ft)	222			406	241		
Travel Time (s)	5.0			9.2	5.5		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Heavy Vehicles (%)	2%	5%	2%	2%	5%	2%	
Adj. Flow (vph)	0	616	0	0	108	0	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	616	0	0	108	0	
Turn Type		Free			NA		
Protected Phases					2		4
Permitted Phases		Free					
Minimum Split (s)					16.0		16.0
Total Split (s)					57.0		63.0
Total Split (%)					47.5%		53%
Yellow Time (s)					3.5		3.5
All-Red Time (s)					2.5		2.5
Lost Time Adjust (s)					0.0		
Total Lost Time (s)					6.0		
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)		120.0			51.0		
Actuated g/C Ratio		1.00			0.42		
v/c Ratio		0.23			0.07		
Control Delay		0.7			20.7		
Queue Delay		0.0			0.0		
Total Delay		0.7			20.7		
LOS		A			C		
Approach Delay	0.7				20.7		
Approach LOS	A				C		
Queue Length 50th (ft)		9			25		
Queue Length 95th (ft)		14			44		
Internal Link Dist (ft)	142			326	161		
Turn Bay Length (ft)							
Base Capacity (vph)		2707			1461		
Starvation Cap Reductn		0			0		
Spillback Cap Reductn		0			0		
Storage Cap Reductn		0			0		

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø4
Reduced v/c Ratio		0.23			0.07		

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 96 (80%), Referenced to phase 2:SBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.38	
Intersection Signal Delay: 3.7	Intersection LOS: A
Intersection Capacity Utilization 13.3%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4037: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & WB I-94 Off-ramp

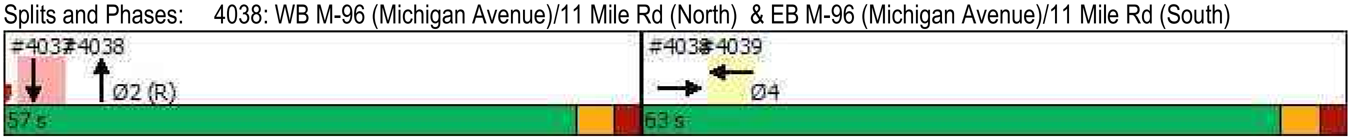


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑						↑↑↑				
Traffic Volume (vph)	0	567	0	0	0	0	0	686	0	0	0	0
Future Volume (vph)	0	567	0	0	0	0	0	686	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	1.00	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	3438	0	0	0	0	0	4940	0	0	0	0
Flt Permitted												
Satd. Flow (perm)	0	3438	0	0	0	0	0	4940	0	0	0	0
Right Turn on Red	Yes		Yes			Yes			Yes			Yes
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		190			222			207			131	
Travel Time (s)		4.3			5.0			4.7			3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	5%	2%	2%	2%	2%	2%	5%	2%	2%	2%	2%
Adj. Flow (vph)	0	616	0	0	0	0	0	746	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	616	0	0	0	0	0	746	0	0	0	0
Turn Type		NA						NA				
Protected Phases		4						2				
Permitted Phases												
Minimum Split (s)		16.0						16.0				
Total Split (s)		63.0						57.0				
Total Split (%)		52.5%						47.5%				
Yellow Time (s)		3.5						3.5				
All-Red Time (s)		2.5						2.5				
Lost Time Adjust (s)		0.0						0.0				
Total Lost Time (s)		6.0						6.0				
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		57.0						51.0				
Actuated g/C Ratio		0.48						0.42				
v/c Ratio		0.38						0.36				
Control Delay		17.4						42.3				
Queue Delay		0.0						0.0				
Total Delay		17.4						42.3				
LOS		B						D				
Approach Delay		17.4						42.3				
Approach LOS		B						D				
Queue Length 50th (ft)		107						217				
Queue Length 95th (ft)		133						261				
Internal Link Dist (ft)		110			142			127			51	
Turn Bay Length (ft)												
Base Capacity (vph)		1633						2099				
Starvation Cap Reductn		0						0				
Spillback Cap Reductn		0						0				
Storage Cap Reductn		0						0				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio		0.38						0.36				

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 96 (80%), Referenced to phase 2:SBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.38	
Intersection Signal Delay: 31.0	Intersection LOS: C
Intersection Capacity Utilization 38.9%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4038: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & EB M-96 (Michigan Avenue)/11 Mile Rd (South)

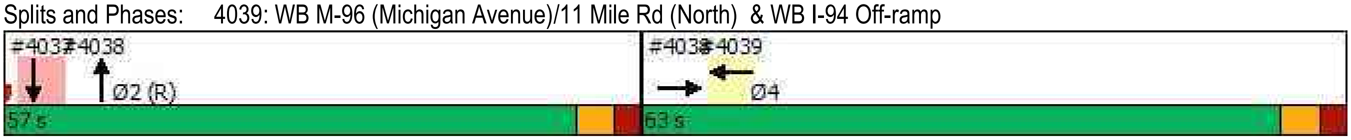


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø2
Lane Configurations							
Traffic Volume (vph)	0	0	0	151	686	0	
Future Volume (vph)	0	0	0	151	686	0	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.94	1.00	
Frt							
Flt Protected					0.950		
Satd. Flow (prot)	0	0	0	1810	4848	0	
Flt Permitted					0.950		
Satd. Flow (perm)	0	0	0	1810	4848	0	
Right Turn on Red		Yes			Yes	Yes	
Satd. Flow (RTOR)					2497		
Link Speed (mph)	30			30	30		
Link Distance (ft)	415			317	131		
Travel Time (s)	9.4			7.2	3.0		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Heavy Vehicles (%)	2%	2%	2%	5%	5%	2%	
Adj. Flow (vph)	0	0	0	164	746	0	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	0	164	746	0	
Turn Type				NA	Perm		
Protected Phases				4!			2
Permitted Phases					Free!		
Minimum Split (s)				16.0			16.0
Total Split (s)				63.0			57.0
Total Split (%)				52.5%			48%
Yellow Time (s)				3.5			3.5
All-Red Time (s)				2.5			2.5
Lost Time Adjust (s)				0.0			
Total Lost Time (s)				6.0			
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)				57.0	120.0		
Actuated g/C Ratio				0.48	1.00		
v/c Ratio				0.19	0.15		
Control Delay				18.9	0.2		
Queue Delay				0.0	0.0		
Total Delay				18.9	0.2		
LOS				B	A		
Approach Delay				18.9	0.2		
Approach LOS				B	A		
Queue Length 50th (ft)				71	3		
Queue Length 95th (ft)				116	0		
Internal Link Dist (ft)	335			237	51		
Turn Bay Length (ft)							
Base Capacity (vph)				859	4848		
Starvation Cap Reductn				0	0		
Spillback Cap Reductn				0	0		
Storage Cap Reductn				0	0		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø2
Reduced v/c Ratio				0.19	0.15		

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 96 (80%), Referenced to phase 2:SBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.38	
Intersection Signal Delay: 3.6	Intersection LOS: A
Intersection Capacity Utilization 53.0%	ICU Level of Service A
Analysis Period (min) 15	
! Phase conflict between lane groups.	

Splits and Phases: 4039: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & WB I-94 Off-ramp



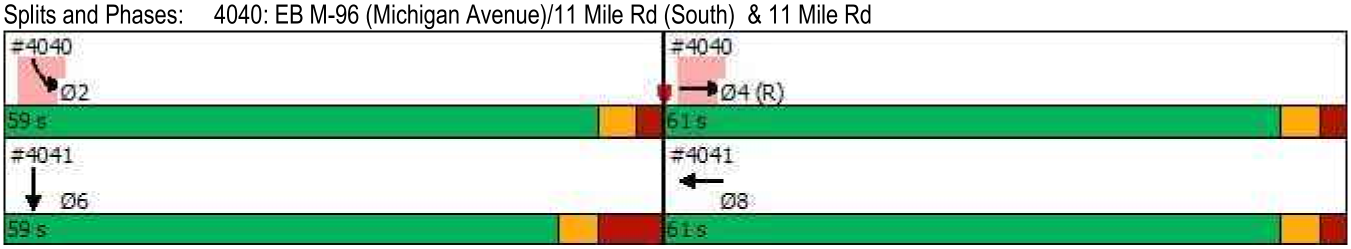
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø6	Ø8
Lane Configurations								
Traffic Volume (vph)	0	505	0	0	207	0		
Future Volume (vph)	0	505	0	0	207	0		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.97	1.00		
Frt								
Flt Protected					0.950			
Satd. Flow (prot)	0	3539	0	0	3335	0		
Flt Permitted					0.950			
Satd. Flow (perm)	0	3539	0	0	3335	0		
Right Turn on Red				Yes	Yes	Yes		
Satd. Flow (RTOR)					443			
Link Speed (mph)		55	55		45			
Link Distance (ft)		212	597		92			
Travel Time (s)		2.6	7.4		1.4			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Heavy Vehicles (%)	2%	2%	2%	2%	5%	2%		
Adj. Flow (vph)	0	549	0	0	225	0		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	0	549	0	0	225	0		
Turn Type		NA			Prot			
Protected Phases		4			2		6	8
Permitted Phases								
Minimum Split (s)		16.0			19.5		19.5	16.0
Total Split (s)		61.0			59.0		59.0	61.0
Total Split (%)		50.8%			49.2%		49%	51%
Yellow Time (s)		3.5			3.5		3.5	3.5
All-Red Time (s)		2.5			2.5		6.0	2.5
Lost Time Adjust (s)		0.0			0.0			
Total Lost Time (s)		6.0			6.0			
Lead/Lag								
Lead-Lag Optimize?								
Act Effct Green (s)		55.0			53.0			
Actuated g/C Ratio		0.46			0.44			
v/c Ratio		0.34			0.13			
Control Delay		21.6			0.2			
Queue Delay		0.0			0.0			
Total Delay		21.6			0.2			
LOS		C			A			
Approach Delay		21.6			0.2			
Approach LOS		C			A			
Queue Length 50th (ft)		140			0			
Queue Length 95th (ft)		183			0			
Internal Link Dist (ft)		132	517		12			
Turn Bay Length (ft)								
Base Capacity (vph)		1622			1720			
Starvation Cap Reductn		0			0			
Spillback Cap Reductn		0			0			
Storage Cap Reductn		0			0			

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø6	Ø8
Reduced v/c Ratio		0.34			0.13			

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 32 (27%), Referenced to phase 4:EBT, Start of Green
Natural Cycle: 40
Control Type: Pretimed
Maximum v/c Ratio: 0.37
Intersection Signal Delay: 15.4 Intersection LOS: B
Intersection Capacity Utilization 36.7% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 4040: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & 11 Mile Rd



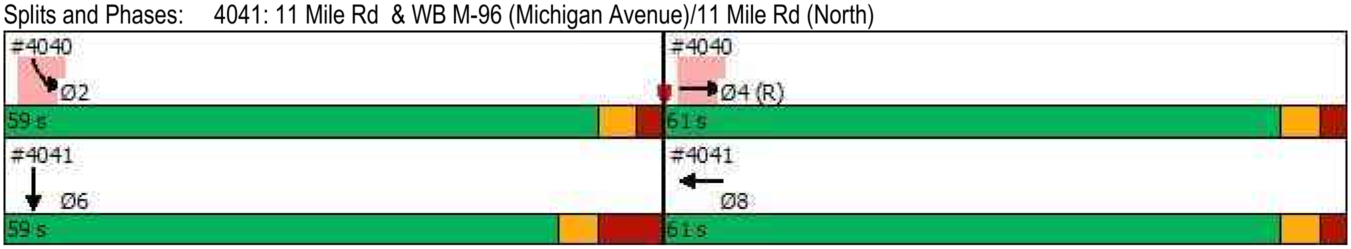
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	558	343	0	0	0	0	207	56
Future Volume (vph)	0	0	0	0	558	343	0	0	0	0	207	56
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		250	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Frt						0.850					0.968	
Flt Protected												
Satd. Flow (prot)	0	0	0	0	3539	1538	0	0	0	0	3348	0
Flt Permitted												
Satd. Flow (perm)	0	0	0	0	3539	1538	0	0	0	0	3348	0
Right Turn on Red			Yes	Yes		Yes			Yes			Yes
Satd. Flow (RTOR)						373					35	
Link Speed (mph)		55			55			45			55	
Link Distance (ft)		210			598			92			259	
Travel Time (s)		2.6			7.4			1.4			3.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	5%	2%	2%	2%	2%	5%	2%
Adj. Flow (vph)	0	0	0	0	607	373	0	0	0	0	225	61
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	607	373	0	0	0	0	286	0
Turn Type					NA	custom					NA	
Protected Phases					8	Free					6	
Permitted Phases												
Minimum Split (s)					16.0						19.5	
Total Split (s)					61.0						59.0	
Total Split (%)					50.8%						49.2%	
Yellow Time (s)					3.5						3.5	
All-Red Time (s)					2.5						6.0	
Lost Time Adjust (s)					0.0						0.0	
Total Lost Time (s)					6.0						9.5	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)					55.0	120.0					49.5	
Actuated g/C Ratio					0.46	1.00					0.41	
v/c Ratio					0.37	0.24					0.20	
Control Delay					30.8	2.1					30.6	
Queue Delay					0.0	0.0					0.0	
Total Delay					30.8	2.1					30.6	
LOS					C	A					C	
Approach Delay					19.9						30.6	
Approach LOS					B						C	
Queue Length 50th (ft)					221	0					85	
Queue Length 95th (ft)					273	290					126	
Internal Link Dist (ft)		130			518			12			179	
Turn Bay Length (ft)						250						
Base Capacity (vph)					1622	1538					1401	

Lane Group	Ø2	Ø4
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Ideal Flow (vphpl)		
Storage Length (ft)		
Storage Lanes		
Taper Length (ft)		
Lane Util. Factor		
Frt		
Flt Protected		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Peak Hour Factor		
Heavy Vehicles (%)		
Adj. Flow (vph)		
Shared Lane Traffic (%)		
Lane Group Flow (vph)		
Turn Type		
Protected Phases	2	4
Permitted Phases		
Minimum Split (s)	19.5	16.0
Total Split (s)	59.0	61.0
Total Split (%)	49%	51%
Yellow Time (s)	3.5	3.5
All-Red Time (s)	2.5	2.5
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag		
Lead-Lag Optimize?		
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)		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn					0	0					0	
Spillback Cap Reductn					0	0					0	
Storage Cap Reductn					0	0					0	
Reduced v/c Ratio					0.37	0.24					0.20	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 32 (27%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.37	
Intersection Signal Delay: 22.3	Intersection LOS: C
Intersection Capacity Utilization 36.7%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4041: 11 Mile Rd & WB M-96 (Michigan Avenue)/11 Mile Rd (North)



Lane Group	Ø2	Ø4
Starvation Cap Reductn		
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		

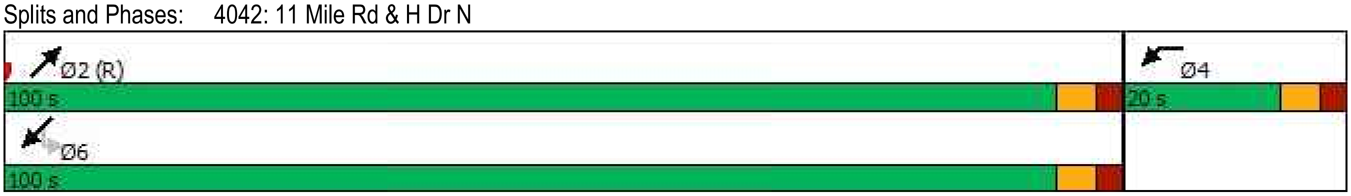
Intersection Summary

Lane Group	WBL	WBR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	0	0	343	0	0	263
Future Volume (vph)	0	0	343	0	0	263
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	1810	0	1863	0	0	1863
Flt Permitted						
Satd. Flow (perm)	1810	0	1863	0	0	1863
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)						
Link Speed (mph)	25		55			55
Link Distance (ft)	1262		1787			680
Travel Time (s)	34.4		22.2			8.4
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	2%	2%	5%	2%	2%
Adj. Flow (vph)	0	0	373	0	0	286
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	373	0	0	286
Turn Type	Prot		NA			NA
Protected Phases	4		2			6
Permitted Phases					6	
Minimum Split (s)	13.0		16.0		13.0	13.0
Total Split (s)	20.0		100.0		100.0	100.0
Total Split (%)	16.7%		83.3%		83.3%	83.3%
Yellow Time (s)	3.5		3.5		3.5	3.5
All-Red Time (s)	2.5		2.5		2.5	2.5
Lost Time Adjust (s)	0.0		0.0			0.0
Total Lost Time (s)	6.0		6.0			6.0
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)			94.0			94.0
Actuated g/C Ratio			0.78			0.78
v/c Ratio			0.26			0.20
Control Delay			1.1			3.7
Queue Delay			0.0			0.0
Total Delay			1.1			3.7
LOS			A			A
Approach Delay			1.1			3.7
Approach LOS			A			A
Queue Length 50th (ft)			13			47
Queue Length 95th (ft)			18			69
Internal Link Dist (ft)	1182		1707			600
Turn Bay Length (ft)						
Base Capacity (vph)			1459			1459
Starvation Cap Reductn			0			0
Spillback Cap Reductn			0			0
Storage Cap Reductn			0			0

Lane Group	WBL	WBR	NET	NER	SWL	SWT
Reduced v/c Ratio			0.26			0.20

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NET, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.26	
Intersection Signal Delay: 2.2	Intersection LOS: A
Intersection Capacity Utilization 23.1%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4042: 11 Mile Rd & H Dr N

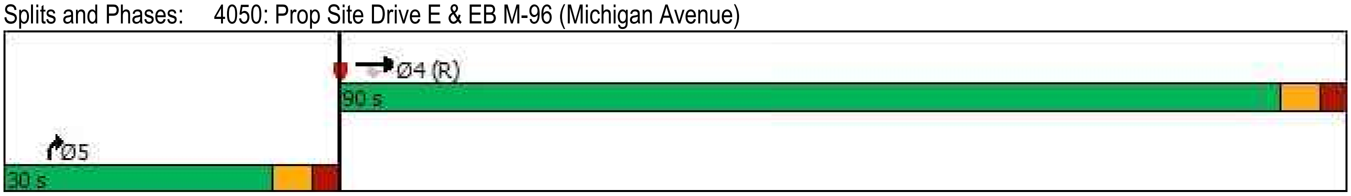


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↱↱				↱↱
Traffic Volume (vph)	839	215	0	0	0	215
Future Volume (vph)	839	215	0	0	0	215
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		500	600		0	0
Storage Lanes		2	0		0	2
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	0.88	1.00	1.00	1.00	0.88
Frt		0.850				0.850
Flt Protected						
Satd. Flow (prot)	3539	2787	0	0	0	2787
Flt Permitted						
Satd. Flow (perm)	3539	2787	0	0	0	2787
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		234				349
Link Speed (mph)	55			55	25	
Link Distance (ft)	669			659	1093	
Travel Time (s)	8.3			8.2	29.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	912	234	0	0	0	234
Shared Lane Traffic (%)						
Lane Group Flow (vph)	912	234	0	0	0	234
Turn Type	NA	Perm				Prot
Protected Phases	4					5
Permitted Phases		4				
Detector Phase	4	4				5
Switch Phase						
Minimum Initial (s)	10.0	10.0				10.0
Minimum Split (s)	16.0	16.0				16.0
Total Split (s)	90.0	90.0				30.0
Total Split (%)	75.0%	75.0%				25.0%
Yellow Time (s)	3.5	3.5				3.5
All-Red Time (s)	2.5	2.5				2.5
Lost Time Adjust (s)	0.0	0.0				0.0
Total Lost Time (s)	6.0	6.0				6.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max	C-Max				None
Act Effct Green (s)	98.0	98.0				10.0
Actuated g/C Ratio	0.82	0.82				0.08
v/c Ratio	0.32	0.10				0.42
Control Delay	3.3	0.3				2.4
Queue Delay	0.0	0.0				0.0
Total Delay	3.3	0.3				2.4
LOS	A	A				A
Approach Delay	2.7				2.4	
Approach LOS	A				A	
Queue Length 50th (ft)	0	0				0
Queue Length 95th (ft)	0	8				0

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Internal Link Dist (ft)	589			579	1013	
Turn Bay Length (ft)		500				
Base Capacity (vph)	2890	2318				836
Starvation Cap Reductn	0	0				0
Spillback Cap Reductn	0	0				0
Storage Cap Reductn	0	0				0
Reduced v/c Ratio	0.32	0.10				0.28

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 52 (43%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 40	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.42	
Intersection Signal Delay: 2.6	Intersection LOS: A
Intersection Capacity Utilization 41.5%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4050: Prop Site Drive E & EB M-96 (Michigan Avenue)

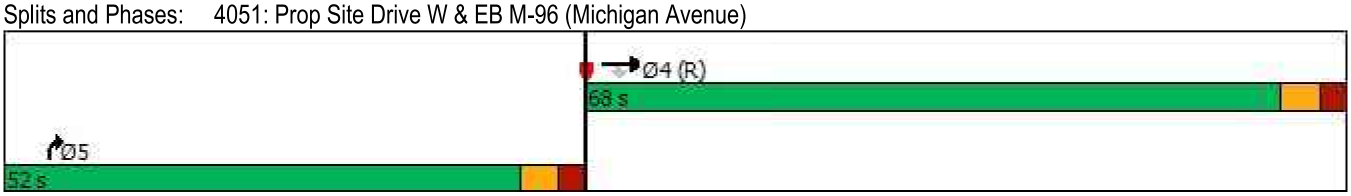


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	502	389	0	0	0	389
Future Volume (vph)	502	389	0	0	0	389
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		500	600		0	0
Storage Lanes		2	0		0	2
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	0.88	1.00	1.00	1.00	0.88
Frt		0.850				0.850
Flt Protected						
Satd. Flow (prot)	3539	2787	0	0	0	2787
Flt Permitted						
Satd. Flow (perm)	3539	2787	0	0	0	2787
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		423				486
Link Speed (mph)	55			55	25	
Link Distance (ft)	608			627	1293	
Travel Time (s)	7.5			7.8	35.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	546	423	0	0	0	423
Shared Lane Traffic (%)						
Lane Group Flow (vph)	546	423	0	0	0	423
Turn Type	NA	Perm				Prot
Protected Phases	4					5
Permitted Phases		4				
Detector Phase	4	4				5
Switch Phase						
Minimum Initial (s)	10.0	10.0				10.0
Minimum Split (s)	16.0	16.0				16.0
Total Split (s)	68.0	68.0				52.0
Total Split (%)	56.7%	56.7%				43.3%
Yellow Time (s)	3.5	3.5				3.5
All-Red Time (s)	2.5	2.5				2.5
Lost Time Adjust (s)	0.0	0.0				0.0
Total Lost Time (s)	6.0	6.0				6.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max	C-Max				None
Act Effct Green (s)	98.0	98.0				10.0
Actuated g/C Ratio	0.82	0.82				0.08
v/c Ratio	0.19	0.18				0.62
Control Delay	0.1	0.2				6.3
Queue Delay	0.0	0.0				0.0
Total Delay	0.1	0.2				6.3
LOS	A	A				A
Approach Delay	0.2				6.3	
Approach LOS	A				A	
Queue Length 50th (ft)	0	0				0
Queue Length 95th (ft)	0	0				25

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Internal Link Dist (ft)	528			547	1213	
Turn Bay Length (ft)		500				
Base Capacity (vph)	2890	2353				1368
Starvation Cap Reductn	0	0				0
Spillback Cap Reductn	0	0				0
Storage Cap Reductn	0	0				0
Reduced v/c Ratio	0.19	0.18				0.31

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 32 (27%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 40	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.62	
Intersection Signal Delay: 2.0	Intersection LOS: A
Intersection Capacity Utilization 37.5%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4051: Prop Site Drive W & EB M-96 (Michigan Avenue)

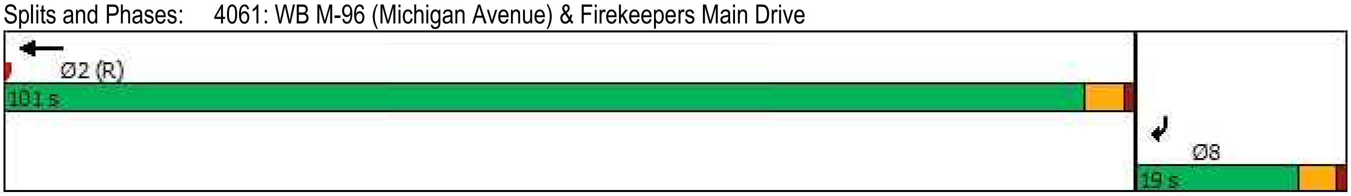


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	812	168	0	134
Future Volume (vph)	0	0	812	168	0	134
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			0	0	0
Storage Lanes	0			0	0	2
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	0.88
Frt			0.975			0.850
Flt Protected						
Satd. Flow (prot)	0	0	3462	0	0	2787
Flt Permitted						
Satd. Flow (perm)	0	0	3462	0	0	2787
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			71			460
Link Speed (mph)		55	55		25	
Link Distance (ft)		574	509		701	
Travel Time (s)		7.1	6.3		19.1	
Peak Hour Factor	0.92	0.92	0.92	0.95	0.67	0.92
Heavy Vehicles (%)	2%	2%	2%	0%	0%	2%
Adj. Flow (vph)	0	0	883	177	0	146
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1060	0	0	146
Turn Type			NA			Prot
Protected Phases			2			8
Permitted Phases						
Detector Phase			2			8
Switch Phase						
Minimum Initial (s)			10.0			10.0
Minimum Split (s)			22.5			14.5
Total Split (s)			101.0			19.0
Total Split (%)			84.2%			15.8%
Yellow Time (s)			3.5			3.5
All-Red Time (s)			1.0			1.0
Lost Time Adjust (s)			0.0			0.0
Total Lost Time (s)			4.5			4.5
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode			C-Max			None
Act Effct Green (s)			101.0			10.0
Actuated g/C Ratio			0.84			0.08
v/c Ratio			0.36			0.22
Control Delay			2.4			0.8
Queue Delay			0.0			0.0
Total Delay			2.4			0.8
LOS			A			A
Approach Delay			2.4		0.8	
Approach LOS			A		A	
Queue Length 50th (ft)			65			0

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Queue Length 95th (ft)			82			0
Internal Link Dist (ft)		494	429		621	
Turn Bay Length (ft)						
Base Capacity (vph)			2925			741
Starvation Cap Reductn			0			0
Spillback Cap Reductn			0			0
Storage Cap Reductn			0			0
Reduced v/c Ratio			0.36			0.20

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:WBT, Start of Green	
Natural Cycle: 40	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.36	
Intersection Signal Delay: 2.2	Intersection LOS: A
Intersection Capacity Utilization 43.6%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4061: WB M-96 (Michigan Avenue) & Firekeepers Main Drive

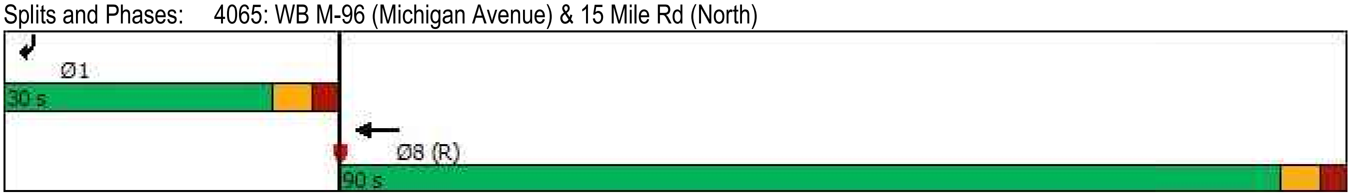


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	1840	352	0	317
Future Volume (vph)	0	0	1840	352	0	317
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			250	0	200
Storage Lanes	0			0	0	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.91	1.00	1.00	0.88
Frt				0.850		0.850
Flt Protected						
Satd. Flow (prot)	0	0	5085	1583	0	2787
Flt Permitted						
Satd. Flow (perm)	0	0	5085	1583	0	2787
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				172		40
Link Speed (mph)		45	45		45	
Link Distance (ft)		534	660		516	
Travel Time (s)		8.1	10.0		7.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	2000	383	0	345
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	2000	383	0	345
Turn Type			NA	custom		Prot
Protected Phases			8	Free		1
Permitted Phases						
Minimum Split (s)			16.0			13.0
Total Split (s)			90.0			30.0
Total Split (%)			75.0%			25.0%
Yellow Time (s)			3.5			3.5
All-Red Time (s)			2.5			2.5
Lost Time Adjust (s)			0.0			0.0
Total Lost Time (s)			6.0			6.0
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)			84.0	120.0		24.0
Actuated g/C Ratio			0.70	1.00		0.20
v/c Ratio			0.56	0.24		0.59
Control Delay			2.4	5.0		42.8
Queue Delay			0.0	0.0		0.0
Total Delay			2.4	5.0		42.8
LOS			A	A		D
Approach Delay			2.9		42.8	
Approach LOS			A		D	
Queue Length 50th (ft)			42	106		122
Queue Length 95th (ft)			57	126		177
Internal Link Dist (ft)		454	580		436	
Turn Bay Length (ft)				250		200
Base Capacity (vph)			3559	1583		589
Starvation Cap Reductn			80	0		0

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Spillback Cap Reductn			0	0		0
Storage Cap Reductn			0	0		0
Reduced v/c Ratio			0.57	0.24		0.59

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 8:WBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.59	
Intersection Signal Delay: 7.9	Intersection LOS: A
Intersection Capacity Utilization 56.6%	ICU Level of Service B
Analysis Period (min) 15	

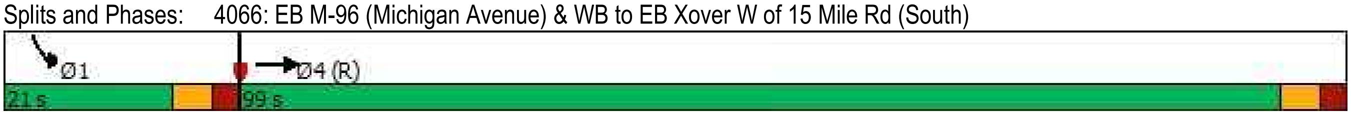
Splits and Phases: 4065: WB M-96 (Michigan Avenue) & 15 Mile Rd (North)



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	1853	0	0	119	0
Future Volume (vph)	0	1853	0	0	119	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.91	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	5085	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	5085	0	0	1770	0
Right Turn on Red				Yes	Yes	Yes
Satd. Flow (RTOR)					33	
Link Speed (mph)		45	45		25	
Link Distance (ft)		262	1016		123	
Travel Time (s)		4.0	15.4		3.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.90	0.92
Adj. Flow (vph)	0	2014	0	0	132	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	2014	0	0	132	0
Turn Type		NA			Prot	
Protected Phases		4			1	
Permitted Phases						
Minimum Split (s)		16.0			16.0	
Total Split (s)		99.0			21.0	
Total Split (%)		82.5%			17.5%	
Yellow Time (s)		3.5			3.5	
All-Red Time (s)		2.5			2.5	
Lost Time Adjust (s)		0.0			0.0	
Total Lost Time (s)		6.0			6.0	
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)		93.0			15.0	
Actuated g/C Ratio		0.78			0.12	
v/c Ratio		0.51			0.53	
Control Delay		2.7			45.5	
Queue Delay		0.0			0.0	
Total Delay		2.7			45.5	
LOS		A			D	
Approach Delay		2.7			45.5	
Approach LOS		A			D	
Queue Length 50th (ft)		78			79	
Queue Length 95th (ft)		86			145	
Internal Link Dist (ft)		182	936		43	
Turn Bay Length (ft)						
Base Capacity (vph)		3940			250	
Starvation Cap Reductn		0			0	
Spillback Cap Reductn		0			0	
Storage Cap Reductn		0			0	
Reduced v/c Ratio		0.51			0.53	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 116 (97%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.53	
Intersection Signal Delay: 5.3	Intersection LOS: A
Intersection Capacity Utilization 80.0%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 4066: EB M-96 (Michigan Avenue) & WB to EB Xover W of 15 Mile Rd (South)

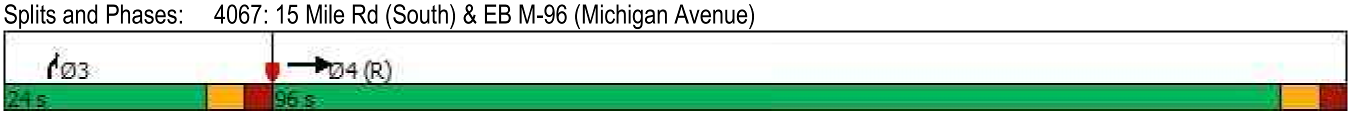


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1749	223	0	0	0	224
Future Volume (vph)	1749	223	0	0	0	224
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		50	0		0	250
Storage Lanes		0	0		0	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	1.00	1.00	1.00	0.88
Frt	0.983					0.850
Flt Protected						
Satd. Flow (prot)	4999	0	0	0	0	2814
Flt Permitted						
Satd. Flow (perm)	4999	0	0	0	0	2814
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	53					63
Link Speed (mph)	45			45	45	
Link Distance (ft)	1016			704	1375	
Travel Time (s)	15.4			10.7	20.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.88	0.88
Heavy Vehicles (%)	2%	2%	2%	2%	1%	1%
Adj. Flow (vph)	1901	242	0	0	0	255
Shared Lane Traffic (%)						
Lane Group Flow (vph)	2143	0	0	0	0	255
Turn Type	NA					Prot
Protected Phases	4					3
Permitted Phases						
Minimum Split (s)	17.0					16.0
Total Split (s)	96.0					24.0
Total Split (%)	80.0%					20.0%
Yellow Time (s)	3.5					3.5
All-Red Time (s)	2.5					2.5
Lost Time Adjust (s)	0.0					0.0
Total Lost Time (s)	6.0					6.0
Lead/Lag	Lag					Lead
Lead-Lag Optimize?	Yes					Yes
Act Effct Green (s)	90.0					18.0
Actuated g/C Ratio	0.75					0.15
v/c Ratio	0.57					0.54
Control Delay	2.3					39.8
Queue Delay	0.0					0.0
Total Delay	2.3					39.8
LOS	A					D
Approach Delay	2.3				39.8	
Approach LOS	A				D	
Queue Length 50th (ft)	58					78
Queue Length 95th (ft)	66					122
Internal Link Dist (ft)	936			624	1295	
Turn Bay Length (ft)						250
Base Capacity (vph)	3762					475

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Starvation Cap Reductn	0					0
Spillback Cap Reductn	0					0
Storage Cap Reductn	0					0
Reduced v/c Ratio	0.57					0.54

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 4 (3%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 45	
Control Type: Pretimed	
Maximum v/c Ratio: 0.57	
Intersection Signal Delay: 6.3	Intersection LOS: A
Intersection Capacity Utilization 57.1%	ICU Level of Service B
Analysis Period (min) 15	

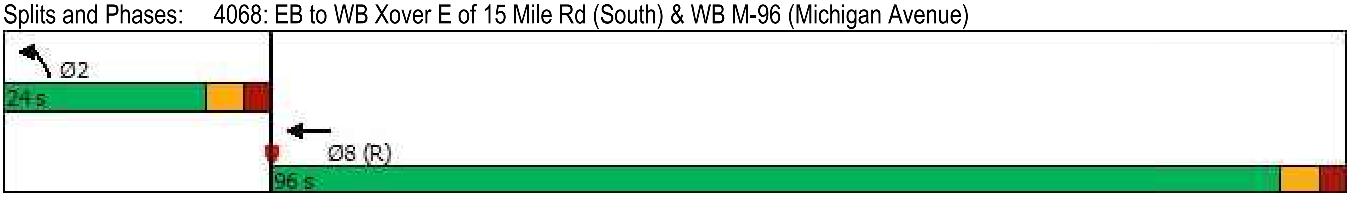
Splits and Phases: 4067: 15 Mile Rd (South) & EB M-96 (Michigan Avenue)



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	1860	113	0
Future Volume (vph)	0	0	0	1860	113	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	5085	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	5085	1770	0
Right Turn on Red		Yes			Yes	Yes
Satd. Flow (RTOR)					28	
Link Speed (mph)	45			45	25	
Link Distance (ft)	687			275	111	
Travel Time (s)	10.4			4.2	3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	2022	123	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	2022	123	0
Turn Type				NA	Prot	
Protected Phases				8	2	
Permitted Phases						
Minimum Split (s)				16.0	13.0	
Total Split (s)				96.0	24.0	
Total Split (%)				80.0%	20.0%	
Yellow Time (s)				3.5	3.5	
All-Red Time (s)				2.5	2.5	
Lost Time Adjust (s)				0.0	0.0	
Total Lost Time (s)				6.0	6.0	
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)				90.0	18.0	
Actuated g/C Ratio				0.75	0.15	
v/c Ratio				0.53	0.43	
Control Delay				7.5	36.9	
Queue Delay				0.2	0.0	
Total Delay				7.6	36.9	
LOS				A	D	
Approach Delay				7.6	36.9	
Approach LOS				A	D	
Queue Length 50th (ft)				348	73	
Queue Length 95th (ft)				369	138	
Internal Link Dist (ft)	607			195	31	
Turn Bay Length (ft)						
Base Capacity (vph)				3813	289	
Starvation Cap Reductn				682	0	
Spillback Cap Reductn				0	0	
Storage Cap Reductn				0	0	
Reduced v/c Ratio				0.65	0.43	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 112 (93%), Referenced to phase 8:WBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.53	
Intersection Signal Delay: 9.3	Intersection LOS: A
Intersection Capacity Utilization 83.9%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 4068: EB to WB Xover E of 15 Mile Rd (South) & WB M-96 (Michigan Avenue)

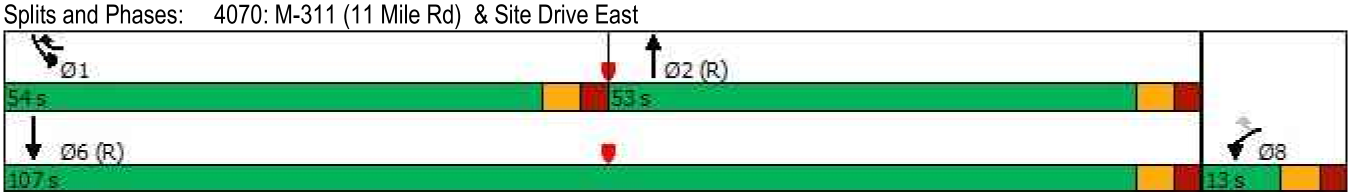


Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	102	0	0	129
Future Volume (vph)	0	0	102	0	0	129
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	500		0	400	
Storage Lanes	1	1		0	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.88	0.95	0.95	1.00	0.95
Frt						
Flt Protected						
Satd. Flow (prot)	1863	3278	3539	0	1863	3539
Flt Permitted						
Satd. Flow (perm)	1863	3278	3539	0	1863	3539
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)						
Link Speed (mph)	25		55			55
Link Distance (ft)	750		940			974
Travel Time (s)	20.5		11.7			12.1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	111	0	0	140
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	111	0	0	140
Turn Type	Prot	pm+ov	NA		Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8				
Detector Phase	8	1	2		1	6
Switch Phase						
Minimum Initial (s)	7.0	7.0	10.0		7.0	10.0
Minimum Split (s)	13.0	13.0	16.0		13.0	16.0
Total Split (s)	13.0	54.0	53.0		54.0	107.0
Total Split (%)	10.8%	45.0%	44.2%		45.0%	89.2%
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5
All-Red Time (s)	2.5	2.5	2.5		2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0		6.0	6.0
Lead/Lag		Lead	Lag		Lead	
Lead-Lag Optimize?						
Recall Mode	None	None	C-Max		None	C-Max
Act Effct Green (s)			120.0			120.0
Actuated g/C Ratio			1.00			1.00
v/c Ratio			0.03			0.04
Control Delay			0.0			0.0
Queue Delay			0.0			0.0
Total Delay			0.0			0.0
LOS			A			A
Approach Delay						
Approach LOS						
Queue Length 50th (ft)			0			0
Queue Length 95th (ft)			0			0

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Internal Link Dist (ft)	670		860			894
Turn Bay Length (ft)						
Base Capacity (vph)			3539			3539
Starvation Cap Reductn			0			0
Spillback Cap Reductn			0			0
Storage Cap Reductn			0			0
Reduced v/c Ratio			0.03			0.04

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 8 (7%), Referenced to phase 2:NBT and 6:SBT, Start of Green	
Natural Cycle: 45	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.04	
Intersection Signal Delay: 0.0	Intersection LOS: A
Intersection Capacity Utilization 13.3%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4070: M-311 (11 Mile Rd) & Site Drive East



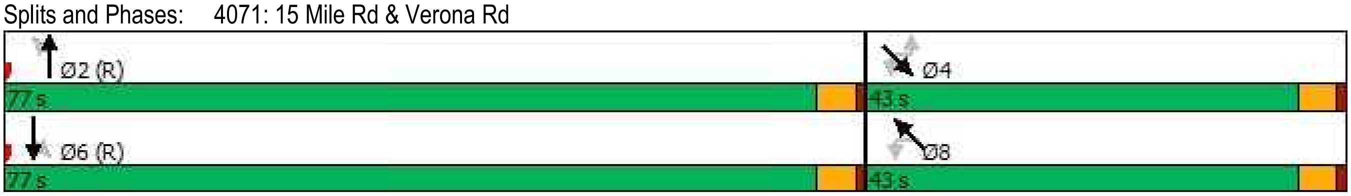
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	310	13	13	5	9	4	0	87	290	6	118	14
Future Volume (vph)	310	13	13	5	9	4	0	87	290	6	118	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		70	0		0
Storage Lanes	0		0	0		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
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
Frt		0.995			0.968				0.850		0.986	
Flt Protected		0.956			0.987						0.998	
Satd. Flow (prot)	0	1789	0	0	1715	0	0	1845	1392	0	1851	0
Flt Permitted		0.720			0.914						0.991	
Satd. Flow (perm)	0	1348	0	0	1588	0	0	1845	1392	0	1838	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		3			7				326		5	
Link Speed (mph)		45			55			55			55	
Link Distance (ft)		682			426			745			951	
Travel Time (s)		10.3			5.3			9.2			11.8	
Peak Hour Factor	0.80	0.80	0.80	0.60	0.60	0.60	0.89	0.89	0.89	0.86	0.86	0.86
Heavy Vehicles (%)	1%	1%	1%	0%	0%	25%	0%	3%	16%	1%	1%	1%
Adj. Flow (vph)	388	16	16	8	15	7	0	98	326	7	137	16
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	420	0	0	30	0	0	98	326	0	160	0
Turn Type	Perm	NA		Perm	NA			NA	Perm	Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4		4	8		
Minimum Split (s)	22.5	22.5		22.5	22.5		22.5	22.5	22.5	22.5	22.5	
Total Split (s)	77.0	77.0		77.0	77.0		43.0	43.0	43.0	43.0	43.0	
Total Split (%)	64.2%	64.2%		64.2%	64.2%		35.8%	35.8%	35.8%	35.8%	35.8%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0	0.0		0.0	
Total Lost Time (s)		4.5			4.5			4.5	4.5		4.5	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		72.5			72.5			38.5	38.5		38.5	
Actuated g/C Ratio		0.60			0.60			0.32	0.32		0.32	
v/c Ratio		0.52			0.03			0.17	0.49		0.27	
Control Delay		16.3			8.0			30.2	5.9		30.8	
Queue Delay		0.0			0.0			0.0	0.0		0.0	
Total Delay		16.3			8.0			30.2	5.9		30.8	
LOS		B			A			C	A		C	
Approach Delay		16.3			8.0			11.5			30.8	
Approach LOS		B			A			B			C	
Queue Length 50th (ft)		174			7			54	0		89	
Queue Length 95th (ft)		216			12			96	63		139	
Internal Link Dist (ft)		602			346			665			871	
Turn Bay Length (ft)									70			
Base Capacity (vph)		815			962			591	668		593	

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
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		0.52			0.03			0.17	0.49		0.27	

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 55
Control Type: Pretimed
Maximum v/c Ratio: 0.52
Intersection Signal Delay: 16.4 Intersection LOS: B
Intersection Capacity Utilization 45.9% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 4071: 15 Mile Rd & Verona Rd

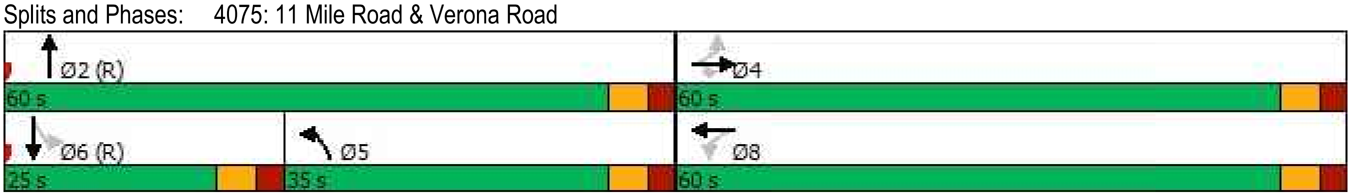


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	375	95	17	394	19	93	68	13	10	82	8
Future Volume (vph)	11	375	95	17	394	19	93	68	13	10	82	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	190		70	190		0	140		0	215		0
Storage Lanes	1		1	1		0	2		0	1		0
Taper Length (ft)	115			140			200			165		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.993			0.976			0.987	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	1900	1468	1805	1882	0	3072	1854	0	1687	1753	0
Flt Permitted	0.331			0.331			0.950			0.697		
Satd. Flow (perm)	629	1900	1468	629	1882	0	3072	1854	0	1238	1753	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			82		3			10			3	
Link Speed (mph)		55			55			45			55	
Link Distance (ft)		519			1585			1015			821	
Travel Time (s)		6.4			19.6			15.4			10.2	
Peak Hour Factor	0.79	0.79	0.79	0.87	0.87	0.87	0.87	0.87	0.87	0.66	0.66	0.66
Heavy Vehicles (%)	0%	0%	10%	0%	0%	5%	14%	0%	0%	7%	7%	7%
Adj. Flow (vph)	14	475	120	20	453	22	107	78	15	15	124	12
Shared Lane Traffic (%)												
Lane Group Flow (vph)	14	475	120	20	475	0	107	93	0	15	136	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Perm	NA	
Protected Phases		4			8		5	2			6	
Permitted Phases	4		4	8						6		
Minimum Split (s)	25.0	25.0	25.0	25.0	25.0		16.0	25.0		25.0	25.0	
Total Split (s)	60.0	60.0	60.0	60.0	60.0		35.0	60.0		25.0	25.0	
Total Split (%)	50.0%	50.0%	50.0%	50.0%	50.0%		29.2%	50.0%		20.8%	20.8%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	2.5	2.5	2.5	2.5	2.5		2.5	2.5		2.5	2.5	
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)	6.0	6.0	6.0	6.0	6.0		6.0	6.0		6.0	6.0	
Lead/Lag							Lag			Lead	Lead	
Lead-Lag Optimize?							Yes			Yes	Yes	
Act Effct Green (s)	54.0	54.0	54.0	54.0	54.0		29.0	54.0		19.0	19.0	
Actuated g/C Ratio	0.45	0.45	0.45	0.45	0.45		0.24	0.45		0.16	0.16	
v/c Ratio	0.05	0.56	0.17	0.07	0.56		0.14	0.11		0.08	0.49	
Control Delay	19.4	27.3	7.9	19.8	27.3		36.4	17.5		44.3	51.6	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	19.4	27.3	7.9	19.8	27.3		36.4	17.5		44.3	51.6	
LOS	B	C	A	B	C		D	B		D	D	
Approach Delay		23.3			27.0			27.6			50.9	
Approach LOS		C			C			C			D	
Queue Length 50th (ft)	6	264	16	9	263		33	36		10	95	
Queue Length 95th (ft)	17	306	40	24	351		56	67		22	113	
Internal Link Dist (ft)		439			1505			935			741	
Turn Bay Length (ft)	190		70	190			140			215		
Base Capacity (vph)	283	855	705	283	848		742	839		196	280	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0	0	0	0		0	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	0.05	0.56	0.17	0.07	0.56		0.14	0.11		0.08	0.49	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green	
Natural Cycle: 70	
Control Type: Pretimed	
Maximum v/c Ratio: 0.56	
Intersection Signal Delay: 28.0	Intersection LOS: C
Intersection Capacity Utilization 41.2%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4075: 11 Mile Road & Verona Road



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	749	143	0	231
Future Volume (vph)	0	0	749	143	0	231
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200			300	245	245
Storage Lanes	0			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.976			0.865
Flt Protected						
Satd. Flow (prot)	0	0	3328	0	0	1644
Flt Permitted						
Satd. Flow (perm)	0	0	3328	0	0	1644
Link Speed (mph)		55	55		25	
Link Distance (ft)		509	395		760	
Travel Time (s)		6.3	4.9		20.7	
Peak Hour Factor	0.88	0.88	0.91	0.91	0.79	0.79
Heavy Vehicles (%)	1%	1%	7%	0%	0%	0%
Adj. Flow (vph)	0	0	823	157	0	292
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	980	0	0	292
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 46.2%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	735	43	0	157
Future Volume (vph)	0	0	735	43	0	157
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	175			50	0	0
Storage Lanes	0			0	0	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.992			0.865
Flt Protected						
Satd. Flow (prot)	0	0	3359	0	0	1565
Flt Permitted						
Satd. Flow (perm)	0	0	3359	0	0	1565
Link Speed (mph)		55	55		25	
Link Distance (ft)		395	586		185	
Travel Time (s)		4.9	7.3		5.0	
Peak Hour Factor	0.90	0.90	0.95	0.95	0.70	0.70
Heavy Vehicles (%)	1%	1%	7%	0%	5%	5%
Adj. Flow (vph)	0	0	774	45	0	224
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	819	0	0	224
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 38.1%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	771	12	0	7
Future Volume (vph)	0	0	771	12	0	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150			600	0	0
Storage Lanes	0			0	0	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.998			0.865
Flt Protected						
Satd. Flow (prot)	0	0	3370	0	0	1644
Flt Permitted						
Satd. Flow (perm)	0	0	3370	0	0	1644
Link Speed (mph)		55	55		25	
Link Distance (ft)		586	607		1086	
Travel Time (s)		7.3	7.5		29.6	
Peak Hour Factor	0.83	0.83	0.92	0.92	0.60	0.60
Heavy Vehicles (%)	10%	1%	7%	0%	33%	0%
Adj. Flow (vph)	0	0	838	13	0	12
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	851	0	0	12
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 31.7%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	505	8	0	7
Future Volume (vph)	0	0	505	8	0	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.998			0.865
Flt Protected						
Satd. Flow (prot)	0	0	3532	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	0	3532	0	0	1611
Link Speed (mph)		55	55		55	
Link Distance (ft)		538	1254		1399	
Travel Time (s)		6.7	15.5		17.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	549	9	0	8
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	558	0	0	8
Sign Control		Free	Free		Stop	

Intersection Summary
Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 24.2% ICU Level of Service A
Analysis Period (min) 15

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	0	5	0	352	0	0	317	0
Future Volume (vph)	0	0	0	0	0	5	0	352	0	0	317	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
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
Frt					0.865							
Flt Protected												
Satd. Flow (prot)	0	1863	0	0	1611	0	0	1863	0	0	1863	0
Flt Permitted												
Satd. Flow (perm)	0	1863	0	0	1611	0	0	1863	0	0	1863	0
Link Speed (mph)		45			45			25			45	
Link Distance (ft)		957			1038			516			593	
Travel Time (s)		14.5			15.7			14.1			9.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	0	5	0	383	0	0	345	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	5	0	0	383	0	0	345	0
Sign Control		Stop			Stop			Free			Free	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 28.5% ICU Level of Service A
Analysis Period (min) 15

Lane Group	EBT	EBR	WBL	WBT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	0	0	119	841	0	0
Future Volume (vph)	0	0	119	841	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.91	0.91	1.00	1.00
Frt						
Flt Protected				0.994		
Satd. Flow (prot)	0	0	0	5055	0	0
Flt Permitted				0.994		
Satd. Flow (perm)	0	0	0	5055	0	0
Link Speed (mph)	45			45	25	
Link Distance (ft)	183			382	263	
Travel Time (s)	2.8			5.8	7.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	129	914	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1043	0	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 29.3%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	1023	685	0	0	0	0
Future Volume (vph)	1023	685	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950	0.980				
Satd. Flow (prot)	1610	3322	0	0	0	0
Flt Permitted	0.950	0.980				
Satd. Flow (perm)	1610	3322	0	0	0	0
Link Speed (mph)		45	45		25	
Link Distance (ft)		619	209		329	
Travel Time (s)		9.4	3.2		9.0	
Peak Hour Factor	0.86	0.86	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1190	797	0	0	0	0
Shared Lane Traffic (%)	45%					
Lane Group Flow (vph)	654	1333	0	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 50.8%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	0	707	168	0	0
Future Volume (vph)	0	0	707	168	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	1.00
Frt				0.850		
Flt Protected						
Satd. Flow (prot)	0	0	3539	1583	0	0
Flt Permitted						
Satd. Flow (perm)	0	0	3539	1583	0	0
Link Speed (mph)		45	45		30	
Link Distance (ft)		213	315		137	
Travel Time (s)		3.2	4.8		3.1	
Peak Hour Factor	0.92	0.92	0.91	0.91	0.92	0.92
Adj. Flow (vph)	0	0	777	185	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	777	185	0	0
Sign Control		Stop	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 46.8%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	807	0	0	159	0
Future Volume (vph)	0	807	0	0	159	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3505	0	0	1787	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3505	0	0	1787	0
Link Speed (mph)		45	45		25	
Link Distance (ft)		309	168		108	
Travel Time (s)		4.7	2.5		2.9	
Peak Hour Factor	0.86	0.86	0.92	0.92	0.87	0.87
Heavy Vehicles (%)	3%	3%	2%	2%	1%	1%
Adj. Flow (vph)	0	938	0	0	183	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	938	0	0	183	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 45.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑↑	↰	
Traffic Volume (vph)	0	0	0	820	182	0
Future Volume (vph)	0	0	0	820	182	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	5036	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	5036	1770	0
Link Speed (mph)	45			45	25	
Link Distance (ft)	134			152	111	
Travel Time (s)	2.0			2.3	3.0	
Peak Hour Factor	0.92	0.92	0.89	0.89	0.94	0.94
Heavy Vehicles (%)	2%	2%	3%	3%	2%	2%
Adj. Flow (vph)	0	0	0	921	194	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	921	194	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 35.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	785	0	0	80	0
Future Volume (vph)	0	785	0	0	80	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3574	0	0	1787	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3574	0	0	1787	0
Link Speed (mph)		45	45		25	
Link Distance (ft)		222	290		102	
Travel Time (s)		3.4	4.4		2.8	
Peak Hour Factor	0.95	0.95	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	1%	1%	2%	2%	1%	1%
Adj. Flow (vph)	0	826	0	0	87	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	826	0	0	87	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 58.7%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	839	65	0
Future Volume (vph)	0	0	0	839	65	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	30			45	25	
Link Distance (ft)	114			1105	101	
Travel Time (s)	2.6			16.7	2.8	
Peak Hour Factor	0.92	0.92	0.88	0.88	0.94	0.94
Adj. Flow (vph)	0	0	0	953	69	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	953	69	0
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 54.6% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	53	227	31	4	162	12	14	37	3	13	81	35
Future Volume (vph)	53	227	31	4	162	12	14	37	3	13	81	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	80		0	80		0	110		0	115		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	180			180			140			175		
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
Frt		0.982			0.989			0.988			0.955	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	1866	0	1770	1842	0	1703	1771	0	1770	1779	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1805	1866	0	1770	1842	0	1703	1771	0	1770	1779	0
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		1365			1319			666			571	
Travel Time (s)		20.7			20.0			10.1			8.7	
Peak Hour Factor	0.94	0.94	0.94	0.88	0.88	0.88	0.78	0.78	0.78	0.91	0.91	0.91
Heavy Vehicles (%)	0%	0%	0%	2%	2%	2%	6%	6%	6%	2%	2%	2%
Adj. Flow (vph)	56	241	33	5	184	14	18	47	4	14	89	38
Shared Lane Traffic (%)												
Lane Group Flow (vph)	56	274	0	5	198	0	18	51	0	14	127	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 34.6%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL2	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	SWL	SWR
Lane Configurations											
Traffic Volume (vph)	55	0	112	0	270	79	81	385	0	0	0
Future Volume (vph)	55	0	112	0	270	79	81	385	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	240	0		0	105		0	0	0
Storage Lanes		1	1	0		0	1		0	0	0
Taper Length (ft)		25		25			70			25	
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
Frt			0.850		0.969						
Flt Protected	0.950						0.950				
Satd. Flow (prot)	1687	0	1615	0	1805	0	1752	1845	0	0	0
Flt Permitted	0.950						0.950				
Satd. Flow (perm)	1687	0	1615	0	1805	0	1752	1845	0	0	0
Link Speed (mph)		25			45			45		25	
Link Distance (ft)		894			1167			685		897	
Travel Time (s)		24.4			17.7			10.4		24.5	
Peak Hour Factor	0.93	0.93	0.93	0.91	0.91	0.91	0.95	0.95	0.95	0.92	0.92
Heavy Vehicles (%)	7%	0%	0%	2%	2%	2%	3%	3%	3%	2%	2%
Adj. Flow (vph)	59	0	120	0	297	87	85	405	0	0	0
Shared Lane Traffic (%)											
Lane Group Flow (vph)	59	0	120	0	384	0	85	405	0	0	0
Sign Control		Stop			Free			Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 33.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	WBL2	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NER
Lane Configurations											
Traffic Volume (vph)	93	0	84	61	264	0	0	373	50	0	0
Future Volume (vph)	93	0	84	61	264	0	0	373	50	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	185	165		0	0		0	0	0
Storage Lanes		1	1	1		0	0		0	0	0
Taper Length (ft)		25		110			25			25	
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
Frt			0.850					0.984			
Flt Protected	0.950			0.950							
Satd. Flow (prot)	1805	0	1455	1752	1845	0	0	1815	0	0	0
Flt Permitted	0.950			0.950							
Satd. Flow (perm)	1805	0	1455	1752	1845	0	0	1815	0	0	0
Link Speed (mph)		25			45			45		25	
Link Distance (ft)		613			685			608		913	
Travel Time (s)		16.7			10.4			9.2		24.9	
Peak Hour Factor	0.81	0.81	0.81	0.87	0.87	0.87	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	11%	3%	3%	3%	3%	3%	3%	2%	2%
Adj. Flow (vph)	115	0	104	70	303	0	0	405	54	0	0
Shared Lane Traffic (%)											
Lane Group Flow (vph)	115	0	104	70	303	0	0	459	0	0	0
Sign Control		Stop			Free			Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 33.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	184	140	0	396	272	0
Future Volume (vph)	184	140	0	396	272	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.850				
Flt Protected	0.950					
Satd. Flow (prot)	1543	1553	0	3505	3374	0
Flt Permitted	0.950					
Satd. Flow (perm)	1543	1553	0	3505	3374	0
Link Speed (mph)	25			55	55	
Link Distance (ft)	119			105	620	
Travel Time (s)	3.2			1.3	7.7	
Peak Hour Factor	0.93	0.93	0.82	0.82	0.92	0.92
Heavy Vehicles (%)	17%	4%	0%	3%	7%	0%
Adj. Flow (vph)	198	151	0	483	296	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	198	151	0	483	296	0
Sign Control	Stop			Free	Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 27.8% ICU Level of Service A

Analysis Period (min) 15

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	396	61	35	377
Future Volume (vph)	0	0	396	61	35	377
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		340	0	
Storage Lanes	0	0		1	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	1.00	0.95	0.95
Frt				0.850		
Flt Protected						0.996
Satd. Flow (prot)	0	0	3505	1568	0	3383
Flt Permitted						0.996
Satd. Flow (perm)	0	0	3505	1568	0	3383
Link Speed (mph)	25		55			55
Link Distance (ft)	664		1109			105
Travel Time (s)	18.1		13.7			1.3
Peak Hour Factor	0.92	0.92	0.82	0.82	0.92	0.92
Heavy Vehicles (%)	2%	2%	3%	3%	20%	5%
Adj. Flow (vph)	0	0	483	74	38	410
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	483	74	0	448
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 29.1%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	WBL2	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NER
Lane Configurations											
Traffic Volume (vph)	52	0	60	0	352	0	0	220	86	0	0
Future Volume (vph)	52	0	60	0	352	0	0	220	86	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	205	0		0	0		135	0	0
Storage Lanes		1	1	0		0	0		1	0	0
Taper Length (ft)		25		25			25			25	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00
Frt			0.850						0.850		
Flt Protected	0.950										
Satd. Flow (prot)	1736	0	1380	0	3438	0	0	3343	1272	0	0
Flt Permitted	0.950										
Satd. Flow (perm)	1736	0	1380	0	3438	0	0	3343	1272	0	0
Link Speed (mph)		25			55			55		25	
Link Distance (ft)		296			230			1367		908	
Travel Time (s)		8.1			2.9			16.9		24.8	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.95	0.95	0.95	0.92	0.92
Heavy Vehicles (%)	4%	0%	17%	0%	5%	0%	0%	8%	27%	2%	2%
Adj. Flow (vph)	59	0	68	0	400	0	0	232	91	0	0
Shared Lane Traffic (%)											
Lane Group Flow (vph)	59	0	68	0	400	0	0	232	91	0	0
Sign Control		Stop			Free			Free		Stop	

Intersection Summary		
Area Type:	Other	
Control Type: Unsignalized		
Intersection Capacity Utilization 20.4%		ICU Level of Service A
Analysis Period (min) 15		

Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	33	80	0	270	154	0
Future Volume (vph)	33	80	0	270	154	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				
Flt Protected	0.950					
Satd. Flow (prot)	1752	1077	0	1624	1696	0
Flt Permitted	0.950					
Satd. Flow (perm)	1752	1077	0	1624	1696	0
Link Speed (mph)	25			45	45	
Link Distance (ft)	189			1063	114	
Travel Time (s)	5.2			16.1	1.7	
Peak Hour Factor	0.74	0.74	0.93	0.93	0.89	0.89
Heavy Vehicles (%)	3%	50%	17%	17%	12%	12%
Adj. Flow (vph)	45	108	0	290	173	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	45	108	0	290	173	0
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 24.2%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	0	0	182	121	3	154
Future Volume (vph)	0	0	182	121	3	154
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.850		
Flt Protected						0.999
Satd. Flow (prot)	0	0	1624	1380	0	1689
Flt Permitted						0.999
Satd. Flow (perm)	0	0	1624	1380	0	1689
Link Speed (mph)	25		45			45
Link Distance (ft)	105		114			727
Travel Time (s)	2.9		1.7			11.0
Peak Hour Factor	0.92	0.92	0.93	0.93	0.89	0.89
Heavy Vehicles (%)	2%	2%	17%	17%	33%	12%
Adj. Flow (vph)	0	0	196	130	3	173
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	196	130	0	176
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 22.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBR	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	6	97	58	124	60	11
Future Volume (vph)	6	97	58	124	60	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	195	0	0			90
Storage Lanes	1	1	0			1
Taper Length (ft)	135		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				0.850
Flt Protected	0.950			0.984		
Satd. Flow (prot)	1570	1404	0	1615	1776	1509
Flt Permitted	0.950			0.984		
Satd. Flow (perm)	1570	1404	0	1615	1776	1509
Link Speed (mph)	25			45	45	
Link Distance (ft)	597			727	1165	
Travel Time (s)	16.3			11.0	17.7	
Peak Hour Factor	0.83	0.83	0.91	0.91	0.78	0.78
Heavy Vehicles (%)	15%	15%	43%	3%	7%	7%
Adj. Flow (vph)	7	117	64	136	77	14
Shared Lane Traffic (%)						
Lane Group Flow (vph)	7	117	0	200	77	14
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 26.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	18	942	18	0
Future Volume (vph)	0	0	18	942	18	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.91	0.91	1.00	1.00
Frt						
Flt Protected				0.999	0.950	
Satd. Flow (prot)	0	0	0	5080	1770	0
Flt Permitted				0.999	0.950	
Satd. Flow (perm)	0	0	0	5080	1770	0
Link Speed (mph)	45			45	25	
Link Distance (ft)	382			217	236	
Travel Time (s)	5.8			3.3	6.4	
Peak Hour Factor	0.90	0.90	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	20	1024	20	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1044	20	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 28.6%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑					↱
Traffic Volume (vph)	966	0	0	0	0	30
Future Volume (vph)	966	0	0	0	0	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	1.00	1.00	1.00	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	3539	0	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	3539	0	0	0	0	1611
Link Speed (mph)	45			45	25	
Link Distance (ft)	168			432	770	
Travel Time (s)	2.5			6.5	21.0	
Peak Hour Factor	0.87	0.87	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1110	0	0	0	0	33
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1110	0	0	0	0	33
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 44.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations			↑↑↑			↱
Traffic Volume (vph)	0	0	1002	0	0	32
Future Volume (vph)	0	0	1002	0	0	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.91	1.00	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	0	0	5036	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	0	5036	0	0	1611
Link Speed (mph)		45	45		25	
Link Distance (ft)		494	134		230	
Travel Time (s)		7.5	2.0		6.3	
Peak Hour Factor	0.92	0.92	0.89	0.89	0.92	0.92
Heavy Vehicles (%)	2%	2%	3%	3%	2%	2%
Adj. Flow (vph)	0	0	1126	0	0	35
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1126	0	0	35
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 39.3%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations			↑↱			
Traffic Volume (vph)	0	0	854	50	0	0
Future Volume (vph)	0	0	854	50	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.992			
Flt Protected						
Satd. Flow (prot)	0	0	3511	0	0	0
Flt Permitted						
Satd. Flow (perm)	0	0	3511	0	0	0
Link Speed (mph)		30	45		25	
Link Distance (ft)		176	114		201	
Travel Time (s)		4.0	1.7		5.5	
Peak Hour Factor	0.92	0.92	0.88	0.88	0.92	0.92
Adj. Flow (vph)	0	0	970	57	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1027	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 33.7%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	NBT	NBR	SBL	SBT	SWL	SWR
Lane Configurations	↑↱			↑↑		
Traffic Volume (vph)	352	228	0	272	0	0
Future Volume (vph)	352	228	0	272	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	1.00	0.95	1.00	1.00
Frt	0.941					
Flt Protected						
Satd. Flow (prot)	3164	0	0	3343	0	0
Flt Permitted						
Satd. Flow (perm)	3164	0	0	3343	0	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	620			230	1088	
Travel Time (s)	7.7			2.9	29.7	
Peak Hour Factor	0.88	0.88	0.95	0.95	0.92	0.92
Heavy Vehicles (%)	5%	11%	8%	8%	2%	2%
Adj. Flow (vph)	400	259	0	286	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	659	0	0	286	0	0
Sign Control	Free			Free	Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 20.4% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	32	822	0	0	0	0	0	48	29
Future Volume (vph)	0	0	0	32	822	0	0	0	0	0	48	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	165		0	0		0	0		0
Storage Lanes	0		0	1		0	0		0	0		0
Taper Length (ft)	25			85			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt											0.949	
Flt Protected				0.950								
Satd. Flow (prot)	0	0	0	1770	3539	0	0	0	0	0	1785	0
Flt Permitted				0.950								
Satd. Flow (perm)	0	0	0	1770	3539	0	0	0	0	0	1785	0
Link Speed (mph)		30			45			30			30	
Link Distance (ft)		212			176			102			496	
Travel Time (s)		4.8			2.7			2.3			11.3	
Peak Hour Factor	0.92	0.92	0.92	0.86	0.86	0.86	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	1%	1%	1%
Adj. Flow (vph)	0	0	0	37	956	0	0	0	0	0	52	32
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	37	956	0	0	0	0	0	84	0
Sign Control		Free			Free			Yield			Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 33.7% ICU Level of Service A

Analysis Period (min) 15

Lane Group	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	1004	0	0	0	1037
Future Volume (vph)	0	1004	0	0	0	1037
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	0.88
Frt						0.850
Flt Protected						
Satd. Flow (prot)	0	3539	0	0	0	2787
Flt Permitted						
Satd. Flow (perm)	0	3539	0	0	0	2787
Link Speed (mph)		55	55		55	
Link Distance (ft)		434	1242		1194	
Travel Time (s)		5.4	15.4		14.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1091	0	0	0	1127
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1091	0	0	0	1127
Sign Control		Free	Free		Free	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 39.6% ICU Level of Service A
Analysis Period (min) 15

Lane Group	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	0	119	0	0	264
Future Volume (vph)	0	0	119	0	0	264
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	0	0	1863	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	0	1863	0	0	1611
Link Speed (mph)		25	25		30	
Link Distance (ft)		1199	263		174	
Travel Time (s)		32.7	7.2		4.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.90	0.90
Adj. Flow (vph)	0	0	129	0	0	293
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	129	0	0	293
Sign Control		Free	Yield		Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 29.3% ICU Level of Service A

Analysis Period (min) 15

Lane Group	WBL	WBR	NBL	NBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	168	1023	0	0	0
Future Volume (vph)	0	168	1023	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.97	1.00	1.00	1.00
Frt		0.865				
Flt Protected			0.950			
Satd. Flow (prot)	0	1627	3303	0	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	1627	3303	0	0	0
Link Speed (mph)	45		45		45	
Link Distance (ft)	255		329		551	
Travel Time (s)	3.9		5.0		8.3	
Peak Hour Factor	0.91	0.91	0.93	0.93	0.92	0.92
Heavy Vehicles (%)	1%	1%	6%	6%	2%	2%
Adj. Flow (vph)	0	185	1100	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	185	1100	0	0	0
Sign Control	Yield		Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 49.5%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	159	875	0	0
Future Volume (vph)	0	0	159	875	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	450		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			85		25	
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	5085	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	5085	0	0
Link Speed (mph)	45			45	30	
Link Distance (ft)	315			494	108	
Travel Time (s)	4.8			7.5	2.5	
Peak Hour Factor	0.92	0.92	0.87	0.87	0.92	0.92
Adj. Flow (vph)	0	0	183	1006	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	183	1006	0	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 38.1%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	182	814	0	0	0	0
Future Volume (vph)	182	814	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	275			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	110				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		45	45		30	
Link Distance (ft)		432	161		111	
Travel Time (s)		6.5	2.4		2.5	
Peak Hour Factor	0.94	0.94	0.92	0.92	0.92	0.92
Adj. Flow (vph)	194	866	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	194	866	0	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 45.0%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	102	0	0	0	129
Future Volume (vph)	0	102	0	0	0	129
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	0.76
Frt						0.850
Flt Protected						
Satd. Flow (prot)	0	3539	0	0	0	3610
Flt Permitted						
Satd. Flow (perm)	0	3539	0	0	0	3610
Link Speed (mph)		55	55		45	
Link Distance (ft)		1093	655		773	
Travel Time (s)		13.5	8.1		11.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	111	0	0	0	140
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	111	0	0	0	140
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 6.7%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	65	800	0	0	0	0
Future Volume (vph)	65	800	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	180			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	75				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		45	45		30	
Link Distance (ft)		290	1089		101	
Travel Time (s)		4.4	16.5		2.3	
Peak Hour Factor	0.94	0.94	0.92	0.92	0.92	0.92
Adj. Flow (vph)	69	851	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	69	851	0	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 52.0%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NWL	NWR
Lane Configurations	↑↑↱					
Traffic Volume (vph)	1596	264	0	0	0	0
Future Volume (vph)	1596	264	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	1.00	1.00	1.00	1.00
Frt	0.979					
Flt Protected						
Satd. Flow (prot)	4979	0	0	0	0	0
Flt Permitted						
Satd. Flow (perm)	4979	0	0	0	0	0
Link Speed (mph)	45			45	30	
Link Distance (ft)	311			156	174	
Travel Time (s)	4.7			2.4	4.0	
Peak Hour Factor	0.90	0.90	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1773	293	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	2066	0	0	0	0	0
Sign Control	Free			Stop	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 57.1%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	NBT	NBR	SBL	SBT	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	0	0	112	1019	0	0
Future Volume (vph)	0	0	112	1019	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	500		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			100		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	3539	0	0
Link Speed (mph)	30			25	25	
Link Distance (ft)	266			1471	301	
Travel Time (s)	6.0			40.1	8.2	
Peak Hour Factor	0.92	0.92	0.75	0.75	0.92	0.92
Adj. Flow (vph)	0	0	149	1359	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	149	1359	0	0
Sign Control	Stop			Free	Free	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 31.5% ICU Level of Service A
Analysis Period (min) 15

Lane Group	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	253	122	0	0	0	0
Future Volume (vph)	253	122	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected		0.967				
Satd. Flow (prot)	0	1801	0	0	0	0
Flt Permitted		0.967				
Satd. Flow (perm)	0	1801	0	0	0	0
Link Speed (mph)		25	30		25	
Link Distance (ft)		1207	315		252	
Travel Time (s)		32.9	7.2		6.9	
Peak Hour Factor	0.75	0.75	0.92	0.92	0.92	0.92
Adj. Flow (vph)	337	163	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	500	0	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 23.8%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	103	0	69	0	0
Future Volume (vph)	0	103	0	69	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.865		
Flt Protected						
Satd. Flow (prot)	0	1652	0	1191	0	0
Flt Permitted						
Satd. Flow (perm)	0	1652	0	1191	0	0
Link Speed (mph)		25	25		25	
Link Distance (ft)		995	597		1154	
Travel Time (s)		27.1	16.3		31.5	
Peak Hour Factor	0.83	0.83	0.89	0.89	0.92	0.92
Heavy Vehicles (%)	15%	15%	38%	38%	2%	2%
Adj. Flow (vph)	0	124	0	78	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	124	0	78	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 8.8%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	53	2104	0	0
Future Volume (vph)	0	0	53	2104	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	250		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	5085	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	5085	0	0
Link Speed (mph)	45			45	25	
Link Distance (ft)	894			534	137	
Travel Time (s)	13.5			8.1	3.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	58	2287	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	58	2287	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 44.0%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	2138	0	0	53	0
Future Volume (vph)	0	2138	0	0	53	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.86	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	6408	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	6408	0	0	1770	0
Link Speed (mph)		45	45		25	
Link Distance (ft)		744	1191		137	
Travel Time (s)		11.3	18.0		3.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	2324	0	0	58	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	2324	0	0	58	0
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 78.3% ICU Level of Service D

Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	338	1853	0	0	0	0
Future Volume (vph)	338	1853	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	400			0	0	0
Storage Lanes	2			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	0.97	0.86	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	3433	6408	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	3433	6408	0	0	0	0
Link Speed (mph)		45	45		25	
Link Distance (ft)		1191	262		113	
Travel Time (s)		18.0	4.0		3.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	367	2014	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	367	2014	0	0	0	0
Sign Control		Free	Stop		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 71.0%	ICU Level of Service C
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	119	1854	0	0
Future Volume (vph)	0	0	119	1854	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	250		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	5085	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	5085	0	0
Link Speed (mph)	45			45	25	
Link Distance (ft)	254			1016	123	
Travel Time (s)	3.8			15.4	3.4	
Peak Hour Factor	0.92	0.92	0.90	0.87	0.92	0.92
Adj. Flow (vph)	0	0	132	2131	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	132	2131	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 126.9%	ICU Level of Service H
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	113	1860	0	0	0	0
Future Volume (vph)	113	1860	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.91	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	5085	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	5085	0	0	0	0
Link Speed (mph)		45	45		30	
Link Distance (ft)		704	311		111	
Travel Time (s)		10.7	4.7		2.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	123	2022	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	123	2022	0	0	0	0
Sign Control		Free	Stop		Stop	

Intersection Summary		
Area Type:	Other	
Control Type: Unsignalized		
Intersection Capacity Utilization 80.2%		ICU Level of Service D
Analysis Period (min) 15		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑	↰	
Traffic Volume (vph)	0	0	0	946	27	0
Future Volume (vph)	0	0	0	946	27	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	30	
Link Distance (ft)	583			574	107	
Travel Time (s)	7.2			7.1	2.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	1028	29	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1028	29	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 55.5%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	27	820	0	0	0	0
Future Volume (vph)	27	820	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		30	
Link Distance (ft)		1122	576		107	
Travel Time (s)		13.9	7.1		2.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	29	891	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	29	891	0	0	0	0
Sign Control		Free	Stop		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 55.5%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	937	36	0	54
Future Volume (vph)	0	0	937	36	0	54
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.994			0.865
Flt Protected						
Satd. Flow (prot)	0	0	3518	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	0	3518	0	0	1611
Link Speed (mph)		55	55		30	
Link Distance (ft)		590	583		121	
Travel Time (s)		7.3	7.2		2.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	1018	39	0	59
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1057	0	0	59
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 37.1% ICU Level of Service A
Analysis Period (min) 15

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	168	823	0	0
Future Volume (vph)	0	0	168	823	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	250		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	3539	0	0
Link Speed (mph)	55			55	30	
Link Distance (ft)	405			590	104	
Travel Time (s)	5.0			7.3	2.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	183	895	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	183	895	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 34.3%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑			↰	
Traffic Volume (vph)	0	679	0	0	168	0
Future Volume (vph)	0	679	0	0	168	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	1770	0
Link Speed (mph)		55	55		30	
Link Distance (ft)		316	1122		104	
Travel Time (s)		3.9	13.9		2.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	738	0	0	183	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	738	0	0	183	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 48.2%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	67	820	0	0
Future Volume (vph)	0	0	67	820	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	250			0
Storage Lanes	0	0	2			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	0.97	0.91	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	3433	5085	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	3433	5085	0	0
Link Speed (mph)	45			55	30	
Link Distance (ft)	105			493	555	
Travel Time (s)	1.6			6.1	12.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	73	891	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	73	891	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary		
Area Type:	Other	
Control Type: Unsignalized		
Intersection Capacity Utilization 37.8%		ICU Level of Service A
Analysis Period (min) 15		

Lane Group	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	661	159	0	0	0	0
Future Volume (vph)	661	159	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.94	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	4990	1863	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	4990	1863	0	0	0	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		555	271		108	
Travel Time (s)		12.6	6.2		2.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	718	173	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	718	173	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 32.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	73	0	0	0	0	159
Future Volume (vph)	73	0	0	0	0	159
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	1863	0	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	1863	0	0	0	0	1611
Link Speed (mph)	25			30	25	
Link Distance (ft)	287			1072	271	
Travel Time (s)	7.8			24.4	7.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	79	0	0	0	0	173
Shared Lane Traffic (%)						
Lane Group Flow (vph)	79	0	0	0	0	173
Sign Control	Yield			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 20.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	NBT	NBR	SBL	SBT	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	0	0	73	593	0	0
Future Volume (vph)	0	0	73	593	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.91	0.91	1.00	1.00
Frt						
Flt Protected				0.995		
Satd. Flow (prot)	0	0	0	5044	0	0
Flt Permitted				0.995		
Satd. Flow (perm)	0	0	0	5044	0	0
Link Speed (mph)	45			45	45	
Link Distance (ft)	194			406	287	
Travel Time (s)	2.9			6.2	4.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	5%	2%	2%	2%
Adj. Flow (vph)	0	0	79	645	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	724	0	0
Sign Control	Free			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 20.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	104	110	0	0	0	0
Future Volume (vph)	104	110	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1719	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1719	3539	0	0	0	0
Link Speed (mph)		25	25		25	
Link Distance (ft)		879	346		271	
Travel Time (s)		24.0	9.4		7.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	2%	2%	2%	2%	2%
Adj. Flow (vph)	113	120	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	113	120	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 28.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	79	0	0	81
Future Volume (vph)	0	0	79	0	0	81
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	0	0	1863	0	0	1565
Flt Permitted						
Satd. Flow (perm)	0	0	1863	0	0	1565
Link Speed (mph)		30	45		45	
Link Distance (ft)		874	182		254	
Travel Time (s)		19.9	2.8		3.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	5%
Adj. Flow (vph)	0	0	86	0	0	88
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	86	0	0	88
Sign Control		Free	Free		Yield	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 30.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBR	SBL	SBR	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	0	0	0	0	79	686
Future Volume (vph)	0	0	0	0	79	686
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.91
Frt					0.896	0.850
Flt Protected					0.985	
Satd. Flow (prot)	0	0	0	0	1611	2799
Flt Permitted					0.985	
Satd. Flow (perm)	0	0	0	0	1611	2799
Link Speed (mph)	30		30		30	
Link Distance (ft)	182		207		337	
Travel Time (s)	4.1		4.7		7.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	5%
Adj. Flow (vph)	0	0	0	0	86	746
Shared Lane Traffic (%)						26%
Lane Group Flow (vph)	0	0	0	0	280	552
Sign Control	Stop		Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 30.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↱					
Traffic Volume (vph)	567	81	0	0	0	0
Future Volume (vph)	567	81	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00
Frt	0.981					
Flt Protected						
Satd. Flow (prot)	3373	0	0	0	0	0
Flt Permitted						
Satd. Flow (perm)	3373	0	0	0	0	0
Link Speed (mph)	30			45	25	
Link Distance (ft)	306			190	254	
Travel Time (s)	7.0			2.9	6.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	5%	2%	2%	2%	2%
Adj. Flow (vph)	616	88	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	704	0	0	0	0	0
Sign Control	Free			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 38.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	0	99	151	0	0
Future Volume (vph)	0	0	99	151	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			250	0	0
Storage Lanes	0			1	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	1.00
Frt				0.850		
Flt Protected						
Satd. Flow (prot)	0	0	3539	1538	0	0
Flt Permitted						
Satd. Flow (perm)	0	0	3539	1538	0	0
Link Speed (mph)		25	25		25	
Link Distance (ft)		241	1465		317	
Travel Time (s)		6.6	40.0		8.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	5%	2%	2%
Adj. Flow (vph)	0	0	108	164	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	108	164	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 13.3%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	837	64	0
Future Volume (vph)	0	0	0	837	64	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	4940	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	4940	1770	0
Link Speed (mph)	55			30	25	
Link Distance (ft)	598			415	105	
Travel Time (s)	7.4			9.4	2.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	5%	2%	2%
Adj. Flow (vph)	0	0	0	910	70	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	910	70	0
Sign Control	Free			Free	Stop	

Intersection Summary		
Area Type:	Other	
Control Type: Unsignalized		
Intersection Capacity Utilization 40.8%		ICU Level of Service A
Analysis Period (min) 15		

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	64	648	0	0	0	0
Future Volume (vph)	64	648	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3438	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3438	0	0	0	0
Link Speed (mph)		55	30		25	
Link Distance (ft)		597	306		105	
Travel Time (s)		7.4	7.0		2.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	5%	2%	2%	2%	2%
Adj. Flow (vph)	70	704	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	70	704	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 40.8% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	614	0	0
Future Volume (vph)	0	0	0	614	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	0	0	0	3539	1863	0
Flt Permitted						
Satd. Flow (perm)	0	0	0	3539	1863	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	586			210	99	
Travel Time (s)	7.3			2.6	2.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	667	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	667	0	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 27.0%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	505	0	0	0	0
Future Volume (vph)	0	505	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	1863	3539	0	0	0	0
Flt Permitted						
Satd. Flow (perm)	1863	3539	0	0	0	0
Link Speed (mph)		55	55		25	
Link Distance (ft)		589	212		99	
Travel Time (s)		7.3	2.6		2.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	549	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	549	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 27.0%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	614	0	0
Future Volume (vph)	0	0	0	614	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	0	0	0	3539	0	0
Flt Permitted						
Satd. Flow (perm)	0	0	0	3539	0	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	723			586	81	
Travel Time (s)	9.0			7.3	2.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	667	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	667	0	0
Sign Control	Free			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 27.0%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	505	0	0	0	0	0	0	0	0	0	0
Future Volume (vph)	0	505	0	0	0	0	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	3539	0	0	0	0	0	0	1863	0	1863	0
Flt Permitted												
Satd. Flow (perm)	0	3539	0	0	0	0	0	0	1863	0	1863	0
Link Speed (mph)		55			55			25			25	
Link Distance (ft)		719			589			84			81	
Travel Time (s)		8.9			7.3			2.3			2.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	549	0	0	0	0	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	549	0	0	0	0	0	0	0	0	0	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 24.0% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBT	EBR	WBL	WBT	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	0	505	0	614	0	0
Future Volume (vph)	0	505	0	614	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.88	1.00	0.95	1.00	1.00
Frt		0.850				
Flt Protected						
Satd. Flow (prot)	0	2787	0	3539	0	0
Flt Permitted						
Satd. Flow (perm)	0	2787	0	3539	0	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	997			723	719	
Travel Time (s)	12.4			9.0	19.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	549	0	667	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	549	0	667	0	0
Sign Control	Free			Free	Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 21.0% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	286	534	0	0	0	0
Future Volume (vph)	286	534	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		55	
Link Distance (ft)		2077	2379		116	
Travel Time (s)		25.7	29.5		1.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	311	580	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	311	580	0	0	0	0
Sign Control		Free	Stop		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 36.2%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NEL	NER
Lane Configurations				↑↑	↰	
Traffic Volume (vph)	0	0	0	497	286	0
Future Volume (vph)	0	0	0	497	286	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	607			2382	116	
Travel Time (s)	7.5			29.5	3.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	540	311	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	540	311	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 42.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	0	0	14	497	0	0
Future Volume (vph)	0	0	14	497	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	250		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	3539	0	0
Link Speed (mph)	55			55	55	
Link Distance (ft)	2382			560	108	
Travel Time (s)	29.5			6.9	1.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	15	540	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	15	540	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary		
Area Type:	Other	
Control Type: Unsignalized		
Intersection Capacity Utilization 23.9%		ICU Level of Service A
Analysis Period (min) 15		

Lane Group	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	0	534	0	0	14	0
Future Volume (vph)	0	534	0	0	14	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	1770	0
Link Speed (mph)		55	55		25	
Link Distance (ft)		2379	608		108	
Travel Time (s)		29.5	7.5		2.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	580	0	0	15	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	580	0	0	15	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 35.2%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	509	39	0	0	0	32
Future Volume (vph)	509	39	0	0	0	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		600	600		0	0
Storage Lanes		0	0		0	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00
Frt	0.989					0.865
Flt Protected						
Satd. Flow (prot)	3500	0	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	3500	0	0	0	0	1611
Link Speed (mph)	55			55	45	
Link Distance (ft)	608			628	1089	
Travel Time (s)	7.5			7.8	16.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	553	42	0	0	0	35
Shared Lane Traffic (%)						
Lane Group Flow (vph)	595	0	0	0	0	35
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 25.3%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑	↰	
Traffic Volume (vph)	0	0	0	502	9	0
Future Volume (vph)	0	0	0	502	9	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	645			3831	112	
Travel Time (s)	8.0			47.5	3.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	546	10	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	546	10	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 42.0%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	9	532	0	0	0	0
Future Volume (vph)	9	532	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		55	
Link Distance (ft)		628	3825		112	
Travel Time (s)		7.8	47.4		1.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	10	578	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	10	578	0	0	0	0
Sign Control		Free	Stop		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 35.2%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	10	502	0	0
Future Volume (vph)	0	0	10	502	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	250		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	3539	0	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	3831			538	97	
Travel Time (s)	47.5			6.7	2.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	11	546	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	11	546	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 24.7% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑			↰	
Traffic Volume (vph)	0	532	0	0	10	0
Future Volume (vph)	0	532	0	0	10	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	1770	0
Link Speed (mph)		55	55		25	
Link Distance (ft)		3825	591		97	
Travel Time (s)		47.4	7.3		2.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	578	0	0	11	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	578	0	0	11	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 35.2%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	530	12	0	0	0	16
Future Volume (vph)	530	12	0	0	0	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00
Frt	0.997					0.865
Flt Protected						
Satd. Flow (prot)	3529	0	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	3529	0	0	0	0	1611
Link Speed (mph)	55			55	45	
Link Distance (ft)	591			1206	1073	
Travel Time (s)	7.3			15.0	16.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	576	13	0	0	0	17
Shared Lane Traffic (%)						
Lane Group Flow (vph)	589	0	0	0	0	17
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 25.0%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑	↰	
Traffic Volume (vph)	0	0	0	504	9	0
Future Volume (vph)	0	0	0	504	9	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	1254			1793	105	
Travel Time (s)	15.5			22.2	2.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	548	10	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	548	10	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 43.1%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	9	537	0	0	0	0
Future Volume (vph)	9	537	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		55	
Link Distance (ft)		1206	1786		105	
Travel Time (s)		15.0	22.1		1.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	10	584	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	10	584	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 35.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	354	504	0	0
Future Volume (vph)	0	0	354	504	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	500		0	0
Storage Lanes		0	2		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	0.97	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	3433	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	3433	3539	0	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	1793			596	109	
Travel Time (s)	22.2			7.4	3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	385	548	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	385	548	0	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 76.7%	ICU Level of Service D
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	823	35	0
Future Volume (vph)	0	0	0	823	35	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	631			2681	109	
Travel Time (s)	7.8			33.2	3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	895	38	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	895	38	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 51.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	35	856	0	0	0	0
Future Volume (vph)	35	856	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		55	
Link Distance (ft)		627	2678		109	
Travel Time (s)		7.8	33.2		1.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	38	930	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	38	930	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 53.1% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	198	823	0	0
Future Volume (vph)	0	0	198	823	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	500		0	0
Storage Lanes		0	2		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	0.97	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	3433	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	3433	3539	0	0
Link Speed (mph)	55			55	55	
Link Distance (ft)	2681			671	109	
Travel Time (s)	33.2			8.3	1.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	215	895	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	215	895	0	0
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 85.8% ICU Level of Service E

Analysis Period (min) 15

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	1004	17	0
Future Volume (vph)	0	0	0	1004	17	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	654			797	95	
Travel Time (s)	8.1			9.9	2.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	1091	18	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1091	18	0
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 58.4% ICU Level of Service B

Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	17	1037	0	0	0	0
Future Volume (vph)	17	1037	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		55	
Link Distance (ft)		659	784		95	
Travel Time (s)		8.2	9.7		1.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	18	1127	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	18	1127	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 63.1%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	802	18	0	0	0	18
Future Volume (vph)	802	18	0	0	0	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00
Frt	0.997					0.865
Flt Protected						
Satd. Flow (prot)	3529	0	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	3529	0	0	0	0	1611
Link Speed (mph)	55			55	25	
Link Distance (ft)	576			2077	205	
Travel Time (s)	7.1			25.7	5.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	872	20	0	0	0	20
Shared Lane Traffic (%)						
Lane Group Flow (vph)	892	0	0	0	0	20
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 32.7%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	1179	0	0	959	0
Future Volume (vph)	0	1179	0	0	959	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	0.97	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	3433	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	3433	0
Link Speed (mph)		45	45		45	
Link Distance (ft)		1021	744		215	
Travel Time (s)		15.5	11.3		3.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1282	0	0	1042	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1282	0	0	1042	0
Sign Control		Free	Stop		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 66.6%	ICU Level of Service C
Analysis Period (min) 15	

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	0	0	641	129
Future Volume (vph)	0	0	0	0	641	129
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		0	250	
Storage Lanes	0	0		0	2	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.97	0.91
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	0	3433	5085
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	0	3433	5085
Link Speed (mph)	55		45			30
Link Distance (ft)	167		773			587
Travel Time (s)	2.1		11.7			13.3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	697	140
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	0	697	140
Sign Control	Stop		Stop			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 29.4%	ICU Level of Service A
Analysis Period (min) 15	

1005: WB M-96 (Michigan Avenue) & SB I-69 Off-Ramp (Push Button) Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	4.7	14.1	9.8

1007: EB M-96 (Michigan Avenue) (Push Button) & SB I-69 Off-Ramp/EB M-96 (Michigan Avenue) Perfor

Approach	EB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	25.8	1.9	3.5

1008: WB M-96 (Michigan Avenue)/NB I-69 Off-Ramp & WB M-96 (Michigan Avenue) (Push Button) Perf

Approach	WB	SW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	17.9	2.1	6.5

1009: WB M-96 (Michigan Avenue) (Push Button)/WB M-96 (Michigan Avenue) & EB M-96 (Michigan Ave

Approach	EB	SW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	19.4	14.2	16.7

1010: NB I-69 Off-Ramp (Push Button) & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	3.7	20.0	6.2

3003: M-227/West Drive & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.4	0.1	0.1
Total Del/Veh (s)	7.8	6.1	19.1	9.3

3093: M-227/West Drive & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	0.0	2.1	0.0	0.3
Total Del/Veh (s)	3.5	31.8	2.7	7.8

4001: M-96 (Michigan Avenue) & WB Main Entrance/WB M-96 (Michigan Avenue) Performance by appro

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	13.2	12.2	12.9

4003: EB to WB Xover E of 15 Mile Rd (North) & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	3.5	0.6
Total Del/Veh (s)	7.1	31.7	11.1

4004: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	3.2	50.1	12.8

4005: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	6.1	25.0	13.7

4006: M-311 (11 Mile Rd) & Site Driveway West Performance by approach

Approach	NB	SB	All
Denied Del/Veh (s)	0.1	0.0	0.1
Total Del/Veh (s)	0.2	0.6	0.4

4007: M-311 (11 Mile Rd) & F Drive N Performance by approach

Approach	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.1	0.2	0.1

4010: EB M-96 (Michigan Avenue)/EB M-96 (Michigan Avenue) (Push Button) & WB M-96 (Michigan Ave

Approach	WB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	21.5	10.2	14.3

4030: NB M-311 (11 Mile Rd)/WB M-96 (Michigan Avenue)/11 Mile Rd (North) & EB M-96 (Michigan Ave

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	22.7	10.2	21.0

4031: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & WB M-96 (Michigan Avenue) Performance by a

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	24.3	2.1	22.7

4033: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & NB to SB Xover N of M-96 (Michigan Avenue) P

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	24.8	2.7	4.6

4034: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & EB I-94 Off-ramp Performance by approach

Approach	SB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.0	16.8	4.4

4035: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & WB M-96 (Michigan Avenue)/11 Mile Rd (North)

Approach	SB	NW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	14.1	31.3	23.2

4036: EB I-94 Off-ramp & WB M-96 (Michigan Avenue)/11 Mile Rd (North) Performance by approach

Approach	NB	NW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	21.6	1.5	4.1

4037: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & WB I-94 Off-ramp Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.2	17.3	3.6

4038: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & EB M-96 (Michigan Avenue)/11 Mile Rd (South)

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	15.6	30.1	23.5

4039: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & WB I-94 Off-ramp Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	18.2	4.3	6.8

4040: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & 11 Mile Rd Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	17.4	2.4	13.2

4041: 11 Mile Rd & WB M-96 (Michigan Avenue)/11 Mile Rd (North) Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	15.8	22.6	17.3

4042: 11 Mile Rd & H Dr N Performance by approach

Approach	NE	SW	All
Denied Del/Veh (s)	0.0	0.2	0.1
Total Del/Veh (s)	2.4	3.6	2.9

4050: Prop Site Drive E & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	3.7	47.2	11.0

4051: Prop Site Drive W & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	4.6	41.6	15.8

4061: WB M-96 (Michigan Avenue) & Firekeepers Main Drive Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	3.4	50.2	8.7

4065: WB M-96 (Michigan Avenue) & 15 Mile Rd (North) Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	5.7	40.6	10.1

4066: EB M-96 (Michigan Avenue) & WB to EB Xover W of 15 Mile Rd (South) Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	3.0	42.1	5.5

4067: 15 Mile Rd (South) & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.5	0.0
Total Del/Veh (s)	6.3	45.3	10.1

4068: EB to WB Xover E of 15 Mile Rd (South) & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	4.6	35.8	6.4

4070: M-311 (11 Mile Rd) & Site Drive East Performance by approach

Approach	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.1	0.2	0.1

4071: 15 Mile Rd & Verona Rd Performance by approach

Approach	NB	SB	SE	NW	All
Denied Del/Veh (s)	0.4	0.1	3.0	0.2	1.4
Total Del/Veh (s)	13.4	10.2	10.8	29.3	14.8

4075: 11 Mile Road & Verona Road Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.5	2.3	0.6	0.6
Total Del/Veh (s)	17.5	24.1	25.1	47.6	23.4

9002: WB M-96 (Michigan Avenue) & Firekeepers Gas Station Driveway Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.2	0.0
Total Del/Veh (s)	1.8	8.2	3.1

9003: WB M-96 (Michigan Avenue) & Firekeepers E Drive Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.8	7.2	2.6

9004: WB M-96 (Michigan Avenue) & Ackerson Drive Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	1.2	6.0	1.3

9006: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	0.9	2.5	0.9

9008: 15 Mile Rd (North) & Old M-96 (Michigan Ave) Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.0	0.0	0.0
Total Del/Veh (s)	4.5	0.6	0.6	0.6

9013: SB I-69 On-Ramp & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	11.7	11.7

9016: EB M-96 (Michigan Avenue) & NB I-69 On-Ramp Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	11.1	11.1

9017: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	1.6	1.6

9018: EB M-96 (Michigan Avenue) & WB to EB Xover W of M-227/West Drive Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.2	7.0	2.2

9019: EB to WB Xover W of M-227/West Drive & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.5	11.2	3.2

9020: EB M-96 (Michigan Avenue) & WB to EB Xover E of M-227/West Drive Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.0	8.9	1.7

9021: EB to WB Xover E of M-227/West Drive & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.2	0.0	0.2
Total Del/Veh (s)	1.1	8.9	1.7

9023: M-311 (11 Mile Rd) & B Drive North Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.8	0.3	1.1	0.6	0.6
Total Del/Veh (s)	1.1	0.7	8.0	8.2	2.9

9025: M-294 (Beadle Lake Road) & EB I-94 Off-Ramp & EB I-94 On-Ramp Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	2.3	0.3	0.0	0.5
Total Del/Veh (s)	6.9	1.7	1.7	2.6

9026: WB I-94 On-Ramp & M-294 (Beadle Lake Road) & WB I-94 Off-Ramp Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	2.0	0.0	0.4	0.5
Total Del/Veh (s)	7.2	1.6	1.2	2.5

9027: Old US-27 & EB I-94 to Old US-27 Off Ramp Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0
Total Del/Veh (s)	7.5	0.2	1.1	2.9

9028: Old US-27 & NB Old US-27 to EB I-94 On Ramp Performance by approach

Approach	NB	SB	All
Denied Del/Veh (s)	0.6	0.0	0.3
Total Del/Veh (s)	0.8	0.5	0.7

9029: SB Old US-27 WB I-94 On Ramp & Old US-27 & WB I-94 to Old US-27 Off Ramp Performance by

Approach	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	1.2	0.5
Total Del/Veh (s)	4.8	0.2	0.8	1.1

9030: I-94BL/Partello Rd & EB I-94 to I-94BL/Partello Off Ramp Performance by approach

Approach	SE	NE	SW	All
Denied Del/Veh (s)	0.0	0.3	0.0	0.1
Total Del/Veh (s)	4.5	1.5	0.2	1.8

9031: I-94BL/Partello Rd & I-94/Partello Rd to EB I-94 On Ramp Performance by approach

Approach	NE	SW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.2	0.7	0.4

9032: I-94BL/Partello Rd & WB I-94 to I-94/Partello Rd Performance by approach

Approach	EB	NE	SW	All
Denied Del/Veh (s)	0.0	0.0	0.7	0.1
Total Del/Veh (s)	3.5	1.2	0.5	1.7

9034: Dummy Node & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	1.4	5.2	1.5

9035: Dummy Node & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	0.5	7.6	0.7

9036: WB M-96 (Michigan Avenue) & Dummy Node Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	0.6	4.3	0.7

9037: WB M-96 (Michigan Avenue) & Dummy Node Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.5	0.5

9040: Old US-27 & NB Old US-27 to WB I-94 On Ramp Performance by approach

Approach	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.1	0.3	0.8

9041: WB to EB Xover E of M-227/West Drive/McDonald's Dr & WB M-96 (Michigan Avenue) Performanc

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	1.3	13.3	2.3

9128: M-96 (Michigan Avenue)/WB M-96 (Michigan Avenue) & EB M-96 (Michigan Avenue) Performance

Approach	NB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.1	3.8	2.4

9137: SB I-69 On-Ramp Performance by approach

Approach	SB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	6.3	0.1	2.0

9143: NB I-69 On-Ramp Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	7.1	2.8	3.4

9146: WB to EB Xover W of M-227/West Drive & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.8	0.8

9147: EB M-96 (Michigan Avenue) & EB to WB Xover W of M-227/West Drive Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	1.7	1.7

9150: M-311 (11 Mile Rd) /NB M-311 (11 Mile Rd) & SB M-311 (11 Mile Rd) Performance by approach

Approach	NB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.1	0.2	0.1

9151: EB M-96 (Michigan Avenue) & EB to WB Xover E of M-227/West Drive Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.5	0.5

9157: SB I-69 On-Ramp & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.1	2.1

9158: SB I-69 Off-Ramp (Push Button) & SB I-69 Off-Ramp Performance by approach

Approach	SB	All
Denied Del/Veh (s)	0.4	0.4
Total Del/Veh (s)	1.9	1.9

9159: NB I-69 Off-Ramp & NB I-69 Off-Ramp (Push Button) Performance by approach

Approach	NB	All
Denied Del/Veh (s)	0.3	0.3
Total Del/Veh (s)	2.8	2.8

9178: WB I-94 to BL-94/Partello Rd Off Ramp/WB I-94 to I-94/Partello Rd & BL-94/Partello Rd to WB I-94

Approach	EB	WB	All
Denied Del/Veh (s)	0.2	0.0	0.1
Total Del/Veh (s)	0.2	0.3	0.2

9304: WB to EB Xover W of 15 Mile Rd (North) & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	1.9	1.9

9305: EB M-96 (Michigan Avenue) & WB to EB Xover W of 15 Mile Rd (North) Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.7	37.3	2.5

9307: EB M-96 (Michigan Avenue) & EB to WB Xover E of 15 Mile Rd (North) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	3.4	3.4

9310: WB to EB Xover W of 15 Mile Rd (South) & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.6	2.6

9311: EB M-96 (Michigan Avenue) & EB to WB Xover E of 15 Mile Rd (South) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.5	2.5

9330: EB to WB Xover E of Old M-311 (11 Mile Rd) & WB M-96 (Michigan Avenue) Performance by appr

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.6	5.4	1.7

9331: EB M-96 (Michigan Avenue) & EB to WB Xover E of Old M-311 (11 Mile Rd) Performance by appro

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.6	2.6

9332: WB M-96 (Michigan Avenue) & Old M-311 (11 Mile Rd) Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.9	5.4	1.1

9336: WB to EB Xover W of Old M-311 (11 Mile Rd) & WB M-96 (Michigan Avenue) Performance by app

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.2	2.2

9337: EB M-96 (Michigan Avenue) & WB to EB Xover W of Old M-311 (11 Mile Rd) Performance by appr

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	4.8	8.3	5.5

9338: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & NB to SB Xover N of M-96 (Michigan Avenue) F

Approach	NB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	1.9	1.9

9339: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & EB I-94 On Ramp Performance by approach

Approach	NB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	4.9	4.9

9340: EB I-94 On Ramp Performance by approach

Approach	EB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	4.2	0.1	1.4

9342: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & EB I-94 On Ramp Performance by approach

Approach	SB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	11.4	11.4

9343: EB I-94 Off-ramp Performance by approach

Approach	EB	All
Denied Del/Veh (s)	1.8	1.8
Total Del/Veh (s)	0.9	0.9

9346: WB I-94 On Ramp Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.1	3.5	2.3

9347: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & WB I-94 On Ramp Performance by approach

Approach	NW	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	3.6	3.6

9348: WB I-94 On Ramp & EB M-96 (Michigan Avenue)/11 Mile Rd (South) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	1.4	1.4

9349: WB I-94 Off-ramp Performance by approach

Approach	WB	All
Denied Del/Veh (s)	1.3	1.3
Total Del/Veh (s)	0.6	0.6

9351: SB to NB Xover E of 11 Mile Rd & WB M-96 (Michigan Avenue)/11 Mile Rd (North) Performance b

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.1	3.8	1.3

9352: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & SB to NB Xover E of 11 Mile Rd Performance b

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	5.4	5.4

9354: EB to WB Xover W of 11 Mile Rd & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	3.4	3.4

9355: EB M-96 (Michigan Avenue) & EB to WB Xover W of 11 Mile Rd Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.3	2.3

9356: WB to EB Xover W of 11 Mile Rd & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.2	2.2

9357: EB M-96 (Michigan Avenue) & WB to EB Xover W of 11 Mile Rd Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.2	0.2

9359: EB M-96 (Michigan Avenue) & M-96 (Michigan Avenue)/WB M-96 (Michigan Avenue) Performance

Approach	EB	WB	All
Denied Del/Veh (s)	0.2	0.0	0.1
Total Del/Veh (s)	1.8	0.7	1.2

9381: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.9	2.9

9382: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.4	6.1	3.7

9383: WB M-96 (Michigan Avenue) Performance by approach

Approach	NW	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.5	0.5

9384: EB M-96 (Michigan Avenue) Performance by approach

Approach	SE	SW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.7	3.4	1.8

9385: Ceresco Road/12 Mile Road & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	1.0	3.1	1.1

9386: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.7	3.2	2.7

9387: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.6	0.6

9388: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.4	0.4

9389: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.2	3.8	2.2

9390: 13 Mile Rd & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	0.6	2.7	0.6

9392: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.1	3.7	1.1

9393: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.8	0.8

9394: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	4.7	4.7

9396: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.8	6.8	2.0

9397: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	1.6	1.6

9398: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.4	2.4

9400: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.6	8.1	0.7

9401: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	1.6	1.6

9410: Retail Drive & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	0.8	6.9	0.9

9415: EB Main Entrance/EB M-96 (Michigan Avenue) & M-96 (Michigan Avenue) Performance by approa

Approach	EB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.1	1.3	1.2

9416: SB M-311 (11 Mile Rd)/EB M-96 (Michigan Avenue)/11 Mile Rd (South) & EB M-96 (Michigan Aver

Approach	SB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	3.3	3.3

Total Network Performance

Denied Del/Veh (s)	0.7
Total Del/Veh (s)	51.9

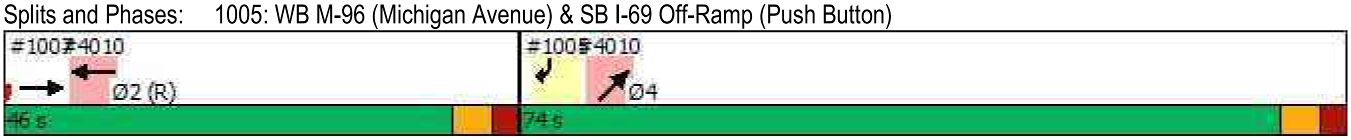
Scenario M2

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø2
Lane Configurations							
Traffic Volume (vph)	0	0	1003	0	0	1563	
Future Volume (vph)	0	0	1003	0	0	1563	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	0.91	1.00	1.00	0.76	
Frt						0.850	
Flt Protected							
Satd. Flow (prot)	0	0	5085	0	0	3610	
Flt Permitted							
Satd. Flow (perm)	0	0	5085	0	0	3610	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)						602	
Link Speed (mph)		45	45		25		
Link Distance (ft)		275	194		266		
Travel Time (s)		4.2	2.9		7.3		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.84	0.75	
Heavy Vehicles (%)	2%	2%	2%	2%	3%	2%	
Adj. Flow (vph)	0	0	1090	0	0	2084	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	1090	0	0	2084	
Turn Type			NA			Prot	
Protected Phases			Free!			4!	2
Permitted Phases							
Minimum Split (s)						17.0	17.0
Total Split (s)						74.0	46.0
Total Split (%)						61.7%	38%
Yellow Time (s)						3.5	3.5
All-Red Time (s)						2.5	2.5
Lost Time Adjust (s)						0.0	
Total Lost Time (s)						6.0	
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)			120.0			68.0	
Actuated g/C Ratio			1.00			0.57	
v/c Ratio			0.21			0.90	
Control Delay			0.1			22.8	
Queue Delay			0.0			0.8	
Total Delay			0.1			23.6	
LOS			A			C	
Approach Delay			0.1		23.6		
Approach LOS			A		C		
Queue Length 50th (ft)			0			466	
Queue Length 95th (ft)			0			346	
Internal Link Dist (ft)		195	114		186		
Turn Bay Length (ft)							
Base Capacity (vph)			5085			2306	
Starvation Cap Reductn			0			0	
Spillback Cap Reductn			549			64	
Storage Cap Reductn			0			0	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø2
Reduced v/c Ratio			0.24			0.93	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 100 (83%), Referenced to phase 2:EBT, Start of Green	
Natural Cycle: 60	
Control Type: Pretimed	
Maximum v/c Ratio: 0.90	
Intersection Signal Delay: 15.5	Intersection LOS: B
Intersection Capacity Utilization 72.0%	ICU Level of Service C
Analysis Period (min) 15	
! Phase conflict between lane groups.	

Splits and Phases: 1005: WB M-96 (Michigan Avenue) & SB I-69 Off-Ramp (Push Button)

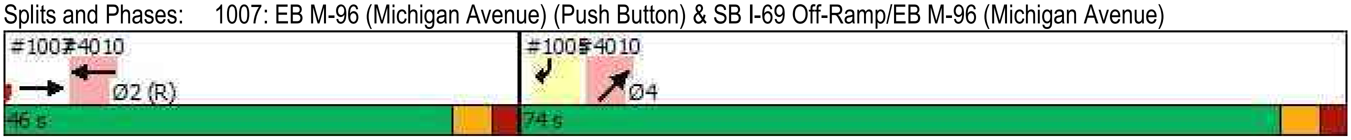


Lane Group	EBT	EBR	WBL	WBT	NEL	NER	Ø4
Lane Configurations							
Traffic Volume (vph)	112	0	0	0	0	2205	
Future Volume (vph)	112	0	0	0	0	2205	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Storage Length (ft)		260	285		0	0	
Storage Lanes		0	0		0	3	
Taper Length (ft)			240		25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.76	
Frt						0.850	
Flt Protected							
Satd. Flow (prot)	1863	0	0	0	0	3610	
Flt Permitted							
Satd. Flow (perm)	1863	0	0	0	0	3610	
Right Turn on Red		Yes				Yes	
Satd. Flow (RTOR)						2086	
Link Speed (mph)	25			45	45		
Link Distance (ft)	301			619	190		
Travel Time (s)	8.2			9.4	2.9		
Peak Hour Factor	0.75	0.84	0.92	0.92	0.90	0.90	
Heavy Vehicles (%)	2%	3%	2%	2%	2%	2%	
Adj. Flow (vph)	149	0	0	0	0	2450	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	149	0	0	0	0	2450	
Turn Type	NA					Free	
Protected Phases	2						4
Permitted Phases						Free	
Minimum Split (s)	17.0						17.0
Total Split (s)	46.0						74.0
Total Split (%)	38.3%						62%
Yellow Time (s)	3.5						3.5
All-Red Time (s)	2.5						2.5
Lost Time Adjust (s)	0.0						
Total Lost Time (s)	6.0						
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)	40.0					120.0	
Actuated g/C Ratio	0.33					1.00	
v/c Ratio	0.24					0.68	
Control Delay	30.3					11.2	
Queue Delay	0.0					0.0	
Total Delay	30.3					11.2	
LOS	C					B	
Approach Delay	30.3				11.2		
Approach LOS	C				B		
Queue Length 50th (ft)	83					449	
Queue Length 95th (ft)	111					279	
Internal Link Dist (ft)	221			539	110		
Turn Bay Length (ft)							
Base Capacity (vph)	621					3610	

Lane Group	EBT	EBR	WBL	WBT	NEL	NER	Ø4
Starvation Cap Reductn	0					0	
Spillback Cap Reductn	0					0	
Storage Cap Reductn	0					0	
Reduced v/c Ratio	0.24					0.68	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 100 (83%), Referenced to phase 2:EBT, Start of Green	
Natural Cycle: 60	
Control Type: Pretimed	
Maximum v/c Ratio: 0.90	
Intersection Signal Delay: 12.3	Intersection LOS: B
Intersection Capacity Utilization 46.5%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 1007: EB M-96 (Michigan Avenue) (Push Button) & SB I-69 Off-Ramp/EB M-96 (Michigan Avenue)

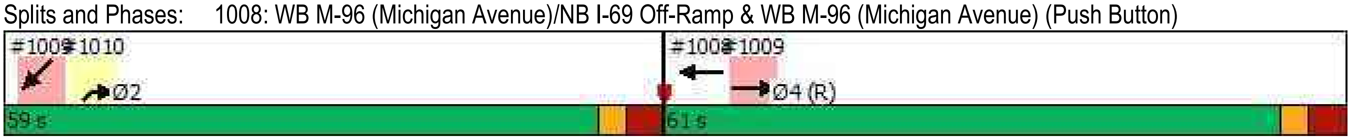


Lane Group	EBL	EBT	WBT	WBR	SWL	SWR	Ø2
Lane Configurations			↑↑			↱↱	
Traffic Volume (vph)	0	0	349	0	0	773	
Future Volume (vph)	0	0	349	0	0	773	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.88	
Frt						0.850	
Flt Protected							
Satd. Flow (prot)	0	0	3539	0	0	2787	
Flt Permitted							
Satd. Flow (perm)	0	0	3539	0	0	2787	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)						1204	
Link Speed (mph)		45	25		45		
Link Distance (ft)		217	252		223		
Travel Time (s)		3.3	6.9		3.4		
Peak Hour Factor	0.92	0.92	0.75	0.93	0.92	0.92	
Heavy Vehicles (%)	2%	2%	2%	6%	2%	2%	
Adj. Flow (vph)	0	0	465	0	0	840	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	465	0	0	840	
Turn Type			NA			Free	
Protected Phases			4				2
Permitted Phases						Free	
Minimum Split (s)			16.0				16.0
Total Split (s)			61.0				59.0
Total Split (%)			50.8%				49%
Yellow Time (s)			2.5				2.5
All-Red Time (s)			3.5				3.5
Lost Time Adjust (s)			0.0				
Total Lost Time (s)			6.0				
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)			55.0			120.0	
Actuated g/C Ratio			0.46			1.00	
v/c Ratio			0.29			0.30	
Control Delay			20.9			2.8	
Queue Delay			0.0			0.0	
Total Delay			20.9			2.8	
LOS			C			A	
Approach Delay			20.9		2.8		
Approach LOS			C		A		
Queue Length 50th (ft)			115			61	
Queue Length 95th (ft)			123			64	
Internal Link Dist (ft)		137	172		143		
Turn Bay Length (ft)							
Base Capacity (vph)			1622			2787	
Starvation Cap Reductn			0			0	
Spillback Cap Reductn			0			0	
Storage Cap Reductn			0			0	

Lane Group	EBL	EBT	WBT	WBR	SWL	SWR	Ø2
Reduced v/c Ratio			0.29			0.30	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 92 (77%), Referenced to phase 4:WBT, Start of Green			
Natural Cycle: 40			
Control Type: Pretimed			
Maximum v/c Ratio: 0.54			
Intersection Signal Delay: 9.2		Intersection LOS: A	
Intersection Capacity Utilization 40.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 1008: WB M-96 (Michigan Avenue)/NB I-69 Off-Ramp & WB M-96 (Michigan Avenue) (Push Button)



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	0	751	0	0	0	0	0	0	0	0	773	0
Future Volume (vph)	0	751	0	0	0	0	0	0	0	0	773	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	3539	0	0	0	0	0	0	0	0	3539	0
Flt Permitted												
Satd. Flow (perm)	0	3539	0	0	0	0	0	0	0	0	3539	0
Right Turn on Red			Yes			Yes			Yes	Yes		Yes
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		209			206			223			213	
Travel Time (s)		3.2			3.1			3.4			3.2	
Peak Hour Factor	0.86	0.86	0.86	0.92	0.92	0.92	0.92	0.92	0.92	0.91	0.91	0.91
Adj. Flow (vph)	0	873	0	0	0	0	0	0	0	0	849	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	873	0	0	0	0	0	0	0	0	849	0
Turn Type		NA									NA	
Protected Phases		4									2	
Permitted Phases												
Minimum Split (s)		16.0									16.0	
Total Split (s)		61.0									59.0	
Total Split (%)		50.8%									49.2%	
Yellow Time (s)		2.5									2.5	
All-Red Time (s)		3.5									3.5	
Lost Time Adjust (s)		0.0									0.0	
Total Lost Time (s)		6.0									6.0	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		55.0									53.0	
Actuated g/C Ratio		0.46									0.44	
v/c Ratio		0.54									0.54	
Control Delay		23.7									24.4	
Queue Delay		0.0									0.0	
Total Delay		23.7									24.4	
LOS		C									C	
Approach Delay		23.7									24.4	
Approach LOS		C									C	
Queue Length 50th (ft)		300									265	
Queue Length 95th (ft)		294									334	
Internal Link Dist (ft)		129			126			143			133	
Turn Bay Length (ft)												
Base Capacity (vph)		1622									1563	
Starvation Cap Reductn		0									0	
Spillback Cap Reductn		0									0	
Storage Cap Reductn		0									0	
Reduced v/c Ratio		0.54									0.54	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 92 (77%), Referenced to phase 4:WBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.54	
Intersection Signal Delay: 24.1	Intersection LOS: C
Intersection Capacity Utilization 52.1%	ICU Level of Service A
Analysis Period (min) 15	

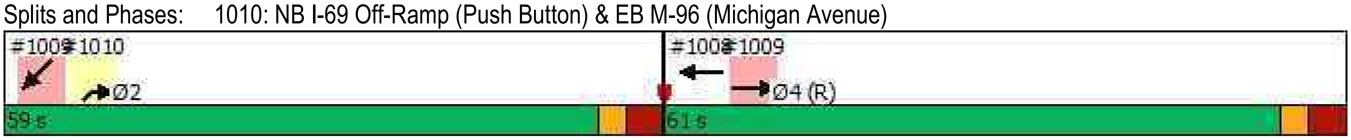
Splits and Phases: 1009: WB M-96 (Michigan Avenue) (Push Button)/WB M-96 (Michigan Avenue) & EB M-96 (Michigan Avenue)

Lane Group	EBT	EBR	WBL	WBT	NEL	NER	Ø4
Lane Configurations	↑↑					↱	
Traffic Volume (vph)	751	0	0	0	0	122	
Future Volume (vph)	751	0	0	0	0	122	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	0.95	1.00	1.00	1.00	1.00	1.00	
Frt						0.865	
Flt Protected							
Satd. Flow (prot)	3539	0	0	0	0	1611	
Flt Permitted							
Satd. Flow (perm)	3539	0	0	0	0	1611	
Right Turn on Red		Yes				Yes	
Satd. Flow (RTOR)						352	
Link Speed (mph)	45			45	25		
Link Distance (ft)	206			309	315		
Travel Time (s)	3.1			4.7	8.6		
Peak Hour Factor	0.86	0.86	0.92	0.92	0.93	0.75	
Heavy Vehicles (%)	2%	2%	2%	2%	6%	2%	
Adj. Flow (vph)	873	0	0	0	0	163	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	873	0	0	0	0	163	
Turn Type	NA					Prot	
Protected Phases	Free!					2!	4
Permitted Phases							
Minimum Split (s)						16.0	16.0
Total Split (s)						59.0	61.0
Total Split (%)						49.2%	51%
Yellow Time (s)						2.5	2.5
All-Red Time (s)						3.5	3.5
Lost Time Adjust (s)						0.0	
Total Lost Time (s)						6.0	
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)	120.0					53.0	
Actuated g/C Ratio	1.00					0.44	
v/c Ratio	0.25					0.18	
Control Delay	0.2					0.4	
Queue Delay	0.0					0.0	
Total Delay	0.2					0.4	
LOS	A					A	
Approach Delay	0.2				0.4		
Approach LOS	A				A		
Queue Length 50th (ft)	0					0	
Queue Length 95th (ft)	0					0	
Internal Link Dist (ft)	126			229	235		
Turn Bay Length (ft)							
Base Capacity (vph)	3539					908	
Starvation Cap Reductn	0					0	
Spillback Cap Reductn	0					0	
Storage Cap Reductn	0					0	

Lane Group	EBT	EBR	WBL	WBT	NEL	NER	Ø4
Reduced v/c Ratio	0.25					0.18	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 92 (77%), Referenced to phase 4:WBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.54	
Intersection Signal Delay: 0.2	Intersection LOS: A
Intersection Capacity Utilization 52.1%	ICU Level of Service A
Analysis Period (min) 15	
! Phase conflict between lane groups.	

Splits and Phases: 1010: NB I-69 Off-Ramp (Push Button) & EB M-96 (Michigan Avenue)



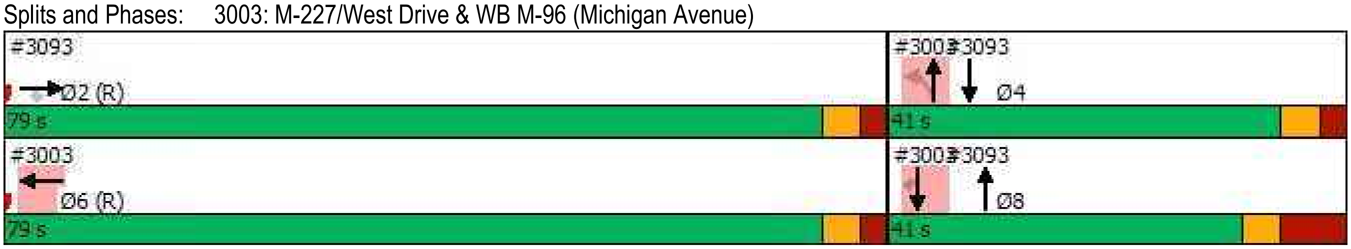
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	725	192	76	50	0	0	84	85
Future Volume (vph)	0	0	0	0	725	192	76	50	0	0	84	85
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		80	0		0	0		0
Storage Lanes	0		0	0		1	1		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.969							0.850
Flt Protected							0.950					
Satd. Flow (prot)	0	0	0	0	4976	0	1671	1863	0	0	1845	1568
Flt Permitted							0.687					
Satd. Flow (perm)	0	0	0	0	4976	0	1209	1863	0	0	1845	1568
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					102							110
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		152			212			101			1197	
Travel Time (s)		2.3			3.2			2.0			23.3	
Peak Hour Factor	0.92	0.92	0.92	0.87	0.87	0.87	0.67	0.67	0.67	0.77	0.77	0.77
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	8%	2%	2%	3%	3%	3%
Adj. Flow (vph)	0	0	0	0	833	221	113	75	0	0	109	110
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1054	0	113	75	0	0	109	110
Turn Type					NA		Perm	NA			NA	Perm
Protected Phases					6			4			8	
Permitted Phases							4					8
Minimum Split (s)					31.0		17.0	17.0			17.0	17.0
Total Split (s)					79.0		41.0	41.0			41.0	41.0
Total Split (%)					65.8%		34.2%	34.2%			34.2%	34.2%
Yellow Time (s)					3.5		3.5	3.5			3.5	3.5
All-Red Time (s)					2.5		2.5	2.5			6.0	6.0
Lost Time Adjust (s)					0.0		0.0	0.0			0.0	0.0
Total Lost Time (s)					6.0		6.0	6.0			9.5	9.5
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)					73.0		35.0	35.0			31.5	31.5
Actuated g/C Ratio					0.61		0.29	0.29			0.26	0.26
v/c Ratio					0.34		0.32	0.14			0.23	0.22
Control Delay					10.7		8.6	5.5			36.2	7.5
Queue Delay					0.0		0.0	0.0			0.0	0.0
Total Delay					10.7		8.6	5.5			36.2	7.5
LOS					B		A	A			D	A
Approach Delay					10.7			7.4			21.8	
Approach LOS					B			A			C	
Queue Length 50th (ft)					124		11	7			66	0
Queue Length 95th (ft)					144		11	8			98	28
Internal Link Dist (ft)		72			132			21			1117	
Turn Bay Length (ft)												
Base Capacity (vph)					3067		352	543			484	492

Lane Group	Ø2
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	2
Permitted Phases	
Minimum Split (s)	16.0
Total Split (s)	79.0
Total Split (%)	66%
Yellow Time (s)	3.5
All-Red Time (s)	2.5
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
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)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
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					0.34		0.32	0.14			0.23	0.22

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 112 (93%), Referenced to phase 2:EBT and 6:, Start of Green	
Natural Cycle: 50	
Control Type: Pretimed	
Maximum v/c Ratio: 0.40	
Intersection Signal Delay: 11.9	Intersection LOS: B
Intersection Capacity Utilization 47.9%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 3003: M-227/West Drive & WB M-96 (Michigan Avenue)



Lane Group	Ø2
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

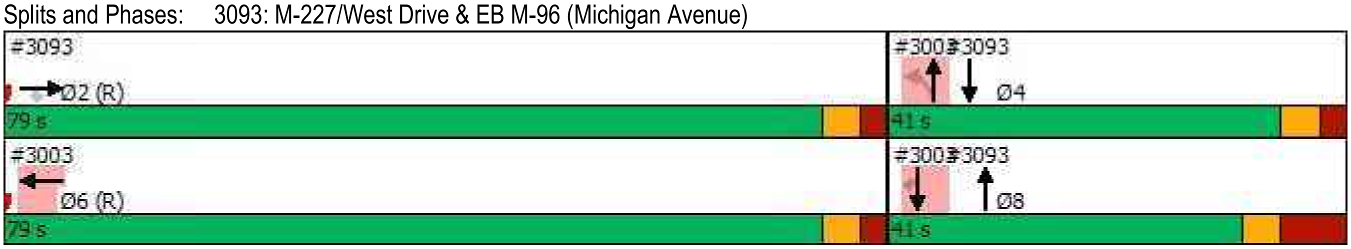
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	821	59	0	0	0	0	126	30	0	84	0
Future Volume (vph)	0	821	59	0	0	0	0	126	30	0	84	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		65	0		0	100		0	0		0
Storage Lanes	0		1	0		0	1		0	0		0
Taper Length (ft)	25			25			70			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Frt			0.850					0.971				
Flt Protected												
Satd. Flow (prot)	0	3574	1442	0	0	0	0	3344	0	0	1881	0
Flt Permitted												
Satd. Flow (perm)	0	3574	1442	0	0	0	0	3344	0	0	1881	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			59					24				
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		161			222			1117			101	
Travel Time (s)		2.4			3.4			21.8			2.0	
Peak Hour Factor	0.95	0.95	0.95	0.92	0.92	0.92	0.72	0.72	0.72	0.83	0.83	0.83
Heavy Vehicles (%)	2%	1%	12%	2%	2%	2%	2%	6%	0%	2%	1%	2%
Adj. Flow (vph)	0	864	62	0	0	0	0	175	42	0	101	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	864	62	0	0	0	0	217	0	0	101	0
Turn Type		NA	Perm					NA			NA	
Protected Phases		2						8			4	
Permitted Phases			2									
Minimum Split (s)		16.0	16.0					17.0			17.0	
Total Split (s)		79.0	79.0					41.0			41.0	
Total Split (%)		65.8%	65.8%					34.2%			34.2%	
Yellow Time (s)		3.5	3.5					3.5			3.5	
All-Red Time (s)		2.5	2.5					6.0			2.5	
Lost Time Adjust (s)		0.0	0.0					0.0			0.0	
Total Lost Time (s)		6.0	6.0					9.5			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		73.0	73.0					31.5			35.0	
Actuated g/C Ratio		0.61	0.61					0.26			0.29	
v/c Ratio		0.40	0.07					0.24			0.18	
Control Delay		4.5	0.2					31.7			0.7	
Queue Delay		0.0	0.0					0.0			0.0	
Total Delay		4.5	0.2					31.7			0.7	
LOS		A	A					C			A	
Approach Delay		4.2						31.7			0.7	
Approach LOS		A						C			A	
Queue Length 50th (ft)		42	1					61			0	
Queue Length 95th (ft)		51	0					73			0	
Internal Link Dist (ft)		81			142			1037			21	
Turn Bay Length (ft)			65									
Base Capacity (vph)		2174	900					895			548	

Lane Group	Ø6
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	6
Permitted Phases	
Minimum Split (s)	31.0
Total Split (s)	79.0
Total Split (%)	66%
Yellow Time (s)	3.5
All-Red Time (s)	2.5
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
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)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn		0	0					0			0	
Spillback Cap Reductn		0	0					18			0	
Storage Cap Reductn		0	0					0			0	
Reduced v/c Ratio		0.40	0.07					0.25			0.18	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 112 (93%), Referenced to phase 2:EBT and 6:, Start of Green	
Natural Cycle: 50	
Control Type: Pretimed	
Maximum v/c Ratio: 0.40	
Intersection Signal Delay: 8.7	Intersection LOS: A
Intersection Capacity Utilization 47.9%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 3093: M-227/West Drive & EB M-96 (Michigan Avenue)



Lane Group	Ø6
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

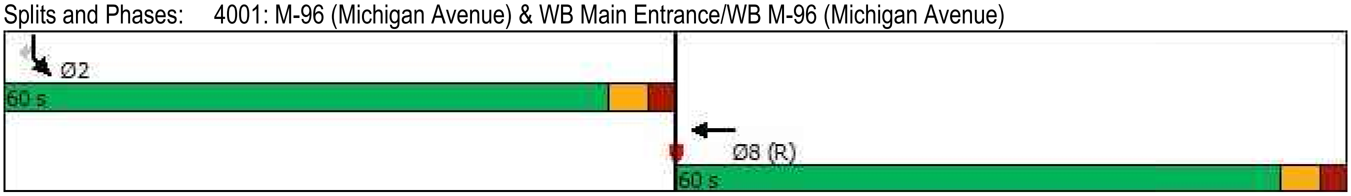
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations										
Traffic Volume (vph)	0	0	0	0	1681	1348	1264	116	0	0
Future Volume (vph)	0	0	0	0	1681	1348	1264	116	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	300		300	0	200	0	0
Storage Lanes	0		0	0		1	2	1	0	0
Taper Length (ft)	25			25			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.88	0.97	1.00	1.00	1.00
Frt						0.850		0.850		
Flt Protected							0.950			
Satd. Flow (prot)	0	0	0	0	3539	2787	3433	1583	0	0
Flt Permitted							0.950			
Satd. Flow (perm)	0	0	0	0	3539	2787	3433	1583	0	0
Right Turn on Red			Yes	Yes		Yes		Yes		
Satd. Flow (RTOR)						503		27		
Link Speed (mph)		45			45		55		45	
Link Distance (ft)		858			894		434		215	
Travel Time (s)		13.0			13.5		5.4		3.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	1827	1465	1374	126	0	0
Shared Lane Traffic (%)										
Lane Group Flow (vph)	0	0	0	0	1827	1465	1374	126	0	0
Turn Type					NA	Free	Prot	Perm		
Protected Phases					8		2			
Permitted Phases						Free		2		
Minimum Split (s)					16.0		16.0	16.0		
Total Split (s)					60.0		60.0	60.0		
Total Split (%)					50.0%		50.0%	50.0%		
Yellow Time (s)					3.5		3.5	3.5		
All-Red Time (s)					2.5		2.5	2.5		
Lost Time Adjust (s)					0.0		0.0	0.0		
Total Lost Time (s)					6.0		6.0	6.0		
Lead/Lag										
Lead-Lag Optimize?										
Act Effct Green (s)					54.0	120.0	54.0	54.0		
Actuated g/C Ratio					0.45	1.00	0.45	0.45		
v/c Ratio					1.15	0.53	0.89	0.17		
Control Delay					99.3	0.4	31.8	7.8		
Queue Delay					0.0	0.0	0.0	0.0		
Total Delay					99.3	0.4	31.8	7.8		
LOS					F	A	C	A		
Approach Delay					55.3		29.8			
Approach LOS					E		C			
Queue Length 50th (ft)					~892	0	526	39		
Queue Length 95th (ft)					#1023	0	627	50		
Internal Link Dist (ft)		778			814		354		135	
Turn Bay Length (ft)						300		200		
Base Capacity (vph)					1592	2787	1544	727		
Starvation Cap Reductn					0	0	0	0		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Spillback Cap Reductn					0	0	0	0		
Storage Cap Reductn					0	0	0	0		
Reduced v/c Ratio					1.15	0.53	0.89	0.17		

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 36 (30%), Referenced to phase 8:WBT, Start of Green
Natural Cycle: 120
Control Type: Pretimed
Maximum v/c Ratio: 1.15
Intersection Signal Delay: 47.3 Intersection LOS: D
Intersection Capacity Utilization 92.5% ICU Level of Service F
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

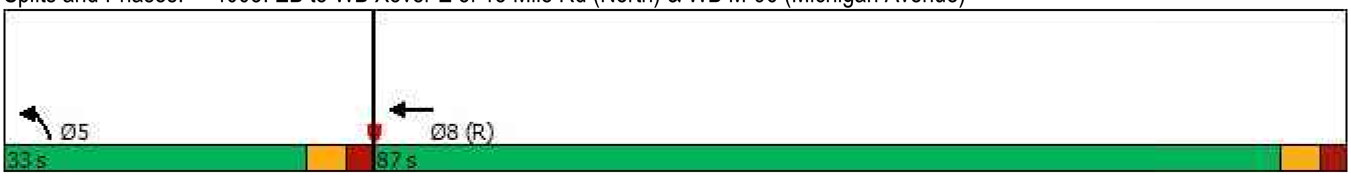
Splits and Phases: 4001: M-96 (Michigan Avenue) & WB Main Entrance/WB M-96 (Michigan Avenue)



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑↑	↰↰	
Traffic Volume (vph)	0	0	0	2598	519	0
Future Volume (vph)	0	0	0	2598	519	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	0.97	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	5085	3433	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	5085	3433	0
Right Turn on Red		Yes			Yes	Yes
Satd. Flow (RTOR)					6	
Link Speed (mph)	45			45	25	
Link Distance (ft)	660			254	113	
Travel Time (s)	10.0			3.8	3.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.70	0.92
Adj. Flow (vph)	0	0	0	2824	741	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	2824	741	0
Turn Type				NA	Prot	
Protected Phases				8	5	
Permitted Phases						
Minimum Split (s)				16.0	13.0	
Total Split (s)				87.0	33.0	
Total Split (%)				72.5%	27.5%	
Yellow Time (s)				3.5	3.5	
All-Red Time (s)				2.5	2.5	
Lost Time Adjust (s)				0.0	0.0	
Total Lost Time (s)				6.0	6.0	
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)				81.0	27.0	
Actuated g/C Ratio				0.68	0.22	
v/c Ratio				0.82	0.95	
Control Delay				11.8	72.3	
Queue Delay				0.0	0.0	
Total Delay				11.8	72.3	
LOS				B	E	
Approach Delay				11.8	72.3	
Approach LOS				B	E	
Queue Length 50th (ft)				315	301	
Queue Length 95th (ft)				309	276	
Internal Link Dist (ft)	580			174	33	
Turn Bay Length (ft)						
Base Capacity (vph)				3432	777	
Starvation Cap Reductn				0	0	
Spillback Cap Reductn				0	0	
Storage Cap Reductn				0	0	
Reduced v/c Ratio				0.82	0.95	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 116 (97%), Referenced to phase 8:WBT, Start of Green	
Natural Cycle: 75	
Control Type: Pretimed	
Maximum v/c Ratio: 0.95	
Intersection Signal Delay: 24.4	Intersection LOS: C
Intersection Capacity Utilization 99.3%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 4003: EB to WB Xover E of 15 Mile Rd (North) & WB M-96 (Michigan Avenue)

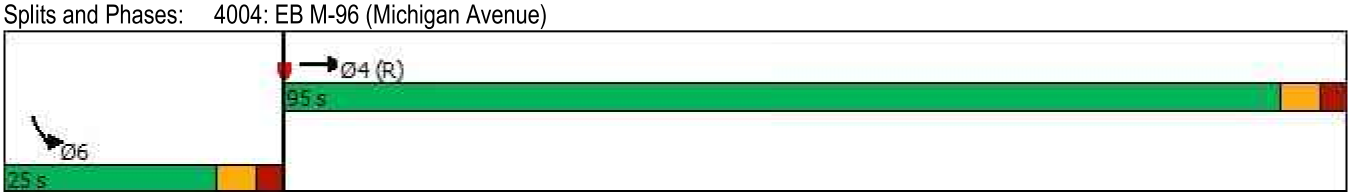


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	1099	0	0	308	0
Future Volume (vph)	0	1099	0	0	308	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	0.97	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	3433	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	3433	0
Right Turn on Red				Yes	Yes	Yes
Satd. Flow (RTOR)					252	
Link Speed (mph)		55	55		25	
Link Distance (ft)		2678	669		109	
Travel Time (s)		33.2	8.3		3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1195	0	0	335	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1195	0	0	335	0
Turn Type		NA			Prot	
Protected Phases		4			6	
Permitted Phases						
Detector Phase		4			6	
Switch Phase						
Minimum Initial (s)		10.0			7.0	
Minimum Split (s)		16.0			13.0	
Total Split (s)		95.0			25.0	
Total Split (%)		79.2%			20.8%	
Yellow Time (s)		3.5			3.5	
All-Red Time (s)		2.5			2.5	
Lost Time Adjust (s)		0.0			0.0	
Total Lost Time (s)		6.0			6.0	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode		C-Max			None	
Act Effct Green (s)		98.7			9.3	
Actuated g/C Ratio		0.82			0.08	
v/c Ratio		0.41			0.67	
Control Delay		1.5			17.6	
Queue Delay		0.0			0.0	
Total Delay		1.5			17.6	
LOS		A			B	
Approach Delay		1.5			17.6	
Approach LOS		A			B	
Queue Length 50th (ft)		30			21	
Queue Length 95th (ft)		34			65	
Internal Link Dist (ft)		2598	589		29	
Turn Bay Length (ft)						
Base Capacity (vph)		2911			755	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Starvation Cap Reductn		0			0	
Spillback Cap Reductn		0			0	
Storage Cap Reductn		0			0	
Reduced v/c Ratio		0.41			0.44	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 20 (17%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 40	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.67	
Intersection Signal Delay: 5.0	Intersection LOS: A
Intersection Capacity Utilization 68.2%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 4004: EB M-96 (Michigan Avenue)

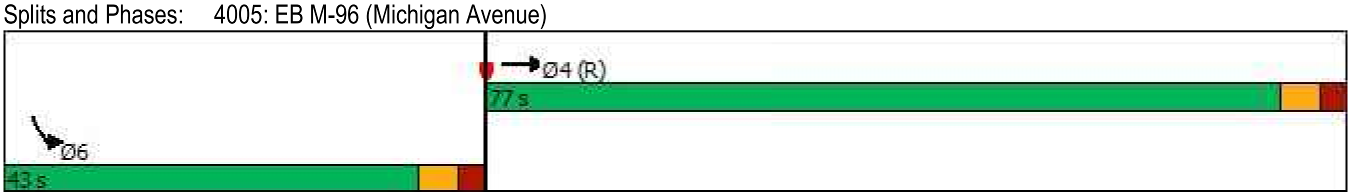


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	603	0	0	549	0
Future Volume (vph)	0	603	0	0	549	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	0.97	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	3433	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	3433	0
Right Turn on Red				Yes	Yes	Yes
Satd. Flow (RTOR)					500	
Link Speed (mph)		55	55		25	
Link Distance (ft)		1786	608		109	
Travel Time (s)		22.1	7.5		3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	655	0	0	597	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	655	0	0	597	0
Turn Type		NA			Prot	
Protected Phases		4			6	
Permitted Phases						
Detector Phase		4			6	
Switch Phase						
Minimum Initial (s)		10.0			7.0	
Minimum Split (s)		16.0			13.0	
Total Split (s)		77.0			43.0	
Total Split (%)		64.2%			35.8%	
Yellow Time (s)		3.5			3.5	
All-Red Time (s)		2.5			2.5	
Lost Time Adjust (s)		0.0			0.0	
Total Lost Time (s)		6.0			6.0	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode		C-Max			Max	
Act Effct Green (s)		71.0			37.0	
Actuated g/C Ratio		0.59			0.31	
v/c Ratio		0.31			0.43	
Control Delay		12.8			12.4	
Queue Delay		0.0			0.0	
Total Delay		12.8			12.4	
LOS		B			B	
Approach Delay		12.8			12.4	
Approach LOS		B			B	
Queue Length 50th (ft)		126			73	
Queue Length 95th (ft)		162			117	
Internal Link Dist (ft)		1706	528		29	
Turn Bay Length (ft)						
Base Capacity (vph)		2093			1404	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Starvation Cap Reductn		0			0	
Spillback Cap Reductn		0			0	
Storage Cap Reductn		0			0	
Reduced v/c Ratio		0.31			0.43	

Intersection Summary		
Area Type:	Other	
Cycle Length: 120		
Actuated Cycle Length: 120		
Offset: 112 (93%), Referenced to phase 4:EBT, Start of Green		
Natural Cycle: 40		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.43		
Intersection Signal Delay: 12.6		Intersection LOS: B
Intersection Capacity Utilization 40.8%		ICU Level of Service A
Analysis Period (min) 15		

Splits and Phases: 4005: EB M-96 (Michigan Avenue)

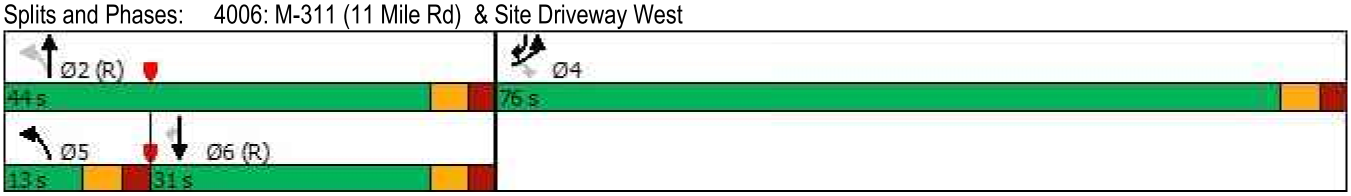


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	102	129	0
Future Volume (vph)	0	0	0	102	129	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	250	250			0
Storage Lanes	2	1	1			1
Taper Length (ft)	25		25			
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	3614	1863	1863	1863	1863	1863
Flt Permitted						
Satd. Flow (perm)	3614	1863	1863	1863	1863	1863
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)						
Link Speed (mph)	25			55	55	
Link Distance (ft)	1178			1461	940	
Travel Time (s)	32.1			18.1	11.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	111	140	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	111	140	0
Turn Type	Prot	Perm	pm+pt	NA	NA	pm+ov
Protected Phases	4		5	2	6	4
Permitted Phases		4	2			6
Detector Phase	4	4	5	2	6	4
Switch Phase						
Minimum Initial (s)	7.0	7.0	7.0	10.0	10.0	7.0
Minimum Split (s)	14.0	14.0	13.0	17.0	17.0	14.0
Total Split (s)	76.0	76.0	13.0	44.0	31.0	76.0
Total Split (%)	63.3%	63.3%	10.8%	36.7%	25.8%	63.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.5	2.5	2.5	2.5	2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None	None	Min	C-Max	C-Max	None
Act Effct Green (s)				120.0	101.0	
Actuated g/C Ratio				1.00	0.84	
v/c Ratio				0.06	0.09	
Control Delay				0.1	1.8	
Queue Delay				0.0	0.0	
Total Delay				0.1	1.8	
LOS				A	A	
Approach Delay				0.1	1.8	
Approach LOS				A	A	
Queue Length 50th (ft)				0	14	
Queue Length 95th (ft)				0	23	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Internal Link Dist (ft)	1098			1381	860	
Turn Bay Length (ft)						
Base Capacity (vph)				1863	1568	
Starvation Cap Reductn				0	0	
Spillback Cap Reductn				0	0	
Storage Cap Reductn				0	0	
Reduced v/c Ratio				0.06	0.09	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 60 (50%), Referenced to phase 2:NBTL and 6:SBT, Start of Green	
Natural Cycle: 45	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.09	
Intersection Signal Delay: 1.0	Intersection LOS: A
Intersection Capacity Utilization 13.3%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4006: M-311 (11 Mile Rd) & Site Driveway West

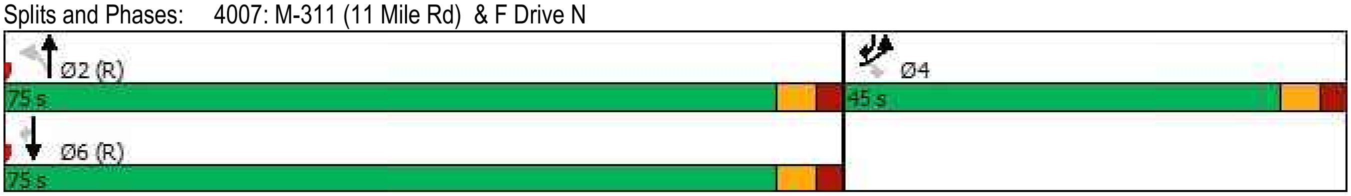


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	102	129	0
Future Volume (vph)	0	0	0	102	129	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	250	400			0
Storage Lanes	2	1	1			1
Taper Length (ft)	25		25			
Lane Util. Factor	0.97	1.00	1.00	0.95	0.95	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	3614	1863	1863	3539	3539	1863
Flt Permitted						
Satd. Flow (perm)	3614	1863	1863	3539	3539	1863
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)						
Link Speed (mph)	45			55	55	
Link Distance (ft)	1846			974	1093	
Travel Time (s)	28.0			12.1	13.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	111	140	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	111	140	0
Turn Type	Prot	Perm	Perm	NA	NA	pm+ov
Protected Phases	4			2	6	4
Permitted Phases		4	2			6
Detector Phase	4	4	2	2	6	4
Switch Phase						
Minimum Initial (s)	7.0	7.0	10.0	10.0	10.0	7.0
Minimum Split (s)	13.0	13.0	16.0	16.0	16.0	13.0
Total Split (s)	45.0	45.0	75.0	75.0	75.0	45.0
Total Split (%)	37.5%	37.5%	62.5%	62.5%	62.5%	37.5%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.5	2.5	2.5	2.5	2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None	None	C-Max	C-Max	C-Max	None
Act Effct Green (s)				120.0	120.0	
Actuated g/C Ratio				1.00	1.00	
v/c Ratio				0.03	0.04	
Control Delay				0.0	0.0	
Queue Delay				0.0	0.0	
Total Delay				0.0	0.0	
LOS				A	A	
Approach Delay						
Approach LOS						
Queue Length 50th (ft)				0	0	
Queue Length 95th (ft)				0	0	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Internal Link Dist (ft)	1766			894	1013	
Turn Bay Length (ft)						
Base Capacity (vph)				3539	3539	
Starvation Cap Reductn				0	0	
Spillback Cap Reductn				0	0	
Storage Cap Reductn				0	0	
Reduced v/c Ratio				0.03	0.04	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 20 (17%), Referenced to phase 2:NBTL and 6:SBT, Start of Green	
Natural Cycle: 40	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.04	
Intersection Signal Delay: 0.0	Intersection LOS: A
Intersection Capacity Utilization 13.3%	ICU Level of Service A
Analysis Period (min) 15	

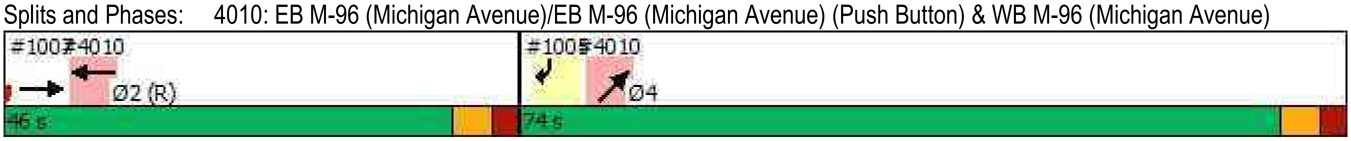
Splits and Phases: 4007: M-311 (11 Mile Rd) & F Drive N



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	1003	0	0	2205	0	0	0	0
Future Volume (vph)	0	0	0	0	1003	0	0	2205	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.91	1.00	1.00	1.00	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	0	0	0	5085	0	0	5085	0	0	0	0
Flt Permitted												
Satd. Flow (perm)	0	0	0	0	5085	0	0	5085	0	0	0	0
Right Turn on Red			Yes			Yes	Yes		Yes			Yes
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		194			183			156			190	
Travel Time (s)		2.9			2.8			2.4			2.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.90	0.90	0.90	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	1090	0	0	2450	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1090	0	0	2450	0	0	0	0
Turn Type					NA			NA				
Protected Phases					2			4				
Permitted Phases												
Minimum Split (s)					17.0			17.0				
Total Split (s)					46.0			74.0				
Total Split (%)					38.3%			61.7%				
Yellow Time (s)					3.5			3.5				
All-Red Time (s)					2.5			2.5				
Lost Time Adjust (s)					0.0			0.0				
Total Lost Time (s)					6.0			6.0				
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)					40.0			68.0				
Actuated g/C Ratio					0.33			0.57				
v/c Ratio					0.64			0.85				
Control Delay					35.7			14.6				
Queue Delay					0.0			0.0				
Total Delay					35.7			14.6				
LOS					D			B				
Approach Delay					35.7			14.6				
Approach LOS					D			B				
Queue Length 50th (ft)					310			368				
Queue Length 95th (ft)					359			484				
Internal Link Dist (ft)		114			103			76			110	
Turn Bay Length (ft)												
Base Capacity (vph)					1695			2881				
Starvation Cap Reductn					0			0				
Spillback Cap Reductn					0			0				
Storage Cap Reductn					0			0				
Reduced v/c Ratio					0.64			0.85				

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 100 (83%), Referenced to phase 2:EBT, Start of Green	
Natural Cycle: 60	
Control Type: Pretimed	
Maximum v/c Ratio: 0.90	
Intersection Signal Delay: 21.1	Intersection LOS: C
Intersection Capacity Utilization 72.0%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 4010: EB M-96 (Michigan Avenue)/EB M-96 (Michigan Avenue) (Push Button) & WB M-96 (Michigan Avenue)



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑						↑↑↑	↱			
Traffic Volume (vph)	0	707	0	0	0	0	0	64	38	0	0	0
Future Volume (vph)	0	707	0	0	0	0	0	64	38	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		250	0		0
Storage Lanes	0		0	0		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	1.00	1.00
Frt									0.850			
Flt Protected												
Satd. Flow (prot)	0	3539	0	0	0	0	0	5085	1583	0	0	0
Flt Permitted												
Satd. Flow (perm)	0	3539	0	0	0	0	0	5085	1583	0	0	0
Right Turn on Red	Yes		Yes			Yes			Yes			Yes
Satd. Flow (RTOR)									41			
Link Speed (mph)		55			55			55			30	
Link Distance (ft)		167			316			655			182	
Travel Time (s)		2.1			3.9			8.1			4.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	768	0	0	0	0	0	70	41	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	768	0	0	0	0	0	70	41	0	0	0
Turn Type		NA						NA	Perm			
Protected Phases		7						2				
Permitted Phases									2			
Minimum Split (s)		16.0						19.5	19.5			
Total Split (s)		51.0						69.0	69.0			
Total Split (%)		42.5%						57.5%	57.5%			
Yellow Time (s)		3.5						3.5	3.5			
All-Red Time (s)		2.5						6.0	6.0			
Lost Time Adjust (s)		0.0						0.0	0.0			
Total Lost Time (s)		6.0						9.5	9.5			
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		45.0						59.5	59.5			
Actuated g/C Ratio		0.38						0.50	0.50			
v/c Ratio		0.58						0.03	0.05			
Control Delay		37.8						15.5	4.8			
Queue Delay		0.0						0.0	0.0			
Total Delay		37.8						15.5	4.8			
LOS		D						B	A			
Approach Delay		37.8						11.6				
Approach LOS		D						B				
Queue Length 50th (ft)		324						9	0			
Queue Length 95th (ft)		390						18	19			
Internal Link Dist (ft)		87			236			575			102	
Turn Bay Length (ft)									250			
Base Capacity (vph)		1327						2521	805			
Starvation Cap Reductn		0						0	0			

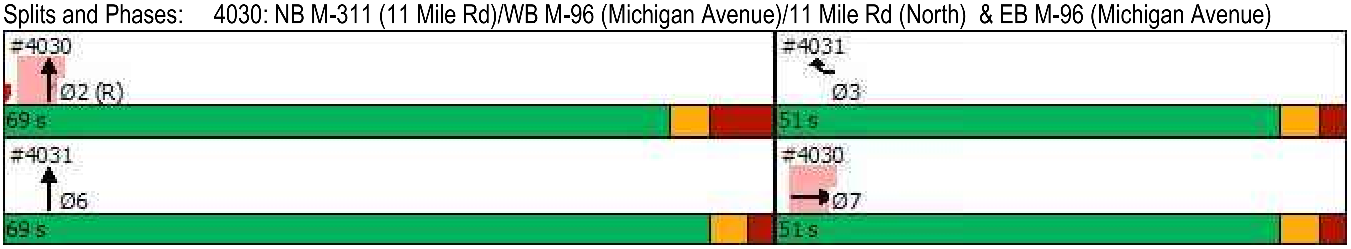
Lane Group	Ø3	Ø6
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Ideal Flow (vphpl)		
Storage Length (ft)		
Storage Lanes		
Taper Length (ft)		
Lane Util. Factor		
Frt		
Flt Protected		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Peak Hour Factor		
Adj. Flow (vph)		
Shared Lane Traffic (%)		
Lane Group Flow (vph)		
Turn Type		
Protected Phases	3	6
Permitted Phases		
Minimum Split (s)	16.0	16.0
Total Split (s)	51.0	69.0
Total Split (%)	43%	58%
Yellow Time (s)	3.5	3.5
All-Red Time (s)	2.5	2.5
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag		
Lead-Lag Optimize?		
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		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn		0						0	0			
Storage Cap Reductn		0						0	0			
Reduced v/c Ratio		0.58						0.03	0.05			

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 88 (73%), Referenced to phase 2:NBT, Start of Green
Natural Cycle: 40
Control Type: Pretimed
Maximum v/c Ratio: 0.58
Intersection Signal Delay: 34.5 Intersection LOS: C
Intersection Capacity Utilization 40.8% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 4030: NB M-311 (11 Mile Rd)/WB M-96 (Michigan Avenue)/11 Mile Rd (North) & EB M-96 (Michigan Avenue)



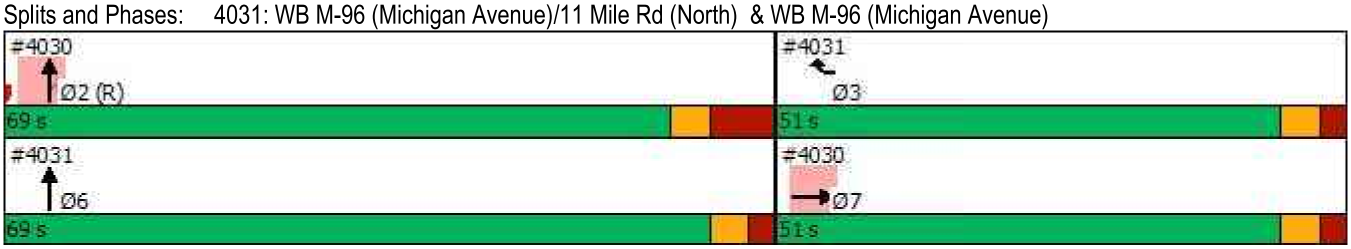
Lane Group	Ø3	Ø6
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		

Intersection Summary

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø2	Ø7
Lane Configurations								
Traffic Volume (vph)	0	889	64	0	0	0		
Future Volume (vph)	0	889	64	0	0	0		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Lane Util. Factor	1.00	0.76	0.91	1.00	1.00	1.00		
Frt		0.850						
Flt Protected								
Satd. Flow (prot)	0	3610	5085	0	0	0		
Flt Permitted								
Satd. Flow (perm)	0	3610	5085	0	0	0		
Right Turn on Red		Yes		Yes				
Satd. Flow (RTOR)		2101						
Link Speed (mph)	55		55			55		
Link Distance (ft)	405		182			493		
Travel Time (s)	5.0		2.3			6.1		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Adj. Flow (vph)	0	966	70	0	0	0		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	0	966	70	0	0	0		
Turn Type		Prot	NA					
Protected Phases		3	6				2	7
Permitted Phases								
Minimum Split (s)		16.0	16.0				19.5	16.0
Total Split (s)		51.0	69.0				69.0	51.0
Total Split (%)		42.5%	57.5%				58%	43%
Yellow Time (s)		3.5	3.5				3.5	3.5
All-Red Time (s)		2.5	2.5				6.0	2.5
Lost Time Adjust (s)		0.0	0.0					
Total Lost Time (s)		6.0	6.0					
Lead/Lag								
Lead-Lag Optimize?								
Act Effct Green (s)		45.0	63.0					
Actuated g/C Ratio		0.38	0.52					
v/c Ratio		0.36	0.03					
Control Delay		0.6	0.0					
Queue Delay		0.0	0.0					
Total Delay		0.6	0.0					
LOS		A	A					
Approach Delay	0.6							
Approach LOS	A							
Queue Length 50th (ft)		4	0					
Queue Length 95th (ft)		7	1					
Internal Link Dist (ft)	325		102			413		
Turn Bay Length (ft)								
Base Capacity (vph)		2666	2669					
Starvation Cap Reductn		0	0					
Spillback Cap Reductn		0	0					
Storage Cap Reductn		0	0					
Reduced v/c Ratio		0.36	0.03					

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 88 (73%), Referenced to phase 2:NBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.58	
Intersection Signal Delay: 0.6	Intersection LOS: A
Intersection Capacity Utilization 40.8%	ICU Level of Service A
Analysis Period (min) 15	

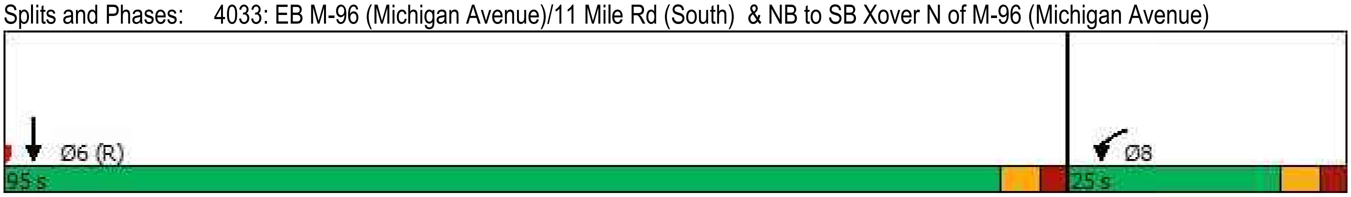
Splits and Phases: 4031: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & WB M-96 (Michigan Avenue)



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	67	0	0	0	0	769
Future Volume (vph)	67	0	0	0	0	769
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	0.91
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	3433	0	0	0	0	5085
Flt Permitted	0.950					
Satd. Flow (perm)	3433	0	0	0	0	5085
Right Turn on Red	Yes	Yes		Yes		
Satd. Flow (RTOR)	487					
Link Speed (mph)	25		55			30
Link Distance (ft)	105		587			495
Travel Time (s)	2.9		7.3			11.3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	73	0	0	0	0	836
Shared Lane Traffic (%)						
Lane Group Flow (vph)	73	0	0	0	0	836
Turn Type	Prot					NA
Protected Phases	8					6
Permitted Phases						
Minimum Split (s)	13.0					16.0
Total Split (s)	25.0					95.0
Total Split (%)	20.8%					79.2%
Yellow Time (s)	3.5					3.5
All-Red Time (s)	2.5					2.5
Lost Time Adjust (s)	0.0					0.0
Total Lost Time (s)	6.0					6.0
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)	19.0					89.0
Actuated g/C Ratio	0.16					0.74
v/c Ratio	0.08					0.22
Control Delay	0.1					0.9
Queue Delay	0.0					0.0
Total Delay	0.1					0.9
LOS	A					A
Approach Delay	0.1					0.9
Approach LOS	A					A
Queue Length 50th (ft)	0					7
Queue Length 95th (ft)	0					9
Internal Link Dist (ft)	25		507			415
Turn Bay Length (ft)						
Base Capacity (vph)	953					3771
Starvation Cap Reductn	0					0
Spillback Cap Reductn	0					0
Storage Cap Reductn	0					0
Reduced v/c Ratio	0.08					0.22

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 89 (74%), Referenced to phase 6:SBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.22	
Intersection Signal Delay: 0.8	Intersection LOS: A
Intersection Capacity Utilization 40.3%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4033: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & NB to SB Xover N of M-96 (Michigan Avenue)



Lane Group	NBL	NBT	SBT	SBR	SEL	SER	Ø2
Lane Configurations							
Traffic Volume (vph)	0	0	659	0	0	110	
Future Volume (vph)	0	0	659	0	0	110	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	0.91	1.00	1.00	0.88	
Frt						0.850	
Flt Protected							
Satd. Flow (prot)	0	0	5085	0	0	2787	
Flt Permitted							
Satd. Flow (perm)	0	0	5085	0	0	2787	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)						763	
Link Speed (mph)		30	30		30		
Link Distance (ft)		495	145		346		
Travel Time (s)		11.3	3.3		7.9		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	0	0	716	0	0	120	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	716	0	0	120	
Turn Type			NA			Prot	
Protected Phases			Free!			4!	2
Permitted Phases							
Minimum Split (s)						16.0	16.0
Total Split (s)						60.0	60.0
Total Split (%)						50.0%	50%
Yellow Time (s)						3.5	3.5
All-Red Time (s)						2.5	2.5
Lost Time Adjust (s)						0.0	
Total Lost Time (s)						6.0	
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)			120.0			54.0	
Actuated g/C Ratio			1.00			0.45	
v/c Ratio			0.14			0.07	
Control Delay			0.1			0.1	
Queue Delay			0.0			0.0	
Total Delay			0.1			0.1	
LOS			A			A	
Approach Delay			0.1		0.1		
Approach LOS			A		A		
Queue Length 50th (ft)			0			0	
Queue Length 95th (ft)			0			0	
Internal Link Dist (ft)		415	65		266		
Turn Bay Length (ft)							
Base Capacity (vph)			5085			1673	
Starvation Cap Reductn			0			0	
Spillback Cap Reductn			0			0	
Storage Cap Reductn			0			0	
Reduced v/c Ratio			0.14			0.07	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 27 (23%), Referenced to phase 4:SER, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.35	
Intersection Signal Delay: 0.1	Intersection LOS: A
Intersection Capacity Utilization 36.8%	ICU Level of Service A
Analysis Period (min) 15	

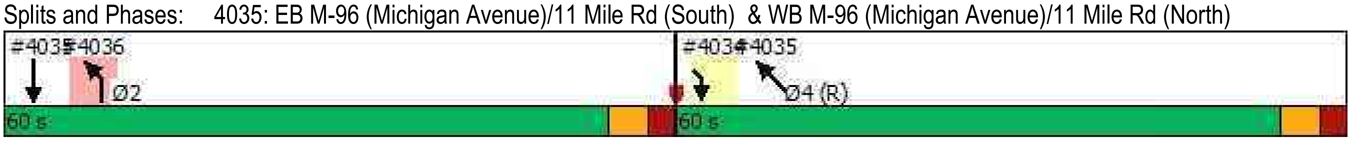
! Phase conflict between lane groups.

Splits and Phases: 4034: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & EB I-94 Off-ramp

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	659	0	0	0	0	0	727	0
Future Volume (vph)	0	0	0	0	659	0	0	0	0	0	727	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.91	1.00	1.00	1.00	1.00	1.00	0.91	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	0	0	0	5085	0	0	0	0	0	5085	0
Flt Permitted												
Satd. Flow (perm)	0	0	0	0	5085	0	0	0	0	0	5085	0
Right Turn on Red			Yes			Yes			Yes	Yes		Yes
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		145			194			233			108	
Travel Time (s)		3.3			4.4			5.3			2.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	716	0	0	0	0	0	790	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	716	0	0	0	0	0	790	0
Turn Type					NA						NA	
Protected Phases					2						4	
Permitted Phases												
Minimum Split (s)					16.0						16.0	
Total Split (s)					60.0						60.0	
Total Split (%)					50.0%						50.0%	
Yellow Time (s)					3.5						3.5	
All-Red Time (s)					2.5						2.5	
Lost Time Adjust (s)					0.0						0.0	
Total Lost Time (s)					6.0						6.0	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)					54.0						54.0	
Actuated g/C Ratio					0.45						0.45	
v/c Ratio					0.31						0.35	
Control Delay					23.2						21.9	
Queue Delay					0.0						0.0	
Total Delay					23.2						21.9	
LOS					C						C	
Approach Delay					23.2						21.9	
Approach LOS					C						C	
Queue Length 50th (ft)					180						136	
Queue Length 95th (ft)					221						163	
Internal Link Dist (ft)		65			114			153			28	
Turn Bay Length (ft)												
Base Capacity (vph)					2288						2288	
Starvation Cap Reductn					0						0	
Spillback Cap Reductn					0						0	
Storage Cap Reductn					0						0	
Reduced v/c Ratio					0.31						0.35	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 27 (23%), Referenced to phase 4:SER, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.35	
Intersection Signal Delay: 22.5	Intersection LOS: C
Intersection Capacity Utilization 34.9%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4035: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & WB M-96 (Michigan Avenue)/11 Mile Rd (North)



Lane Group	NBL	NBR	SET	SER	NWL	NWT	Ø4
Lane Configurations							
Traffic Volume (vph)	104	0	0	0	0	727	
Future Volume (vph)	104	0	0	0	0	727	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.91	
Frt							
Flt Protected	0.950						
Satd. Flow (prot)	1719	0	0	0	0	5085	
Flt Permitted	0.950						
Satd. Flow (perm)	1719	0	0	0	0	5085	
Right Turn on Red	Yes	Yes		Yes			
Satd. Flow (RTOR)	393						
Link Speed (mph)	30		30			30	
Link Distance (ft)	271		337			233	
Travel Time (s)	6.2		7.7			5.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Heavy Vehicles (%)	5%	2%	2%	2%	2%	2%	
Adj. Flow (vph)	113	0	0	0	0	790	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	113	0	0	0	0	790	
Turn Type	Prot					NA	
Protected Phases	2!					Free!	4
Permitted Phases							
Minimum Split (s)	16.0						16.0
Total Split (s)	60.0						60.0
Total Split (%)	50.0%						50%
Yellow Time (s)	3.5						3.5
All-Red Time (s)	2.5						2.5
Lost Time Adjust (s)	0.0						
Total Lost Time (s)	6.0						
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)	54.0					120.0	
Actuated g/C Ratio	0.45					1.00	
v/c Ratio	0.11					0.16	
Control Delay	0.2					0.1	
Queue Delay	0.0					0.0	
Total Delay	0.2					0.1	
LOS	A					A	
Approach Delay	0.2					0.1	
Approach LOS	A					A	
Queue Length 50th (ft)	0					0	
Queue Length 95th (ft)	0					0	
Internal Link Dist (ft)	191		257			153	
Turn Bay Length (ft)							
Base Capacity (vph)	989					5085	
Starvation Cap Reductn	0					0	
Spillback Cap Reductn	0					0	
Storage Cap Reductn	0					0	

Lane Group	NBL	NBR	SET	SER	NWL	NWT	Ø4
Reduced v/c Ratio	0.11					0.16	

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 27 (23%), Referenced to phase 4:SER, Start of Green
Natural Cycle: 40
Control Type: Pretimed
Maximum v/c Ratio: 0.35
Intersection Signal Delay: 0.1 Intersection LOS: A
Intersection Capacity Utilization 30.7% ICU Level of Service A
Analysis Period (min) 15
! Phase conflict between lane groups.

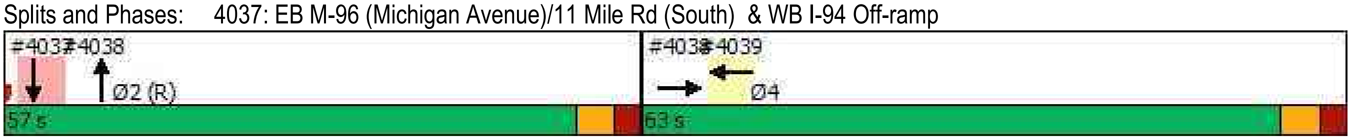
Splits and Phases: 4036: EB I-94 Off-ramp & WB M-96 (Michigan Avenue)/11 Mile Rd (North)

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø4
Lane Configurations							
Traffic Volume (vph)	0	633	0	0	99	0	
Future Volume (vph)	0	633	0	0	99	0	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	0.88	1.00	1.00	0.95	1.00	
Frt		0.850					
Flt Protected							
Satd. Flow (prot)	0	2707	0	0	3438	0	
Flt Permitted							
Satd. Flow (perm)	0	2707	0	0	3438	0	
Right Turn on Red		Yes				Yes	
Satd. Flow (RTOR)		1670					
Link Speed (mph)	30			30	30		
Link Distance (ft)	222			406	241		
Travel Time (s)	5.0			9.2	5.5		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Heavy Vehicles (%)	2%	5%	2%	2%	5%	2%	
Adj. Flow (vph)	0	688	0	0	108	0	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	688	0	0	108	0	
Turn Type		Free			NA		
Protected Phases					2		4
Permitted Phases		Free					
Minimum Split (s)					16.0		16.0
Total Split (s)					57.0		63.0
Total Split (%)					47.5%		53%
Yellow Time (s)					3.5		3.5
All-Red Time (s)					2.5		2.5
Lost Time Adjust (s)					0.0		
Total Lost Time (s)					6.0		
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)		120.0			51.0		
Actuated g/C Ratio		1.00			0.42		
v/c Ratio		0.25			0.07		
Control Delay		0.8			20.7		
Queue Delay		0.0			0.0		
Total Delay		0.8			20.7		
LOS		A			C		
Approach Delay	0.8				20.7		
Approach LOS	A				C		
Queue Length 50th (ft)		11			25		
Queue Length 95th (ft)		15			44		
Internal Link Dist (ft)	142			326	161		
Turn Bay Length (ft)							
Base Capacity (vph)		2707			1461		
Starvation Cap Reductn		0			0		
Spillback Cap Reductn		0			0		
Storage Cap Reductn		0			0		

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø4
Reduced v/c Ratio		0.25			0.07		

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 96 (80%), Referenced to phase 2:SBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.42	
Intersection Signal Delay: 3.5	Intersection LOS: A
Intersection Capacity Utilization 13.3%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4037: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & WB I-94 Off-ramp

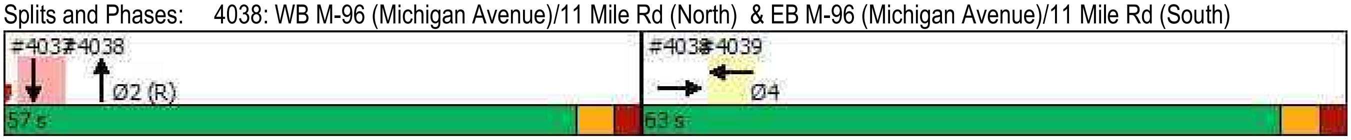


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑						↑↑↑				
Traffic Volume (vph)	0	633	0	0	0	0	0	752	0	0	0	0
Future Volume (vph)	0	633	0	0	0	0	0	752	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	1.00	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	3438	0	0	0	0	0	4940	0	0	0	0
Flt Permitted												
Satd. Flow (perm)	0	3438	0	0	0	0	0	4940	0	0	0	0
Right Turn on Red	Yes		Yes			Yes			Yes			Yes
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		190			222			207			131	
Travel Time (s)		4.3			5.0			4.7			3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	5%	2%	2%	2%	2%	2%	5%	2%	2%	2%	2%
Adj. Flow (vph)	0	688	0	0	0	0	0	817	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	688	0	0	0	0	0	817	0	0	0	0
Turn Type		NA						NA				
Protected Phases		4						2				
Permitted Phases												
Minimum Split (s)		16.0						16.0				
Total Split (s)		63.0						57.0				
Total Split (%)		52.5%						47.5%				
Yellow Time (s)		3.5						3.5				
All-Red Time (s)		2.5						2.5				
Lost Time Adjust (s)		0.0						0.0				
Total Lost Time (s)		6.0						6.0				
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		57.0						51.0				
Actuated g/C Ratio		0.48						0.42				
v/c Ratio		0.42						0.39				
Control Delay		16.8						43.0				
Queue Delay		0.0						0.0				
Total Delay		16.8						43.0				
LOS		B						D				
Approach Delay		16.8						43.0				
Approach LOS		B						D				
Queue Length 50th (ft)		112						239				
Queue Length 95th (ft)		137						284				
Internal Link Dist (ft)		110			142			127			51	
Turn Bay Length (ft)												
Base Capacity (vph)		1633						2099				
Starvation Cap Reductn		0						0				
Spillback Cap Reductn		0						0				
Storage Cap Reductn		0						0				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio		0.42						0.39				

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 96 (80%), Referenced to phase 2:SBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.42	
Intersection Signal Delay: 31.0	Intersection LOS: C
Intersection Capacity Utilization 42.0%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4038: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & EB M-96 (Michigan Avenue)/11 Mile Rd (South)

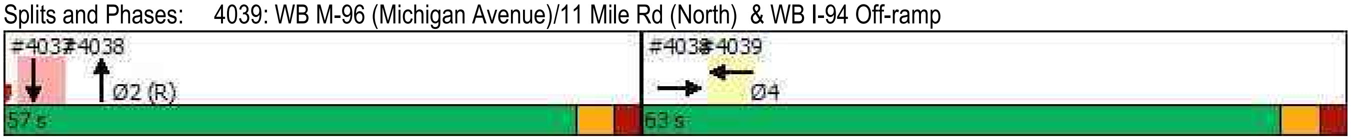


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø2
Lane Configurations							
Traffic Volume (vph)	0	0	0	151	752	0	
Future Volume (vph)	0	0	0	151	752	0	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.94	1.00	
Frt							
Flt Protected					0.950		
Satd. Flow (prot)	0	0	0	1810	4848	0	
Flt Permitted					0.950		
Satd. Flow (perm)	0	0	0	1810	4848	0	
Right Turn on Red		Yes			Yes	Yes	
Satd. Flow (RTOR)					2497		
Link Speed (mph)	30			30	30		
Link Distance (ft)	415			317	131		
Travel Time (s)	9.4			7.2	3.0		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Heavy Vehicles (%)	2%	2%	2%	5%	5%	2%	
Adj. Flow (vph)	0	0	0	164	817	0	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	0	164	817	0	
Turn Type				NA	Perm		
Protected Phases				4!			2
Permitted Phases					Free!		
Minimum Split (s)				16.0			16.0
Total Split (s)				63.0			57.0
Total Split (%)				52.5%			48%
Yellow Time (s)				3.5			3.5
All-Red Time (s)				2.5			2.5
Lost Time Adjust (s)				0.0			
Total Lost Time (s)				6.0			
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)				57.0	120.0		
Actuated g/C Ratio				0.48	1.00		
v/c Ratio				0.19	0.17		
Control Delay				18.9	0.3		
Queue Delay				0.0	0.0		
Total Delay				18.9	0.3		
LOS				B	A		
Approach Delay				18.9	0.3		
Approach LOS				B	A		
Queue Length 50th (ft)				71	2		
Queue Length 95th (ft)				116	0		
Internal Link Dist (ft)	335			237	51		
Turn Bay Length (ft)							
Base Capacity (vph)				859	4848		
Starvation Cap Reductn				0	0		
Spillback Cap Reductn				0	0		
Storage Cap Reductn				0	0		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø2
Reduced v/c Ratio				0.19	0.17		

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 96 (80%), Referenced to phase 2:SBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.42	
Intersection Signal Delay: 3.4	Intersection LOS: A
Intersection Capacity Utilization 57.3%	ICU Level of Service B
Analysis Period (min) 15	
! Phase conflict between lane groups.	

Splits and Phases: 4039: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & WB I-94 Off-ramp

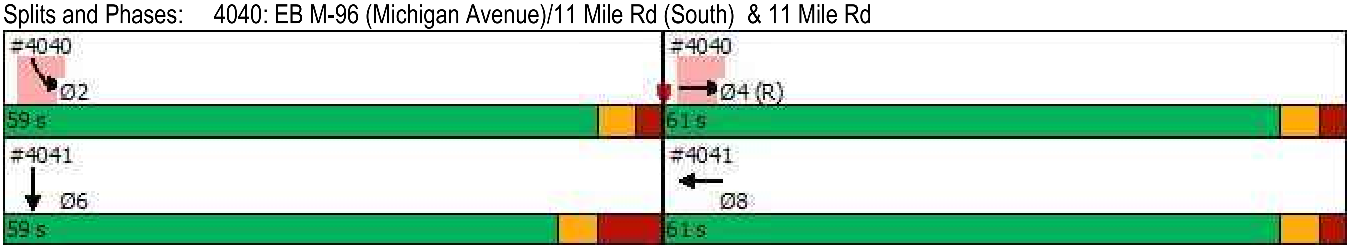


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø6	Ø8
Lane Configurations								
Traffic Volume (vph)	0	571	0	0	207	0		
Future Volume (vph)	0	571	0	0	207	0		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.97	1.00		
Frt								
Flt Protected					0.950			
Satd. Flow (prot)	0	3539	0	0	3335	0		
Flt Permitted					0.950			
Satd. Flow (perm)	0	3539	0	0	3335	0		
Right Turn on Red				Yes	Yes	Yes		
Satd. Flow (RTOR)					358			
Link Speed (mph)		55	55		45			
Link Distance (ft)		212	597		92			
Travel Time (s)		2.6	7.4		1.4			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Heavy Vehicles (%)	2%	2%	2%	2%	5%	2%		
Adj. Flow (vph)	0	621	0	0	225	0		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	0	621	0	0	225	0		
Turn Type		NA			Prot			
Protected Phases		4			2		6	8
Permitted Phases								
Minimum Split (s)		16.0			19.5		19.5	16.0
Total Split (s)		61.0			59.0		59.0	61.0
Total Split (%)		50.8%			49.2%		49%	51%
Yellow Time (s)		3.5			3.5		3.5	3.5
All-Red Time (s)		2.5			2.5		6.0	2.5
Lost Time Adjust (s)		0.0			0.0			
Total Lost Time (s)		6.0			6.0			
Lead/Lag								
Lead-Lag Optimize?								
Act Effct Green (s)		55.0			53.0			
Actuated g/C Ratio		0.46			0.44			
v/c Ratio		0.38			0.13			
Control Delay		22.2			0.2			
Queue Delay		0.0			0.0			
Total Delay		22.2			0.2			
LOS		C			A			
Approach Delay		22.2			0.2			
Approach LOS		C			A			
Queue Length 50th (ft)		162			0			
Queue Length 95th (ft)		209			0			
Internal Link Dist (ft)		132	517		12			
Turn Bay Length (ft)								
Base Capacity (vph)		1622			1672			
Starvation Cap Reductn		0			0			
Spillback Cap Reductn		0			0			
Storage Cap Reductn		0			0			

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø6	Ø8
Reduced v/c Ratio		0.38			0.13			

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 32 (27%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.42	
Intersection Signal Delay: 16.4	Intersection LOS: B
Intersection Capacity Utilization 38.5%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4040: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & 11 Mile Rd



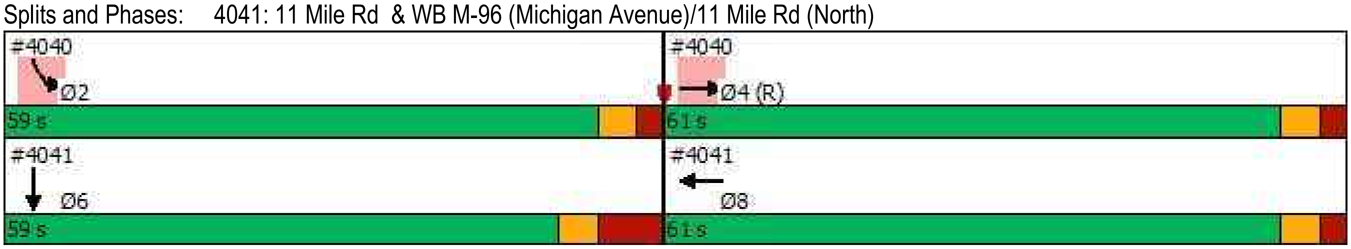
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	624	343	0	0	0	0	207	56
Future Volume (vph)	0	0	0	0	624	343	0	0	0	0	207	56
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		250	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Frt						0.850					0.968	
Flt Protected												
Satd. Flow (prot)	0	0	0	0	3539	1538	0	0	0	0	3348	0
Flt Permitted												
Satd. Flow (perm)	0	0	0	0	3539	1538	0	0	0	0	3348	0
Right Turn on Red			Yes	Yes		Yes			Yes			Yes
Satd. Flow (RTOR)						345					35	
Link Speed (mph)		55			55			45			55	
Link Distance (ft)		210			598			92			259	
Travel Time (s)		2.6			7.4			1.4			3.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	5%	2%	2%	2%	2%	5%	2%
Adj. Flow (vph)	0	0	0	0	678	373	0	0	0	0	225	61
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	678	373	0	0	0	0	286	0
Turn Type					NA	custom					NA	
Protected Phases					8	Free					6	
Permitted Phases												
Minimum Split (s)					16.0						19.5	
Total Split (s)					61.0						59.0	
Total Split (%)					50.8%						49.2%	
Yellow Time (s)					3.5						3.5	
All-Red Time (s)					2.5						6.0	
Lost Time Adjust (s)					0.0						0.0	
Total Lost Time (s)					6.0						9.5	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)					55.0	120.0					49.5	
Actuated g/C Ratio					0.46	1.00					0.41	
v/c Ratio					0.42	0.24					0.20	
Control Delay					31.7	1.7					30.6	
Queue Delay					0.0	0.0					0.0	
Total Delay					31.7	1.7					30.6	
LOS					C	A					C	
Approach Delay					21.0						30.6	
Approach LOS					C						C	
Queue Length 50th (ft)					251	0					85	
Queue Length 95th (ft)					305	0					126	
Internal Link Dist (ft)		130			518			12			179	
Turn Bay Length (ft)						250						
Base Capacity (vph)					1622	1538					1401	

Lane Group	Ø2	Ø4
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Ideal Flow (vphpl)		
Storage Length (ft)		
Storage Lanes		
Taper Length (ft)		
Lane Util. Factor		
Frt		
Flt Protected		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Peak Hour Factor		
Heavy Vehicles (%)		
Adj. Flow (vph)		
Shared Lane Traffic (%)		
Lane Group Flow (vph)		
Turn Type		
Protected Phases	2	4
Permitted Phases		
Minimum Split (s)	19.5	16.0
Total Split (s)	59.0	61.0
Total Split (%)	49%	51%
Yellow Time (s)	3.5	3.5
All-Red Time (s)	2.5	2.5
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag		
Lead-Lag Optimize?		
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)		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn					0	0					0	
Spillback Cap Reductn					0	0					0	
Storage Cap Reductn					0	0					0	
Reduced v/c Ratio					0.42	0.24					0.20	

Intersection Summary		
Area Type: Other		
Cycle Length: 120		
Actuated Cycle Length: 120		
Offset: 32 (27%), Referenced to phase 4:EBT, Start of Green		
Natural Cycle: 40		
Control Type: Pretimed		
Maximum v/c Ratio: 0.42		
Intersection Signal Delay: 23.1	Intersection LOS: C	
Intersection Capacity Utilization 38.5%	ICU Level of Service A	
Analysis Period (min) 15		

Splits and Phases: 4041: 11 Mile Rd & WB M-96 (Michigan Avenue)/11 Mile Rd (North)



Lane Group	Ø2	Ø4
Starvation Cap Reductn		
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		

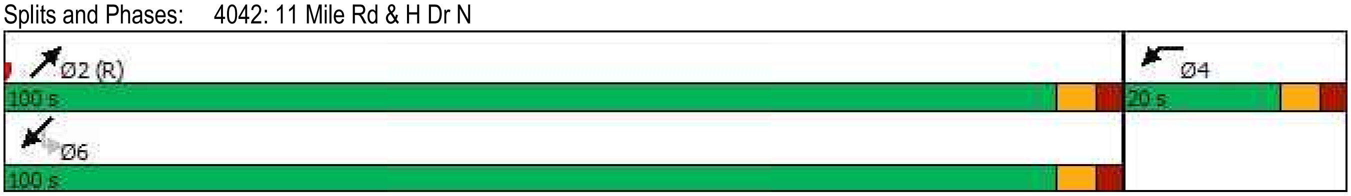
Intersection Summary

Lane Group	WBL	WBR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	0	0	343	0	0	263
Future Volume (vph)	0	0	343	0	0	263
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	1810	0	1863	0	0	1863
Flt Permitted						
Satd. Flow (perm)	1810	0	1863	0	0	1863
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)						
Link Speed (mph)	25		55			55
Link Distance (ft)	1262		1787			680
Travel Time (s)	34.4		22.2			8.4
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	2%	2%	5%	2%	2%
Adj. Flow (vph)	0	0	373	0	0	286
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	373	0	0	286
Turn Type	Prot		NA			NA
Protected Phases	4		2			6
Permitted Phases					6	
Minimum Split (s)	13.0		16.0		13.0	13.0
Total Split (s)	20.0		100.0		100.0	100.0
Total Split (%)	16.7%		83.3%		83.3%	83.3%
Yellow Time (s)	3.5		3.5		3.5	3.5
All-Red Time (s)	2.5		2.5		2.5	2.5
Lost Time Adjust (s)	0.0		0.0			0.0
Total Lost Time (s)	6.0		6.0			6.0
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)			94.0			94.0
Actuated g/C Ratio			0.78			0.78
v/c Ratio			0.26			0.20
Control Delay			1.1			3.7
Queue Delay			0.0			0.0
Total Delay			1.1			3.7
LOS			A			A
Approach Delay			1.1			3.7
Approach LOS			A			A
Queue Length 50th (ft)			12			47
Queue Length 95th (ft)			16			69
Internal Link Dist (ft)	1182		1707			600
Turn Bay Length (ft)						
Base Capacity (vph)			1459			1459
Starvation Cap Reductn			0			0
Spillback Cap Reductn			0			0
Storage Cap Reductn			0			0

Lane Group	WBL	WBR	NET	NER	SWL	SWT
Reduced v/c Ratio			0.26			0.20

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NET, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.26	
Intersection Signal Delay: 2.2	Intersection LOS: A
Intersection Capacity Utilization 23.1%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4042: 11 Mile Rd & H Dr N



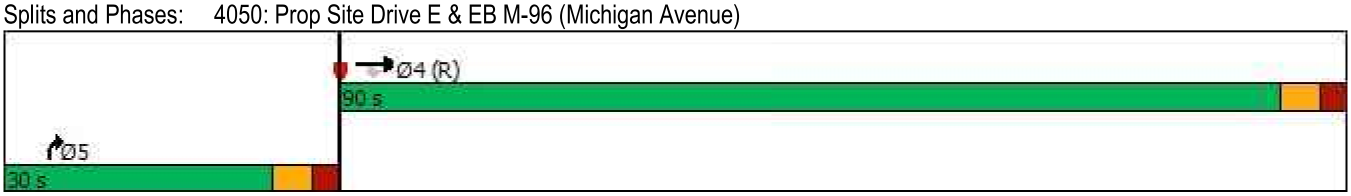
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	rr				rr
Traffic Volume (vph)	1072	335	0	0	0	335
Future Volume (vph)	1072	335	0	0	0	335
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		500	600		0	0
Storage Lanes		2	0		0	2
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	0.88	1.00	1.00	1.00	0.88
Frt		0.850				0.850
Flt Protected						
Satd. Flow (prot)	3539	2787	0	0	0	2787
Flt Permitted						
Satd. Flow (perm)	3539	2787	0	0	0	2787
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		364				213
Link Speed (mph)	55			55	25	
Link Distance (ft)	669			659	1093	
Travel Time (s)	8.3			8.2	29.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1165	364	0	0	0	364
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1165	364	0	0	0	364
Turn Type	NA	Perm				Prot
Protected Phases	4					5
Permitted Phases		4				
Detector Phase	4	4				5
Switch Phase						
Minimum Initial (s)	10.0	10.0				10.0
Minimum Split (s)	16.0	16.0				16.0
Total Split (s)	90.0	90.0				30.0
Total Split (%)	75.0%	75.0%				25.0%
Yellow Time (s)	3.5	3.5				3.5
All-Red Time (s)	2.5	2.5				2.5
Lost Time Adjust (s)	0.0	0.0				0.0
Total Lost Time (s)	6.0	6.0				6.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max	C-Max				None
Act Effct Green (s)	94.8	94.8				13.2
Actuated g/C Ratio	0.79	0.79				0.11
v/c Ratio	0.42	0.16				0.74
Control Delay	6.3	0.4				30.1
Queue Delay	0.2	0.0				0.0
Total Delay	6.5	0.4				30.1
LOS	A	A				C
Approach Delay	5.1				30.1	
Approach LOS	A				C	
Queue Length 50th (ft)	165	1				64
Queue Length 95th (ft)	219	5				116

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Internal Link Dist (ft)	589			579	1013	
Turn Bay Length (ft)		500				
Base Capacity (vph)	2797	2278				727
Starvation Cap Reductn	731	0				0
Spillback Cap Reductn	0	0				0
Storage Cap Reductn	0	0				0
Reduced v/c Ratio	0.56	0.16				0.50

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 52 (43%), Referenced to phase 4:EBT, Start of Green
Natural Cycle: 40
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.74
Intersection Signal Delay: 9.9 Intersection LOS: A
Intersection Capacity Utilization 51.4% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 4050: Prop Site Drive E & EB M-96 (Michigan Avenue)



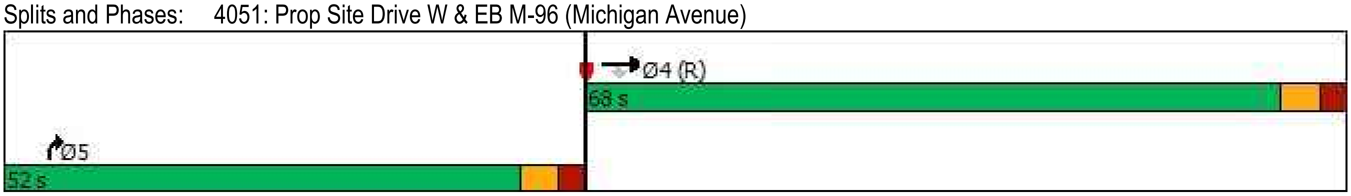
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	550	602	0	0	0	602
Future Volume (vph)	550	602	0	0	0	602
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		500	600		0	0
Storage Lanes		2	0		0	2
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	0.88	1.00	1.00	1.00	0.88
Frt		0.850				0.850
Flt Protected						
Satd. Flow (prot)	3539	2787	0	0	0	2787
Flt Permitted						
Satd. Flow (perm)	3539	2787	0	0	0	2787
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		654				424
Link Speed (mph)	55			55	25	
Link Distance (ft)	608			627	1293	
Travel Time (s)	7.5			7.8	35.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	598	654	0	0	0	654
Shared Lane Traffic (%)						
Lane Group Flow (vph)	598	654	0	0	0	654
Turn Type	NA	Perm				Prot
Protected Phases	4					5
Permitted Phases		4				
Detector Phase	4	4				5
Switch Phase						
Minimum Initial (s)	10.0	10.0				10.0
Minimum Split (s)	16.0	16.0				16.0
Total Split (s)	68.0	68.0				52.0
Total Split (%)	56.7%	56.7%				43.3%
Yellow Time (s)	3.5	3.5				3.5
All-Red Time (s)	2.5	2.5				2.5
Lost Time Adjust (s)	0.0	0.0				0.0
Total Lost Time (s)	6.0	6.0				6.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max	C-Max				None
Act Effct Green (s)	90.0	90.0				18.0
Actuated g/C Ratio	0.75	0.75				0.15
v/c Ratio	0.23	0.29				0.84
Control Delay	3.4	0.6				27.0
Queue Delay	0.0	0.0				0.0
Total Delay	3.4	0.6				27.0
LOS	A	A				C
Approach Delay	1.9				27.0	
Approach LOS	A				C	
Queue Length 50th (ft)	0	2				101
Queue Length 95th (ft)	167	21				164

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Internal Link Dist (ft)	528			547	1213	
Turn Bay Length (ft)		500				
Base Capacity (vph)	2655	2254				1329
Starvation Cap Reductn	0	0				0
Spillback Cap Reductn	0	0				0
Storage Cap Reductn	0	0				0
Reduced v/c Ratio	0.23	0.29				0.49

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 32 (27%), Referenced to phase 4:EBT, Start of Green
Natural Cycle: 40
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.84
Intersection Signal Delay: 10.6 Intersection LOS: B
Intersection Capacity Utilization 46.3% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 4051: Prop Site Drive W & EB M-96 (Michigan Avenue)

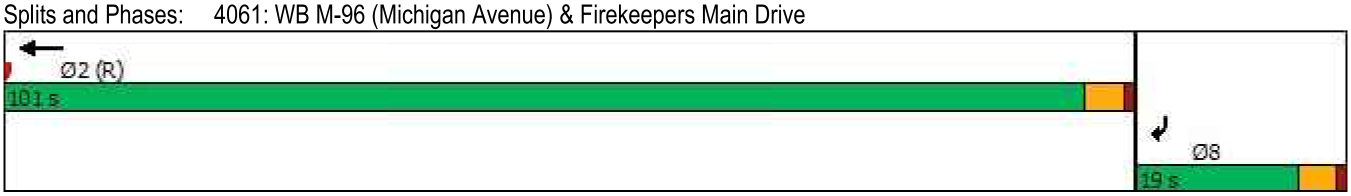


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	878	168	0	134
Future Volume (vph)	0	0	878	168	0	134
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			0	0	0
Storage Lanes	0			0	0	2
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	0.88
Frt			0.977			0.850
Flt Protected						
Satd. Flow (prot)	0	0	3468	0	0	2787
Flt Permitted						
Satd. Flow (perm)	0	0	3468	0	0	2787
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			65			408
Link Speed (mph)		55	55		25	
Link Distance (ft)		574	509		701	
Travel Time (s)		7.1	6.3		19.1	
Peak Hour Factor	0.92	0.92	0.92	0.95	0.67	0.92
Heavy Vehicles (%)	2%	2%	2%	0%	0%	2%
Adj. Flow (vph)	0	0	954	177	0	146
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1131	0	0	146
Turn Type			NA			Prot
Protected Phases			2			8
Permitted Phases						
Detector Phase			2			8
Switch Phase						
Minimum Initial (s)			10.0			10.0
Minimum Split (s)			22.5			14.5
Total Split (s)			101.0			19.0
Total Split (%)			84.2%			15.8%
Yellow Time (s)			3.5			3.5
All-Red Time (s)			1.0			1.0
Lost Time Adjust (s)			0.0			0.0
Total Lost Time (s)			4.5			4.5
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode			C-Max			None
Act Effct Green (s)			101.0			10.0
Actuated g/C Ratio			0.84			0.08
v/c Ratio			0.39			0.24
Control Delay			2.5			0.9
Queue Delay			0.0			0.0
Total Delay			2.5			0.9
LOS			A			A
Approach Delay			2.5		0.9	
Approach LOS			A		A	
Queue Length 50th (ft)			73			0

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Queue Length 95th (ft)			91			0
Internal Link Dist (ft)		494	429		621	
Turn Bay Length (ft)						
Base Capacity (vph)			2929			695
Starvation Cap Reductn			0			0
Spillback Cap Reductn			0			0
Storage Cap Reductn			0			0
Reduced v/c Ratio			0.39			0.21

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:WBT, Start of Green	
Natural Cycle: 40	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.39	
Intersection Signal Delay: 2.3	Intersection LOS: A
Intersection Capacity Utilization 45.5%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4061: WB M-96 (Michigan Avenue) & Firekeepers Main Drive



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	2622	495	0	460
Future Volume (vph)	0	0	2622	495	0	460
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			250	0	200
Storage Lanes	0			0	0	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.91	1.00	1.00	0.88
Frt				0.850		0.850
Flt Protected						
Satd. Flow (prot)	0	0	5085	1583	0	2787
Flt Permitted						
Satd. Flow (perm)	0	0	5085	1583	0	2787
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				170		7
Link Speed (mph)		45	45		45	
Link Distance (ft)		534	660		516	
Travel Time (s)		8.1	10.0		7.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	2850	538	0	500
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	2850	538	0	500
Turn Type			NA	custom		Prot
Protected Phases			8	Free		1
Permitted Phases						
Minimum Split (s)			16.0			13.0
Total Split (s)			90.0			30.0
Total Split (%)			75.0%			25.0%
Yellow Time (s)			3.5			3.5
All-Red Time (s)			2.5			2.5
Lost Time Adjust (s)			0.0			0.0
Total Lost Time (s)			6.0			6.0
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)			84.0	120.0		24.0
Actuated g/C Ratio			0.70	1.00		0.20
v/c Ratio			0.80	0.34		0.89
Control Delay			3.4	7.9		65.0
Queue Delay			0.1	0.0		0.0
Total Delay			3.5	7.9		65.0
LOS			A	A		E
Approach Delay			4.2		65.0	
Approach LOS			A		E	
Queue Length 50th (ft)			86	157		213
Queue Length 95th (ft)			m89	m158		#318
Internal Link Dist (ft)		454	580		436	
Turn Bay Length (ft)				250		200
Base Capacity (vph)			3559	1583		563
Starvation Cap Reductn			88	0		0

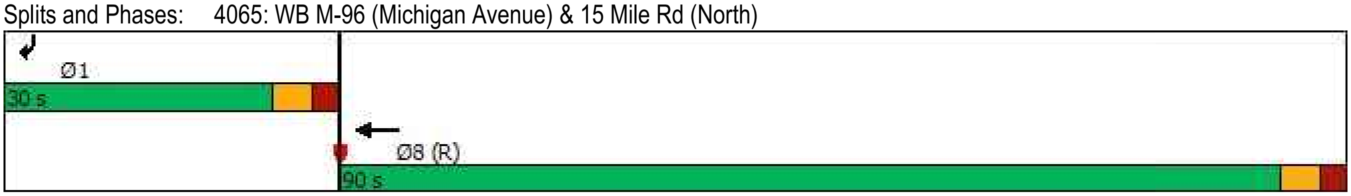
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Spillback Cap Reductn			0	0		0
Storage Cap Reductn			0	0		0
Reduced v/c Ratio			0.82	0.34		0.89

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 8:WBT, Start of Green	
Natural Cycle: 65	
Control Type: Pretimed	
Maximum v/c Ratio: 0.89	
Intersection Signal Delay: 12.0	Intersection LOS: B
Intersection Capacity Utilization 76.8%	ICU Level of Service D
Analysis Period (min) 15	

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4065: WB M-96 (Michigan Avenue) & 15 Mile Rd (North)

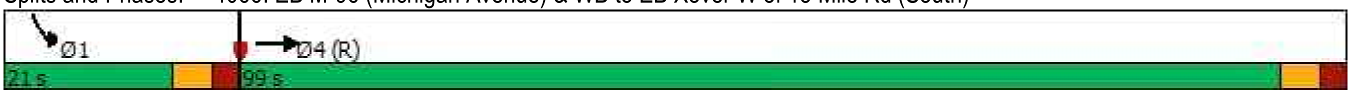


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	2596	0	0	119	0
Future Volume (vph)	0	2596	0	0	119	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.91	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	5085	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	5085	0	0	1770	0
Right Turn on Red				Yes	Yes	Yes
Satd. Flow (RTOR)					7	
Link Speed (mph)		45	45		25	
Link Distance (ft)		262	1016		123	
Travel Time (s)		4.0	15.4		3.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.90	0.92
Adj. Flow (vph)	0	2822	0	0	132	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	2822	0	0	132	0
Turn Type		NA			Prot	
Protected Phases		4			1	
Permitted Phases						
Minimum Split (s)		16.0			16.0	
Total Split (s)		99.0			21.0	
Total Split (%)		82.5%			17.5%	
Yellow Time (s)		3.5			3.5	
All-Red Time (s)		2.5			2.5	
Lost Time Adjust (s)		0.0			0.0	
Total Lost Time (s)		6.0			6.0	
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)		93.0			15.0	
Actuated g/C Ratio		0.78			0.12	
v/c Ratio		0.72			0.58	
Control Delay		3.8			49.2	
Queue Delay		0.0			0.0	
Total Delay		3.8			49.2	
LOS		A			D	
Approach Delay		3.8			49.2	
Approach LOS		A			D	
Queue Length 50th (ft)		133			91	
Queue Length 95th (ft)		144			m135	
Internal Link Dist (ft)		182	936		43	
Turn Bay Length (ft)						
Base Capacity (vph)		3940			227	
Starvation Cap Reductn		0			0	
Spillback Cap Reductn		0			0	
Storage Cap Reductn		0			0	
Reduced v/c Ratio		0.72			0.58	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 116 (97%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 60	
Control Type: Pretimed	
Maximum v/c Ratio: 0.72	
Intersection Signal Delay: 5.8	Intersection LOS: A
Intersection Capacity Utilization 108.7%	ICU Level of Service G
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4066: EB M-96 (Michigan Avenue) & WB to EB Xover W of 15 Mile Rd (South)

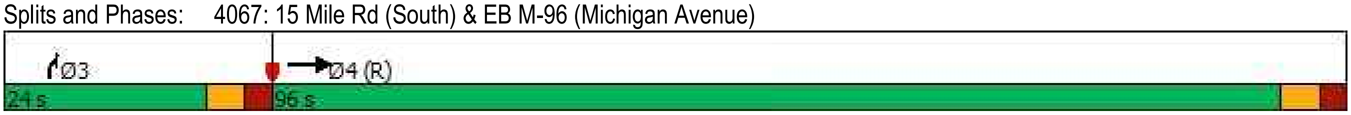


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	2454	261	0	0	0	262
Future Volume (vph)	2454	261	0	0	0	262
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		50	0		0	250
Storage Lanes		0	0		0	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	1.00	1.00	1.00	0.88
Frt	0.986					0.850
Flt Protected						
Satd. Flow (prot)	5014	0	0	0	0	2814
Flt Permitted						
Satd. Flow (perm)	5014	0	0	0	0	2814
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	43					14
Link Speed (mph)	45			45	45	
Link Distance (ft)	1016			704	1375	
Travel Time (s)	15.4			10.7	20.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.88	0.88
Heavy Vehicles (%)	2%	2%	2%	2%	1%	1%
Adj. Flow (vph)	2667	284	0	0	0	298
Shared Lane Traffic (%)						
Lane Group Flow (vph)	2951	0	0	0	0	298
Turn Type	NA					Prot
Protected Phases	4					3
Permitted Phases						
Minimum Split (s)	17.0					16.0
Total Split (s)	96.0					24.0
Total Split (%)	80.0%					20.0%
Yellow Time (s)	3.5					3.5
All-Red Time (s)	2.5					2.5
Lost Time Adjust (s)	0.0					0.0
Total Lost Time (s)	6.0					6.0
Lead/Lag	Lag					Lead
Lead-Lag Optimize?	Yes					Yes
Act Effct Green (s)	90.0					18.0
Actuated g/C Ratio	0.75					0.15
v/c Ratio	0.78					0.69
Control Delay	3.0					55.0
Queue Delay	0.0					0.0
Total Delay	3.0					55.0
LOS	A					E
Approach Delay	3.0				55.0	
Approach LOS	A				E	
Queue Length 50th (ft)	79					119
Queue Length 95th (ft)	84					169
Internal Link Dist (ft)	936			624	1295	
Turn Bay Length (ft)						250
Base Capacity (vph)	3771					434

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Starvation Cap Reductn	2					0
Spillback Cap Reductn	0					0
Storage Cap Reductn	0					0
Reduced v/c Ratio	0.78					0.69

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 4 (3%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 60	
Control Type: Pretimed	
Maximum v/c Ratio: 0.78	
Intersection Signal Delay: 7.8	Intersection LOS: A
Intersection Capacity Utilization 72.4%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 4067: 15 Mile Rd (South) & EB M-96 (Michigan Avenue)



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	2566	151	0
Future Volume (vph)	0	0	0	2566	151	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	5085	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	5085	1770	0
Right Turn on Red		Yes			Yes	Yes
Satd. Flow (RTOR)					6	
Link Speed (mph)	45			45	25	
Link Distance (ft)	687			275	111	
Travel Time (s)	10.4			4.2	3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	2789	164	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	2789	164	0
Turn Type				NA	Prot	
Protected Phases				8	2	
Permitted Phases						
Minimum Split (s)				16.0	13.0	
Total Split (s)				96.0	24.0	
Total Split (%)				80.0%	20.0%	
Yellow Time (s)				3.5	3.5	
All-Red Time (s)				2.5	2.5	
Lost Time Adjust (s)				0.0	0.0	
Total Lost Time (s)				6.0	6.0	
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)				90.0	18.0	
Actuated g/C Ratio				0.75	0.15	
v/c Ratio				0.73	0.61	
Control Delay				8.9	47.2	
Queue Delay				0.6	0.0	
Total Delay				9.4	47.2	
LOS				A	D	
Approach Delay				9.4	47.2	
Approach LOS				A	D	
Queue Length 50th (ft)				413	123	
Queue Length 95th (ft)				487	m165	
Internal Link Dist (ft)	607			195	31	
Turn Bay Length (ft)						
Base Capacity (vph)				3813	270	
Starvation Cap Reductn				548	0	
Spillback Cap Reductn				0	0	
Storage Cap Reductn				0	0	
Reduced v/c Ratio				0.85	0.61	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 112 (93%), Referenced to phase 8:WBT, Start of Green

Natural Cycle: 55

Control Type: Pretimed

Maximum v/c Ratio: 0.73

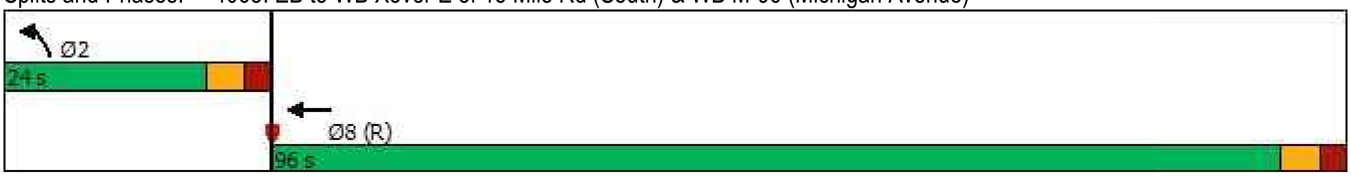
Intersection Signal Delay: 11.5 Intersection LOS: B

Intersection Capacity Utilization 97.6% ICU Level of Service F

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4068: EB to WB Xover E of 15 Mile Rd (South) & WB M-96 (Michigan Avenue)



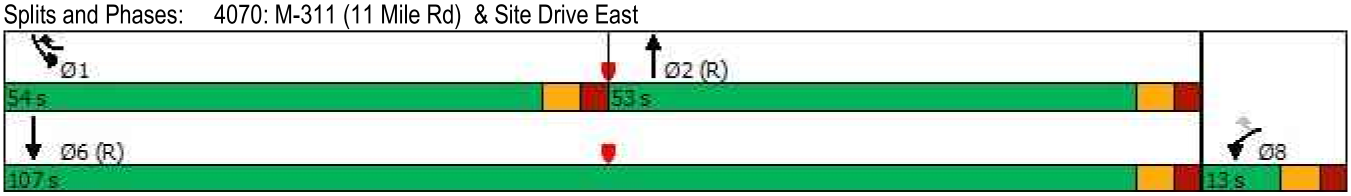
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	102	0	0	129
Future Volume (vph)	0	0	102	0	0	129
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	500		0	400	
Storage Lanes	1	1		0	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.88	0.95	0.95	1.00	0.95
Frt						
Flt Protected						
Satd. Flow (prot)	1863	3278	3539	0	1863	3539
Flt Permitted						
Satd. Flow (perm)	1863	3278	3539	0	1863	3539
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)						
Link Speed (mph)	25		55			55
Link Distance (ft)	750		940			974
Travel Time (s)	20.5		11.7			12.1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	111	0	0	140
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	111	0	0	140
Turn Type	Prot	pm+ov	NA		Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8				
Detector Phase	8	1	2		1	6
Switch Phase						
Minimum Initial (s)	7.0	7.0	10.0		7.0	10.0
Minimum Split (s)	13.0	13.0	16.0		13.0	16.0
Total Split (s)	13.0	54.0	53.0		54.0	107.0
Total Split (%)	10.8%	45.0%	44.2%		45.0%	89.2%
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5
All-Red Time (s)	2.5	2.5	2.5		2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0		6.0	6.0
Lead/Lag		Lead	Lag		Lead	
Lead-Lag Optimize?						
Recall Mode	None	None	C-Max		None	C-Max
Act Effct Green (s)			120.0			120.0
Actuated g/C Ratio			1.00			1.00
v/c Ratio			0.03			0.04
Control Delay			0.0			0.0
Queue Delay			0.0			0.0
Total Delay			0.0			0.0
LOS			A			A
Approach Delay						
Approach LOS						
Queue Length 50th (ft)			0			0
Queue Length 95th (ft)			0			0

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Internal Link Dist (ft)	670		860			894
Turn Bay Length (ft)						
Base Capacity (vph)			3539			3539
Starvation Cap Reductn			0			0
Spillback Cap Reductn			0			0
Storage Cap Reductn			0			0
Reduced v/c Ratio			0.03			0.04

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 8 (7%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 45
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.04
Intersection Signal Delay: 0.0 Intersection LOS: A
Intersection Capacity Utilization 13.3% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 4070: M-311 (11 Mile Rd) & Site Drive East

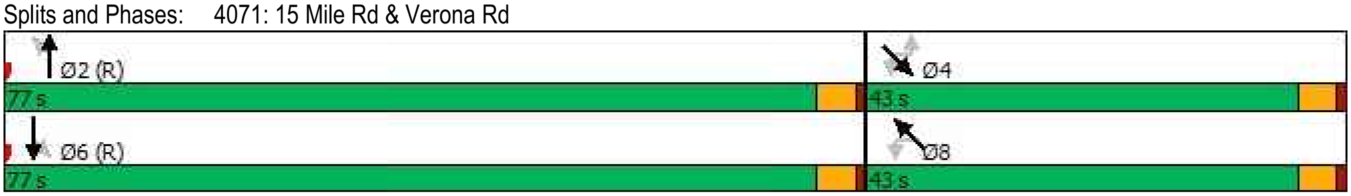


Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	453	13	13	5	9	4	0	87	433	6	118	14
Future Volume (vph)	453	13	13	5	9	4	0	87	433	6	118	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		70	0		0
Storage Lanes	0		0	0		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
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
Frt		0.996			0.968				0.850		0.986	
Flt Protected		0.955			0.987						0.998	
Satd. Flow (prot)	0	1789	0	0	1715	0	0	1845	1392	0	1851	0
Flt Permitted		0.716			0.891						0.991	
Satd. Flow (perm)	0	1342	0	0	1548	0	0	1845	1392	0	1838	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2			7				487		5	
Link Speed (mph)		45			55			55			55	
Link Distance (ft)		682			426			745			951	
Travel Time (s)		10.3			5.3			9.2			11.8	
Peak Hour Factor	0.80	0.80	0.80	0.60	0.60	0.60	0.89	0.89	0.89	0.86	0.86	0.86
Heavy Vehicles (%)	1%	1%	1%	0%	0%	25%	0%	3%	16%	1%	1%	1%
Adj. Flow (vph)	566	16	16	8	15	7	0	98	487	7	137	16
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	598	0	0	30	0	0	98	487	0	160	0
Turn Type	Perm	NA		Perm	NA			NA	Perm	Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4		4	8		
Minimum Split (s)	22.5	22.5		22.5	22.5		22.5	22.5	22.5	22.5	22.5	
Total Split (s)	77.0	77.0		77.0	77.0		43.0	43.0	43.0	43.0	43.0	
Total Split (%)	64.2%	64.2%		64.2%	64.2%		35.8%	35.8%	35.8%	35.8%	35.8%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0	0.0		0.0	
Total Lost Time (s)		4.5			4.5			4.5	4.5		4.5	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		72.5			72.5			38.5	38.5		38.5	
Actuated g/C Ratio		0.60			0.60			0.32	0.32		0.32	
v/c Ratio		0.74			0.03			0.17	0.63		0.27	
Control Delay		23.8			8.0			30.2	6.7		30.8	
Queue Delay		0.0			0.0			0.0	0.0		0.0	
Total Delay		23.8			8.0			30.2	6.7		30.8	
LOS		C			A			C	A		C	
Approach Delay		23.8			8.0			10.6			30.8	
Approach LOS		C			A			B			C	
Queue Length 50th (ft)		310			7			54	0		89	
Queue Length 95th (ft)		367			12			96	80		139	
Internal Link Dist (ft)		602			346			665			871	
Turn Bay Length (ft)									70			
Base Capacity (vph)		811			938			591	777		593	

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
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		0.74			0.03			0.17	0.63		0.27	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 60	
Control Type: Pretimed	
Maximum v/c Ratio: 0.74	
Intersection Signal Delay: 18.7	Intersection LOS: B
Intersection Capacity Utilization 54.7%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4071: 15 Mile Rd & Verona Rd



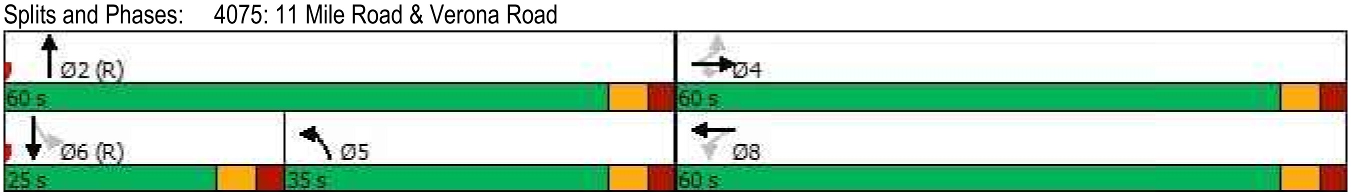
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	518	95	17	537	19	93	68	13	10	82	8
Future Volume (vph)	11	518	95	17	537	19	93	68	13	10	82	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	190		70	190		0	140		0	215		0
Storage Lanes	1		1	1		0	2		0	1		0
Taper Length (ft)	115			140			200			165		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.995			0.976			0.987	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	1900	1468	1805	1887	0	3072	1854	0	1687	1753	0
Flt Permitted	0.185			0.170			0.950			0.697		
Satd. Flow (perm)	352	1900	1468	323	1887	0	3072	1854	0	1238	1753	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			82		2			10			3	
Link Speed (mph)		55			55			45			55	
Link Distance (ft)		519			1585			1015			821	
Travel Time (s)		6.4			19.6			15.4			10.2	
Peak Hour Factor	0.79	0.79	0.79	0.87	0.87	0.87	0.87	0.87	0.87	0.66	0.66	0.66
Heavy Vehicles (%)	0%	0%	10%	0%	0%	5%	14%	0%	0%	7%	7%	7%
Adj. Flow (vph)	14	656	120	20	617	22	107	78	15	15	124	12
Shared Lane Traffic (%)												
Lane Group Flow (vph)	14	656	120	20	639	0	107	93	0	15	136	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Perm	NA	
Protected Phases		4			8		5	2			6	
Permitted Phases	4		4	8						6		
Minimum Split (s)	25.0	25.0	25.0	25.0	25.0		16.0	25.0		25.0	25.0	
Total Split (s)	60.0	60.0	60.0	60.0	60.0		35.0	60.0		25.0	25.0	
Total Split (%)	50.0%	50.0%	50.0%	50.0%	50.0%		29.2%	50.0%		20.8%	20.8%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	2.5	2.5	2.5	2.5	2.5		2.5	2.5		2.5	2.5	
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)	6.0	6.0	6.0	6.0	6.0		6.0	6.0		6.0	6.0	
Lead/Lag							Lag			Lead	Lead	
Lead-Lag Optimize?							Yes			Yes	Yes	
Act Effct Green (s)	54.0	54.0	54.0	54.0	54.0		29.0	54.0		19.0	19.0	
Actuated g/C Ratio	0.45	0.45	0.45	0.45	0.45		0.24	0.45		0.16	0.16	
v/c Ratio	0.09	0.77	0.17	0.14	0.75		0.14	0.11		0.08	0.49	
Control Delay	20.9	35.0	7.9	22.5	34.2		36.4	17.5		44.3	51.6	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	20.9	35.0	7.9	22.5	34.2		36.4	17.5		44.3	51.6	
LOS	C	D	A	C	C		D	B		D	D	
Approach Delay		30.7			33.8			27.6			50.9	
Approach LOS		C			C			C			D	
Queue Length 50th (ft)	6	418	16	9	401		33	36		10	95	
Queue Length 95th (ft)	18	463	40	26	522		56	67		22	113	
Internal Link Dist (ft)		439			1505			935			741	
Turn Bay Length (ft)	190		70	190			140			215		
Base Capacity (vph)	158	855	705	145	850		742	839		196	280	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0	0	0	0		0	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	0.77	0.17	0.14	0.75		0.14	0.11		0.08	0.49	

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green
Natural Cycle: 75
Control Type: Pretimed
Maximum v/c Ratio: 0.77
Intersection Signal Delay: 33.2 Intersection LOS: C
Intersection Capacity Utilization 48.7% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 4075: 11 Mile Road & Verona Road



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	815	143	0	231
Future Volume (vph)	0	0	815	143	0	231
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200			300	245	245
Storage Lanes	0			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.978			0.865
Flt Protected						
Satd. Flow (prot)	0	0	3332	0	0	1644
Flt Permitted						
Satd. Flow (perm)	0	0	3332	0	0	1644
Link Speed (mph)		55	55		25	
Link Distance (ft)		509	395		760	
Travel Time (s)		6.3	4.9		20.7	
Peak Hour Factor	0.88	0.88	0.91	0.91	0.79	0.79
Heavy Vehicles (%)	1%	1%	7%	0%	0%	0%
Adj. Flow (vph)	0	0	896	157	0	292
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1053	0	0	292
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 48.1% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	801	43	0	157
Future Volume (vph)	0	0	801	43	0	157
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	175			50	0	0
Storage Lanes	0			0	0	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.992			0.865
Flt Protected						
Satd. Flow (prot)	0	0	3358	0	0	1565
Flt Permitted						
Satd. Flow (perm)	0	0	3358	0	0	1565
Link Speed (mph)		55	55		25	
Link Distance (ft)		395	586		185	
Travel Time (s)		4.9	7.3		5.0	
Peak Hour Factor	0.90	0.90	0.95	0.95	0.70	0.70
Heavy Vehicles (%)	1%	1%	7%	0%	5%	5%
Adj. Flow (vph)	0	0	843	45	0	224
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	888	0	0	224
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 39.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	837	12	0	7
Future Volume (vph)	0	0	837	12	0	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150			600	0	0
Storage Lanes	0			0	0	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.998			0.865
Flt Protected						
Satd. Flow (prot)	0	0	3370	0	0	1644
Flt Permitted						
Satd. Flow (perm)	0	0	3370	0	0	1644
Link Speed (mph)		55	55		25	
Link Distance (ft)		586	607		1086	
Travel Time (s)		7.3	7.5		29.6	
Peak Hour Factor	0.83	0.83	0.92	0.92	0.60	0.60
Heavy Vehicles (%)	10%	1%	7%	0%	33%	0%
Adj. Flow (vph)	0	0	910	13	0	12
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	923	0	0	12
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 33.5%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	571	8	0	7
Future Volume (vph)	0	0	571	8	0	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.998			0.865
Flt Protected						
Satd. Flow (prot)	0	0	3532	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	0	3532	0	0	1611
Link Speed (mph)		55	55		55	
Link Distance (ft)		538	1254		1399	
Travel Time (s)		6.7	15.5		17.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	621	9	0	8
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	630	0	0	8
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 26.0%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	0	5	0	495	0	0	460	0
Future Volume (vph)	0	0	0	0	0	5	0	495	0	0	460	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
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
Frt					0.865							
Flt Protected												
Satd. Flow (prot)	0	1863	0	0	1611	0	0	1863	0	0	1863	0
Flt Permitted												
Satd. Flow (perm)	0	1863	0	0	1611	0	0	1863	0	0	1863	0
Link Speed (mph)		45			45			25			45	
Link Distance (ft)		957			1038			516			593	
Travel Time (s)		14.5			15.7			14.1			9.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	0	5	0	538	0	0	500	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	5	0	0	538	0	0	500	0
Sign Control		Stop			Stop			Free			Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 36.1% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBT	EBR	WBL	WBT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	0	0	119	1003	0	0
Future Volume (vph)	0	0	119	1003	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.91	0.91	1.00	1.00
Frt						
Flt Protected				0.995		
Satd. Flow (prot)	0	0	0	5060	0	0
Flt Permitted				0.995		
Satd. Flow (perm)	0	0	0	5060	0	0
Link Speed (mph)	45			45	25	
Link Distance (ft)	183			382	263	
Travel Time (s)	2.8			5.8	7.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	129	1090	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1219	0	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 35.2%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	1566	751	0	0	0	0
Future Volume (vph)	1566	751	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950	0.975				
Satd. Flow (prot)	1610	3305	0	0	0	0
Flt Permitted	0.950	0.975				
Satd. Flow (perm)	1610	3305	0	0	0	0
Link Speed (mph)		45	45		25	
Link Distance (ft)		619	209		329	
Travel Time (s)		9.4	3.2		9.0	
Peak Hour Factor	0.86	0.86	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1821	873	0	0	0	0
Shared Lane Traffic (%)	50%					
Lane Group Flow (vph)	910	1784	0	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 62.5%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations			↑↑	↱		
Traffic Volume (vph)	0	0	773	168	0	0
Future Volume (vph)	0	0	773	168	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	1.00
Frt				0.850		
Flt Protected						
Satd. Flow (prot)	0	0	3539	1583	0	0
Flt Permitted						
Satd. Flow (perm)	0	0	3539	1583	0	0
Link Speed (mph)		45	45		30	
Link Distance (ft)		213	315		137	
Travel Time (s)		3.2	4.8		3.1	
Peak Hour Factor	0.92	0.92	0.91	0.91	0.92	0.92
Adj. Flow (vph)	0	0	849	185	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	849	185	0	0
Sign Control		Stop	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 50.5%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑			↰	
Traffic Volume (vph)	0	873	0	0	159	0
Future Volume (vph)	0	873	0	0	159	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3505	0	0	1787	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3505	0	0	1787	0
Link Speed (mph)		45	45		25	
Link Distance (ft)		309	168		108	
Travel Time (s)		4.7	2.5		2.9	
Peak Hour Factor	0.86	0.86	0.92	0.92	0.87	0.87
Heavy Vehicles (%)	3%	3%	2%	2%	1%	1%
Adj. Flow (vph)	0	1015	0	0	183	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1015	0	0	183	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 49.0%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑↑	↰	
Traffic Volume (vph)	0	0	0	886	182	0
Future Volume (vph)	0	0	0	886	182	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	5036	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	5036	1770	0
Link Speed (mph)	45			45	25	
Link Distance (ft)	134			152	111	
Travel Time (s)	2.0			2.3	3.0	
Peak Hour Factor	0.92	0.92	0.89	0.89	0.94	0.94
Heavy Vehicles (%)	2%	2%	3%	3%	2%	2%
Adj. Flow (vph)	0	0	0	996	194	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	996	194	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 37.2%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	851	0	0	80	0
Future Volume (vph)	0	851	0	0	80	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3574	0	0	1787	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3574	0	0	1787	0
Link Speed (mph)		45	45		25	
Link Distance (ft)		222	290		102	
Travel Time (s)		3.4	4.4		2.8	
Peak Hour Factor	0.95	0.95	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	1%	1%	2%	2%	1%	1%
Adj. Flow (vph)	0	896	0	0	87	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	896	0	0	87	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 62.4%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑	↰	
Traffic Volume (vph)	0	0	0	905	65	0
Future Volume (vph)	0	0	0	905	65	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	30			45	25	
Link Distance (ft)	114			1105	101	
Travel Time (s)	2.6			16.7	2.8	
Peak Hour Factor	0.92	0.92	0.88	0.88	0.94	0.94
Adj. Flow (vph)	0	0	0	1028	69	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1028	69	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 58.2%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	53	265	31	4	200	12	14	37	3	13	81	35
Future Volume (vph)	53	265	31	4	200	12	14	37	3	13	81	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	80		0	80		0	110		0	115		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	180			180			140			175		
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
Frt		0.984			0.991			0.988			0.955	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	1870	0	1770	1846	0	1703	1771	0	1770	1779	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1805	1870	0	1770	1846	0	1703	1771	0	1770	1779	0
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		1365			1319			666			571	
Travel Time (s)		20.7			20.0			10.1			8.7	
Peak Hour Factor	0.94	0.94	0.94	0.88	0.88	0.88	0.78	0.78	0.78	0.91	0.91	0.91
Heavy Vehicles (%)	0%	0%	0%	2%	2%	2%	6%	6%	6%	2%	2%	2%
Adj. Flow (vph)	56	282	33	5	227	14	18	47	4	14	89	38
Shared Lane Traffic (%)												
Lane Group Flow (vph)	56	315	0	5	241	0	18	51	0	14	127	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 36.6%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL2	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	SWL	SWR
Lane Configurations											
Traffic Volume (vph)	55	0	112	0	270	79	81	385	0	0	0
Future Volume (vph)	55	0	112	0	270	79	81	385	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	240	0		0	105		0	0	0
Storage Lanes		1	1	0		0	1		0	0	0
Taper Length (ft)		25		25			70			25	
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
Frt			0.850		0.969						
Flt Protected	0.950						0.950				
Satd. Flow (prot)	1687	0	1615	0	1805	0	1752	1845	0	0	0
Flt Permitted	0.950						0.950				
Satd. Flow (perm)	1687	0	1615	0	1805	0	1752	1845	0	0	0
Link Speed (mph)		25			45			45		25	
Link Distance (ft)		894			1167			685		897	
Travel Time (s)		24.4			17.7			10.4		24.5	
Peak Hour Factor	0.93	0.93	0.93	0.91	0.91	0.91	0.95	0.95	0.95	0.92	0.92
Heavy Vehicles (%)	7%	0%	0%	2%	2%	2%	3%	3%	3%	2%	2%
Adj. Flow (vph)	59	0	120	0	297	87	85	405	0	0	0
Shared Lane Traffic (%)											
Lane Group Flow (vph)	59	0	120	0	384	0	85	405	0	0	0
Sign Control		Stop			Free			Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 33.9% ICU Level of Service A

Analysis Period (min) 15

Lane Group	WBL2	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NER
Lane Configurations											
Traffic Volume (vph)	93	0	84	61	264	0	0	373	50	0	0
Future Volume (vph)	93	0	84	61	264	0	0	373	50	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	185	165		0	0		0	0	0
Storage Lanes		1	1	1		0	0		0	0	0
Taper Length (ft)		25		110			25			25	
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
Frt			0.850					0.984			
Flt Protected	0.950			0.950							
Satd. Flow (prot)	1805	0	1455	1752	1845	0	0	1815	0	0	0
Flt Permitted	0.950			0.950							
Satd. Flow (perm)	1805	0	1455	1752	1845	0	0	1815	0	0	0
Link Speed (mph)		25			45			45		25	
Link Distance (ft)		613			685			608		913	
Travel Time (s)		16.7			10.4			9.2		24.9	
Peak Hour Factor	0.81	0.81	0.81	0.87	0.87	0.87	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	11%	3%	3%	3%	3%	3%	3%	2%	2%
Adj. Flow (vph)	115	0	104	70	303	0	0	405	54	0	0
Shared Lane Traffic (%)											
Lane Group Flow (vph)	115	0	104	70	303	0	0	459	0	0	0
Sign Control		Stop			Free			Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 33.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	184	140	0	396	272	0
Future Volume (vph)	184	140	0	396	272	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.850				
Flt Protected	0.950					
Satd. Flow (prot)	1543	1553	0	3505	3374	0
Flt Permitted	0.950					
Satd. Flow (perm)	1543	1553	0	3505	3374	0
Link Speed (mph)	25			55	55	
Link Distance (ft)	119			105	620	
Travel Time (s)	3.2			1.3	7.7	
Peak Hour Factor	0.93	0.93	0.82	0.82	0.92	0.92
Heavy Vehicles (%)	17%	4%	0%	3%	7%	0%
Adj. Flow (vph)	198	151	0	483	296	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	198	151	0	483	296	0
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 27.8%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	396	61	35	377
Future Volume (vph)	0	0	396	61	35	377
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		340	0	
Storage Lanes	0	0		1	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	1.00	0.95	0.95
Frt				0.850		
Flt Protected						0.996
Satd. Flow (prot)	0	0	3505	1568	0	3383
Flt Permitted						0.996
Satd. Flow (perm)	0	0	3505	1568	0	3383
Link Speed (mph)	25		55			55
Link Distance (ft)	664		1109			105
Travel Time (s)	18.1		13.7			1.3
Peak Hour Factor	0.92	0.92	0.82	0.82	0.92	0.92
Heavy Vehicles (%)	2%	2%	3%	3%	20%	5%
Adj. Flow (vph)	0	0	483	74	38	410
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	483	74	0	448
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 29.1%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	WBL2	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NER
Lane Configurations											
Traffic Volume (vph)	52	0	60	0	352	0	0	220	86	0	0
Future Volume (vph)	52	0	60	0	352	0	0	220	86	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	205	0		0	0		135	0	0
Storage Lanes		1	1	0		0	0		1	0	0
Taper Length (ft)		25		25			25			25	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00
Frt			0.850						0.850		
Flt Protected	0.950										
Satd. Flow (prot)	1736	0	1380	0	3438	0	0	3343	1272	0	0
Flt Permitted	0.950										
Satd. Flow (perm)	1736	0	1380	0	3438	0	0	3343	1272	0	0
Link Speed (mph)		25			55			55		25	
Link Distance (ft)		296			230			1367		908	
Travel Time (s)		8.1			2.9			16.9		24.8	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.95	0.95	0.95	0.92	0.92
Heavy Vehicles (%)	4%	0%	17%	0%	5%	0%	0%	8%	27%	2%	2%
Adj. Flow (vph)	59	0	68	0	400	0	0	232	91	0	0
Shared Lane Traffic (%)											
Lane Group Flow (vph)	59	0	68	0	400	0	0	232	91	0	0
Sign Control		Stop			Free			Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 20.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	33	80	0	270	154	0
Future Volume (vph)	33	80	0	270	154	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				
Flt Protected	0.950					
Satd. Flow (prot)	1752	1077	0	1624	1696	0
Flt Permitted	0.950					
Satd. Flow (perm)	1752	1077	0	1624	1696	0
Link Speed (mph)	25			45	45	
Link Distance (ft)	189			1063	114	
Travel Time (s)	5.2			16.1	1.7	
Peak Hour Factor	0.74	0.74	0.93	0.93	0.89	0.89
Heavy Vehicles (%)	3%	50%	17%	17%	12%	12%
Adj. Flow (vph)	45	108	0	290	173	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	45	108	0	290	173	0
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 24.2%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	0	0	182	121	3	154
Future Volume (vph)	0	0	182	121	3	154
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.850		
Flt Protected						0.999
Satd. Flow (prot)	0	0	1624	1380	0	1689
Flt Permitted						0.999
Satd. Flow (perm)	0	0	1624	1380	0	1689
Link Speed (mph)	25		45			45
Link Distance (ft)	105		114			727
Travel Time (s)	2.9		1.7			11.0
Peak Hour Factor	0.92	0.92	0.93	0.93	0.89	0.89
Heavy Vehicles (%)	2%	2%	17%	17%	33%	12%
Adj. Flow (vph)	0	0	196	130	3	173
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	196	130	0	176
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 22.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBR	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	6	97	58	124	60	11
Future Volume (vph)	6	97	58	124	60	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	195	0	0			90
Storage Lanes	1	1	0			1
Taper Length (ft)	135		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				0.850
Flt Protected	0.950			0.984		
Satd. Flow (prot)	1570	1404	0	1615	1776	1509
Flt Permitted	0.950			0.984		
Satd. Flow (perm)	1570	1404	0	1615	1776	1509
Link Speed (mph)	25			45	45	
Link Distance (ft)	597			727	1165	
Travel Time (s)	16.3			11.0	17.7	
Peak Hour Factor	0.83	0.83	0.91	0.91	0.78	0.78
Heavy Vehicles (%)	15%	15%	43%	3%	7%	7%
Adj. Flow (vph)	7	117	64	136	77	14
Shared Lane Traffic (%)						
Lane Group Flow (vph)	7	117	0	200	77	14
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 26.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	18	1104	18	0
Future Volume (vph)	0	0	18	1104	18	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.91	0.91	1.00	1.00
Frt						
Flt Protected				0.999	0.950	
Satd. Flow (prot)	0	0	0	5080	1770	0
Flt Permitted				0.999	0.950	
Satd. Flow (perm)	0	0	0	5080	1770	0
Link Speed (mph)	45			45	25	
Link Distance (ft)	382			217	236	
Travel Time (s)	5.8			3.3	6.4	
Peak Hour Factor	0.90	0.90	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	20	1200	20	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1220	20	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 31.7%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑					↱
Traffic Volume (vph)	1032	0	0	0	0	30
Future Volume (vph)	1032	0	0	0	0	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	1.00	1.00	1.00	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	3539	0	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	3539	0	0	0	0	1611
Link Speed (mph)	45			45	25	
Link Distance (ft)	168			432	770	
Travel Time (s)	2.5			6.5	21.0	
Peak Hour Factor	0.87	0.87	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1186	0	0	0	0	33
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1186	0	0	0	0	33
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 46.3%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	1068	0	0	32
Future Volume (vph)	0	0	1068	0	0	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.91	1.00	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	0	0	5036	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	0	5036	0	0	1611
Link Speed (mph)		45	45		25	
Link Distance (ft)		494	134		230	
Travel Time (s)		7.5	2.0		6.3	
Peak Hour Factor	0.92	0.92	0.89	0.89	0.92	0.92
Heavy Vehicles (%)	2%	2%	3%	3%	2%	2%
Adj. Flow (vph)	0	0	1200	0	0	35
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1200	0	0	35
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 40.5%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	920	50	0	0
Future Volume (vph)	0	0	920	50	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.992			
Flt Protected						
Satd. Flow (prot)	0	0	3511	0	0	0
Flt Permitted						
Satd. Flow (perm)	0	0	3511	0	0	0
Link Speed (mph)		30	45		25	
Link Distance (ft)		176	114		201	
Travel Time (s)		4.0	1.7		5.5	
Peak Hour Factor	0.92	0.92	0.88	0.88	0.92	0.92
Adj. Flow (vph)	0	0	1045	57	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1102	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 35.5%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	NBT	NBR	SBL	SBT	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	352	228	0	272	0	0
Future Volume (vph)	352	228	0	272	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	1.00	0.95	1.00	1.00
Frt	0.941					
Flt Protected						
Satd. Flow (prot)	3164	0	0	3343	0	0
Flt Permitted						
Satd. Flow (perm)	3164	0	0	3343	0	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	620			230	1088	
Travel Time (s)	7.7			2.9	29.7	
Peak Hour Factor	0.88	0.88	0.95	0.95	0.92	0.92
Heavy Vehicles (%)	5%	11%	8%	8%	2%	2%
Adj. Flow (vph)	400	259	0	286	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	659	0	0	286	0	0
Sign Control	Free			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 20.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	32	888	0	0	0	0	0	48	29
Future Volume (vph)	0	0	0	32	888	0	0	0	0	0	48	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	165		0	0		0	0		0
Storage Lanes	0		0	1		0	0		0	0		0
Taper Length (ft)	25			85			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt											0.949	
Flt Protected				0.950								
Satd. Flow (prot)	0	0	0	1770	3539	0	0	0	0	0	1785	0
Flt Permitted				0.950								
Satd. Flow (perm)	0	0	0	1770	3539	0	0	0	0	0	1785	0
Link Speed (mph)		30			45			30			30	
Link Distance (ft)		212			176			102			496	
Travel Time (s)		4.8			2.7			2.3			11.3	
Peak Hour Factor	0.92	0.92	0.92	0.86	0.86	0.86	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	1%	1%	1%
Adj. Flow (vph)	0	0	0	37	1033	0	0	0	0	0	52	32
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	37	1033	0	0	0	0	0	84	0
Sign Control		Free			Free			Yield			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 35.5%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	1347	0	0	0	1380
Future Volume (vph)	0	1347	0	0	0	1380
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	0.88
Frt						0.850
Flt Protected						
Satd. Flow (prot)	0	3539	0	0	0	2787
Flt Permitted						
Satd. Flow (perm)	0	3539	0	0	0	2787
Link Speed (mph)		55	55		55	
Link Distance (ft)		434	1242		1194	
Travel Time (s)		5.4	15.4		14.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1464	0	0	0	1500
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1464	0	0	0	1500
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 51.6%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	0	119	0	0	360
Future Volume (vph)	0	0	119	0	0	360
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	0	0	1863	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	0	1863	0	0	1611
Link Speed (mph)		25	25		30	
Link Distance (ft)		1199	263		174	
Travel Time (s)		32.7	7.2		4.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.90	0.90
Adj. Flow (vph)	0	0	129	0	0	400
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	129	0	0	400
Sign Control		Free	Yield		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 35.2%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	WBL	WBR	NBL	NBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	168	1566	0	0	0
Future Volume (vph)	0	168	1566	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.97	1.00	1.00	1.00
Frt		0.865				
Flt Protected			0.950			
Satd. Flow (prot)	0	1627	3303	0	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	1627	3303	0	0	0
Link Speed (mph)	45		45		45	
Link Distance (ft)	255		329		551	
Travel Time (s)	3.9		5.0		8.3	
Peak Hour Factor	0.91	0.91	0.93	0.93	0.92	0.92
Heavy Vehicles (%)	1%	1%	6%	6%	2%	2%
Adj. Flow (vph)	0	185	1684	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	185	1684	0	0	0
Sign Control	Yield		Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 61.3%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	159	941	0	0
Future Volume (vph)	0	0	159	941	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	450		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			85		25	
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	5085	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	5085	0	0
Link Speed (mph)	45			45	30	
Link Distance (ft)	315			494	108	
Travel Time (s)	4.8			7.5	2.5	
Peak Hour Factor	0.92	0.92	0.87	0.87	0.92	0.92
Adj. Flow (vph)	0	0	183	1082	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	183	1082	0	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 40.0%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	182	880	0	0	0	0
Future Volume (vph)	182	880	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	275			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	110				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		45	45		30	
Link Distance (ft)		432	161		111	
Travel Time (s)		6.5	2.4		2.5	
Peak Hour Factor	0.94	0.94	0.92	0.92	0.92	0.92
Adj. Flow (vph)	194	936	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	194	936	0	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary		
Area Type:	Other	
Control Type: Unsignalized		
Intersection Capacity Utilization 48.1%		ICU Level of Service A
Analysis Period (min) 15		

Lane Group	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	102	0	0	0	129
Future Volume (vph)	0	102	0	0	0	129
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	0.76
Frt						0.850
Flt Protected						
Satd. Flow (prot)	0	3539	0	0	0	3610
Flt Permitted						
Satd. Flow (perm)	0	3539	0	0	0	3610
Link Speed (mph)		55	55		45	
Link Distance (ft)		1093	655		773	
Travel Time (s)		13.5	8.1		11.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	111	0	0	0	140
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	111	0	0	0	140
Sign Control		Free	Free		Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 6.7% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	65	866	0	0	0	0
Future Volume (vph)	65	866	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	180			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	75				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		45	45		30	
Link Distance (ft)		290	1089		101	
Travel Time (s)		4.4	16.5		2.3	
Peak Hour Factor	0.94	0.94	0.92	0.92	0.92	0.92
Adj. Flow (vph)	69	921	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	69	921	0	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 55.6%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NWL	NWR
Lane Configurations	↑↑↱					
Traffic Volume (vph)	2205	360	0	0	0	0
Future Volume (vph)	2205	360	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	1.00	1.00	1.00	1.00
Frt	0.979					
Flt Protected						
Satd. Flow (prot)	4979	0	0	0	0	0
Flt Permitted						
Satd. Flow (perm)	4979	0	0	0	0	0
Link Speed (mph)	45			45	30	
Link Distance (ft)	311			156	174	
Travel Time (s)	4.7			2.4	4.0	
Peak Hour Factor	0.90	0.90	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2450	400	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	2850	0	0	0	0	0
Sign Control	Free			Stop	Free	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 72.0% ICU Level of Service C
Analysis Period (min) 15

Lane Group	NBT	NBR	SBL	SBT	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	0	0	112	1563	0	0
Future Volume (vph)	0	0	112	1563	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	500		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			100		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	3539	0	0
Link Speed (mph)	30			25	25	
Link Distance (ft)	266			1471	301	
Travel Time (s)	6.0			40.1	8.2	
Peak Hour Factor	0.92	0.92	0.75	0.75	0.92	0.92
Adj. Flow (vph)	0	0	149	2084	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	149	2084	0	0
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 46.5%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	349	122	0	0	0	0
Future Volume (vph)	349	122	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected		0.964				
Satd. Flow (prot)	0	1796	0	0	0	0
Flt Permitted		0.964				
Satd. Flow (perm)	0	1796	0	0	0	0
Link Speed (mph)		25	30		25	
Link Distance (ft)		1207	315		252	
Travel Time (s)		32.9	7.2		6.9	
Peak Hour Factor	0.75	0.75	0.92	0.92	0.92	0.92
Adj. Flow (vph)	465	163	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	628	0	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 40.6%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	103	0	69	0	0
Future Volume (vph)	0	103	0	69	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.865		
Flt Protected						
Satd. Flow (prot)	0	1652	0	1191	0	0
Flt Permitted						
Satd. Flow (perm)	0	1652	0	1191	0	0
Link Speed (mph)		25	25		25	
Link Distance (ft)		995	597		1154	
Travel Time (s)		27.1	16.3		31.5	
Peak Hour Factor	0.83	0.83	0.89	0.89	0.92	0.92
Heavy Vehicles (%)	15%	15%	38%	38%	2%	2%
Adj. Flow (vph)	0	124	0	78	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	124	0	78	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 8.8%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	53	3029	0	0
Future Volume (vph)	0	0	53	3029	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	250		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	5085	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	5085	0	0
Link Speed (mph)	45			45	25	
Link Distance (ft)	894			534	137	
Travel Time (s)	13.5			8.1	3.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	58	3292	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	58	3292	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 61.2% ICU Level of Service B

Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	3062	0	0	53	0
Future Volume (vph)	0	3062	0	0	53	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.86	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	6408	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	6408	0	0	1770	0
Link Speed (mph)		45	45		25	
Link Distance (ft)		744	1191		137	
Travel Time (s)		11.3	18.0		3.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	3328	0	0	58	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	3328	0	0	58	0
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 109.6% ICU Level of Service H

Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	519	2596	0	0	0	0
Future Volume (vph)	519	2596	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	400			0	0	0
Storage Lanes	2			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	0.97	0.86	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	3433	6408	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	3433	6408	0	0	0	0
Link Speed (mph)		45	45		25	
Link Distance (ft)		1191	262		113	
Travel Time (s)		18.0	4.0		3.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	564	2822	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	564	2822	0	0	0	0
Sign Control		Free	Stop		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 96.1%	ICU Level of Service F
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	119	2598	0	0
Future Volume (vph)	0	0	119	2598	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	250		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	5085	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	5085	0	0
Link Speed (mph)	45			45	25	
Link Distance (ft)	254			1016	123	
Travel Time (s)	3.8			15.4	3.4	
Peak Hour Factor	0.92	0.92	0.90	0.87	0.92	0.92
Adj. Flow (vph)	0	0	132	2986	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	132	2986	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary		
Area Type:	Other	
Control Type: Unsignalized		
Intersection Capacity Utilization 140.6%		ICU Level of Service H
Analysis Period (min) 15		

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	151	2565	0	0	0	0
Future Volume (vph)	151	2565	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.91	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	5085	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	5085	0	0	0	0
Link Speed (mph)		45	45		30	
Link Distance (ft)		704	311		111	
Travel Time (s)		10.7	4.7		2.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	164	2788	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	164	2788	0	0	0	0
Sign Control		Free	Stop		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 107.5%	ICU Level of Service G
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	1012	27	0
Future Volume (vph)	0	0	0	1012	27	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	30	
Link Distance (ft)	583			574	107	
Travel Time (s)	7.2			7.1	2.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	1100	29	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1100	29	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 59.1%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	27	886	0	0	0	0
Future Volume (vph)	27	886	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		30	
Link Distance (ft)		1122	576		107	
Travel Time (s)		13.9	7.1		2.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	29	963	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	29	963	0	0	0	0
Sign Control		Free	Stop		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 59.1%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	1003	36	0	54
Future Volume (vph)	0	0	1003	36	0	54
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.995			0.865
Flt Protected						
Satd. Flow (prot)	0	0	3522	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	0	3522	0	0	1611
Link Speed (mph)		55	55		30	
Link Distance (ft)		590	583		121	
Travel Time (s)		7.3	7.2		2.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	1090	39	0	59
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1129	0	0	59
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 38.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	168	889	0	0
Future Volume (vph)	0	0	168	889	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	250		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	3539	0	0
Link Speed (mph)	55			55	30	
Link Distance (ft)	405			590	104	
Travel Time (s)	5.0			7.3	2.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	183	966	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	183	966	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 36.1%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑			↰	
Traffic Volume (vph)	0	745	0	0	168	0
Future Volume (vph)	0	745	0	0	168	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	1770	0
Link Speed (mph)		55	55		30	
Link Distance (ft)		316	1122		104	
Travel Time (s)		3.9	13.9		2.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	810	0	0	183	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	810	0	0	183	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 51.8%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	67	886	0	0
Future Volume (vph)	0	0	67	886	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	250			0
Storage Lanes	0	0	2			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	0.97	0.91	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	3433	5085	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	3433	5085	0	0
Link Speed (mph)	45			55	30	
Link Distance (ft)	105			493	555	
Travel Time (s)	1.6			6.1	12.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	73	963	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	73	963	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 40.3%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	727	159	0	0	0	0
Future Volume (vph)	727	159	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.94	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	4990	1863	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	4990	1863	0	0	0	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		555	271		108	
Travel Time (s)		12.6	6.2		2.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	790	173	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	790	173	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 34.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	73	0	0	0	0	159
Future Volume (vph)	73	0	0	0	0	159
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	1863	0	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	1863	0	0	0	0	1611
Link Speed (mph)	25			30	25	
Link Distance (ft)	287			1072	271	
Travel Time (s)	7.8			24.4	7.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	79	0	0	0	0	173
Shared Lane Traffic (%)						
Lane Group Flow (vph)	79	0	0	0	0	173
Sign Control	Yield			Free	Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 20.4% ICU Level of Service A

Analysis Period (min) 15

Lane Group	NBT	NBR	SBL	SBT	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	0	0	73	659	0	0
Future Volume (vph)	0	0	73	659	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.91	0.91	1.00	1.00
Frt						
Flt Protected				0.995		
Satd. Flow (prot)	0	0	0	5045	0	0
Flt Permitted				0.995		
Satd. Flow (perm)	0	0	0	5045	0	0
Link Speed (mph)	45			45	45	
Link Distance (ft)	194			406	287	
Travel Time (s)	2.9			6.2	4.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	5%	2%	2%	2%
Adj. Flow (vph)	0	0	79	716	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	795	0	0
Sign Control	Free			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 20.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	104	110	0	0	0	0
Future Volume (vph)	104	110	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1719	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1719	3539	0	0	0	0
Link Speed (mph)		25	25		25	
Link Distance (ft)		879	346		271	
Travel Time (s)		24.0	9.4		7.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	2%	2%	2%	2%	2%
Adj. Flow (vph)	113	120	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	113	120	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 29.7%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	79	0	0	81
Future Volume (vph)	0	0	79	0	0	81
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	0	0	1863	0	0	1565
Flt Permitted						
Satd. Flow (perm)	0	0	1863	0	0	1565
Link Speed (mph)		30	45		45	
Link Distance (ft)		874	182		254	
Travel Time (s)		19.9	2.8		3.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	5%
Adj. Flow (vph)	0	0	86	0	0	88
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	86	0	0	88
Sign Control		Free	Free		Yield	

Intersection Summary		
Area Type:	Other	
Control Type: Unsignalized		
Intersection Capacity Utilization 32.7%		ICU Level of Service A
Analysis Period (min) 15		

Lane Group	EBL	EBR	SBL	SBR	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	0	0	0	0	79	752
Future Volume (vph)	0	0	0	0	79	752
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.91
Frt					0.892	0.850
Flt Protected					0.986	
Satd. Flow (prot)	0	0	0	0	1604	2799
Flt Permitted					0.986	
Satd. Flow (perm)	0	0	0	0	1604	2799
Link Speed (mph)	30		30		30	
Link Distance (ft)	182		207		337	
Travel Time (s)	4.1		4.7		7.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	5%
Adj. Flow (vph)	0	0	0	0	86	817
Shared Lane Traffic (%)						27%
Lane Group Flow (vph)	0	0	0	0	307	596
Sign Control	Stop		Free		Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 32.7% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↱					
Traffic Volume (vph)	633	81	0	0	0	0
Future Volume (vph)	633	81	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00
Frt	0.983					
Flt Protected						
Satd. Flow (prot)	3380	0	0	0	0	0
Flt Permitted						
Satd. Flow (perm)	3380	0	0	0	0	0
Link Speed (mph)	30			45	25	
Link Distance (ft)	306			190	254	
Travel Time (s)	7.0			2.9	6.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	5%	2%	2%	2%	2%
Adj. Flow (vph)	688	88	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	776	0	0	0	0	0
Sign Control	Free			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 42.0%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations			↑↑	↱		
Traffic Volume (vph)	0	0	99	151	0	0
Future Volume (vph)	0	0	99	151	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			250	0	0
Storage Lanes	0			1	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	1.00
Frt				0.850		
Flt Protected						
Satd. Flow (prot)	0	0	3539	1538	0	0
Flt Permitted						
Satd. Flow (perm)	0	0	3539	1538	0	0
Link Speed (mph)		25	25		25	
Link Distance (ft)		241	1465		317	
Travel Time (s)		6.6	40.0		8.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	5%	2%	2%
Adj. Flow (vph)	0	0	108	164	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	108	164	0	0
Sign Control		Free	Free		Free	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 13.3% ICU Level of Service A
Analysis Period (min) 15

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑↑	↰	
Traffic Volume (vph)	0	0	0	903	64	0
Future Volume (vph)	0	0	0	903	64	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	4940	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	4940	1770	0
Link Speed (mph)	55			30	25	
Link Distance (ft)	598			415	105	
Travel Time (s)	7.4			9.4	2.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	5%	2%	2%
Adj. Flow (vph)	0	0	0	982	70	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	982	70	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 43.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	64	714	0	0	0	0
Future Volume (vph)	64	714	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3438	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3438	0	0	0	0
Link Speed (mph)		55	30		25	
Link Distance (ft)		597	306		105	
Travel Time (s)		7.4	7.0		2.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	5%	2%	2%	2%	2%
Adj. Flow (vph)	70	776	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	70	776	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 43.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	680	0	0
Future Volume (vph)	0	0	0	680	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	0	0	0	3539	1863	0
Flt Permitted						
Satd. Flow (perm)	0	0	0	3539	1863	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	586			210	99	
Travel Time (s)	7.3			2.6	2.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	739	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	739	0	0
Sign Control	Free			Free	Stop	

Intersection Summary
Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 28.8% ICU Level of Service A
Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	571	0	0	0	0
Future Volume (vph)	0	571	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	1863	3539	0	0	0	0
Flt Permitted						
Satd. Flow (perm)	1863	3539	0	0	0	0
Link Speed (mph)		55	55		25	
Link Distance (ft)		589	212		99	
Travel Time (s)		7.3	2.6		2.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	621	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	621	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 28.8%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	680	0	0
Future Volume (vph)	0	0	0	680	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	0	0	0	3539	0	0
Flt Permitted						
Satd. Flow (perm)	0	0	0	3539	0	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	723			586	81	
Travel Time (s)	9.0			7.3	2.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	739	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	739	0	0
Sign Control	Free			Free	Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 28.8% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	571	0	0	0	0	0	0	0	0	0	0
Future Volume (vph)	0	571	0	0	0	0	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	3539	0	0	0	0	0	0	1863	0	1863	0
Flt Permitted												
Satd. Flow (perm)	0	3539	0	0	0	0	0	0	1863	0	1863	0
Link Speed (mph)		55			55			25			25	
Link Distance (ft)		719			589			84			81	
Travel Time (s)		8.9			7.3			2.3			2.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	621	0	0	0	0	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	621	0	0	0	0	0	0	0	0	0	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 25.8% ICU Level of Service A
Analysis Period (min) 15

Lane Group	EBT	EBR	WBL	WBT	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	0	571	0	680	0	0
Future Volume (vph)	0	571	0	680	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.88	1.00	0.95	1.00	1.00
Frt		0.850				
Flt Protected						
Satd. Flow (prot)	0	2787	0	3539	0	0
Flt Permitted						
Satd. Flow (perm)	0	2787	0	3539	0	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	997			723	719	
Travel Time (s)	12.4			9.0	19.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	621	0	739	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	621	0	739	0	0
Sign Control	Free			Free	Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 23.3% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	286	600	0	0	0	0
Future Volume (vph)	286	600	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		55	
Link Distance (ft)		2077	2379		116	
Travel Time (s)		25.7	29.5		1.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	311	652	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	311	652	0	0	0	0
Sign Control		Free	Stop		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 38.8% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBT	EBR	WBL	WBT	NEL	NER
Lane Configurations				↑↑	↰	
Traffic Volume (vph)	0	0	0	563	286	0
Future Volume (vph)	0	0	0	563	286	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	607			2382	116	
Travel Time (s)	7.5			29.5	3.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	612	311	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	612	311	0
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 45.5% ICU Level of Service A
Analysis Period (min) 15

Lane Group	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	0	0	14	563	0	0
Future Volume (vph)	0	0	14	563	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	250		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	3539	0	0
Link Speed (mph)	55			55	55	
Link Distance (ft)	2382			560	108	
Travel Time (s)	29.5			6.9	1.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	15	612	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	15	612	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 68.7%	ICU Level of Service C
Analysis Period (min) 15	

Lane Group	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	0	600	0	0	14	0
Future Volume (vph)	0	600	0	0	14	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	1770	0
Link Speed (mph)		55	55		25	
Link Distance (ft)		2379	608		108	
Travel Time (s)		29.5	7.5		2.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	652	0	0	15	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	652	0	0	15	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 38.8%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	575	39	0	0	0	32
Future Volume (vph)	575	39	0	0	0	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		600	600		0	0
Storage Lanes		0	0		0	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00
Frt	0.991					0.865
Flt Protected						
Satd. Flow (prot)	3507	0	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	3507	0	0	0	0	1611
Link Speed (mph)	55			55	45	
Link Distance (ft)	608			628	1089	
Travel Time (s)	7.5			7.8	16.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	625	42	0	0	0	35
Shared Lane Traffic (%)						
Lane Group Flow (vph)	667	0	0	0	0	35
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 27.1%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑	↰	
Traffic Volume (vph)	0	0	0	568	9	0
Future Volume (vph)	0	0	0	568	9	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	645			3831	112	
Travel Time (s)	8.0			47.5	3.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	617	10	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	617	10	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 43.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	9	598	0	0	0	0
Future Volume (vph)	9	598	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		55	
Link Distance (ft)		628	3825		112	
Travel Time (s)		7.8	47.4		1.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	10	650	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	10	650	0	0	0	0
Sign Control		Free	Stop		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 38.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	10	568	0	0
Future Volume (vph)	0	0	10	568	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	250		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	3539	0	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	3831			538	97	
Travel Time (s)	47.5			6.7	2.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	11	617	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	11	617	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 31.0%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	598	0	0	10	0
Future Volume (vph)	0	598	0	0	10	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	1770	0
Link Speed (mph)		55	55		25	
Link Distance (ft)		3825	591		97	
Travel Time (s)		47.4	7.3		2.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	650	0	0	11	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	650	0	0	11	0
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 38.9% ICU Level of Service A
Analysis Period (min) 15

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	596	12	0	0	0	16
Future Volume (vph)	596	12	0	0	0	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00
Frt	0.997					0.865
Flt Protected						
Satd. Flow (prot)	3529	0	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	3529	0	0	0	0	1611
Link Speed (mph)	55			55	45	
Link Distance (ft)	591			1206	1073	
Travel Time (s)	7.3			15.0	16.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	648	13	0	0	0	17
Shared Lane Traffic (%)						
Lane Group Flow (vph)	661	0	0	0	0	17
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 26.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑	↰	
Traffic Volume (vph)	0	0	0	570	9	0
Future Volume (vph)	0	0	0	570	9	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	1254			1793	105	
Travel Time (s)	15.5			22.2	2.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	620	10	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	620	10	0
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 44.9% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	9	603	0	0	0	0
Future Volume (vph)	9	603	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		55	
Link Distance (ft)		1206	1786		105	
Travel Time (s)		15.0	22.1		1.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	10	655	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	10	655	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 39.1%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	549	570	0	0
Future Volume (vph)	0	0	549	570	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	500		0	0
Storage Lanes		0	2		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	0.97	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	3433	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	3433	3539	0	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	1793			596	109	
Travel Time (s)	22.2			7.4	3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	597	620	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	597	620	0	0
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 83.5% ICU Level of Service E

Analysis Period (min) 15

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	1066	53	0
Future Volume (vph)	0	0	0	1066	53	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	631			2681	109	
Travel Time (s)	7.8			33.2	3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	1159	58	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1159	58	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 58.1%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	53	1099	0	0	0	0
Future Volume (vph)	53	1099	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		55	
Link Distance (ft)		627	2678		109	
Travel Time (s)		7.8	33.2		1.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	58	1195	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	58	1195	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 66.5% ICU Level of Service C

Analysis Period (min) 15

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	308	1066	0	0
Future Volume (vph)	0	0	308	1066	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	500		0	0
Storage Lanes		0	2		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	0.97	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	3433	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	3433	3539	0	0
Link Speed (mph)	55			55	55	
Link Distance (ft)	2681			671	109	
Travel Time (s)	33.2			8.3	1.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	335	1159	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	335	1159	0	0
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 95.2% ICU Level of Service F

Analysis Period (min) 15

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑	↰	
Traffic Volume (vph)	0	0	0	1347	27	0
Future Volume (vph)	0	0	0	1347	27	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	654			797	95	
Travel Time (s)	8.1			9.9	2.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	1464	29	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1464	29	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 67.9%	ICU Level of Service C
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	27	1380	0	0	0	0
Future Volume (vph)	27	1380	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		55	
Link Distance (ft)		659	784		95	
Travel Time (s)		8.2	9.7		1.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	29	1500	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	29	1500	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 82.0%	ICU Level of Service E
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	868	18	0	0	0	18
Future Volume (vph)	868	18	0	0	0	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00
Frt	0.997					0.865
Flt Protected						
Satd. Flow (prot)	3529	0	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	3529	0	0	0	0	1611
Link Speed (mph)	55			55	25	
Link Distance (ft)	576			2077	205	
Travel Time (s)	7.1			25.7	5.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	943	20	0	0	0	20
Shared Lane Traffic (%)						
Lane Group Flow (vph)	963	0	0	0	0	20
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 34.6%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	1798	0	0	1264	0
Future Volume (vph)	0	1798	0	0	1264	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	0.97	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	3433	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	3433	0
Link Speed (mph)		45	45		45	
Link Distance (ft)		1021	744		215	
Travel Time (s)		15.5	11.3		3.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1954	0	0	1374	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1954	0	0	1374	0
Sign Control		Free	Stop		Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 92.4% ICU Level of Service F

Analysis Period (min) 15

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	0	0	707	129
Future Volume (vph)	0	0	0	0	707	129
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		0	250	
Storage Lanes	0	0		0	2	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.97	0.91
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	0	3433	5085
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	0	3433	5085
Link Speed (mph)	55		45			30
Link Distance (ft)	167		773			587
Travel Time (s)	2.1		11.7			13.3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	768	140
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	0	768	140
Sign Control	Stop		Stop			Free

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 30.7% ICU Level of Service A
Analysis Period (min) 15

1005: WB M-96 (Michigan Avenue) & SB I-69 Off-Ramp (Push Button) Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	5.9	19.9	14.4

1007: EB M-96 (Michigan Avenue) (Push Button) & SB I-69 Off-Ramp/EB M-96 (Michigan Avenue) Perfor

Approach	EB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	28.0	2.8	4.1

1008: WB M-96 (Michigan Avenue)/NB I-69 Off-Ramp & WB M-96 (Michigan Avenue) (Push Button) Perf

Approach	WB	SW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	18.1	2.1	7.2

1009: WB M-96 (Michigan Avenue) (Push Button)/WB M-96 (Michigan Avenue) & EB M-96 (Michigan Ave

Approach	EB	SW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	16.8	13.3	15.0

1010: NB I-69 Off-Ramp (Push Button) & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	3.7	21.5	6.2

3003: M-227/West Drive & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.1	0.0
Total Del/Veh (s)	8.6	5.1	19.6	9.8

3093: M-227/West Drive & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	0.0	2.0	0.0	0.3
Total Del/Veh (s)	3.5	30.6	2.6	7.3

4001: M-96 (Michigan Avenue) & WB Main Entrance/WB M-96 (Michigan Avenue) Performance by appro

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	74.5	15.2	56.0

4003: EB to WB Xover E of 15 Mile Rd (North) & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	2.6	85.2	17.6
Total Del/Veh (s)	24.6	36.0	26.6

4004: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	3.9	55.7	14.6

4005: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	6.9	26.4	15.8

4006: M-311 (11 Mile Rd) & Site Driveway West Performance by approach

Approach	NB	SB	All
Denied Del/Veh (s)	0.2	0.0	0.1
Total Del/Veh (s)	0.1	0.6	0.4

4007: M-311 (11 Mile Rd) & F Drive N Performance by approach

Approach	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.1	0.2	0.1

4010: EB M-96 (Michigan Avenue)/EB M-96 (Michigan Avenue) (Push Button) & WB M-96 (Michigan Ave

Approach	WB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	20.7	13.4	15.7

4030: NB M-311 (11 Mile Rd)/WB M-96 (Michigan Avenue)/11 Mile Rd (North) & EB M-96 (Michigan Ave

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	21.2	10.9	19.8

4031: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & WB M-96 (Michigan Avenue) Performance by a

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	25.4	2.2	23.7

4033: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & NB to SB Xover N of M-96 (Michigan Avenue) P

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	20.8	2.8	4.3

4034: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & EB I-94 Off-ramp Performance by approach

Approach	SB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.1	18.7	4.3

4035: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & WB M-96 (Michigan Avenue)/11 Mile Rd (North)

Approach	SB	NW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	13.6	31.4	22.8

4036: EB I-94 Off-ramp & WB M-96 (Michigan Avenue)/11 Mile Rd (North) Performance by approach

Approach	NB	NW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	19.9	1.6	3.8

4037: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & WB I-94 Off-ramp Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.4	19.2	3.8

4038: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & EB M-96 (Michigan Avenue)/11 Mile Rd (South)

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	16.3	30.6	24.0

4039: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & WB I-94 Off-ramp Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	18.2	4.3	6.8

4040: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & 11 Mile Rd Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	17.3	2.6	13.3

4041: 11 Mile Rd & WB M-96 (Michigan Avenue)/11 Mile Rd (North) Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	16.3	22.9	17.8

4042: 11 Mile Rd & H Dr N Performance by approach

Approach	NE	SW	All
Denied Del/Veh (s)	0.0	0.3	0.1
Total Del/Veh (s)	2.5	3.4	2.9

4050: Prop Site Drive E & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	4.8	43.1	12.3

4051: Prop Site Drive W & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	7.9	36.7	18.2

4061: WB M-96 (Michigan Avenue) & Firekeepers Main Drive Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	3.5	48.9	8.9

4065: WB M-96 (Michigan Avenue) & 15 Mile Rd (North) Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.3	0.0	0.3
Total Del/Veh (s)	40.9	57.2	43.2

4066: EB M-96 (Michigan Avenue) & WB to EB Xover W of 15 Mile Rd (South) Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	6.3	39.8	7.8

4067: 15 Mile Rd (South) & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.5	0.0
Total Del/Veh (s)	11.4	47.1	14.6

4068: EB to WB Xover E of 15 Mile Rd (South) & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.5	0.0	0.5
Total Del/Veh (s)	8.5	37.4	10.0

4070: M-311 (11 Mile Rd) & Site Drive East Performance by approach

Approach	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.0	0.2	0.1

4071: 15 Mile Rd & Verona Rd Performance by approach

Approach	NB	SB	SE	NW	All
Denied Del/Veh (s)	0.5	0.1	3.1	0.2	1.6
Total Del/Veh (s)	16.6	10.2	10.9	31.0	15.7

4075: 11 Mile Road & Verona Road Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.7	2.1	0.5	0.5
Total Del/Veh (s)	22.5	31.3	24.9	44.5	27.7

9002: WB M-96 (Michigan Avenue) & Firekeepers Gas Station Driveway Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.2	0.0
Total Del/Veh (s)	1.9	8.0	3.1

9003: WB M-96 (Michigan Avenue) & Firekeepers E Drive Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.9	8.6	3.0

9004: WB M-96 (Michigan Avenue) & Ackerson Drive Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	1.3	6.5	1.4

9006: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	0.9	2.7	1.0

9008: 15 Mile Rd (North) & Old M-96 (Michigan Ave) Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.0	0.0	0.0
Total Del/Veh (s)	6.2	0.7	2.5	1.6

9013: SB I-69 On-Ramp & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	13.3	13.3

9016: EB M-96 (Michigan Avenue) & NB I-69 On-Ramp Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	14.8	14.8

9017: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	1.6	1.6

9018: EB M-96 (Michigan Avenue) & WB to EB Xover W of M-227/West Drive Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.1	8.4	2.2

9019: EB to WB Xover W of M-227/West Drive & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.5	11.5	3.1

9020: EB M-96 (Michigan Avenue) & WB to EB Xover E of M-227/West Drive Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.0	8.9	1.7

9021: EB to WB Xover E of M-227/West Drive & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.2	0.0	0.2
Total Del/Veh (s)	1.2	10.1	1.8

9023: M-311 (11 Mile Rd) & B Drive North Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.8	0.3	1.2	0.5	0.6
Total Del/Veh (s)	1.2	0.7	8.8	8.9	3.0

9025: M-294 (Beadle Lake Road) & EB I-94 Off-Ramp & EB I-94 On-Ramp Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	2.6	0.3	0.0	0.6
Total Del/Veh (s)	6.0	1.7	1.7	2.4

9026: WB I-94 On-Ramp & M-294 (Beadle Lake Road) & WB I-94 Off-Ramp Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	2.0	0.0	0.3	0.5
Total Del/Veh (s)	7.2	1.6	1.3	2.4

9027: Old US-27 & EB I-94 to Old US-27 Off Ramp Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0
Total Del/Veh (s)	6.9	0.2	1.1	2.7

9028: Old US-27 & NB Old US-27 to EB I-94 On Ramp Performance by approach

Approach	NB	SB	All
Denied Del/Veh (s)	0.6	0.0	0.3
Total Del/Veh (s)	0.7	0.5	0.6

9029: SB Old US-27 WB I-94 On Ramp & Old US-27 & WB I-94 to Old US-27 Off Ramp Performance by

Approach	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	1.1	0.4
Total Del/Veh (s)	4.8	0.2	0.8	1.1

9030: I-94BL/Partello Rd & EB I-94 to I-94BL/Partello Off Ramp Performance by approach

Approach	SE	NE	SW	All
Denied Del/Veh (s)	0.0	0.2	0.0	0.1
Total Del/Veh (s)	4.4	1.4	0.2	1.6

9031: I-94BL/Partello Rd & I-94/Partello Rd to EB I-94 On Ramp Performance by approach

Approach	NE	SW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.2	0.7	0.4

9032: I-94BL/Partello Rd & WB I-94 to I-94/Partello Rd Performance by approach

Approach	EB	NE	SW	All
Denied Del/Veh (s)	0.0	0.0	0.8	0.2
Total Del/Veh (s)	3.4	1.2	0.5	1.8

9034: Dummy Node & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	1.5	5.3	1.6

9035: Dummy Node & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	0.5	10.8	0.8

9036: WB M-96 (Michigan Avenue) & Dummy Node Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	0.6	5.3	0.7

9037: WB M-96 (Michigan Avenue) & Dummy Node Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.5	0.5

9040: Old US-27 & NB Old US-27 to WB I-94 On Ramp Performance by approach

Approach	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.0	0.3	0.8

9041: WB to EB Xover E of M-227/West Drive/McDonald's Dr & WB M-96 (Michigan Avenue) Performanc

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	1.4	14.8	2.5

9128: M-96 (Michigan Avenue)/WB M-96 (Michigan Avenue) & EB M-96 (Michigan Avenue) Performance

Approach	NB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.1	5.2	3.2

9137: SB I-69 On-Ramp Performance by approach

Approach	SB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	7.0	0.4	2.0

9143: NB I-69 On-Ramp Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	14.8	3.1	4.2

9146: WB to EB Xover W of M-227/West Drive & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.9	0.9

9147: EB M-96 (Michigan Avenue) & EB to WB Xover W of M-227/West Drive Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	1.7	1.7

9150: M-311 (11 Mile Rd) /NB M-311 (11 Mile Rd) & SB M-311 (11 Mile Rd) Performance by approach

Approach	NB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.1	0.2	0.2

9151: EB M-96 (Michigan Avenue) & EB to WB Xover E of M-227/West Drive Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.5	0.5

9157: SB I-69 On-Ramp & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	6.2	6.2

9158: SB I-69 Off-Ramp (Push Button) & SB I-69 Off-Ramp Performance by approach

Approach	SB	All
Denied Del/Veh (s)	0.6	0.6
Total Del/Veh (s)	11.6	11.6

9159: NB I-69 Off-Ramp & NB I-69 Off-Ramp (Push Button) Performance by approach

Approach	NB	All
Denied Del/Veh (s)	0.4	0.4
Total Del/Veh (s)	3.2	3.2

9178: WB I-94 to BL-94/Partello Rd Off Ramp/WB I-94 to I-94/Partello Rd & BL-94/Partello Rd to WB I-94

Approach	EB	WB	All
Denied Del/Veh (s)	0.2	0.0	0.1
Total Del/Veh (s)	0.2	0.4	0.3

9304: WB to EB Xover W of 15 Mile Rd (North) & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	30.0	30.0

9305: EB M-96 (Michigan Avenue) & WB to EB Xover W of 15 Mile Rd (North) Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	3.1	54.0	4.0

9307: EB M-96 (Michigan Avenue) & EB to WB Xover E of 15 Mile Rd (North) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	13.9	13.9

9310: WB to EB Xover W of 15 Mile Rd (South) & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	53.4	53.4

9311: EB M-96 (Michigan Avenue) & EB to WB Xover E of 15 Mile Rd (South) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	5.0	5.0

9330: EB to WB Xover E of Old M-311 (11 Mile Rd) & WB M-96 (Michigan Avenue) Performance by appr

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.6	6.6	1.7

9331: EB M-96 (Michigan Avenue) & EB to WB Xover E of Old M-311 (11 Mile Rd) Performance by appro

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.8	2.8

9332: WB M-96 (Michigan Avenue) & Old M-311 (11 Mile Rd) Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.9	5.4	1.2

9336: WB to EB Xover W of Old M-311 (11 Mile Rd) & WB M-96 (Michigan Avenue) Performance by app

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.3	2.3

9337: EB M-96 (Michigan Avenue) & WB to EB Xover W of Old M-311 (11 Mile Rd) Performance by appr

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	5.0	9.7	5.9

9338: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & NB to SB Xover N of M-96 (Michigan Avenue) F

Approach	NB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	1.9	1.9

9339: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & EB I-94 On Ramp Performance by approach

Approach	NB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	5.7	5.7

9340: EB I-94 On Ramp Performance by approach

Approach	EB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	4.4	0.1	1.5

9342: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & EB I-94 On Ramp Performance by approach

Approach	SB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	12.7	12.7

9343: EB I-94 Off-ramp Performance by approach

Approach	EB	All
Denied Del/Veh (s)	1.9	1.9
Total Del/Veh (s)	1.0	1.0

9346: WB I-94 On Ramp Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.7	3.4	2.6

9347: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & WB I-94 On Ramp Performance by approach

Approach	NW	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	4.1	4.1

9348: WB I-94 On Ramp & EB M-96 (Michigan Avenue)/11 Mile Rd (South) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	1.7	1.7

9349: WB I-94 Off-ramp Performance by approach

Approach	WB	All
Denied Del/Veh (s)	1.3	1.3
Total Del/Veh (s)	0.6	0.6

9351: SB to NB Xover E of 11 Mile Rd & WB M-96 (Michigan Avenue)/11 Mile Rd (North) Performance b

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.2	3.5	1.4

9352: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & SB to NB Xover E of 11 Mile Rd Performance b

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	5.6	5.6

9354: EB to WB Xover W of 11 Mile Rd & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	3.5	3.5

9355: EB M-96 (Michigan Avenue) & EB to WB Xover W of 11 Mile Rd Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.4	2.4

9356: WB to EB Xover W of 11 Mile Rd & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.3	2.3

9357: EB M-96 (Michigan Avenue) & WB to EB Xover W of 11 Mile Rd Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.3	0.3

9359: EB M-96 (Michigan Avenue) & M-96 (Michigan Avenue)/WB M-96 (Michigan Avenue) Performance

Approach	EB	WB	All
Denied Del/Veh (s)	0.2	0.0	0.1
Total Del/Veh (s)	2.0	0.8	1.3

9381: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.9	2.9

9382: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.6	5.8	3.8

9383: WB M-96 (Michigan Avenue) Performance by approach

Approach	NW	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.5	0.5

9384: EB M-96 (Michigan Avenue) Performance by approach

Approach	SE	SW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.7	3.7	1.7

9385: Ceresco Road/12 Mile Road & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	0.9	3.6	1.1

9386: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.9	3.6	2.9

9387: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.6	0.6

9388: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.4	0.4

9389: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.3	4.0	2.3

9390: 13 Mile Rd & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	0.6	2.9	0.6

9392: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.1	3.3	1.2

9393: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.9	0.9

9394: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	19.8	19.8

9396: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.1	7.9	2.4

9397: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.4	2.4

9398: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	17.2	17.2

9400: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.7	11.1	0.9

9401: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.3	2.3

9410: Retail Drive & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	0.7	6.8	0.8

9415: EB Main Entrance/EB M-96 (Michigan Avenue) & M-96 (Michigan Avenue) Performance by approa

Approach	EB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.0	1.9	2.0

9416: SB M-311 (11 Mile Rd)/EB M-96 (Michigan Avenue)/11 Mile Rd (South) & EB M-96 (Michigan Ave

Approach	SB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	3.7	3.7

Total Network Performance

Denied Del/Veh (s)	4.1
Total Del/Veh (s)	100.0

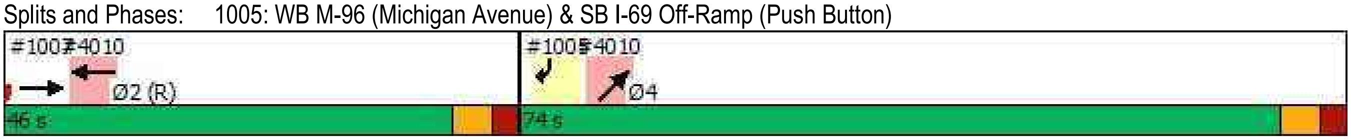
Scenario M3

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø2
Lane Configurations							
Traffic Volume (vph)	0	0	1230	0	0	2322	
Future Volume (vph)	0	0	1230	0	0	2322	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	0.91	1.00	1.00	0.76	
Frt						0.850	
Flt Protected							
Satd. Flow (prot)	0	0	5085	0	0	3610	
Flt Permitted							
Satd. Flow (perm)	0	0	5085	0	0	3610	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)						432	
Link Speed (mph)		45	45		25		
Link Distance (ft)		275	194		266		
Travel Time (s)		4.2	2.9		7.3		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.84	0.75	
Heavy Vehicles (%)	2%	2%	2%	2%	3%	2%	
Adj. Flow (vph)	0	0	1337	0	0	3096	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	1337	0	0	3096	
Turn Type			NA			Prot	
Protected Phases			Free!			4!	2
Permitted Phases							
Minimum Split (s)						17.0	17.0
Total Split (s)						74.0	46.0
Total Split (%)						61.7%	38%
Yellow Time (s)						3.5	3.5
All-Red Time (s)						2.5	2.5
Lost Time Adjust (s)						0.0	
Total Lost Time (s)						6.0	
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)			120.0			68.0	
Actuated g/C Ratio			1.00			0.57	
v/c Ratio			0.26			1.39	
Control Delay			0.1			200.0	
Queue Delay			0.0			0.1	
Total Delay			0.1			200.1	
LOS			A			F	
Approach Delay			0.1		200.1		
Approach LOS			A		F		
Queue Length 50th (ft)			0			~1341	
Queue Length 95th (ft)			0			#1055	
Internal Link Dist (ft)		195	114		186		
Turn Bay Length (ft)							
Base Capacity (vph)			5085			2232	
Starvation Cap Reductn			0			0	
Spillback Cap Reductn			969			87	
Storage Cap Reductn			0			0	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø2
Reduced v/c Ratio			0.32			1.44	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 100 (83%), Referenced to phase 2:EBT, Start of Green	
Natural Cycle: 150	
Control Type: Pretimed	
Maximum v/c Ratio: 1.39	
Intersection Signal Delay: 139.8	Intersection LOS: F
Intersection Capacity Utilization 92.9%	ICU Level of Service F
Analysis Period (min) 15	
~ Volume exceeds capacity, queue is theoretically infinite.	
Queue shown is maximum after two cycles.	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	
! Phase conflict between lane groups.	

Splits and Phases: 1005: WB M-96 (Michigan Avenue) & SB I-69 Off-Ramp (Push Button)



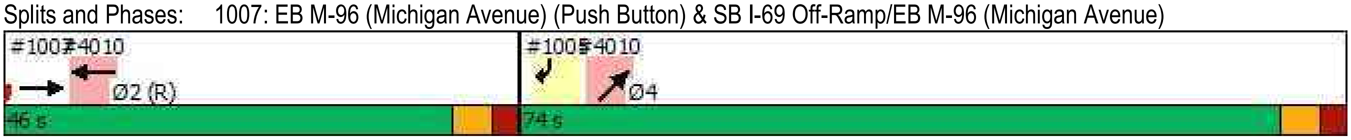
Lane Group	EBT	EBR	WBL	WBT	NEL	NER	Ø4
Lane Configurations							
Traffic Volume (vph)	112	0	0	0	0	3059	
Future Volume (vph)	112	0	0	0	0	3059	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Storage Length (ft)		260	285		0	0	
Storage Lanes		0	0		0	3	
Taper Length (ft)			240		25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.76	
Frt						0.850	
Flt Protected							
Satd. Flow (prot)	1863	0	0	0	0	3610	
Flt Permitted							
Satd. Flow (perm)	1863	0	0	0	0	3610	
Right Turn on Red		Yes				Yes	
Satd. Flow (RTOR)						2086	
Link Speed (mph)	25			45	45		
Link Distance (ft)	301			619	190		
Travel Time (s)	8.2			9.4	2.9		
Peak Hour Factor	0.75	0.84	0.92	0.92	0.90	0.90	
Heavy Vehicles (%)	2%	3%	2%	2%	2%	2%	
Adj. Flow (vph)	149	0	0	0	0	3399	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	149	0	0	0	0	3399	
Turn Type	NA					Free	
Protected Phases	2						4
Permitted Phases						Free	
Minimum Split (s)	17.0						17.0
Total Split (s)	46.0						74.0
Total Split (%)	38.3%						62%
Yellow Time (s)	3.5						3.5
All-Red Time (s)	2.5						2.5
Lost Time Adjust (s)	0.0						
Total Lost Time (s)	6.0						
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)	40.0					120.0	
Actuated g/C Ratio	0.33					1.00	
v/c Ratio	0.24					0.94	
Control Delay	30.3					23.3	
Queue Delay	0.0					0.0	
Total Delay	30.3					23.3	
LOS	C					C	
Approach Delay	30.3				23.3		
Approach LOS	C				C		
Queue Length 50th (ft)	83					494	
Queue Length 95th (ft)	111					m305	
Internal Link Dist (ft)	221			539	110		
Turn Bay Length (ft)							
Base Capacity (vph)	621					3610	

Lane Group	EBT	EBR	WBL	WBT	NEL	NER	Ø4
Starvation Cap Reductn	0					0	
Spillback Cap Reductn	0					0	
Storage Cap Reductn	0					0	
Reduced v/c Ratio	0.24					0.94	

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 100 (83%), Referenced to phase 2:EBT, Start of Green
Natural Cycle: 150
Control Type: Pretimed
Maximum v/c Ratio: 1.39
Intersection Signal Delay: 23.5 Intersection LOS: C
Intersection Capacity Utilization 67.5% ICU Level of Service C
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1007: EB M-96 (Michigan Avenue) (Push Button) & SB I-69 Off-Ramp/EB M-96 (Michigan Avenue)

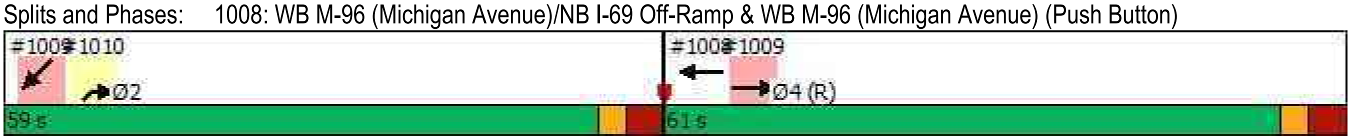


Lane Group	EBL	EBT	WBT	WBR	SWL	SWR	Ø2
Lane Configurations			↑↑			↱↱	
Traffic Volume (vph)	0	0	482	0	0	867	
Future Volume (vph)	0	0	482	0	0	867	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.88	
Frt						0.850	
Flt Protected							
Satd. Flow (prot)	0	0	3539	0	0	2787	
Flt Permitted							
Satd. Flow (perm)	0	0	3539	0	0	2787	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)						1097	
Link Speed (mph)		45	25		45		
Link Distance (ft)		217	252		223		
Travel Time (s)		3.3	6.9		3.4		
Peak Hour Factor	0.92	0.92	0.75	0.93	0.92	0.92	
Heavy Vehicles (%)	2%	2%	2%	6%	2%	2%	
Adj. Flow (vph)	0	0	643	0	0	942	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	643	0	0	942	
Turn Type			NA			Free	
Protected Phases			4				2
Permitted Phases						Free	
Minimum Split (s)			16.0				16.0
Total Split (s)			61.0				59.0
Total Split (%)			50.8%				49%
Yellow Time (s)			2.5				2.5
All-Red Time (s)			3.5				3.5
Lost Time Adjust (s)			0.0				
Total Lost Time (s)			6.0				
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)			55.0			120.0	
Actuated g/C Ratio			0.46			1.00	
v/c Ratio			0.40			0.34	
Control Delay			22.4			3.4	
Queue Delay			0.0			0.0	
Total Delay			22.4			3.4	
LOS			C			A	
Approach Delay			22.4		3.4		
Approach LOS			C		A		
Queue Length 50th (ft)			169			75	
Queue Length 95th (ft)			173			76	
Internal Link Dist (ft)		137	172		143		
Turn Bay Length (ft)							
Base Capacity (vph)			1622			2787	
Starvation Cap Reductn			0			0	
Spillback Cap Reductn			0			0	
Storage Cap Reductn			0			0	

Lane Group	EBL	EBT	WBT	WBR	SWL	SWR	Ø2
Reduced v/c Ratio			0.40			0.34	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 92 (77%), Referenced to phase 4:WBT, Start of Green	
Natural Cycle: 45	
Control Type: Pretimed	
Maximum v/c Ratio: 0.61	
Intersection Signal Delay: 11.1	Intersection LOS: B
Intersection Capacity Utilization 47.9%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 1008: WB M-96 (Michigan Avenue)/NB I-69 Off-Ramp & WB M-96 (Michigan Avenue) (Push Button)



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	0	845	0	0	0	0	0	0	0	0	867	0
Future Volume (vph)	0	845	0	0	0	0	0	0	0	0	867	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	3539	0	0	0	0	0	0	0	0	3539	0
Flt Permitted												
Satd. Flow (perm)	0	3539	0	0	0	0	0	0	0	0	3539	0
Right Turn on Red			Yes			Yes			Yes	Yes		Yes
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		209			206			223			213	
Travel Time (s)		3.2			3.1			3.4			3.2	
Peak Hour Factor	0.86	0.86	0.86	0.92	0.92	0.92	0.92	0.92	0.92	0.91	0.91	0.91
Adj. Flow (vph)	0	983	0	0	0	0	0	0	0	0	953	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	983	0	0	0	0	0	0	0	0	953	0
Turn Type		NA									NA	
Protected Phases		4									2	
Permitted Phases												
Minimum Split (s)		16.0									16.0	
Total Split (s)		61.0									59.0	
Total Split (%)		50.8%									49.2%	
Yellow Time (s)		2.5									2.5	
All-Red Time (s)		3.5									3.5	
Lost Time Adjust (s)		0.0									0.0	
Total Lost Time (s)		6.0									6.0	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		55.0									53.0	
Actuated g/C Ratio		0.46									0.44	
v/c Ratio		0.61									0.61	
Control Delay		22.0									25.0	
Queue Delay		0.0									0.0	
Total Delay		22.0									25.0	
LOS		C									C	
Approach Delay		22.0									25.0	
Approach LOS		C									C	
Queue Length 50th (ft)		266									307	
Queue Length 95th (ft)		m303									382	
Internal Link Dist (ft)		129			126			143			133	
Turn Bay Length (ft)												
Base Capacity (vph)		1622									1563	
Starvation Cap Reductn		0									0	
Spillback Cap Reductn		0									0	
Storage Cap Reductn		0									0	
Reduced v/c Ratio		0.61									0.61	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 92 (77%), Referenced to phase 4:WBT, Start of Green	
Natural Cycle: 45	
Control Type: Pretimed	
Maximum v/c Ratio: 0.61	
Intersection Signal Delay: 23.5	Intersection LOS: C
Intersection Capacity Utilization 57.3%	ICU Level of Service B
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1009: WB M-96 (Michigan Avenue) (Push Button)/WB M-96 (Michigan Avenue) & EB M-96 (Michigan Avenue)

Lane Group	EBT	EBR	WBL	WBT	NEL	NER	Ø4
Lane Configurations	↑↑					↱	
Traffic Volume (vph)	845	0	0	0	0	122	
Future Volume (vph)	845	0	0	0	0	122	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	0.95	1.00	1.00	1.00	1.00	1.00	
Frt						0.865	
Flt Protected							
Satd. Flow (prot)	3539	0	0	0	0	1611	
Flt Permitted							
Satd. Flow (perm)	3539	0	0	0	0	1611	
Right Turn on Red		Yes				Yes	
Satd. Flow (RTOR)						305	
Link Speed (mph)	45			45	25		
Link Distance (ft)	206			309	315		
Travel Time (s)	3.1			4.7	8.6		
Peak Hour Factor	0.86	0.86	0.92	0.92	0.93	0.75	
Heavy Vehicles (%)	2%	2%	2%	2%	6%	2%	
Adj. Flow (vph)	983	0	0	0	0	163	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	983	0	0	0	0	163	
Turn Type	NA					Prot	
Protected Phases	Free!					2!	4
Permitted Phases							
Minimum Split (s)						16.0	16.0
Total Split (s)						59.0	61.0
Total Split (%)						49.2%	51%
Yellow Time (s)						2.5	2.5
All-Red Time (s)						3.5	3.5
Lost Time Adjust (s)						0.0	
Total Lost Time (s)						6.0	
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)	120.0					53.0	
Actuated g/C Ratio	1.00					0.44	
v/c Ratio	0.28					0.19	
Control Delay	0.2					0.5	
Queue Delay	0.0					0.0	
Total Delay	0.2					0.5	
LOS	A					A	
Approach Delay	0.2				0.5		
Approach LOS	A				A		
Queue Length 50th (ft)	0					0	
Queue Length 95th (ft)	0					0	
Internal Link Dist (ft)	126			229	235		
Turn Bay Length (ft)							
Base Capacity (vph)	3539					881	
Starvation Cap Reductn	0					0	
Spillback Cap Reductn	0					0	
Storage Cap Reductn	0					0	

Lane Group	EBT	EBR	WBL	WBT	NEL	NER	Ø4
Reduced v/c Ratio	0.28					0.19	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 92 (77%), Referenced to phase 4:WBT, Start of Green	
Natural Cycle: 45	
Control Type: Pretimed	
Maximum v/c Ratio: 0.61	
Intersection Signal Delay: 0.2	Intersection LOS: A
Intersection Capacity Utilization 57.3%	ICU Level of Service B
Analysis Period (min) 15	
! Phase conflict between lane groups.	

Splits and Phases: 1010: NB I-69 Off-Ramp (Push Button) & EB M-96 (Michigan Avenue)

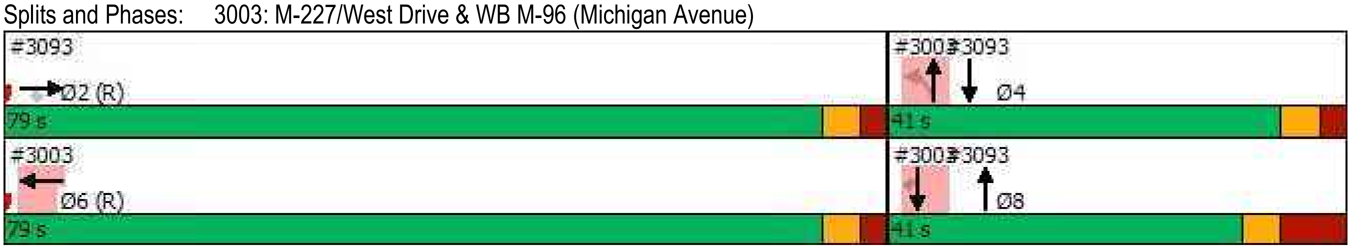
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	819	192	76	50	0	0	84	85
Future Volume (vph)	0	0	0	0	819	192	76	50	0	0	84	85
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		80	0		0	0		0
Storage Lanes	0		0	0		1	1		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.971							0.850
Flt Protected							0.950					
Satd. Flow (prot)	0	0	0	0	4987	0	1671	1863	0	0	1845	1568
Flt Permitted							0.687					
Satd. Flow (perm)	0	0	0	0	4987	0	1209	1863	0	0	1845	1568
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					83							110
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		152			212			101			1197	
Travel Time (s)		2.3			3.2			2.0			23.3	
Peak Hour Factor	0.92	0.92	0.92	0.87	0.87	0.87	0.67	0.67	0.67	0.77	0.77	0.77
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	8%	2%	2%	3%	3%	3%
Adj. Flow (vph)	0	0	0	0	941	221	113	75	0	0	109	110
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1162	0	113	75	0	0	109	110
Turn Type					NA		Perm	NA			NA	Perm
Protected Phases					6			4			8	
Permitted Phases							4					8
Minimum Split (s)					31.0		17.0	17.0			17.0	17.0
Total Split (s)					79.0		41.0	41.0			41.0	41.0
Total Split (%)					65.8%		34.2%	34.2%			34.2%	34.2%
Yellow Time (s)					3.5		3.5	3.5			3.5	3.5
All-Red Time (s)					2.5		2.5	2.5			6.0	6.0
Lost Time Adjust (s)					0.0		0.0	0.0			0.0	0.0
Total Lost Time (s)					6.0		6.0	6.0			9.5	9.5
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)					73.0		35.0	35.0			31.5	31.5
Actuated g/C Ratio					0.61		0.29	0.29			0.26	0.26
v/c Ratio					0.38		0.32	0.14			0.23	0.22
Control Delay					11.4		8.6	5.5			36.2	7.5
Queue Delay					0.0		0.0	0.0			0.0	0.0
Total Delay					11.4		8.6	5.5			36.2	7.5
LOS					B		A	A			D	A
Approach Delay					11.4			7.4			21.8	
Approach LOS					B			A			C	
Queue Length 50th (ft)					145		11	7			66	0
Queue Length 95th (ft)					166		11	8			98	28
Internal Link Dist (ft)		72			132			21			1117	
Turn Bay Length (ft)												
Base Capacity (vph)					3066		352	543			484	492

Lane Group	Ø2
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	2
Permitted Phases	
Minimum Split (s)	16.0
Total Split (s)	79.0
Total Split (%)	66%
Yellow Time (s)	3.5
All-Red Time (s)	2.5
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
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)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
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					0.38		0.32	0.14			0.23	0.22

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 112 (93%), Referenced to phase 2:EBT and 6:, Start of Green	
Natural Cycle: 50	
Control Type: Pretimed	
Maximum v/c Ratio: 0.44	
Intersection Signal Delay: 12.4	Intersection LOS: B
Intersection Capacity Utilization 49.7%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 3003: M-227/West Drive & WB M-96 (Michigan Avenue)



Lane Group	Ø2
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)	0	915	59	0	0	0	0	126	30	0	84	0
Future Volume (vph)	0	915	59	0	0	0	0	126	30	0	84	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		65	0		0	100		0	0		0
Storage Lanes	0		1	0		0	1		0	0		0
Taper Length (ft)	25			25			70			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Frt			0.850					0.971				
Flt Protected												
Satd. Flow (prot)	0	3574	1442	0	0	0	0	3344	0	0	1881	0
Flt Permitted												
Satd. Flow (perm)	0	3574	1442	0	0	0	0	3344	0	0	1881	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			59					24				
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		161			222			1117			101	
Travel Time (s)		2.4			3.4			21.8			2.0	
Peak Hour Factor	0.95	0.95	0.95	0.92	0.92	0.92	0.72	0.72	0.72	0.83	0.83	0.83
Heavy Vehicles (%)	2%	1%	12%	2%	2%	2%	2%	6%	0%	2%	1%	2%
Adj. Flow (vph)	0	963	62	0	0	0	0	175	42	0	101	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	963	62	0	0	0	0	217	0	0	101	0
Turn Type		NA	Perm					NA			NA	
Protected Phases		2						8			4	
Permitted Phases			2									
Minimum Split (s)		16.0	16.0					17.0			17.0	
Total Split (s)		79.0	79.0					41.0			41.0	
Total Split (%)		65.8%	65.8%					34.2%			34.2%	
Yellow Time (s)		3.5	3.5					3.5			3.5	
All-Red Time (s)		2.5	2.5					6.0			2.5	
Lost Time Adjust (s)		0.0	0.0					0.0			0.0	
Total Lost Time (s)		6.0	6.0					9.5			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		73.0	73.0					31.5			35.0	
Actuated g/C Ratio		0.61	0.61					0.26			0.29	
v/c Ratio		0.44	0.07					0.24			0.18	
Control Delay		4.4	0.2					31.7			0.7	
Queue Delay		0.0	0.0					0.0			0.0	
Total Delay		4.4	0.2					31.7			0.7	
LOS		A	A					C			A	
Approach Delay		4.2						31.7			0.7	
Approach LOS		A						C			A	
Queue Length 50th (ft)		43	1					61			0	
Queue Length 95th (ft)		51	0					73			0	
Internal Link Dist (ft)		81			142			1037			21	
Turn Bay Length (ft)			65									
Base Capacity (vph)		2174	900					895			548	

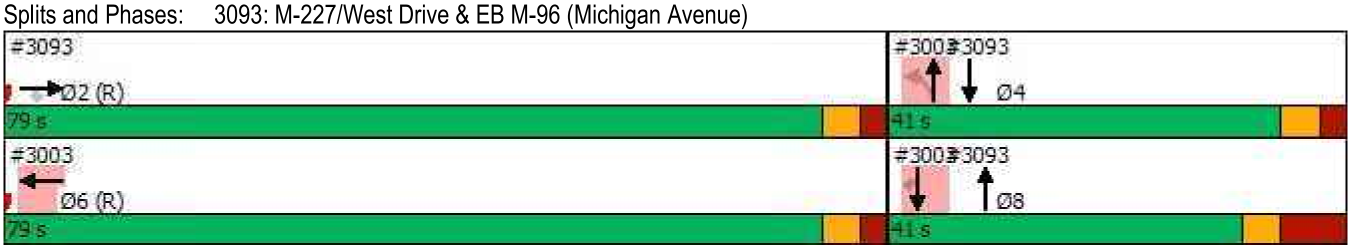
Lane Group	Ø6
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	6
Permitted Phases	
Minimum Split (s)	31.0
Total Split (s)	79.0
Total Split (%)	66%
Yellow Time (s)	3.5
All-Red Time (s)	2.5
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
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)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn		0	0					0			0	
Spillback Cap Reductn		0	0					18			0	
Storage Cap Reductn		0	0					0			0	
Reduced v/c Ratio		0.44	0.07					0.25			0.18	

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 112 (93%), Referenced to phase 2:EBT and 6:, Start of Green
Natural Cycle: 50
Control Type: Pretimed
Maximum v/c Ratio: 0.44
Intersection Signal Delay: 8.4 Intersection LOS: A
Intersection Capacity Utilization 49.7% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 3093: M-227/West Drive & EB M-96 (Michigan Avenue)



Lane Group	Ø6
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

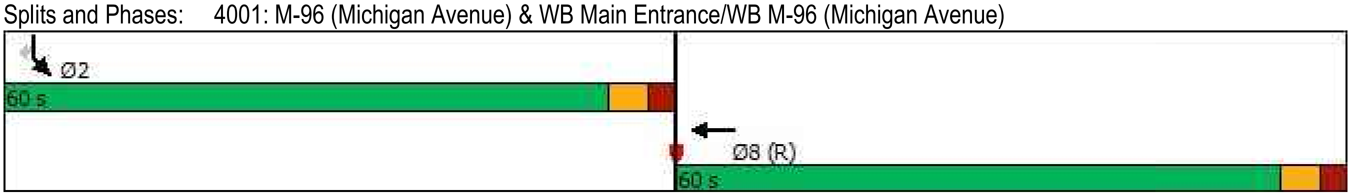
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations										
Traffic Volume (vph)	0	0	0	0	2494	1826	1690	169	0	0
Future Volume (vph)	0	0	0	0	2494	1826	1690	169	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	300		300	0	200	0	0
Storage Lanes	0		0	0		1	2	1	0	0
Taper Length (ft)	25			25			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.88	0.97	1.00	1.00	1.00
Frt						0.850		0.850		
Flt Protected							0.950			
Satd. Flow (prot)	0	0	0	0	3539	2787	3433	1583	0	0
Flt Permitted							0.950			
Satd. Flow (perm)	0	0	0	0	3539	2787	3433	1583	0	0
Right Turn on Red			Yes	Yes		Yes		Yes		
Satd. Flow (RTOR)						459		27		
Link Speed (mph)		45			45		55		45	
Link Distance (ft)		858			894		434		215	
Travel Time (s)		13.0			13.5		5.4		3.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	2711	1985	1837	184	0	0
Shared Lane Traffic (%)										
Lane Group Flow (vph)	0	0	0	0	2711	1985	1837	184	0	0
Turn Type					NA	Free	Prot	Perm		
Protected Phases					8		2			
Permitted Phases						Free		2		
Minimum Split (s)					16.0		16.0	16.0		
Total Split (s)					60.0		60.0	60.0		
Total Split (%)					50.0%		50.0%	50.0%		
Yellow Time (s)					3.5		3.5	3.5		
All-Red Time (s)					2.5		2.5	2.5		
Lost Time Adjust (s)					0.0		0.0	0.0		
Total Lost Time (s)					6.0		6.0	6.0		
Lead/Lag										
Lead-Lag Optimize?										
Act Effct Green (s)					54.0	120.0	54.0	54.0		
Actuated g/C Ratio					0.45	1.00	0.45	0.45		
v/c Ratio					1.70	0.71	1.19	0.25		
Control Delay					340.4	0.2	113.7	7.1		
Queue Delay					0.0	0.0	0.0	0.0		
Total Delay					340.4	0.2	113.7	7.1		
LOS					F	A	F	A		
Approach Delay					196.6		104.0			
Approach LOS					F		F			
Queue Length 50th (ft)					~1631	0	~901	29		
Queue Length 95th (ft)					m#1321	m0	#1040	m42		
Internal Link Dist (ft)		778			814		354		135	
Turn Bay Length (ft)						300		200		
Base Capacity (vph)					1592	2787	1544	727		
Starvation Cap Reductn					0	0	0	0		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Spillback Cap Reductn					0	0	0	0		
Storage Cap Reductn					0	0	0	0		
Reduced v/c Ratio					1.70	0.71	1.19	0.25		

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 36 (30%), Referenced to phase 8:WBT, Start of Green	
Natural Cycle: 150	
Control Type: Pretimed	
Maximum v/c Ratio: 1.70	
Intersection Signal Delay: 168.7	Intersection LOS: F
Intersection Capacity Utilization 127.2%	ICU Level of Service H
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4001: M-96 (Michigan Avenue) & WB Main Entrance/WB M-96 (Michigan Avenue)

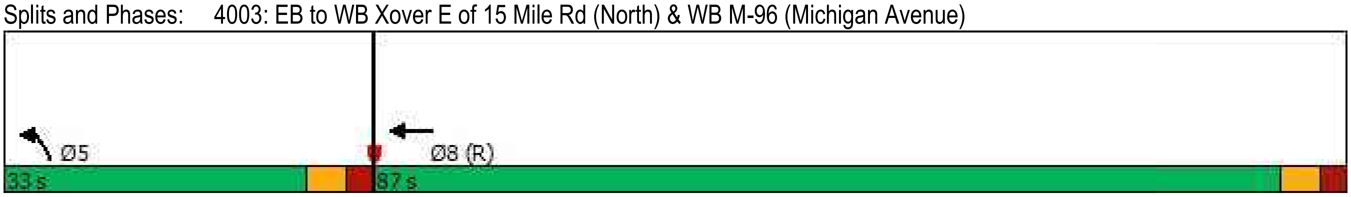


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	3637	771	0
Future Volume (vph)	0	0	0	3637	771	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	0.97	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	5085	3433	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	5085	3433	0
Right Turn on Red		Yes			Yes	Yes
Satd. Flow (RTOR)						
Link Speed (mph)	45			45	25	
Link Distance (ft)	660			254	113	
Travel Time (s)	10.0			3.8	3.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.70	0.92
Adj. Flow (vph)	0	0	0	3953	1101	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	3953	1101	0
Turn Type				NA	Prot	
Protected Phases				8	5	
Permitted Phases						
Minimum Split (s)				16.0	13.0	
Total Split (s)				87.0	33.0	
Total Split (%)				72.5%	27.5%	
Yellow Time (s)				3.5	3.5	
All-Red Time (s)				2.5	2.5	
Lost Time Adjust (s)				0.0	0.0	
Total Lost Time (s)				6.0	6.0	
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)				81.0	27.0	
Actuated g/C Ratio				0.68	0.22	
v/c Ratio				1.15	1.43	
Control Delay				88.5	236.0	
Queue Delay				0.2	0.0	
Total Delay				88.7	236.0	
LOS				F	F	
Approach Delay				88.7	236.0	
Approach LOS				F	F	
Queue Length 50th (ft)				~1316	~603	
Queue Length 95th (ft)				m#1297	m#487	
Internal Link Dist (ft)	580			174	33	
Turn Bay Length (ft)						
Base Capacity (vph)				3432	772	
Starvation Cap Reductn				0	0	
Spillback Cap Reductn				310	0	
Storage Cap Reductn				0	0	
Reduced v/c Ratio				1.27	1.43	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 116 (97%), Referenced to phase 8:WBT, Start of Green	
Natural Cycle: 150	
Control Type: Pretimed	
Maximum v/c Ratio: 1.43	
Intersection Signal Delay: 120.8	Intersection LOS: F
Intersection Capacity Utilization 141.6%	ICU Level of Service H
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4003: EB to WB Xover E of 15 Mile Rd (North) & WB M-96 (Michigan Avenue)

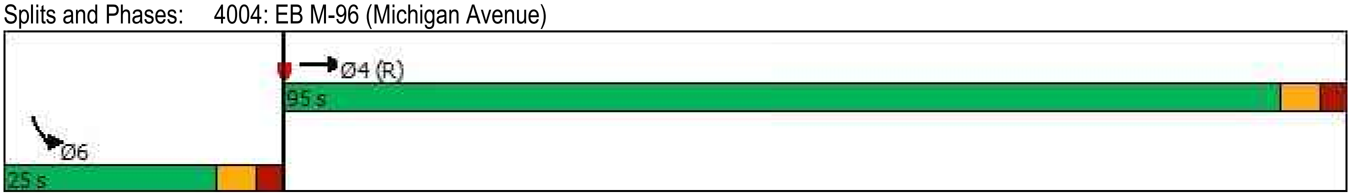


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	1439	0	0	461	0
Future Volume (vph)	0	1439	0	0	461	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	0.97	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	3433	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	3433	0
Right Turn on Red				Yes	Yes	Yes
Satd. Flow (RTOR)					127	
Link Speed (mph)		55	55		25	
Link Distance (ft)		2678	669		109	
Travel Time (s)		33.2	8.3		3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1564	0	0	501	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1564	0	0	501	0
Turn Type		NA			Prot	
Protected Phases		4			6	
Permitted Phases						
Detector Phase		4			6	
Switch Phase						
Minimum Initial (s)		10.0			7.0	
Minimum Split (s)		16.0			13.0	
Total Split (s)		95.0			25.0	
Total Split (%)		79.2%			20.8%	
Yellow Time (s)		3.5			3.5	
All-Red Time (s)		2.5			2.5	
Lost Time Adjust (s)		0.0			0.0	
Total Lost Time (s)		6.0			6.0	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode		C-Max			None	
Act Effct Green (s)		90.7			17.3	
Actuated g/C Ratio		0.76			0.14	
v/c Ratio		0.58			0.83	
Control Delay		2.2			41.8	
Queue Delay		0.0			0.0	
Total Delay		2.2			41.8	
LOS		A			D	
Approach Delay		2.2			41.8	
Approach LOS		A			D	
Queue Length 50th (ft)		40			139	
Queue Length 95th (ft)		37			202	
Internal Link Dist (ft)		2598	589		29	
Turn Bay Length (ft)						
Base Capacity (vph)		2674			650	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Starvation Cap Reductn		0			0	
Spillback Cap Reductn		22			0	
Storage Cap Reductn		0			0	
Reduced v/c Ratio		0.59			0.77	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 20 (17%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.83	
Intersection Signal Delay: 11.8	Intersection LOS: B
Intersection Capacity Utilization 87.0%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 4004: EB M-96 (Michigan Avenue)

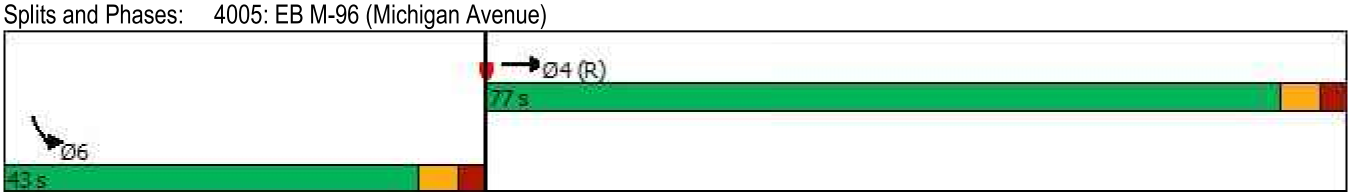


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	697	0	0	822	0
Future Volume (vph)	0	697	0	0	822	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	0.97	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	3433	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	3433	0
Right Turn on Red				Yes	Yes	Yes
Satd. Flow (RTOR)					396	
Link Speed (mph)		55	55		25	
Link Distance (ft)		1786	608		109	
Travel Time (s)		22.1	7.5		3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	758	0	0	893	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	758	0	0	893	0
Turn Type		NA			Prot	
Protected Phases		4			6	
Permitted Phases						
Detector Phase		4			6	
Switch Phase						
Minimum Initial (s)		10.0			7.0	
Minimum Split (s)		16.0			13.0	
Total Split (s)		77.0			43.0	
Total Split (%)		64.2%			35.8%	
Yellow Time (s)		3.5			3.5	
All-Red Time (s)		2.5			2.5	
Lost Time Adjust (s)		0.0			0.0	
Total Lost Time (s)		6.0			6.0	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode		C-Max			Max	
Act Effct Green (s)		71.0			37.0	
Actuated g/C Ratio		0.59			0.31	
v/c Ratio		0.36			0.67	
Control Delay		13.3			22.3	
Queue Delay		0.0			0.0	
Total Delay		13.3			22.3	
LOS		B			C	
Approach Delay		13.3			22.3	
Approach LOS		B			C	
Queue Length 50th (ft)		151			215	
Queue Length 95th (ft)		191			287	
Internal Link Dist (ft)		1706	528		29	
Turn Bay Length (ft)						
Base Capacity (vph)		2093			1332	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Starvation Cap Reductn		0			0	
Spillback Cap Reductn		0			0	
Storage Cap Reductn		0			0	
Reduced v/c Ratio		0.36			0.67	

Intersection Summary		
Area Type:	Other	
Cycle Length: 120		
Actuated Cycle Length: 120		
Offset: 112 (93%), Referenced to phase 4:EBT, Start of Green		
Natural Cycle: 40		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.67		
Intersection Signal Delay: 18.2		Intersection LOS: B
Intersection Capacity Utilization 51.1%		ICU Level of Service A
Analysis Period (min) 15		

Splits and Phases: 4005: EB M-96 (Michigan Avenue)

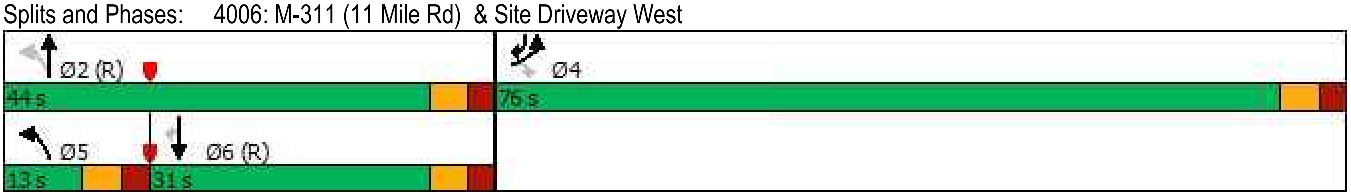


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	102	129	0
Future Volume (vph)	0	0	0	102	129	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	250	250			0
Storage Lanes	2	1	1			1
Taper Length (ft)	25		25			
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	3614	1863	1863	1863	1863	1863
Flt Permitted						
Satd. Flow (perm)	3614	1863	1863	1863	1863	1863
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)						
Link Speed (mph)	25			55	55	
Link Distance (ft)	1178			1461	940	
Travel Time (s)	32.1			18.1	11.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	111	140	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	111	140	0
Turn Type	Prot	Perm	pm+pt	NA	NA	pm+ov
Protected Phases	4		5	2	6	4
Permitted Phases		4	2			6
Detector Phase	4	4	5	2	6	4
Switch Phase						
Minimum Initial (s)	7.0	7.0	7.0	10.0	10.0	7.0
Minimum Split (s)	14.0	14.0	13.0	17.0	17.0	14.0
Total Split (s)	76.0	76.0	13.0	44.0	31.0	76.0
Total Split (%)	63.3%	63.3%	10.8%	36.7%	25.8%	63.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.5	2.5	2.5	2.5	2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None	None	Min	C-Max	C-Max	None
Act Effct Green (s)				120.0	101.0	
Actuated g/C Ratio				1.00	0.84	
v/c Ratio				0.06	0.09	
Control Delay				0.1	1.8	
Queue Delay				0.0	0.0	
Total Delay				0.1	1.8	
LOS				A	A	
Approach Delay				0.1	1.8	
Approach LOS				A	A	
Queue Length 50th (ft)				0	14	
Queue Length 95th (ft)				0	23	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Internal Link Dist (ft)	1098			1381	860	
Turn Bay Length (ft)						
Base Capacity (vph)				1863	1568	
Starvation Cap Reductn				0	0	
Spillback Cap Reductn				0	0	
Storage Cap Reductn				0	0	
Reduced v/c Ratio				0.06	0.09	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 60 (50%), Referenced to phase 2:NBTL and 6:SBT, Start of Green	
Natural Cycle: 45	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.09	
Intersection Signal Delay: 1.0	Intersection LOS: A
Intersection Capacity Utilization 13.3%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4006: M-311 (11 Mile Rd) & Site Driveway West

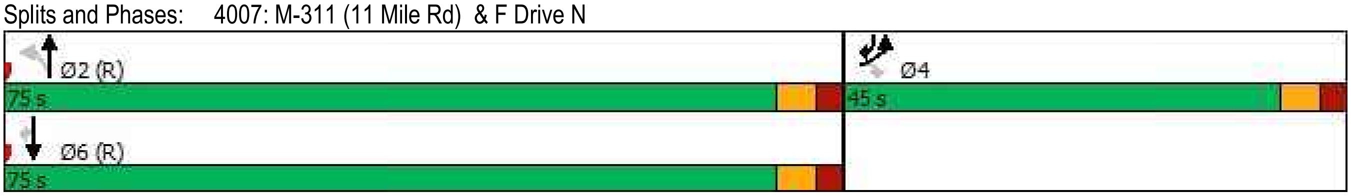


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	102	129	0
Future Volume (vph)	0	0	0	102	129	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	250	400			0
Storage Lanes	2	1	1			1
Taper Length (ft)	25		25			
Lane Util. Factor	0.97	1.00	1.00	0.95	0.95	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	3614	1863	1863	3539	3539	1863
Flt Permitted						
Satd. Flow (perm)	3614	1863	1863	3539	3539	1863
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)						
Link Speed (mph)	45			55	55	
Link Distance (ft)	1846			974	1093	
Travel Time (s)	28.0			12.1	13.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	111	140	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	111	140	0
Turn Type	Prot	Perm	Perm	NA	NA	pm+ov
Protected Phases	4			2	6	4
Permitted Phases		4	2			6
Detector Phase	4	4	2	2	6	4
Switch Phase						
Minimum Initial (s)	7.0	7.0	10.0	10.0	10.0	7.0
Minimum Split (s)	13.0	13.0	16.0	16.0	16.0	13.0
Total Split (s)	45.0	45.0	75.0	75.0	75.0	45.0
Total Split (%)	37.5%	37.5%	62.5%	62.5%	62.5%	37.5%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.5	2.5	2.5	2.5	2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None	None	C-Max	C-Max	C-Max	None
Act Effct Green (s)				120.0	120.0	
Actuated g/C Ratio				1.00	1.00	
v/c Ratio				0.03	0.04	
Control Delay				0.0	0.0	
Queue Delay				0.0	0.0	
Total Delay				0.0	0.0	
LOS				A	A	
Approach Delay						
Approach LOS						
Queue Length 50th (ft)				0	0	
Queue Length 95th (ft)				0	0	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Internal Link Dist (ft)	1766			894	1013	
Turn Bay Length (ft)						
Base Capacity (vph)				3539	3539	
Starvation Cap Reductn				0	0	
Spillback Cap Reductn				0	0	
Storage Cap Reductn				0	0	
Reduced v/c Ratio				0.03	0.04	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 20 (17%), Referenced to phase 2:NBTL and 6:SBT, Start of Green	
Natural Cycle: 40	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.04	
Intersection Signal Delay: 0.0	Intersection LOS: A
Intersection Capacity Utilization 13.3%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4007: M-311 (11 Mile Rd) & F Drive N

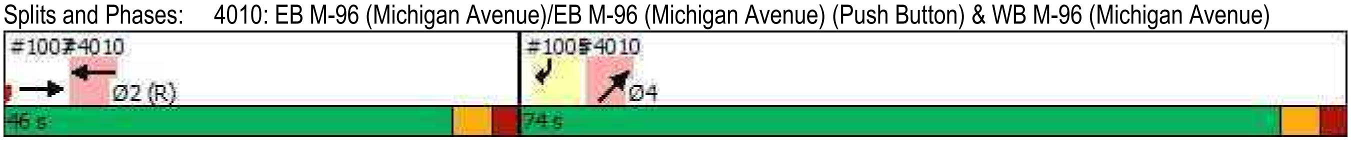


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	1230	0	0	3059	0	0	0	0
Future Volume (vph)	0	0	0	0	1230	0	0	3059	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.91	1.00	1.00	1.00	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	0	0	0	5085	0	0	5085	0	0	0	0
Flt Permitted												
Satd. Flow (perm)	0	0	0	0	5085	0	0	5085	0	0	0	0
Right Turn on Red			Yes			Yes	Yes		Yes			Yes
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		194			183			156			190	
Travel Time (s)		2.9			2.8			2.4			2.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.90	0.90	0.90	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	1337	0	0	3399	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1337	0	0	3399	0	0	0	0
Turn Type					NA			NA				
Protected Phases					2			4				
Permitted Phases												
Minimum Split (s)					17.0			17.0				
Total Split (s)					46.0			74.0				
Total Split (%)					38.3%			61.7%				
Yellow Time (s)					3.5			3.5				
All-Red Time (s)					2.5			2.5				
Lost Time Adjust (s)					0.0			0.0				
Total Lost Time (s)					6.0			6.0				
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)					40.0			68.0				
Actuated g/C Ratio					0.33			0.57				
v/c Ratio					0.79			1.18				
Control Delay					37.1			103.4				
Queue Delay					0.0			0.0				
Total Delay					37.1			103.4				
LOS					D			F				
Approach Delay					37.1			103.4				
Approach LOS					D			F				
Queue Length 50th (ft)					385			~1154				
Queue Length 95th (ft)					438			m#1026				
Internal Link Dist (ft)		114			103			76			110	
Turn Bay Length (ft)												
Base Capacity (vph)					1695			2881				
Starvation Cap Reductn					0			0				
Spillback Cap Reductn					0			0				
Storage Cap Reductn					0			0				
Reduced v/c Ratio					0.79			1.18				

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 100 (83%), Referenced to phase 2:EBT, Start of Green	
Natural Cycle: 150	
Control Type: Pretimed	
Maximum v/c Ratio: 1.39	
Intersection Signal Delay: 84.7	Intersection LOS: F
Intersection Capacity Utilization 92.9%	ICU Level of Service F
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4010: EB M-96 (Michigan Avenue)/EB M-96 (Michigan Avenue) (Push Button) & WB M-96 (Michigan Avenue)



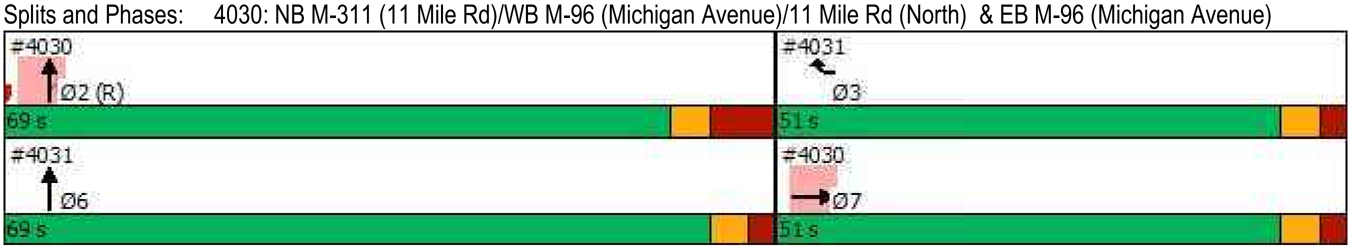
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	801	0	0	0	0	0	64	38	0	0	0
Future Volume (vph)	0	801	0	0	0	0	0	64	38	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		250	0		0
Storage Lanes	0		0	0		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	1.00	1.00
Frt									0.850			
Flt Protected												
Satd. Flow (prot)	0	3539	0	0	0	0	0	5085	1583	0	0	0
Flt Permitted												
Satd. Flow (perm)	0	3539	0	0	0	0	0	5085	1583	0	0	0
Right Turn on Red	Yes		Yes			Yes			Yes			Yes
Satd. Flow (RTOR)									41			
Link Speed (mph)		55			55			55			30	
Link Distance (ft)		167			316			655			182	
Travel Time (s)		2.1			3.9			8.1			4.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	871	0	0	0	0	0	70	41	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	871	0	0	0	0	0	70	41	0	0	0
Turn Type		NA						NA	Perm			
Protected Phases		7						2				
Permitted Phases									2			
Minimum Split (s)		16.0						19.5	19.5			
Total Split (s)		51.0						69.0	69.0			
Total Split (%)		42.5%						57.5%	57.5%			
Yellow Time (s)		3.5						3.5	3.5			
All-Red Time (s)		2.5						6.0	6.0			
Lost Time Adjust (s)		0.0						0.0	0.0			
Total Lost Time (s)		6.0						9.5	9.5			
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		45.0						59.5	59.5			
Actuated g/C Ratio		0.38						0.50	0.50			
v/c Ratio		0.66						0.03	0.05			
Control Delay		40.1						15.5	4.8			
Queue Delay		0.0						0.0	0.0			
Total Delay		40.1						15.5	4.8			
LOS		D						B	A			
Approach Delay		40.1						11.6				
Approach LOS		D						B				
Queue Length 50th (ft)		372						9	0			
Queue Length 95th (ft)		440						18	19			
Internal Link Dist (ft)		87			236			575			102	
Turn Bay Length (ft)									250			
Base Capacity (vph)		1327						2521	805			
Starvation Cap Reductn		0						0	0			

Lane Group	Ø3	Ø6
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Ideal Flow (vphpl)		
Storage Length (ft)		
Storage Lanes		
Taper Length (ft)		
Lane Util. Factor		
Frt		
Flt Protected		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Peak Hour Factor		
Adj. Flow (vph)		
Shared Lane Traffic (%)		
Lane Group Flow (vph)		
Turn Type		
Protected Phases	3	6
Permitted Phases		
Minimum Split (s)	16.0	16.0
Total Split (s)	51.0	69.0
Total Split (%)	43%	58%
Yellow Time (s)	3.5	3.5
All-Red Time (s)	2.5	2.5
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag		
Lead-Lag Optimize?		
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		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn		0						0	0			
Storage Cap Reductn		0						0	0			
Reduced v/c Ratio		0.66						0.03	0.05			

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 88 (73%), Referenced to phase 2:NBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.66	
Intersection Signal Delay: 36.8	Intersection LOS: D
Intersection Capacity Utilization 43.4%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4030: NB M-311 (11 Mile Rd)/WB M-96 (Michigan Avenue)/11 Mile Rd (North) & EB M-96 (Michigan Avenue)



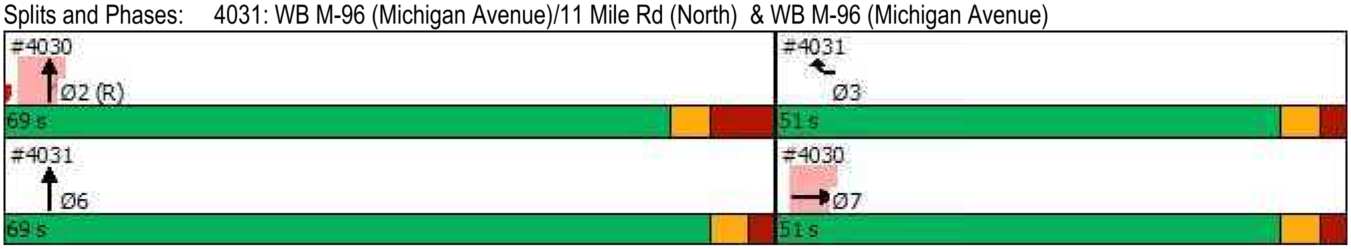
Lane Group	Ø3	Ø6
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		

Intersection Summary

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø2	Ø7
Lane Configurations								
Traffic Volume (vph)	0	983	64	0	0	0		
Future Volume (vph)	0	983	64	0	0	0		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Lane Util. Factor	1.00	0.76	0.91	1.00	1.00	1.00		
Frt		0.850						
Flt Protected								
Satd. Flow (prot)	0	3610	5085	0	0	0		
Flt Permitted								
Satd. Flow (perm)	0	3610	5085	0	0	0		
Right Turn on Red		Yes		Yes				
Satd. Flow (RTOR)		2101						
Link Speed (mph)	55		55			55		
Link Distance (ft)	405		182			493		
Travel Time (s)	5.0		2.3			6.1		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Adj. Flow (vph)	0	1068	70	0	0	0		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	0	1068	70	0	0	0		
Turn Type		Prot	NA					
Protected Phases		3	6				2	7
Permitted Phases								
Minimum Split (s)		16.0	16.0				19.5	16.0
Total Split (s)		51.0	69.0				69.0	51.0
Total Split (%)		42.5%	57.5%				58%	43%
Yellow Time (s)		3.5	3.5				3.5	3.5
All-Red Time (s)		2.5	2.5				6.0	2.5
Lost Time Adjust (s)		0.0	0.0					
Total Lost Time (s)		6.0	6.0					
Lead/Lag								
Lead-Lag Optimize?								
Act Effct Green (s)		45.0	63.0					
Actuated g/C Ratio		0.38	0.52					
v/c Ratio		0.40	0.03					
Control Delay		0.8	0.0					
Queue Delay		0.0	0.0					
Total Delay		0.8	0.0					
LOS		A	A					
Approach Delay	0.8							
Approach LOS	A							
Queue Length 50th (ft)		7	0					
Queue Length 95th (ft)		12	1					
Internal Link Dist (ft)	325		102			413		
Turn Bay Length (ft)								
Base Capacity (vph)		2666	2669					
Starvation Cap Reductn		0	0					
Spillback Cap Reductn		0	0					
Storage Cap Reductn		0	0					
Reduced v/c Ratio		0.40	0.03					

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 88 (73%), Referenced to phase 2:NBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.66	
Intersection Signal Delay: 0.7	Intersection LOS: A
Intersection Capacity Utilization 43.4%	ICU Level of Service A
Analysis Period (min) 15	

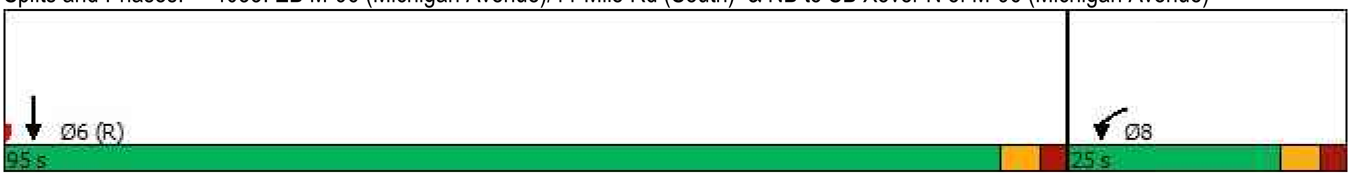
Splits and Phases: 4031: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & WB M-96 (Michigan Avenue)



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	67	0	0	0	0	863
Future Volume (vph)	67	0	0	0	0	863
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	0.91
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	3433	0	0	0	0	5085
Flt Permitted	0.950					
Satd. Flow (perm)	3433	0	0	0	0	5085
Right Turn on Red	Yes	Yes		Yes		
Satd. Flow (RTOR)	405					
Link Speed (mph)	25		55			30
Link Distance (ft)	105		587			495
Travel Time (s)	2.9		7.3			11.3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	73	0	0	0	0	938
Shared Lane Traffic (%)						
Lane Group Flow (vph)	73	0	0	0	0	938
Turn Type	Prot					NA
Protected Phases	8					6
Permitted Phases						
Minimum Split (s)	13.0					16.0
Total Split (s)	25.0					95.0
Total Split (%)	20.8%					79.2%
Yellow Time (s)	3.5					3.5
All-Red Time (s)	2.5					2.5
Lost Time Adjust (s)	0.0					0.0
Total Lost Time (s)	6.0					6.0
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)	19.0					89.0
Actuated g/C Ratio	0.16					0.74
v/c Ratio	0.08					0.25
Control Delay	0.2					0.9
Queue Delay	0.0					0.0
Total Delay	0.2					0.9
LOS	A					A
Approach Delay	0.2					0.9
Approach LOS	A					A
Queue Length 50th (ft)	0					7
Queue Length 95th (ft)	0					9
Internal Link Dist (ft)	25		507			415
Turn Bay Length (ft)						
Base Capacity (vph)	884					3771
Starvation Cap Reductn	0					0
Spillback Cap Reductn	0					0
Storage Cap Reductn	0					0
Reduced v/c Ratio	0.08					0.25

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 89 (74%), Referenced to phase 6:SBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.25	
Intersection Signal Delay: 0.8	Intersection LOS: A
Intersection Capacity Utilization 43.9%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4033: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & NB to SB Xover N of M-96 (Michigan Avenue)



Lane Group	NBL	NBT	SBT	SBR	SEL	SER	Ø2
Lane Configurations			↑↑↑			↱↱	
Traffic Volume (vph)	0	0	753	0	0	110	
Future Volume (vph)	0	0	753	0	0	110	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	0.91	1.00	1.00	0.88	
Frt						0.850	
Flt Protected							
Satd. Flow (prot)	0	0	5085	0	0	2787	
Flt Permitted							
Satd. Flow (perm)	0	0	5085	0	0	2787	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)						667	
Link Speed (mph)		30	30		30		
Link Distance (ft)		495	145		346		
Travel Time (s)		11.3	3.3		7.9		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	0	0	818	0	0	120	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	818	0	0	120	
Turn Type			NA			Prot	
Protected Phases			Free!			4!	2
Permitted Phases							
Minimum Split (s)						16.0	16.0
Total Split (s)						60.0	60.0
Total Split (%)						50.0%	50%
Yellow Time (s)						3.5	3.5
All-Red Time (s)						2.5	2.5
Lost Time Adjust (s)						0.0	
Total Lost Time (s)						6.0	
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)			120.0			54.0	
Actuated g/C Ratio			1.00			0.45	
v/c Ratio			0.16			0.07	
Control Delay			0.1			0.1	
Queue Delay			0.0			0.0	
Total Delay			0.1			0.1	
LOS			A			A	
Approach Delay			0.1		0.1		
Approach LOS			A		A		
Queue Length 50th (ft)			0			0	
Queue Length 95th (ft)			0			0	
Internal Link Dist (ft)		415	65		266		
Turn Bay Length (ft)							
Base Capacity (vph)			5085			1621	
Starvation Cap Reductn			0			0	
Spillback Cap Reductn			0			0	
Storage Cap Reductn			0			0	
Reduced v/c Ratio			0.16			0.07	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 27 (23%), Referenced to phase 4:SER, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.39	
Intersection Signal Delay: 0.1	Intersection LOS: A
Intersection Capacity Utilization 40.4%	ICU Level of Service A
Analysis Period (min) 15	

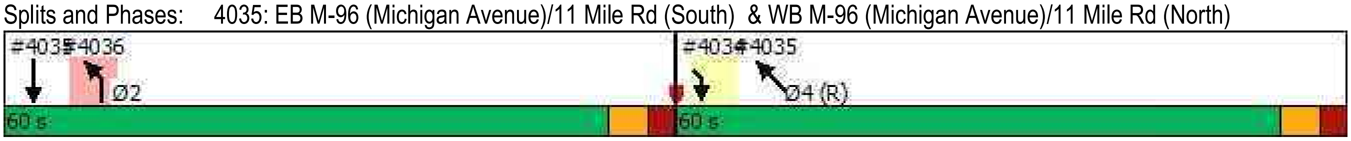
! Phase conflict between lane groups.

Splits and Phases: 4034: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & EB I-94 Off-ramp

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	753	0	0	0	0	0	821	0
Future Volume (vph)	0	0	0	0	753	0	0	0	0	0	821	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.91	1.00	1.00	1.00	1.00	1.00	0.91	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	0	0	0	5085	0	0	0	0	0	5085	0
Flt Permitted												
Satd. Flow (perm)	0	0	0	0	5085	0	0	0	0	0	5085	0
Right Turn on Red			Yes			Yes			Yes	Yes		Yes
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		145			194			233			108	
Travel Time (s)		3.3			4.4			5.3			2.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	818	0	0	0	0	0	892	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	818	0	0	0	0	0	892	0
Turn Type					NA						NA	
Protected Phases					2						4	
Permitted Phases												
Minimum Split (s)					16.0						16.0	
Total Split (s)					60.0						60.0	
Total Split (%)					50.0%						50.0%	
Yellow Time (s)					3.5						3.5	
All-Red Time (s)					2.5						2.5	
Lost Time Adjust (s)					0.0						0.0	
Total Lost Time (s)					6.0						6.0	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)					54.0						54.0	
Actuated g/C Ratio					0.45						0.45	
v/c Ratio					0.36						0.39	
Control Delay					23.3						22.3	
Queue Delay					0.0						0.0	
Total Delay					23.3						22.3	
LOS					C						C	
Approach Delay					23.3						22.3	
Approach LOS					C						C	
Queue Length 50th (ft)					212						153	
Queue Length 95th (ft)					257						181	
Internal Link Dist (ft)		65			114			153			28	
Turn Bay Length (ft)												
Base Capacity (vph)					2288						2288	
Starvation Cap Reductn					0						0	
Spillback Cap Reductn					0						0	
Storage Cap Reductn					0						0	
Reduced v/c Ratio					0.36						0.39	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 27 (23%), Referenced to phase 4:SER, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.39	
Intersection Signal Delay: 22.8	Intersection LOS: C
Intersection Capacity Utilization 38.5%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4035: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & WB M-96 (Michigan Avenue)/11 Mile Rd (North)



Lane Group	NBL	NBR	SET	SER	NWL	NWT	Ø4
Lane Configurations							
Traffic Volume (vph)	104	0	0	0	0	821	
Future Volume (vph)	104	0	0	0	0	821	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.91	
Frt							
Flt Protected	0.950						
Satd. Flow (prot)	1719	0	0	0	0	5085	
Flt Permitted	0.950						
Satd. Flow (perm)	1719	0	0	0	0	5085	
Right Turn on Red	Yes	Yes		Yes			
Satd. Flow (RTOR)	344						
Link Speed (mph)	30		30			30	
Link Distance (ft)	271		337			233	
Travel Time (s)	6.2		7.7			5.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Heavy Vehicles (%)	5%	2%	2%	2%	2%	2%	
Adj. Flow (vph)	113	0	0	0	0	892	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	113	0	0	0	0	892	
Turn Type	Prot					NA	
Protected Phases	2!					Free!	4
Permitted Phases							
Minimum Split (s)	16.0						16.0
Total Split (s)	60.0						60.0
Total Split (%)	50.0%						50%
Yellow Time (s)	3.5						3.5
All-Red Time (s)	2.5						2.5
Lost Time Adjust (s)	0.0						
Total Lost Time (s)	6.0						
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)	54.0					120.0	
Actuated g/C Ratio	0.45					1.00	
v/c Ratio	0.12					0.18	
Control Delay	0.2					0.1	
Queue Delay	0.0					0.0	
Total Delay	0.2					0.1	
LOS	A					A	
Approach Delay	0.3					0.1	
Approach LOS	A					A	
Queue Length 50th (ft)	0					0	
Queue Length 95th (ft)	0					0	
Internal Link Dist (ft)	191		257			153	
Turn Bay Length (ft)							
Base Capacity (vph)	962					5085	
Starvation Cap Reductn	0					0	
Spillback Cap Reductn	0					0	
Storage Cap Reductn	0					0	

Lane Group	NBL	NBR	SET	SER	NWL	NWT	Ø4
Reduced v/c Ratio	0.12					0.18	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 27 (23%), Referenced to phase 4:SER, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.39	
Intersection Signal Delay: 0.1	Intersection LOS: A
Intersection Capacity Utilization 32.5%	ICU Level of Service A
Analysis Period (min) 15	
! Phase conflict between lane groups.	

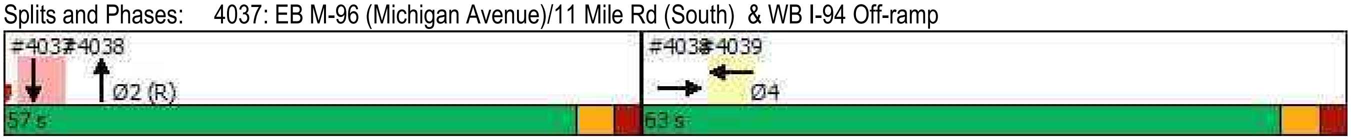
Splits and Phases: 4036: EB I-94 Off-ramp & WB M-96 (Michigan Avenue)/11 Mile Rd (North)

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø4
Lane Configurations							
Traffic Volume (vph)	0	727	0	0	99	0	
Future Volume (vph)	0	727	0	0	99	0	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	0.88	1.00	1.00	0.95	1.00	
Frt		0.850					
Flt Protected							
Satd. Flow (prot)	0	2707	0	0	3438	0	
Flt Permitted							
Satd. Flow (perm)	0	2707	0	0	3438	0	
Right Turn on Red		Yes				Yes	
Satd. Flow (RTOR)		1670					
Link Speed (mph)	30			30	30		
Link Distance (ft)	222			406	241		
Travel Time (s)	5.0			9.2	5.5		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Heavy Vehicles (%)	2%	5%	2%	2%	5%	2%	
Adj. Flow (vph)	0	790	0	0	108	0	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	790	0	0	108	0	
Turn Type		Free			NA		
Protected Phases					2		4
Permitted Phases		Free					
Minimum Split (s)					16.0		16.0
Total Split (s)					57.0		63.0
Total Split (%)					47.5%		53%
Yellow Time (s)					3.5		3.5
All-Red Time (s)					2.5		2.5
Lost Time Adjust (s)					0.0		
Total Lost Time (s)					6.0		
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)		120.0			51.0		
Actuated g/C Ratio		1.00			0.42		
v/c Ratio		0.29			0.07		
Control Delay		1.0			20.7		
Queue Delay		0.0			0.0		
Total Delay		1.0			20.7		
LOS		A			C		
Approach Delay	1.0				20.7		
Approach LOS	A				C		
Queue Length 50th (ft)		13			25		
Queue Length 95th (ft)		16			44		
Internal Link Dist (ft)	142			326	161		
Turn Bay Length (ft)							
Base Capacity (vph)		2707			1461		
Starvation Cap Reductn		0			0		
Spillback Cap Reductn		0			0		
Storage Cap Reductn		0			0		

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø4
Reduced v/c Ratio		0.29			0.07		

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 96 (80%), Referenced to phase 2:SBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.48	
Intersection Signal Delay: 3.4	Intersection LOS: A
Intersection Capacity Utilization 13.3%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4037: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & WB I-94 Off-ramp



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑						↑↑↑				
Traffic Volume (vph)	0	727	0	0	0	0	0	846	0	0	0	0
Future Volume (vph)	0	727	0	0	0	0	0	846	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	1.00	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	3438	0	0	0	0	0	4940	0	0	0	0
Flt Permitted												
Satd. Flow (perm)	0	3438	0	0	0	0	0	4940	0	0	0	0
Right Turn on Red	Yes		Yes			Yes			Yes			Yes
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		190			222			207			131	
Travel Time (s)		4.3			5.0			4.7			3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	5%	2%	2%	2%	2%	2%	5%	2%	2%	2%	2%
Adj. Flow (vph)	0	790	0	0	0	0	0	920	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	790	0	0	0	0	0	920	0	0	0	0
Turn Type		NA						NA				
Protected Phases		4						2				
Permitted Phases												
Minimum Split (s)		16.0						16.0				
Total Split (s)		63.0						57.0				
Total Split (%)		52.5%						47.5%				
Yellow Time (s)		3.5						3.5				
All-Red Time (s)		2.5						2.5				
Lost Time Adjust (s)		0.0						0.0				
Total Lost Time (s)		6.0						6.0				
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		57.0						51.0				
Actuated g/C Ratio		0.48						0.42				
v/c Ratio		0.48						0.44				
Control Delay		16.1						44.0				
Queue Delay		0.0						0.0				
Total Delay		16.1						44.0				
LOS		B						D				
Approach Delay		16.1						44.0				
Approach LOS		B						D				
Queue Length 50th (ft)		119						271				
Queue Length 95th (ft)		143						318				
Internal Link Dist (ft)		110			142			127			51	
Turn Bay Length (ft)												
Base Capacity (vph)		1633						2099				
Starvation Cap Reductn		0						0				
Spillback Cap Reductn		0						0				
Storage Cap Reductn		0						0				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio		0.48						0.44				

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 96 (80%), Referenced to phase 2:SBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.48	
Intersection Signal Delay: 31.1	Intersection LOS: C
Intersection Capacity Utilization 46.4%	ICU Level of Service A
Analysis Period (min) 15	

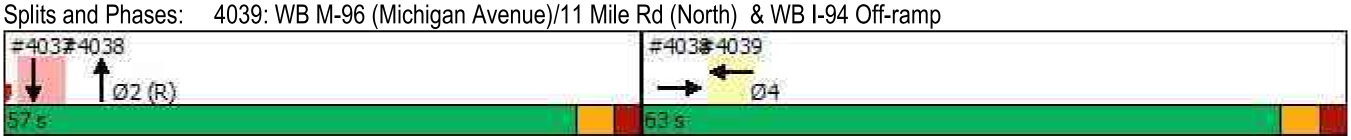
Splits and Phases: 4038: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & EB M-96 (Michigan Avenue)/11 Mile Rd (South)

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø2
Lane Configurations							
Traffic Volume (vph)	0	0	0	151	846	0	
Future Volume (vph)	0	0	0	151	846	0	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.94	1.00	
Frt							
Flt Protected					0.950		
Satd. Flow (prot)	0	0	0	1810	4848	0	
Flt Permitted					0.950		
Satd. Flow (perm)	0	0	0	1810	4848	0	
Right Turn on Red		Yes			Yes	Yes	
Satd. Flow (RTOR)					2497		
Link Speed (mph)	30			30	30		
Link Distance (ft)	415			317	131		
Travel Time (s)	9.4			7.2	3.0		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Heavy Vehicles (%)	2%	2%	2%	5%	5%	2%	
Adj. Flow (vph)	0	0	0	164	920	0	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	0	164	920	0	
Turn Type				NA	Perm		
Protected Phases				4!			2
Permitted Phases					Free!		
Minimum Split (s)				16.0			16.0
Total Split (s)				63.0			57.0
Total Split (%)				52.5%			48%
Yellow Time (s)				3.5			3.5
All-Red Time (s)				2.5			2.5
Lost Time Adjust (s)				0.0			
Total Lost Time (s)				6.0			
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)				57.0	120.0		
Actuated g/C Ratio				0.48	1.00		
v/c Ratio				0.19	0.19		
Control Delay				18.9	0.3		
Queue Delay				0.0	0.0		
Total Delay				18.9	0.3		
LOS				B	A		
Approach Delay				18.9	0.3		
Approach LOS				B	A		
Queue Length 50th (ft)				71	3		
Queue Length 95th (ft)				116	0		
Internal Link Dist (ft)	335			237	51		
Turn Bay Length (ft)							
Base Capacity (vph)				859	4848		
Starvation Cap Reductn				0	0		
Spillback Cap Reductn				0	0		
Storage Cap Reductn				0	0		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø2
Reduced v/c Ratio				0.19	0.19		

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 96 (80%), Referenced to phase 2:SBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.48	
Intersection Signal Delay: 3.1	Intersection LOS: A
Intersection Capacity Utilization 63.5%	ICU Level of Service B
Analysis Period (min) 15	
! Phase conflict between lane groups.	

Splits and Phases: 4039: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & WB I-94 Off-ramp

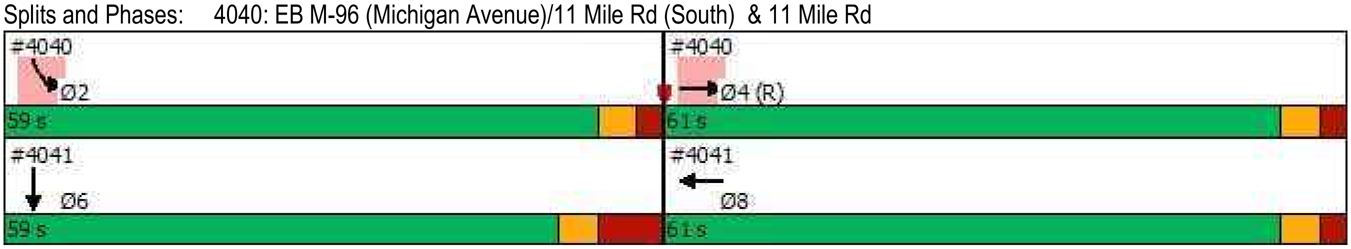


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø6	Ø8
Lane Configurations								
Traffic Volume (vph)	0	665	0	0	207	0		
Future Volume (vph)	0	665	0	0	207	0		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.97	1.00		
Frt								
Flt Protected					0.950			
Satd. Flow (prot)	0	3539	0	0	3335	0		
Flt Permitted					0.950			
Satd. Flow (perm)	0	3539	0	0	3335	0		
Right Turn on Red				Yes	Yes	Yes		
Satd. Flow (RTOR)					265			
Link Speed (mph)		55	55		45			
Link Distance (ft)		212	597		92			
Travel Time (s)		2.6	7.4		1.4			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Heavy Vehicles (%)	2%	2%	2%	2%	5%	2%		
Adj. Flow (vph)	0	723	0	0	225	0		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	0	723	0	0	225	0		
Turn Type		NA			Prot			
Protected Phases		4			2		6	8
Permitted Phases								
Minimum Split (s)		16.0			19.5		19.5	16.0
Total Split (s)		61.0			59.0		59.0	61.0
Total Split (%)		50.8%			49.2%		49%	51%
Yellow Time (s)		3.5			3.5		3.5	3.5
All-Red Time (s)		2.5			2.5		6.0	2.5
Lost Time Adjust (s)		0.0			0.0			
Total Lost Time (s)		6.0			6.0			
Lead/Lag								
Lead-Lag Optimize?								
Act Effct Green (s)		55.0			53.0			
Actuated g/C Ratio		0.46			0.44			
v/c Ratio		0.45			0.14			
Control Delay		23.2			0.2			
Queue Delay		0.0			0.0			
Total Delay		23.2			0.2			
LOS		C			A			
Approach Delay		23.2			0.2			
Approach LOS		C			A			
Queue Length 50th (ft)		195			0			
Queue Length 95th (ft)		248			0			
Internal Link Dist (ft)		132	517		12			
Turn Bay Length (ft)								
Base Capacity (vph)		1622			1620			
Starvation Cap Reductn		0			0			
Spillback Cap Reductn		0			0			
Storage Cap Reductn		0			0			

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø6	Ø8
Reduced v/c Ratio		0.45			0.14			

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 32 (27%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.48	
Intersection Signal Delay: 17.8	Intersection LOS: B
Intersection Capacity Utilization 41.1%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4040: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & 11 Mile Rd



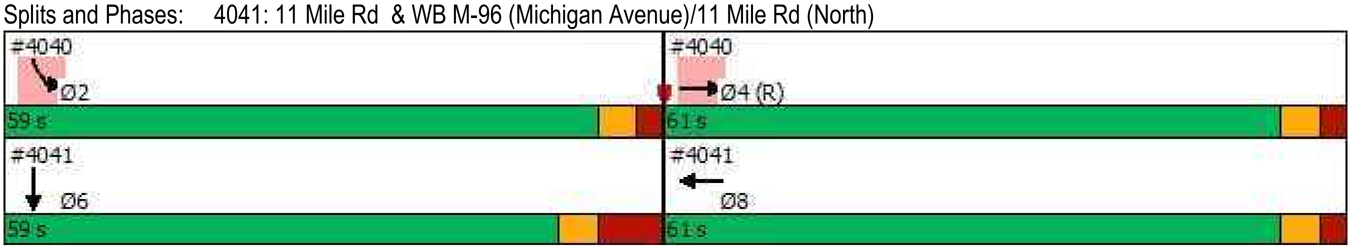
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	718	343	0	0	0	0	207	56
Future Volume (vph)	0	0	0	0	718	343	0	0	0	0	207	56
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		250	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Frt						0.850					0.968	
Flt Protected												
Satd. Flow (prot)	0	0	0	0	3539	1538	0	0	0	0	3348	0
Flt Permitted												
Satd. Flow (perm)	0	0	0	0	3539	1538	0	0	0	0	3348	0
Right Turn on Red			Yes	Yes		Yes			Yes			Yes
Satd. Flow (RTOR)						299					35	
Link Speed (mph)		55			55			45			55	
Link Distance (ft)		210			598			92			259	
Travel Time (s)		2.6			7.4			1.4			3.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	5%	2%	2%	2%	2%	5%	2%
Adj. Flow (vph)	0	0	0	0	780	373	0	0	0	0	225	61
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	780	373	0	0	0	0	286	0
Turn Type					NA	custom					NA	
Protected Phases					8	Free					6	
Permitted Phases												
Minimum Split (s)					16.0						19.5	
Total Split (s)					61.0						59.0	
Total Split (%)					50.8%						49.2%	
Yellow Time (s)					3.5						3.5	
All-Red Time (s)					2.5						6.0	
Lost Time Adjust (s)					0.0						0.0	
Total Lost Time (s)					6.0						9.5	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)					55.0	120.0					49.5	
Actuated g/C Ratio					0.46	1.00					0.41	
v/c Ratio					0.48	0.24					0.20	
Control Delay					33.0	1.1					30.6	
Queue Delay					0.0	0.0					0.0	
Total Delay					33.0	1.1					30.6	
LOS					C	A					C	
Approach Delay					22.7						30.6	
Approach LOS					C						C	
Queue Length 50th (ft)					295	0					85	
Queue Length 95th (ft)					368	0					126	
Internal Link Dist (ft)		130			518			12			179	
Turn Bay Length (ft)						250						
Base Capacity (vph)					1622	1538					1401	

Lane Group	Ø2	Ø4
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Ideal Flow (vphpl)		
Storage Length (ft)		
Storage Lanes		
Taper Length (ft)		
Lane Util. Factor		
Frt		
Flt Protected		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Peak Hour Factor		
Heavy Vehicles (%)		
Adj. Flow (vph)		
Shared Lane Traffic (%)		
Lane Group Flow (vph)		
Turn Type		
Protected Phases	2	4
Permitted Phases		
Minimum Split (s)	19.5	16.0
Total Split (s)	59.0	61.0
Total Split (%)	49%	51%
Yellow Time (s)	3.5	3.5
All-Red Time (s)	2.5	2.5
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag		
Lead-Lag Optimize?		
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)		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn					0	0					0	
Spillback Cap Reductn					0	0					0	
Storage Cap Reductn					0	0					0	
Reduced v/c Ratio					0.48	0.24					0.20	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 32 (27%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.48	
Intersection Signal Delay: 24.3	Intersection LOS: C
Intersection Capacity Utilization 41.1%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4041: 11 Mile Rd & WB M-96 (Michigan Avenue)/11 Mile Rd (North)



Lane Group	Ø2	Ø4
Starvation Cap Reductn		
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		

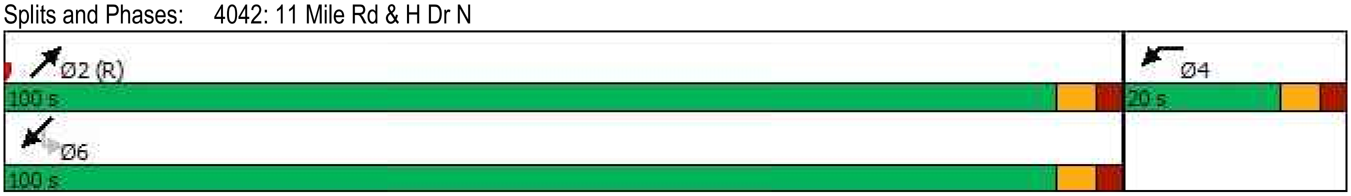
Intersection Summary

Lane Group	WBL	WBR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	0	0	343	0	0	263
Future Volume (vph)	0	0	343	0	0	263
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	1810	0	1863	0	0	1863
Flt Permitted						
Satd. Flow (perm)	1810	0	1863	0	0	1863
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)						
Link Speed (mph)	25		55			55
Link Distance (ft)	1262		1787			680
Travel Time (s)	34.4		22.2			8.4
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	2%	2%	5%	2%	2%
Adj. Flow (vph)	0	0	373	0	0	286
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	373	0	0	286
Turn Type	Prot		NA			NA
Protected Phases	4		2			6
Permitted Phases					6	
Minimum Split (s)	13.0		16.0		13.0	13.0
Total Split (s)	20.0		100.0		100.0	100.0
Total Split (%)	16.7%		83.3%		83.3%	83.3%
Yellow Time (s)	3.5		3.5		3.5	3.5
All-Red Time (s)	2.5		2.5		2.5	2.5
Lost Time Adjust (s)	0.0		0.0			0.0
Total Lost Time (s)	6.0		6.0			6.0
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)			94.0			94.0
Actuated g/C Ratio			0.78			0.78
v/c Ratio			0.26			0.20
Control Delay			1.0			3.7
Queue Delay			0.0			0.0
Total Delay			1.0			3.7
LOS			A			A
Approach Delay			1.0			3.7
Approach LOS			A			A
Queue Length 50th (ft)			11			47
Queue Length 95th (ft)			15			69
Internal Link Dist (ft)	1182		1707			600
Turn Bay Length (ft)						
Base Capacity (vph)			1459			1459
Starvation Cap Reductn			0			0
Spillback Cap Reductn			0			0
Storage Cap Reductn			0			0

Lane Group	WBL	WBR	NET	NER	SWL	SWT
Reduced v/c Ratio			0.26			0.20

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NET, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.26	
Intersection Signal Delay: 2.2	Intersection LOS: A
Intersection Capacity Utilization 23.1%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4042: 11 Mile Rd & H Dr N



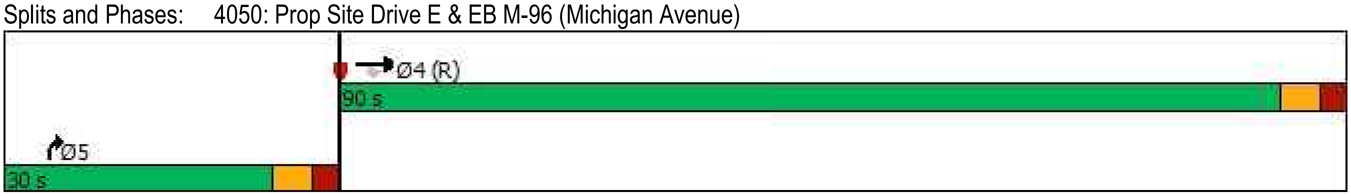
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↱↱				↱↱
Traffic Volume (vph)	1398	502	0	0	0	502
Future Volume (vph)	1398	502	0	0	0	502
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		500	600		0	0
Storage Lanes		2	0		0	2
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	0.88	1.00	1.00	1.00	0.88
Frt		0.850				0.850
Flt Protected						
Satd. Flow (prot)	3539	2787	0	0	0	2787
Flt Permitted						
Satd. Flow (perm)	3539	2787	0	0	0	2787
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		546				105
Link Speed (mph)	55			55	25	
Link Distance (ft)	669			659	1093	
Travel Time (s)	8.3			8.2	29.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1520	546	0	0	0	546
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1520	546	0	0	0	546
Turn Type	NA	Perm				Prot
Protected Phases	4					5
Permitted Phases		4				
Detector Phase	4	4				5
Switch Phase						
Minimum Initial (s)	10.0	10.0				10.0
Minimum Split (s)	16.0	16.0				16.0
Total Split (s)	90.0	90.0				30.0
Total Split (%)	75.0%	75.0%				25.0%
Yellow Time (s)	3.5	3.5				3.5
All-Red Time (s)	2.5	2.5				2.5
Lost Time Adjust (s)	0.0	0.0				0.0
Total Lost Time (s)	6.0	6.0				6.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max	C-Max				None
Act Effct Green (s)	85.4	85.4				22.6
Actuated g/C Ratio	0.71	0.71				0.19
v/c Ratio	0.60	0.26				0.90
Control Delay	12.5	4.9				56.5
Queue Delay	0.7	0.0				0.0
Total Delay	13.1	4.9				56.5
LOS	B	A				E
Approach Delay	11.0				56.5	
Approach LOS	B				E	
Queue Length 50th (ft)	336	22				191
Queue Length 95th (ft)	373	118				#290

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Internal Link Dist (ft)	589			579	1013	
Turn Bay Length (ft)		500				
Base Capacity (vph)	2518	2140				641
Starvation Cap Reductn	583	0				0
Spillback Cap Reductn	0	0				0
Storage Cap Reductn	0	0				0
Reduced v/c Ratio	0.79	0.26				0.85

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 52 (43%), Referenced to phase 4:EBT, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.90
Intersection Signal Delay: 20.5 Intersection LOS: C
Intersection Capacity Utilization 66.2% ICU Level of Service C
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 4050: Prop Site Drive E & EB M-96 (Michigan Avenue)

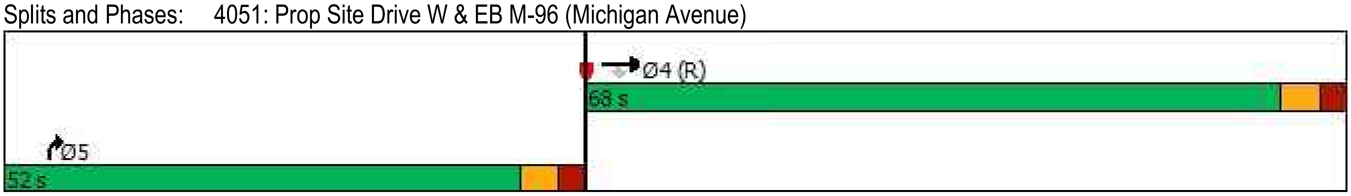


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	617	902	0	0	0	902
Future Volume (vph)	617	902	0	0	0	902
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		500	600		0	0
Storage Lanes		2	0		0	2
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	0.88	1.00	1.00	1.00	0.88
Frt		0.850				0.850
Flt Protected						
Satd. Flow (prot)	3539	2787	0	0	0	2787
Flt Permitted						
Satd. Flow (perm)	3539	2787	0	0	0	2787
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		980				351
Link Speed (mph)	55			55	25	
Link Distance (ft)	608			627	1293	
Travel Time (s)	7.5			7.8	35.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	671	980	0	0	0	980
Shared Lane Traffic (%)						
Lane Group Flow (vph)	671	980	0	0	0	980
Turn Type	NA	Perm				Prot
Protected Phases	4					5
Permitted Phases		4				
Detector Phase	4	4				5
Switch Phase						
Minimum Initial (s)	10.0	10.0				10.0
Minimum Split (s)	16.0	16.0				16.0
Total Split (s)	68.0	68.0				52.0
Total Split (%)	56.7%	56.7%				43.3%
Yellow Time (s)	3.5	3.5				3.5
All-Red Time (s)	2.5	2.5				2.5
Lost Time Adjust (s)	0.0	0.0				0.0
Total Lost Time (s)	6.0	6.0				6.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max	C-Max				None
Act Effct Green (s)	70.9	70.9				37.1
Actuated g/C Ratio	0.59	0.59				0.31
v/c Ratio	0.32	0.48				0.89
Control Delay	15.9	5.8				34.9
Queue Delay	0.0	0.0				0.0
Total Delay	15.9	5.8				34.9
LOS	B	A				C
Approach Delay	9.9				34.9	
Approach LOS	A				C	
Queue Length 50th (ft)	189	39				279
Queue Length 95th (ft)	252	32				341

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Internal Link Dist (ft)	528			547	1213	
Turn Bay Length (ft)		500				
Base Capacity (vph)	2089	2047				1284
Starvation Cap Reductn	0	67				0
Spillback Cap Reductn	0	0				0
Storage Cap Reductn	0	0				0
Reduced v/c Ratio	0.32	0.49				0.76

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 32 (27%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 50	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.89	
Intersection Signal Delay: 19.2	Intersection LOS: B
Intersection Capacity Utilization 58.6%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 4051: Prop Site Drive W & EB M-96 (Michigan Avenue)

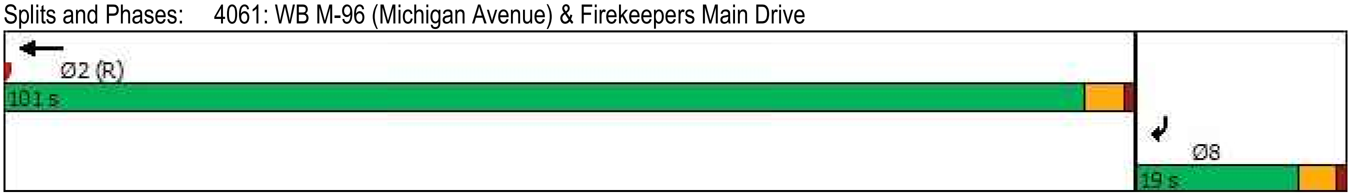


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	972	168	0	134
Future Volume (vph)	0	0	972	168	0	134
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			0	0	0
Storage Lanes	0			0	0	2
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	0.88
Frt			0.978			0.850
Flt Protected						
Satd. Flow (prot)	0	0	3471	0	0	2787
Flt Permitted						
Satd. Flow (perm)	0	0	3471	0	0	2787
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			57			343
Link Speed (mph)		55	55		25	
Link Distance (ft)		574	509		701	
Travel Time (s)		7.1	6.3		19.1	
Peak Hour Factor	0.92	0.92	0.92	0.95	0.67	0.92
Heavy Vehicles (%)	2%	2%	2%	0%	0%	2%
Adj. Flow (vph)	0	0	1057	177	0	146
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1234	0	0	146
Turn Type			NA			Prot
Protected Phases			2			8
Permitted Phases						
Detector Phase			2			8
Switch Phase						
Minimum Initial (s)			10.0			10.0
Minimum Split (s)			22.5			14.5
Total Split (s)			101.0			19.0
Total Split (%)			84.2%			15.8%
Yellow Time (s)			3.5			3.5
All-Red Time (s)			1.0			1.0
Lost Time Adjust (s)			0.0			0.0
Total Lost Time (s)			4.5			4.5
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode			C-Max			None
Act Effct Green (s)			101.0			10.0
Actuated g/C Ratio			0.84			0.08
v/c Ratio			0.42			0.27
Control Delay			2.7			1.2
Queue Delay			0.0			0.0
Total Delay			2.7			1.2
LOS			A			A
Approach Delay			2.7		1.2	
Approach LOS			A		A	
Queue Length 50th (ft)			84			0

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Queue Length 95th (ft)			104			0
Internal Link Dist (ft)		494	429		621	
Turn Bay Length (ft)						
Base Capacity (vph)			2930			638
Starvation Cap Reductn			0			0
Spillback Cap Reductn			0			0
Storage Cap Reductn			0			0
Reduced v/c Ratio			0.42			0.23

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:WBT, Start of Green	
Natural Cycle: 40	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.42	
Intersection Signal Delay: 2.5	Intersection LOS: A
Intersection Capacity Utilization 48.1%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4061: WB M-96 (Michigan Avenue) & Firekeepers Main Drive



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	3714	694	0	659
Future Volume (vph)	0	0	3714	694	0	659
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			250	0	200
Storage Lanes	0			0	0	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.91	1.00	1.00	0.88
Frt				0.850		0.850
Flt Protected						
Satd. Flow (prot)	0	0	5085	1583	0	2787
Flt Permitted						
Satd. Flow (perm)	0	0	5085	1583	0	2787
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				168		
Link Speed (mph)		45	45		45	
Link Distance (ft)		534	660		516	
Travel Time (s)		8.1	10.0		7.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	4037	754	0	716
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	4037	754	0	716
Turn Type			NA	custom		Prot
Protected Phases			8	Free		1
Permitted Phases						
Minimum Split (s)			16.0			13.0
Total Split (s)			90.0			30.0
Total Split (%)			75.0%			25.0%
Yellow Time (s)			3.5			3.5
All-Red Time (s)			2.5			2.5
Lost Time Adjust (s)			0.0			0.0
Total Lost Time (s)			6.0			6.0
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)			84.0	120.0		24.0
Actuated g/C Ratio			0.70	1.00		0.20
v/c Ratio			1.13	0.48		1.29
Control Delay			71.0	15.0		181.1
Queue Delay			0.0	0.0		0.0
Total Delay			71.1	15.0		181.1
LOS			E	B		F
Approach Delay			62.3		181.1	
Approach LOS			E		F	
Queue Length 50th (ft)			~1338	337		~400
Queue Length 95th (ft)			m127	m141		#533
Internal Link Dist (ft)		454	580		436	
Turn Bay Length (ft)				250		200
Base Capacity (vph)			3559	1583		557
Starvation Cap Reductn			91	0		0

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Spillback Cap Reductn			0	0		0
Storage Cap Reductn			0	0		0
Reduced v/c Ratio			1.16	0.48		1.29

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 8:WBT, Start of Green

Natural Cycle: 150

Control Type: Pretimed

Maximum v/c Ratio: 1.29

Intersection Signal Delay: 77.7 Intersection LOS: E

Intersection Capacity Utilization 104.8% ICU Level of Service G

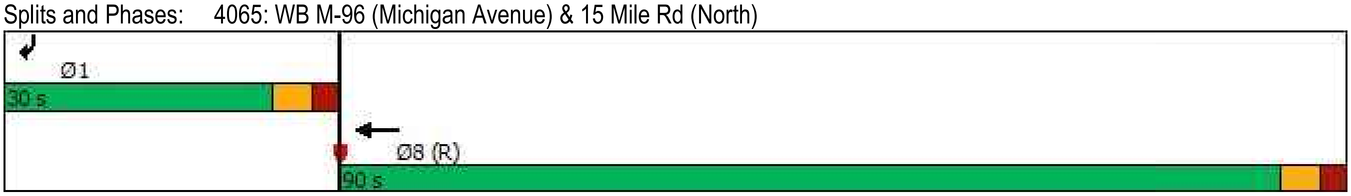
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4065: WB M-96 (Michigan Avenue) & 15 Mile Rd (North)

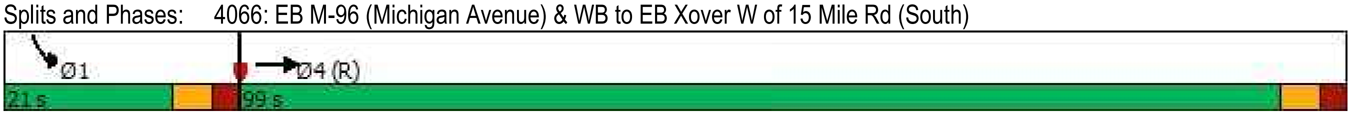


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑			↰	
Traffic Volume (vph)	0	3635	0	0	119	0
Future Volume (vph)	0	3635	0	0	119	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.91	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	5085	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	5085	0	0	1770	0
Right Turn on Red				Yes	Yes	Yes
Satd. Flow (RTOR)					1	
Link Speed (mph)		45	45		25	
Link Distance (ft)		262	1016		123	
Travel Time (s)		4.0	15.4		3.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.90	0.92
Adj. Flow (vph)	0	3951	0	0	132	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	3951	0	0	132	0
Turn Type		NA			Prot	
Protected Phases		4			1	
Permitted Phases						
Minimum Split (s)		16.0			16.0	
Total Split (s)		99.0			21.0	
Total Split (%)		82.5%			17.5%	
Yellow Time (s)		3.5			3.5	
All-Red Time (s)		2.5			2.5	
Lost Time Adjust (s)		0.0			0.0	
Total Lost Time (s)		6.0			6.0	
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)		93.0			15.0	
Actuated g/C Ratio		0.78			0.12	
v/c Ratio		1.00			0.59	
Control Delay		24.2			43.4	
Queue Delay		38.1			0.0	
Total Delay		62.3			43.4	
LOS		E			D	
Approach Delay		62.3			43.4	
Approach LOS		E			D	
Queue Length 50th (ft)		~1145			94	
Queue Length 95th (ft)		m1046			m97	
Internal Link Dist (ft)		182	936		43	
Turn Bay Length (ft)						
Base Capacity (vph)		3940			222	
Starvation Cap Reductn		0			0	
Spillback Cap Reductn		410			0	
Storage Cap Reductn		0			0	
Reduced v/c Ratio		1.12			0.59	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 116 (97%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 90	
Control Type: Pretimed	
Maximum v/c Ratio: 1.00	
Intersection Signal Delay: 61.7	Intersection LOS: E
Intersection Capacity Utilization 148.8%	ICU Level of Service H
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4066: EB M-96 (Michigan Avenue) & WB to EB Xover W of 15 Mile Rd (South)



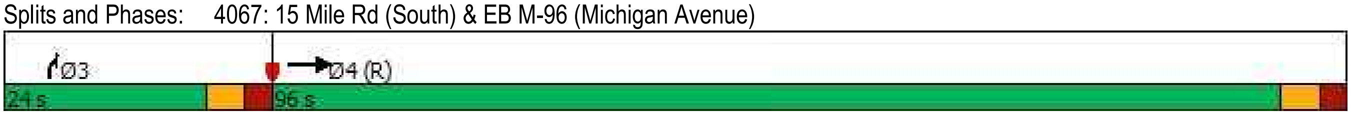
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	3441	313	0	0	0	315
Future Volume (vph)	3441	313	0	0	0	315
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		50	0		0	250
Storage Lanes		0	0		0	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	1.00	1.00	1.00	0.88
Frt	0.987					0.850
Flt Protected						
Satd. Flow (prot)	5019	0	0	0	0	2814
Flt Permitted						
Satd. Flow (perm)	5019	0	0	0	0	2814
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	35					2
Link Speed (mph)	45			45	45	
Link Distance (ft)	1016			704	1375	
Travel Time (s)	15.4			10.7	20.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.88	0.88
Heavy Vehicles (%)	2%	2%	2%	2%	1%	1%
Adj. Flow (vph)	3740	340	0	0	0	358
Shared Lane Traffic (%)						
Lane Group Flow (vph)	4080	0	0	0	0	358
Turn Type	NA					Prot
Protected Phases	4					3
Permitted Phases						
Minimum Split (s)	17.0					16.0
Total Split (s)	96.0					24.0
Total Split (%)	80.0%					20.0%
Yellow Time (s)	3.5					3.5
All-Red Time (s)	2.5					2.5
Lost Time Adjust (s)	0.0					0.0
Total Lost Time (s)	6.0					6.0
Lead/Lag	Lag					Lead
Lead-Lag Optimize?	Yes					Yes
Act Effct Green (s)	90.0					18.0
Actuated g/C Ratio	0.75					0.15
v/c Ratio	1.08					0.85
Control Delay	46.7					68.3
Queue Delay	0.1					0.0
Total Delay	46.8					68.3
LOS	D					E
Approach Delay	46.8				68.3	
Approach LOS	D				E	
Queue Length 50th (ft)	~265					154
Queue Length 95th (ft)	m#246					#231
Internal Link Dist (ft)	936			624	1295	
Turn Bay Length (ft)						250
Base Capacity (vph)	3773					423

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Starvation Cap Reductn	1					0
Spillback Cap Reductn	0					0
Storage Cap Reductn	0					0
Reduced v/c Ratio	1.08					0.85

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 4 (3%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 140	
Control Type: Pretimed	
Maximum v/c Ratio: 1.08	
Intersection Signal Delay: 48.5	Intersection LOS: D
Intersection Capacity Utilization 94.5%	ICU Level of Service F
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4067: 15 Mile Rd (South) & EB M-96 (Michigan Avenue)

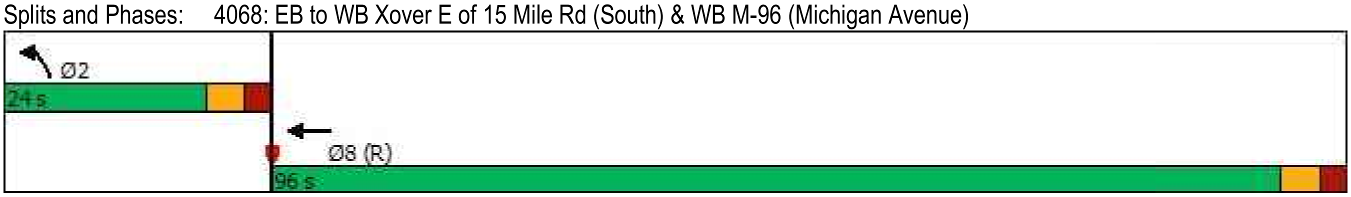


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑↑	↰	
Traffic Volume (vph)	0	0	0	3552	204	0
Future Volume (vph)	0	0	0	3552	204	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	5085	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	5085	1770	0
Right Turn on Red		Yes			Yes	Yes
Satd. Flow (RTOR)					1	
Link Speed (mph)	45			45	25	
Link Distance (ft)	687			275	111	
Travel Time (s)	10.4			4.2	3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	3861	222	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	3861	222	0
Turn Type				NA	Prot	
Protected Phases				8	2	
Permitted Phases						
Minimum Split (s)				16.0	13.0	
Total Split (s)				96.0	24.0	
Total Split (%)				80.0%	20.0%	
Yellow Time (s)				3.5	3.5	
All-Red Time (s)				2.5	2.5	
Lost Time Adjust (s)				0.0	0.0	
Total Lost Time (s)				6.0	6.0	
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)				90.0	18.0	
Actuated g/C Ratio				0.75	0.15	
v/c Ratio				1.01	0.83	
Control Delay				22.0	44.4	
Queue Delay				35.4	0.0	
Total Delay				57.4	44.4	
LOS				E	D	
Approach Delay				57.4	44.4	
Approach LOS				E	D	
Queue Length 50th (ft)				~911	165	
Queue Length 95th (ft)				m458	m154	
Internal Link Dist (ft)	607			195	31	
Turn Bay Length (ft)						
Base Capacity (vph)				3813	266	
Starvation Cap Reductn				472	0	
Spillback Cap Reductn				0	0	
Storage Cap Reductn				0	0	
Reduced v/c Ratio				1.16	0.83	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 112 (93%), Referenced to phase 8:WBT, Start of Green	
Natural Cycle: 100	
Control Type: Pretimed	
Maximum v/c Ratio: 1.01	
Intersection Signal Delay: 56.7	Intersection LOS: E
Intersection Capacity Utilization 116.6%	ICU Level of Service H
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4068: EB to WB Xover E of 15 Mile Rd (South) & WB M-96 (Michigan Avenue)

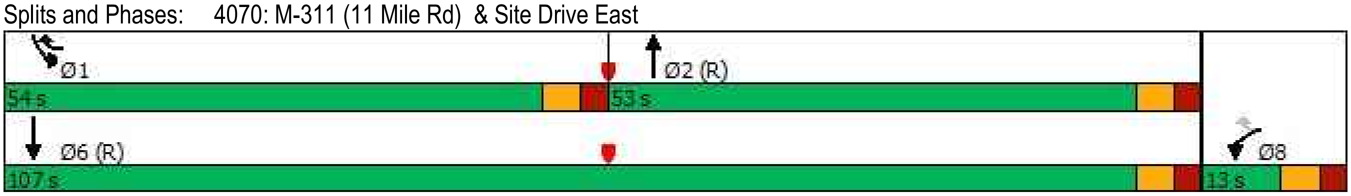


Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	102	0	0	129
Future Volume (vph)	0	0	102	0	0	129
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	500		0	400	
Storage Lanes	1	1		0	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.88	0.95	0.95	1.00	0.95
Frt						
Flt Protected						
Satd. Flow (prot)	1863	3278	3539	0	1863	3539
Flt Permitted						
Satd. Flow (perm)	1863	3278	3539	0	1863	3539
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)						
Link Speed (mph)	25		55			55
Link Distance (ft)	750		940			974
Travel Time (s)	20.5		11.7			12.1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	111	0	0	140
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	111	0	0	140
Turn Type	Prot	pm+ov	NA		Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8				
Detector Phase	8	1	2		1	6
Switch Phase						
Minimum Initial (s)	7.0	7.0	10.0		7.0	10.0
Minimum Split (s)	13.0	13.0	16.0		13.0	16.0
Total Split (s)	13.0	54.0	53.0		54.0	107.0
Total Split (%)	10.8%	45.0%	44.2%		45.0%	89.2%
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5
All-Red Time (s)	2.5	2.5	2.5		2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0		6.0	6.0
Lead/Lag		Lead	Lag		Lead	
Lead-Lag Optimize?						
Recall Mode	None	None	C-Max		None	C-Max
Act Effct Green (s)			120.0			120.0
Actuated g/C Ratio			1.00			1.00
v/c Ratio			0.03			0.04
Control Delay			0.0			0.0
Queue Delay			0.0			0.0
Total Delay			0.0			0.0
LOS			A			A
Approach Delay						
Approach LOS						
Queue Length 50th (ft)			0			0
Queue Length 95th (ft)			0			0

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Internal Link Dist (ft)	670		860			894
Turn Bay Length (ft)						
Base Capacity (vph)			3539			3539
Starvation Cap Reductn			0			0
Spillback Cap Reductn			0			0
Storage Cap Reductn			0			0
Reduced v/c Ratio			0.03			0.04

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 8 (7%), Referenced to phase 2:NBT and 6:SBT, Start of Green	
Natural Cycle: 45	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.04	
Intersection Signal Delay: 0.0	Intersection LOS: A
Intersection Capacity Utilization 13.3%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4070: M-311 (11 Mile Rd) & Site Drive East



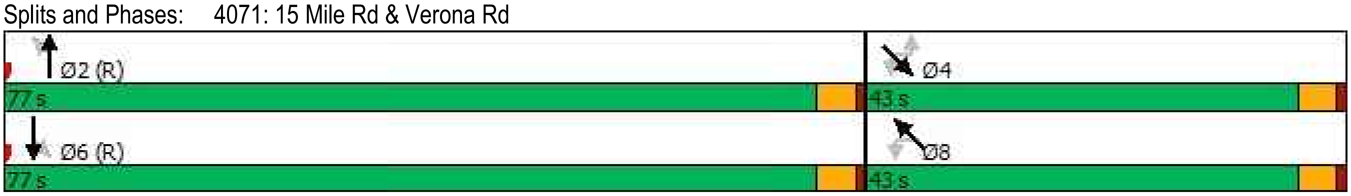
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	652	13	13	5	9	4	0	87	632	6	118	14
Future Volume (vph)	652	13	13	5	9	4	0	87	632	6	118	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		70	0		0
Storage Lanes	0		0	0		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
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
Frt		0.997			0.968				0.850		0.986	
Flt Protected		0.954			0.987						0.998	
Satd. Flow (prot)	0	1789	0	0	1715	0	0	1845	1392	0	1851	0
Flt Permitted		0.712			0.861						0.991	
Satd. Flow (perm)	0	1335	0	0	1496	0	0	1845	1392	0	1838	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1			7				710		5	
Link Speed (mph)		45			55			55			55	
Link Distance (ft)		682			426			745			951	
Travel Time (s)		10.3			5.3			9.2			11.8	
Peak Hour Factor	0.80	0.80	0.80	0.60	0.60	0.60	0.89	0.89	0.89	0.86	0.86	0.86
Heavy Vehicles (%)	1%	1%	1%	0%	0%	25%	0%	3%	16%	1%	1%	1%
Adj. Flow (vph)	815	16	16	8	15	7	0	98	710	7	137	16
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	847	0	0	30	0	0	98	710	0	160	0
Turn Type	Perm	NA		Perm	NA			NA	Perm	Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4		4	8		
Minimum Split (s)	22.5	22.5		22.5	22.5		22.5	22.5	22.5	22.5	22.5	
Total Split (s)	77.0	77.0		77.0	77.0		43.0	43.0	43.0	43.0	43.0	
Total Split (%)	64.2%	64.2%		64.2%	64.2%		35.8%	35.8%	35.8%	35.8%	35.8%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0	0.0		0.0	
Total Lost Time (s)		4.5			4.5			4.5	4.5		4.5	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		72.5			72.5			38.5	38.5		38.5	
Actuated g/C Ratio		0.60			0.60			0.32	0.32		0.32	
v/c Ratio		1.05			0.03			0.17	0.77		0.27	
Control Delay		70.7			8.1			30.2	8.7		30.8	
Queue Delay		0.0			0.0			0.0	0.0		0.0	
Total Delay		70.7			8.1			30.2	8.7		30.8	
LOS		E			A			C	A		C	
Approach Delay		70.7			8.1			11.3			30.8	
Approach LOS		E			A			B			C	
Queue Length 50th (ft)		~716			7			54	0		89	
Queue Length 95th (ft)		#781			12			96	107		139	
Internal Link Dist (ft)		602			346			665			871	
Turn Bay Length (ft)									70			
Base Capacity (vph)		806			906			591	928		593	

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
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		1.05			0.03			0.17	0.77		0.27	

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 90
Control Type: Pretimed
Maximum v/c Ratio: 1.05
Intersection Signal Delay: 40.2 Intersection LOS: D
Intersection Capacity Utilization 67.0% ICU Level of Service C
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 4071: 15 Mile Rd & Verona Rd



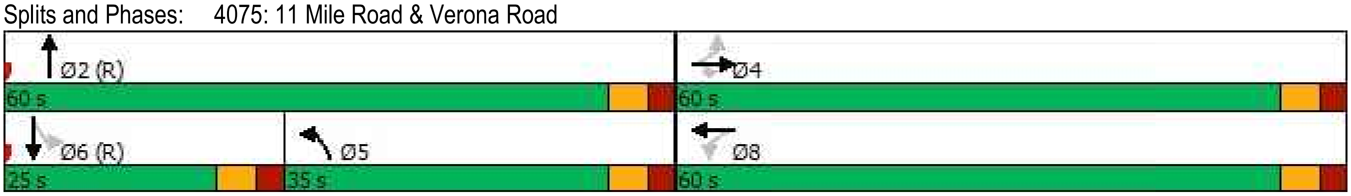
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	717	95	17	736	19	93	68	13	10	82	8
Future Volume (vph)	11	717	95	17	736	19	93	68	13	10	82	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	190		70	190		0	140		0	215		0
Storage Lanes	1		1	1		0	2		0	1		0
Taper Length (ft)	115			140			200			165		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.996			0.976			0.987	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	1900	1468	1805	1890	0	3072	1854	0	1687	1753	0
Flt Permitted	0.074			0.074			0.950			0.697		
Satd. Flow (perm)	141	1900	1468	141	1890	0	3072	1854	0	1238	1753	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			82		1			10			3	
Link Speed (mph)		55			55			45			55	
Link Distance (ft)		519			1585			1015			821	
Travel Time (s)		6.4			19.6			15.4			10.2	
Peak Hour Factor	0.79	0.79	0.79	0.87	0.87	0.87	0.87	0.87	0.87	0.66	0.66	0.66
Heavy Vehicles (%)	0%	0%	10%	0%	0%	5%	14%	0%	0%	7%	7%	7%
Adj. Flow (vph)	14	908	120	20	846	22	107	78	15	15	124	12
Shared Lane Traffic (%)												
Lane Group Flow (vph)	14	908	120	20	868	0	107	93	0	15	136	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Perm	NA	
Protected Phases		4			8		5	2			6	
Permitted Phases	4		4	8						6		
Minimum Split (s)	25.0	25.0	25.0	25.0	25.0		16.0	25.0		25.0	25.0	
Total Split (s)	60.0	60.0	60.0	60.0	60.0		35.0	60.0		25.0	25.0	
Total Split (%)	50.0%	50.0%	50.0%	50.0%	50.0%		29.2%	50.0%		20.8%	20.8%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	2.5	2.5	2.5	2.5	2.5		2.5	2.5		2.5	2.5	
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)	6.0	6.0	6.0	6.0	6.0		6.0	6.0		6.0	6.0	
Lead/Lag							Lag			Lead	Lead	
Lead-Lag Optimize?							Yes			Yes	Yes	
Act Effct Green (s)	54.0	54.0	54.0	54.0	54.0		29.0	54.0		19.0	19.0	
Actuated g/C Ratio	0.45	0.45	0.45	0.45	0.45		0.24	0.45		0.16	0.16	
v/c Ratio	0.22	1.06	0.17	0.32	1.02		0.14	0.11		0.08	0.49	
Control Delay	31.2	81.4	7.9	37.9	69.2		36.4	17.5		44.3	51.6	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	31.2	81.4	7.9	37.9	69.2		36.4	17.5		44.3	51.6	
LOS	C	F	A	D	E		D	B		D	D	
Approach Delay		72.3			68.5			27.6			50.9	
Approach LOS		E			E			C			D	
Queue Length 50th (ft)	6	~775	16	10	~713		33	36		10	95	
Queue Length 95th (ft)	22	#812	40	34	#907		56	67		22	113	
Internal Link Dist (ft)		439			1505			935			741	
Turn Bay Length (ft)	190		70	190			140			215		
Base Capacity (vph)	63	855	705	63	851		742	839		196	280	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0	0	0	0		0	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	0.22	1.06	0.17	0.32	1.02		0.14	0.11		0.08	0.49	

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green
Natural Cycle: 90
Control Type: Pretimed
Maximum v/c Ratio: 1.06
Intersection Signal Delay: 65.5 Intersection LOS: E
Intersection Capacity Utilization 59.2% ICU Level of Service B
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 4075: 11 Mile Road & Verona Road



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	909	143	0	231
Future Volume (vph)	0	0	909	143	0	231
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200			300	245	245
Storage Lanes	0			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.980			0.865
Flt Protected						
Satd. Flow (prot)	0	0	3336	0	0	1644
Flt Permitted						
Satd. Flow (perm)	0	0	3336	0	0	1644
Link Speed (mph)		55	55		25	
Link Distance (ft)		509	395		760	
Travel Time (s)		6.3	4.9		20.7	
Peak Hour Factor	0.88	0.88	0.91	0.91	0.79	0.79
Heavy Vehicles (%)	1%	1%	7%	0%	0%	0%
Adj. Flow (vph)	0	0	999	157	0	292
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1156	0	0	292
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 50.7%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	895	43	0	157
Future Volume (vph)	0	0	895	43	0	157
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	175			50	0	0
Storage Lanes	0			0	0	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.993			0.865
Flt Protected						
Satd. Flow (prot)	0	0	3360	0	0	1565
Flt Permitted						
Satd. Flow (perm)	0	0	3360	0	0	1565
Link Speed (mph)		55	55		25	
Link Distance (ft)		395	586		185	
Travel Time (s)		4.9	7.3		5.0	
Peak Hour Factor	0.90	0.90	0.95	0.95	0.70	0.70
Heavy Vehicles (%)	1%	1%	7%	0%	5%	5%
Adj. Flow (vph)	0	0	942	45	0	224
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	987	0	0	224
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 42.5% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	931	12	0	7
Future Volume (vph)	0	0	931	12	0	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150			600	0	0
Storage Lanes	0			0	0	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.998			0.865
Flt Protected						
Satd. Flow (prot)	0	0	3370	0	0	1644
Flt Permitted						
Satd. Flow (perm)	0	0	3370	0	0	1644
Link Speed (mph)		55	55		25	
Link Distance (ft)		586	607		1086	
Travel Time (s)		7.3	7.5		29.6	
Peak Hour Factor	0.83	0.83	0.92	0.92	0.60	0.60
Heavy Vehicles (%)	10%	1%	7%	0%	33%	0%
Adj. Flow (vph)	0	0	1012	13	0	12
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1025	0	0	12
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 36.1% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	665	8	0	7
Future Volume (vph)	0	0	665	8	0	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.998			0.865
Flt Protected						
Satd. Flow (prot)	0	0	3532	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	0	3532	0	0	1611
Link Speed (mph)		55	55		55	
Link Distance (ft)		538	1254		1399	
Travel Time (s)		6.7	15.5		17.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	723	9	0	8
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	732	0	0	8
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 28.6%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	0	5	0	694	0	0	659	0
Future Volume (vph)	0	0	0	0	0	5	0	694	0	0	659	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
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
Frt					0.865							
Flt Protected												
Satd. Flow (prot)	0	1863	0	0	1611	0	0	1863	0	0	1863	0
Flt Permitted												
Satd. Flow (perm)	0	1863	0	0	1611	0	0	1863	0	0	1863	0
Link Speed (mph)		45			45			25			45	
Link Distance (ft)		957			1038			516			593	
Travel Time (s)		14.5			15.7			14.1			9.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	0	5	0	754	0	0	716	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	5	0	0	754	0	0	716	0
Sign Control		Stop			Stop			Free			Free	

Intersection Summary		
Area Type:	Other	
Control Type: Unsignalized		
Intersection Capacity Utilization 46.5%		ICU Level of Service A
Analysis Period (min) 15		

Lane Group	EBT	EBR	WBL	WBT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	0	0	119	1230	0	0
Future Volume (vph)	0	0	119	1230	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.91	0.91	1.00	1.00
Frt						
Flt Protected				0.996		
Satd. Flow (prot)	0	0	0	5065	0	0
Flt Permitted				0.996		
Satd. Flow (perm)	0	0	0	5065	0	0
Link Speed (mph)	45			45	25	
Link Distance (ft)	183			382	263	
Travel Time (s)	2.8			5.8	7.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	129	1337	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1466	0	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 43.5%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	2326	845	0	0	0	0
Future Volume (vph)	2326	845	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950	0.972				
Satd. Flow (prot)	1610	3295	0	0	0	0
Flt Permitted	0.950	0.972				
Satd. Flow (perm)	1610	3295	0	0	0	0
Link Speed (mph)		45	45		25	
Link Distance (ft)		619	209		329	
Travel Time (s)		9.4	3.2		9.0	
Peak Hour Factor	0.86	0.86	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2705	983	0	0	0	0
Shared Lane Traffic (%)	50%					
Lane Group Flow (vph)	1352	2336	0	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 79.0%	ICU Level of Service D
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	0	867	168	0	0
Future Volume (vph)	0	0	867	168	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	1.00
Frt				0.850		
Flt Protected						
Satd. Flow (prot)	0	0	3539	1583	0	0
Flt Permitted						
Satd. Flow (perm)	0	0	3539	1583	0	0
Link Speed (mph)		45	45		30	
Link Distance (ft)		213	315		137	
Travel Time (s)		3.2	4.8		3.1	
Peak Hour Factor	0.92	0.92	0.91	0.91	0.92	0.92
Adj. Flow (vph)	0	0	953	185	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	953	185	0	0
Sign Control		Stop	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 55.7%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	967	0	0	159	0
Future Volume (vph)	0	967	0	0	159	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3505	0	0	1787	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3505	0	0	1787	0
Link Speed (mph)		45	45		25	
Link Distance (ft)		309	168		108	
Travel Time (s)		4.7	2.5		2.9	
Peak Hour Factor	0.86	0.86	0.92	0.92	0.87	0.87
Heavy Vehicles (%)	3%	3%	2%	2%	1%	1%
Adj. Flow (vph)	0	1124	0	0	183	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1124	0	0	183	0
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 53.4% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	980	182	0
Future Volume (vph)	0	0	0	980	182	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	5036	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	5036	1770	0
Link Speed (mph)	45			45	25	
Link Distance (ft)	134			152	111	
Travel Time (s)	2.0			2.3	3.0	
Peak Hour Factor	0.92	0.92	0.89	0.89	0.94	0.94
Heavy Vehicles (%)	2%	2%	3%	3%	2%	2%
Adj. Flow (vph)	0	0	0	1101	194	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1101	194	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 39.0%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	945	0	0	80	0
Future Volume (vph)	0	945	0	0	80	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3574	0	0	1787	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3574	0	0	1787	0
Link Speed (mph)		45	45		25	
Link Distance (ft)		222	290		102	
Travel Time (s)		3.4	4.4		2.8	
Peak Hour Factor	0.95	0.95	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	1%	1%	2%	2%	1%	1%
Adj. Flow (vph)	0	995	0	0	87	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	995	0	0	87	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 67.6%	ICU Level of Service C
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑	↰	
Traffic Volume (vph)	0	0	0	999	65	0
Future Volume (vph)	0	0	0	999	65	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	30			45	25	
Link Distance (ft)	114			1105	101	
Travel Time (s)	2.6			16.7	2.8	
Peak Hour Factor	0.92	0.92	0.88	0.88	0.94	0.94
Adj. Flow (vph)	0	0	0	1135	69	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1135	69	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 63.4%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	53	318	31	4	253	12	14	37	3	13	81	35
Future Volume (vph)	53	318	31	4	253	12	14	37	3	13	81	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	80		0	80		0	110		0	115		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	180			180			140			175		
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
Frt		0.987			0.993			0.988			0.955	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	1875	0	1770	1850	0	1703	1771	0	1770	1779	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1805	1875	0	1770	1850	0	1703	1771	0	1770	1779	0
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		1365			1319			666			571	
Travel Time (s)		20.7			20.0			10.1			8.7	
Peak Hour Factor	0.94	0.94	0.94	0.88	0.88	0.88	0.78	0.78	0.78	0.91	0.91	0.91
Heavy Vehicles (%)	0%	0%	0%	2%	2%	2%	6%	6%	6%	2%	2%	2%
Adj. Flow (vph)	56	338	33	5	288	14	18	47	4	14	89	38
Shared Lane Traffic (%)												
Lane Group Flow (vph)	56	371	0	5	302	0	18	51	0	14	127	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 39.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL2	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	SWL	SWR
Lane Configurations											
Traffic Volume (vph)	55	0	112	0	270	79	81	385	0	0	0
Future Volume (vph)	55	0	112	0	270	79	81	385	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	240	0		0	105		0	0	0
Storage Lanes		1	1	0		0	1		0	0	0
Taper Length (ft)		25		25			70			25	
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
Frt			0.850		0.969						
Flt Protected	0.950						0.950				
Satd. Flow (prot)	1687	0	1615	0	1805	0	1752	1845	0	0	0
Flt Permitted	0.950						0.950				
Satd. Flow (perm)	1687	0	1615	0	1805	0	1752	1845	0	0	0
Link Speed (mph)		25			45			45		25	
Link Distance (ft)		894			1167			685		897	
Travel Time (s)		24.4			17.7			10.4		24.5	
Peak Hour Factor	0.93	0.93	0.93	0.91	0.91	0.91	0.95	0.95	0.95	0.92	0.92
Heavy Vehicles (%)	7%	0%	0%	2%	2%	2%	3%	3%	3%	2%	2%
Adj. Flow (vph)	59	0	120	0	297	87	85	405	0	0	0
Shared Lane Traffic (%)											
Lane Group Flow (vph)	59	0	120	0	384	0	85	405	0	0	0
Sign Control		Stop			Free			Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 33.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	WBL2	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NER
Lane Configurations											
Traffic Volume (vph)	93	0	84	61	264	0	0	373	50	0	0
Future Volume (vph)	93	0	84	61	264	0	0	373	50	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	185	165		0	0		0	0	0
Storage Lanes		1	1	1		0	0		0	0	0
Taper Length (ft)		25		110			25			25	
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
Frt			0.850					0.984			
Flt Protected	0.950			0.950							
Satd. Flow (prot)	1805	0	1455	1752	1845	0	0	1815	0	0	0
Flt Permitted	0.950			0.950							
Satd. Flow (perm)	1805	0	1455	1752	1845	0	0	1815	0	0	0
Link Speed (mph)		25			45			45		25	
Link Distance (ft)		613			685			608		913	
Travel Time (s)		16.7			10.4			9.2		24.9	
Peak Hour Factor	0.81	0.81	0.81	0.87	0.87	0.87	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	11%	3%	3%	3%	3%	3%	3%	2%	2%
Adj. Flow (vph)	115	0	104	70	303	0	0	405	54	0	0
Shared Lane Traffic (%)											
Lane Group Flow (vph)	115	0	104	70	303	0	0	459	0	0	0
Sign Control		Stop			Free			Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 33.9% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	184	140	0	396	272	0
Future Volume (vph)	184	140	0	396	272	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.850				
Flt Protected	0.950					
Satd. Flow (prot)	1543	1553	0	3505	3374	0
Flt Permitted	0.950					
Satd. Flow (perm)	1543	1553	0	3505	3374	0
Link Speed (mph)	25			55	55	
Link Distance (ft)	119			105	620	
Travel Time (s)	3.2			1.3	7.7	
Peak Hour Factor	0.93	0.93	0.82	0.82	0.92	0.92
Heavy Vehicles (%)	17%	4%	0%	3%	7%	0%
Adj. Flow (vph)	198	151	0	483	296	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	198	151	0	483	296	0
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 27.8%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	396	61	35	377
Future Volume (vph)	0	0	396	61	35	377
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		340	0	
Storage Lanes	0	0		1	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	1.00	0.95	0.95
Frt				0.850		
Flt Protected						0.996
Satd. Flow (prot)	0	0	3505	1568	0	3383
Flt Permitted						0.996
Satd. Flow (perm)	0	0	3505	1568	0	3383
Link Speed (mph)	25		55			55
Link Distance (ft)	664		1109			105
Travel Time (s)	18.1		13.7			1.3
Peak Hour Factor	0.92	0.92	0.82	0.82	0.92	0.92
Heavy Vehicles (%)	2%	2%	3%	3%	20%	5%
Adj. Flow (vph)	0	0	483	74	38	410
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	483	74	0	448
Sign Control	Stop		Free			Free

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 29.1% ICU Level of Service A
Analysis Period (min) 15

Lane Group	WBL2	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NER
Lane Configurations											
Traffic Volume (vph)	52	0	60	0	352	0	0	220	86	0	0
Future Volume (vph)	52	0	60	0	352	0	0	220	86	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	205	0		0	0		135	0	0
Storage Lanes		1	1	0		0	0		1	0	0
Taper Length (ft)		25		25			25			25	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00
Frt			0.850						0.850		
Flt Protected	0.950										
Satd. Flow (prot)	1736	0	1380	0	3438	0	0	3343	1272	0	0
Flt Permitted	0.950										
Satd. Flow (perm)	1736	0	1380	0	3438	0	0	3343	1272	0	0
Link Speed (mph)		25			55			55		25	
Link Distance (ft)		296			230			1367		908	
Travel Time (s)		8.1			2.9			16.9		24.8	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.95	0.95	0.95	0.92	0.92
Heavy Vehicles (%)	4%	0%	17%	0%	5%	0%	0%	8%	27%	2%	2%
Adj. Flow (vph)	59	0	68	0	400	0	0	232	91	0	0
Shared Lane Traffic (%)											
Lane Group Flow (vph)	59	0	68	0	400	0	0	232	91	0	0
Sign Control		Stop			Free			Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 20.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	33	80	0	270	154	0
Future Volume (vph)	33	80	0	270	154	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				
Flt Protected	0.950					
Satd. Flow (prot)	1752	1077	0	1624	1696	0
Flt Permitted	0.950					
Satd. Flow (perm)	1752	1077	0	1624	1696	0
Link Speed (mph)	25			45	45	
Link Distance (ft)	189			1063	114	
Travel Time (s)	5.2			16.1	1.7	
Peak Hour Factor	0.74	0.74	0.93	0.93	0.89	0.89
Heavy Vehicles (%)	3%	50%	17%	17%	12%	12%
Adj. Flow (vph)	45	108	0	290	173	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	45	108	0	290	173	0
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 24.2%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	0	0	182	121	3	154
Future Volume (vph)	0	0	182	121	3	154
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.850		
Flt Protected						0.999
Satd. Flow (prot)	0	0	1624	1380	0	1689
Flt Permitted						0.999
Satd. Flow (perm)	0	0	1624	1380	0	1689
Link Speed (mph)	25		45			45
Link Distance (ft)	105		114			727
Travel Time (s)	2.9		1.7			11.0
Peak Hour Factor	0.92	0.92	0.93	0.93	0.89	0.89
Heavy Vehicles (%)	2%	2%	17%	17%	33%	12%
Adj. Flow (vph)	0	0	196	130	3	173
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	196	130	0	176
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 22.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBR	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	6	97	58	124	60	11
Future Volume (vph)	6	97	58	124	60	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	195	0	0			90
Storage Lanes	1	1	0			1
Taper Length (ft)	135		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				0.850
Flt Protected	0.950			0.984		
Satd. Flow (prot)	1570	1404	0	1615	1776	1509
Flt Permitted	0.950			0.984		
Satd. Flow (perm)	1570	1404	0	1615	1776	1509
Link Speed (mph)	25			45	45	
Link Distance (ft)	597			727	1165	
Travel Time (s)	16.3			11.0	17.7	
Peak Hour Factor	0.83	0.83	0.91	0.91	0.78	0.78
Heavy Vehicles (%)	15%	15%	43%	3%	7%	7%
Adj. Flow (vph)	7	117	64	136	77	14
Shared Lane Traffic (%)						
Lane Group Flow (vph)	7	117	0	200	77	14
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 26.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	18	1331	18	0
Future Volume (vph)	0	0	18	1331	18	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.91	0.91	1.00	1.00
Frt						
Flt Protected				0.999	0.950	
Satd. Flow (prot)	0	0	0	5080	1770	0
Flt Permitted				0.999	0.950	
Satd. Flow (perm)	0	0	0	5080	1770	0
Link Speed (mph)	45			45	25	
Link Distance (ft)	382			217	236	
Travel Time (s)	5.8			3.3	6.4	
Peak Hour Factor	0.90	0.90	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	20	1447	20	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1467	20	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 36.1%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1126	0	0	0	0	30
Future Volume (vph)	1126	0	0	0	0	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	1.00	1.00	1.00	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	3539	0	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	3539	0	0	0	0	1611
Link Speed (mph)	45			45	25	
Link Distance (ft)	168			432	770	
Travel Time (s)	2.5			6.5	21.0	
Peak Hour Factor	0.87	0.87	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1294	0	0	0	0	33
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1294	0	0	0	0	33
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 48.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	1162	0	0	32
Future Volume (vph)	0	0	1162	0	0	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.91	1.00	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	0	0	5036	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	0	5036	0	0	1611
Link Speed (mph)		45	45		25	
Link Distance (ft)		494	134		230	
Travel Time (s)		7.5	2.0		6.3	
Peak Hour Factor	0.92	0.92	0.89	0.89	0.92	0.92
Heavy Vehicles (%)	2%	2%	3%	3%	2%	2%
Adj. Flow (vph)	0	0	1306	0	0	35
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1306	0	0	35
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 42.4% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	1014	50	0	0
Future Volume (vph)	0	0	1014	50	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.993			
Flt Protected						
Satd. Flow (prot)	0	0	3514	0	0	0
Flt Permitted						
Satd. Flow (perm)	0	0	3514	0	0	0
Link Speed (mph)		30	45		25	
Link Distance (ft)		176	114		201	
Travel Time (s)		4.0	1.7		5.5	
Peak Hour Factor	0.92	0.92	0.88	0.88	0.92	0.92
Adj. Flow (vph)	0	0	1152	57	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1209	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 38.1%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	NBT	NBR	SBL	SBT	SWL	SWR
Lane Configurations	↑↱			↑↑		
Traffic Volume (vph)	352	228	0	272	0	0
Future Volume (vph)	352	228	0	272	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	1.00	0.95	1.00	1.00
Frt	0.941					
Flt Protected						
Satd. Flow (prot)	3164	0	0	3343	0	0
Flt Permitted						
Satd. Flow (perm)	3164	0	0	3343	0	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	620			230	1088	
Travel Time (s)	7.7			2.9	29.7	
Peak Hour Factor	0.88	0.88	0.95	0.95	0.92	0.92
Heavy Vehicles (%)	5%	11%	8%	8%	2%	2%
Adj. Flow (vph)	400	259	0	286	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	659	0	0	286	0	0
Sign Control	Free			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 20.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	32	982	0	0	0	0	0	48	29
Future Volume (vph)	0	0	0	32	982	0	0	0	0	0	48	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	165		0	0		0	0		0
Storage Lanes	0		0	1		0	0		0	0		0
Taper Length (ft)	25			85			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt											0.949	
Flt Protected				0.950								
Satd. Flow (prot)	0	0	0	1770	3539	0	0	0	0	0	1785	0
Flt Permitted				0.950								
Satd. Flow (perm)	0	0	0	1770	3539	0	0	0	0	0	1785	0
Link Speed (mph)		30			45			30			30	
Link Distance (ft)		212			176			102			496	
Travel Time (s)		4.8			2.7			2.3			11.3	
Peak Hour Factor	0.92	0.92	0.92	0.86	0.86	0.86	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	1%	1%	1%
Adj. Flow (vph)	0	0	0	37	1142	0	0	0	0	0	52	32
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	37	1142	0	0	0	0	0	84	0
Sign Control		Free			Free			Yield			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 38.1%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	1826	0	0	0	1859
Future Volume (vph)	0	1826	0	0	0	1859
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	0.88
Frt						0.850
Flt Protected						
Satd. Flow (prot)	0	3539	0	0	0	2787
Flt Permitted						
Satd. Flow (perm)	0	3539	0	0	0	2787
Link Speed (mph)		55	55		55	
Link Distance (ft)		434	1242		1194	
Travel Time (s)		5.4	15.4		14.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1985	0	0	0	2021
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1985	0	0	0	2021
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 68.4%	ICU Level of Service C
Analysis Period (min) 15	

Lane Group	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	0	119	0	0	493
Future Volume (vph)	0	0	119	0	0	493
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	0	0	1863	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	0	1863	0	0	1611
Link Speed (mph)		25	25		30	
Link Distance (ft)		1199	263		174	
Travel Time (s)		32.7	7.2		4.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.90	0.90
Adj. Flow (vph)	0	0	129	0	0	548
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	129	0	0	548
Sign Control		Free	Yield		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 43.5%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	WBL	WBR	NBL	NBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	168	2326	0	0	0
Future Volume (vph)	0	168	2326	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.97	1.00	1.00	1.00
Frt		0.865				
Flt Protected			0.950			
Satd. Flow (prot)	0	1627	3303	0	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	1627	3303	0	0	0
Link Speed (mph)	45		45		45	
Link Distance (ft)	255		329		551	
Travel Time (s)	3.9		5.0		8.3	
Peak Hour Factor	0.91	0.91	0.93	0.93	0.92	0.92
Heavy Vehicles (%)	1%	1%	6%	6%	2%	2%
Adj. Flow (vph)	0	185	2501	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	185	2501	0	0	0
Sign Control	Yield		Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 77.7%	ICU Level of Service D
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	159	1035	0	0
Future Volume (vph)	0	0	159	1035	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	450		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			85		25	
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	5085	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	5085	0	0
Link Speed (mph)	45			45	30	
Link Distance (ft)	315			494	108	
Travel Time (s)	4.8			7.5	2.5	
Peak Hour Factor	0.92	0.92	0.87	0.87	0.92	0.92
Adj. Flow (vph)	0	0	183	1190	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	183	1190	0	0
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 42.6% ICU Level of Service A
Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	182	974	0	0	0	0
Future Volume (vph)	182	974	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	275			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	110				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		45	45		30	
Link Distance (ft)		432	161		111	
Travel Time (s)		6.5	2.4		2.5	
Peak Hour Factor	0.94	0.94	0.92	0.92	0.92	0.92
Adj. Flow (vph)	194	1036	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	194	1036	0	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 52.5%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	102	0	0	0	129
Future Volume (vph)	0	102	0	0	0	129
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	0.76
Frt						0.850
Flt Protected						
Satd. Flow (prot)	0	3539	0	0	0	3610
Flt Permitted						
Satd. Flow (perm)	0	3539	0	0	0	3610
Link Speed (mph)		55	55		45	
Link Distance (ft)		1093	655		773	
Travel Time (s)		13.5	8.1		11.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	111	0	0	0	140
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	111	0	0	0	140
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 6.7%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	65	960	0	0	0	0
Future Volume (vph)	65	960	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	180			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	75				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		45	45		30	
Link Distance (ft)		290	1089		101	
Travel Time (s)		4.4	16.5		2.3	
Peak Hour Factor	0.94	0.94	0.92	0.92	0.92	0.92
Adj. Flow (vph)	69	1021	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	69	1021	0	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 60.8%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	3059	493	0	0	0	0
Future Volume (vph)	3059	493	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	1.00	1.00	1.00	1.00
Frt	0.979					
Flt Protected						
Satd. Flow (prot)	4979	0	0	0	0	0
Flt Permitted						
Satd. Flow (perm)	4979	0	0	0	0	0
Link Speed (mph)	45			45	30	
Link Distance (ft)	311			156	174	
Travel Time (s)	4.7			2.4	4.0	
Peak Hour Factor	0.90	0.90	0.92	0.92	0.92	0.92
Adj. Flow (vph)	3399	548	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	3947	0	0	0	0	0
Sign Control	Free			Stop	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 92.9%	ICU Level of Service F
Analysis Period (min) 15	

Lane Group	NBT	NBR	SBL	SBT	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	0	0	112	2322	0	0
Future Volume (vph)	0	0	112	2322	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	500		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			100		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	3539	0	0
Link Speed (mph)	30			25	25	
Link Distance (ft)	266			1471	301	
Travel Time (s)	6.0			40.1	8.2	
Peak Hour Factor	0.92	0.92	0.75	0.75	0.92	0.92
Adj. Flow (vph)	0	0	149	3096	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	149	3096	0	0
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 67.5%	ICU Level of Service C
Analysis Period (min) 15	

Lane Group	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	482	122	0	0	0	0
Future Volume (vph)	482	122	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected		0.962				
Satd. Flow (prot)	0	1792	0	0	0	0
Flt Permitted		0.962				
Satd. Flow (perm)	0	1792	0	0	0	0
Link Speed (mph)		25	30		25	
Link Distance (ft)		1207	315		252	
Travel Time (s)		32.9	7.2		6.9	
Peak Hour Factor	0.75	0.75	0.92	0.92	0.92	0.92
Adj. Flow (vph)	643	163	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	806	0	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 47.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	103	0	69	0	0
Future Volume (vph)	0	103	0	69	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.865		
Flt Protected						
Satd. Flow (prot)	0	1652	0	1191	0	0
Flt Permitted						
Satd. Flow (perm)	0	1652	0	1191	0	0
Link Speed (mph)		25	25		25	
Link Distance (ft)		995	597		1154	
Travel Time (s)		27.1	16.3		31.5	
Peak Hour Factor	0.83	0.83	0.89	0.89	0.92	0.92
Heavy Vehicles (%)	15%	15%	38%	38%	2%	2%
Adj. Flow (vph)	0	124	0	78	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	124	0	78	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 8.8%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	53	4320	0	0
Future Volume (vph)	0	0	53	4320	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	250		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	5085	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	5085	0	0
Link Speed (mph)	45			45	25	
Link Distance (ft)	894			534	137	
Travel Time (s)	13.5			8.1	3.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	58	4696	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	58	4696	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 79.9% ICU Level of Service D

Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	4353	0	0	53	0
Future Volume (vph)	0	4353	0	0	53	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.86	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	6408	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	6408	0	0	1770	0
Link Speed (mph)		45	45		25	
Link Distance (ft)		744	1191		137	
Travel Time (s)		11.3	18.0		3.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	4732	0	0	58	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	4732	0	0	58	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 153.2%	ICU Level of Service H
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	771	3635	0	0	0	0
Future Volume (vph)	771	3635	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	400			0	0	0
Storage Lanes	2			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	0.97	0.86	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	3433	6408	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	3433	6408	0	0	0	0
Link Speed (mph)		45	45		25	
Link Distance (ft)		1191	262		113	
Travel Time (s)		18.0	4.0		3.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	838	3951	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	838	3951	0	0	0	0
Sign Control		Free	Stop		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 131.3%	ICU Level of Service H
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	119	3637	0	0
Future Volume (vph)	0	0	119	3637	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	250		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	5085	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	5085	0	0
Link Speed (mph)	45			45	25	
Link Distance (ft)	254			1016	123	
Travel Time (s)	3.8			15.4	3.4	
Peak Hour Factor	0.92	0.92	0.90	0.87	0.92	0.92
Adj. Flow (vph)	0	0	132	4180	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	132	4180	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 159.6%	ICU Level of Service H
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	204	3552	0	0	0	0
Future Volume (vph)	204	3552	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.91	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	5085	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	5085	0	0	0	0
Link Speed (mph)		45	45		30	
Link Distance (ft)		704	311		111	
Travel Time (s)		10.7	4.7		2.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	222	3861	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	222	3861	0	0	0	0
Sign Control		Free	Stop		Stop	

Intersection Summary		
Area Type:	Other	
Control Type: Unsignalized		
Intersection Capacity Utilization 145.6%		ICU Level of Service H
Analysis Period (min) 15		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	1106	27	0
Future Volume (vph)	0	0	0	1106	27	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	30	
Link Distance (ft)	583			574	107	
Travel Time (s)	7.2			7.1	2.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	1202	29	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1202	29	0
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 64.3% ICU Level of Service C

Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	27	980	0	0	0	0
Future Volume (vph)	27	980	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		30	
Link Distance (ft)		1122	576		107	
Travel Time (s)		13.9	7.1		2.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	29	1065	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	29	1065	0	0	0	0
Sign Control		Free	Stop		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 64.3%	ICU Level of Service C
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	1097	36	0	54
Future Volume (vph)	0	0	1097	36	0	54
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.995			0.865
Flt Protected						
Satd. Flow (prot)	0	0	3522	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	0	3522	0	0	1611
Link Speed (mph)		55	55		30	
Link Distance (ft)		590	583		121	
Travel Time (s)		7.3	7.2		2.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	1192	39	0	59
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1231	0	0	59
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 41.5%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	168	983	0	0
Future Volume (vph)	0	0	168	983	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	250		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	3539	0	0
Link Speed (mph)	55			55	30	
Link Distance (ft)	405			590	104	
Travel Time (s)	5.0			7.3	2.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	183	1068	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	183	1068	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 38.7%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	839	0	0	168	0
Future Volume (vph)	0	839	0	0	168	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	1770	0
Link Speed (mph)		55	55		30	
Link Distance (ft)		316	1122		104	
Travel Time (s)		3.9	13.9		2.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	912	0	0	183	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	912	0	0	183	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 57.0%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	67	980	0	0
Future Volume (vph)	0	0	67	980	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	250			0
Storage Lanes	0	0	2			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	0.97	0.91	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	3433	5085	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	3433	5085	0	0
Link Speed (mph)	45			55	30	
Link Distance (ft)	105			493	555	
Travel Time (s)	1.6			6.1	12.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	73	1065	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	73	1065	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 43.9% ICU Level of Service A

Analysis Period (min) 15

Lane Group	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	821	159	0	0	0	0
Future Volume (vph)	821	159	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.94	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	4990	1863	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	4990	1863	0	0	0	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		555	271		108	
Travel Time (s)		12.6	6.2		2.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	892	173	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	892	173	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 38.5%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NEL	NER
Lane Configurations	↑					↱
Traffic Volume (vph)	73	0	0	0	0	159
Future Volume (vph)	73	0	0	0	0	159
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	1863	0	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	1863	0	0	0	0	1611
Link Speed (mph)	25			30	25	
Link Distance (ft)	287			1072	271	
Travel Time (s)	7.8			24.4	7.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	79	0	0	0	0	173
Shared Lane Traffic (%)						
Lane Group Flow (vph)	79	0	0	0	0	173
Sign Control	Yield			Free	Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 20.4% ICU Level of Service A

Analysis Period (min) 15

Lane Group	NBT	NBR	SBL	SBT	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	0	0	73	753	0	0
Future Volume (vph)	0	0	73	753	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.91	0.91	1.00	1.00
Frt						
Flt Protected				0.996		
Satd. Flow (prot)	0	0	0	5052	0	0
Flt Permitted				0.996		
Satd. Flow (perm)	0	0	0	5052	0	0
Link Speed (mph)	45			45	45	
Link Distance (ft)	194			406	287	
Travel Time (s)	2.9			6.2	4.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	5%	2%	2%	2%
Adj. Flow (vph)	0	0	79	818	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	897	0	0
Sign Control	Free			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 20.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	104	110	0	0	0	0
Future Volume (vph)	104	110	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1719	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1719	3539	0	0	0	0
Link Speed (mph)		25	25		25	
Link Distance (ft)		879	346		271	
Travel Time (s)		24.0	9.4		7.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	2%	2%	2%	2%	2%
Adj. Flow (vph)	113	120	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	113	120	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 31.5%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	79	0	0	81
Future Volume (vph)	0	0	79	0	0	81
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	0	0	1863	0	0	1565
Flt Permitted						
Satd. Flow (perm)	0	0	1863	0	0	1565
Link Speed (mph)		30	45		45	
Link Distance (ft)		874	182		254	
Travel Time (s)		19.9	2.8		3.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	5%
Adj. Flow (vph)	0	0	86	0	0	88
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	86	0	0	88
Sign Control		Free	Free		Yield	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 35.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBR	SBL	SBR	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	0	0	0	0	79	846
Future Volume (vph)	0	0	0	0	79	846
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.91
Frt					0.887	0.850
Flt Protected					0.988	
Satd. Flow (prot)	0	0	0	0	1597	2799
Flt Permitted					0.988	
Satd. Flow (perm)	0	0	0	0	1597	2799
Link Speed (mph)	30		30		30	
Link Distance (ft)	182		207		337	
Travel Time (s)	4.1		4.7		7.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	5%
Adj. Flow (vph)	0	0	0	0	86	920
Shared Lane Traffic (%)						28%
Lane Group Flow (vph)	0	0	0	0	344	662
Sign Control	Stop		Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 35.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	727	81	0	0	0	0
Future Volume (vph)	727	81	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00
Frt	0.985					
Flt Protected						
Satd. Flow (prot)	3387	0	0	0	0	0
Flt Permitted						
Satd. Flow (perm)	3387	0	0	0	0	0
Link Speed (mph)	30			45	25	
Link Distance (ft)	306			190	254	
Travel Time (s)	7.0			2.9	6.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	5%	2%	2%	2%	2%
Adj. Flow (vph)	790	88	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	878	0	0	0	0	0
Sign Control	Free			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 46.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	0	99	151	0	0
Future Volume (vph)	0	0	99	151	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			250	0	0
Storage Lanes	0			1	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	1.00
Frt				0.850		
Flt Protected						
Satd. Flow (prot)	0	0	3539	1538	0	0
Flt Permitted						
Satd. Flow (perm)	0	0	3539	1538	0	0
Link Speed (mph)		25	25		25	
Link Distance (ft)		241	1465		317	
Travel Time (s)		6.6	40.0		8.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	5%	2%	2%
Adj. Flow (vph)	0	0	108	164	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	108	164	0	0
Sign Control		Free	Free		Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 13.3% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	997	64	0
Future Volume (vph)	0	0	0	997	64	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	4940	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	4940	1770	0
Link Speed (mph)	55			30	25	
Link Distance (ft)	598			415	105	
Travel Time (s)	7.4			9.4	2.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	5%	2%	2%
Adj. Flow (vph)	0	0	0	1084	70	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1084	70	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 48.3%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	64	808	0	0	0	0
Future Volume (vph)	64	808	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3438	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3438	0	0	0	0
Link Speed (mph)		55	30		25	
Link Distance (ft)		597	306		105	
Travel Time (s)		7.4	7.0		2.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	5%	2%	2%	2%	2%
Adj. Flow (vph)	70	878	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	70	878	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 48.3% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	774	0	0
Future Volume (vph)	0	0	0	774	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	0	0	0	3539	1863	0
Flt Permitted						
Satd. Flow (perm)	0	0	0	3539	1863	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	586			210	99	
Travel Time (s)	7.3			2.6	2.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	841	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	841	0	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 31.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	665	0	0	0	0
Future Volume (vph)	0	665	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	1863	3539	0	0	0	0
Flt Permitted						
Satd. Flow (perm)	1863	3539	0	0	0	0
Link Speed (mph)		55	55		25	
Link Distance (ft)		589	212		99	
Travel Time (s)		7.3	2.6		2.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	723	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	723	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 31.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	774	0	0
Future Volume (vph)	0	0	0	774	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	0	0	0	3539	0	0
Flt Permitted						
Satd. Flow (perm)	0	0	0	3539	0	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	723			586	81	
Travel Time (s)	9.0			7.3	2.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	841	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	841	0	0
Sign Control	Free			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 31.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	665	0	0	0	0	0	0	0	0	0	0
Future Volume (vph)	0	665	0	0	0	0	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	3539	0	0	0	0	0	0	1863	0	1863	0
Flt Permitted												
Satd. Flow (perm)	0	3539	0	0	0	0	0	0	1863	0	1863	0
Link Speed (mph)		55			55			25			25	
Link Distance (ft)		719			589			84			81	
Travel Time (s)		8.9			7.3			2.3			2.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	723	0	0	0	0	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	723	0	0	0	0	0	0	0	0	0	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 28.4% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBT	EBR	WBL	WBT	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	0	665	0	774	0	0
Future Volume (vph)	0	665	0	774	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.88	1.00	0.95	1.00	1.00
Frt		0.850				
Flt Protected						
Satd. Flow (prot)	0	2787	0	3539	0	0
Flt Permitted						
Satd. Flow (perm)	0	2787	0	3539	0	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	997			723	719	
Travel Time (s)	12.4			9.0	19.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	723	0	841	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	723	0	841	0	0
Sign Control	Free			Free	Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 26.6% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	286	694	0	0	0	0
Future Volume (vph)	286	694	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		55	
Link Distance (ft)		2077	2379		116	
Travel Time (s)		25.7	29.5		1.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	311	754	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	311	754	0	0	0	0
Sign Control		Free	Stop		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 44.0%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NEL	NER
Lane Configurations				↑↑	↰	
Traffic Volume (vph)	0	0	0	657	286	0
Future Volume (vph)	0	0	0	657	286	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	607			2382	116	
Travel Time (s)	7.5			29.5	3.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	714	311	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	714	311	0
Sign Control	Free			Free	Stop	

Intersection Summary		
Area Type:	Other	
Control Type: Unsignalized		
Intersection Capacity Utilization 50.7%		ICU Level of Service A
Analysis Period (min) 15		

Lane Group	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	0	0	14	657	0	0
Future Volume (vph)	0	0	14	657	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	250		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	3539	0	0
Link Speed (mph)	55			55	55	
Link Distance (ft)	2382			560	108	
Travel Time (s)	29.5			6.9	1.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	15	714	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	15	714	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary		
Area Type:	Other	
Control Type: Unsignalized		
Intersection Capacity Utilization 71.3%		ICU Level of Service C
Analysis Period (min) 15		

Lane Group	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	0	694	0	0	14	0
Future Volume (vph)	0	694	0	0	14	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	1770	0
Link Speed (mph)		55	55		25	
Link Distance (ft)		2379	608		108	
Travel Time (s)		29.5	7.5		2.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	754	0	0	15	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	754	0	0	15	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 44.0%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↱					↱
Traffic Volume (vph)	669	39	0	0	0	32
Future Volume (vph)	669	39	0	0	0	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		600	600		0	0
Storage Lanes		0	0		0	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00
Frt	0.992					0.865
Flt Protected						
Satd. Flow (prot)	3511	0	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	3511	0	0	0	0	1611
Link Speed (mph)	55			55	45	
Link Distance (ft)	608			628	1089	
Travel Time (s)	7.5			7.8	16.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	727	42	0	0	0	35
Shared Lane Traffic (%)						
Lane Group Flow (vph)	769	0	0	0	0	35
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 29.7%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑	↰	
Traffic Volume (vph)	0	0	0	662	9	0
Future Volume (vph)	0	0	0	662	9	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	645			3831	112	
Travel Time (s)	8.0			47.5	3.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	720	10	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	720	10	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 46.5%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	9	692	0	0	0	0
Future Volume (vph)	9	692	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		55	
Link Distance (ft)		628	3825		112	
Travel Time (s)		7.8	47.4		1.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	10	752	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	10	752	0	0	0	0
Sign Control		Free	Stop		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 44.1%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	10	662	0	0
Future Volume (vph)	0	0	10	662	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	250		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	3539	0	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	3831			538	97	
Travel Time (s)	47.5			6.7	2.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	11	720	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	11	720	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 33.6%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	692	0	0	10	0
Future Volume (vph)	0	692	0	0	10	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	1770	0
Link Speed (mph)		55	55		25	
Link Distance (ft)		3825	591		97	
Travel Time (s)		47.4	7.3		2.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	752	0	0	11	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	752	0	0	11	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 44.1%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	690	12	0	0	0	16
Future Volume (vph)	690	12	0	0	0	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00
Frt	0.997					0.865
Flt Protected						
Satd. Flow (prot)	3529	0	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	3529	0	0	0	0	1611
Link Speed (mph)	55			55	45	
Link Distance (ft)	591			1206	1073	
Travel Time (s)	7.3			15.0	16.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	750	13	0	0	0	17
Shared Lane Traffic (%)						
Lane Group Flow (vph)	763	0	0	0	0	17
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 29.5%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑	↰	
Traffic Volume (vph)	0	0	0	664	9	0
Future Volume (vph)	0	0	0	664	9	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	1254			1793	105	
Travel Time (s)	15.5			22.2	2.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	722	10	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	722	10	0
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 47.5% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	9	697	0	0	0	0
Future Volume (vph)	9	697	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		55	
Link Distance (ft)		1206	1786		105	
Travel Time (s)		15.0	22.1		1.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	10	758	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	10	758	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 44.3%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	822	664	0	0
Future Volume (vph)	0	0	822	664	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	500		0	0
Storage Lanes		0	2		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	0.97	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	3433	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	3433	3539	0	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	1793			596	109	
Travel Time (s)	22.2			7.4	3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	893	722	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	893	722	0	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 92.9%	ICU Level of Service F
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑	↰	
Traffic Volume (vph)	0	0	0	1406	80	0
Future Volume (vph)	0	0	0	1406	80	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	631			2681	109	
Travel Time (s)	7.8			33.2	3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	1528	87	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1528	87	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 67.5%	ICU Level of Service C
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	80	1439	0	0	0	0
Future Volume (vph)	80	1439	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		55	
Link Distance (ft)		627	2678		109	
Travel Time (s)		7.8	33.2		1.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	87	1564	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	87	1564	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 85.3%	ICU Level of Service E
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	461	1406	0	0
Future Volume (vph)	0	0	461	1406	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	500		0	0
Storage Lanes		0	2		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	0.97	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	3433	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	3433	3539	0	0
Link Speed (mph)	55			55	55	
Link Distance (ft)	2681			671	109	
Travel Time (s)	33.2			8.3	1.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	501	1528	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	501	1528	0	0
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 108.5% ICU Level of Service G

Analysis Period (min) 15

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	1826	41	0
Future Volume (vph)	0	0	0	1826	41	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	654			797	95	
Travel Time (s)	8.1			9.9	2.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	1985	45	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1985	45	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 81.1%	ICU Level of Service D
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	41	1859	0	0	0	0
Future Volume (vph)	41	1859	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		55	
Link Distance (ft)		659	784		95	
Travel Time (s)		8.2	9.7		1.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	45	2021	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	45	2021	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary		
Area Type:	Other	
Control Type: Unsignalized		
Intersection Capacity Utilization 108.5%		ICU Level of Service G
Analysis Period (min) 15		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	962	18	0	0	0	18
Future Volume (vph)	962	18	0	0	0	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00
Frt	0.997					0.865
Flt Protected						
Satd. Flow (prot)	3529	0	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	3529	0	0	0	0	1611
Link Speed (mph)	55			55	25	
Link Distance (ft)	576			2077	205	
Travel Time (s)	7.1			25.7	5.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1046	20	0	0	0	20
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1066	0	0	0	0	20
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 37.2%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	2663	0	0	1690	0
Future Volume (vph)	0	2663	0	0	1690	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	0.97	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	3433	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	3433	0
Link Speed (mph)		45	45		45	
Link Distance (ft)		1021	744		215	
Travel Time (s)		15.5	11.3		3.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	2895	0	0	1837	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	2895	0	0	1837	0
Sign Control		Free	Stop		Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 128.5% ICU Level of Service H

Analysis Period (min) 15

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	0	0	801	129
Future Volume (vph)	0	0	0	0	801	129
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		0	250	
Storage Lanes	0	0		0	2	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.97	0.91
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	0	3433	5085
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	0	3433	5085
Link Speed (mph)	55		45			30
Link Distance (ft)	167		773			587
Travel Time (s)	2.1		11.7			13.3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	871	140
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	0	871	140
Sign Control	Stop		Stop			Free

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 32.5% ICU Level of Service A

Analysis Period (min) 15

1005: WB M-96 (Michigan Avenue) & SB I-69 Off-Ramp (Push Button) Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	13.0	89.4	48.5

1007: EB M-96 (Michigan Avenue) (Push Button) & SB I-69 Off-Ramp/EB M-96 (Michigan Avenue) Perfor

Approach	EB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	17.3	3.5	3.8

1008: WB M-96 (Michigan Avenue)/NB I-69 Off-Ramp & WB M-96 (Michigan Avenue) (Push Button) Perf

Approach	WB	SW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	40.8	8.1	20.1

1009: WB M-96 (Michigan Avenue) (Push Button)/WB M-96 (Michigan Avenue) & EB M-96 (Michigan Ave

Approach	EB	SW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	24.8	23.5	24.0

1010: NB I-69 Off-Ramp (Push Button) & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	3.7	19.0	6.0

3003: M-227/West Drive & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.2	0.2	0.0
Total Del/Veh (s)	8.9	5.8	19.4	9.9

3093: M-227/West Drive & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	0.0	2.1	0.0	0.3
Total Del/Veh (s)	4.1	30.7	3.1	8.3

4001: M-96 (Michigan Avenue) & WB Main Entrance/WB M-96 (Michigan Avenue) Performance by appro

Approach	WB	SB	All
Denied Del/Veh (s)	0.1	0.2	0.1
Total Del/Veh (s)	87.9	101.1	91.5

4003: EB to WB Xover E of 15 Mile Rd (North) & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	8.1	188.3	48.3
Total Del/Veh (s)	43.1	43.1	43.1

4004: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	247.6	100.9	228.5

4005: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	9.2	27.5	16.5

4006: M-311 (11 Mile Rd) & Site Driveway West Performance by approach

Approach	NB	SB	All
Denied Del/Veh (s)	0.2	0.0	0.1
Total Del/Veh (s)	0.2	0.5	0.4

4007: M-311 (11 Mile Rd) & F Drive N Performance by approach

Approach	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.1	0.2	0.1

4010: EB M-96 (Michigan Avenue)/EB M-96 (Michigan Avenue) (Push Button) & WB M-96 (Michigan Ave

Approach	WB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	33.3	18.6	23.5

4030: NB M-311 (11 Mile Rd)/WB M-96 (Michigan Avenue)/11 Mile Rd (North) & EB M-96 (Michigan Ave

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	19.4	11.1	18.5

4031: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & WB M-96 (Michigan Avenue) Performance by a

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	24.9	2.1	23.4

4033: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & NB to SB Xover N of M-96 (Michigan Avenue) P

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	21.1	3.4	4.5

4034: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & EB I-94 Off-ramp Performance by approach

Approach	SB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.1	17.6	4.2

4035: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & WB M-96 (Michigan Avenue)/11 Mile Rd (North)

Approach	SB	NW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	13.0	31.1	21.8

4036: EB I-94 Off-ramp & WB M-96 (Michigan Avenue)/11 Mile Rd (North) Performance by approach

Approach	NB	NW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	19.7	1.5	3.9

4037: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & WB I-94 Off-ramp Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.3	19.8	3.6

4038: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & EB M-96 (Michigan Avenue)/11 Mile Rd (South)

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	16.6	30.2	23.6

4039: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & WB I-94 Off-ramp Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	16.6	4.3	6.3

4040: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & 11 Mile Rd Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	18.6	2.5	14.7

4041: 11 Mile Rd & WB M-96 (Michigan Avenue)/11 Mile Rd (North) Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	17.6	23.3	18.8

4042: 11 Mile Rd & H Dr N Performance by approach

Approach	NE	SW	All
Denied Del/Veh (s)	0.0	0.2	0.1
Total Del/Veh (s)	2.2	3.5	2.8

4050: Prop Site Drive E & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	66.7	19.9
Total Del/Veh (s)	83.6	316.5	147.2

4051: Prop Site Drive W & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	5.6	2.5
Total Del/Veh (s)	22.6	78.3	47.7

4061: WB M-96 (Michigan Avenue) & Firekeepers Main Drive Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	3.2	49.8	8.9

4065: WB M-96 (Michigan Avenue) & 15 Mile Rd (North) Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	1.9	0.0	1.5
Total Del/Veh (s)	74.8	130.1	84.5

4066: EB M-96 (Michigan Avenue) & WB to EB Xover W of 15 Mile Rd (South) Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	17.4	33.5	17.8

4067: 15 Mile Rd (South) & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.6	0.1
Total Del/Veh (s)	60.7	49.8	59.6

4068: EB to WB Xover E of 15 Mile Rd (South) & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	11.2	0.0	10.5
Total Del/Veh (s)	32.4	40.7	33.0

4070: M-311 (11 Mile Rd) & Site Drive East Performance by approach

Approach	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.1	0.2	0.1

4071: 15 Mile Rd & Verona Rd Performance by approach

Approach	NB	SB	SE	NW	All
Denied Del/Veh (s)	0.7	0.1	3.3	9.8	2.7
Total Del/Veh (s)	23.6	11.7	20.3	199.2	37.1

4075: 11 Mile Road & Verona Road Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	10.7	2.2	0.5	4.6
Total Del/Veh (s)	44.5	93.7	26.6	41.2	62.9

9002: WB M-96 (Michigan Avenue) & Firekeepers Gas Station Driveway Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.2	0.1
Total Del/Veh (s)	1.7	8.2	3.1

9003: WB M-96 (Michigan Avenue) & Firekeepers E Drive Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.6	7.6	2.7

9004: WB M-96 (Michigan Avenue) & Ackerson Drive Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	1.3	4.3	1.3

9006: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	0.9	1.9	0.9

9008: 15 Mile Rd (North) & Old M-96 (Michigan Ave) Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.0	0.0	0.0
Total Del/Veh (s)	7.2	0.7	103.6	59.4

9013: SB I-69 On-Ramp & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.5	0.5
Total Del/Veh (s)	80.1	80.1

9016: EB M-96 (Michigan Avenue) & NB I-69 On-Ramp Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	21.7	21.7

9017: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	5.0	5.0

9018: EB M-96 (Michigan Avenue) & WB to EB Xover W of M-227/West Drive Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.1	7.8	2.2

9019: EB to WB Xover W of M-227/West Drive & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.5	13.3	3.1

9020: EB M-96 (Michigan Avenue) & WB to EB Xover E of M-227/West Drive Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.0	7.9	1.6

9021: EB to WB Xover E of M-227/West Drive & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.3	0.0	0.2
Total Del/Veh (s)	1.3	12.8	1.9

9023: M-311 (11 Mile Rd) & B Drive North Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.7	0.3	1.1	0.5	0.6
Total Del/Veh (s)	1.4	0.8	8.9	9.5	2.9

9025: M-294 (Beadle Lake Road) & EB I-94 Off-Ramp & EB I-94 On-Ramp Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	2.5	0.3	0.0	0.5
Total Del/Veh (s)	7.0	1.6	1.8	2.6

9026: WB I-94 On-Ramp & M-294 (Beadle Lake Road) & WB I-94 Off-Ramp Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	2.0	0.0	0.3	0.5
Total Del/Veh (s)	7.2	1.5	1.2	2.4

9027: Old US-27 & EB I-94 to Old US-27 Off Ramp Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0
Total Del/Veh (s)	7.6	0.2	1.0	2.8

9028: Old US-27 & NB Old US-27 to EB I-94 On Ramp Performance by approach

Approach	NB	SB	All
Denied Del/Veh (s)	0.6	0.0	0.3
Total Del/Veh (s)	0.8	0.4	0.6

9029: SB Old US-27 WB I-94 On Ramp & Old US-27 & WB I-94 to Old US-27 Off Ramp Performance by

Approach	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	1.0	0.4
Total Del/Veh (s)	4.7	0.2	0.8	1.1

9030: I-94BL/Partello Rd & EB I-94 to I-94BL/Partello Off Ramp Performance by approach

Approach	SE	NE	SW	All
Denied Del/Veh (s)	0.0	0.3	0.0	0.1
Total Del/Veh (s)	4.5	1.4	0.2	1.7

9031: I-94BL/Partello Rd & I-94/Partello Rd to EB I-94 On Ramp Performance by approach

Approach	NE	SW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.2	0.7	0.4

9032: I-94BL/Partello Rd & WB I-94 to I-94/Partello Rd Performance by approach

Approach	EB	NE	SW	All
Denied Del/Veh (s)	0.0	0.0	0.9	0.2
Total Del/Veh (s)	3.3	1.2	0.5	1.7

9034: Dummy Node & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.4	21.1	0.7
Total Del/Veh (s)	23.0	430.9	28.0

9035: Dummy Node & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	0.5	8.2	0.7

9036: WB M-96 (Michigan Avenue) & Dummy Node Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	0.6	5.2	0.8

9037: WB M-96 (Michigan Avenue) & Dummy Node Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.5	0.5

9040: Old US-27 & NB Old US-27 to WB I-94 On Ramp Performance by approach

Approach	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.0	0.2	0.8

9041: WB to EB Xover E of M-227/West Drive/McDonald's Dr & WB M-96 (Michigan Avenue) Performanc

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	1.7	17.6	2.7

9128: M-96 (Michigan Avenue)/WB M-96 (Michigan Avenue) & EB M-96 (Michigan Avenue) Performance

Approach	NB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	4.6	229.5	117.3

9137: SB I-69 On-Ramp Performance by approach

Approach	SB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	10.6	1.2	3.3

9143: NB I-69 On-Ramp Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	20.1	3.4	4.7

9146: WB to EB Xover W of M-227/West Drive & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	1.2	1.2

9147: EB M-96 (Michigan Avenue) & EB to WB Xover W of M-227/West Drive Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	1.6	1.6

9150: M-311 (11 Mile Rd) /NB M-311 (11 Mile Rd) & SB M-311 (11 Mile Rd) Performance by approach

Approach	NB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.1	0.2	0.2

9151: EB M-96 (Michigan Avenue) & EB to WB Xover E of M-227/West Drive Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.5	0.5

9157: SB I-69 On-Ramp & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.3	0.3
Total Del/Veh (s)	30.2	30.2

9158: SB I-69 Off-Ramp (Push Button) & SB I-69 Off-Ramp Performance by approach

Approach	SB	All
Denied Del/Veh (s)	831.7	831.7
Total Del/Veh (s)	287.8	287.8

9159: NB I-69 Off-Ramp & NB I-69 Off-Ramp (Push Button) Performance by approach

Approach	NB	All
Denied Del/Veh (s)	0.6	0.6
Total Del/Veh (s)	15.9	15.9

9178: WB I-94 to BL-94/Partello Rd Off Ramp/WB I-94 to I-94/Partello Rd & BL-94/Partello Rd to WB I-94

Approach	EB	WB	All
Denied Del/Veh (s)	0.1	0.0	0.1
Total Del/Veh (s)	0.2	0.3	0.2

9304: WB to EB Xover W of 15 Mile Rd (North) & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	50.7	50.7

9305: EB M-96 (Michigan Avenue) & WB to EB Xover W of 15 Mile Rd (North) Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	34.6	377.4	38.7

9307: EB M-96 (Michigan Avenue) & EB to WB Xover E of 15 Mile Rd (North) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.2	0.2
Total Del/Veh (s)	77.5	77.5

9310: WB to EB Xover W of 15 Mile Rd (South) & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	47.2	47.2
Total Del/Veh (s)	167.4	167.4

9311: EB M-96 (Michigan Avenue) & EB to WB Xover E of 15 Mile Rd (South) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	46.2	46.2

9330: EB to WB Xover E of Old M-311 (11 Mile Rd) & WB M-96 (Michigan Avenue) Performance by appr

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.5	5.4	1.6

9331: EB M-96 (Michigan Avenue) & EB to WB Xover E of Old M-311 (11 Mile Rd) Performance by appro

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.8	2.8

9332: WB M-96 (Michigan Avenue) & Old M-311 (11 Mile Rd) Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.9	5.0	1.1

9336: WB to EB Xover W of Old M-311 (11 Mile Rd) & WB M-96 (Michigan Avenue) Performance by app

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.2	2.2

9337: EB M-96 (Michigan Avenue) & WB to EB Xover W of Old M-311 (11 Mile Rd) Performance by appr

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	4.8	9.9	5.6

9338: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & NB to SB Xover N of M-96 (Michigan Avenue) F

Approach	NB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	1.8	1.8

9339: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & EB I-94 On Ramp Performance by approach

Approach	NB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	6.2	6.2

9340: EB I-94 On Ramp Performance by approach

Approach	EB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	4.2	0.1	1.5

9342: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & EB I-94 On Ramp Performance by approach

Approach	SB	All
Denied Del/Veh (s)	0.1	0.1
Total Del/Veh (s)	14.3	14.3

9343: EB I-94 Off-ramp Performance by approach

Approach	EB	All
Denied Del/Veh (s)	1.7	1.7
Total Del/Veh (s)	1.0	1.0

9346: WB I-94 On Ramp Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.6	3.5	2.6

9347: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & WB I-94 On Ramp Performance by approach

Approach	NW	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	4.2	4.2

9348: WB I-94 On Ramp & EB M-96 (Michigan Avenue)/11 Mile Rd (South) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.3	2.3

9349: WB I-94 Off-ramp Performance by approach

Approach	WB	All
Denied Del/Veh (s)	1.3	1.3
Total Del/Veh (s)	0.5	0.5

9351: SB to NB Xover E of 11 Mile Rd & WB M-96 (Michigan Avenue)/11 Mile Rd (North) Performance b

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.2	3.8	1.4

9352: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & SB to NB Xover E of 11 Mile Rd Performance b

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	6.1	6.1

9354: EB to WB Xover W of 11 Mile Rd & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	3.6	3.6

9355: EB M-96 (Michigan Avenue) & EB to WB Xover W of 11 Mile Rd Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	3.0	3.0

9356: WB to EB Xover W of 11 Mile Rd & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.5	2.5

9357: EB M-96 (Michigan Avenue) & WB to EB Xover W of 11 Mile Rd Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.4	0.4

9359: EB M-96 (Michigan Avenue) & M-96 (Michigan Avenue)/WB M-96 (Michigan Avenue) Performance

Approach	EB	WB	All
Denied Del/Veh (s)	0.2	0.0	0.1
Total Del/Veh (s)	2.3	0.8	1.5

9381: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	3.2	3.2

9382: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.5	5.3	3.7

9383: WB M-96 (Michigan Avenue) Performance by approach

Approach	NW	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.5	0.5

9384: EB M-96 (Michigan Avenue) Performance by approach

Approach	SE	SW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.8	3.9	1.8

9385: Ceresco Road/12 Mile Road & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	0.9	4.8	1.0

9386: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.8	3.2	2.8

9387: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.6	0.6

9388: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.4	0.4

9389: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.5	3.6	2.5

9390: 13 Mile Rd & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	0.6	3.4	0.6

9392: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.1	3.0	1.1

9393: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.9	0.9

9394: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	42.6	42.6

9396: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.5	8.9	3.0

9397: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	28.8	28.8

9398: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	61.4	61.4

9400: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	54.0	61.5	54.1

9401: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.1	0.1
Total Del/Veh (s)	82.5	82.5

9410: Retail Drive & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	0.8	5.7	0.9

9415: EB Main Entrance/EB M-96 (Michigan Avenue) & M-96 (Michigan Avenue) Performance by approa

Approach	EB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	53.0	15.4	43.2

9416: SB M-311 (11 Mile Rd)/EB M-96 (Michigan Avenue)/11 Mile Rd (South) & EB M-96 (Michigan Aver

Approach	SB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	4.0	4.0

Total Network Performance

Denied Del/Veh (s)	126.4
Total Del/Veh (s)	292.9

Scenario M4

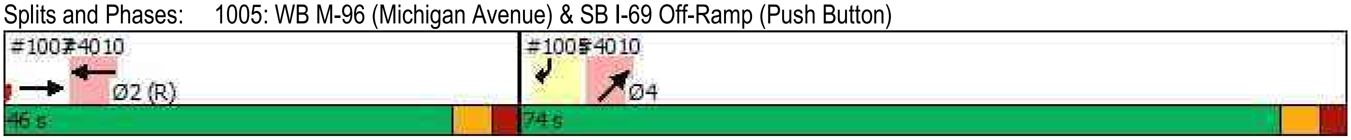
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø2
Lane Configurations							
Traffic Volume (vph)	0	0	1400	0	0	2894	
Future Volume (vph)	0	0	1400	0	0	2894	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	0.91	1.00	1.00	0.76	
Frt						0.850	
Flt Protected							
Satd. Flow (prot)	0	0	5085	0	0	3610	
Flt Permitted							
Satd. Flow (perm)	0	0	5085	0	0	3610	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)						335	
Link Speed (mph)		45	45		25		
Link Distance (ft)		275	194		266		
Travel Time (s)		4.2	2.9		7.3		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.84	0.75	
Heavy Vehicles (%)	2%	2%	2%	2%	3%	2%	
Adj. Flow (vph)	0	0	1522	0	0	3859	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	1522	0	0	3859	
Turn Type			NA			Prot	
Protected Phases			Free!			4!	2
Permitted Phases							
Minimum Split (s)						17.0	17.0
Total Split (s)						74.0	46.0
Total Split (%)						61.7%	38%
Yellow Time (s)						3.5	3.5
All-Red Time (s)						2.5	2.5
Lost Time Adjust (s)						0.0	
Total Lost Time (s)						6.0	
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)			120.0			68.0	
Actuated g/C Ratio			1.00			0.57	
v/c Ratio			0.30			1.76	
Control Delay			0.4			366.6	
Queue Delay			0.1			0.2	
Total Delay			0.4			366.9	
LOS			A			F	
Approach Delay			0.4		366.9		
Approach LOS			A		F		
Queue Length 50th (ft)			0			~1920	
Queue Length 95th (ft)			0			#1528	
Internal Link Dist (ft)		195	114		186		
Turn Bay Length (ft)							
Base Capacity (vph)			5085			2190	
Starvation Cap Reductn			0			0	
Spillback Cap Reductn			1340			168	
Storage Cap Reductn			0			0	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø2
Reduced v/c Ratio			0.41			1.91	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 100 (83%), Referenced to phase 2:EBT, Start of Green	
Natural Cycle: 150	
Control Type: Pretimed	
Maximum v/c Ratio: 1.76	
Intersection Signal Delay: 263.2	Intersection LOS: F
Intersection Capacity Utilization 108.5%	ICU Level of Service G
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
! Phase conflict between lane groups.

Splits and Phases: 1005: WB M-96 (Michigan Avenue) & SB I-69 Off-Ramp (Push Button)



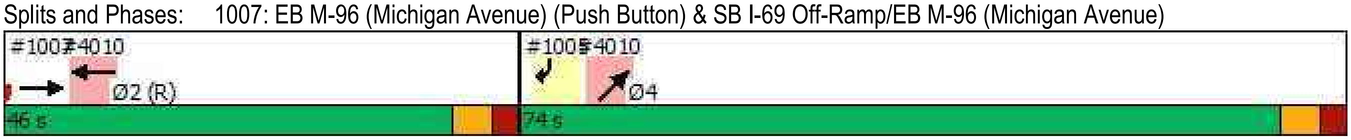
Lane Group	EBT	EBR	WBL	WBT	NEL	NER	Ø4
Lane Configurations							
Traffic Volume (vph)	112	0	0	0	0	3700	
Future Volume (vph)	112	0	0	0	0	3700	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Storage Length (ft)		260	285		0	0	
Storage Lanes		0	0		0	3	
Taper Length (ft)			240		25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.76	
Frt						0.850	
Flt Protected							
Satd. Flow (prot)	1863	0	0	0	0	3610	
Flt Permitted							
Satd. Flow (perm)	1863	0	0	0	0	3610	
Right Turn on Red		Yes				Yes	
Satd. Flow (RTOR)						2086	
Link Speed (mph)	25			45	45		
Link Distance (ft)	301			619	190		
Travel Time (s)	8.2			9.4	2.9		
Peak Hour Factor	0.75	0.84	0.92	0.92	0.90	0.90	
Heavy Vehicles (%)	2%	3%	2%	2%	2%	2%	
Adj. Flow (vph)	149	0	0	0	0	4111	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	149	0	0	0	0	4111	
Turn Type	NA					Free	
Protected Phases	2						4
Permitted Phases						Free	
Minimum Split (s)	17.0						17.0
Total Split (s)	46.0						74.0
Total Split (%)	38.3%						62%
Yellow Time (s)	3.5						3.5
All-Red Time (s)	2.5						2.5
Lost Time Adjust (s)	0.0						
Total Lost Time (s)	6.0						
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)	40.0					120.0	
Actuated g/C Ratio	0.33					1.00	
v/c Ratio	0.24					1.14	
Control Delay	30.3					89.3	
Queue Delay	0.0					0.0	
Total Delay	30.3					89.3	
LOS	C					F	
Approach Delay	30.3				89.3		
Approach LOS	C				F		
Queue Length 50th (ft)	83					~938	
Queue Length 95th (ft)	111					m305	
Internal Link Dist (ft)	221			539	110		
Turn Bay Length (ft)							
Base Capacity (vph)	621					3610	

Lane Group	EBT	EBR	WBL	WBT	NEL	NER	Ø4
Starvation Cap Reductn	0					0	
Spillback Cap Reductn	0					0	
Storage Cap Reductn	0					0	
Reduced v/c Ratio	0.24					1.14	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 100 (83%), Referenced to phase 2:EBT, Start of Green	
Natural Cycle: 150	
Control Type: Pretimed	
Maximum v/c Ratio: 1.76	
Intersection Signal Delay: 87.2	Intersection LOS: F
Intersection Capacity Utilization 83.3%	ICU Level of Service E
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1007: EB M-96 (Michigan Avenue) (Push Button) & SB I-69 Off-Ramp/EB M-96 (Michigan Avenue)

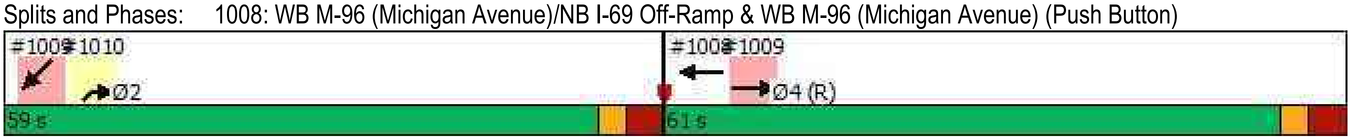


Lane Group	EBL	EBT	WBT	WBR	SWL	SWR	Ø2
Lane Configurations							
Traffic Volume (vph)	0	0	582	0	0	937	
Future Volume (vph)	0	0	582	0	0	937	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.88	
Frt						0.850	
Flt Protected							
Satd. Flow (prot)	0	0	3539	0	0	2787	
Flt Permitted							
Satd. Flow (perm)	0	0	3539	0	0	2787	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)						1047	
Link Speed (mph)		45	25		45		
Link Distance (ft)		217	252		223		
Travel Time (s)		3.3	6.9		3.4		
Peak Hour Factor	0.92	0.92	0.75	0.93	0.92	0.92	
Heavy Vehicles (%)	2%	2%	2%	6%	2%	2%	
Adj. Flow (vph)	0	0	776	0	0	1018	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	776	0	0	1018	
Turn Type			NA			Free	
Protected Phases			4				2
Permitted Phases						Free	
Minimum Split (s)			16.0				16.0
Total Split (s)			61.0				59.0
Total Split (%)			50.8%				49%
Yellow Time (s)			2.5				2.5
All-Red Time (s)			3.5				3.5
Lost Time Adjust (s)			0.0				
Total Lost Time (s)			6.0				
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)			55.0			120.0	
Actuated g/C Ratio			0.46			1.00	
v/c Ratio			0.48			0.37	
Control Delay			23.8			3.8	
Queue Delay			0.0			0.0	
Total Delay			23.8			3.8	
LOS			C			A	
Approach Delay			23.8		3.8		
Approach LOS			C		A		
Queue Length 50th (ft)			214			88	
Queue Length 95th (ft)			212			88	
Internal Link Dist (ft)		137	172		143		
Turn Bay Length (ft)							
Base Capacity (vph)			1622			2787	
Starvation Cap Reductn			0			0	
Spillback Cap Reductn			0			0	
Storage Cap Reductn			0			0	

Lane Group	EBL	EBT	WBT	WBR	SWL	SWR	Ø2
Reduced v/c Ratio			0.48			0.37	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 92 (77%), Referenced to phase 4:WBT, Start of Green	
Natural Cycle: 50	
Control Type: Pretimed	
Maximum v/c Ratio: 0.66	
Intersection Signal Delay: 12.5	Intersection LOS: B
Intersection Capacity Utilization 53.5%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 1008: WB M-96 (Michigan Avenue)/NB I-69 Off-Ramp & WB M-96 (Michigan Avenue) (Push Button)



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	0	915	0	0	0	0	0	0	0	0	937	0
Future Volume (vph)	0	915	0	0	0	0	0	0	0	0	937	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	3539	0	0	0	0	0	0	0	0	3539	0
Flt Permitted												
Satd. Flow (perm)	0	3539	0	0	0	0	0	0	0	0	3539	0
Right Turn on Red			Yes			Yes			Yes	Yes		Yes
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		209			206			223			213	
Travel Time (s)		3.2			3.1			3.4			3.2	
Peak Hour Factor	0.86	0.86	0.86	0.92	0.92	0.92	0.92	0.92	0.92	0.91	0.91	0.91
Adj. Flow (vph)	0	1064	0	0	0	0	0	0	0	0	1030	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1064	0	0	0	0	0	0	0	0	1030	0
Turn Type		NA									NA	
Protected Phases		4									2	
Permitted Phases												
Minimum Split (s)		16.0									16.0	
Total Split (s)		61.0									59.0	
Total Split (%)		50.8%									49.2%	
Yellow Time (s)		2.5									2.5	
All-Red Time (s)		3.5									3.5	
Lost Time Adjust (s)		0.0									0.0	
Total Lost Time (s)		6.0									6.0	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		55.0									53.0	
Actuated g/C Ratio		0.46									0.44	
v/c Ratio		0.66									0.66	
Control Delay		24.7									25.6	
Queue Delay		0.0									0.0	
Total Delay		24.7									25.6	
LOS		C									C	
Approach Delay		24.7									25.6	
Approach LOS		C									C	
Queue Length 50th (ft)		313									341	
Queue Length 95th (ft)		m268									420	
Internal Link Dist (ft)		129			126			143			133	
Turn Bay Length (ft)												
Base Capacity (vph)		1622									1563	
Starvation Cap Reductn		0									0	
Spillback Cap Reductn		0									0	
Storage Cap Reductn		0									0	
Reduced v/c Ratio		0.66									0.66	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 92 (77%), Referenced to phase 4:WBT, Start of Green	
Natural Cycle: 50	
Control Type: Pretimed	
Maximum v/c Ratio: 0.66	
Intersection Signal Delay: 25.1	Intersection LOS: C
Intersection Capacity Utilization 61.2%	ICU Level of Service B
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

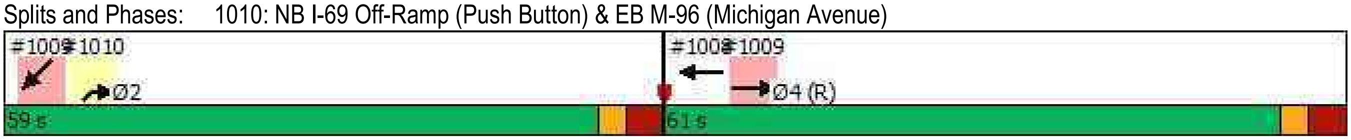
Splits and Phases: 1009: WB M-96 (Michigan Avenue) (Push Button)/WB M-96 (Michigan Avenue) & EB M-96 (Michigan Avenue)

Lane Group	EBT	EBR	WBL	WBT	NEL	NER	Ø4
Lane Configurations							
Traffic Volume (vph)	915	0	0	0	0	122	
Future Volume (vph)	915	0	0	0	0	122	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	0.95	1.00	1.00	1.00	1.00	1.00	
Frt						0.865	
Flt Protected							
Satd. Flow (prot)	3539	0	0	0	0	1611	
Flt Permitted							
Satd. Flow (perm)	3539	0	0	0	0	1611	
Right Turn on Red		Yes				Yes	
Satd. Flow (RTOR)						273	
Link Speed (mph)	45			45	25		
Link Distance (ft)	206			309	315		
Travel Time (s)	3.1			4.7	8.6		
Peak Hour Factor	0.86	0.86	0.92	0.92	0.93	0.75	
Heavy Vehicles (%)	2%	2%	2%	2%	6%	2%	
Adj. Flow (vph)	1064	0	0	0	0	163	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	1064	0	0	0	0	163	
Turn Type	NA					Prot	
Protected Phases	Free!					2!	4
Permitted Phases							
Minimum Split (s)						16.0	16.0
Total Split (s)						59.0	61.0
Total Split (%)						49.2%	51%
Yellow Time (s)						2.5	2.5
All-Red Time (s)						3.5	3.5
Lost Time Adjust (s)						0.0	
Total Lost Time (s)						6.0	
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)	120.0					53.0	
Actuated g/C Ratio	1.00					0.44	
v/c Ratio	0.30					0.19	
Control Delay	0.2					0.5	
Queue Delay	0.0					0.0	
Total Delay	0.2					0.5	
LOS	A					A	
Approach Delay	0.2				0.5		
Approach LOS	A				A		
Queue Length 50th (ft)	0					0	
Queue Length 95th (ft)	0					0	
Internal Link Dist (ft)	126			229	235		
Turn Bay Length (ft)							
Base Capacity (vph)	3539					863	
Starvation Cap Reductn	0					0	
Spillback Cap Reductn	0					0	
Storage Cap Reductn	0					0	

Lane Group	EBT	EBR	WBL	WBT	NEL	NER	Ø4
Reduced v/c Ratio	0.30					0.19	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 92 (77%), Referenced to phase 4:WBT, Start of Green	
Natural Cycle: 50	
Control Type: Pretimed	
Maximum v/c Ratio: 0.66	
Intersection Signal Delay: 0.2	Intersection LOS: A
Intersection Capacity Utilization 61.2%	ICU Level of Service B
Analysis Period (min) 15	
! Phase conflict between lane groups.	

Splits and Phases: 1010: NB I-69 Off-Ramp (Push Button) & EB M-96 (Michigan Avenue)



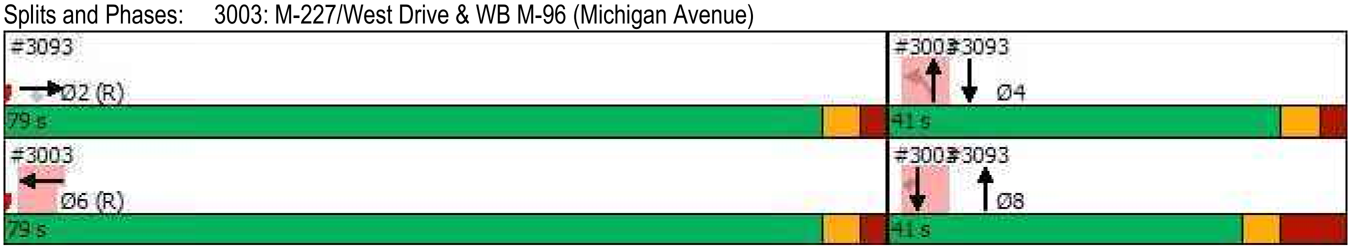
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	889	192	76	50	0	0	84	85
Future Volume (vph)	0	0	0	0	889	192	76	50	0	0	84	85
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		80	0		0	0		0
Storage Lanes	0		0	0		1	1		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.973							0.850
Flt Protected							0.950					
Satd. Flow (prot)	0	0	0	0	4997	0	1671	1863	0	0	1845	1568
Flt Permitted							0.687					
Satd. Flow (perm)	0	0	0	0	4997	0	1209	1863	0	0	1845	1568
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					72							110
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		152			212			101			1197	
Travel Time (s)		2.3			3.2			2.0			23.3	
Peak Hour Factor	0.92	0.92	0.92	0.87	0.87	0.87	0.67	0.67	0.67	0.77	0.77	0.77
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	8%	2%	2%	3%	3%	3%
Adj. Flow (vph)	0	0	0	0	1022	221	113	75	0	0	109	110
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1243	0	113	75	0	0	109	110
Turn Type					NA		Perm	NA			NA	Perm
Protected Phases					6			4			8	
Permitted Phases							4					8
Minimum Split (s)					31.0		17.0	17.0			17.0	17.0
Total Split (s)					79.0		41.0	41.0			41.0	41.0
Total Split (%)					65.8%		34.2%	34.2%			34.2%	34.2%
Yellow Time (s)					3.5		3.5	3.5			3.5	3.5
All-Red Time (s)					2.5		2.5	2.5			6.0	6.0
Lost Time Adjust (s)					0.0		0.0	0.0			0.0	0.0
Total Lost Time (s)					6.0		6.0	6.0			9.5	9.5
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)					73.0		35.0	35.0			31.5	31.5
Actuated g/C Ratio					0.61		0.29	0.29			0.26	0.26
v/c Ratio					0.41		0.32	0.14			0.23	0.22
Control Delay					11.9		8.6	5.5			36.2	7.5
Queue Delay					0.0		0.0	0.0			0.0	0.0
Total Delay					11.9		8.6	5.5			36.2	7.5
LOS					B		A	A			D	A
Approach Delay					11.9			7.4			21.8	
Approach LOS					B			A			C	
Queue Length 50th (ft)					161		11	7			66	0
Queue Length 95th (ft)					182		11	8			98	28
Internal Link Dist (ft)		72			132			21			1117	
Turn Bay Length (ft)												
Base Capacity (vph)					3068		352	543			484	492

Lane Group	Ø2
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	2
Permitted Phases	
Minimum Split (s)	16.0
Total Split (s)	79.0
Total Split (%)	66%
Yellow Time (s)	3.5
All-Red Time (s)	2.5
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
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)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
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					0.41		0.32	0.14			0.23	0.22

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 112 (93%), Referenced to phase 2:EBT and 6:, Start of Green	
Natural Cycle: 50	
Control Type: Pretimed	
Maximum v/c Ratio: 0.48	
Intersection Signal Delay: 12.7	Intersection LOS: B
Intersection Capacity Utilization 51.0%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 3003: M-227/West Drive & WB M-96 (Michigan Avenue)



Lane Group	Ø2
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)	0	985	59	0	0	0	0	126	30	0	84	0
Future Volume (vph)	0	985	59	0	0	0	0	126	30	0	84	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		65	0		0	100		0	0		0
Storage Lanes	0		1	0		0	1		0	0		0
Taper Length (ft)	25			25			70			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Frt			0.850					0.971				
Flt Protected												
Satd. Flow (prot)	0	3574	1442	0	0	0	0	3344	0	0	1881	0
Flt Permitted												
Satd. Flow (perm)	0	3574	1442	0	0	0	0	3344	0	0	1881	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			59					24				
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		161			222			1117			101	
Travel Time (s)		2.4			3.4			21.8			2.0	
Peak Hour Factor	0.95	0.95	0.95	0.92	0.92	0.92	0.72	0.72	0.72	0.83	0.83	0.83
Heavy Vehicles (%)	2%	1%	12%	2%	2%	2%	2%	6%	0%	2%	1%	2%
Adj. Flow (vph)	0	1037	62	0	0	0	0	175	42	0	101	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1037	62	0	0	0	0	217	0	0	101	0
Turn Type		NA	Perm					NA			NA	
Protected Phases		2						8			4	
Permitted Phases			2									
Minimum Split (s)		16.0	16.0					17.0			17.0	
Total Split (s)		79.0	79.0					41.0			41.0	
Total Split (%)		65.8%	65.8%					34.2%			34.2%	
Yellow Time (s)		3.5	3.5					3.5			3.5	
All-Red Time (s)		2.5	2.5					6.0			2.5	
Lost Time Adjust (s)		0.0	0.0					0.0			0.0	
Total Lost Time (s)		6.0	6.0					9.5			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		73.0	73.0					31.5			35.0	
Actuated g/C Ratio		0.61	0.61					0.26			0.29	
v/c Ratio		0.48	0.07					0.24			0.18	
Control Delay		4.4	0.2					31.7			0.7	
Queue Delay		0.0	0.0					0.0			0.0	
Total Delay		4.4	0.2					31.7			0.7	
LOS		A	A					C			A	
Approach Delay		4.2						31.7			0.7	
Approach LOS		A						C			A	
Queue Length 50th (ft)		44	1					61			0	
Queue Length 95th (ft)		52	0					73			0	
Internal Link Dist (ft)		81			142			1037			21	
Turn Bay Length (ft)			65									
Base Capacity (vph)		2174	900					895			548	

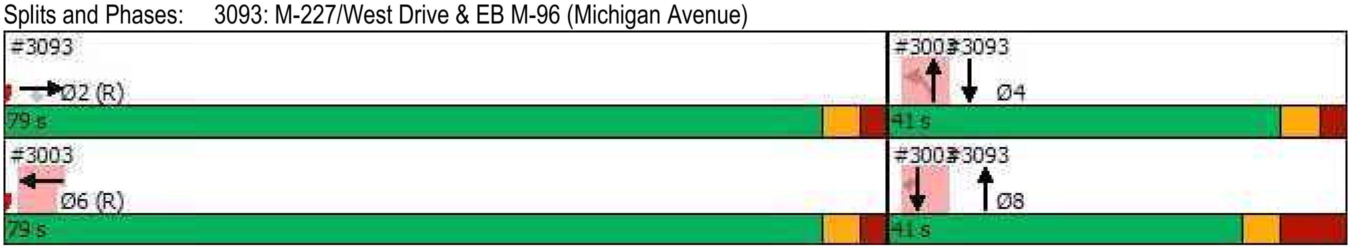
Lane Group	Ø6
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	6
Permitted Phases	
Minimum Split (s)	31.0
Total Split (s)	79.0
Total Split (%)	66%
Yellow Time (s)	3.5
All-Red Time (s)	2.5
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
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)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn		0	0					0			0	
Spillback Cap Reductn		0	0					18			0	
Storage Cap Reductn		0	0					0			0	
Reduced v/c Ratio		0.48	0.07					0.25			0.18	

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 112 (93%), Referenced to phase 2:EBT and 6:, Start of Green
Natural Cycle: 50
Control Type: Pretimed
Maximum v/c Ratio: 0.48
Intersection Signal Delay: 8.1 Intersection LOS: A
Intersection Capacity Utilization 51.0% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 3093: M-227/West Drive & EB M-96 (Michigan Avenue)



Lane Group	Ø6
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

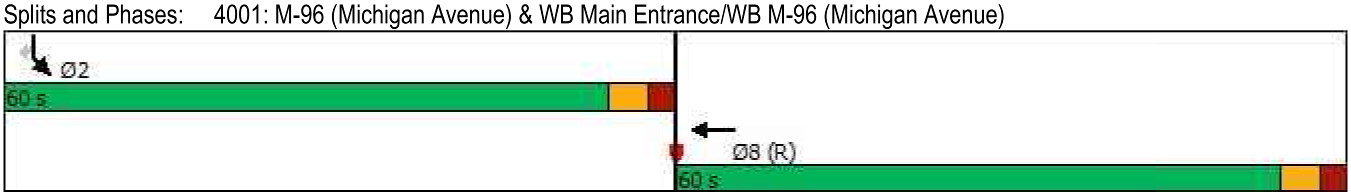
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations										
Traffic Volume (vph)	0	0	0	0	3106	2187	2010	210	0	0
Future Volume (vph)	0	0	0	0	3106	2187	2010	210	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	300		300	0	200	0	0
Storage Lanes	0		0	0		1	2	1	0	0
Taper Length (ft)	25			25			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.88	0.97	1.00	1.00	1.00
Frt						0.850		0.850		
Flt Protected							0.950			
Satd. Flow (prot)	0	0	0	0	3539	2787	3433	1583	0	0
Flt Permitted							0.950			
Satd. Flow (perm)	0	0	0	0	3539	2787	3433	1583	0	0
Right Turn on Red			Yes	Yes		Yes		Yes		
Satd. Flow (RTOR)						441		27		
Link Speed (mph)		45			45		55		45	
Link Distance (ft)		858			894		434		215	
Travel Time (s)		13.0			13.5		5.4		3.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	3376	2377	2185	228	0	0
Shared Lane Traffic (%)										
Lane Group Flow (vph)	0	0	0	0	3376	2377	2185	228	0	0
Turn Type					NA	Free	Prot	Perm		
Protected Phases					8		2			
Permitted Phases						Free		2		
Minimum Split (s)					16.0		16.0	16.0		
Total Split (s)					60.0		60.0	60.0		
Total Split (%)					50.0%		50.0%	50.0%		
Yellow Time (s)					3.5		3.5	3.5		
All-Red Time (s)					2.5		2.5	2.5		
Lost Time Adjust (s)					0.0		0.0	0.0		
Total Lost Time (s)					6.0		6.0	6.0		
Lead/Lag										
Lead-Lag Optimize?										
Act Effct Green (s)					54.0	120.0	54.0	54.0		
Actuated g/C Ratio					0.45	1.00	0.45	0.45		
v/c Ratio					2.12	0.85	1.42	0.31		
Control Delay					525.4	3.3	211.4	9.4		
Queue Delay					0.0	0.0	0.0	0.0		
Total Delay					525.4	3.3	211.4	9.4		
LOS					F	A	F	A		
Approach Delay					309.7		192.3			
Approach LOS					F		F			
Queue Length 50th (ft)					~2204	39	~1198	40		
Queue Length 95th (ft)					m#1360	m0	m#1213	m93		
Internal Link Dist (ft)		778			814		354		135	
Turn Bay Length (ft)						300		200		
Base Capacity (vph)					1592	2787	1544	727		
Starvation Cap Reductn					0	0	0	0		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Spillback Cap Reductn					0	0	0	0		
Storage Cap Reductn					0	0	0	0		
Reduced v/c Ratio					2.12	0.85	1.42	0.31		

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 36 (30%), Referenced to phase 8:WBT, Start of Green	
Natural Cycle: 150	
Control Type: Pretimed	
Maximum v/c Ratio: 2.12	
Intersection Signal Delay: 275.0	Intersection LOS: F
Intersection Capacity Utilization 153.2%	ICU Level of Service H
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4001: M-96 (Michigan Avenue) & WB Main Entrance/WB M-96 (Michigan Avenue)

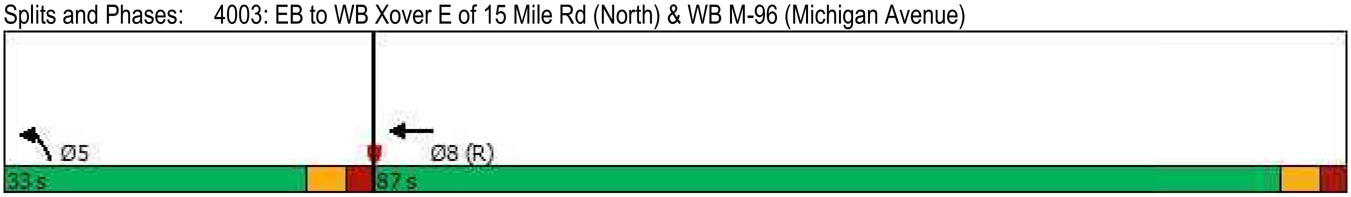


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	4419	962	0
Future Volume (vph)	0	0	0	4419	962	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	0.97	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	5085	3433	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	5085	3433	0
Right Turn on Red		Yes			Yes	Yes
Satd. Flow (RTOR)						
Link Speed (mph)	45			45	25	
Link Distance (ft)	660			254	113	
Travel Time (s)	10.0			3.8	3.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.70	0.92
Adj. Flow (vph)	0	0	0	4803	1374	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	4803	1374	0
Turn Type				NA	Prot	
Protected Phases				8	5	
Permitted Phases						
Minimum Split (s)				16.0	13.0	
Total Split (s)				87.0	33.0	
Total Split (%)				72.5%	27.5%	
Yellow Time (s)				3.5	3.5	
All-Red Time (s)				2.5	2.5	
Lost Time Adjust (s)				0.0	0.0	
Total Lost Time (s)				6.0	6.0	
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)				81.0	27.0	
Actuated g/C Ratio				0.68	0.22	
v/c Ratio				1.40	1.78	
Control Delay				200.8	386.3	
Queue Delay				0.3	0.0	
Total Delay				201.2	386.3	
LOS				F	F	
Approach Delay				201.2	386.3	
Approach LOS				F	F	
Queue Length 50th (ft)				~1824	~834	
Queue Length 95th (ft)				m#1357	m#629	
Internal Link Dist (ft)	580			174	33	
Turn Bay Length (ft)						
Base Capacity (vph)				3432	772	
Starvation Cap Reductn				0	0	
Spillback Cap Reductn				566	0	
Storage Cap Reductn				0	0	
Reduced v/c Ratio				1.68	1.78	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 116 (97%), Referenced to phase 8:WBT, Start of Green	
Natural Cycle: 150	
Control Type: Pretimed	
Maximum v/c Ratio: 1.78	
Intersection Signal Delay: 242.3	Intersection LOS: F
Intersection Capacity Utilization 173.5%	ICU Level of Service H
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4003: EB to WB Xover E of 15 Mile Rd (North) & WB M-96 (Michigan Avenue)



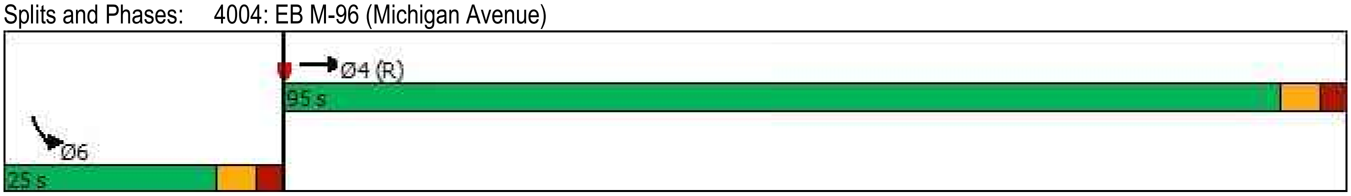
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	1694	0	0	576	0
Future Volume (vph)	0	1694	0	0	576	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	0.97	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	3433	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	3433	0
Right Turn on Red				Yes	Yes	Yes
Satd. Flow (RTOR)					75	
Link Speed (mph)		55	55		25	
Link Distance (ft)		2678	669		109	
Travel Time (s)		33.2	8.3		3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1841	0	0	626	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1841	0	0	626	0
Turn Type		NA			Prot	
Protected Phases		4			6	
Permitted Phases						
Detector Phase		4			6	
Switch Phase						
Minimum Initial (s)		10.0			7.0	
Minimum Split (s)		16.0			13.0	
Total Split (s)		95.0			25.0	
Total Split (%)		79.2%			20.8%	
Yellow Time (s)		3.5			3.5	
All-Red Time (s)		2.5			2.5	
Lost Time Adjust (s)		0.0			0.0	
Total Lost Time (s)		6.0			6.0	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode		C-Max			None	
Act Effct Green (s)		89.0			19.0	
Actuated g/C Ratio		0.74			0.16	
v/c Ratio		0.70			1.03	
Control Delay		2.4			75.9	
Queue Delay		0.2			0.0	
Total Delay		2.6			75.9	
LOS		A			E	
Approach Delay		2.6			75.9	
Approach LOS		A			E	
Queue Length 50th (ft)		35			~239	
Queue Length 95th (ft)		m36			m#331	
Internal Link Dist (ft)		2598	589		29	
Turn Bay Length (ft)						
Base Capacity (vph)		2624			606	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Starvation Cap Reductn		0			0	
Spillback Cap Reductn		192			0	
Storage Cap Reductn		0			0	
Reduced v/c Ratio		0.76			1.03	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 20 (17%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.03	
Intersection Signal Delay: 21.2	Intersection LOS: C
Intersection Capacity Utilization 101.1%	ICU Level of Service G
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4004: EB M-96 (Michigan Avenue)

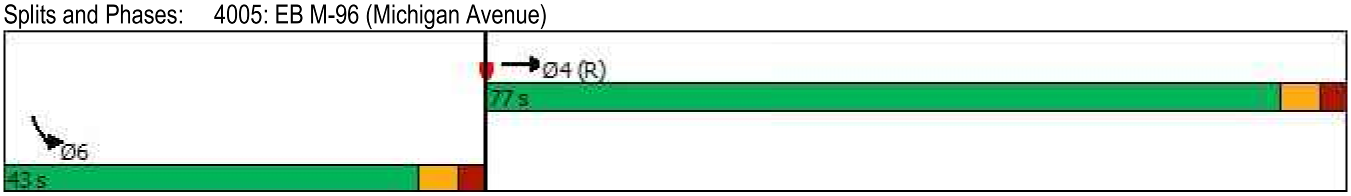


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	767	0	0	1028	0
Future Volume (vph)	0	767	0	0	1028	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	0.97	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	3433	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	3433	0
Right Turn on Red				Yes	Yes	Yes
Satd. Flow (RTOR)					333	
Link Speed (mph)		55	55		25	
Link Distance (ft)		1786	608		109	
Travel Time (s)		22.1	7.5		3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	834	0	0	1117	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	834	0	0	1117	0
Turn Type		NA			Prot	
Protected Phases		4			6	
Permitted Phases						
Detector Phase		4			6	
Switch Phase						
Minimum Initial (s)		10.0			7.0	
Minimum Split (s)		16.0			13.0	
Total Split (s)		77.0			43.0	
Total Split (%)		64.2%			35.8%	
Yellow Time (s)		3.5			3.5	
All-Red Time (s)		2.5			2.5	
Lost Time Adjust (s)		0.0			0.0	
Total Lost Time (s)		6.0			6.0	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode		C-Max			Max	
Act Effct Green (s)		71.0			37.0	
Actuated g/C Ratio		0.59			0.31	
v/c Ratio		0.40			0.87	
Control Delay		13.8			31.3	
Queue Delay		0.0			0.0	
Total Delay		13.8			31.3	
LOS		B			C	
Approach Delay		13.8			31.3	
Approach LOS		B			C	
Queue Length 50th (ft)		171			335	
Queue Length 95th (ft)		214			400	
Internal Link Dist (ft)		1706	528		29	
Turn Bay Length (ft)						
Base Capacity (vph)		2093			1288	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Starvation Cap Reductn		0			0	
Spillback Cap Reductn		0			0	
Storage Cap Reductn		0			0	
Reduced v/c Ratio		0.40			0.87	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 112 (93%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 50	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.87	
Intersection Signal Delay: 23.8	Intersection LOS: C
Intersection Capacity Utilization 58.9%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 4005: EB M-96 (Michigan Avenue)

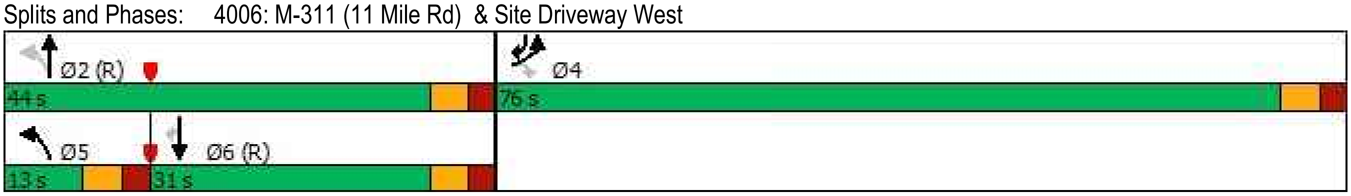


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	102	129	0
Future Volume (vph)	0	0	0	102	129	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	250	250			0
Storage Lanes	2	1	1			1
Taper Length (ft)	25		25			
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	3614	1863	1863	1863	1863	1863
Flt Permitted						
Satd. Flow (perm)	3614	1863	1863	1863	1863	1863
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)						
Link Speed (mph)	25			55	55	
Link Distance (ft)	1178			1461	940	
Travel Time (s)	32.1			18.1	11.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	111	140	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	111	140	0
Turn Type	Prot	Perm	pm+pt	NA	NA	pm+ov
Protected Phases	4		5	2	6	4
Permitted Phases		4	2			6
Detector Phase	4	4	5	2	6	4
Switch Phase						
Minimum Initial (s)	7.0	7.0	7.0	10.0	10.0	7.0
Minimum Split (s)	14.0	14.0	13.0	17.0	17.0	14.0
Total Split (s)	76.0	76.0	13.0	44.0	31.0	76.0
Total Split (%)	63.3%	63.3%	10.8%	36.7%	25.8%	63.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.5	2.5	2.5	2.5	2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None	None	Min	C-Max	C-Max	None
Act Effct Green (s)				120.0	101.0	
Actuated g/C Ratio				1.00	0.84	
v/c Ratio				0.06	0.09	
Control Delay				0.1	1.8	
Queue Delay				0.0	0.0	
Total Delay				0.1	1.8	
LOS				A	A	
Approach Delay				0.1	1.8	
Approach LOS				A	A	
Queue Length 50th (ft)				0	14	
Queue Length 95th (ft)				0	23	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Internal Link Dist (ft)	1098			1381	860	
Turn Bay Length (ft)						
Base Capacity (vph)				1863	1568	
Starvation Cap Reductn				0	0	
Spillback Cap Reductn				0	0	
Storage Cap Reductn				0	0	
Reduced v/c Ratio				0.06	0.09	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 60 (50%), Referenced to phase 2:NBTL and 6:SBT, Start of Green	
Natural Cycle: 45	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.09	
Intersection Signal Delay: 1.0	Intersection LOS: A
Intersection Capacity Utilization 13.3%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4006: M-311 (11 Mile Rd) & Site Driveway West

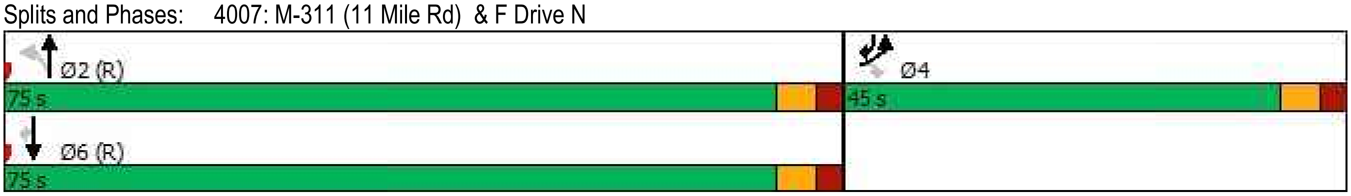


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	102	129	0
Future Volume (vph)	0	0	0	102	129	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	250	400			0
Storage Lanes	2	1	1			1
Taper Length (ft)	25		25			
Lane Util. Factor	0.97	1.00	1.00	0.95	0.95	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	3614	1863	1863	3539	3539	1863
Flt Permitted						
Satd. Flow (perm)	3614	1863	1863	3539	3539	1863
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)						
Link Speed (mph)	45			55	55	
Link Distance (ft)	1846			974	1093	
Travel Time (s)	28.0			12.1	13.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	111	140	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	111	140	0
Turn Type	Prot	Perm	Perm	NA	NA	pm+ov
Protected Phases	4			2	6	4
Permitted Phases		4	2			6
Detector Phase	4	4	2	2	6	4
Switch Phase						
Minimum Initial (s)	7.0	7.0	10.0	10.0	10.0	7.0
Minimum Split (s)	13.0	13.0	16.0	16.0	16.0	13.0
Total Split (s)	45.0	45.0	75.0	75.0	75.0	45.0
Total Split (%)	37.5%	37.5%	62.5%	62.5%	62.5%	37.5%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.5	2.5	2.5	2.5	2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None	None	C-Max	C-Max	C-Max	None
Act Effct Green (s)				120.0	120.0	
Actuated g/C Ratio				1.00	1.00	
v/c Ratio				0.03	0.04	
Control Delay				0.0	0.0	
Queue Delay				0.0	0.0	
Total Delay				0.0	0.0	
LOS				A	A	
Approach Delay						
Approach LOS						
Queue Length 50th (ft)				0	0	
Queue Length 95th (ft)				0	0	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Internal Link Dist (ft)	1766			894	1013	
Turn Bay Length (ft)						
Base Capacity (vph)				3539	3539	
Starvation Cap Reductn				0	0	
Spillback Cap Reductn				0	0	
Storage Cap Reductn				0	0	
Reduced v/c Ratio				0.03	0.04	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 20 (17%), Referenced to phase 2:NBTL and 6:SBT, Start of Green	
Natural Cycle: 40	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.04	
Intersection Signal Delay: 0.0	Intersection LOS: A
Intersection Capacity Utilization 13.3%	ICU Level of Service A
Analysis Period (min) 15	

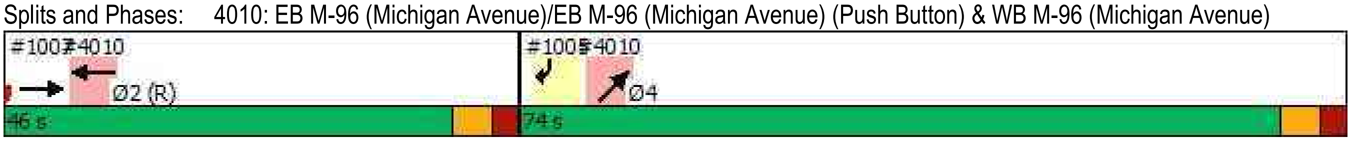
Splits and Phases: 4007: M-311 (11 Mile Rd) & F Drive N



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations					↑↑↑			↑↑↑				
Traffic Volume (vph)	0	0	0	0	1400	0	0	3700	0	0	0	0
Future Volume (vph)	0	0	0	0	1400	0	0	3700	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.91	1.00	1.00	1.00	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	0	0	0	5085	0	0	5085	0	0	0	0
Flt Permitted												
Satd. Flow (perm)	0	0	0	0	5085	0	0	5085	0	0	0	0
Right Turn on Red			Yes			Yes	Yes		Yes			Yes
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		194			183			156			190	
Travel Time (s)		2.9			2.8			2.4			2.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.90	0.90	0.90	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	1522	0	0	4111	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1522	0	0	4111	0	0	0	0
Turn Type					NA			NA				
Protected Phases					2			4				
Permitted Phases												
Minimum Split (s)					17.0			17.0				
Total Split (s)					46.0			74.0				
Total Split (%)					38.3%			61.7%				
Yellow Time (s)					3.5			3.5				
All-Red Time (s)					2.5			2.5				
Lost Time Adjust (s)					0.0			0.0				
Total Lost Time (s)					6.0			6.0				
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)					40.0			68.0				
Actuated g/C Ratio					0.33			0.57				
v/c Ratio					0.90			1.43				
Control Delay					41.1			214.8				
Queue Delay					0.0			0.0				
Total Delay					41.1			214.8				
LOS					D			F				
Approach Delay					41.1			214.8				
Approach LOS					D			F				
Queue Length 50th (ft)					445			~1580				
Queue Length 95th (ft)					501			m#1069				
Internal Link Dist (ft)		114			103			76			110	
Turn Bay Length (ft)												
Base Capacity (vph)					1695			2881				
Starvation Cap Reductn					0			0				
Spillback Cap Reductn					0			0				
Storage Cap Reductn					0			0				
Reduced v/c Ratio					0.90			1.43				

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 100 (83%), Referenced to phase 2:EBT, Start of Green	
Natural Cycle: 150	
Control Type: Pretimed	
Maximum v/c Ratio: 1.76	
Intersection Signal Delay: 167.9	Intersection LOS: F
Intersection Capacity Utilization 108.5%	ICU Level of Service G
Analysis Period (min) 15	
~ Volume exceeds capacity, queue is theoretically infinite.	
Queue shown is maximum after two cycles.	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 4010: EB M-96 (Michigan Avenue)/EB M-96 (Michigan Avenue) (Push Button) & WB M-96 (Michigan Avenue)



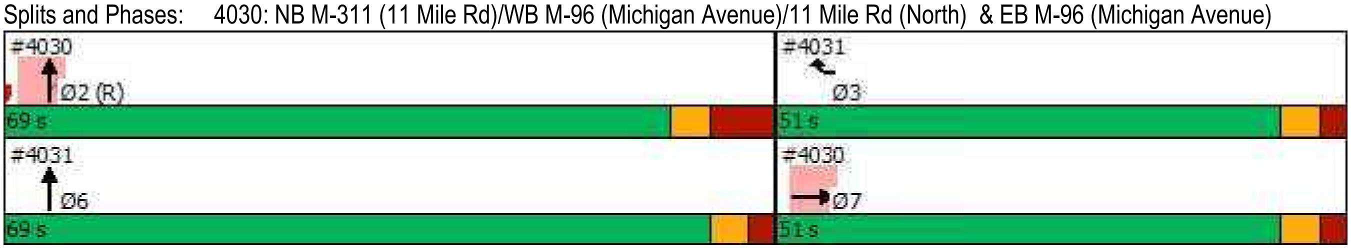
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	871	0	0	0	0	0	64	38	0	0	0
Future Volume (vph)	0	871	0	0	0	0	0	64	38	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		250	0		0
Storage Lanes	0		0	0		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	1.00	1.00
Frt									0.850			
Flt Protected												
Satd. Flow (prot)	0	3539	0	0	0	0	0	5085	1583	0	0	0
Flt Permitted												
Satd. Flow (perm)	0	3539	0	0	0	0	0	5085	1583	0	0	0
Right Turn on Red	Yes		Yes			Yes			Yes			Yes
Satd. Flow (RTOR)									36			
Link Speed (mph)		55			55			55			30	
Link Distance (ft)		167			316			655			182	
Travel Time (s)		2.1			3.9			8.1			4.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	947	0	0	0	0	0	70	41	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	947	0	0	0	0	0	70	41	0	0	0
Turn Type		NA						NA	Perm			
Protected Phases		7						2				
Permitted Phases									2			
Minimum Split (s)		16.0						19.5	19.5			
Total Split (s)		51.0						69.0	69.0			
Total Split (%)		42.5%						57.5%	57.5%			
Yellow Time (s)		3.5						3.5	3.5			
All-Red Time (s)		2.5						6.0	6.0			
Lost Time Adjust (s)		0.0						0.0	0.0			
Total Lost Time (s)		6.0						9.5	9.5			
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		45.0						59.5	59.5			
Actuated g/C Ratio		0.38						0.50	0.50			
v/c Ratio		0.71						0.03	0.05			
Control Delay		41.9						15.5	5.9			
Queue Delay		0.0						0.0	0.0			
Total Delay		41.9						15.5	5.9			
LOS		D						B	A			
Approach Delay		41.9						12.0				
Approach LOS		D						B				
Queue Length 50th (ft)		406						9	2			
Queue Length 95th (ft)		477						18	21			
Internal Link Dist (ft)		87			236			575			102	
Turn Bay Length (ft)									250			
Base Capacity (vph)		1327						2521	803			
Starvation Cap Reductn		0						0	0			

Lane Group	Ø3	Ø6
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Ideal Flow (vphpl)		
Storage Length (ft)		
Storage Lanes		
Taper Length (ft)		
Lane Util. Factor		
Frt		
Flt Protected		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Peak Hour Factor		
Adj. Flow (vph)		
Shared Lane Traffic (%)		
Lane Group Flow (vph)		
Turn Type		
Protected Phases	3	6
Permitted Phases		
Minimum Split (s)	16.0	16.0
Total Split (s)	51.0	69.0
Total Split (%)	43%	58%
Yellow Time (s)	3.5	3.5
All-Red Time (s)	2.5	2.5
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag		
Lead-Lag Optimize?		
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		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn		0						0	0			
Storage Cap Reductn		0						0	0			
Reduced v/c Ratio		0.71						0.03	0.05			

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 88 (73%), Referenced to phase 2:NBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.71	
Intersection Signal Delay: 38.7	Intersection LOS: D
Intersection Capacity Utilization 45.3%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4030: NB M-311 (11 Mile Rd)/WB M-96 (Michigan Avenue)/11 Mile Rd (North) & EB M-96 (Michigan Avenue)



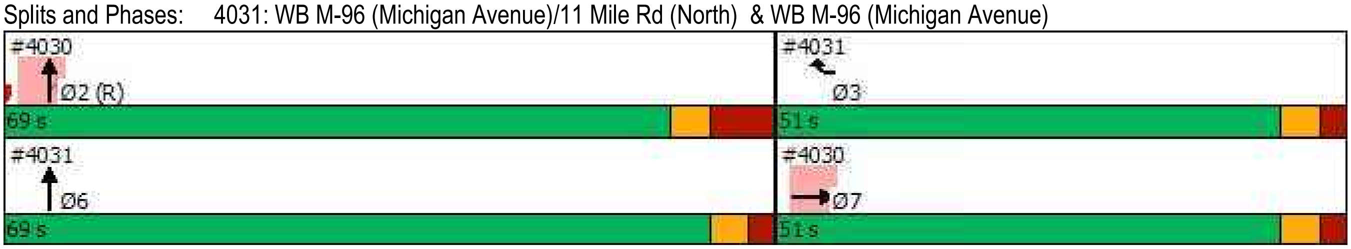
Lane Group	Ø3	Ø6
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		

Intersection Summary

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø2	Ø7
Lane Configurations								
Traffic Volume (vph)	0	1053	64	0	0	0		
Future Volume (vph)	0	1053	64	0	0	0		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Lane Util. Factor	1.00	0.76	0.91	1.00	1.00	1.00		
Frt		0.850						
Flt Protected								
Satd. Flow (prot)	0	3610	5085	0	0	0		
Flt Permitted								
Satd. Flow (perm)	0	3610	5085	0	0	0		
Right Turn on Red		Yes		Yes				
Satd. Flow (RTOR)		2101						
Link Speed (mph)	55		55			55		
Link Distance (ft)	405		182			493		
Travel Time (s)	5.0		2.3			6.1		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Adj. Flow (vph)	0	1145	70	0	0	0		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	0	1145	70	0	0	0		
Turn Type		Prot	NA					
Protected Phases		3	6				2	7
Permitted Phases								
Minimum Split (s)		16.0	16.0				19.5	16.0
Total Split (s)		51.0	69.0				69.0	51.0
Total Split (%)		42.5%	57.5%				58%	43%
Yellow Time (s)		3.5	3.5				3.5	3.5
All-Red Time (s)		2.5	2.5				6.0	2.5
Lost Time Adjust (s)		0.0	0.0					
Total Lost Time (s)		6.0	6.0					
Lead/Lag								
Lead-Lag Optimize?								
Act Effct Green (s)		45.0	63.0					
Actuated g/C Ratio		0.38	0.52					
v/c Ratio		0.43	0.03					
Control Delay		0.9	0.0					
Queue Delay		0.0	0.0					
Total Delay		0.9	0.0					
LOS		A	A					
Approach Delay	0.9							
Approach LOS	A							
Queue Length 50th (ft)		11	0					
Queue Length 95th (ft)		16	1					
Internal Link Dist (ft)	325		102			413		
Turn Bay Length (ft)								
Base Capacity (vph)		2666	2669					
Starvation Cap Reductn		0	0					
Spillback Cap Reductn		0	0					
Storage Cap Reductn		0	0					
Reduced v/c Ratio		0.43	0.03					

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 88 (73%), Referenced to phase 2:NBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.71	
Intersection Signal Delay: 0.9	Intersection LOS: A
Intersection Capacity Utilization 45.3%	ICU Level of Service A
Analysis Period (min) 15	

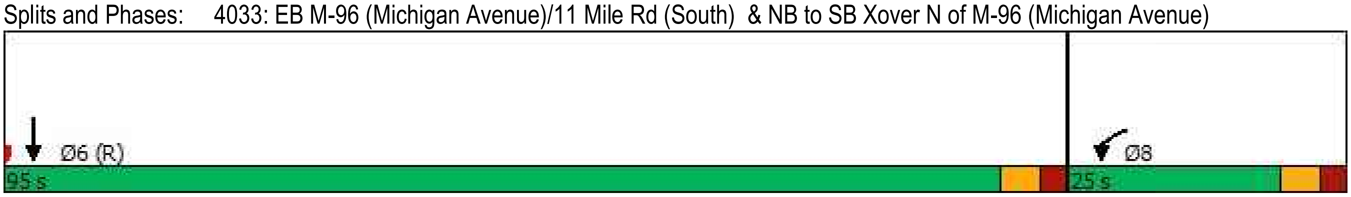
Splits and Phases: 4031: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & WB M-96 (Michigan Avenue)



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	67	0	0	0	0	933
Future Volume (vph)	67	0	0	0	0	933
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	0.91
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	3433	0	0	0	0	5085
Flt Permitted	0.950					
Satd. Flow (perm)	3433	0	0	0	0	5085
Right Turn on Red	Yes	Yes		Yes		
Satd. Flow (RTOR)	353					
Link Speed (mph)	25		55			30
Link Distance (ft)	105		587			495
Travel Time (s)	2.9		7.3			11.3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	73	0	0	0	0	1014
Shared Lane Traffic (%)						
Lane Group Flow (vph)	73	0	0	0	0	1014
Turn Type	Prot					NA
Protected Phases	8					6
Permitted Phases						
Minimum Split (s)	13.0					16.0
Total Split (s)	25.0					95.0
Total Split (%)	20.8%					79.2%
Yellow Time (s)	3.5					3.5
All-Red Time (s)	2.5					2.5
Lost Time Adjust (s)	0.0					0.0
Total Lost Time (s)	6.0					6.0
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)	19.0					89.0
Actuated g/C Ratio	0.16					0.74
v/c Ratio	0.09					0.27
Control Delay	0.2					0.9
Queue Delay	0.0					0.0
Total Delay	0.2					0.9
LOS	A					A
Approach Delay	0.2					0.9
Approach LOS	A					A
Queue Length 50th (ft)	0					7
Queue Length 95th (ft)	0					9
Internal Link Dist (ft)	25		507			415
Turn Bay Length (ft)						
Base Capacity (vph)	840					3771
Starvation Cap Reductn	0					0
Spillback Cap Reductn	0					0
Storage Cap Reductn	0					0
Reduced v/c Ratio	0.09					0.27

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 89 (74%), Referenced to phase 6:SBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.27	
Intersection Signal Delay: 0.8	Intersection LOS: A
Intersection Capacity Utilization 46.6%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4033: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & NB to SB Xover N of M-96 (Michigan Avenue)



Lane Group	NBL	NBT	SBT	SBR	SEL	SER	Ø2
Lane Configurations			↑↑↑			↱↱	
Traffic Volume (vph)	0	0	823	0	0	110	
Future Volume (vph)	0	0	823	0	0	110	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	0.91	1.00	1.00	0.88	
Frt						0.850	
Flt Protected							
Satd. Flow (prot)	0	0	5085	0	0	2787	
Flt Permitted							
Satd. Flow (perm)	0	0	5085	0	0	2787	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)						602	
Link Speed (mph)		30	30		30		
Link Distance (ft)		495	145		346		
Travel Time (s)		11.3	3.3		7.9		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	0	0	895	0	0	120	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	895	0	0	120	
Turn Type			NA			Prot	
Protected Phases			Free!			4!	2
Permitted Phases							
Minimum Split (s)						16.0	16.0
Total Split (s)						60.0	60.0
Total Split (%)						50.0%	50%
Yellow Time (s)						3.5	3.5
All-Red Time (s)						2.5	2.5
Lost Time Adjust (s)						0.0	
Total Lost Time (s)						6.0	
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)			120.0			54.0	
Actuated g/C Ratio			1.00			0.45	
v/c Ratio			0.18			0.08	
Control Delay			0.1			0.1	
Queue Delay			0.0			0.0	
Total Delay			0.1			0.1	
LOS			A			A	
Approach Delay			0.1		0.1		
Approach LOS			A		A		
Queue Length 50th (ft)			0			0	
Queue Length 95th (ft)			0			0	
Internal Link Dist (ft)		415	65		266		
Turn Bay Length (ft)							
Base Capacity (vph)			5085			1585	
Starvation Cap Reductn			0			0	
Spillback Cap Reductn			0			0	
Storage Cap Reductn			0			0	
Reduced v/c Ratio			0.18			0.08	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 27 (23%), Referenced to phase 4:SER, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.42	
Intersection Signal Delay: 0.1	Intersection LOS: A
Intersection Capacity Utilization 43.1%	ICU Level of Service A
Analysis Period (min) 15	

! Phase conflict between lane groups.

Splits and Phases: 4034: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & EB I-94 Off-ramp

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	823	0	0	0	0	0	891	0
Future Volume (vph)	0	0	0	0	823	0	0	0	0	0	891	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.91	1.00	1.00	1.00	1.00	1.00	0.91	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	0	0	0	5085	0	0	0	0	0	5085	0
Flt Permitted												
Satd. Flow (perm)	0	0	0	0	5085	0	0	0	0	0	5085	0
Right Turn on Red			Yes			Yes			Yes	Yes		Yes
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		145			194			233			108	
Travel Time (s)		3.3			4.4			5.3			2.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	895	0	0	0	0	0	968	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	895	0	0	0	0	0	968	0
Turn Type					NA						NA	
Protected Phases					2						4	
Permitted Phases												
Minimum Split (s)					16.0						16.0	
Total Split (s)					60.0						60.0	
Total Split (%)					50.0%						50.0%	
Yellow Time (s)					3.5						3.5	
All-Red Time (s)					2.5						2.5	
Lost Time Adjust (s)					0.0						0.0	
Total Lost Time (s)					6.0						6.0	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)					54.0						54.0	
Actuated g/C Ratio					0.45						0.45	
v/c Ratio					0.39						0.42	
Control Delay					23.3						22.6	
Queue Delay					0.0						0.0	
Total Delay					23.3						22.6	
LOS					C						C	
Approach Delay					23.3						22.6	
Approach LOS					C						C	
Queue Length 50th (ft)					237						166	
Queue Length 95th (ft)					284						194	
Internal Link Dist (ft)		65			114			153			28	
Turn Bay Length (ft)												
Base Capacity (vph)					2288						2288	
Starvation Cap Reductn					0						0	
Spillback Cap Reductn					0						0	
Storage Cap Reductn					0						0	
Reduced v/c Ratio					0.39						0.42	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 27 (23%), Referenced to phase 4:SER, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.42	
Intersection Signal Delay: 23.0	Intersection LOS: C
Intersection Capacity Utilization 41.2%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4035: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & WB M-96 (Michigan Avenue)/11 Mile Rd (North)

Lane Group	NBL	NBR	SET	SER	NWL	NWT	Ø4
Lane Configurations							
Traffic Volume (vph)	104	0	0	0	0	891	
Future Volume (vph)	104	0	0	0	0	891	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.91	
Frt							
Flt Protected	0.950						
Satd. Flow (prot)	1719	0	0	0	0	5085	
Flt Permitted	0.950						
Satd. Flow (perm)	1719	0	0	0	0	5085	
Right Turn on Red	Yes	Yes		Yes			
Satd. Flow (RTOR)	311						
Link Speed (mph)	30		30			30	
Link Distance (ft)	271		337			233	
Travel Time (s)	6.2		7.7			5.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Heavy Vehicles (%)	5%	2%	2%	2%	2%	2%	
Adj. Flow (vph)	113	0	0	0	0	968	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	113	0	0	0	0	968	
Turn Type	Prot					NA	
Protected Phases	2!					Free!	4
Permitted Phases							
Minimum Split (s)	16.0						16.0
Total Split (s)	60.0						60.0
Total Split (%)	50.0%						50%
Yellow Time (s)	3.5						3.5
All-Red Time (s)	2.5						2.5
Lost Time Adjust (s)	0.0						
Total Lost Time (s)	6.0						
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)	54.0					120.0	
Actuated g/C Ratio	0.45					1.00	
v/c Ratio	0.12					0.19	
Control Delay	0.3					0.1	
Queue Delay	0.0					0.0	
Total Delay	0.3					0.1	
LOS	A					A	
Approach Delay	0.3					0.1	
Approach LOS	A					A	
Queue Length 50th (ft)	0					0	
Queue Length 95th (ft)	0					0	
Internal Link Dist (ft)	191		257			153	
Turn Bay Length (ft)							
Base Capacity (vph)	944					5085	
Starvation Cap Reductn	0					0	
Spillback Cap Reductn	0					0	
Storage Cap Reductn	0					0	

Lane Group	NBL	NBR	SET	SER	NWL	NWT	Ø4
Reduced v/c Ratio	0.12					0.19	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 27 (23%), Referenced to phase 4:SER, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.42	
Intersection Signal Delay: 0.1	Intersection LOS: A
Intersection Capacity Utilization 33.9%	ICU Level of Service A
Analysis Period (min) 15	
! Phase conflict between lane groups.	

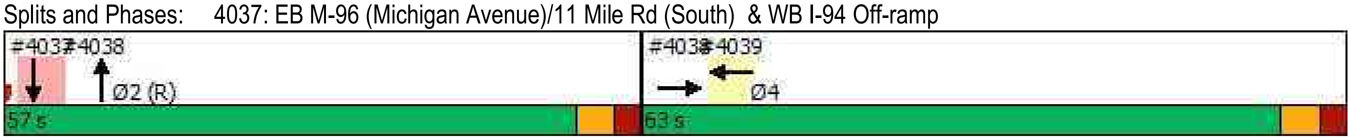
Splits and Phases: 4036: EB I-94 Off-ramp & WB M-96 (Michigan Avenue)/11 Mile Rd (North)

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø4
Lane Configurations							
Traffic Volume (vph)	0	797	0	0	99	0	
Future Volume (vph)	0	797	0	0	99	0	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	0.88	1.00	1.00	0.95	1.00	
Frt		0.850					
Flt Protected							
Satd. Flow (prot)	0	2707	0	0	3438	0	
Flt Permitted							
Satd. Flow (perm)	0	2707	0	0	3438	0	
Right Turn on Red		Yes				Yes	
Satd. Flow (RTOR)		1670					
Link Speed (mph)	30			30	30		
Link Distance (ft)	222			406	241		
Travel Time (s)	5.0			9.2	5.5		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Heavy Vehicles (%)	2%	5%	2%	2%	5%	2%	
Adj. Flow (vph)	0	866	0	0	108	0	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	866	0	0	108	0	
Turn Type		Free			NA		
Protected Phases					2		4
Permitted Phases		Free					
Minimum Split (s)					16.0		16.0
Total Split (s)					57.0		63.0
Total Split (%)					47.5%		53%
Yellow Time (s)					3.5		3.5
All-Red Time (s)					2.5		2.5
Lost Time Adjust (s)					0.0		
Total Lost Time (s)					6.0		
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)		120.0			51.0		
Actuated g/C Ratio		1.00			0.42		
v/c Ratio		0.32			0.07		
Control Delay		1.2			20.7		
Queue Delay		0.0			0.0		
Total Delay		1.2			20.7		
LOS		A			C		
Approach Delay	1.2				20.7		
Approach LOS	A				C		
Queue Length 50th (ft)		15			25		
Queue Length 95th (ft)		17			44		
Internal Link Dist (ft)	142			326	161		
Turn Bay Length (ft)							
Base Capacity (vph)		2707			1461		
Starvation Cap Reductn		0			0		
Spillback Cap Reductn		0			0		
Storage Cap Reductn		0			0		

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø4
Reduced v/c Ratio		0.32			0.07		

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 96 (80%), Referenced to phase 2:SBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.53	
Intersection Signal Delay: 3.4	Intersection LOS: A
Intersection Capacity Utilization 13.3%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4037: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & WB I-94 Off-ramp

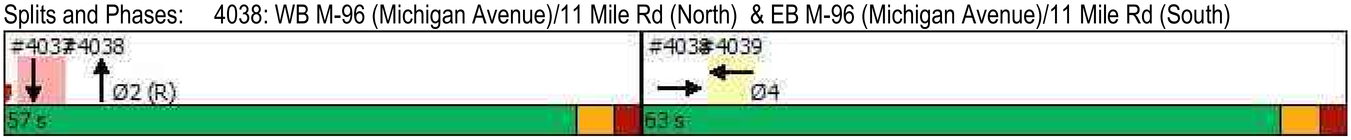


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	797	0	0	0	0	0	916	0	0	0	0
Future Volume (vph)	0	797	0	0	0	0	0	916	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	1.00	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	3438	0	0	0	0	0	4940	0	0	0	0
Flt Permitted												
Satd. Flow (perm)	0	3438	0	0	0	0	0	4940	0	0	0	0
Right Turn on Red	Yes		Yes			Yes			Yes			Yes
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		190			222			207			131	
Travel Time (s)		4.3			5.0			4.7			3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	5%	2%	2%	2%	2%	2%	5%	2%	2%	2%	2%
Adj. Flow (vph)	0	866	0	0	0	0	0	996	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	866	0	0	0	0	0	996	0	0	0	0
Turn Type		NA						NA				
Protected Phases		4						2				
Permitted Phases												
Minimum Split (s)		16.0						16.0				
Total Split (s)		63.0						57.0				
Total Split (%)		52.5%						47.5%				
Yellow Time (s)		3.5						3.5				
All-Red Time (s)		2.5						2.5				
Lost Time Adjust (s)		0.0						0.0				
Total Lost Time (s)		6.0						6.0				
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		57.0						51.0				
Actuated g/C Ratio		0.48						0.42				
v/c Ratio		0.53						0.47				
Control Delay		15.8						44.7				
Queue Delay		0.0						0.0				
Total Delay		15.8						44.7				
LOS		B						D				
Approach Delay		15.8						44.7				
Approach LOS		B						D				
Queue Length 50th (ft)		124						295				
Queue Length 95th (ft)		147						342				
Internal Link Dist (ft)		110			142			127			51	
Turn Bay Length (ft)												
Base Capacity (vph)		1633						2099				
Starvation Cap Reductn		0						0				
Spillback Cap Reductn		0						0				
Storage Cap Reductn		0						0				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio		0.53						0.47				

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 96 (80%), Referenced to phase 2:SBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.53	
Intersection Signal Delay: 31.3	Intersection LOS: C
Intersection Capacity Utilization 49.7%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4038: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & EB M-96 (Michigan Avenue)/11 Mile Rd (South)

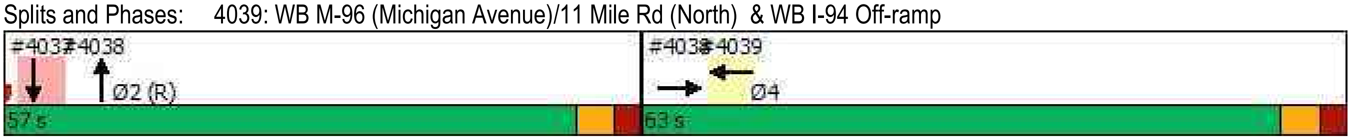


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø2
Lane Configurations							
Traffic Volume (vph)	0	0	0	151	916	0	
Future Volume (vph)	0	0	0	151	916	0	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.94	1.00	
Frt							
Flt Protected					0.950		
Satd. Flow (prot)	0	0	0	1810	4848	0	
Flt Permitted					0.950		
Satd. Flow (perm)	0	0	0	1810	4848	0	
Right Turn on Red		Yes			Yes	Yes	
Satd. Flow (RTOR)					2497		
Link Speed (mph)	30			30	30		
Link Distance (ft)	415			317	131		
Travel Time (s)	9.4			7.2	3.0		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Heavy Vehicles (%)	2%	2%	2%	5%	5%	2%	
Adj. Flow (vph)	0	0	0	164	996	0	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	0	164	996	0	
Turn Type				NA	Perm		
Protected Phases				4!			2
Permitted Phases					Free!		
Minimum Split (s)				16.0			16.0
Total Split (s)				63.0			57.0
Total Split (%)				52.5%			48%
Yellow Time (s)				3.5			3.5
All-Red Time (s)				2.5			2.5
Lost Time Adjust (s)				0.0			
Total Lost Time (s)				6.0			
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)				57.0	120.0		
Actuated g/C Ratio				0.48	1.00		
v/c Ratio				0.19	0.21		
Control Delay				18.9	0.3		
Queue Delay				0.0	0.0		
Total Delay				18.9	0.3		
LOS				B	A		
Approach Delay				18.9	0.3		
Approach LOS				B	A		
Queue Length 50th (ft)				71	3		
Queue Length 95th (ft)				116	0		
Internal Link Dist (ft)	335			237	51		
Turn Bay Length (ft)							
Base Capacity (vph)				859	4848		
Starvation Cap Reductn				0	0		
Spillback Cap Reductn				0	0		
Storage Cap Reductn				0	0		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø2
Reduced v/c Ratio				0.19	0.21		

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 96 (80%), Referenced to phase 2:SBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.53	
Intersection Signal Delay: 3.0	Intersection LOS: A
Intersection Capacity Utilization 68.2%	ICU Level of Service C
Analysis Period (min) 15	
! Phase conflict between lane groups.	

Splits and Phases: 4039: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & WB I-94 Off-ramp



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø6	Ø8
Lane Configurations								
Traffic Volume (vph)	0	735	0	0	207	0		
Future Volume (vph)	0	735	0	0	207	0		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.97	1.00		
Frt								
Flt Protected					0.950			
Satd. Flow (prot)	0	3539	0	0	3335	0		
Flt Permitted					0.950			
Satd. Flow (perm)	0	3539	0	0	3335	0		
Right Turn on Red				Yes	Yes	Yes		
Satd. Flow (RTOR)					211			
Link Speed (mph)		55	55		45			
Link Distance (ft)		212	597		92			
Travel Time (s)		2.6	7.4		1.4			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Heavy Vehicles (%)	2%	2%	2%	2%	5%	2%		
Adj. Flow (vph)	0	799	0	0	225	0		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	0	799	0	0	225	0		
Turn Type		NA			Prot			
Protected Phases		4			2		6	8
Permitted Phases								
Minimum Split (s)		16.0			19.5		19.5	16.0
Total Split (s)		61.0			59.0		59.0	61.0
Total Split (%)		50.8%			49.2%		49%	51%
Yellow Time (s)		3.5			3.5		3.5	3.5
All-Red Time (s)		2.5			2.5		6.0	2.5
Lost Time Adjust (s)		0.0			0.0			
Total Lost Time (s)		6.0			6.0			
Lead/Lag								
Lead-Lag Optimize?								
Act Effct Green (s)		55.0			53.0			
Actuated g/C Ratio		0.46			0.44			
v/c Ratio		0.49			0.14			
Control Delay		24.0			0.2			
Queue Delay		0.0			0.0			
Total Delay		24.0			0.2			
LOS		C			A			
Approach Delay		24.0			0.2			
Approach LOS		C			A			
Queue Length 50th (ft)		222			0			
Queue Length 95th (ft)		280			0			
Internal Link Dist (ft)		132	517		12			
Turn Bay Length (ft)								
Base Capacity (vph)		1622			1590			
Starvation Cap Reductn		0			0			
Spillback Cap Reductn		0			0			
Storage Cap Reductn		0			0			

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø6	Ø8
Reduced v/c Ratio		0.49			0.14			

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 32 (27%), Referenced to phase 4:EBT, Start of Green

Natural Cycle: 40

Control Type: Pretimed

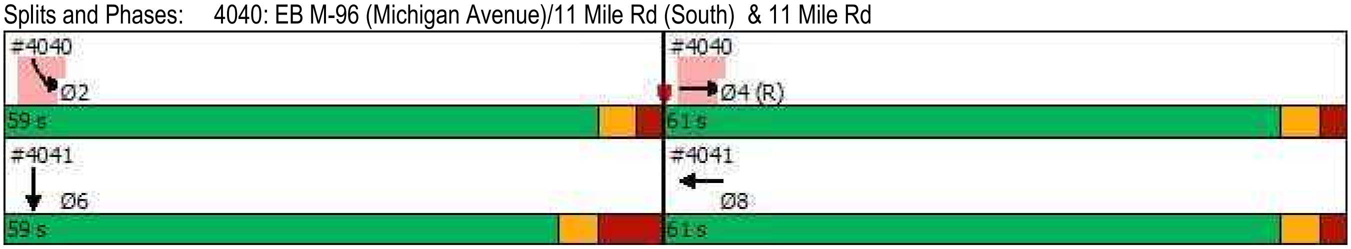
Maximum v/c Ratio: 0.53

Intersection Signal Delay: 18.8 Intersection LOS: B

Intersection Capacity Utilization 43.0% ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 4040: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & 11 Mile Rd



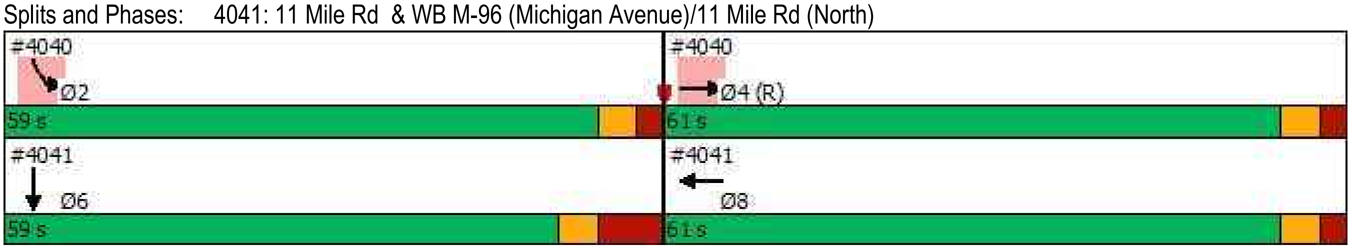
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	788	343	0	0	0	0	207	56
Future Volume (vph)	0	0	0	0	788	343	0	0	0	0	207	56
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		250	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Frt						0.850					0.968	
Flt Protected												
Satd. Flow (prot)	0	0	0	0	3539	1538	0	0	0	0	3348	0
Flt Permitted												
Satd. Flow (perm)	0	0	0	0	3539	1538	0	0	0	0	3348	0
Right Turn on Red			Yes	Yes		Yes			Yes			Yes
Satd. Flow (RTOR)						273					35	
Link Speed (mph)		55			55			45			55	
Link Distance (ft)		210			598			92			259	
Travel Time (s)		2.6			7.4			1.4			3.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	5%	2%	2%	2%	2%	5%	2%
Adj. Flow (vph)	0	0	0	0	857	373	0	0	0	0	225	61
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	857	373	0	0	0	0	286	0
Turn Type					NA	custom					NA	
Protected Phases					8	Free					6	
Permitted Phases												
Minimum Split (s)					16.0						19.5	
Total Split (s)					61.0						59.0	
Total Split (%)					50.8%						49.2%	
Yellow Time (s)					3.5						3.5	
All-Red Time (s)					2.5						6.0	
Lost Time Adjust (s)					0.0						0.0	
Total Lost Time (s)					6.0						9.5	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)					55.0	120.0					49.5	
Actuated g/C Ratio					0.46	1.00					0.41	
v/c Ratio					0.53	0.24					0.20	
Control Delay					34.1	0.7					30.6	
Queue Delay					0.0	0.0					0.0	
Total Delay					34.1	0.7					30.6	
LOS					C	A					C	
Approach Delay					24.0						30.6	
Approach LOS					C						C	
Queue Length 50th (ft)					339	0					85	
Queue Length 95th (ft)					417	0					126	
Internal Link Dist (ft)		130			518			12			179	
Turn Bay Length (ft)						250						
Base Capacity (vph)					1622	1538					1401	

Lane Group	Ø2	Ø4
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Ideal Flow (vphpl)		
Storage Length (ft)		
Storage Lanes		
Taper Length (ft)		
Lane Util. Factor		
Frt		
Flt Protected		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Peak Hour Factor		
Heavy Vehicles (%)		
Adj. Flow (vph)		
Shared Lane Traffic (%)		
Lane Group Flow (vph)		
Turn Type		
Protected Phases	2	4
Permitted Phases		
Minimum Split (s)	19.5	16.0
Total Split (s)	59.0	61.0
Total Split (%)	49%	51%
Yellow Time (s)	3.5	3.5
All-Red Time (s)	2.5	2.5
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag		
Lead-Lag Optimize?		
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)		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn					0	0					0	
Spillback Cap Reductn					0	0					0	
Storage Cap Reductn					0	0					0	
Reduced v/c Ratio					0.53	0.24					0.20	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 32 (27%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.53	
Intersection Signal Delay: 25.2	Intersection LOS: C
Intersection Capacity Utilization 43.0%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4041: 11 Mile Rd & WB M-96 (Michigan Avenue)/11 Mile Rd (North)



Lane Group	Ø2	Ø4
Starvation Cap Reductn		
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		

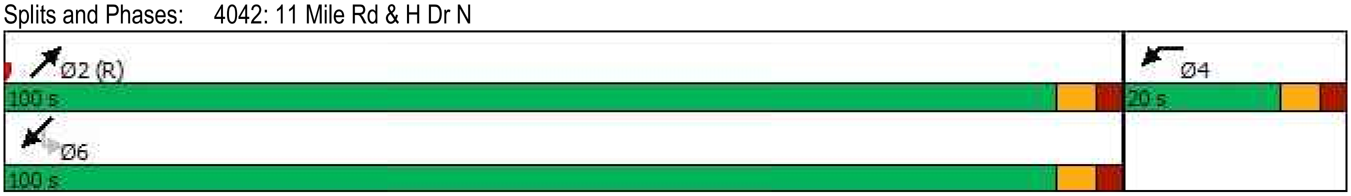
Intersection Summary

Lane Group	WBL	WBR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	0	0	343	0	0	263
Future Volume (vph)	0	0	343	0	0	263
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	1810	0	1863	0	0	1863
Flt Permitted						
Satd. Flow (perm)	1810	0	1863	0	0	1863
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)						
Link Speed (mph)	25		55			55
Link Distance (ft)	1262		1787			680
Travel Time (s)	34.4		22.2			8.4
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	2%	2%	5%	2%	2%
Adj. Flow (vph)	0	0	373	0	0	286
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	373	0	0	286
Turn Type	Prot		NA			NA
Protected Phases	4		2			6
Permitted Phases					6	
Minimum Split (s)	13.0		16.0		13.0	13.0
Total Split (s)	20.0		100.0		100.0	100.0
Total Split (%)	16.7%		83.3%		83.3%	83.3%
Yellow Time (s)	3.5		3.5		3.5	3.5
All-Red Time (s)	2.5		2.5		2.5	2.5
Lost Time Adjust (s)	0.0		0.0			0.0
Total Lost Time (s)	6.0		6.0			6.0
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)			94.0			94.0
Actuated g/C Ratio			0.78			0.78
v/c Ratio			0.26			0.20
Control Delay			1.0			3.7
Queue Delay			0.0			0.0
Total Delay			1.0			3.7
LOS			A			A
Approach Delay			1.0			3.7
Approach LOS			A			A
Queue Length 50th (ft)			10			47
Queue Length 95th (ft)			14			69
Internal Link Dist (ft)	1182		1707			600
Turn Bay Length (ft)						
Base Capacity (vph)			1459			1459
Starvation Cap Reductn			0			0
Spillback Cap Reductn			0			0
Storage Cap Reductn			0			0

Lane Group	WBL	WBR	NET	NER	SWL	SWT
Reduced v/c Ratio			0.26			0.20

Intersection Summary		
Area Type: Other		
Cycle Length: 120		
Actuated Cycle Length: 120		
Offset: 0 (0%), Referenced to phase 2:NET, Start of Green		
Natural Cycle: 40		
Control Type: Pretimed		
Maximum v/c Ratio: 0.26		
Intersection Signal Delay: 2.2	Intersection LOS: A	
Intersection Capacity Utilization 23.1%	ICU Level of Service A	
Analysis Period (min) 15		

Splits and Phases: 4042: 11 Mile Rd & H Dr N

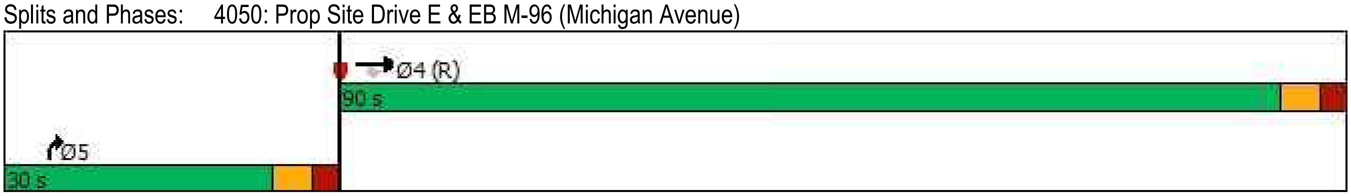


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1644	626	0	0	0	627
Future Volume (vph)	1644	626	0	0	0	627
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		500	600		0	0
Storage Lanes		2	0		0	2
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	0.88	1.00	1.00	1.00	0.88
Frt		0.850				0.850
Flt Protected						
Satd. Flow (prot)	3539	2787	0	0	0	2787
Flt Permitted						
Satd. Flow (perm)	3539	2787	0	0	0	2787
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		680				61
Link Speed (mph)	55			55	25	
Link Distance (ft)	669			659	1093	
Travel Time (s)	8.3			8.2	29.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1787	680	0	0	0	682
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1787	680	0	0	0	682
Turn Type	NA	Perm				Prot
Protected Phases	4					5
Permitted Phases		4				
Detector Phase	4	4				5
Switch Phase						
Minimum Initial (s)	10.0	10.0				10.0
Minimum Split (s)	16.0	16.0				16.0
Total Split (s)	90.0	90.0				30.0
Total Split (%)	75.0%	75.0%				25.0%
Yellow Time (s)	3.5	3.5				3.5
All-Red Time (s)	2.5	2.5				2.5
Lost Time Adjust (s)	0.0	0.0				0.0
Total Lost Time (s)	6.0	6.0				6.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max	C-Max				None
Act Effct Green (s)	84.0	84.0				24.0
Actuated g/C Ratio	0.70	0.70				0.20
v/c Ratio	0.72	0.32				1.13
Control Delay	14.9	10.1				116.3
Queue Delay	3.6	0.0				0.0
Total Delay	18.5	10.1				116.3
LOS	B	B				F
Approach Delay	16.2				116.3	
Approach LOS	B				F	
Queue Length 50th (ft)	446	110				~325
Queue Length 95th (ft)	577	m136				#458

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Internal Link Dist (ft)	589			579	1013	
Turn Bay Length (ft)		500				
Base Capacity (vph)	2477	2154				606
Starvation Cap Reductn	584	0				0
Spillback Cap Reductn	0	0				0
Storage Cap Reductn	0	0				0
Reduced v/c Ratio	0.94	0.32				1.13

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 52 (43%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.13	
Intersection Signal Delay: 37.9	Intersection LOS: D
Intersection Capacity Utilization 77.4%	ICU Level of Service D
Analysis Period (min) 15	
~ Volume exceeds capacity, queue is theoretically infinite. Queue shown is maximum after two cycles.	
# 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 4050: Prop Site Drive E & EB M-96 (Michigan Avenue)



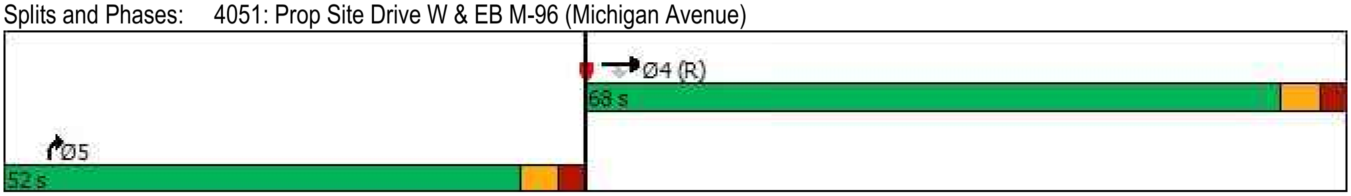
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	667	1128	0	0	0	1127
Future Volume (vph)	667	1128	0	0	0	1127
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		500	600		0	0
Storage Lanes		2	0		0	2
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	0.88	1.00	1.00	1.00	0.88
Frt		0.850				0.850
Flt Protected						
Satd. Flow (prot)	3539	2787	0	0	0	2787
Flt Permitted						
Satd. Flow (perm)	3539	2787	0	0	0	2787
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		1226				304
Link Speed (mph)	55			55	25	
Link Distance (ft)	608			627	1293	
Travel Time (s)	7.5			7.8	35.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	725	1226	0	0	0	1225
Shared Lane Traffic (%)						
Lane Group Flow (vph)	725	1226	0	0	0	1225
Turn Type	NA	Perm				Prot
Protected Phases	4					5
Permitted Phases		4				
Detector Phase	4	4				5
Switch Phase						
Minimum Initial (s)	10.0	10.0				10.0
Minimum Split (s)	16.0	16.0				16.0
Total Split (s)	68.0	68.0				52.0
Total Split (%)	56.7%	56.7%				43.3%
Yellow Time (s)	3.5	3.5				3.5
All-Red Time (s)	2.5	2.5				2.5
Lost Time Adjust (s)	0.0	0.0				0.0
Total Lost Time (s)	6.0	6.0				6.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max	C-Max				None
Act Effct Green (s)	62.3	62.3				45.7
Actuated g/C Ratio	0.52	0.52				0.38
v/c Ratio	0.39	0.60				0.98
Control Delay	21.8	11.6				49.2
Queue Delay	0.0	0.1				0.0
Total Delay	21.8	11.7				49.2
LOS	C	B				D
Approach Delay	15.5				49.2	
Approach LOS	B				D	
Queue Length 50th (ft)	234	205				428
Queue Length 95th (ft)	274	321				#607

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Internal Link Dist (ft)	528			547	1213	
Turn Bay Length (ft)		500				
Base Capacity (vph)	1837	2036				1255
Starvation Cap Reductn	0	151				0
Spillback Cap Reductn	0	0				0
Storage Cap Reductn	0	0				0
Reduced v/c Ratio	0.39	0.65				0.98

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 32 (27%), Referenced to phase 4:EBT, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.98
Intersection Signal Delay: 28.5 Intersection LOS: C
Intersection Capacity Utilization 67.9% ICU Level of Service C
Analysis Period (min) 15
\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 4051: Prop Site Drive W & EB M-96 (Michigan Avenue)

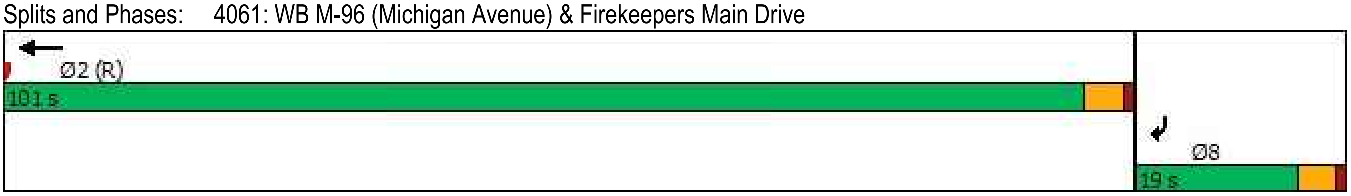


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	1042	168	0	134
Future Volume (vph)	0	0	1042	168	0	134
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			0	0	0
Storage Lanes	0			0	0	2
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	0.88
Frt			0.980			0.850
Flt Protected						
Satd. Flow (prot)	0	0	3478	0	0	2787
Flt Permitted						
Satd. Flow (perm)	0	0	3478	0	0	2787
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			53			302
Link Speed (mph)		55	55		25	
Link Distance (ft)		574	509		701	
Travel Time (s)		7.1	6.3		19.1	
Peak Hour Factor	0.92	0.92	0.92	0.95	0.67	0.92
Heavy Vehicles (%)	2%	2%	2%	0%	0%	2%
Adj. Flow (vph)	0	0	1133	177	0	146
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1310	0	0	146
Turn Type			NA			Prot
Protected Phases			2			8
Permitted Phases						
Detector Phase			2			8
Switch Phase						
Minimum Initial (s)			10.0			10.0
Minimum Split (s)			22.5			14.5
Total Split (s)			101.0			19.0
Total Split (%)			84.2%			15.8%
Yellow Time (s)			3.5			3.5
All-Red Time (s)			1.0			1.0
Lost Time Adjust (s)			0.0			0.0
Total Lost Time (s)			4.5			4.5
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode			C-Max			None
Act Effct Green (s)			101.0			10.0
Actuated g/C Ratio			0.84			0.08
v/c Ratio			0.45			0.29
Control Delay			2.8			1.4
Queue Delay			0.0			0.0
Total Delay			2.8			1.4
LOS			A			A
Approach Delay			2.8		1.4	
Approach LOS			A		A	
Queue Length 50th (ft)			94			0

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Queue Length 95th (ft)			114			0
Internal Link Dist (ft)		494	429		621	
Turn Bay Length (ft)						
Base Capacity (vph)			2935			602
Starvation Cap Reductn			0			0
Spillback Cap Reductn			0			0
Storage Cap Reductn			0			0
Reduced v/c Ratio			0.45			0.24

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:WBT, Start of Green	
Natural Cycle: 40	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.45	
Intersection Signal Delay: 2.7	Intersection LOS: A
Intersection Capacity Utilization 50.0%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4061: WB M-96 (Michigan Avenue) & Firekeepers Main Drive



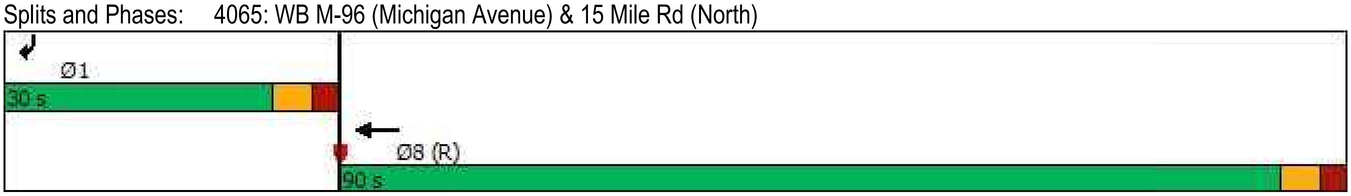
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	4536	845	0	810
Future Volume (vph)	0	0	4536	845	0	810
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			250	0	200
Storage Lanes	0			0	0	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.91	1.00	1.00	0.88
Frt				0.850		0.850
Flt Protected						
Satd. Flow (prot)	0	0	5085	1583	0	2787
Flt Permitted						
Satd. Flow (perm)	0	0	5085	1583	0	2787
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				168		
Link Speed (mph)		45	45		45	
Link Distance (ft)		534	660		516	
Travel Time (s)		8.1	10.0		7.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	4930	918	0	880
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	4930	918	0	880
Turn Type			NA	custom		Prot
Protected Phases			8	Free		1
Permitted Phases						
Minimum Split (s)			16.0			13.0
Total Split (s)			90.0			30.0
Total Split (%)			75.0%			25.0%
Yellow Time (s)			3.5			3.5
All-Red Time (s)			2.5			2.5
Lost Time Adjust (s)			0.0			0.0
Total Lost Time (s)			6.0			6.0
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)			84.0	120.0		24.0
Actuated g/C Ratio			0.70	1.00		0.20
v/c Ratio			1.39	0.58		1.58
Control Delay			188.3	21.3		302.6
Queue Delay			0.0	0.0		0.0
Total Delay			188.4	21.3		302.6
LOS			F	C		F
Approach Delay			162.1		302.6	
Approach LOS			F		F	
Queue Length 50th (ft)			~1872	474		~550
Queue Length 95th (ft)			m132	m136		#689
Internal Link Dist (ft)		454	580		436	
Turn Bay Length (ft)				250		200
Base Capacity (vph)			3559	1583		557
Starvation Cap Reductn			93	0		0

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Spillback Cap Reductn			0	0		0
Storage Cap Reductn			0	0		0
Reduced v/c Ratio			1.42	0.58		1.58

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 8:WBT, Start of Green
Natural Cycle: 150
Control Type: Pretimed
Maximum v/c Ratio: 1.58
Intersection Signal Delay: 180.5 Intersection LOS: F
Intersection Capacity Utilization 126.0% ICU Level of Service H
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4065: WB M-96 (Michigan Avenue) & 15 Mile Rd (North)



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑			↰	
Traffic Volume (vph)	0	4416	0	0	119	0
Future Volume (vph)	0	4416	0	0	119	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.91	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	5085	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	5085	0	0	1770	0
Right Turn on Red				Yes	Yes	Yes
Satd. Flow (RTOR)						
Link Speed (mph)		45	45		25	
Link Distance (ft)		262	1016		123	
Travel Time (s)		4.0	15.4		3.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.90	0.92
Adj. Flow (vph)	0	4800	0	0	132	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	4800	0	0	132	0
Turn Type		NA			Prot	
Protected Phases		4			1	
Permitted Phases						
Minimum Split (s)		16.0			16.0	
Total Split (s)		99.0			21.0	
Total Split (%)		82.5%			17.5%	
Yellow Time (s)		3.5			3.5	
All-Red Time (s)		2.5			2.5	
Lost Time Adjust (s)		0.0			0.0	
Total Lost Time (s)		6.0			6.0	
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)		93.0			15.0	
Actuated g/C Ratio		0.78			0.12	
v/c Ratio		1.22			0.60	
Control Delay		115.6			40.8	
Queue Delay		0.4			0.0	
Total Delay		116.1			40.8	
LOS		F			D	
Approach Delay		116.1			40.8	
Approach LOS		F			D	
Queue Length 50th (ft)		~1697			95	
Queue Length 95th (ft)		m#1411			m81	
Internal Link Dist (ft)		182	936		43	
Turn Bay Length (ft)						
Base Capacity (vph)		3940			221	
Starvation Cap Reductn		0			0	
Spillback Cap Reductn		946			0	
Storage Cap Reductn		0			0	
Reduced v/c Ratio		1.60			0.60	

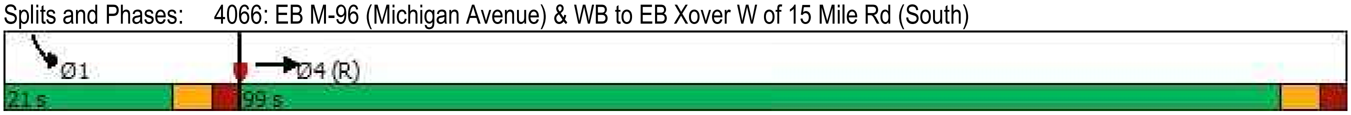
Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 116 (97%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 150	
Control Type: Pretimed	
Maximum v/c Ratio: 1.22	
Intersection Signal Delay: 114.0	Intersection LOS: F
Intersection Capacity Utilization 179.0%	ICU Level of Service H
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4066: EB M-96 (Michigan Avenue) & WB to EB Xover W of 15 Mile Rd (South)



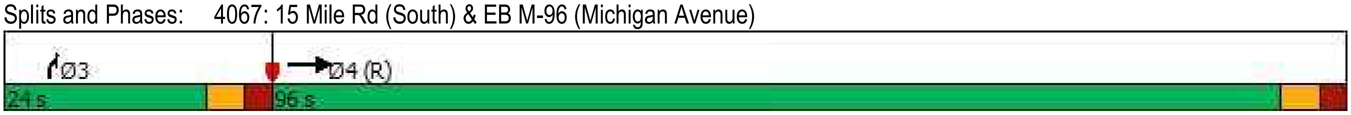
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	4182	353	0	0	0	355
Future Volume (vph)	4182	353	0	0	0	355
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		50	0		0	250
Storage Lanes		0	0		0	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	1.00	1.00	1.00	0.88
Frt	0.988					0.850
Flt Protected						
Satd. Flow (prot)	5024	0	0	0	0	2814
Flt Permitted						
Satd. Flow (perm)	5024	0	0	0	0	2814
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	32					
Link Speed (mph)	45			45	45	
Link Distance (ft)	1016			704	1375	
Travel Time (s)	15.4			10.7	20.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.88	0.88
Heavy Vehicles (%)	2%	2%	2%	2%	1%	1%
Adj. Flow (vph)	4546	384	0	0	0	403
Shared Lane Traffic (%)						
Lane Group Flow (vph)	4930	0	0	0	0	403
Turn Type	NA					Prot
Protected Phases	4					3
Permitted Phases						
Minimum Split (s)	17.0					16.0
Total Split (s)	96.0					24.0
Total Split (%)	80.0%					20.0%
Yellow Time (s)	3.5					3.5
All-Red Time (s)	2.5					2.5
Lost Time Adjust (s)	0.0					0.0
Total Lost Time (s)	6.0					6.0
Lead/Lag	Lag					Lead
Lead-Lag Optimize?	Yes					Yes
Act Effct Green (s)	90.0					18.0
Actuated g/C Ratio	0.75					0.15
v/c Ratio	1.31					0.95
Control Delay	151.8					84.8
Queue Delay	0.0					0.0
Total Delay	151.8					84.8
LOS	F					F
Approach Delay	151.8				84.8	
Approach LOS	F				F	
Queue Length 50th (ft)	~1794					178
Queue Length 95th (ft)	m#240					#277
Internal Link Dist (ft)	936			624	1295	
Turn Bay Length (ft)						250
Base Capacity (vph)	3776					422

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Starvation Cap Reductn	1					0
Spillback Cap Reductn	0					0
Storage Cap Reductn	0					0
Reduced v/c Ratio	1.31					0.95

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 4 (3%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 150	
Control Type: Pretimed	
Maximum v/c Ratio: 1.31	
Intersection Signal Delay: 146.7	Intersection LOS: F
Intersection Capacity Utilization 111.1%	ICU Level of Service H
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

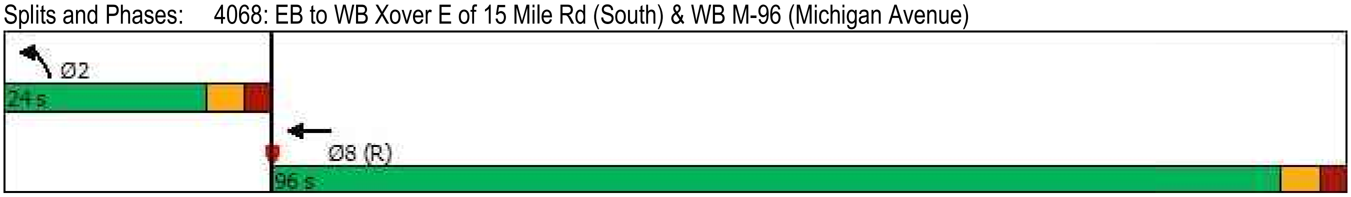
Splits and Phases: 4067: 15 Mile Rd (South) & EB M-96 (Michigan Avenue)



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑↑	↰	
Traffic Volume (vph)	0	0	0	4294	244	0
Future Volume (vph)	0	0	0	4294	244	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	5085	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	5085	1770	0
Right Turn on Red		Yes			Yes	Yes
Satd. Flow (RTOR)						
Link Speed (mph)	45			45	25	
Link Distance (ft)	687			275	111	
Travel Time (s)	10.4			4.2	3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	4667	265	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	4667	265	0
Turn Type				NA	Prot	
Protected Phases				8	2	
Permitted Phases						
Minimum Split (s)				16.0	13.0	
Total Split (s)				96.0	24.0	
Total Split (%)				80.0%	20.0%	
Yellow Time (s)				3.5	3.5	
All-Red Time (s)				2.5	2.5	
Lost Time Adjust (s)				0.0	0.0	
Total Lost Time (s)				6.0	6.0	
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)				90.0	18.0	
Actuated g/C Ratio				0.75	0.15	
v/c Ratio				1.22	1.00	
Control Delay				117.7	59.7	
Queue Delay				0.2	0.0	
Total Delay				117.9	59.7	
LOS				F	E	
Approach Delay				117.9	59.7	
Approach LOS				F	E	
Queue Length 50th (ft)				~1630	204	
Queue Length 95th (ft)				m378	m154	
Internal Link Dist (ft)	607			195	31	
Turn Bay Length (ft)						
Base Capacity (vph)				3813	265	
Starvation Cap Reductn				429	0	
Spillback Cap Reductn				0	0	
Storage Cap Reductn				0	0	
Reduced v/c Ratio				1.38	1.00	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 112 (93%), Referenced to phase 8:WBT, Start of Green	
Natural Cycle: 150	
Control Type: Pretimed	
Maximum v/c Ratio: 1.22	
Intersection Signal Delay: 114.7	Intersection LOS: F
Intersection Capacity Utilization 131.0%	ICU Level of Service H
Analysis Period (min) 15	
~ Volume exceeds capacity, queue is theoretically infinite.	
Queue shown is maximum after two cycles.	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 4068: EB to WB Xover E of 15 Mile Rd (South) & WB M-96 (Michigan Avenue)



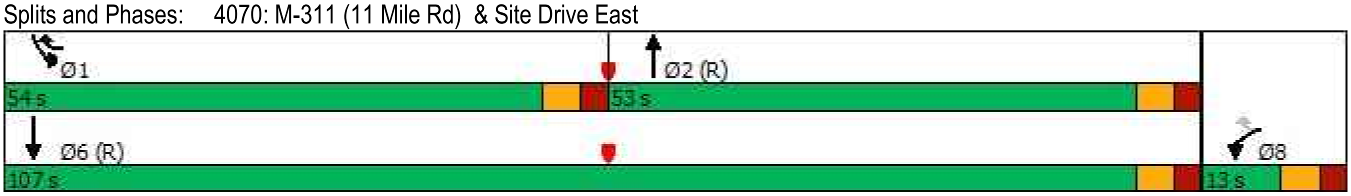
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	102	0	0	129
Future Volume (vph)	0	0	102	0	0	129
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	500		0	400	
Storage Lanes	1	1		0	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.88	0.95	0.95	1.00	0.95
Frt						
Flt Protected						
Satd. Flow (prot)	1863	3278	3539	0	1863	3539
Flt Permitted						
Satd. Flow (perm)	1863	3278	3539	0	1863	3539
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)						
Link Speed (mph)	25		55			55
Link Distance (ft)	750		940			974
Travel Time (s)	20.5		11.7			12.1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	111	0	0	140
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	111	0	0	140
Turn Type	Prot	pm+ov	NA		Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8				
Detector Phase	8	1	2		1	6
Switch Phase						
Minimum Initial (s)	7.0	7.0	10.0		7.0	10.0
Minimum Split (s)	13.0	13.0	16.0		13.0	16.0
Total Split (s)	13.0	54.0	53.0		54.0	107.0
Total Split (%)	10.8%	45.0%	44.2%		45.0%	89.2%
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5
All-Red Time (s)	2.5	2.5	2.5		2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0		6.0	6.0
Lead/Lag		Lead	Lag		Lead	
Lead-Lag Optimize?						
Recall Mode	None	None	C-Max		None	C-Max
Act Effct Green (s)			120.0			120.0
Actuated g/C Ratio			1.00			1.00
v/c Ratio			0.03			0.04
Control Delay			0.0			0.0
Queue Delay			0.0			0.0
Total Delay			0.0			0.0
LOS			A			A
Approach Delay						
Approach LOS						
Queue Length 50th (ft)			0			0
Queue Length 95th (ft)			0			0

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Internal Link Dist (ft)	670		860			894
Turn Bay Length (ft)						
Base Capacity (vph)			3539			3539
Starvation Cap Reductn			0			0
Spillback Cap Reductn			0			0
Storage Cap Reductn			0			0
Reduced v/c Ratio			0.03			0.04

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 8 (7%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 45
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.04
Intersection Signal Delay: 0.0 Intersection LOS: A
Intersection Capacity Utilization 13.3% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 4070: M-311 (11 Mile Rd) & Site Drive East



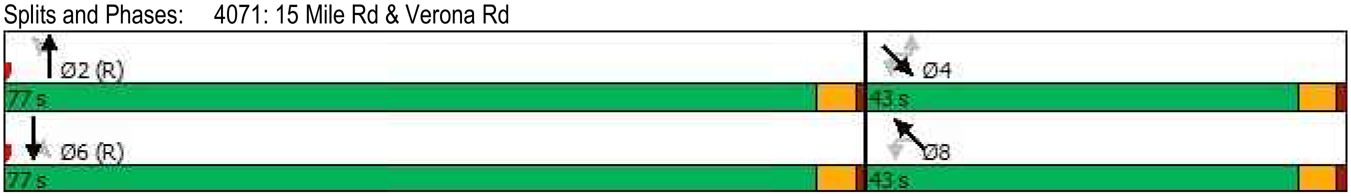
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	803	13	13	5	9	4	0	87	783	6	118	14
Future Volume (vph)	803	13	13	5	9	4	0	87	783	6	118	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		70	0		0
Storage Lanes	0		0	0		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
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
Frt		0.998			0.968				0.850		0.986	
Flt Protected		0.954			0.987						0.998	
Satd. Flow (prot)	0	1791	0	0	1715	0	0	1845	1392	0	1851	0
Flt Permitted		0.711			0.838						0.991	
Satd. Flow (perm)	0	1335	0	0	1456	0	0	1845	1392	0	1838	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1			7				880		5	
Link Speed (mph)		45			55			55			55	
Link Distance (ft)		682			426			745			951	
Travel Time (s)		10.3			5.3			9.2			11.8	
Peak Hour Factor	0.80	0.80	0.80	0.60	0.60	0.60	0.89	0.89	0.89	0.86	0.86	0.86
Heavy Vehicles (%)	1%	1%	1%	0%	0%	25%	0%	3%	16%	1%	1%	1%
Adj. Flow (vph)	1004	16	16	8	15	7	0	98	880	7	137	16
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1036	0	0	30	0	0	98	880	0	160	0
Turn Type	Perm	NA		Perm	NA			NA	Perm	Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4		4	8		
Minimum Split (s)	22.5	22.5		22.5	22.5		22.5	22.5	22.5	22.5	22.5	
Total Split (s)	77.0	77.0		77.0	77.0		43.0	43.0	43.0	43.0	43.0	
Total Split (%)	64.2%	64.2%		64.2%	64.2%		35.8%	35.8%	35.8%	35.8%	35.8%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0	0.0		0.0	
Total Lost Time (s)		4.5			4.5			4.5	4.5		4.5	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		72.5			72.5			38.5	38.5		38.5	
Actuated g/C Ratio		0.60			0.60			0.32	0.32		0.32	
v/c Ratio		1.29			0.03			0.17	0.84		0.27	
Control Delay		162.5			8.1			30.2	11.0		30.8	
Queue Delay		0.0			0.0			0.0	0.0		0.0	
Total Delay		162.5			8.1			30.2	11.0		30.8	
LOS		F			A			C	B		C	
Approach Delay		162.5			8.1			13.0			30.8	
Approach LOS		F			A			B			C	
Queue Length 50th (ft)		~1025			7			54	0		89	
Queue Length 95th (ft)		#1066			12			96	140		139	
Internal Link Dist (ft)		602			346			665			871	
Turn Bay Length (ft)									70			
Base Capacity (vph)		806			882			591	1044		593	

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
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		1.29			0.03			0.17	0.84		0.27	

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 110
Control Type: Pretimed
Maximum v/c Ratio: 1.29
Intersection Signal Delay: 84.5 Intersection LOS: F
Intersection Capacity Utilization 76.4% ICU Level of Service D
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 4071: 15 Mile Rd & Verona Rd



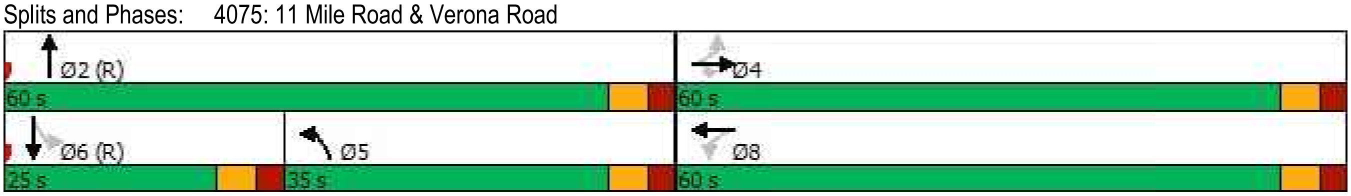
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	868	95	17	887	19	93	68	13	10	82	8
Future Volume (vph)	11	868	95	17	887	19	93	68	13	10	82	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	190		70	190		0	140		0	215		0
Storage Lanes	1		1	1		0	2		0	1		0
Taper Length (ft)	115			140			200			165		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.997			0.976			0.987	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	1900	1468	1805	1892	0	3072	1854	0	1687	1753	0
Flt Permitted	0.074			0.074			0.950			0.697		
Satd. Flow (perm)	141	1900	1468	141	1892	0	3072	1854	0	1238	1753	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			82		1			10			3	
Link Speed (mph)		55			55			45			55	
Link Distance (ft)		519			1585			1015			821	
Travel Time (s)		6.4			19.6			15.4			10.2	
Peak Hour Factor	0.79	0.79	0.79	0.87	0.87	0.87	0.87	0.87	0.87	0.66	0.66	0.66
Heavy Vehicles (%)	0%	0%	10%	0%	0%	5%	14%	0%	0%	7%	7%	7%
Adj. Flow (vph)	14	1099	120	20	1020	22	107	78	15	15	124	12
Shared Lane Traffic (%)												
Lane Group Flow (vph)	14	1099	120	20	1042	0	107	93	0	15	136	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Perm	NA	
Protected Phases		4			8		5	2			6	
Permitted Phases	4		4	8						6		
Minimum Split (s)	25.0	25.0	25.0	25.0	25.0		16.0	25.0		25.0	25.0	
Total Split (s)	60.0	60.0	60.0	60.0	60.0		35.0	60.0		25.0	25.0	
Total Split (%)	50.0%	50.0%	50.0%	50.0%	50.0%		29.2%	50.0%		20.8%	20.8%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	2.5	2.5	2.5	2.5	2.5		2.5	2.5		2.5	2.5	
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)	6.0	6.0	6.0	6.0	6.0		6.0	6.0		6.0	6.0	
Lead/Lag							Lag			Lead	Lead	
Lead-Lag Optimize?							Yes			Yes	Yes	
Act Effct Green (s)	54.0	54.0	54.0	54.0	54.0		29.0	54.0		19.0	19.0	
Actuated g/C Ratio	0.45	0.45	0.45	0.45	0.45		0.24	0.45		0.16	0.16	
v/c Ratio	0.22	1.29	0.17	0.32	1.22		0.14	0.11		0.08	0.49	
Control Delay	31.2	167.6	7.9	37.9	142.4		36.4	17.5		44.3	51.6	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	31.2	167.6	7.9	37.9	142.4		36.4	17.5		44.3	51.6	
LOS	C	F	A	D	F		D	B		D	D	
Approach Delay		150.5			140.4			27.6			50.9	
Approach LOS		F			F			C			D	
Queue Length 50th (ft)	6	~1082	16	10	~998		33	36		10	95	
Queue Length 95th (ft)	22	#1090	40	34	#1191		56	67		22	113	
Internal Link Dist (ft)		439			1505			935			741	
Turn Bay Length (ft)	190		70	190			140			215		
Base Capacity (vph)	63	855	705	63	851		742	839		196	280	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0	0	0	0		0	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	0.22	1.29	0.17	0.32	1.22		0.14	0.11		0.08	0.49	

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green	
Natural Cycle: 100	
Control Type: Pretimed	
Maximum v/c Ratio: 1.29	
Intersection Signal Delay: 131.5	Intersection LOS: F
Intersection Capacity Utilization 67.2%	ICU Level of Service C
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 4075: 11 Mile Road & Verona Road



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	979	143	0	231
Future Volume (vph)	0	0	979	143	0	231
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200			300	245	245
Storage Lanes	0			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.981			0.865
Flt Protected						
Satd. Flow (prot)	0	0	3338	0	0	1644
Flt Permitted						
Satd. Flow (perm)	0	0	3338	0	0	1644
Link Speed (mph)		55	55		25	
Link Distance (ft)		509	395		760	
Travel Time (s)		6.3	4.9		20.7	
Peak Hour Factor	0.88	0.88	0.91	0.91	0.79	0.79
Heavy Vehicles (%)	1%	1%	7%	0%	0%	0%
Adj. Flow (vph)	0	0	1076	157	0	292
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1233	0	0	292
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 52.6%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	965	43	0	157
Future Volume (vph)	0	0	965	43	0	157
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	175			50	0	0
Storage Lanes	0			0	0	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.994			0.865
Flt Protected						
Satd. Flow (prot)	0	0	3363	0	0	1565
Flt Permitted						
Satd. Flow (perm)	0	0	3363	0	0	1565
Link Speed (mph)		55	55		25	
Link Distance (ft)		395	586		185	
Travel Time (s)		4.9	7.3		5.0	
Peak Hour Factor	0.90	0.90	0.95	0.95	0.70	0.70
Heavy Vehicles (%)	1%	1%	7%	0%	5%	5%
Adj. Flow (vph)	0	0	1016	45	0	224
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1061	0	0	224
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 44.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	1001	12	0	7
Future Volume (vph)	0	0	1001	12	0	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150			600	0	0
Storage Lanes	0			0	0	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.998			0.865
Flt Protected						
Satd. Flow (prot)	0	0	3370	0	0	1644
Flt Permitted						
Satd. Flow (perm)	0	0	3370	0	0	1644
Link Speed (mph)		55	55		25	
Link Distance (ft)		586	607		1086	
Travel Time (s)		7.3	7.5		29.6	
Peak Hour Factor	0.83	0.83	0.92	0.92	0.60	0.60
Heavy Vehicles (%)	10%	1%	7%	0%	33%	0%
Adj. Flow (vph)	0	0	1088	13	0	12
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1101	0	0	12
Sign Control		Free	Free		Stop	

Intersection Summary
Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 38.1% ICU Level of Service A
Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	735	8	0	7
Future Volume (vph)	0	0	735	8	0	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.998			0.865
Flt Protected						
Satd. Flow (prot)	0	0	3532	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	0	3532	0	0	1611
Link Speed (mph)		55	55		55	
Link Distance (ft)		538	1254		1399	
Travel Time (s)		6.7	15.5		17.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	799	9	0	8
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	808	0	0	8
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 30.6%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	0	5	0	845	0	0	810	0
Future Volume (vph)	0	0	0	0	0	5	0	845	0	0	810	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
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
Frt					0.865							
Flt Protected												
Satd. Flow (prot)	0	1863	0	0	1611	0	0	1863	0	0	1863	0
Flt Permitted												
Satd. Flow (perm)	0	1863	0	0	1611	0	0	1863	0	0	1863	0
Link Speed (mph)		45			45			25			45	
Link Distance (ft)		957			1038			516			593	
Travel Time (s)		14.5			15.7			14.1			9.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	0	5	0	918	0	0	880	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	5	0	0	918	0	0	880	0
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 54.5%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NEL	NER
Lane Configurations				↰↑↑		
Traffic Volume (vph)	0	0	119	1400	0	0
Future Volume (vph)	0	0	119	1400	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.91	0.91	1.00	1.00
Frt						
Flt Protected				0.996		
Satd. Flow (prot)	0	0	0	5065	0	0
Flt Permitted				0.996		
Satd. Flow (perm)	0	0	0	5065	0	0
Link Speed (mph)	45			45	25	
Link Distance (ft)	183			382	263	
Travel Time (s)	2.8			5.8	7.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	129	1522	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1651	0	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 49.6%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	2897	915	0	0	0	0
Future Volume (vph)	2897	915	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950	0.970				
Satd. Flow (prot)	1610	3288	0	0	0	0
Flt Permitted	0.950	0.970				
Satd. Flow (perm)	1610	3288	0	0	0	0
Link Speed (mph)		45	45		25	
Link Distance (ft)		619	209		329	
Travel Time (s)		9.4	3.2		9.0	
Peak Hour Factor	0.86	0.86	0.92	0.92	0.92	0.92
Adj. Flow (vph)	3369	1064	0	0	0	0
Shared Lane Traffic (%)	50%					
Lane Group Flow (vph)	1684	2749	0	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 91.4% ICU Level of Service F

Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations			↑↑	↱		
Traffic Volume (vph)	0	0	937	168	0	0
Future Volume (vph)	0	0	937	168	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	1.00
Frt				0.850		
Flt Protected						
Satd. Flow (prot)	0	0	3539	1583	0	0
Flt Permitted						
Satd. Flow (perm)	0	0	3539	1583	0	0
Link Speed (mph)		45	45		30	
Link Distance (ft)		213	315		137	
Travel Time (s)		3.2	4.8		3.1	
Peak Hour Factor	0.92	0.92	0.91	0.91	0.92	0.92
Adj. Flow (vph)	0	0	1030	185	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1030	185	0	0
Sign Control		Stop	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 59.5%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	1037	0	0	159	0
Future Volume (vph)	0	1037	0	0	159	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3505	0	0	1787	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3505	0	0	1787	0
Link Speed (mph)		45	45		25	
Link Distance (ft)		309	168		108	
Travel Time (s)		4.7	2.5		2.9	
Peak Hour Factor	0.86	0.86	0.92	0.92	0.87	0.87
Heavy Vehicles (%)	3%	3%	2%	2%	1%	1%
Adj. Flow (vph)	0	1206	0	0	183	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1206	0	0	183	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 56.7%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	1050	182	0
Future Volume (vph)	0	0	0	1050	182	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	5036	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	5036	1770	0
Link Speed (mph)	45			45	25	
Link Distance (ft)	134			152	111	
Travel Time (s)	2.0			2.3	3.0	
Peak Hour Factor	0.92	0.92	0.89	0.89	0.94	0.94
Heavy Vehicles (%)	2%	2%	3%	3%	2%	2%
Adj. Flow (vph)	0	0	0	1180	194	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1180	194	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 40.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	1015	0	0	80	0
Future Volume (vph)	0	1015	0	0	80	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3574	0	0	1787	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3574	0	0	1787	0
Link Speed (mph)		45	45		25	
Link Distance (ft)		222	290		102	
Travel Time (s)		3.4	4.4		2.8	
Peak Hour Factor	0.95	0.95	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	1%	1%	2%	2%	1%	1%
Adj. Flow (vph)	0	1068	0	0	87	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1068	0	0	87	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 71.4%	ICU Level of Service C
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑	↰	
Traffic Volume (vph)	0	0	0	1069	65	0
Future Volume (vph)	0	0	0	1069	65	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	30			45	25	
Link Distance (ft)	114			1105	101	
Travel Time (s)	2.6			16.7	2.8	
Peak Hour Factor	0.92	0.92	0.88	0.88	0.94	0.94
Adj. Flow (vph)	0	0	0	1215	69	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1215	69	0
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 67.3% ICU Level of Service C

Analysis Period (min) 15

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	53	358	31	4	293	12	14	37	3	13	81	35
Future Volume (vph)	53	358	31	4	293	12	14	37	3	13	81	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	80		0	80		0	110		0	115		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	180			180			140			175		
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
Frt		0.988			0.994			0.988			0.955	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	1877	0	1770	1852	0	1703	1771	0	1770	1779	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1805	1877	0	1770	1852	0	1703	1771	0	1770	1779	0
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		1365			1319			666			571	
Travel Time (s)		20.7			20.0			10.1			8.7	
Peak Hour Factor	0.94	0.94	0.94	0.88	0.88	0.88	0.78	0.78	0.78	0.91	0.91	0.91
Heavy Vehicles (%)	0%	0%	0%	2%	2%	2%	6%	6%	6%	2%	2%	2%
Adj. Flow (vph)	56	381	33	5	333	14	18	47	4	14	89	38
Shared Lane Traffic (%)												
Lane Group Flow (vph)	56	414	0	5	347	0	18	51	0	14	127	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary		
Area Type:	Other	
Control Type: Unsignalized		
Intersection Capacity Utilization 41.5%		ICU Level of Service A
Analysis Period (min) 15		

Lane Group	EBL2	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	SWL	SWR
Lane Configurations											
Traffic Volume (vph)	55	0	112	0	270	79	81	385	0	0	0
Future Volume (vph)	55	0	112	0	270	79	81	385	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	240	0		0	105		0	0	0
Storage Lanes		1	1	0		0	1		0	0	0
Taper Length (ft)		25		25			70			25	
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
Frt			0.850		0.969						
Flt Protected	0.950						0.950				
Satd. Flow (prot)	1687	0	1615	0	1805	0	1752	1845	0	0	0
Flt Permitted	0.950						0.950				
Satd. Flow (perm)	1687	0	1615	0	1805	0	1752	1845	0	0	0
Link Speed (mph)		25			45			45		25	
Link Distance (ft)		894			1167			685		897	
Travel Time (s)		24.4			17.7			10.4		24.5	
Peak Hour Factor	0.93	0.93	0.93	0.91	0.91	0.91	0.95	0.95	0.95	0.92	0.92
Heavy Vehicles (%)	7%	0%	0%	2%	2%	2%	3%	3%	3%	2%	2%
Adj. Flow (vph)	59	0	120	0	297	87	85	405	0	0	0
Shared Lane Traffic (%)											
Lane Group Flow (vph)	59	0	120	0	384	0	85	405	0	0	0
Sign Control		Stop			Free			Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 33.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	WBL2	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NER
Lane Configurations											
Traffic Volume (vph)	93	0	84	61	264	0	0	373	50	0	0
Future Volume (vph)	93	0	84	61	264	0	0	373	50	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	185	165		0	0		0	0	0
Storage Lanes		1	1	1		0	0		0	0	0
Taper Length (ft)		25		110			25			25	
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
Frt			0.850					0.984			
Flt Protected	0.950			0.950							
Satd. Flow (prot)	1805	0	1455	1752	1845	0	0	1815	0	0	0
Flt Permitted	0.950			0.950							
Satd. Flow (perm)	1805	0	1455	1752	1845	0	0	1815	0	0	0
Link Speed (mph)		25			45			45		25	
Link Distance (ft)		613			685			608		913	
Travel Time (s)		16.7			10.4			9.2		24.9	
Peak Hour Factor	0.81	0.81	0.81	0.87	0.87	0.87	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	11%	3%	3%	3%	3%	3%	3%	2%	2%
Adj. Flow (vph)	115	0	104	70	303	0	0	405	54	0	0
Shared Lane Traffic (%)											
Lane Group Flow (vph)	115	0	104	70	303	0	0	459	0	0	0
Sign Control		Stop			Free			Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 33.9% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	184	140	0	396	272	0
Future Volume (vph)	184	140	0	396	272	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.850				
Flt Protected	0.950					
Satd. Flow (prot)	1543	1553	0	3505	3374	0
Flt Permitted	0.950					
Satd. Flow (perm)	1543	1553	0	3505	3374	0
Link Speed (mph)	25			55	55	
Link Distance (ft)	119			105	620	
Travel Time (s)	3.2			1.3	7.7	
Peak Hour Factor	0.93	0.93	0.82	0.82	0.92	0.92
Heavy Vehicles (%)	17%	4%	0%	3%	7%	0%
Adj. Flow (vph)	198	151	0	483	296	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	198	151	0	483	296	0
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 27.8%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			↑↑	↱		↰↑
Traffic Volume (vph)	0	0	396	61	35	377
Future Volume (vph)	0	0	396	61	35	377
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		340	0	
Storage Lanes	0	0		1	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	1.00	0.95	0.95
Frt				0.850		
Flt Protected						0.996
Satd. Flow (prot)	0	0	3505	1568	0	3383
Flt Permitted						0.996
Satd. Flow (perm)	0	0	3505	1568	0	3383
Link Speed (mph)	25		55			55
Link Distance (ft)	664		1109			105
Travel Time (s)	18.1		13.7			1.3
Peak Hour Factor	0.92	0.92	0.82	0.82	0.92	0.92
Heavy Vehicles (%)	2%	2%	3%	3%	20%	5%
Adj. Flow (vph)	0	0	483	74	38	410
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	483	74	0	448
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 29.1%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	WBL2	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NER
Lane Configurations											
Traffic Volume (vph)	52	0	60	0	352	0	0	220	86	0	0
Future Volume (vph)	52	0	60	0	352	0	0	220	86	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	205	0		0	0		135	0	0
Storage Lanes		1	1	0		0	0		1	0	0
Taper Length (ft)		25		25			25			25	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00
Frt			0.850						0.850		
Flt Protected	0.950										
Satd. Flow (prot)	1736	0	1380	0	3438	0	0	3343	1272	0	0
Flt Permitted	0.950										
Satd. Flow (perm)	1736	0	1380	0	3438	0	0	3343	1272	0	0
Link Speed (mph)		25			55			55		25	
Link Distance (ft)		296			230			1367		908	
Travel Time (s)		8.1			2.9			16.9		24.8	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.95	0.95	0.95	0.92	0.92
Heavy Vehicles (%)	4%	0%	17%	0%	5%	0%	0%	8%	27%	2%	2%
Adj. Flow (vph)	59	0	68	0	400	0	0	232	91	0	0
Shared Lane Traffic (%)											
Lane Group Flow (vph)	59	0	68	0	400	0	0	232	91	0	0
Sign Control		Stop			Free			Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 20.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	33	80	0	270	154	0
Future Volume (vph)	33	80	0	270	154	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				
Flt Protected	0.950					
Satd. Flow (prot)	1752	1077	0	1624	1696	0
Flt Permitted	0.950					
Satd. Flow (perm)	1752	1077	0	1624	1696	0
Link Speed (mph)	25			45	45	
Link Distance (ft)	189			1063	114	
Travel Time (s)	5.2			16.1	1.7	
Peak Hour Factor	0.74	0.74	0.93	0.93	0.89	0.89
Heavy Vehicles (%)	3%	50%	17%	17%	12%	12%
Adj. Flow (vph)	45	108	0	290	173	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	45	108	0	290	173	0
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 24.2%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	0	0	182	121	3	154
Future Volume (vph)	0	0	182	121	3	154
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.850		
Flt Protected						0.999
Satd. Flow (prot)	0	0	1624	1380	0	1689
Flt Permitted						0.999
Satd. Flow (perm)	0	0	1624	1380	0	1689
Link Speed (mph)	25		45			45
Link Distance (ft)	105		114			727
Travel Time (s)	2.9		1.7			11.0
Peak Hour Factor	0.92	0.92	0.93	0.93	0.89	0.89
Heavy Vehicles (%)	2%	2%	17%	17%	33%	12%
Adj. Flow (vph)	0	0	196	130	3	173
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	196	130	0	176
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 22.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBR	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	6	97	58	124	60	11
Future Volume (vph)	6	97	58	124	60	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	195	0	0			90
Storage Lanes	1	1	0			1
Taper Length (ft)	135		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				0.850
Flt Protected	0.950			0.984		
Satd. Flow (prot)	1570	1404	0	1615	1776	1509
Flt Permitted	0.950			0.984		
Satd. Flow (perm)	1570	1404	0	1615	1776	1509
Link Speed (mph)	25			45	45	
Link Distance (ft)	597			727	1165	
Travel Time (s)	16.3			11.0	17.7	
Peak Hour Factor	0.83	0.83	0.91	0.91	0.78	0.78
Heavy Vehicles (%)	15%	15%	43%	3%	7%	7%
Adj. Flow (vph)	7	117	64	136	77	14
Shared Lane Traffic (%)						
Lane Group Flow (vph)	7	117	0	200	77	14
Sign Control	Stop			Free	Free	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 26.4% ICU Level of Service A
Analysis Period (min) 15

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	18	1501	18	0
Future Volume (vph)	0	0	18	1501	18	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.91	0.91	1.00	1.00
Frt						
Flt Protected				0.999	0.950	
Satd. Flow (prot)	0	0	0	5080	1770	0
Flt Permitted				0.999	0.950	
Satd. Flow (perm)	0	0	0	5080	1770	0
Link Speed (mph)	45			45	25	
Link Distance (ft)	382			217	236	
Travel Time (s)	5.8			3.3	6.4	
Peak Hour Factor	0.90	0.90	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	20	1632	20	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1652	20	0
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 39.4% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1196	0	0	0	0	30
Future Volume (vph)	1196	0	0	0	0	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	1.00	1.00	1.00	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	3539	0	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	3539	0	0	0	0	1611
Link Speed (mph)	45			45	25	
Link Distance (ft)	168			432	770	
Travel Time (s)	2.5			6.5	21.0	
Peak Hour Factor	0.87	0.87	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1375	0	0	0	0	33
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1375	0	0	0	0	33
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 50.8% ICU Level of Service A
Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations			↑↑↑			↱
Traffic Volume (vph)	0	0	1232	0	0	32
Future Volume (vph)	0	0	1232	0	0	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.91	1.00	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	0	0	5036	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	0	5036	0	0	1611
Link Speed (mph)		45	45		25	
Link Distance (ft)		494	134		230	
Travel Time (s)		7.5	2.0		6.3	
Peak Hour Factor	0.92	0.92	0.89	0.89	0.92	0.92
Heavy Vehicles (%)	2%	2%	3%	3%	2%	2%
Adj. Flow (vph)	0	0	1384	0	0	35
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1384	0	0	35
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 43.7% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	1084	50	0	0
Future Volume (vph)	0	0	1084	50	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.993			
Flt Protected						
Satd. Flow (prot)	0	0	3514	0	0	0
Flt Permitted						
Satd. Flow (perm)	0	0	3514	0	0	0
Link Speed (mph)		30	45		25	
Link Distance (ft)		176	114		201	
Travel Time (s)		4.0	1.7		5.5	
Peak Hour Factor	0.92	0.92	0.88	0.88	0.92	0.92
Adj. Flow (vph)	0	0	1232	57	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1289	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 40.0%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	NBT	NBR	SBL	SBT	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	352	228	0	272	0	0
Future Volume (vph)	352	228	0	272	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	1.00	0.95	1.00	1.00
Frt	0.941					
Flt Protected						
Satd. Flow (prot)	3164	0	0	3343	0	0
Flt Permitted						
Satd. Flow (perm)	3164	0	0	3343	0	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	620			230	1088	
Travel Time (s)	7.7			2.9	29.7	
Peak Hour Factor	0.88	0.88	0.95	0.95	0.92	0.92
Heavy Vehicles (%)	5%	11%	8%	8%	2%	2%
Adj. Flow (vph)	400	259	0	286	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	659	0	0	286	0	0
Sign Control	Free			Free	Free	

Intersection Summary		
Area Type:	Other	
Control Type: Unsignalized		
Intersection Capacity Utilization 20.4%		ICU Level of Service A
Analysis Period (min) 15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	32	1052	0	0	0	0	0	48	29
Future Volume (vph)	0	0	0	32	1052	0	0	0	0	0	48	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	165		0	0		0	0		0
Storage Lanes	0		0	1		0	0		0	0		0
Taper Length (ft)	25			85			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt											0.949	
Flt Protected				0.950								
Satd. Flow (prot)	0	0	0	1770	3539	0	0	0	0	0	1785	0
Flt Permitted				0.950								
Satd. Flow (perm)	0	0	0	1770	3539	0	0	0	0	0	1785	0
Link Speed (mph)		30			45			30			30	
Link Distance (ft)		212			176			102			496	
Travel Time (s)		4.8			2.7			2.3			11.3	
Peak Hour Factor	0.92	0.92	0.92	0.86	0.86	0.86	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	1%	1%	1%
Adj. Flow (vph)	0	0	0	37	1223	0	0	0	0	0	52	32
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	37	1223	0	0	0	0	0	84	0
Sign Control		Free			Free			Yield			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 40.0%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	2187	0	0	0	2220
Future Volume (vph)	0	2187	0	0	0	2220
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	0.88
Frt						0.850
Flt Protected						
Satd. Flow (prot)	0	3539	0	0	0	2787
Flt Permitted						
Satd. Flow (perm)	0	3539	0	0	0	2787
Link Speed (mph)		55	55		55	
Link Distance (ft)		434	1242		1194	
Travel Time (s)		5.4	15.4		14.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	2377	0	0	0	2413
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	2377	0	0	0	2413
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 81.0%	ICU Level of Service D
Analysis Period (min) 15	

Lane Group	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	0	119	0	0	593
Future Volume (vph)	0	0	119	0	0	593
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	0	0	1863	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	0	1863	0	0	1611
Link Speed (mph)		25	25		30	
Link Distance (ft)		1199	263		174	
Travel Time (s)		32.7	7.2		4.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.90	0.90
Adj. Flow (vph)	0	0	129	0	0	659
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	129	0	0	659
Sign Control		Free	Yield		Free	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 49.6% ICU Level of Service A
Analysis Period (min) 15

Lane Group	WBL	WBR	NBL	NBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	168	2897	0	0	0
Future Volume (vph)	0	168	2897	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.97	1.00	1.00	1.00
Frt		0.865				
Flt Protected			0.950			
Satd. Flow (prot)	0	1627	3303	0	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	1627	3303	0	0	0
Link Speed (mph)	45		45		45	
Link Distance (ft)	255		329		551	
Travel Time (s)	3.9		5.0		8.3	
Peak Hour Factor	0.91	0.91	0.93	0.93	0.92	0.92
Heavy Vehicles (%)	1%	1%	6%	6%	2%	2%
Adj. Flow (vph)	0	185	3115	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	185	3115	0	0	0
Sign Control	Yield		Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 90.1%	ICU Level of Service E
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	159	1105	0	0
Future Volume (vph)	0	0	159	1105	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	450		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			85		25	
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	5085	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	5085	0	0
Link Speed (mph)	45			45	30	
Link Distance (ft)	315			494	108	
Travel Time (s)	4.8			7.5	2.5	
Peak Hour Factor	0.92	0.92	0.87	0.87	0.92	0.92
Adj. Flow (vph)	0	0	183	1270	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	183	1270	0	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 44.5%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	182	1044	0	0	0	0
Future Volume (vph)	182	1044	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	275			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	110				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		45	45		30	
Link Distance (ft)		432	161		111	
Travel Time (s)		6.5	2.4		2.5	
Peak Hour Factor	0.94	0.94	0.92	0.92	0.92	0.92
Adj. Flow (vph)	194	1111	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	194	1111	0	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 55.8%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations		↑↑				↱↱↱
Traffic Volume (vph)	0	102	0	0	0	129
Future Volume (vph)	0	102	0	0	0	129
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	0.76
Frt						0.850
Flt Protected						
Satd. Flow (prot)	0	3539	0	0	0	3610
Flt Permitted						
Satd. Flow (perm)	0	3539	0	0	0	3610
Link Speed (mph)		55	55		45	
Link Distance (ft)		1093	655		773	
Travel Time (s)		13.5	8.1		11.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	111	0	0	0	140
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	111	0	0	0	140
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 6.7%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	65	1030	0	0	0	0
Future Volume (vph)	65	1030	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	180			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	75				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		45	45		30	
Link Distance (ft)		290	1089		101	
Travel Time (s)		4.4	16.5		2.3	
Peak Hour Factor	0.94	0.94	0.92	0.92	0.92	0.92
Adj. Flow (vph)	69	1096	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	69	1096	0	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 64.7%	ICU Level of Service C
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	3700	593	0	0	0	0
Future Volume (vph)	3700	593	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	1.00	1.00	1.00	1.00
Frt	0.979					
Flt Protected						
Satd. Flow (prot)	4979	0	0	0	0	0
Flt Permitted						
Satd. Flow (perm)	4979	0	0	0	0	0
Link Speed (mph)	45			45	30	
Link Distance (ft)	311			156	174	
Travel Time (s)	4.7			2.4	4.0	
Peak Hour Factor	0.90	0.90	0.92	0.92	0.92	0.92
Adj. Flow (vph)	4111	659	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	4770	0	0	0	0	0
Sign Control	Free			Stop	Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 108.5% ICU Level of Service G

Analysis Period (min) 15

Lane Group	NBT	NBR	SBL	SBT	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	0	0	112	2894	0	0
Future Volume (vph)	0	0	112	2894	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	500		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			100		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	3539	0	0
Link Speed (mph)	30			25	25	
Link Distance (ft)	266			1471	301	
Travel Time (s)	6.0			40.1	8.2	
Peak Hour Factor	0.92	0.92	0.75	0.75	0.92	0.92
Adj. Flow (vph)	0	0	149	3859	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	149	3859	0	0
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 83.3%	ICU Level of Service E
Analysis Period (min) 15	

Lane Group	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	582	122	0	0	0	0
Future Volume (vph)	582	122	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected		0.960				
Satd. Flow (prot)	0	1788	0	0	0	0
Flt Permitted		0.960				
Satd. Flow (perm)	0	1788	0	0	0	0
Link Speed (mph)		25	30		25	
Link Distance (ft)		1207	315		252	
Travel Time (s)		32.9	7.2		6.9	
Peak Hour Factor	0.75	0.75	0.92	0.92	0.92	0.92
Adj. Flow (vph)	776	163	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	939	0	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 53.5% ICU Level of Service A
Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	103	0	69	0	0
Future Volume (vph)	0	103	0	69	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.865		
Flt Protected						
Satd. Flow (prot)	0	1652	0	1191	0	0
Flt Permitted						
Satd. Flow (perm)	0	1652	0	1191	0	0
Link Speed (mph)		25	25		25	
Link Distance (ft)		995	597		1154	
Travel Time (s)		27.1	16.3		31.5	
Peak Hour Factor	0.83	0.83	0.89	0.89	0.92	0.92
Heavy Vehicles (%)	15%	15%	38%	38%	2%	2%
Adj. Flow (vph)	0	124	0	78	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	124	0	78	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 8.8%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	53	5293	0	0
Future Volume (vph)	0	0	53	5293	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	250		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	5085	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	5085	0	0
Link Speed (mph)	45			45	25	
Link Distance (ft)	894			534	137	
Travel Time (s)	13.5			8.1	3.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	58	5753	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	58	5753	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 94.0%	ICU Level of Service F
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	5325	0	0	53	0
Future Volume (vph)	0	5325	0	0	53	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.86	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	6408	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	6408	0	0	1770	0
Link Speed (mph)		45	45		25	
Link Distance (ft)		744	1191		137	
Travel Time (s)		11.3	18.0		3.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	5788	0	0	58	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	5788	0	0	58	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 186.1%	ICU Level of Service H
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	962	4416	0	0	0	0
Future Volume (vph)	962	4416	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	400			0	0	0
Storage Lanes	2			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	0.97	0.86	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	3433	6408	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	3433	6408	0	0	0	0
Link Speed (mph)		45	45		25	
Link Distance (ft)		1191	262		113	
Travel Time (s)		18.0	4.0		3.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1046	4800	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1046	4800	0	0	0	0
Sign Control		Free	Stop		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 157.7%	ICU Level of Service H
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	119	4419	0	0
Future Volume (vph)	0	0	119	4419	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	250		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	5085	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	5085	0	0
Link Speed (mph)	45			45	25	
Link Distance (ft)	254			1016	123	
Travel Time (s)	3.8			15.4	3.4	
Peak Hour Factor	0.92	0.92	0.90	0.87	0.92	0.92
Adj. Flow (vph)	0	0	132	5079	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	132	5079	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 174.0% ICU Level of Service H

Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	244	4293	0	0	0	0
Future Volume (vph)	244	4293	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.91	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	5085	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	5085	0	0	0	0
Link Speed (mph)		45	45		30	
Link Distance (ft)		704	311		111	
Travel Time (s)		10.7	4.7		2.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	265	4666	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	265	4666	0	0	0	0
Sign Control		Free	Stop		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 174.2%	ICU Level of Service H
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	1176	27	0
Future Volume (vph)	0	0	0	1176	27	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	30	
Link Distance (ft)	583			574	107	
Travel Time (s)	7.2			7.1	2.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	1278	29	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1278	29	0
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 68.2% ICU Level of Service C
Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	27	1050	0	0	0	0
Future Volume (vph)	27	1050	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		30	
Link Distance (ft)		1122	576		107	
Travel Time (s)		13.9	7.1		2.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	29	1141	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	29	1141	0	0	0	0
Sign Control		Free	Stop		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 68.2%	ICU Level of Service C
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	1167	36	0	54
Future Volume (vph)	0	0	1167	36	0	54
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.996			0.865
Flt Protected						
Satd. Flow (prot)	0	0	3525	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	0	3525	0	0	1611
Link Speed (mph)		55	55		30	
Link Distance (ft)		590	583		121	
Travel Time (s)		7.3	7.2		2.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	1268	39	0	59
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1307	0	0	59
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 43.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	168	1053	0	0
Future Volume (vph)	0	0	168	1053	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	250		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	3539	0	0
Link Speed (mph)	55			55	30	
Link Distance (ft)	405			590	104	
Travel Time (s)	5.0			7.3	2.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	183	1145	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	183	1145	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 40.6%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑			↰	
Traffic Volume (vph)	0	909	0	0	168	0
Future Volume (vph)	0	909	0	0	168	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	1770	0
Link Speed (mph)		55	55		30	
Link Distance (ft)		316	1122		104	
Travel Time (s)		3.9	13.9		2.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	988	0	0	183	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	988	0	0	183	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 60.9%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	67	1050	0	0
Future Volume (vph)	0	0	67	1050	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	250			0
Storage Lanes	0	0	2			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	0.97	0.91	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	3433	5085	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	3433	5085	0	0
Link Speed (mph)	45			55	30	
Link Distance (ft)	105			493	555	
Travel Time (s)	1.6			6.1	12.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	73	1141	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	73	1141	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 46.6%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	891	159	0	0	0	0
Future Volume (vph)	891	159	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.94	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	4990	1863	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	4990	1863	0	0	0	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		555	271		108	
Travel Time (s)		12.6	6.2		2.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	968	173	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	968	173	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 41.2%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NEL	NER
Lane Configurations	↑					↱
Traffic Volume (vph)	73	0	0	0	0	159
Future Volume (vph)	73	0	0	0	0	159
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	1863	0	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	1863	0	0	0	0	1611
Link Speed (mph)	25			30	25	
Link Distance (ft)	287			1072	271	
Travel Time (s)	7.8			24.4	7.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	79	0	0	0	0	173
Shared Lane Traffic (%)						
Lane Group Flow (vph)	79	0	0	0	0	173
Sign Control	Yield			Free	Free	

Intersection Summary		
Area Type:	Other	
Control Type: Unsignalized		
Intersection Capacity Utilization 20.7%		ICU Level of Service A
Analysis Period (min) 15		

Lane Group	NBT	NBR	SBL	SBT	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	0	0	73	823	0	0
Future Volume (vph)	0	0	73	823	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.91	0.91	1.00	1.00
Frt						
Flt Protected				0.996		
Satd. Flow (prot)	0	0	0	5053	0	0
Flt Permitted				0.996		
Satd. Flow (perm)	0	0	0	5053	0	0
Link Speed (mph)	45			45	45	
Link Distance (ft)	194			406	287	
Travel Time (s)	2.9			6.2	4.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	5%	2%	2%	2%
Adj. Flow (vph)	0	0	79	895	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	974	0	0
Sign Control	Free			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 20.7%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	104	110	0	0	0	0
Future Volume (vph)	104	110	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1719	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1719	3539	0	0	0	0
Link Speed (mph)		25	25		25	
Link Distance (ft)		879	346		271	
Travel Time (s)		24.0	9.4		7.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	2%	2%	2%	2%	2%
Adj. Flow (vph)	113	120	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	113	120	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 32.9% ICU Level of Service A
Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	79	0	0	81
Future Volume (vph)	0	0	79	0	0	81
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	0	0	1863	0	0	1565
Flt Permitted						
Satd. Flow (perm)	0	0	1863	0	0	1565
Link Speed (mph)		30	45		45	
Link Distance (ft)		874	182		254	
Travel Time (s)		19.9	2.8		3.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	5%
Adj. Flow (vph)	0	0	86	0	0	88
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	86	0	0	88
Sign Control		Free	Free		Yield	

Intersection Summary		
Area Type:	Other	
Control Type: Unsignalized		
Intersection Capacity Utilization 37.3%		ICU Level of Service A
Analysis Period (min) 15		

Lane Group	EBL	EBR	SBL	SBR	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	0	0	0	0	79	916
Future Volume (vph)	0	0	0	0	79	916
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.91
Frt					0.885	0.850
Flt Protected					0.988	
Satd. Flow (prot)	0	0	0	0	1593	2799
Flt Permitted					0.988	
Satd. Flow (perm)	0	0	0	0	1593	2799
Link Speed (mph)	30		30		30	
Link Distance (ft)	182		207		337	
Travel Time (s)	4.1		4.7		7.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	5%
Adj. Flow (vph)	0	0	0	0	86	996
Shared Lane Traffic (%)						28%
Lane Group Flow (vph)	0	0	0	0	365	717
Sign Control	Stop		Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 37.3%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	797	81	0	0	0	0
Future Volume (vph)	797	81	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00
Frt	0.986					
Flt Protected						
Satd. Flow (prot)	3390	0	0	0	0	0
Flt Permitted						
Satd. Flow (perm)	3390	0	0	0	0	0
Link Speed (mph)	30			45	25	
Link Distance (ft)	306			190	254	
Travel Time (s)	7.0			2.9	6.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	5%	2%	2%	2%	2%
Adj. Flow (vph)	866	88	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	954	0	0	0	0	0
Sign Control	Free			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 49.7%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	0	99	151	0	0
Future Volume (vph)	0	0	99	151	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			250	0	0
Storage Lanes	0			1	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	1.00
Frt				0.850		
Flt Protected						
Satd. Flow (prot)	0	0	3539	1538	0	0
Flt Permitted						
Satd. Flow (perm)	0	0	3539	1538	0	0
Link Speed (mph)		25	25		25	
Link Distance (ft)		241	1465		317	
Travel Time (s)		6.6	40.0		8.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	5%	2%	2%
Adj. Flow (vph)	0	0	108	164	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	108	164	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 13.3%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	1067	64	0
Future Volume (vph)	0	0	0	1067	64	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	4940	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	4940	1770	0
Link Speed (mph)	55			30	25	
Link Distance (ft)	598			415	105	
Travel Time (s)	7.4			9.4	2.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	5%	2%	2%
Adj. Flow (vph)	0	0	0	1160	70	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1160	70	0
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 51.6% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	64	878	0	0	0	0
Future Volume (vph)	64	878	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3438	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3438	0	0	0	0
Link Speed (mph)		55	30		25	
Link Distance (ft)		597	306		105	
Travel Time (s)		7.4	7.0		2.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	5%	2%	2%	2%	2%
Adj. Flow (vph)	70	954	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	70	954	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 51.6%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑	↰	
Traffic Volume (vph)	0	0	0	844	0	0
Future Volume (vph)	0	0	0	844	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	0	0	0	3539	1863	0
Flt Permitted						
Satd. Flow (perm)	0	0	0	3539	1863	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	586			210	99	
Travel Time (s)	7.3			2.6	2.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	917	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	917	0	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 33.3%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	735	0	0	0	0
Future Volume (vph)	0	735	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	1863	3539	0	0	0	0
Flt Permitted						
Satd. Flow (perm)	1863	3539	0	0	0	0
Link Speed (mph)		55	55		25	
Link Distance (ft)		589	212		99	
Travel Time (s)		7.3	2.6		2.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	799	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	799	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 33.3%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	844	0	0
Future Volume (vph)	0	0	0	844	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	0	0	0	3539	0	0
Flt Permitted						
Satd. Flow (perm)	0	0	0	3539	0	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	723			586	81	
Travel Time (s)	9.0			7.3	2.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	917	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	917	0	0
Sign Control	Free			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 33.3%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	735	0	0	0	0	0	0	0	0	0	0
Future Volume (vph)	0	735	0	0	0	0	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	3539	0	0	0	0	0	0	1863	0	1863	0
Flt Permitted												
Satd. Flow (perm)	0	3539	0	0	0	0	0	0	1863	0	1863	0
Link Speed (mph)		55			55			25			25	
Link Distance (ft)		719			589			84			81	
Travel Time (s)		8.9			7.3			2.3			2.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	799	0	0	0	0	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	799	0	0	0	0	0	0	0	0	0	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 30.3%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	0	735	0	844	0	0
Future Volume (vph)	0	735	0	844	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.88	1.00	0.95	1.00	1.00
Frt		0.850				
Flt Protected						
Satd. Flow (prot)	0	2787	0	3539	0	0
Flt Permitted						
Satd. Flow (perm)	0	2787	0	3539	0	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	997			723	719	
Travel Time (s)	12.4			9.0	19.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	799	0	917	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	799	0	917	0	0
Sign Control	Free			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 29.0%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	286	764	0	0	0	0
Future Volume (vph)	286	764	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		55	
Link Distance (ft)		2077	2379		116	
Travel Time (s)		25.7	29.5		1.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	311	830	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	311	830	0	0	0	0
Sign Control		Free	Stop		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 47.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NEL	NER
Lane Configurations				↑↑	↰	
Traffic Volume (vph)	0	0	0	727	286	0
Future Volume (vph)	0	0	0	727	286	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	607			2382	116	
Travel Time (s)	7.5			29.5	3.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	790	311	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	790	311	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 54.6%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	0	0	14	727	0	0
Future Volume (vph)	0	0	14	727	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	250		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	3539	0	0
Link Speed (mph)	55			55	55	
Link Distance (ft)	2382			560	108	
Travel Time (s)	29.5			6.9	1.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	15	790	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	15	790	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary		
Area Type:	Other	
Control Type: Unsignalized		
Intersection Capacity Utilization 73.2%		ICU Level of Service D
Analysis Period (min) 15		

Lane Group	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	0	764	0	0	14	0
Future Volume (vph)	0	764	0	0	14	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	1770	0
Link Speed (mph)		55	55		25	
Link Distance (ft)		2379	608		108	
Travel Time (s)		29.5	7.5		2.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	830	0	0	15	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	830	0	0	15	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 47.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	739	39	0	0	0	32
Future Volume (vph)	739	39	0	0	0	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		600	600		0	0
Storage Lanes		0	0		0	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00
Frt	0.993					0.865
Flt Protected						
Satd. Flow (prot)	3514	0	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	3514	0	0	0	0	1611
Link Speed (mph)	55			55	45	
Link Distance (ft)	608			628	1089	
Travel Time (s)	7.5			7.8	16.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	803	42	0	0	0	35
Shared Lane Traffic (%)						
Lane Group Flow (vph)	845	0	0	0	0	35
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 31.7%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	732	9	0
Future Volume (vph)	0	0	0	732	9	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	645			3831	112	
Travel Time (s)	8.0			47.5	3.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	796	10	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	796	10	0
Sign Control	Free			Free	Stop	

Intersection Summary		
Area Type:	Other	
Control Type: Unsignalized		
Intersection Capacity Utilization 48.4%		ICU Level of Service A
Analysis Period (min) 15		

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	9	762	0	0	0	0
Future Volume (vph)	9	762	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		55	
Link Distance (ft)		628	3825		112	
Travel Time (s)		7.8	47.4		1.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	10	828	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	10	828	0	0	0	0
Sign Control		Free	Stop		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 48.0%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	10	732	0	0
Future Volume (vph)	0	0	10	732	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	250		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	3539	0	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	3831			538	97	
Travel Time (s)	47.5			6.7	2.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	11	796	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	11	796	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary		
Area Type:	Other	
Control Type: Unsignalized		
Intersection Capacity Utilization 35.6%		ICU Level of Service A
Analysis Period (min) 15		

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	762	0	0	10	0
Future Volume (vph)	0	762	0	0	10	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	1770	0
Link Speed (mph)		55	55		25	
Link Distance (ft)		3825	591		97	
Travel Time (s)		47.4	7.3		2.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	828	0	0	11	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	828	0	0	11	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 48.0%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	760	12	0	0	0	16
Future Volume (vph)	760	12	0	0	0	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00
Frt	0.998					0.865
Flt Protected						
Satd. Flow (prot)	3532	0	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	3532	0	0	0	0	1611
Link Speed (mph)	55			55	45	
Link Distance (ft)	591			1206	1073	
Travel Time (s)	7.3			15.0	16.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	826	13	0	0	0	17
Shared Lane Traffic (%)						
Lane Group Flow (vph)	839	0	0	0	0	17
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 31.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑	↰	
Traffic Volume (vph)	0	0	0	734	9	0
Future Volume (vph)	0	0	0	734	9	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	1254			1793	105	
Travel Time (s)	15.5			22.2	2.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	798	10	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	798	10	0
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 49.5% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	9	767	0	0	0	0
Future Volume (vph)	9	767	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		55	
Link Distance (ft)		1206	1786		105	
Travel Time (s)		15.0	22.1		1.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	10	834	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	10	834	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 48.2% ICU Level of Service A
Analysis Period (min) 15

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations			↰↰	↑↑		
Traffic Volume (vph)	0	0	1028	734	0	0
Future Volume (vph)	0	0	1028	734	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	500		0	0
Storage Lanes		0	2		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	0.97	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	3433	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	3433	3539	0	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	1793			596	109	
Travel Time (s)	22.2			7.4	3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	1117	798	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1117	798	0	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 99.9%	ICU Level of Service F
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	1662	100	0
Future Volume (vph)	0	0	0	1662	100	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	631			2681	109	
Travel Time (s)	7.8			33.2	3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	1807	109	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1807	109	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 74.6%	ICU Level of Service D
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	100	1694	0	0	0	0
Future Volume (vph)	100	1694	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		55	
Link Distance (ft)		627	2678		109	
Travel Time (s)		7.8	33.2		1.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	109	1841	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	109	1841	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 99.4%	ICU Level of Service F
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations			↰↰	↑↑		
Traffic Volume (vph)	0	0	576	1662	0	0
Future Volume (vph)	0	0	576	1662	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	500		0	0
Storage Lanes		0	2		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	0.97	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	3433	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	3433	3539	0	0
Link Speed (mph)	55			55	55	
Link Distance (ft)	2681			671	109	
Travel Time (s)	33.2			8.3	1.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	626	1807	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	626	1807	0	0
Sign Control	Free			Free	Stop	

Intersection Summary		
Area Type:	Other	
Control Type: Unsignalized		
Intersection Capacity Utilization 118.5%		ICU Level of Service H
Analysis Period (min) 15		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑	↰	
Traffic Volume (vph)	0	0	0	2187	51	0
Future Volume (vph)	0	0	0	2187	51	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	654			797	95	
Travel Time (s)	8.1			9.9	2.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	2377	55	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	2377	55	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 91.1%	ICU Level of Service F
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	51	2220	0	0	0	0
Future Volume (vph)	51	2220	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		55	
Link Distance (ft)		659	784		95	
Travel Time (s)		8.2	9.7		1.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	55	2413	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	55	2413	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary		
Area Type:	Other	
Control Type: Unsignalized		
Intersection Capacity Utilization 128.5%		ICU Level of Service H
Analysis Period (min) 15		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↱					↱
Traffic Volume (vph)	1032	18	0	0	0	18
Future Volume (vph)	1032	18	0	0	0	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00
Frt	0.997					0.865
Flt Protected						
Satd. Flow (prot)	3529	0	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	3529	0	0	0	0	1611
Link Speed (mph)	55			55	25	
Link Distance (ft)	576			2077	205	
Travel Time (s)	7.1			25.7	5.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1122	20	0	0	0	20
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1142	0	0	0	0	20
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 39.1%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	3315	0	0	2010	0
Future Volume (vph)	0	3315	0	0	2010	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	0.97	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	3433	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	3433	0
Link Speed (mph)		45	45		45	
Link Distance (ft)		1021	744		215	
Travel Time (s)		15.5	11.3		3.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	3603	0	0	2185	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	3603	0	0	2185	0
Sign Control		Free	Stop		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 155.6%	ICU Level of Service H
Analysis Period (min) 15	

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	0	0	871	129
Future Volume (vph)	0	0	0	0	871	129
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		0	250	
Storage Lanes	0	0		0	2	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.97	0.91
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	0	3433	5085
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	0	3433	5085
Link Speed (mph)	55		45			30
Link Distance (ft)	167		773			587
Travel Time (s)	2.1		11.7			13.3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	947	140
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	0	947	140
Sign Control	Stop		Stop			Free

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 33.9% ICU Level of Service A

Analysis Period (min) 15

1005: WB M-96 (Michigan Avenue) & SB I-69 Off-Ramp (Push Button) Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	25.8	130.9	70.6

1007: EB M-96 (Michigan Avenue) (Push Button) & SB I-69 Off-Ramp/EB M-96 (Michigan Avenue) Perfor

Approach	EB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	20.1	3.5	3.7

1008: WB M-96 (Michigan Avenue)/NB I-69 Off-Ramp & WB M-96 (Michigan Avenue) (Push Button) Perf

Approach	WB	SW	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	72.0	14.0	37.1

1009: WB M-96 (Michigan Avenue) (Push Button)/WB M-96 (Michigan Avenue) & EB M-96 (Michigan Ave

Approach	EB	SW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	32.5	43.0	38.5

1010: NB I-69 Off-Ramp (Push Button) & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	3.7	23.6	6.8

3003: M-227/West Drive & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.0	0.1	0.1
Total Del/Veh (s)	12.6	7.1	20.2	13.1

3093: M-227/West Drive & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	0.0	1.8	0.0	0.3
Total Del/Veh (s)	4.8	30.6	2.6	8.9

4001: M-96 (Michigan Avenue) & WB Main Entrance/WB M-96 (Michigan Avenue) Performance by appro

Approach	WB	SB	All
Denied Del/Veh (s)	0.1	0.0	0.1
Total Del/Veh (s)	109.6	142.2	118.3

4003: EB to WB Xover E of 15 Mile Rd (North) & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	22.2	273.5	88.2
Total Del/Veh (s)	57.9	47.3	55.3

4004: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	519.8	167.0	483.4

4005: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	198.4	43.3	151.7

4006: M-311 (11 Mile Rd) & Site Driveway West Performance by approach

Approach	NB	SB	All
Denied Del/Veh (s)	0.2	0.0	0.1
Total Del/Veh (s)	0.2	0.7	0.5

4007: M-311 (11 Mile Rd) & F Drive N Performance by approach

Approach	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.1	0.2	0.1

4010: EB M-96 (Michigan Avenue)/EB M-96 (Michigan Avenue) (Push Button) & WB M-96 (Michigan Ave

Approach	WB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	42.7	18.4	25.9

4030: NB M-311 (11 Mile Rd)/WB M-96 (Michigan Avenue)/11 Mile Rd (North) & EB M-96 (Michigan Ave

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	17.2	10.2	16.5

4031: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & WB M-96 (Michigan Avenue) Performance by a

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	24.7	2.0	23.1

4033: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & NB to SB Xover N of M-96 (Michigan Avenue) P

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	24.4	3.7	4.8

4034: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & EB I-94 Off-ramp Performance by approach

Approach	SB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.2	18.8	4.1

4035: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & WB M-96 (Michigan Avenue)/11 Mile Rd (North)

Approach	SB	NW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	13.1	30.5	21.0

4036: EB I-94 Off-ramp & WB M-96 (Michigan Avenue)/11 Mile Rd (North) Performance by approach

Approach	NB	NW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	19.7	1.5	3.9

4037: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & WB I-94 Off-ramp Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.1	24.7	4.6

4038: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & EB M-96 (Michigan Avenue)/11 Mile Rd (South)

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	18.7	30.2	24.2

4039: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & WB I-94 Off-ramp Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	19.0	4.3	6.8

4040: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & 11 Mile Rd Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	19.8	2.6	16.1

4041: 11 Mile Rd & WB M-96 (Michigan Avenue)/11 Mile Rd (North) Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	17.2	24.3	18.8

4042: 11 Mile Rd & H Dr N Performance by approach

Approach	NE	SW	All
Denied Del/Veh (s)	0.0	0.2	0.1
Total Del/Veh (s)	2.4	3.6	2.9

4050: Prop Site Drive E & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	421.4	170.7
Total Del/Veh (s)	152.5	592.9	286.9

4051: Prop Site Drive W & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	254.5	146.6
Total Del/Veh (s)	100.0	305.2	202.6

4061: WB M-96 (Michigan Avenue) & Firekeepers Main Drive Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	3.2	50.0	9.5

4065: WB M-96 (Michigan Avenue) & 15 Mile Rd (North) Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	10.0	0.0	8.4
Total Del/Veh (s)	98.1	178.0	111.7

4066: EB M-96 (Michigan Avenue) & WB to EB Xover W of 15 Mile Rd (South) Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	19.2	32.3	19.4

4067: 15 Mile Rd (South) & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.6	0.1
Total Del/Veh (s)	72.1	56.2	70.2

4068: EB to WB Xover E of 15 Mile Rd (South) & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	42.7	0.0	39.7
Total Del/Veh (s)	46.1	63.9	47.4

4070: M-311 (11 Mile Rd) & Site Drive East Performance by approach

Approach	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.1	0.2	0.1

4071: 15 Mile Rd & Verona Rd Performance by approach

Approach	NB	SB	SE	NW	All
Denied Del/Veh (s)	6.0	0.1	11.6	117.5	17.0
Total Del/Veh (s)	33.2	6.1	41.4	414.2	62.6

4075: 11 Mile Road & Verona Road Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	206.1	2.2	0.6	92.3
Total Del/Veh (s)	63.5	219.9	27.4	45.6	125.5

9002: WB M-96 (Michigan Avenue) & Firekeepers Gas Station Driveway Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.2	0.1
Total Del/Veh (s)	1.6	7.4	3.0

9003: WB M-96 (Michigan Avenue) & Firekeepers E Drive Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.6	6.5	2.7

9004: WB M-96 (Michigan Avenue) & Ackerson Drive Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	1.3	4.1	1.3

9006: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	0.8	1.3	0.8

9008: 15 Mile Rd (North) & Old M-96 (Michigan Ave) Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.0	0.0	0.0
Total Del/Veh (s)	4.8	0.7	175.4	90.6

9013: SB I-69 On-Ramp & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	118.6	118.6

9016: EB M-96 (Michigan Avenue) & NB I-69 On-Ramp Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.1	0.1
Total Del/Veh (s)	24.1	24.1

9017: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	1.1	1.1
Total Del/Veh (s)	26.5	26.5

9018: EB M-96 (Michigan Avenue) & WB to EB Xover W of M-227/West Drive Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.1	8.0	2.3

9019: EB to WB Xover W of M-227/West Drive & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.1	0.0	0.1
Total Del/Veh (s)	4.5	26.0	6.8

9020: EB M-96 (Michigan Avenue) & WB to EB Xover E of M-227/West Drive Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.1	7.6	1.7

9021: EB to WB Xover E of M-227/West Drive & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	3.6	0.0	3.4
Total Del/Veh (s)	14.0	24.8	14.5

9023: M-311 (11 Mile Rd) & B Drive North Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.7	0.3	1.2	0.5	0.6
Total Del/Veh (s)	1.4	1.0	10.3	10.6	3.0

9025: M-294 (Beadle Lake Road) & EB I-94 Off-Ramp & EB I-94 On-Ramp Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	2.6	0.3	0.0	0.6
Total Del/Veh (s)	6.4	1.6	1.7	2.5

9026: WB I-94 On-Ramp & M-294 (Beadle Lake Road) & WB I-94 Off-Ramp Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	2.0	0.0	0.3	0.5
Total Del/Veh (s)	6.8	1.6	1.2	2.4

9027: Old US-27 & EB I-94 to Old US-27 Off Ramp Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0
Total Del/Veh (s)	7.4	0.2	0.9	2.7

9028: Old US-27 & NB Old US-27 to EB I-94 On Ramp Performance by approach

Approach	NB	SB	All
Denied Del/Veh (s)	0.6	0.0	0.3
Total Del/Veh (s)	0.8	0.4	0.6

9029: SB Old US-27 WB I-94 On Ramp & Old US-27 & WB I-94 to Old US-27 Off Ramp Performance by

Approach	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	1.2	0.5
Total Del/Veh (s)	4.6	0.2	0.8	1.1

9030: I-94BL/Partello Rd & EB I-94 to I-94BL/Partello Off Ramp Performance by approach

Approach	SE	NE	SW	All
Denied Del/Veh (s)	0.0	0.2	0.0	0.1
Total Del/Veh (s)	4.4	1.4	0.2	1.7

9031: I-94BL/Partello Rd & I-94/Partello Rd to EB I-94 On Ramp Performance by approach

Approach	NE	SW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.2	0.7	0.4

9032: I-94BL/Partello Rd & WB I-94 to I-94/Partello Rd Performance by approach

Approach	EB	NE	SW	All
Denied Del/Veh (s)	0.0	0.0	0.8	0.2
Total Del/Veh (s)	3.6	1.2	0.5	1.7

9034: Dummy Node & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	2.4	96.9	3.7
Total Del/Veh (s)	42.5	1052.4	54.9

9035: Dummy Node & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	0.5	6.4	0.7

9036: WB M-96 (Michigan Avenue) & Dummy Node Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	3.8	28.8	4.6

9037: WB M-96 (Michigan Avenue) & Dummy Node Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.1	2.1

9040: Old US-27 & NB Old US-27 to WB I-94 On Ramp Performance by approach

Approach	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.0	0.2	0.8

9041: WB to EB Xover E of M-227/West Drive/McDonald's Dr & WB M-96 (Michigan Avenue) Performanc

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.2	0.0
Total Del/Veh (s)	6.5	32.9	8.3

9128: M-96 (Michigan Avenue)/WB M-96 (Michigan Avenue) & EB M-96 (Michigan Avenue) Performance

Approach	NB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	57.1	364.1	216.2

9137: SB I-69 On-Ramp Performance by approach

Approach	SB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	14.4	1.2	3.7

9143: NB I-69 On-Ramp Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.1
Total Del/Veh (s)	19.8	3.5	4.6

9146: WB to EB Xover W of M-227/West Drive & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	21.4	21.4

9147: EB M-96 (Michigan Avenue) & EB to WB Xover W of M-227/West Drive Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	3.4	3.4

9150: M-311 (11 Mile Rd) /NB M-311 (11 Mile Rd) & SB M-311 (11 Mile Rd) Performance by approach

Approach	NB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.1	0.2	0.2

9151: EB M-96 (Michigan Avenue) & EB to WB Xover E of M-227/West Drive Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.8	0.8

9157: SB I-69 On-Ramp & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.2	0.2
Total Del/Veh (s)	29.6	29.6

9158: SB I-69 Off-Ramp (Push Button) & SB I-69 Off-Ramp Performance by approach

Approach	SB	All
Denied Del/Veh (s)	1239.5	1239.5
Total Del/Veh (s)	451.3	451.3

9159: NB I-69 Off-Ramp & NB I-69 Off-Ramp (Push Button) Performance by approach

Approach	NB	All
Denied Del/Veh (s)	96.7	96.7
Total Del/Veh (s)	127.3	127.3

9178: WB I-94 to BL-94/Partello Rd Off Ramp/WB I-94 to I-94/Partello Rd & BL-94/Partello Rd to WB I-94

Approach	EB	WB	All
Denied Del/Veh (s)	0.2	0.0	0.1
Total Del/Veh (s)	0.2	0.3	0.3

9304: WB to EB Xover W of 15 Mile Rd (North) & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	68.0	68.0

9305: EB M-96 (Michigan Avenue) & WB to EB Xover W of 15 Mile Rd (North) Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	39.0	720.5	43.9

9307: EB M-96 (Michigan Avenue) & EB to WB Xover E of 15 Mile Rd (North) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.1	0.1
Total Del/Veh (s)	82.6	82.6

9310: WB to EB Xover W of 15 Mile Rd (South) & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	73.3	73.3
Total Del/Veh (s)	221.4	221.4

9311: EB M-96 (Michigan Avenue) & EB to WB Xover E of 15 Mile Rd (South) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.1	0.1
Total Del/Veh (s)	52.5	52.5

9330: EB to WB Xover E of Old M-311 (11 Mile Rd) & WB M-96 (Michigan Avenue) Performance by appr

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.5	6.1	1.6

9331: EB M-96 (Michigan Avenue) & EB to WB Xover E of Old M-311 (11 Mile Rd) Performance by appro

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	3.0	3.0

9332: WB M-96 (Michigan Avenue) & Old M-311 (11 Mile Rd) Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.8	5.4	1.1

9336: WB to EB Xover W of Old M-311 (11 Mile Rd) & WB M-96 (Michigan Avenue) Performance by app

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.3	2.3

9337: EB M-96 (Michigan Avenue) & WB to EB Xover W of Old M-311 (11 Mile Rd) Performance by appr

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	4.8	10.3	5.5

9338: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & NB to SB Xover N of M-96 (Michigan Avenue) F

Approach	NB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	1.9	1.9

9339: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & EB I-94 On Ramp Performance by approach

Approach	NB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	6.8	6.8

9340: EB I-94 On Ramp Performance by approach

Approach	EB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	4.2	0.1	1.7

9342: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & EB I-94 On Ramp Performance by approach

Approach	SB	All
Denied Del/Veh (s)	0.1	0.1
Total Del/Veh (s)	19.5	19.5

9343: EB I-94 Off-ramp Performance by approach

Approach	EB	All
Denied Del/Veh (s)	1.8	1.8
Total Del/Veh (s)	1.0	1.0

9346: WB I-94 On Ramp Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.7	3.5	2.6

9347: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & WB I-94 On Ramp Performance by approach

Approach	NW	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	4.6	4.6

9348: WB I-94 On Ramp & EB M-96 (Michigan Avenue)/11 Mile Rd (South) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	7.1	7.1

9349: WB I-94 Off-ramp Performance by approach

Approach	WB	All
Denied Del/Veh (s)	1.2	1.2
Total Del/Veh (s)	0.6	0.6

9351: SB to NB Xover E of 11 Mile Rd & WB M-96 (Michigan Avenue)/11 Mile Rd (North) Performance b

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.2	3.8	1.4

9352: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & SB to NB Xover E of 11 Mile Rd Performance b

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	7.5	7.5

9354: EB to WB Xover W of 11 Mile Rd & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	3.5	3.5

9355: EB M-96 (Michigan Avenue) & EB to WB Xover W of 11 Mile Rd Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	3.6	3.6

9356: WB to EB Xover W of 11 Mile Rd & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.5	2.5

9357: EB M-96 (Michigan Avenue) & WB to EB Xover W of 11 Mile Rd Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.4	0.4

9359: EB M-96 (Michigan Avenue) & M-96 (Michigan Avenue)/WB M-96 (Michigan Avenue) Performance

Approach	EB	WB	All
Denied Del/Veh (s)	0.2	0.0	0.1
Total Del/Veh (s)	2.6	0.8	1.7

9381: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	3.2	3.2

9382: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.3	4.8	3.5

9383: WB M-96 (Michigan Avenue) Performance by approach

Approach	NW	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.4	0.4

9384: EB M-96 (Michigan Avenue) Performance by approach

Approach	SE	SW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.8	5.3	1.8

9385: Ceresco Road/12 Mile Road & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	0.9	5.6	1.1

9386: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.7	3.7	2.7

9387: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.6	0.6

9388: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.3	0.3

9389: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.6	4.2	2.6

9390: 13 Mile Rd & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	0.6	4.4	0.7

9392: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.0	3.5	1.0

9393: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	13.9	13.9

9394: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	45.0	45.0

9396: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.9	6.5	2.4

9397: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	82.0	82.0

9398: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	143.6	143.6

9400: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	185.0	302.1	187.8

9401: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.8	0.8
Total Del/Veh (s)	141.6	141.6

9410: Retail Drive & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	0.9	7.8	1.1

9415: EB Main Entrance/EB M-96 (Michigan Avenue) & M-96 (Michigan Avenue) Performance by approa

Approach	EB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	72.1	24.6	61.8

9416: SB M-311 (11 Mile Rd)/EB M-96 (Michigan Avenue)/11 Mile Rd (South) & EB M-96 (Michigan Aver

Approach	SB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	4.2	4.2

Total Network Performance

Denied Del/Veh (s)	305.8
Total Del/Veh (s)	401.0

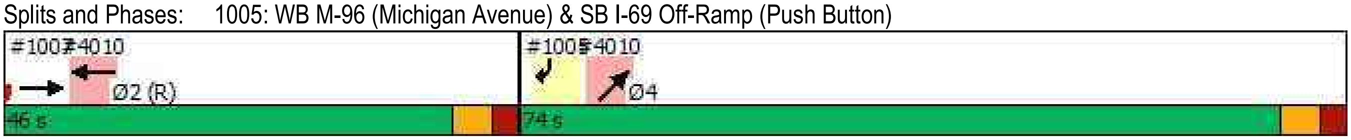
Scenario M1&S1

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø2
Lane Configurations							
Traffic Volume (vph)	0	0	1054	0	0	1019	
Future Volume (vph)	0	0	1054	0	0	1019	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	0.91	1.00	1.00	0.76	
Frt						0.850	
Flt Protected							
Satd. Flow (prot)	0	0	5085	0	0	3610	
Flt Permitted							
Satd. Flow (perm)	0	0	5085	0	0	3610	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)						558	
Link Speed (mph)		45	45		25		
Link Distance (ft)		275	194		266		
Travel Time (s)		4.2	2.9		7.3		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.84	0.75	
Heavy Vehicles (%)	2%	2%	2%	2%	3%	2%	
Adj. Flow (vph)	0	0	1146	0	0	1359	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	1146	0	0	1359	
Turn Type			NA			Prot	
Protected Phases			Free!			4!	2
Permitted Phases							
Minimum Split (s)						17.0	17.0
Total Split (s)						74.0	46.0
Total Split (%)						61.7%	38%
Yellow Time (s)						3.5	3.5
All-Red Time (s)						2.5	2.5
Lost Time Adjust (s)						0.0	
Total Lost Time (s)						6.0	
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)			120.0			68.0	
Actuated g/C Ratio			1.00			0.57	
v/c Ratio			0.23			0.59	
Control Delay			0.1			10.4	
Queue Delay			0.0			0.0	
Total Delay			0.1			10.4	
LOS			A			B	
Approach Delay			0.1		10.4		
Approach LOS			A		B		
Queue Length 50th (ft)			0			164	
Queue Length 95th (ft)			0			137	
Internal Link Dist (ft)		195	114		186		
Turn Bay Length (ft)							
Base Capacity (vph)			5085			2287	
Starvation Cap Reductn			0			0	
Spillback Cap Reductn			407			44	
Storage Cap Reductn			0			0	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø2
Reduced v/c Ratio			0.24			0.61	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 100 (83%), Referenced to phase 2:EBT, Start of Green	
Natural Cycle: 45	
Control Type: Pretimed	
Maximum v/c Ratio: 0.68	
Intersection Signal Delay: 5.7	Intersection LOS: A
Intersection Capacity Utilization 62.4%	ICU Level of Service B
Analysis Period (min) 15	
! Phase conflict between lane groups.	

Splits and Phases: 1005: WB M-96 (Michigan Avenue) & SB I-69 Off-Ramp (Push Button)

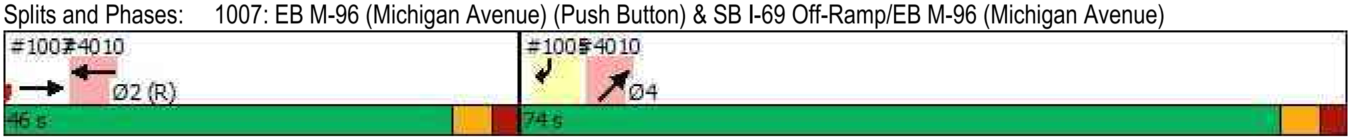


Lane Group	EBT	EBR	WBL	WBT	NEL	NER	Ø4
Lane Configurations							
Traffic Volume (vph)	112	0	0	0	0	1657	
Future Volume (vph)	112	0	0	0	0	1657	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Storage Length (ft)		260	285		0	0	
Storage Lanes		0	0		0	3	
Taper Length (ft)			240		25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.76	
Frt						0.850	
Flt Protected							
Satd. Flow (prot)	1863	0	0	0	0	3610	
Flt Permitted							
Satd. Flow (perm)	1863	0	0	0	0	3610	
Right Turn on Red		Yes				Yes	
Satd. Flow (RTOR)						2086	
Link Speed (mph)	25			45	45		
Link Distance (ft)	301			619	190		
Travel Time (s)	8.2			9.4	2.9		
Peak Hour Factor	0.75	0.84	0.92	0.92	0.90	0.90	
Heavy Vehicles (%)	2%	3%	2%	2%	2%	2%	
Adj. Flow (vph)	149	0	0	0	0	1841	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	149	0	0	0	0	1841	
Turn Type	NA					Free	
Protected Phases	2						4
Permitted Phases						Free	
Minimum Split (s)	17.0						17.0
Total Split (s)	46.0						74.0
Total Split (%)	38.3%						62%
Yellow Time (s)	3.5						3.5
All-Red Time (s)	2.5						2.5
Lost Time Adjust (s)	0.0						
Total Lost Time (s)	6.0						
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)	40.0					120.0	
Actuated g/C Ratio	0.33					1.00	
v/c Ratio	0.24					0.51	
Control Delay	30.3					3.9	
Queue Delay	0.0					0.0	
Total Delay	30.3					3.9	
LOS	C					A	
Approach Delay	30.3				3.9		
Approach LOS	C				A		
Queue Length 50th (ft)	83					105	
Queue Length 95th (ft)	111					183	
Internal Link Dist (ft)	221			539	110		
Turn Bay Length (ft)							
Base Capacity (vph)	621					3610	

Lane Group	EBT	EBR	WBL	WBT	NEL	NER	Ø4
Starvation Cap Reductn	0					0	
Spillback Cap Reductn	0					0	
Storage Cap Reductn	0					0	
Reduced v/c Ratio	0.24					0.51	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 100 (83%), Referenced to phase 2:EBT, Start of Green	
Natural Cycle: 45	
Control Type: Pretimed	
Maximum v/c Ratio: 0.68	
Intersection Signal Delay: 5.8	Intersection LOS: A
Intersection Capacity Utilization 31.5%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 1007: EB M-96 (Michigan Avenue) (Push Button) & SB I-69 Off-Ramp/EB M-96 (Michigan Avenue)

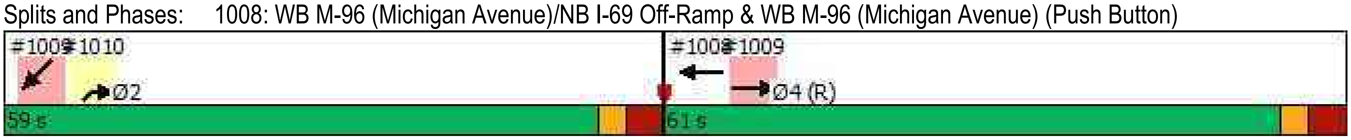


Lane Group	EBL	EBT	WBT	WBR	SWL	SWR	Ø2
Lane Configurations							
Traffic Volume (vph)	0	0	405	0	0	768	
Future Volume (vph)	0	0	405	0	0	768	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.88	
Frt						0.850	
Flt Protected							
Satd. Flow (prot)	0	0	3539	0	0	2787	
Flt Permitted							
Satd. Flow (perm)	0	0	3539	0	0	2787	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)						1152	
Link Speed (mph)		45	25		45		
Link Distance (ft)		217	252		223		
Travel Time (s)		3.3	6.9		3.4		
Peak Hour Factor	0.92	0.92	0.75	0.93	0.92	0.92	
Heavy Vehicles (%)	2%	2%	2%	6%	2%	2%	
Adj. Flow (vph)	0	0	540	0	0	835	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	540	0	0	835	
Turn Type			NA			Free	
Protected Phases			4				2
Permitted Phases						Free	
Minimum Split (s)			16.0				16.0
Total Split (s)			61.0				59.0
Total Split (%)			50.8%				49%
Yellow Time (s)			2.5				2.5
All-Red Time (s)			3.5				3.5
Lost Time Adjust (s)			0.0				
Total Lost Time (s)			6.0				
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)			55.0			120.0	
Actuated g/C Ratio			0.46			1.00	
v/c Ratio			0.33			0.30	
Control Delay			21.5			2.8	
Queue Delay			0.0			0.0	
Total Delay			21.5			2.8	
LOS			C			A	
Approach Delay			21.5		2.8		
Approach LOS			C		A		
Queue Length 50th (ft)			137			61	
Queue Length 95th (ft)			144			63	
Internal Link Dist (ft)		137	172		143		
Turn Bay Length (ft)							
Base Capacity (vph)			1622			2787	
Starvation Cap Reductn			0			0	
Spillback Cap Reductn			0			0	
Storage Cap Reductn			0			0	

Lane Group	EBL	EBT	WBT	WBR	SWL	SWR	Ø2
Reduced v/c Ratio			0.33			0.30	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 92 (77%), Referenced to phase 4:WBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.54	
Intersection Signal Delay: 10.1	Intersection LOS: B
Intersection Capacity Utilization 43.7%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 1008: WB M-96 (Michigan Avenue)/NB I-69 Off-Ramp & WB M-96 (Michigan Avenue) (Push Button)



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	0	746	0	0	0	0	0	0	0	0	768	0
Future Volume (vph)	0	746	0	0	0	0	0	0	0	0	768	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	3539	0	0	0	0	0	0	0	0	3539	0
Flt Permitted												
Satd. Flow (perm)	0	3539	0	0	0	0	0	0	0	0	3539	0
Right Turn on Red			Yes			Yes			Yes	Yes		Yes
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		209			206			223			213	
Travel Time (s)		3.2			3.1			3.4			3.2	
Peak Hour Factor	0.86	0.86	0.86	0.92	0.92	0.92	0.92	0.92	0.92	0.91	0.91	0.91
Adj. Flow (vph)	0	867	0	0	0	0	0	0	0	0	844	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	867	0	0	0	0	0	0	0	0	844	0
Turn Type		NA									NA	
Protected Phases		4									2	
Permitted Phases												
Minimum Split (s)		16.0									16.0	
Total Split (s)		61.0									59.0	
Total Split (%)		50.8%									49.2%	
Yellow Time (s)		2.5									2.5	
All-Red Time (s)		3.5									3.5	
Lost Time Adjust (s)		0.0									0.0	
Total Lost Time (s)		6.0									6.0	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		55.0									53.0	
Actuated g/C Ratio		0.46									0.44	
v/c Ratio		0.53									0.54	
Control Delay		31.8									24.4	
Queue Delay		0.0									0.0	
Total Delay		31.8									24.4	
LOS		C									C	
Approach Delay		31.8									24.4	
Approach LOS		C									C	
Queue Length 50th (ft)		352									263	
Queue Length 95th (ft)		404									332	
Internal Link Dist (ft)		129			126			143			133	
Turn Bay Length (ft)												
Base Capacity (vph)		1622									1563	
Starvation Cap Reductn		0									0	
Spillback Cap Reductn		0									0	
Storage Cap Reductn		0									0	
Reduced v/c Ratio		0.53									0.54	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 92 (77%), Referenced to phase 4:WBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.54	
Intersection Signal Delay: 28.2	Intersection LOS: C
Intersection Capacity Utilization 51.9%	ICU Level of Service A
Analysis Period (min) 15	

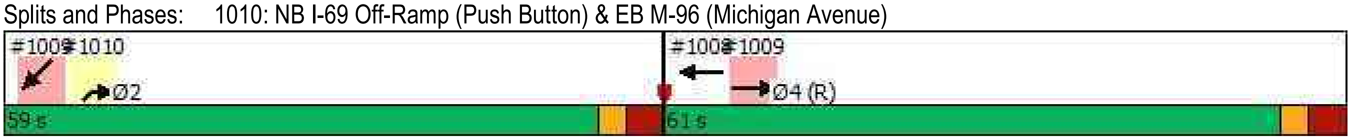
Splits and Phases: 1009: WB M-96 (Michigan Avenue) (Push Button)/WB M-96 (Michigan Avenue) & EB M-96 (Michigan Avenue)

Lane Group	EBT	EBR	WBL	WBT	NEL	NER	Ø4
Lane Configurations							
Traffic Volume (vph)	746	0	0	0	0	122	
Future Volume (vph)	746	0	0	0	0	122	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	0.95	1.00	1.00	1.00	1.00	1.00	
Frt						0.865	
Flt Protected							
Satd. Flow (prot)	3539	0	0	0	0	1611	
Flt Permitted							
Satd. Flow (perm)	3539	0	0	0	0	1611	
Right Turn on Red		Yes				Yes	
Satd. Flow (RTOR)						355	
Link Speed (mph)	45			45	25		
Link Distance (ft)	206			309	315		
Travel Time (s)	3.1			4.7	8.6		
Peak Hour Factor	0.86	0.86	0.92	0.92	0.93	0.75	
Heavy Vehicles (%)	2%	2%	2%	2%	6%	2%	
Adj. Flow (vph)	867	0	0	0	0	163	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	867	0	0	0	0	163	
Turn Type	NA					Prot	
Protected Phases	Free!					2!	4
Permitted Phases							
Minimum Split (s)						16.0	16.0
Total Split (s)						59.0	61.0
Total Split (%)						49.2%	51%
Yellow Time (s)						2.5	2.5
All-Red Time (s)						3.5	3.5
Lost Time Adjust (s)						0.0	
Total Lost Time (s)						6.0	
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)	120.0					53.0	
Actuated g/C Ratio	1.00					0.44	
v/c Ratio	0.24					0.18	
Control Delay	0.2					0.4	
Queue Delay	0.0					0.0	
Total Delay	0.2					0.4	
LOS	A					A	
Approach Delay	0.2				0.4		
Approach LOS	A				A		
Queue Length 50th (ft)	0					0	
Queue Length 95th (ft)	0					0	
Internal Link Dist (ft)	126			229	235		
Turn Bay Length (ft)							
Base Capacity (vph)	3539					909	
Starvation Cap Reductn	0					0	
Spillback Cap Reductn	0					0	
Storage Cap Reductn	0					0	

Lane Group	EBT	EBR	WBL	WBT	NEL	NER	Ø4
Reduced v/c Ratio	0.24					0.18	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 92 (77%), Referenced to phase 4:WBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.54	
Intersection Signal Delay: 0.2	Intersection LOS: A
Intersection Capacity Utilization 51.9%	ICU Level of Service A
Analysis Period (min) 15	
! Phase conflict between lane groups.	

Splits and Phases: 1010: NB I-69 Off-Ramp (Push Button) & EB M-96 (Michigan Avenue)



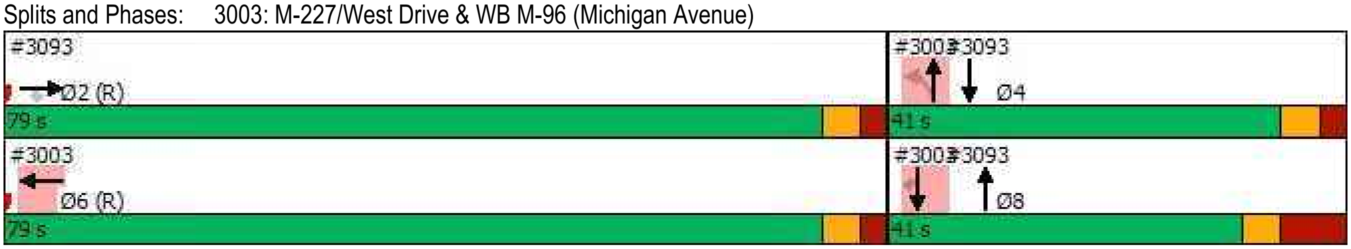
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	720	192	76	50	0	0	84	85
Future Volume (vph)	0	0	0	0	720	192	76	50	0	0	84	85
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		80	0		0	0		0
Storage Lanes	0		0	0		1	1		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.968							0.850
Flt Protected							0.950					
Satd. Flow (prot)	0	0	0	0	4971	0	1671	1863	0	0	1845	1568
Flt Permitted							0.687					
Satd. Flow (perm)	0	0	0	0	4971	0	1209	1863	0	0	1845	1568
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					103							110
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		152			212			101			1197	
Travel Time (s)		2.3			3.2			2.0			23.3	
Peak Hour Factor	0.92	0.92	0.92	0.87	0.87	0.87	0.67	0.67	0.67	0.77	0.77	0.77
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	8%	2%	2%	3%	3%	3%
Adj. Flow (vph)	0	0	0	0	828	221	113	75	0	0	109	110
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1049	0	113	75	0	0	109	110
Turn Type					NA		Perm	NA			NA	Perm
Protected Phases					6			4			8	
Permitted Phases							4					8
Minimum Split (s)					31.0		17.0	17.0			17.0	17.0
Total Split (s)					79.0		41.0	41.0			41.0	41.0
Total Split (%)					65.8%		34.2%	34.2%			34.2%	34.2%
Yellow Time (s)					3.5		3.5	3.5			3.5	3.5
All-Red Time (s)					2.5		2.5	2.5			6.0	6.0
Lost Time Adjust (s)					0.0		0.0	0.0			0.0	0.0
Total Lost Time (s)					6.0		6.0	6.0			9.5	9.5
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)					73.0		35.0	35.0			31.5	31.5
Actuated g/C Ratio					0.61		0.29	0.29			0.26	0.26
v/c Ratio					0.34		0.32	0.14			0.23	0.22
Control Delay					10.7		8.6	5.5			36.2	7.5
Queue Delay					0.0		0.0	0.0			0.0	0.0
Total Delay					10.7		8.6	5.5			36.2	7.5
LOS					B		A	A			D	A
Approach Delay					10.7			7.4			21.8	
Approach LOS					B			A			C	
Queue Length 50th (ft)					123		11	7			66	0
Queue Length 95th (ft)					143		11	8			98	28
Internal Link Dist (ft)		72			132			21			1117	
Turn Bay Length (ft)												
Base Capacity (vph)					3064		352	543			484	492

Lane Group	Ø2
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	2
Permitted Phases	
Minimum Split (s)	16.0
Total Split (s)	79.0
Total Split (%)	66%
Yellow Time (s)	3.5
All-Red Time (s)	2.5
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
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)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
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					0.34		0.32	0.14			0.23	0.22

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 112 (93%), Referenced to phase 2:EBT and 6:, Start of Green	
Natural Cycle: 50	
Control Type: Pretimed	
Maximum v/c Ratio: 0.40	
Intersection Signal Delay: 11.9	Intersection LOS: B
Intersection Capacity Utilization 47.8%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 3003: M-227/West Drive & WB M-96 (Michigan Avenue)



Lane Group	Ø2
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)	0	816	59	0	0	0	0	126	30	0	84	0
Future Volume (vph)	0	816	59	0	0	0	0	126	30	0	84	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		65	0		0	100		0	0		0
Storage Lanes	0		1	0		0	1		0	0		0
Taper Length (ft)	25			25			70			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Frt			0.850					0.971				
Flt Protected												
Satd. Flow (prot)	0	3574	1442	0	0	0	0	3344	0	0	1881	0
Flt Permitted												
Satd. Flow (perm)	0	3574	1442	0	0	0	0	3344	0	0	1881	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			59					24				
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		161			222			1117			101	
Travel Time (s)		2.4			3.4			21.8			2.0	
Peak Hour Factor	0.95	0.95	0.95	0.92	0.92	0.92	0.72	0.72	0.72	0.83	0.83	0.83
Heavy Vehicles (%)	2%	1%	12%	2%	2%	2%	2%	6%	0%	2%	1%	2%
Adj. Flow (vph)	0	859	62	0	0	0	0	175	42	0	101	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	859	62	0	0	0	0	217	0	0	101	0
Turn Type		NA	Perm					NA			NA	
Protected Phases		2						8			4	
Permitted Phases			2									
Minimum Split (s)		16.0	16.0					17.0			17.0	
Total Split (s)		79.0	79.0					41.0			41.0	
Total Split (%)		65.8%	65.8%					34.2%			34.2%	
Yellow Time (s)		3.5	3.5					3.5			3.5	
All-Red Time (s)		2.5	2.5					6.0			2.5	
Lost Time Adjust (s)		0.0	0.0					0.0			0.0	
Total Lost Time (s)		6.0	6.0					9.5			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		73.0	73.0					31.5			35.0	
Actuated g/C Ratio		0.61	0.61					0.26			0.29	
v/c Ratio		0.40	0.07					0.24			0.18	
Control Delay		4.5	0.2					31.7			0.7	
Queue Delay		0.0	0.0					0.0			0.0	
Total Delay		4.5	0.2					31.7			0.7	
LOS		A	A					C			A	
Approach Delay		4.2						31.7			0.7	
Approach LOS		A						C			A	
Queue Length 50th (ft)		42	1					61			0	
Queue Length 95th (ft)		51	0					73			0	
Internal Link Dist (ft)		81			142			1037			21	
Turn Bay Length (ft)			65									
Base Capacity (vph)		2174	900					895			548	

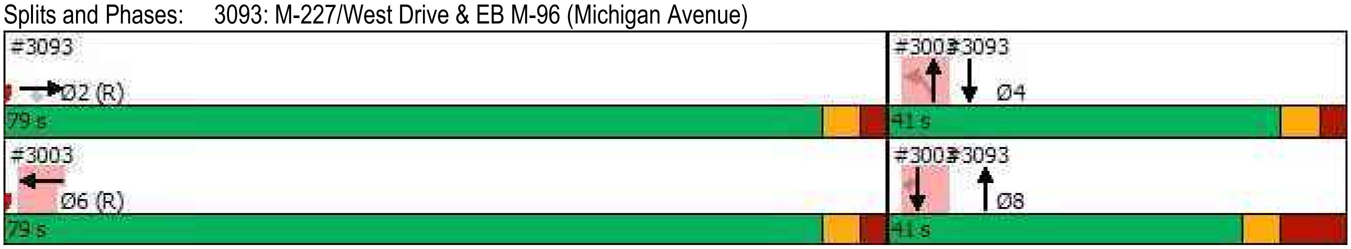
Lane Group	Ø6
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	6
Permitted Phases	
Minimum Split (s)	31.0
Total Split (s)	79.0
Total Split (%)	66%
Yellow Time (s)	3.5
All-Red Time (s)	2.5
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
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)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn		0	0					0			0	
Spillback Cap Reductn		0	0					18			0	
Storage Cap Reductn		0	0					0			0	
Reduced v/c Ratio		0.40	0.07					0.25			0.18	

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 112 (93%), Referenced to phase 2:EBT and 6:, Start of Green
Natural Cycle: 50
Control Type: Pretimed
Maximum v/c Ratio: 0.40
Intersection Signal Delay: 8.8 Intersection LOS: A
Intersection Capacity Utilization 47.8% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 3093: M-227/West Drive & EB M-96 (Michigan Avenue)



Lane Group	Ø6
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

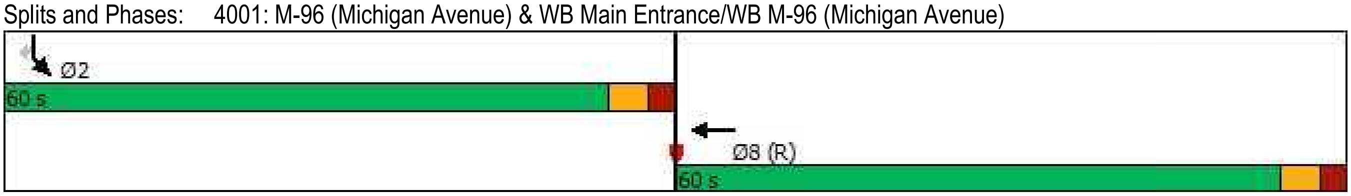
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations										
Traffic Volume (vph)	0	0	0	0	1100	1217	1172	78	0	0
Future Volume (vph)	0	0	0	0	1100	1217	1172	78	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	300		300	0	200	0	0
Storage Lanes	0		0	0		1	2	1	0	0
Taper Length (ft)	25			25			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.88	0.97	1.00	1.00	1.00
Frt						0.850		0.850		
Flt Protected							0.950			
Satd. Flow (prot)	0	0	0	0	3539	2787	3433	1583	0	0
Flt Permitted							0.950			
Satd. Flow (perm)	0	0	0	0	3539	2787	3433	1583	0	0
Right Turn on Red			Yes	Yes		Yes		Yes		
Satd. Flow (RTOR)						694		30		
Link Speed (mph)		45			45		55		45	
Link Distance (ft)		858			894		434		215	
Travel Time (s)		13.0			13.5		5.4		3.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	1196	1323	1274	85	0	0
Shared Lane Traffic (%)										
Lane Group Flow (vph)	0	0	0	0	1196	1323	1274	85	0	0
Turn Type					NA	Free	Prot	Perm		
Protected Phases					8		2			
Permitted Phases						Free		2		
Minimum Split (s)					16.0		16.0	16.0		
Total Split (s)					60.0		60.0	60.0		
Total Split (%)					50.0%		50.0%	50.0%		
Yellow Time (s)					3.5		3.5	3.5		
All-Red Time (s)					2.5		2.5	2.5		
Lost Time Adjust (s)					0.0		0.0	0.0		
Total Lost Time (s)					6.0		6.0	6.0		
Lead/Lag										
Lead-Lag Optimize?										
Act Effct Green (s)					54.0	120.0	54.0	54.0		
Actuated g/C Ratio					0.45	1.00	0.45	0.45		
v/c Ratio					0.75	0.47	0.83	0.12		
Control Delay					28.5	0.5	25.9	5.2		
Queue Delay					0.0	0.0	0.0	0.0		
Total Delay					28.5	0.5	25.9	5.2		
LOS					C	A	C	A		
Approach Delay					13.7		24.6			
Approach LOS					B		C			
Queue Length 50th (ft)					419	0	455	20		
Queue Length 95th (ft)					548	0	558	35		
Internal Link Dist (ft)		778			814		354		135	
Turn Bay Length (ft)						300		200		
Base Capacity (vph)					1592	2787	1544	728		
Starvation Cap Reductn					0	0	0	0		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Spillback Cap Reductn					0	0	0	0		
Storage Cap Reductn					0	0	0	0		
Reduced v/c Ratio					0.75	0.47	0.83	0.12		

Intersection Summary		
Area Type: Other		
Cycle Length: 120		
Actuated Cycle Length: 120		
Offset: 36 (30%), Referenced to phase 8:WBT, Start of Green		
Natural Cycle: 60		
Control Type: Pretimed		
Maximum v/c Ratio: 0.83		
Intersection Signal Delay: 17.6	Intersection LOS: B	
Intersection Capacity Utilization 73.8%	ICU Level of Service D	
Analysis Period (min) 15		

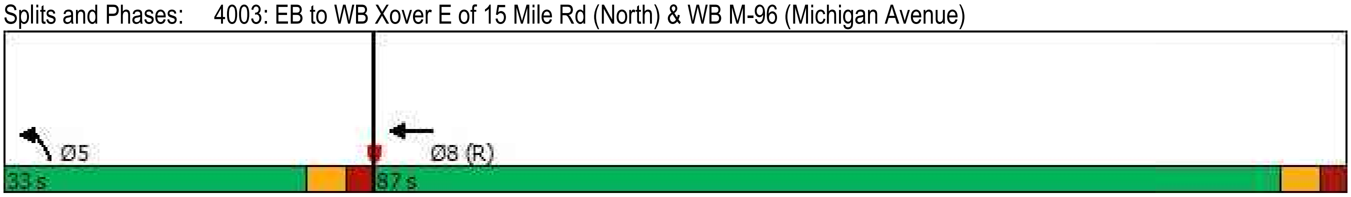
Splits and Phases: 4001: M-96 (Michigan Avenue) & WB Main Entrance/WB M-96 (Michigan Avenue)



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑↑	↰↰	
Traffic Volume (vph)	0	0	0	2067	338	0
Future Volume (vph)	0	0	0	2067	338	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	0.97	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	5085	3433	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	5085	3433	0
Right Turn on Red		Yes			Yes	Yes
Satd. Flow (RTOR)					22	
Link Speed (mph)	45			45	25	
Link Distance (ft)	660			254	113	
Travel Time (s)	10.0			3.8	3.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.70	0.92
Adj. Flow (vph)	0	0	0	2247	483	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	2247	483	0
Turn Type				NA	Prot	
Protected Phases				8	5	
Permitted Phases						
Minimum Split (s)				16.0	13.0	
Total Split (s)				87.0	33.0	
Total Split (%)				72.5%	27.5%	
Yellow Time (s)				3.5	3.5	
All-Red Time (s)				2.5	2.5	
Lost Time Adjust (s)				0.0	0.0	
Total Lost Time (s)				6.0	6.0	
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)				81.0	27.0	
Actuated g/C Ratio				0.68	0.22	
v/c Ratio				0.65	0.61	
Control Delay				6.1	48.9	
Queue Delay				0.0	0.0	
Total Delay				6.1	48.9	
LOS				A	D	
Approach Delay				6.1	48.9	
Approach LOS				A	D	
Queue Length 50th (ft)				125	179	
Queue Length 95th (ft)				173	177	
Internal Link Dist (ft)	580			174	33	
Turn Bay Length (ft)						
Base Capacity (vph)				3432	789	
Starvation Cap Reductn				0	0	
Spillback Cap Reductn				0	0	
Storage Cap Reductn				0	0	
Reduced v/c Ratio				0.65	0.61	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 116 (97%), Referenced to phase 8:WBT, Start of Green	
Natural Cycle: 50	
Control Type: Pretimed	
Maximum v/c Ratio: 0.65	
Intersection Signal Delay: 13.7	Intersection LOS: B
Intersection Capacity Utilization 78.2%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 4003: EB to WB Xover E of 15 Mile Rd (North) & WB M-96 (Michigan Avenue)

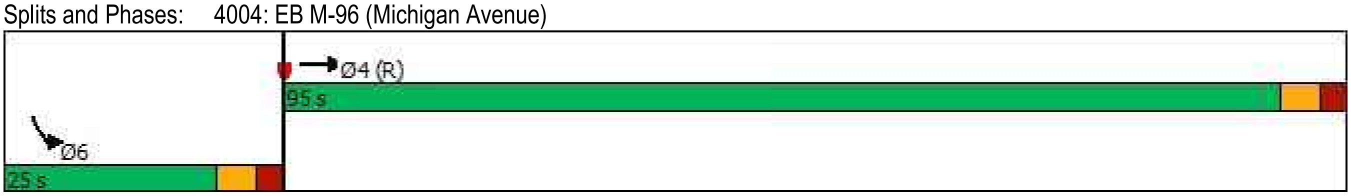


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	1069	0	0	198	0
Future Volume (vph)	0	1069	0	0	198	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	0.97	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	3433	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	3433	0
Right Turn on Red				Yes	Yes	Yes
Satd. Flow (RTOR)					268	
Link Speed (mph)		55	55		25	
Link Distance (ft)		2678	669		109	
Travel Time (s)		33.2	8.3		3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1162	0	0	215	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1162	0	0	215	0
Turn Type		NA			Prot	
Protected Phases		4			6	
Permitted Phases						
Detector Phase		4			6	
Switch Phase						
Minimum Initial (s)		10.0			7.0	
Minimum Split (s)		16.0			13.0	
Total Split (s)		95.0			25.0	
Total Split (%)		79.2%			20.8%	
Yellow Time (s)		3.5			3.5	
All-Red Time (s)		2.5			2.5	
Lost Time Adjust (s)		0.0			0.0	
Total Lost Time (s)		6.0			6.0	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode		C-Max			None	
Act Effct Green (s)		100.9			7.1	
Actuated g/C Ratio		0.84			0.06	
v/c Ratio		0.39			0.47	
Control Delay		1.1			6.8	
Queue Delay		0.0			0.0	
Total Delay		1.1			6.8	
LOS		A			A	
Approach Delay		1.1			6.8	
Approach LOS		A			A	
Queue Length 50th (ft)		20			6	
Queue Length 95th (ft)		19			16	
Internal Link Dist (ft)		2598	589		29	
Turn Bay Length (ft)						
Base Capacity (vph)		2976			769	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Starvation Cap Reductn		0			0	
Spillback Cap Reductn		0			0	
Storage Cap Reductn		0			0	
Reduced v/c Ratio		0.39			0.28	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 20 (17%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 40	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.47	
Intersection Signal Delay: 2.0	Intersection LOS: A
Intersection Capacity Utilization 66.5%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 4004: EB M-96 (Michigan Avenue)

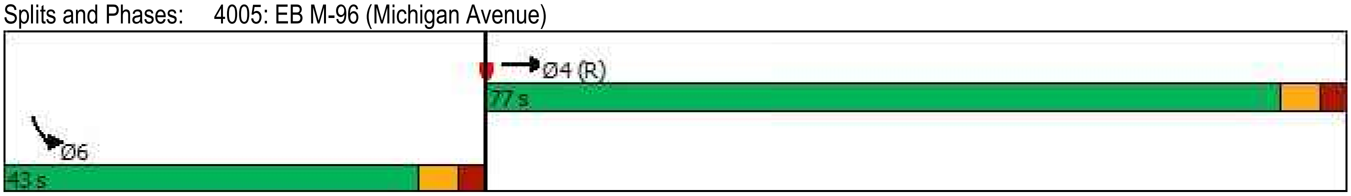


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	750	0	0	354	0
Future Volume (vph)	0	750	0	0	354	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	0.97	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	3433	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	3433	0
Right Turn on Red				Yes	Yes	Yes
Satd. Flow (RTOR)					347	
Link Speed (mph)		55	55		25	
Link Distance (ft)		1786	608		109	
Travel Time (s)		22.1	7.5		3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	815	0	0	385	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	815	0	0	385	0
Turn Type		NA			Prot	
Protected Phases		4			6	
Permitted Phases						
Detector Phase		4			6	
Switch Phase						
Minimum Initial (s)		10.0			7.0	
Minimum Split (s)		16.0			13.0	
Total Split (s)		77.0			43.0	
Total Split (%)		64.2%			35.8%	
Yellow Time (s)		3.5			3.5	
All-Red Time (s)		2.5			2.5	
Lost Time Adjust (s)		0.0			0.0	
Total Lost Time (s)		6.0			6.0	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode		C-Max			Max	
Act Effct Green (s)		71.0			37.0	
Actuated g/C Ratio		0.59			0.31	
v/c Ratio		0.39			0.30	
Control Delay		13.7			12.4	
Queue Delay		0.0			0.0	
Total Delay		13.7			12.4	
LOS		B			B	
Approach Delay		13.7			12.4	
Approach LOS		B			B	
Queue Length 50th (ft)		166			40	
Queue Length 95th (ft)		208			86	
Internal Link Dist (ft)		1706	528		29	
Turn Bay Length (ft)						
Base Capacity (vph)		2093			1298	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Starvation Cap Reductn		0			0	
Spillback Cap Reductn		0			0	
Storage Cap Reductn		0			0	
Reduced v/c Ratio		0.39			0.30	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 112 (93%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 40	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.39	
Intersection Signal Delay: 13.3	Intersection LOS: B
Intersection Capacity Utilization 48.9%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4005: EB M-96 (Michigan Avenue)

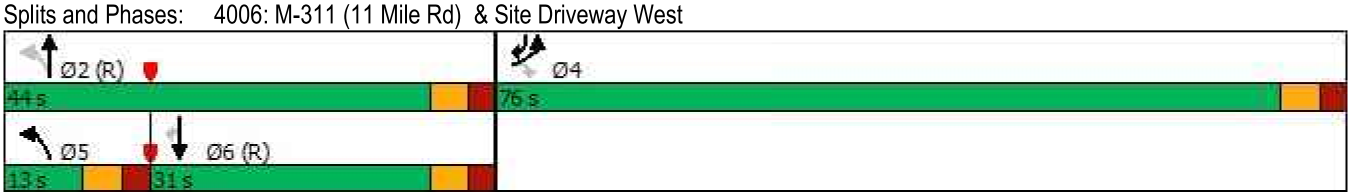


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	575	31	31	132	159	575
Future Volume (vph)	575	31	31	132	159	575
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	250	250			0
Storage Lanes	2	1	1			1
Taper Length (ft)	25		25			
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	1.00
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	3433	1583	1770	1863	1863	1583
Flt Permitted	0.950		0.592			
Satd. Flow (perm)	3433	1583	1103	1863	1863	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		34				625
Link Speed (mph)	25			55	55	
Link Distance (ft)	1178			1461	940	
Travel Time (s)	32.1			18.1	11.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	625	34	34	143	173	625
Shared Lane Traffic (%)						
Lane Group Flow (vph)	625	34	34	143	173	625
Turn Type	Prot	Perm	pm+pt	NA	NA	pm+ov
Protected Phases	4		5	2	6	4
Permitted Phases		4	2			6
Detector Phase	4	4	5	2	6	4
Switch Phase						
Minimum Initial (s)	7.0	7.0	7.0	10.0	10.0	7.0
Minimum Split (s)	14.0	14.0	13.0	17.0	17.0	14.0
Total Split (s)	76.0	76.0	13.0	44.0	31.0	76.0
Total Split (%)	63.3%	63.3%	10.8%	36.7%	25.8%	63.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.5	2.5	2.5	2.5	2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None	None	Min	C-Max	C-Max	None
Act Effct Green (s)	31.2	31.2	76.8	76.8	63.7	100.9
Actuated g/C Ratio	0.26	0.26	0.64	0.64	0.53	0.84
v/c Ratio	0.70	0.08	0.05	0.12	0.18	0.44
Control Delay	44.1	9.7	9.9	9.9	16.0	2.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	44.1	9.7	9.9	9.9	16.0	2.3
LOS	D	A	A	A	B	A
Approach Delay	42.3			9.9	5.2	
Approach LOS	D			A	A	
Queue Length 50th (ft)	226	0	9	40	38	33
Queue Length 95th (ft)	261	23	26	82	86	57

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Internal Link Dist (ft)	1098			1381	860	
Turn Bay Length (ft)		250	250			
Base Capacity (vph)	2002	937	745	1192	988	1583
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	0.31	0.04	0.05	0.12	0.18	0.39

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 60 (50%), Referenced to phase 2:NBTL and 6:SBT, Start of Green	
Natural Cycle: 45	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.70	
Intersection Signal Delay: 20.7	Intersection LOS: C
Intersection Capacity Utilization 51.4%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4006: M-311 (11 Mile Rd) & Site Driveway West



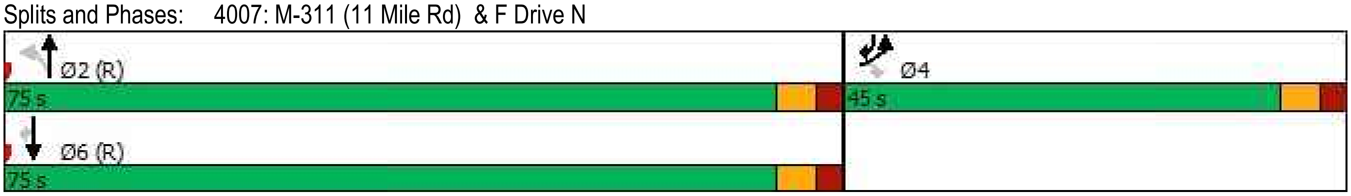
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	515	15	15	1041	1068	515
Future Volume (vph)	515	15	15	1041	1068	515
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	250	400			0
Storage Lanes	2	1	1			1
Taper Length (ft)	25		25			
Lane Util. Factor	0.97	1.00	1.00	0.95	0.95	1.00
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	3433	1583	1770	3539	3539	1583
Flt Permitted	0.950		0.203			
Satd. Flow (perm)	3433	1583	378	3539	3539	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		16				
Link Speed (mph)	45			55	55	
Link Distance (ft)	1846			974	1093	
Travel Time (s)	28.0			12.1	13.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	560	16	16	1132	1161	560
Shared Lane Traffic (%)						
Lane Group Flow (vph)	560	16	16	1132	1161	560
Turn Type	Prot	Perm	Perm	NA	NA	pm+ov
Protected Phases	4			2	6	4
Permitted Phases		4	2			6
Detector Phase	4	4	2	2	6	4
Switch Phase						
Minimum Initial (s)	7.0	7.0	10.0	10.0	10.0	7.0
Minimum Split (s)	13.0	13.0	16.0	16.0	16.0	13.0
Total Split (s)	45.0	45.0	75.0	75.0	75.0	45.0
Total Split (%)	37.5%	37.5%	62.5%	62.5%	62.5%	37.5%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.5	2.5	2.5	2.5	2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None	None	C-Max	C-Max	C-Max	None
Act Effct Green (s)	26.5	26.5	81.5	81.5	81.5	120.0
Actuated g/C Ratio	0.22	0.22	0.68	0.68	0.68	1.00
v/c Ratio	0.74	0.04	0.06	0.47	0.48	0.35
Control Delay	49.5	14.5	3.7	8.4	4.7	0.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	49.5	14.5	3.7	8.4	4.7	0.5
LOS	D	B	A	A	A	A
Approach Delay	48.5			8.4	3.3	
Approach LOS	D			A	A	
Queue Length 50th (ft)	208	0	4	333	65	0
Queue Length 95th (ft)	253	18	m4	67	135	0

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Internal Link Dist (ft)	1766			894	1013	
Turn Bay Length (ft)		250	400			
Base Capacity (vph)	1115	525	256	2404	2404	1583
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	0.50	0.03	0.06	0.47	0.48	0.35

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 20 (17%), Referenced to phase 2:NBTL and 6:SBT, Start of Green
Natural Cycle: 40
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.74
Intersection Signal Delay: 12.6 Intersection LOS: B
Intersection Capacity Utilization 54.2% ICU Level of Service A
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

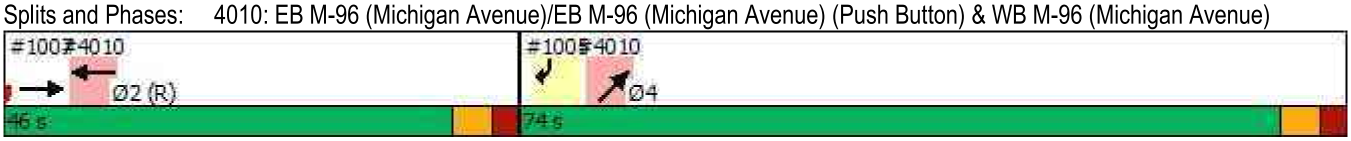
Splits and Phases: 4007: M-311 (11 Mile Rd) & F Drive N



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations					↑↑↑			↑↑↑				
Traffic Volume (vph)	0	0	0	0	1054	0	0	1657	0	0	0	0
Future Volume (vph)	0	0	0	0	1054	0	0	1657	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.91	1.00	1.00	1.00	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	0	0	0	5085	0	0	5085	0	0	0	0
Flt Permitted												
Satd. Flow (perm)	0	0	0	0	5085	0	0	5085	0	0	0	0
Right Turn on Red			Yes			Yes	Yes		Yes			Yes
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		194			183			156			190	
Travel Time (s)		2.9			2.8			2.4			2.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.90	0.90	0.90	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	1146	0	0	1841	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1146	0	0	1841	0	0	0	0
Turn Type					NA			NA				
Protected Phases					2			4				
Permitted Phases												
Minimum Split (s)					17.0			17.0				
Total Split (s)					46.0			74.0				
Total Split (%)					38.3%			61.7%				
Yellow Time (s)					3.5			3.5				
All-Red Time (s)					2.5			2.5				
Lost Time Adjust (s)					0.0			0.0				
Total Lost Time (s)					6.0			6.0				
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)					40.0			68.0				
Actuated g/C Ratio					0.33			0.57				
v/c Ratio					0.68			0.64				
Control Delay					35.3			10.2				
Queue Delay					0.0			0.0				
Total Delay					35.3			10.2				
LOS					D			B				
Approach Delay					35.3			10.2				
Approach LOS					D			B				
Queue Length 50th (ft)					325			219				
Queue Length 95th (ft)					376			262				
Internal Link Dist (ft)		114			103			76			110	
Turn Bay Length (ft)												
Base Capacity (vph)					1695			2881				
Starvation Cap Reductn					0			0				
Spillback Cap Reductn					0			0				
Storage Cap Reductn					0			0				
Reduced v/c Ratio					0.68			0.64				

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 100 (83%), Referenced to phase 2:EBT, Start of Green	
Natural Cycle: 45	
Control Type: Pretimed	
Maximum v/c Ratio: 0.68	
Intersection Signal Delay: 19.8	Intersection LOS: B
Intersection Capacity Utilization 62.4%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 4010: EB M-96 (Michigan Avenue)/EB M-96 (Michigan Avenue) (Push Button) & WB M-96 (Michigan Avenue)



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	641	0	0	0	0	0	1305	251	0	0	0
Future Volume (vph)	0	641	0	0	0	0	0	1305	251	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		250	0		0
Storage Lanes	0		0	0		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	1.00	1.00
Frt									0.850			
Flt Protected												
Satd. Flow (prot)	0	3539	0	0	0	0	0	5085	1583	0	0	0
Flt Permitted												
Satd. Flow (perm)	0	3539	0	0	0	0	0	5085	1583	0	0	0
Right Turn on Red	Yes		Yes			Yes			Yes			Yes
Satd. Flow (RTOR)									92			
Link Speed (mph)		55			55			55			30	
Link Distance (ft)		167			316			655			182	
Travel Time (s)		2.1			3.9			8.1			4.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	697	0	0	0	0	0	1418	273	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	697	0	0	0	0	0	1418	273	0	0	0
Turn Type		NA						NA	Perm			
Protected Phases		7						2				
Permitted Phases									2			
Minimum Split (s)		16.0						19.5	19.5			
Total Split (s)		51.0						69.0	69.0			
Total Split (%)		42.5%						57.5%	57.5%			
Yellow Time (s)		3.5						3.5	3.5			
All-Red Time (s)		2.5						6.0	6.0			
Lost Time Adjust (s)		0.0						0.0	0.0			
Total Lost Time (s)		6.0						9.5	9.5			
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		45.0						59.5	59.5			
Actuated g/C Ratio		0.38						0.50	0.50			
v/c Ratio		0.53						0.56	0.33			
Control Delay		32.2						27.7	18.9			
Queue Delay		0.0						0.0	0.0			
Total Delay		32.2						27.7	18.9			
LOS		C						C	B			
Approach Delay		32.2						26.3				
Approach LOS		C						C				
Queue Length 50th (ft)		258						283	94			
Queue Length 95th (ft)		317						322	146			
Internal Link Dist (ft)		87			236			575			102	
Turn Bay Length (ft)									250			
Base Capacity (vph)		1327						2521	831			
Starvation Cap Reductn		0						0	0			

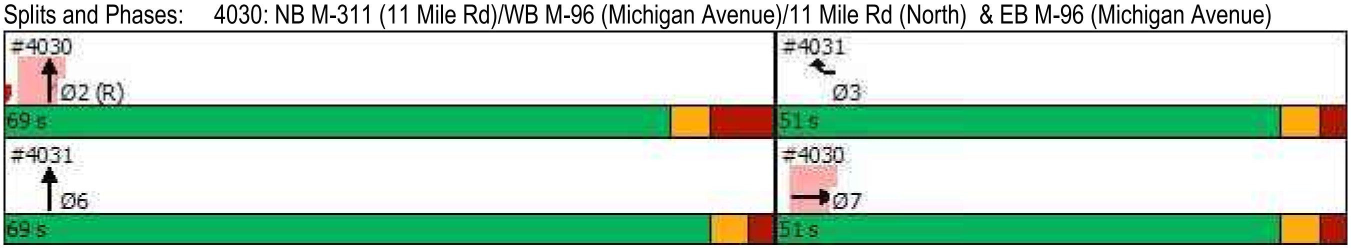
Lane Group	Ø3	Ø6
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Ideal Flow (vphpl)		
Storage Length (ft)		
Storage Lanes		
Taper Length (ft)		
Lane Util. Factor		
Frt		
Flt Protected		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Peak Hour Factor		
Adj. Flow (vph)		
Shared Lane Traffic (%)		
Lane Group Flow (vph)		
Turn Type		
Protected Phases	3	6
Permitted Phases		
Minimum Split (s)	16.0	16.0
Total Split (s)	51.0	69.0
Total Split (%)	43%	58%
Yellow Time (s)	3.5	3.5
All-Red Time (s)	2.5	2.5
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag		
Lead-Lag Optimize?		
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		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn		0						0	0			
Storage Cap Reductn		0						0	0			
Reduced v/c Ratio		0.53						0.56	0.33			

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 88 (73%), Referenced to phase 2:NBT, Start of Green
Natural Cycle: 55
Control Type: Pretimed
Maximum v/c Ratio: 0.81
Intersection Signal Delay: 28.0 Intersection LOS: C
Intersection Capacity Utilization 59.4% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 4030: NB M-311 (11 Mile Rd)/WB M-96 (Michigan Avenue)/11 Mile Rd (North) & EB M-96 (Michigan Avenue)



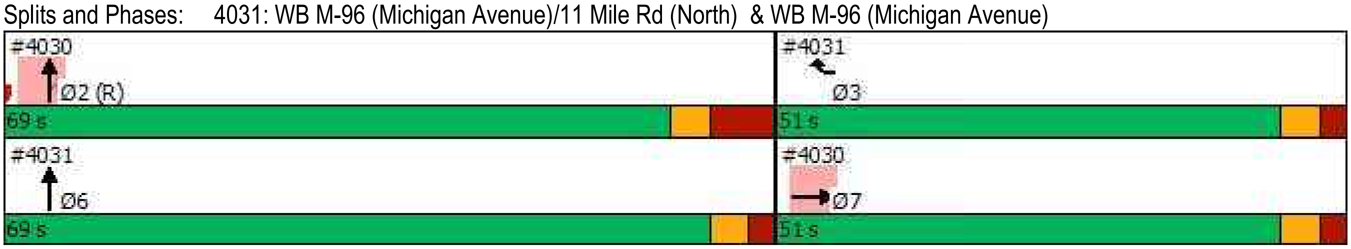
Lane Group	Ø3	Ø6
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		

Intersection Summary

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø2	Ø7
Lane Configurations								
Traffic Volume (vph)	0	1036	1305	0	0	0		
Future Volume (vph)	0	1036	1305	0	0	0		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Lane Util. Factor	1.00	0.76	0.91	1.00	1.00	1.00		
Frt		0.850						
Flt Protected								
Satd. Flow (prot)	0	3610	5085	0	0	0		
Flt Permitted								
Satd. Flow (perm)	0	3610	5085	0	0	0		
Right Turn on Red		Yes		Yes				
Satd. Flow (RTOR)		64						
Link Speed (mph)	55		55			55		
Link Distance (ft)	405		182			493		
Travel Time (s)	5.0		2.3			6.1		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Adj. Flow (vph)	0	1126	1418	0	0	0		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	0	1126	1418	0	0	0		
Turn Type		Prot	NA					
Protected Phases		3	6				2	7
Permitted Phases								
Minimum Split (s)		16.0	16.0				19.5	16.0
Total Split (s)		51.0	69.0				69.0	51.0
Total Split (%)		42.5%	57.5%				58%	43%
Yellow Time (s)		3.5	3.5				3.5	3.5
All-Red Time (s)		2.5	2.5				6.0	2.5
Lost Time Adjust (s)		0.0	0.0					
Total Lost Time (s)		6.0	6.0					
Lead/Lag								
Lead-Lag Optimize?								
Act Effct Green (s)		45.0	63.0					
Actuated g/C Ratio		0.38	0.52					
v/c Ratio		0.81	0.53					
Control Delay		35.0	0.7					
Queue Delay		0.0	0.0					
Total Delay		35.0	0.7					
LOS		C	A					
Approach Delay	35.0		0.7					
Approach LOS	C		A					
Queue Length 50th (ft)		323	0					
Queue Length 95th (ft)		396	0					
Internal Link Dist (ft)	325		102			413		
Turn Bay Length (ft)								
Base Capacity (vph)		1393	2669					
Starvation Cap Reductn		0	51					
Spillback Cap Reductn		0	0					
Storage Cap Reductn		0	0					
Reduced v/c Ratio		0.81	0.54					

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 88 (73%), Referenced to phase 2:NBT, Start of Green	
Natural Cycle: 55	
Control Type: Pretimed	
Maximum v/c Ratio: 0.81	
Intersection Signal Delay: 15.8	Intersection LOS: B
Intersection Capacity Utilization 59.4%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 4031: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & WB M-96 (Michigan Avenue)

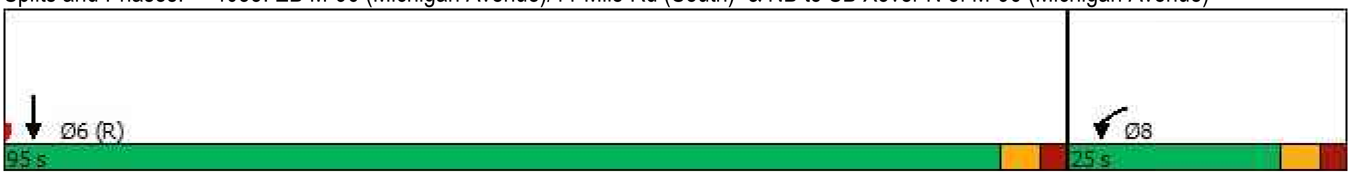


Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	280	0	0	0	0	1944
Future Volume (vph)	280	0	0	0	0	1944
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	0.91
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	3433	0	0	0	0	5085
Flt Permitted	0.950					
Satd. Flow (perm)	3433	0	0	0	0	5085
Right Turn on Red	Yes	Yes		Yes		
Satd. Flow (RTOR)	44					
Link Speed (mph)	25		55			30
Link Distance (ft)	105		587			495
Travel Time (s)	2.9		7.3			11.3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	304	0	0	0	0	2113
Shared Lane Traffic (%)						
Lane Group Flow (vph)	304	0	0	0	0	2113
Turn Type	Prot					NA
Protected Phases	8					6
Permitted Phases						
Minimum Split (s)	13.0					16.0
Total Split (s)	25.0					95.0
Total Split (%)	20.8%					79.2%
Yellow Time (s)	3.5					3.5
All-Red Time (s)	2.5					2.5
Lost Time Adjust (s)	0.0					0.0
Total Lost Time (s)	6.0					6.0
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)	19.0					89.0
Actuated g/C Ratio	0.16					0.74
v/c Ratio	0.52					0.56
Control Delay	13.0					2.4
Queue Delay	0.0					0.1
Total Delay	13.0					2.5
LOS	B					A
Approach Delay	13.0					2.5
Approach LOS	B					A
Queue Length 50th (ft)	54					43
Queue Length 95th (ft)	m78					46
Internal Link Dist (ft)	25		507			415
Turn Bay Length (ft)						
Base Capacity (vph)	580					3771
Starvation Cap Reductn	0					547
Spillback Cap Reductn	0					0
Storage Cap Reductn	0					0
Reduced v/c Ratio	0.52					0.66

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 89 (74%), Referenced to phase 6:SBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.56	
Intersection Signal Delay: 3.9	Intersection LOS: A
Intersection Capacity Utilization 85.7%	ICU Level of Service E
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4033: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & NB to SB Xover N of M-96 (Michigan Avenue)



Lane Group	NBL	NBT	SBT	SBR	SEL	SER	Ø2
Lane Configurations							
Traffic Volume (vph)	0	0	1395	0	0	549	
Future Volume (vph)	0	0	1395	0	0	549	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	0.91	1.00	1.00	0.88	
Frt						0.850	
Flt Protected							
Satd. Flow (prot)	0	0	5085	0	0	2787	
Flt Permitted							
Satd. Flow (perm)	0	0	5085	0	0	2787	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)						261	
Link Speed (mph)		30	30		30		
Link Distance (ft)		495	145		346		
Travel Time (s)		11.3	3.3		7.9		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	0	0	1516	0	0	597	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	1516	0	0	597	
Turn Type			NA			Prot	
Protected Phases			Free!			4!	2
Permitted Phases							
Minimum Split (s)						16.0	16.0
Total Split (s)						60.0	60.0
Total Split (%)						50.0%	50%
Yellow Time (s)						3.5	3.5
All-Red Time (s)						2.5	2.5
Lost Time Adjust (s)						0.0	
Total Lost Time (s)						6.0	
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)			120.0			54.0	
Actuated g/C Ratio			1.00			0.45	
v/c Ratio			0.30			0.43	
Control Delay			0.1			13.0	
Queue Delay			0.0			0.0	
Total Delay			0.1			13.0	
LOS			A			B	
Approach Delay			0.1		13.0		
Approach LOS			A		B		
Queue Length 50th (ft)			0			93	
Queue Length 95th (ft)			0			144	
Internal Link Dist (ft)		415	65		266		
Turn Bay Length (ft)							
Base Capacity (vph)			5085			1397	
Starvation Cap Reductn			0			0	
Spillback Cap Reductn			0			0	
Storage Cap Reductn			0			0	
Reduced v/c Ratio			0.30			0.43	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 27 (23%), Referenced to phase 4:SER, Start of Green	
Natural Cycle: 50	
Control Type: Pretimed	
Maximum v/c Ratio: 0.68	
Intersection Signal Delay: 3.8	Intersection LOS: A
Intersection Capacity Utilization 64.6%	ICU Level of Service C
Analysis Period (min) 15	

! Phase conflict between lane groups.

Splits and Phases: 4034: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & EB I-94 Off-ramp

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations					↑↑↑						↑↑↑	
Traffic Volume (vph)	0	0	0	0	1395	0	0	0	0	0	1433	0
Future Volume (vph)	0	0	0	0	1395	0	0	0	0	0	1433	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.91	1.00	1.00	1.00	1.00	1.00	0.91	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	0	0	0	5085	0	0	0	0	0	5085	0
Flt Permitted												
Satd. Flow (perm)	0	0	0	0	5085	0	0	0	0	0	5085	0
Right Turn on Red			Yes			Yes			Yes	Yes		Yes
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		145			194			233			108	
Travel Time (s)		3.3			4.4			5.3			2.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	1516	0	0	0	0	0	1558	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1516	0	0	0	0	0	1558	0
Turn Type					NA						NA	
Protected Phases					2						4	
Permitted Phases												
Minimum Split (s)					16.0						16.0	
Total Split (s)					60.0						60.0	
Total Split (%)					50.0%						50.0%	
Yellow Time (s)					3.5						3.5	
All-Red Time (s)					2.5						2.5	
Lost Time Adjust (s)					0.0						0.0	
Total Lost Time (s)					6.0						6.0	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)					54.0						54.0	
Actuated g/C Ratio					0.45						0.45	
v/c Ratio					0.66						0.68	
Control Delay					22.8						29.1	
Queue Delay					0.0						0.0	
Total Delay					22.9						29.1	
LOS					C						C	
Approach Delay					22.9						29.1	
Approach LOS					C						C	
Queue Length 50th (ft)					308						369	
Queue Length 95th (ft)					356						429	
Internal Link Dist (ft)		65			114			153			28	
Turn Bay Length (ft)												
Base Capacity (vph)					2288						2288	
Starvation Cap Reductn					54						0	
Spillback Cap Reductn					0						0	
Storage Cap Reductn					0						0	
Reduced v/c Ratio					0.68						0.68	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 27 (23%), Referenced to phase 4:SER, Start of Green	
Natural Cycle: 50	
Control Type: Pretimed	
Maximum v/c Ratio: 0.68	
Intersection Signal Delay: 26.0	Intersection LOS: C
Intersection Capacity Utilization 68.3%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 4035: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & WB M-96 (Michigan Avenue)/11 Mile Rd (North)

Lane Group	NBL	NBR	SET	SER	NWL	NWT	Ø4
Lane Configurations							
Traffic Volume (vph)	104	0	0	0	0	1433	
Future Volume (vph)	104	0	0	0	0	1433	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.91	
Frt							
Flt Protected	0.950						
Satd. Flow (prot)	1719	0	0	0	0	5085	
Flt Permitted	0.950						
Satd. Flow (perm)	1719	0	0	0	0	5085	
Right Turn on Red	Yes	Yes		Yes			
Satd. Flow (RTOR)	140						
Link Speed (mph)	30		30			30	
Link Distance (ft)	271		337			233	
Travel Time (s)	6.2		7.7			5.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Heavy Vehicles (%)	5%	2%	2%	2%	2%	2%	
Adj. Flow (vph)	113	0	0	0	0	1558	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	113	0	0	0	0	1558	
Turn Type	Prot					NA	
Protected Phases	2!					Free!	4
Permitted Phases							
Minimum Split (s)	16.0						16.0
Total Split (s)	60.0						60.0
Total Split (%)	50.0%						50%
Yellow Time (s)	3.5						3.5
All-Red Time (s)	2.5						2.5
Lost Time Adjust (s)	0.0						
Total Lost Time (s)	6.0						
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)	54.0					120.0	
Actuated g/C Ratio	0.45					1.00	
v/c Ratio	0.13					0.31	
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)	0					0	
Queue Length 95th (ft)	21					0	
Internal Link Dist (ft)	191		257			153	
Turn Bay Length (ft)							
Base Capacity (vph)	850					5085	
Starvation Cap Reductn	0					0	
Spillback Cap Reductn	0					0	
Storage Cap Reductn	0					0	

Lane Group	NBL	NBR	SET	SER	NWL	NWT	Ø4
Reduced v/c Ratio	0.13					0.31	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 27 (23%), Referenced to phase 4:SER, Start of Green	
Natural Cycle: 50	
Control Type: Pretimed	
Maximum v/c Ratio: 0.68	
Intersection Signal Delay: 0.2	Intersection LOS: A
Intersection Capacity Utilization 50.0%	ICU Level of Service A
Analysis Period (min) 15	
! Phase conflict between lane groups.	

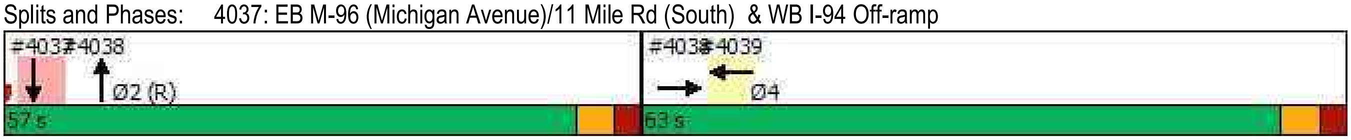
Splits and Phases: 4036: EB I-94 Off-ramp & WB M-96 (Michigan Avenue)/11 Mile Rd (North)

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø4
Lane Configurations							
Traffic Volume (vph)	0	900	0	0	568	0	
Future Volume (vph)	0	900	0	0	568	0	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	0.88	1.00	1.00	0.95	1.00	
Frt		0.850					
Flt Protected							
Satd. Flow (prot)	0	2707	0	0	3438	0	
Flt Permitted							
Satd. Flow (perm)	0	2707	0	0	3438	0	
Right Turn on Red		Yes				Yes	
Satd. Flow (RTOR)		1148					
Link Speed (mph)	30			30	30		
Link Distance (ft)	222			406	241		
Travel Time (s)	5.0			9.2	5.5		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Heavy Vehicles (%)	2%	5%	2%	2%	5%	2%	
Adj. Flow (vph)	0	978	0	0	617	0	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	978	0	0	617	0	
Turn Type		Free			NA		
Protected Phases					2		4
Permitted Phases		Free					
Minimum Split (s)					16.0		16.0
Total Split (s)					57.0		63.0
Total Split (%)					47.5%		53%
Yellow Time (s)					3.5		3.5
All-Red Time (s)					2.5		2.5
Lost Time Adjust (s)					0.0		
Total Lost Time (s)					6.0		
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)		120.0			51.0		
Actuated g/C Ratio		1.00			0.42		
v/c Ratio		0.36			0.42		
Control Delay		3.7			25.3		
Queue Delay		0.0			0.0		
Total Delay		3.7			25.3		
LOS		A			C		
Approach Delay	3.7				25.3		
Approach LOS	A				C		
Queue Length 50th (ft)		45			173		
Queue Length 95th (ft)		88			223		
Internal Link Dist (ft)	142			326	161		
Turn Bay Length (ft)							
Base Capacity (vph)		2707			1461		
Starvation Cap Reductn		0			0		
Spillback Cap Reductn		0			0		
Storage Cap Reductn		0			0		

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø4
Reduced v/c Ratio		0.36			0.42		

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 96 (80%), Referenced to phase 2:SBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.60	
Intersection Signal Delay: 12.0	Intersection LOS: B
Intersection Capacity Utilization 20.7%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4037: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & WB I-94 Off-ramp

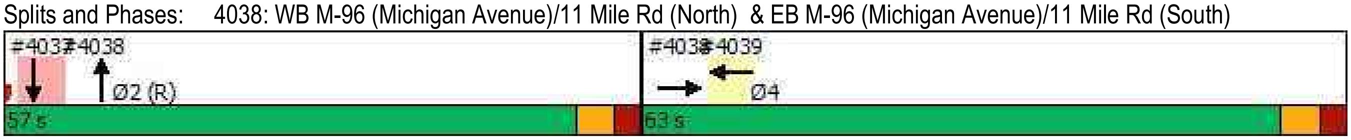


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑						↑↑↑				
Traffic Volume (vph)	0	900	0	0	0	0	0	1019	0	0	0	0
Future Volume (vph)	0	900	0	0	0	0	0	1019	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	1.00	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	3438	0	0	0	0	0	4940	0	0	0	0
Flt Permitted												
Satd. Flow (perm)	0	3438	0	0	0	0	0	4940	0	0	0	0
Right Turn on Red	Yes		Yes			Yes			Yes			Yes
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		190			222			207			131	
Travel Time (s)		4.3			5.0			4.7			3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	5%	2%	2%	2%	2%	2%	5%	2%	2%	2%	2%
Adj. Flow (vph)	0	978	0	0	0	0	0	1108	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	978	0	0	0	0	0	1108	0	0	0	0
Turn Type		NA						NA				
Protected Phases		4						2				
Permitted Phases												
Minimum Split (s)		16.0						16.0				
Total Split (s)		63.0						57.0				
Total Split (%)		52.5%						47.5%				
Yellow Time (s)		3.5						3.5				
All-Red Time (s)		2.5						2.5				
Lost Time Adjust (s)		0.0						0.0				
Total Lost Time (s)		6.0						6.0				
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		57.0						51.0				
Actuated g/C Ratio		0.48						0.42				
v/c Ratio		0.60						0.53				
Control Delay		23.3						43.6				
Queue Delay		0.0						0.0				
Total Delay		23.3						43.6				
LOS		C						D				
Approach Delay		23.3						43.6				
Approach LOS		C						D				
Queue Length 50th (ft)		219						332				
Queue Length 95th (ft)		254						380				
Internal Link Dist (ft)		110			142			127			51	
Turn Bay Length (ft)												
Base Capacity (vph)		1633						2099				
Starvation Cap Reductn		0						0				
Spillback Cap Reductn		0						0				
Storage Cap Reductn		0						0				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio		0.60						0.53				

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 96 (80%), Referenced to phase 2:SBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.60	
Intersection Signal Delay: 34.1	Intersection LOS: C
Intersection Capacity Utilization 54.6%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4038: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & EB M-96 (Michigan Avenue)/11 Mile Rd (South)



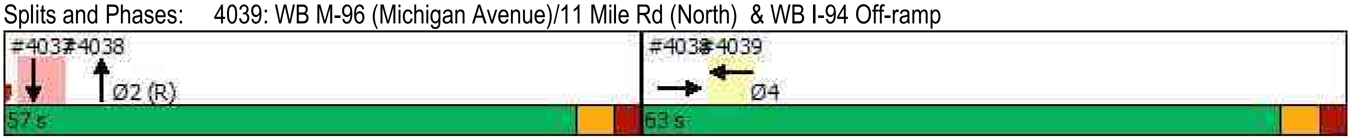
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø2
Lane Configurations							
Traffic Volume (vph)	0	0	0	151	1019	0	
Future Volume (vph)	0	0	0	151	1019	0	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.94	1.00	
Frt							
Flt Protected					0.950		
Satd. Flow (prot)	0	0	0	1810	4848	0	
Flt Permitted					0.950		
Satd. Flow (perm)	0	0	0	1810	4848	0	
Right Turn on Red		Yes			Yes	Yes	
Satd. Flow (RTOR)					2497		
Link Speed (mph)	30			30	30		
Link Distance (ft)	415			317	131		
Travel Time (s)	9.4			7.2	3.0		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Heavy Vehicles (%)	2%	2%	2%	5%	5%	2%	
Adj. Flow (vph)	0	0	0	164	1108	0	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	0	164	1108	0	
Turn Type				NA	Perm		
Protected Phases				4!			2
Permitted Phases					Free!		
Minimum Split (s)				16.0			16.0
Total Split (s)				63.0			57.0
Total Split (%)				52.5%			48%
Yellow Time (s)				3.5			3.5
All-Red Time (s)				2.5			2.5
Lost Time Adjust (s)				0.0			
Total Lost Time (s)				6.0			
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)				57.0	120.0		
Actuated g/C Ratio				0.48	1.00		
v/c Ratio				0.19	0.23		
Control Delay				18.9	0.4		
Queue Delay				0.0	0.0		
Total Delay				18.9	0.4		
LOS				B	A		
Approach Delay				18.9	0.4		
Approach LOS				B	A		
Queue Length 50th (ft)				71	3		
Queue Length 95th (ft)				116	0		
Internal Link Dist (ft)	335			237	51		
Turn Bay Length (ft)							
Base Capacity (vph)				859	4848		
Starvation Cap Reductn				0	0		
Spillback Cap Reductn				0	0		
Storage Cap Reductn				0	0		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø2
Reduced v/c Ratio				0.19	0.23		

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 96 (80%), Referenced to phase 2:SBT, Start of Green
Natural Cycle: 40
Control Type: Pretimed
Maximum v/c Ratio: 0.60
Intersection Signal Delay: 2.8 Intersection LOS: A
Intersection Capacity Utilization 74.9% ICU Level of Service D
Analysis Period (min) 15
! Phase conflict between lane groups.

Splits and Phases: 4039: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & WB I-94 Off-ramp

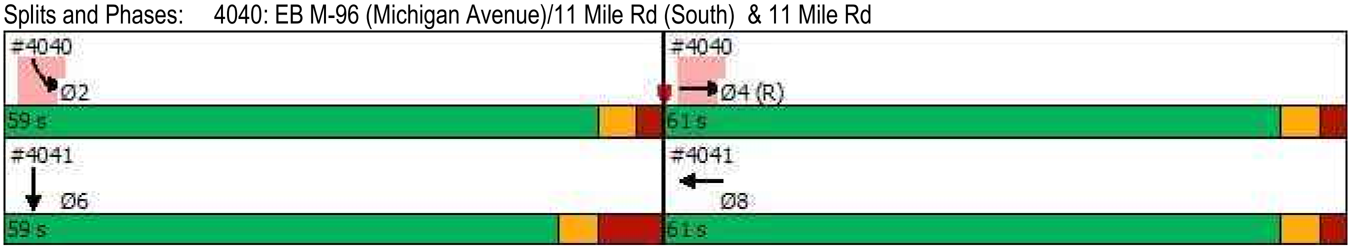


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø6	Ø8
Lane Configurations								
Traffic Volume (vph)	0	611	0	0	434	0		
Future Volume (vph)	0	611	0	0	434	0		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.97	1.00		
Frt								
Flt Protected					0.950			
Satd. Flow (prot)	0	3539	0	0	3335	0		
Flt Permitted					0.950			
Satd. Flow (perm)	0	3539	0	0	3335	0		
Right Turn on Red				Yes	Yes	Yes		
Satd. Flow (RTOR)					315			
Link Speed (mph)		55	55		45			
Link Distance (ft)		212	597		92			
Travel Time (s)		2.6	7.4		1.4			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Heavy Vehicles (%)	2%	2%	2%	2%	5%	2%		
Adj. Flow (vph)	0	664	0	0	472	0		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	0	664	0	0	472	0		
Turn Type		NA			Prot			
Protected Phases		4			2		6	8
Permitted Phases								
Minimum Split (s)		16.0			19.5		19.5	16.0
Total Split (s)		61.0			59.0		59.0	61.0
Total Split (%)		50.8%			49.2%		49%	51%
Yellow Time (s)		3.5			3.5		3.5	3.5
All-Red Time (s)		2.5			2.5		6.0	2.5
Lost Time Adjust (s)		0.0			0.0			
Total Lost Time (s)		6.0			6.0			
Lead/Lag								
Lead-Lag Optimize?								
Act Effct Green (s)		55.0			53.0			
Actuated g/C Ratio		0.46			0.44			
v/c Ratio		0.41			0.29			
Control Delay		22.6			0.4			
Queue Delay		0.0			0.0			
Total Delay		22.6			0.4			
LOS		C			A			
Approach Delay		22.6			0.4			
Approach LOS		C			A			
Queue Length 50th (ft)		176			0			
Queue Length 95th (ft)		225			0			
Internal Link Dist (ft)		132	517		12			
Turn Bay Length (ft)								
Base Capacity (vph)		1622			1648			
Starvation Cap Reductn		0			0			
Spillback Cap Reductn		0			0			
Storage Cap Reductn		0			0			

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø6	Ø8
Reduced v/c Ratio		0.41			0.29			

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 32 (27%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.45	
Intersection Signal Delay: 13.4	Intersection LOS: B
Intersection Capacity Utilization 45.1%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4040: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & 11 Mile Rd



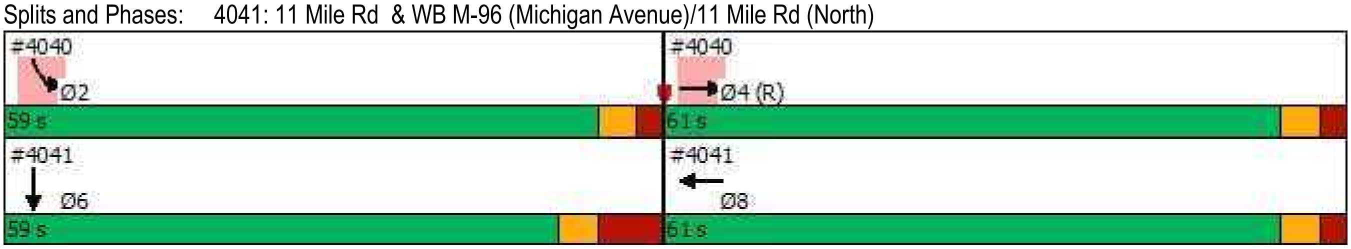
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	664	570	0	0	0	0	434	56
Future Volume (vph)	0	0	0	0	664	570	0	0	0	0	434	56
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		250	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Frt						0.850					0.983	
Flt Protected												
Satd. Flow (prot)	0	0	0	0	3539	1538	0	0	0	0	3391	0
Flt Permitted												
Satd. Flow (perm)	0	0	0	0	3539	1538	0	0	0	0	3391	0
Right Turn on Red			Yes	Yes		Yes			Yes			Yes
Satd. Flow (RTOR)						538					14	
Link Speed (mph)		55			55			45			55	
Link Distance (ft)		210			598			92			259	
Travel Time (s)		2.6			7.4			1.4			3.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	5%	2%	2%	2%	2%	5%	2%
Adj. Flow (vph)	0	0	0	0	722	620	0	0	0	0	472	61
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	722	620	0	0	0	0	533	0
Turn Type					NA	custom					NA	
Protected Phases					8	Free					6	
Permitted Phases												
Minimum Split (s)					16.0						19.5	
Total Split (s)					61.0						59.0	
Total Split (%)					50.8%						49.2%	
Yellow Time (s)					3.5						3.5	
All-Red Time (s)					2.5						6.0	
Lost Time Adjust (s)					0.0						0.0	
Total Lost Time (s)					6.0						9.5	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)					55.0	120.0					49.5	
Actuated g/C Ratio					0.46	1.00					0.41	
v/c Ratio					0.45	0.40					0.38	
Control Delay					31.1	6.6					35.3	
Queue Delay					0.0	0.0					0.0	
Total Delay					31.1	6.6					35.3	
LOS					C	A					D	
Approach Delay					19.7						35.3	
Approach LOS					B						D	
Queue Length 50th (ft)					278	412					187	
Queue Length 95th (ft)					344	515					247	
Internal Link Dist (ft)		130			518			12			179	
Turn Bay Length (ft)						250						
Base Capacity (vph)					1622	1538					1407	

Lane Group	Ø2	Ø4
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Ideal Flow (vphpl)		
Storage Length (ft)		
Storage Lanes		
Taper Length (ft)		
Lane Util. Factor		
Frt		
Flt Protected		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Peak Hour Factor		
Heavy Vehicles (%)		
Adj. Flow (vph)		
Shared Lane Traffic (%)		
Lane Group Flow (vph)		
Turn Type		
Protected Phases	2	4
Permitted Phases		
Minimum Split (s)	19.5	16.0
Total Split (s)	59.0	61.0
Total Split (%)	49%	51%
Yellow Time (s)	3.5	3.5
All-Red Time (s)	2.5	2.5
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag		
Lead-Lag Optimize?		
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)		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn					0	0					0	
Spillback Cap Reductn					0	0					0	
Storage Cap Reductn					0	0					0	
Reduced v/c Ratio					0.45	0.40					0.38	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 32 (27%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.45	
Intersection Signal Delay: 24.2	Intersection LOS: C
Intersection Capacity Utilization 45.1%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4041: 11 Mile Rd & WB M-96 (Michigan Avenue)/11 Mile Rd (North)



Lane Group	Ø2	Ø4
Starvation Cap Reductn		
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		

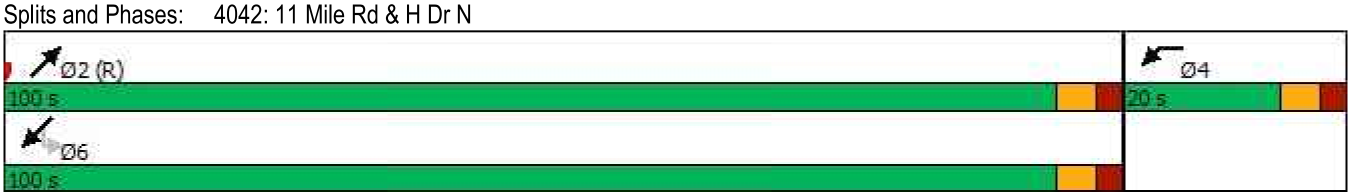
Intersection Summary

Lane Group	WBL	WBR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	0	0	570	0	0	490
Future Volume (vph)	0	0	570	0	0	490
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	1810	0	1863	0	0	1863
Flt Permitted						
Satd. Flow (perm)	1810	0	1863	0	0	1863
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)						
Link Speed (mph)	25		55			55
Link Distance (ft)	1262		1787			680
Travel Time (s)	34.4		22.2			8.4
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	2%	2%	5%	2%	2%
Adj. Flow (vph)	0	0	620	0	0	533
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	620	0	0	533
Turn Type	Prot		NA			NA
Protected Phases	4		2			6
Permitted Phases					6	
Minimum Split (s)	13.0		16.0		13.0	13.0
Total Split (s)	20.0		100.0		100.0	100.0
Total Split (%)	16.7%		83.3%		83.3%	83.3%
Yellow Time (s)	3.5		3.5		3.5	3.5
All-Red Time (s)	2.5		2.5		2.5	2.5
Lost Time Adjust (s)	0.0		0.0			0.0
Total Lost Time (s)	6.0		6.0			6.0
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)			94.0			94.0
Actuated g/C Ratio			0.78			0.78
v/c Ratio			0.42			0.37
Control Delay			1.4			4.7
Queue Delay			0.0			0.0
Total Delay			1.4			4.7
LOS			A			A
Approach Delay			1.4			4.7
Approach LOS			A			A
Queue Length 50th (ft)			16			104
Queue Length 95th (ft)			20			145
Internal Link Dist (ft)	1182		1707			600
Turn Bay Length (ft)						
Base Capacity (vph)			1459			1459
Starvation Cap Reductn			0			0
Spillback Cap Reductn			0			0
Storage Cap Reductn			0			0

Lane Group	WBL	WBR	NET	NER	SWL	SWT
Reduced v/c Ratio			0.42			0.37

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NET, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.42	
Intersection Signal Delay: 2.9	Intersection LOS: A
Intersection Capacity Utilization 35.0%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4042: 11 Mile Rd & H Dr N



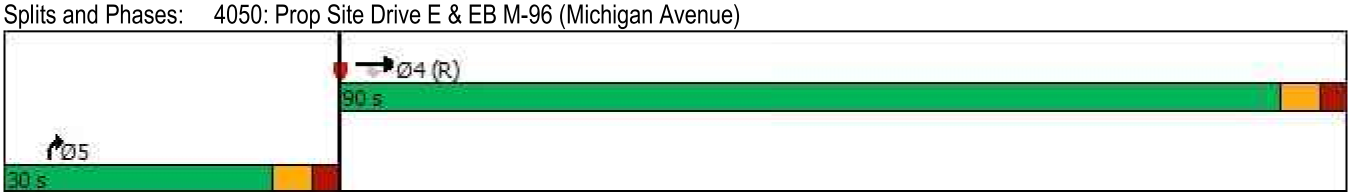
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1052	215	0	0	0	215
Future Volume (vph)	1052	215	0	0	0	215
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		500	600		0	0
Storage Lanes		2	0		0	2
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	0.88	1.00	1.00	1.00	0.88
Frt		0.850				0.850
Flt Protected						
Satd. Flow (prot)	3539	2787	0	0	0	2787
Flt Permitted						
Satd. Flow (perm)	3539	2787	0	0	0	2787
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		234				222
Link Speed (mph)	55			55	25	
Link Distance (ft)	669			659	1093	
Travel Time (s)	8.3			8.2	29.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1143	234	0	0	0	234
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1143	234	0	0	0	234
Turn Type	NA	Perm				Prot
Protected Phases	4					5
Permitted Phases		4				
Detector Phase	4	4				5
Switch Phase						
Minimum Initial (s)	10.0	10.0				10.0
Minimum Split (s)	16.0	16.0				16.0
Total Split (s)	90.0	90.0				30.0
Total Split (%)	75.0%	75.0%				25.0%
Yellow Time (s)	3.5	3.5				3.5
All-Red Time (s)	2.5	2.5				2.5
Lost Time Adjust (s)	0.0	0.0				0.0
Total Lost Time (s)	6.0	6.0				6.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max	C-Max				None
Act Effct Green (s)	97.8	97.8				10.2
Actuated g/C Ratio	0.82	0.82				0.08
v/c Ratio	0.40	0.10				0.53
Control Delay	3.4	0.3				12.9
Queue Delay	0.2	0.0				0.0
Total Delay	3.5	0.3				12.9
LOS	A	A				B
Approach Delay	3.0				12.9	
Approach LOS	A				B	
Queue Length 50th (ft)	108	0				5
Queue Length 95th (ft)	140	7				47

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Internal Link Dist (ft)	589			579	1013	
Turn Bay Length (ft)		500				
Base Capacity (vph)	2885	2314				735
Starvation Cap Reductn	787	0				0
Spillback Cap Reductn	0	0				0
Storage Cap Reductn	0	0				0
Reduced v/c Ratio	0.54	0.10				0.32

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 52 (43%), Referenced to phase 4:EBT, Start of Green
Natural Cycle: 40
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.53
Intersection Signal Delay: 4.4 Intersection LOS: A
Intersection Capacity Utilization 47.4% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 4050: Prop Site Drive E & EB M-96 (Michigan Avenue)

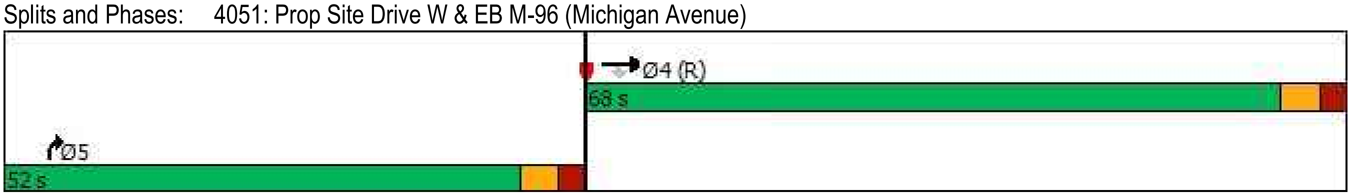


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	715	389	0	0	0	389
Future Volume (vph)	715	389	0	0	0	389
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		500	600		0	0
Storage Lanes		2	0		0	2
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	0.88	1.00	1.00	1.00	0.88
Frt		0.850				0.850
Flt Protected						
Satd. Flow (prot)	3539	2787	0	0	0	2787
Flt Permitted						
Satd. Flow (perm)	3539	2787	0	0	0	2787
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		423				265
Link Speed (mph)	55			55	25	
Link Distance (ft)	608			627	1293	
Travel Time (s)	7.5			7.8	35.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	777	423	0	0	0	423
Shared Lane Traffic (%)						
Lane Group Flow (vph)	777	423	0	0	0	423
Turn Type	NA	Perm				Prot
Protected Phases	4					5
Permitted Phases		4				
Detector Phase	4	4				5
Switch Phase						
Minimum Initial (s)	10.0	10.0				10.0
Minimum Split (s)	16.0	16.0				16.0
Total Split (s)	68.0	68.0				52.0
Total Split (%)	56.7%	56.7%				43.3%
Yellow Time (s)	3.5	3.5				3.5
All-Red Time (s)	2.5	2.5				2.5
Lost Time Adjust (s)	0.0	0.0				0.0
Total Lost Time (s)	6.0	6.0				6.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max	C-Max				None
Act Effct Green (s)	94.3	94.3				13.7
Actuated g/C Ratio	0.79	0.79				0.11
v/c Ratio	0.28	0.19				0.76
Control Delay	1.3	0.3				28.1
Queue Delay	0.0	0.0				0.0
Total Delay	1.3	0.3				28.1
LOS	A	A				C
Approach Delay	1.0				28.1	
Approach LOS	A				C	
Queue Length 50th (ft)	0	0				67
Queue Length 95th (ft)	38	9				122

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Internal Link Dist (ft)	528			547	1213	
Turn Bay Length (ft)		500				
Base Capacity (vph)	2780	2279				1231
Starvation Cap Reductn	0	0				0
Spillback Cap Reductn	0	0				0
Storage Cap Reductn	0	0				0
Reduced v/c Ratio	0.28	0.19				0.34

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 32 (27%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 40	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.76	
Intersection Signal Delay: 8.0	Intersection LOS: A
Intersection Capacity Utilization 43.4%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4051: Prop Site Drive W & EB M-96 (Michigan Avenue)

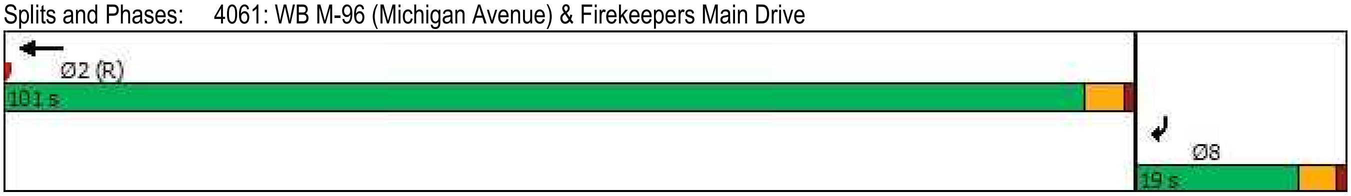


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	1025	168	0	134
Future Volume (vph)	0	0	1025	168	0	134
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			0	0	0
Storage Lanes	0			0	0	2
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	0.88
Frt			0.979			0.850
Flt Protected						
Satd. Flow (prot)	0	0	3474	0	0	2787
Flt Permitted						
Satd. Flow (perm)	0	0	3474	0	0	2787
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			54			312
Link Speed (mph)		55	55		25	
Link Distance (ft)		574	509		701	
Travel Time (s)		7.1	6.3		19.1	
Peak Hour Factor	0.92	0.92	0.92	0.95	0.67	0.92
Heavy Vehicles (%)	2%	2%	2%	0%	0%	2%
Adj. Flow (vph)	0	0	1114	177	0	146
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1291	0	0	146
Turn Type			NA			Prot
Protected Phases			2			8
Permitted Phases						
Detector Phase			2			8
Switch Phase						
Minimum Initial (s)			10.0			10.0
Minimum Split (s)			22.5			14.5
Total Split (s)			101.0			19.0
Total Split (%)			84.2%			15.8%
Yellow Time (s)			3.5			3.5
All-Red Time (s)			1.0			1.0
Lost Time Adjust (s)			0.0			0.0
Total Lost Time (s)			4.5			4.5
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode			C-Max			None
Act Effct Green (s)			101.0			10.0
Actuated g/C Ratio			0.84			0.08
v/c Ratio			0.44			0.28
Control Delay			2.8			1.4
Queue Delay			0.0			0.0
Total Delay			2.8			1.4
LOS			A			A
Approach Delay			2.8		1.4	
Approach LOS			A		A	
Queue Length 50th (ft)			91			0

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Queue Length 95th (ft)			113			0
Internal Link Dist (ft)		494	429		621	
Turn Bay Length (ft)						
Base Capacity (vph)			2932			611
Starvation Cap Reductn			0			0
Spillback Cap Reductn			0			0
Storage Cap Reductn			0			0
Reduced v/c Ratio			0.44			0.24

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:WBT, Start of Green	
Natural Cycle: 40	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.44	
Intersection Signal Delay: 2.6	Intersection LOS: A
Intersection Capacity Utilization 49.5%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4061: WB M-96 (Michigan Avenue) & Firekeepers Main Drive

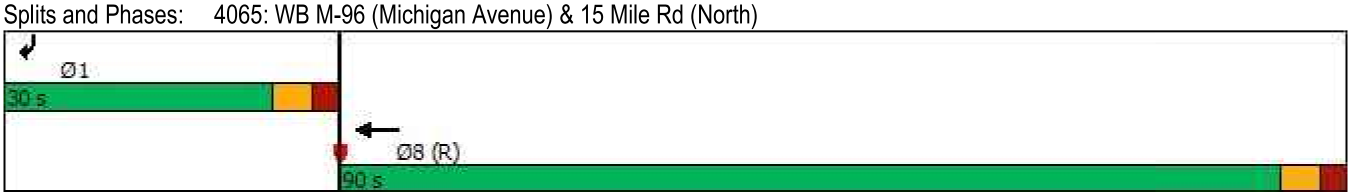


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	2053	352	0	317
Future Volume (vph)	0	0	2053	352	0	317
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			250	0	200
Storage Lanes	0			0	0	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.91	1.00	1.00	0.88
Frt				0.850		0.850
Flt Protected						
Satd. Flow (prot)	0	0	5085	1583	0	2787
Flt Permitted						
Satd. Flow (perm)	0	0	5085	1583	0	2787
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				155		24
Link Speed (mph)		45	45		45	
Link Distance (ft)		534	660		516	
Travel Time (s)		8.1	10.0		7.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	2232	383	0	345
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	2232	383	0	345
Turn Type			NA	custom		Prot
Protected Phases			8	Free		1
Permitted Phases						
Minimum Split (s)			16.0			13.0
Total Split (s)			90.0			30.0
Total Split (%)			75.0%			25.0%
Yellow Time (s)			3.5			3.5
All-Red Time (s)			2.5			2.5
Lost Time Adjust (s)			0.0			0.0
Total Lost Time (s)			6.0			6.0
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)			84.0	120.0		24.0
Actuated g/C Ratio			0.70	1.00		0.20
v/c Ratio			0.63	0.24		0.60
Control Delay			2.6	5.2		45.4
Queue Delay			0.0	0.0		0.0
Total Delay			2.6	5.2		45.4
LOS			A	A		D
Approach Delay			3.0		45.4	
Approach LOS			A		D	
Queue Length 50th (ft)			57	109		129
Queue Length 95th (ft)			58	125		185
Internal Link Dist (ft)		454	580		436	
Turn Bay Length (ft)				250		200
Base Capacity (vph)			3559	1583		576
Starvation Cap Reductn			71	0		0

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Spillback Cap Reductn			0	0		0
Storage Cap Reductn			0	0		0
Reduced v/c Ratio			0.64	0.24		0.60

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 8:WBT, Start of Green	
Natural Cycle: 50	
Control Type: Pretimed	
Maximum v/c Ratio: 0.63	
Intersection Signal Delay: 7.9	Intersection LOS: A
Intersection Capacity Utilization 60.8%	ICU Level of Service B
Analysis Period (min) 15	

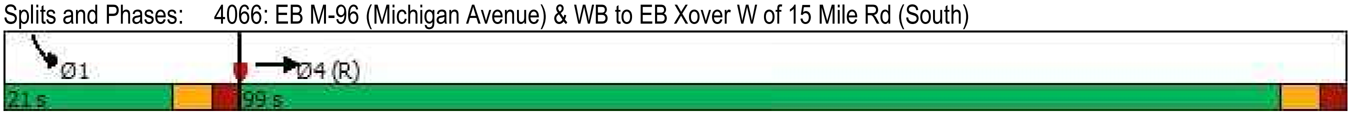
Splits and Phases: 4065: WB M-96 (Michigan Avenue) & 15 Mile Rd (North)



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑			↰	
Traffic Volume (vph)	0	2066	0	0	119	0
Future Volume (vph)	0	2066	0	0	119	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.91	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	5085	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	5085	0	0	1770	0
Right Turn on Red				Yes	Yes	Yes
Satd. Flow (RTOR)					21	
Link Speed (mph)		45	45		25	
Link Distance (ft)		262	1016		123	
Travel Time (s)		4.0	15.4		3.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.90	0.92
Adj. Flow (vph)	0	2246	0	0	132	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	2246	0	0	132	0
Turn Type		NA			Prot	
Protected Phases		4			1	
Permitted Phases						
Minimum Split (s)		16.0			16.0	
Total Split (s)		99.0			21.0	
Total Split (%)		82.5%			17.5%	
Yellow Time (s)		3.5			3.5	
All-Red Time (s)		2.5			2.5	
Lost Time Adjust (s)		0.0			0.0	
Total Lost Time (s)		6.0			6.0	
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)		93.0			15.0	
Actuated g/C Ratio		0.78			0.12	
v/c Ratio		0.57			0.55	
Control Delay		2.6			49.1	
Queue Delay		0.0			0.0	
Total Delay		2.6			49.1	
LOS		A			D	
Approach Delay		2.6			49.1	
Approach LOS		A			D	
Queue Length 50th (ft)		79			88	
Queue Length 95th (ft)		87			154	
Internal Link Dist (ft)		182	936		43	
Turn Bay Length (ft)						
Base Capacity (vph)		3940			239	
Starvation Cap Reductn		0			0	
Spillback Cap Reductn		0			0	
Storage Cap Reductn		0			0	
Reduced v/c Ratio		0.57			0.55	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 116 (97%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 45	
Control Type: Pretimed	
Maximum v/c Ratio: 0.57	
Intersection Signal Delay: 5.2	Intersection LOS: A
Intersection Capacity Utilization 88.2%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 4066: EB M-96 (Michigan Avenue) & WB to EB Xover W of 15 Mile Rd (South)

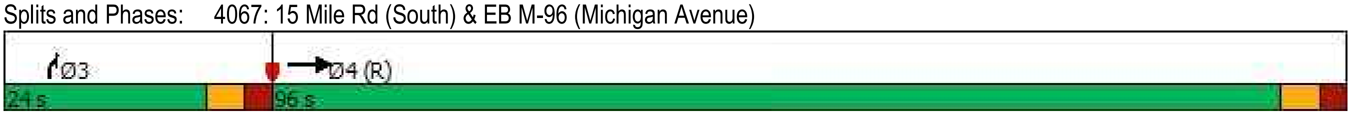


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1962	223	0	0	0	224
Future Volume (vph)	1962	223	0	0	0	224
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		50	0		0	250
Storage Lanes		0	0		0	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	1.00	1.00	1.00	0.88
Frt	0.985					0.850
Flt Protected						
Satd. Flow (prot)	5009	0	0	0	0	2814
Flt Permitted						
Satd. Flow (perm)	5009	0	0	0	0	2814
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	46					40
Link Speed (mph)	45			45	45	
Link Distance (ft)	1016			704	1375	
Travel Time (s)	15.4			10.7	20.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.88	0.88
Heavy Vehicles (%)	2%	2%	2%	2%	1%	1%
Adj. Flow (vph)	2133	242	0	0	0	255
Shared Lane Traffic (%)						
Lane Group Flow (vph)	2375	0	0	0	0	255
Turn Type	NA					Prot
Protected Phases	4					3
Permitted Phases						
Minimum Split (s)	17.0					16.0
Total Split (s)	96.0					24.0
Total Split (%)	80.0%					20.0%
Yellow Time (s)	3.5					3.5
All-Red Time (s)	2.5					2.5
Lost Time Adjust (s)	0.0					0.0
Total Lost Time (s)	6.0					6.0
Lead/Lag	Lag					Lead
Lead-Lag Optimize?	Yes					Yes
Act Effct Green (s)	90.0					18.0
Actuated g/C Ratio	0.75					0.15
v/c Ratio	0.63					0.56
Control Delay	2.3					44.9
Queue Delay	0.0					0.0
Total Delay	2.3					44.9
LOS	A					D
Approach Delay	2.3				44.9	
Approach LOS	A				D	
Queue Length 50th (ft)	62					88
Queue Length 95th (ft)	68					133
Internal Link Dist (ft)	936			624	1295	
Turn Bay Length (ft)						250
Base Capacity (vph)	3768					456

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Starvation Cap Reductn	0					0
Spillback Cap Reductn	0					0
Storage Cap Reductn	0					0
Reduced v/c Ratio	0.63					0.56

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 4 (3%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 50	
Control Type: Pretimed	
Maximum v/c Ratio: 0.63	
Intersection Signal Delay: 6.5	Intersection LOS: A
Intersection Capacity Utilization 61.2%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 4067: 15 Mile Rd (South) & EB M-96 (Michigan Avenue)

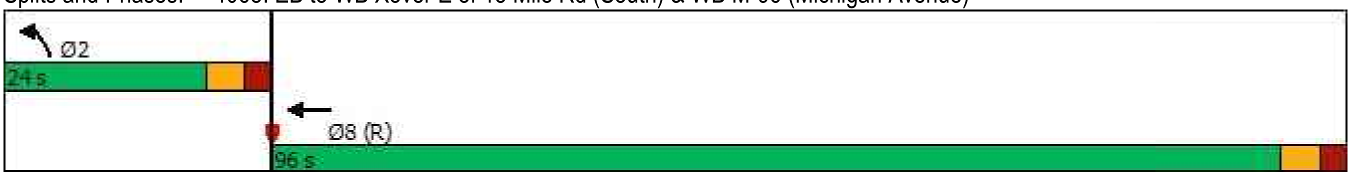


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	2073	113	0
Future Volume (vph)	0	0	0	2073	113	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	5085	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	5085	1770	0
Right Turn on Red		Yes			Yes	Yes
Satd. Flow (RTOR)					18	
Link Speed (mph)	45			45	25	
Link Distance (ft)	687			275	111	
Travel Time (s)	10.4			4.2	3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	2253	123	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	2253	123	0
Turn Type				NA	Prot	
Protected Phases				8	2	
Permitted Phases						
Minimum Split (s)				16.0	13.0	
Total Split (s)				96.0	24.0	
Total Split (%)				80.0%	20.0%	
Yellow Time (s)				3.5	3.5	
All-Red Time (s)				2.5	2.5	
Lost Time Adjust (s)				0.0	0.0	
Total Lost Time (s)				6.0	6.0	
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)				90.0	18.0	
Actuated g/C Ratio				0.75	0.15	
v/c Ratio				0.59	0.44	
Control Delay				7.5	38.5	
Queue Delay				0.1	0.0	
Total Delay				7.6	38.5	
LOS				A	D	
Approach Delay				7.6	38.5	
Approach LOS				A	D	
Queue Length 50th (ft)				404	80	
Queue Length 95th (ft)				429	m140	
Internal Link Dist (ft)	607			195	31	
Turn Bay Length (ft)						
Base Capacity (vph)				3813	280	
Starvation Cap Reductn				497	0	
Spillback Cap Reductn				0	0	
Storage Cap Reductn				0	0	
Reduced v/c Ratio				0.68	0.44	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 112 (93%), Referenced to phase 8:WBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.59	
Intersection Signal Delay: 9.2	Intersection LOS: A
Intersection Capacity Utilization 88.1%	ICU Level of Service E
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4068: EB to WB Xover E of 15 Mile Rd (South) & WB M-96 (Michigan Avenue)

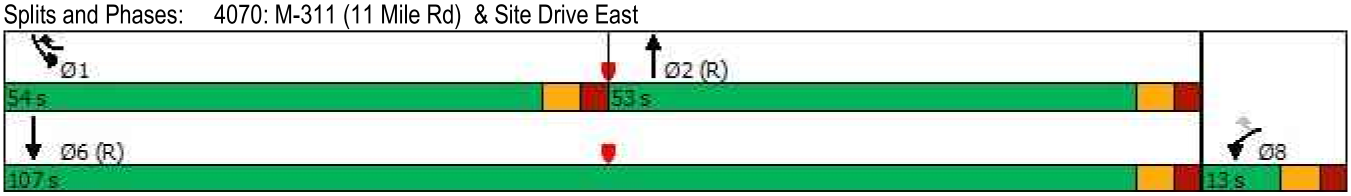


Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	15	364	692	15	364	719
Future Volume (vph)	15	364	692	15	364	719
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	500		0	400	
Storage Lanes	1	1		0	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.88	0.95	0.95	1.00	0.95
Frt		0.850	0.997			
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	2787	3529	0	1770	3539
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1770	2787	3529	0	1770	3539
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		150	2			
Link Speed (mph)	25		55			55
Link Distance (ft)	750		940			974
Travel Time (s)	20.5		11.7			12.1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	16	396	752	16	396	782
Shared Lane Traffic (%)						
Lane Group Flow (vph)	16	396	768	0	396	782
Turn Type	Prot	pm+ov	NA		Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8				
Detector Phase	8	1	2		1	6
Switch Phase						
Minimum Initial (s)	7.0	7.0	10.0		7.0	10.0
Minimum Split (s)	13.0	13.0	16.0		13.0	16.0
Total Split (s)	13.0	54.0	53.0		54.0	107.0
Total Split (%)	10.8%	45.0%	44.2%		45.0%	89.2%
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5
All-Red Time (s)	2.5	2.5	2.5		2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0		6.0	6.0
Lead/Lag		Lead	Lag		Lead	
Lead-Lag Optimize?						
Recall Mode	None	None	C-Max		None	C-Max
Act Effct Green (s)	7.0	38.5	69.5		33.3	112.4
Actuated g/C Ratio	0.06	0.32	0.58		0.28	0.94
v/c Ratio	0.16	0.40	0.38		0.81	0.24
Control Delay	57.3	18.5	9.8		46.4	1.9
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	57.3	18.5	9.8		46.4	1.9
LOS	E	B	A		D	A
Approach Delay	20.0		9.8			16.8
Approach LOS	B		A			B
Queue Length 50th (ft)	12	86	19		295	0
Queue Length 95th (ft)	36	98	352		429	105

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Internal Link Dist (ft)	670		860			894
Turn Bay Length (ft)		500			400	
Base Capacity (vph)	103	1318	2043		708	3315
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	0.16	0.30	0.38		0.56	0.24

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 8 (7%), Referenced to phase 2:NBT and 6:SBT, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.81	
Intersection Signal Delay: 15.1	Intersection LOS: B
Intersection Capacity Utilization 60.6%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 4070: M-311 (11 Mile Rd) & Site Drive East

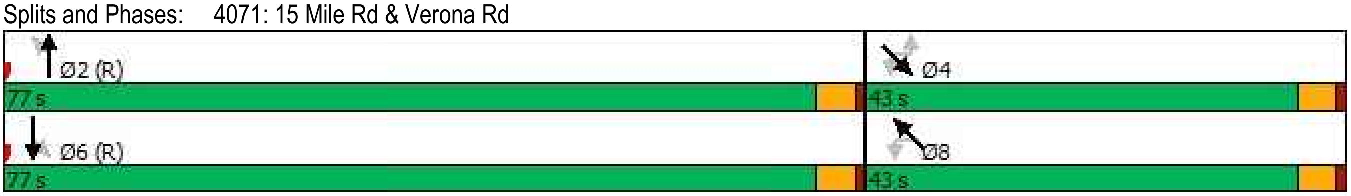


Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	310	13	13	5	9	4	0	87	290	6	118	14
Future Volume (vph)	310	13	13	5	9	4	0	87	290	6	118	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		70	0		0
Storage Lanes	0		0	0		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
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
Frt		0.995			0.968				0.850		0.986	
Flt Protected		0.956			0.987						0.998	
Satd. Flow (prot)	0	1789	0	0	1715	0	0	1845	1392	0	1851	0
Flt Permitted		0.720			0.914						0.991	
Satd. Flow (perm)	0	1348	0	0	1588	0	0	1845	1392	0	1838	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		3			7				326		5	
Link Speed (mph)		45			55			55			55	
Link Distance (ft)		682			426			745			951	
Travel Time (s)		10.3			5.3			9.2			11.8	
Peak Hour Factor	0.80	0.80	0.80	0.60	0.60	0.60	0.89	0.89	0.89	0.86	0.86	0.86
Heavy Vehicles (%)	1%	1%	1%	0%	0%	25%	0%	3%	16%	1%	1%	1%
Adj. Flow (vph)	388	16	16	8	15	7	0	98	326	7	137	16
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	420	0	0	30	0	0	98	326	0	160	0
Turn Type	Perm	NA		Perm	NA			NA	Perm	Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4		4	8		
Minimum Split (s)	22.5	22.5		22.5	22.5		22.5	22.5	22.5	22.5	22.5	
Total Split (s)	77.0	77.0		77.0	77.0		43.0	43.0	43.0	43.0	43.0	
Total Split (%)	64.2%	64.2%		64.2%	64.2%		35.8%	35.8%	35.8%	35.8%	35.8%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0	0.0		0.0	
Total Lost Time (s)		4.5			4.5			4.5	4.5		4.5	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		72.5			72.5			38.5	38.5		38.5	
Actuated g/C Ratio		0.60			0.60			0.32	0.32		0.32	
v/c Ratio		0.52			0.03			0.17	0.49		0.27	
Control Delay		16.3			8.0			30.2	5.9		30.8	
Queue Delay		0.0			0.0			0.0	0.0		0.0	
Total Delay		16.3			8.0			30.2	5.9		30.8	
LOS		B			A			C	A		C	
Approach Delay		16.3			8.0			11.5			30.8	
Approach LOS		B			A			B			C	
Queue Length 50th (ft)		174			7			54	0		89	
Queue Length 95th (ft)		216			12			96	63		139	
Internal Link Dist (ft)		602			346			665			871	
Turn Bay Length (ft)									70			
Base Capacity (vph)		815			962			591	668		593	

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
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		0.52			0.03			0.17	0.49		0.27	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 55	
Control Type: Pretimed	
Maximum v/c Ratio: 0.52	
Intersection Signal Delay: 16.4	Intersection LOS: B
Intersection Capacity Utilization 45.9%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4071: 15 Mile Rd & Verona Rd

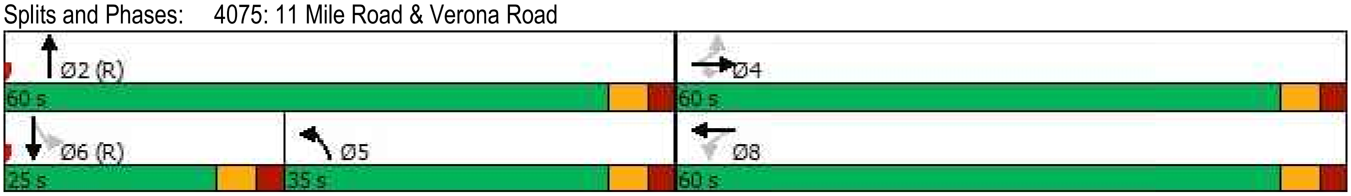


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	375	322	17	394	19	320	68	13	10	82	8
Future Volume (vph)	11	375	322	17	394	19	320	68	13	10	82	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	190		70	190		0	140		0	215		0
Storage Lanes	1		1	1		0	2		0	1		0
Taper Length (ft)	115			140			200			165		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.993			0.976			0.987	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	1900	1468	1805	1882	0	3072	1854	0	1687	1753	0
Flt Permitted	0.331			0.331			0.950			0.697		
Satd. Flow (perm)	629	1900	1468	629	1882	0	3072	1854	0	1238	1753	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			178		3			10			3	
Link Speed (mph)		55			55			45			55	
Link Distance (ft)		519			1585			1015			821	
Travel Time (s)		6.4			19.6			15.4			10.2	
Peak Hour Factor	0.79	0.79	0.79	0.87	0.87	0.87	0.87	0.87	0.87	0.66	0.66	0.66
Heavy Vehicles (%)	0%	0%	10%	0%	0%	5%	14%	0%	0%	7%	7%	7%
Adj. Flow (vph)	14	475	408	20	453	22	368	78	15	15	124	12
Shared Lane Traffic (%)												
Lane Group Flow (vph)	14	475	408	20	475	0	368	93	0	15	136	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Perm	NA	
Protected Phases		4			8		5	2			6	
Permitted Phases	4		4	8						6		
Minimum Split (s)	25.0	25.0	25.0	25.0	25.0		16.0	25.0		25.0	25.0	
Total Split (s)	60.0	60.0	60.0	60.0	60.0		35.0	60.0		25.0	25.0	
Total Split (%)	50.0%	50.0%	50.0%	50.0%	50.0%		29.2%	50.0%		20.8%	20.8%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	2.5	2.5	2.5	2.5	2.5		2.5	2.5		2.5	2.5	
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)	6.0	6.0	6.0	6.0	6.0		6.0	6.0		6.0	6.0	
Lead/Lag							Lag			Lead	Lead	
Lead-Lag Optimize?							Yes			Yes	Yes	
Act Effct Green (s)	54.0	54.0	54.0	54.0	54.0		29.0	54.0		19.0	19.0	
Actuated g/C Ratio	0.45	0.45	0.45	0.45	0.45		0.24	0.45		0.16	0.16	
v/c Ratio	0.05	0.56	0.54	0.07	0.56		0.50	0.11		0.08	0.49	
Control Delay	19.4	27.3	15.8	19.8	27.3		41.9	17.5		44.3	51.6	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	19.4	27.3	15.8	19.8	27.3		41.9	17.5		44.3	51.6	
LOS	B	C	B	B	C		D	B		D	D	
Approach Delay		21.9			27.0			37.0			50.9	
Approach LOS		C			C			D			D	
Queue Length 50th (ft)	6	264	123	9	263		127	36		10	95	
Queue Length 95th (ft)	17	306	165	24	351		169	67		22	113	
Internal Link Dist (ft)		439			1505			935			741	
Turn Bay Length (ft)	190		70	190			140			215		
Base Capacity (vph)	283	855	758	283	848		742	839		196	280	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0	0	0	0		0	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	0.05	0.56	0.54	0.07	0.56		0.50	0.11		0.08	0.49	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green	
Natural Cycle: 70	
Control Type: Pretimed	
Maximum v/c Ratio: 0.56	
Intersection Signal Delay: 28.8	Intersection LOS: C
Intersection Capacity Utilization 51.6%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4075: 11 Mile Road & Verona Road



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	962	143	0	231
Future Volume (vph)	0	0	962	143	0	231
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200			300	245	245
Storage Lanes	0			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.981			0.865
Flt Protected						
Satd. Flow (prot)	0	0	3338	0	0	1644
Flt Permitted						
Satd. Flow (perm)	0	0	3338	0	0	1644
Link Speed (mph)		55	55		25	
Link Distance (ft)		509	395		760	
Travel Time (s)		6.3	4.9		20.7	
Peak Hour Factor	0.88	0.88	0.91	0.91	0.79	0.79
Heavy Vehicles (%)	1%	1%	7%	0%	0%	0%
Adj. Flow (vph)	0	0	1057	157	0	292
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1214	0	0	292
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 52.1%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	948	43	0	157
Future Volume (vph)	0	0	948	43	0	157
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	175			50	0	0
Storage Lanes	0			0	0	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.994			0.865
Flt Protected						
Satd. Flow (prot)	0	0	3363	0	0	1565
Flt Permitted						
Satd. Flow (perm)	0	0	3363	0	0	1565
Link Speed (mph)		55	55		25	
Link Distance (ft)		395	586		185	
Travel Time (s)		4.9	7.3		5.0	
Peak Hour Factor	0.90	0.90	0.95	0.95	0.70	0.70
Heavy Vehicles (%)	1%	1%	7%	0%	5%	5%
Adj. Flow (vph)	0	0	998	45	0	224
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1043	0	0	224
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 44.0% ICU Level of Service A
Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	984	12	0	7
Future Volume (vph)	0	0	984	12	0	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150			600	0	0
Storage Lanes	0			0	0	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.998			0.865
Flt Protected						
Satd. Flow (prot)	0	0	3370	0	0	1644
Flt Permitted						
Satd. Flow (perm)	0	0	3370	0	0	1644
Link Speed (mph)		55	55		25	
Link Distance (ft)		586	607		1086	
Travel Time (s)		7.3	7.5		29.6	
Peak Hour Factor	0.83	0.83	0.92	0.92	0.60	0.60
Heavy Vehicles (%)	10%	1%	7%	0%	33%	0%
Adj. Flow (vph)	0	0	1070	13	0	12
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1083	0	0	12
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 37.6%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	718	8	0	7
Future Volume (vph)	0	0	718	8	0	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.998			0.865
Flt Protected						
Satd. Flow (prot)	0	0	3532	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	0	3532	0	0	1611
Link Speed (mph)		55	55		55	
Link Distance (ft)		538	1254		1399	
Travel Time (s)		6.7	15.5		17.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	780	9	0	8
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	789	0	0	8
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 30.1%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	0	5	0	352	0	0	317	0
Future Volume (vph)	0	0	0	0	0	5	0	352	0	0	317	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
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
Frt					0.865							
Flt Protected												
Satd. Flow (prot)	0	1863	0	0	1611	0	0	1863	0	0	1863	0
Flt Permitted												
Satd. Flow (perm)	0	1863	0	0	1611	0	0	1863	0	0	1863	0
Link Speed (mph)		45			45			25			45	
Link Distance (ft)		957			1038			516			593	
Travel Time (s)		14.5			15.7			14.1			9.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	0	5	0	383	0	0	345	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	5	0	0	383	0	0	345	0
Sign Control		Stop			Stop			Free			Free	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 28.5% ICU Level of Service A
Analysis Period (min) 15

Lane Group	EBT	EBR	WBL	WBT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	0	0	119	1054	0	0
Future Volume (vph)	0	0	119	1054	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.91	0.91	1.00	1.00
Frt						
Flt Protected				0.995		
Satd. Flow (prot)	0	0	0	5060	0	0
Flt Permitted				0.995		
Satd. Flow (perm)	0	0	0	5060	0	0
Link Speed (mph)	45			45	25	
Link Distance (ft)	183			382	263	
Travel Time (s)	2.8			5.8	7.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	129	1146	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1275	0	0
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 38.7% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	1023	746	0	0	0	0
Future Volume (vph)	1023	746	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950	0.982				
Satd. Flow (prot)	1610	3329	0	0	0	0
Flt Permitted	0.950	0.982				
Satd. Flow (perm)	1610	3329	0	0	0	0
Link Speed (mph)		45	45		25	
Link Distance (ft)		619	209		329	
Travel Time (s)		9.4	3.2		9.0	
Peak Hour Factor	0.86	0.86	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1190	867	0	0	0	0
Shared Lane Traffic (%)	44%					
Lane Group Flow (vph)	666	1391	0	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 51.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	0	768	168	0	0
Future Volume (vph)	0	0	768	168	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	1.00
Frt				0.850		
Flt Protected						
Satd. Flow (prot)	0	0	3539	1583	0	0
Flt Permitted						
Satd. Flow (perm)	0	0	3539	1583	0	0
Link Speed (mph)		45	45		30	
Link Distance (ft)		213	315		137	
Travel Time (s)		3.2	4.8		3.1	
Peak Hour Factor	0.92	0.92	0.91	0.91	0.92	0.92
Adj. Flow (vph)	0	0	844	185	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	844	185	0	0
Sign Control		Stop	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 50.2%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	868	0	0	159	0
Future Volume (vph)	0	868	0	0	159	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3505	0	0	1787	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3505	0	0	1787	0
Link Speed (mph)		45	45		25	
Link Distance (ft)		309	168		108	
Travel Time (s)		4.7	2.5		2.9	
Peak Hour Factor	0.86	0.86	0.92	0.92	0.87	0.87
Heavy Vehicles (%)	3%	3%	2%	2%	1%	1%
Adj. Flow (vph)	0	1009	0	0	183	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1009	0	0	183	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 48.7%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑↑	↰	
Traffic Volume (vph)	0	0	0	881	182	0
Future Volume (vph)	0	0	0	881	182	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	5036	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	5036	1770	0
Link Speed (mph)	45			45	25	
Link Distance (ft)	134			152	111	
Travel Time (s)	2.0			2.3	3.0	
Peak Hour Factor	0.92	0.92	0.89	0.89	0.94	0.94
Heavy Vehicles (%)	2%	2%	3%	3%	2%	2%
Adj. Flow (vph)	0	0	0	990	194	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	990	194	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 37.1%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	846	0	0	80	0
Future Volume (vph)	0	846	0	0	80	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3574	0	0	1787	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3574	0	0	1787	0
Link Speed (mph)		45	45		25	
Link Distance (ft)		222	290		102	
Travel Time (s)		3.4	4.4		2.8	
Peak Hour Factor	0.95	0.95	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	1%	1%	2%	2%	1%	1%
Adj. Flow (vph)	0	891	0	0	87	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	891	0	0	87	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 62.1%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	900	65	0
Future Volume (vph)	0	0	0	900	65	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	30			45	25	
Link Distance (ft)	114			1105	101	
Travel Time (s)	2.6			16.7	2.8	
Peak Hour Factor	0.92	0.92	0.88	0.88	0.94	0.94
Adj. Flow (vph)	0	0	0	1023	69	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1023	69	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 57.9%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	114	227	31	4	162	12	14	37	3	13	81	96
Future Volume (vph)	114	227	31	4	162	12	14	37	3	13	81	96
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	80		0	80		0	110		0	115		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	180			180			140			175		
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
Frt		0.982			0.989			0.988			0.919	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	1866	0	1770	1842	0	1703	1771	0	1770	1712	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1805	1866	0	1770	1842	0	1703	1771	0	1770	1712	0
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		1365			1319			666			571	
Travel Time (s)		20.7			20.0			10.1			8.7	
Peak Hour Factor	0.94	0.94	0.94	0.88	0.88	0.88	0.78	0.78	0.78	0.91	0.91	0.91
Heavy Vehicles (%)	0%	0%	0%	2%	2%	2%	6%	6%	6%	2%	2%	2%
Adj. Flow (vph)	121	241	33	5	184	14	18	47	4	14	89	105
Shared Lane Traffic (%)												
Lane Group Flow (vph)	121	274	0	5	198	0	18	51	0	14	194	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 38.8%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL2	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	SWL	SWR
Lane Configurations											
Traffic Volume (vph)	55	0	112	0	270	79	81	385	0	0	0
Future Volume (vph)	55	0	112	0	270	79	81	385	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	240	0		0	105		0	0	0
Storage Lanes		1	1	0		0	1		0	0	0
Taper Length (ft)		25		25			70			25	
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
Frt			0.850		0.969						
Flt Protected	0.950						0.950				
Satd. Flow (prot)	1687	0	1615	0	1805	0	1752	1845	0	0	0
Flt Permitted	0.950						0.950				
Satd. Flow (perm)	1687	0	1615	0	1805	0	1752	1845	0	0	0
Link Speed (mph)		25			45			45		25	
Link Distance (ft)		894			1167			685		897	
Travel Time (s)		24.4			17.7			10.4		24.5	
Peak Hour Factor	0.93	0.93	0.93	0.91	0.91	0.91	0.95	0.95	0.95	0.92	0.92
Heavy Vehicles (%)	7%	0%	0%	2%	2%	2%	3%	3%	3%	2%	2%
Adj. Flow (vph)	59	0	120	0	297	87	85	405	0	0	0
Shared Lane Traffic (%)											
Lane Group Flow (vph)	59	0	120	0	384	0	85	405	0	0	0
Sign Control		Stop			Free			Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 33.9% ICU Level of Service A

Analysis Period (min) 15

Lane Group	WBL2	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NER
Lane Configurations											
Traffic Volume (vph)	93	0	84	61	264	0	0	373	50	0	0
Future Volume (vph)	93	0	84	61	264	0	0	373	50	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	185	165		0	0		0	0	0
Storage Lanes		1	1	1		0	0		0	0	0
Taper Length (ft)		25		110			25			25	
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
Frt			0.850					0.984			
Flt Protected	0.950			0.950							
Satd. Flow (prot)	1805	0	1455	1752	1845	0	0	1815	0	0	0
Flt Permitted	0.950			0.950							
Satd. Flow (perm)	1805	0	1455	1752	1845	0	0	1815	0	0	0
Link Speed (mph)		25			45			45		25	
Link Distance (ft)		613			685			608		913	
Travel Time (s)		16.7			10.4			9.2		24.9	
Peak Hour Factor	0.81	0.81	0.81	0.87	0.87	0.87	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	11%	3%	3%	3%	3%	3%	3%	2%	2%
Adj. Flow (vph)	115	0	104	70	303	0	0	405	54	0	0
Shared Lane Traffic (%)											
Lane Group Flow (vph)	115	0	104	70	303	0	0	459	0	0	0
Sign Control		Stop			Free			Free		Stop	

Intersection Summary		
Area Type:	Other	
Control Type: Unsignalized		
Intersection Capacity Utilization 33.9%		ICU Level of Service A
Analysis Period (min) 15		

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	184	140	0	396	272	0
Future Volume (vph)	184	140	0	396	272	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.850				
Flt Protected	0.950					
Satd. Flow (prot)	1543	1553	0	3505	3374	0
Flt Permitted	0.950					
Satd. Flow (perm)	1543	1553	0	3505	3374	0
Link Speed (mph)	25			55	55	
Link Distance (ft)	119			105	620	
Travel Time (s)	3.2			1.3	7.7	
Peak Hour Factor	0.93	0.93	0.82	0.82	0.92	0.92
Heavy Vehicles (%)	17%	4%	0%	3%	7%	0%
Adj. Flow (vph)	198	151	0	483	296	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	198	151	0	483	296	0
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 27.8%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	396	61	35	377
Future Volume (vph)	0	0	396	61	35	377
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		340	0	
Storage Lanes	0	0		1	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	1.00	0.95	0.95
Frt				0.850		
Flt Protected						0.996
Satd. Flow (prot)	0	0	3505	1568	0	3383
Flt Permitted						0.996
Satd. Flow (perm)	0	0	3505	1568	0	3383
Link Speed (mph)	25		55			55
Link Distance (ft)	664		1109			105
Travel Time (s)	18.1		13.7			1.3
Peak Hour Factor	0.92	0.92	0.82	0.82	0.92	0.92
Heavy Vehicles (%)	2%	2%	3%	3%	20%	5%
Adj. Flow (vph)	0	0	483	74	38	410
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	483	74	0	448
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 29.1%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	WBL2	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NER
Lane Configurations											
Traffic Volume (vph)	52	0	60	0	352	0	0	220	86	0	0
Future Volume (vph)	52	0	60	0	352	0	0	220	86	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	205	0		0	0		135	0	0
Storage Lanes		1	1	0		0	0		1	0	0
Taper Length (ft)		25		25			25			25	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00
Frt			0.850						0.850		
Flt Protected	0.950										
Satd. Flow (prot)	1736	0	1380	0	3438	0	0	3343	1272	0	0
Flt Permitted	0.950										
Satd. Flow (perm)	1736	0	1380	0	3438	0	0	3343	1272	0	0
Link Speed (mph)		25			55			55		25	
Link Distance (ft)		296			230			1367		908	
Travel Time (s)		8.1			2.9			16.9		24.8	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.95	0.95	0.95	0.92	0.92
Heavy Vehicles (%)	4%	0%	17%	0%	5%	0%	0%	8%	27%	2%	2%
Adj. Flow (vph)	59	0	68	0	400	0	0	232	91	0	0
Shared Lane Traffic (%)											
Lane Group Flow (vph)	59	0	68	0	400	0	0	232	91	0	0
Sign Control		Stop			Free			Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 20.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	33	80	0	270	154	0
Future Volume (vph)	33	80	0	270	154	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				
Flt Protected	0.950					
Satd. Flow (prot)	1752	1077	0	1624	1696	0
Flt Permitted	0.950					
Satd. Flow (perm)	1752	1077	0	1624	1696	0
Link Speed (mph)	25			45	45	
Link Distance (ft)	189			1063	114	
Travel Time (s)	5.2			16.1	1.7	
Peak Hour Factor	0.74	0.74	0.93	0.93	0.89	0.89
Heavy Vehicles (%)	3%	50%	17%	17%	12%	12%
Adj. Flow (vph)	45	108	0	290	173	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	45	108	0	290	173	0
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 24.2%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	0	0	182	121	3	154
Future Volume (vph)	0	0	182	121	3	154
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.850		
Flt Protected						0.999
Satd. Flow (prot)	0	0	1624	1380	0	1689
Flt Permitted						0.999
Satd. Flow (perm)	0	0	1624	1380	0	1689
Link Speed (mph)	25		45			45
Link Distance (ft)	105		114			727
Travel Time (s)	2.9		1.7			11.0
Peak Hour Factor	0.92	0.92	0.93	0.93	0.89	0.89
Heavy Vehicles (%)	2%	2%	17%	17%	33%	12%
Adj. Flow (vph)	0	0	196	130	3	173
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	196	130	0	176
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 22.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBR	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	6	97	58	124	60	11
Future Volume (vph)	6	97	58	124	60	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	195	0	0			90
Storage Lanes	1	1	0			1
Taper Length (ft)	135		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				0.850
Flt Protected	0.950			0.984		
Satd. Flow (prot)	1570	1404	0	1615	1776	1509
Flt Permitted	0.950			0.984		
Satd. Flow (perm)	1570	1404	0	1615	1776	1509
Link Speed (mph)	25			45	45	
Link Distance (ft)	597			727	1165	
Travel Time (s)	16.3			11.0	17.7	
Peak Hour Factor	0.83	0.83	0.91	0.91	0.78	0.78
Heavy Vehicles (%)	15%	15%	43%	3%	7%	7%
Adj. Flow (vph)	7	117	64	136	77	14
Shared Lane Traffic (%)						
Lane Group Flow (vph)	7	117	0	200	77	14
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 26.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	18	1155	18	0
Future Volume (vph)	0	0	18	1155	18	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.91	0.91	1.00	1.00
Frt						
Flt Protected				0.999	0.950	
Satd. Flow (prot)	0	0	0	5080	1770	0
Flt Permitted				0.999	0.950	
Satd. Flow (perm)	0	0	0	5080	1770	0
Link Speed (mph)	45			45	25	
Link Distance (ft)	382			217	236	
Travel Time (s)	5.8			3.3	6.4	
Peak Hour Factor	0.90	0.90	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	20	1255	20	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1275	20	0
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 32.7% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑					↱
Traffic Volume (vph)	1027	0	0	0	0	30
Future Volume (vph)	1027	0	0	0	0	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	1.00	1.00	1.00	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	3539	0	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	3539	0	0	0	0	1611
Link Speed (mph)	45			45	25	
Link Distance (ft)	168			432	770	
Travel Time (s)	2.5			6.5	21.0	
Peak Hour Factor	0.87	0.87	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1180	0	0	0	0	33
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1180	0	0	0	0	33
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 46.1%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations			↑↑↑			↱
Traffic Volume (vph)	0	0	1063	0	0	32
Future Volume (vph)	0	0	1063	0	0	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.91	1.00	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	0	0	5036	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	0	5036	0	0	1611
Link Speed (mph)		45	45		25	
Link Distance (ft)		494	134		230	
Travel Time (s)		7.5	2.0		6.3	
Peak Hour Factor	0.92	0.92	0.89	0.89	0.92	0.92
Heavy Vehicles (%)	2%	2%	3%	3%	2%	2%
Adj. Flow (vph)	0	0	1194	0	0	35
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1194	0	0	35
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 40.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	915	50	0	0
Future Volume (vph)	0	0	915	50	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.992			
Flt Protected						
Satd. Flow (prot)	0	0	3511	0	0	0
Flt Permitted						
Satd. Flow (perm)	0	0	3511	0	0	0
Link Speed (mph)		30	45		25	
Link Distance (ft)		176	114		201	
Travel Time (s)		4.0	1.7		5.5	
Peak Hour Factor	0.92	0.92	0.88	0.88	0.92	0.92
Adj. Flow (vph)	0	0	1040	57	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1097	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 35.4% ICU Level of Service A

Analysis Period (min) 15

Lane Group	NBT	NBR	SBL	SBT	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	352	228	0	272	0	0
Future Volume (vph)	352	228	0	272	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	1.00	0.95	1.00	1.00
Frt	0.941					
Flt Protected						
Satd. Flow (prot)	3164	0	0	3343	0	0
Flt Permitted						
Satd. Flow (perm)	3164	0	0	3343	0	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	620			230	1088	
Travel Time (s)	7.7			2.9	29.7	
Peak Hour Factor	0.88	0.88	0.95	0.95	0.92	0.92
Heavy Vehicles (%)	5%	11%	8%	8%	2%	2%
Adj. Flow (vph)	400	259	0	286	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	659	0	0	286	0	0
Sign Control	Free			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 20.4%	ICU Level of Service A
Analysis Period (min) 15	

9041: WB to EB Xover E of M-227/West Drive/McDonald's Dr & WB M-96 (Michigan Avenue)

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	32	883	0	0	0	0	0	48	29
Future Volume (vph)	0	0	0	32	883	0	0	0	0	0	48	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	165		0	0		0	0		0
Storage Lanes	0		0	1		0	0		0	0		0
Taper Length (ft)	25			85			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt											0.949	
Flt Protected				0.950								
Satd. Flow (prot)	0	0	0	1770	3539	0	0	0	0	0	1785	0
Flt Permitted				0.950								
Satd. Flow (perm)	0	0	0	1770	3539	0	0	0	0	0	1785	0
Link Speed (mph)		30			45			30			30	
Link Distance (ft)		212			176			102			496	
Travel Time (s)		4.8			2.7			2.3			11.3	
Peak Hour Factor	0.92	0.92	0.92	0.86	0.86	0.86	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	1%	1%	1%
Adj. Flow (vph)	0	0	0	37	1027	0	0	0	0	0	52	32
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	37	1027	0	0	0	0	0	84	0
Sign Control		Free			Free			Yield			Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 35.4% ICU Level of Service A

Analysis Period (min) 15

Lane Group	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	1217	0	0	0	1250
Future Volume (vph)	0	1217	0	0	0	1250
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	0.88
Frt						0.850
Flt Protected						
Satd. Flow (prot)	0	3539	0	0	0	2787
Flt Permitted						
Satd. Flow (perm)	0	3539	0	0	0	2787
Link Speed (mph)		55	55		55	
Link Distance (ft)		434	1242		1194	
Travel Time (s)		5.4	15.4		14.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1323	0	0	0	1359
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1323	0	0	0	1359
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 47.1%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	0	119	0	0	416
Future Volume (vph)	0	0	119	0	0	416
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	0	0	1863	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	0	1863	0	0	1611
Link Speed (mph)		25	25		30	
Link Distance (ft)		1199	263		174	
Travel Time (s)		32.7	7.2		4.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.90	0.90
Adj. Flow (vph)	0	0	129	0	0	462
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	129	0	0	462
Sign Control		Free	Yield		Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 38.7% ICU Level of Service A

Analysis Period (min) 15

Lane Group	WBL	WBR	NBL	NBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	168	1023	0	0	0
Future Volume (vph)	0	168	1023	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.97	1.00	1.00	1.00
Frt		0.865				
Flt Protected			0.950			
Satd. Flow (prot)	0	1627	3303	0	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	1627	3303	0	0	0
Link Speed (mph)	45		45		45	
Link Distance (ft)	255		329		551	
Travel Time (s)	3.9		5.0		8.3	
Peak Hour Factor	0.91	0.91	0.93	0.93	0.92	0.92
Heavy Vehicles (%)	1%	1%	6%	6%	2%	2%
Adj. Flow (vph)	0	185	1100	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	185	1100	0	0	0
Sign Control	Yield		Free		Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 50.6% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	159	936	0	0
Future Volume (vph)	0	0	159	936	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	450		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			85		25	
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	5085	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	5085	0	0
Link Speed (mph)	45			45	30	
Link Distance (ft)	315			494	108	
Travel Time (s)	4.8			7.5	2.5	
Peak Hour Factor	0.92	0.92	0.87	0.87	0.92	0.92
Adj. Flow (vph)	0	0	183	1076	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	183	1076	0	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 39.8%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	182	875	0	0	0	0
Future Volume (vph)	182	875	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	275			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	110				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		45	45		30	
Link Distance (ft)		432	161		111	
Travel Time (s)		6.5	2.4		2.5	
Peak Hour Factor	0.94	0.94	0.92	0.92	0.92	0.92
Adj. Flow (vph)	194	931	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	194	931	0	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 47.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	1556	0	0	0	1583
Future Volume (vph)	0	1556	0	0	0	1583
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	0.76
Frt						0.850
Flt Protected						
Satd. Flow (prot)	0	3539	0	0	0	3610
Flt Permitted						
Satd. Flow (perm)	0	3539	0	0	0	3610
Link Speed (mph)		55	55		45	
Link Distance (ft)		1093	655		773	
Travel Time (s)		13.5	8.1		11.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1691	0	0	0	1721
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1691	0	0	0	1721
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 46.3%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	65	861	0	0	0	0
Future Volume (vph)	65	861	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	180			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	75				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		45	45		30	
Link Distance (ft)		290	1089		101	
Travel Time (s)		4.4	16.5		2.3	
Peak Hour Factor	0.94	0.94	0.92	0.92	0.92	0.92
Adj. Flow (vph)	69	916	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	69	916	0	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 55.3%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NWL	NWR
Lane Configurations	↑↑↑→					
Traffic Volume (vph)	1657	416	0	0	0	0
Future Volume (vph)	1657	416	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	1.00	1.00	1.00	1.00
Frt	0.970					
Flt Protected						
Satd. Flow (prot)	4933	0	0	0	0	0
Flt Permitted						
Satd. Flow (perm)	4933	0	0	0	0	0
Link Speed (mph)	45			45	30	
Link Distance (ft)	311			156	174	
Travel Time (s)	4.7			2.4	4.0	
Peak Hour Factor	0.90	0.90	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1841	462	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	2303	0	0	0	0	0
Sign Control	Free			Stop	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 62.4%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	NBT	NBR	SBL	SBT	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	0	0	112	1019	0	0
Future Volume (vph)	0	0	112	1019	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	500		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			100		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	3539	0	0
Link Speed (mph)	30			25	25	
Link Distance (ft)	266			1471	301	
Travel Time (s)	6.0			40.1	8.2	
Peak Hour Factor	0.92	0.92	0.75	0.75	0.92	0.92
Adj. Flow (vph)	0	0	149	1359	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	149	1359	0	0
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 31.5%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	405	122	0	0	0	0
Future Volume (vph)	405	122	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected		0.963				
Satd. Flow (prot)	0	1794	0	0	0	0
Flt Permitted		0.963				
Satd. Flow (perm)	0	1794	0	0	0	0
Link Speed (mph)		25	30		25	
Link Distance (ft)		1207	315		252	
Travel Time (s)		32.9	7.2		6.9	
Peak Hour Factor	0.75	0.75	0.92	0.92	0.92	0.92
Adj. Flow (vph)	540	163	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	703	0	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 43.7%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	103	0	69	0	0
Future Volume (vph)	0	103	0	69	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.865		
Flt Protected						
Satd. Flow (prot)	0	1652	0	1191	0	0
Flt Permitted						
Satd. Flow (perm)	0	1652	0	1191	0	0
Link Speed (mph)		25	25		25	
Link Distance (ft)		995	597		1154	
Travel Time (s)		27.1	16.3		31.5	
Peak Hour Factor	0.83	0.83	0.89	0.89	0.92	0.92
Heavy Vehicles (%)	15%	15%	38%	38%	2%	2%
Adj. Flow (vph)	0	124	0	78	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	124	0	78	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 8.8%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	53	2317	0	0
Future Volume (vph)	0	0	53	2317	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	250		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	5085	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	5085	0	0
Link Speed (mph)	45			45	25	
Link Distance (ft)	894			534	137	
Travel Time (s)	13.5			8.1	3.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	58	2518	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	58	2518	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 48.1%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		4 thru lanes			1 left lane	
Traffic Volume (vph)	0	2351	0	0	53	0
Future Volume (vph)	0	2351	0	0	53	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.86	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	6408	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	6408	0	0	1770	0
Link Speed (mph)		45	45		25	
Link Distance (ft)		744	1191		137	
Travel Time (s)		11.3	18.0		3.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	2555	0	0	58	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	2555	0	0	58	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 85.5%	ICU Level of Service E
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	338	2066	0	0	0	0
Future Volume (vph)	338	2066	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	400			0	0	0
Storage Lanes	2			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	0.97	0.86	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	3433	6408	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	3433	6408	0	0	0	0
Link Speed (mph)		45	45		25	
Link Distance (ft)		1191	262		113	
Travel Time (s)		18.0	4.0		3.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	367	2246	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	367	2246	0	0	0	0
Sign Control		Free	Stop		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 78.2%	ICU Level of Service D
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	119	2067	0	0
Future Volume (vph)	0	0	119	2067	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	250		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	5085	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	5085	0	0
Link Speed (mph)	45			45	25	
Link Distance (ft)	254			1016	123	
Travel Time (s)	3.8			15.4	3.4	
Peak Hour Factor	0.92	0.92	0.90	0.87	0.92	0.92
Adj. Flow (vph)	0	0	132	2376	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	132	2376	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 131.1%	ICU Level of Service H
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	113	2073	0	0	0	0
Future Volume (vph)	113	2073	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.91	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	5085	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	5085	0	0	0	0
Link Speed (mph)		45	45		30	
Link Distance (ft)		704	311		111	
Travel Time (s)		10.7	4.7		2.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	123	2253	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	123	2253	0	0	0	0
Sign Control		Free	Stop		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 88.4%	ICU Level of Service E
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑	↰	
Traffic Volume (vph)	0	0	0	1159	27	0
Future Volume (vph)	0	0	0	1159	27	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	30	
Link Distance (ft)	583			574	107	
Travel Time (s)	7.2			7.1	2.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	1260	29	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1260	29	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 67.3%	ICU Level of Service C
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	27	1033	0	0	0	0
Future Volume (vph)	27	1033	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		30	
Link Distance (ft)		1122	576		107	
Travel Time (s)		13.9	7.1		2.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	29	1123	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	29	1123	0	0	0	0
Sign Control		Free	Stop		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 67.3%	ICU Level of Service C
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	1150	36	0	54
Future Volume (vph)	0	0	1150	36	0	54
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.995			0.865
Flt Protected						
Satd. Flow (prot)	0	0	3522	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	0	3522	0	0	1611
Link Speed (mph)		55	55		30	
Link Distance (ft)		590	583		121	
Travel Time (s)		7.3	7.2		2.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	1250	39	0	59
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1289	0	0	59
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 42.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	168	1036	0	0
Future Volume (vph)	0	0	168	1036	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	250		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	3539	0	0
Link Speed (mph)	55			55	30	
Link Distance (ft)	405			590	104	
Travel Time (s)	5.0			7.3	2.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	183	1126	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	183	1126	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 40.2% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑			↰	
Traffic Volume (vph)	0	892	0	0	168	0
Future Volume (vph)	0	892	0	0	168	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	1770	0
Link Speed (mph)		55	55		30	
Link Distance (ft)		316	1122		104	
Travel Time (s)		3.9	13.9		2.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	970	0	0	183	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	970	0	0	183	0
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 60.0% ICU Level of Service B

Analysis Period (min) 15

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	280	2061	0	0
Future Volume (vph)	0	0	280	2061	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	250			0
Storage Lanes	0	0	2			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	0.97	0.91	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	3433	5085	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	3433	5085	0	0
Link Speed (mph)	45			55	30	
Link Distance (ft)	105			493	555	
Travel Time (s)	1.6			6.1	12.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	304	2240	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	304	2240	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 85.7%	ICU Level of Service E
Analysis Period (min) 15	

Lane Group	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	1433	628	0	0	0	0
Future Volume (vph)	1433	628	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.94	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	4990	1863	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	4990	1863	0	0	0	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		555	271		108	
Travel Time (s)		12.6	6.2		2.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1558	683	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1558	683	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 68.3%	ICU Level of Service C
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NEL	NER
Lane Configurations	↑					↱
Traffic Volume (vph)	73	0	0	0	0	628
Future Volume (vph)	73	0	0	0	0	628
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	1863	0	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	1863	0	0	0	0	1611
Link Speed (mph)	25			30	25	
Link Distance (ft)	287			1072	271	
Travel Time (s)	7.8			24.4	7.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	79	0	0	0	0	683
Shared Lane Traffic (%)						
Lane Group Flow (vph)	79	0	0	0	0	683
Sign Control	Yield			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 49.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	NBT	NBR	SBL	SBT	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	0	0	73	1395	0	0
Future Volume (vph)	0	0	73	1395	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.91	0.91	1.00	1.00
Frt						
Flt Protected				0.998		
Satd. Flow (prot)	0	0	0	5068	0	0
Flt Permitted				0.998		
Satd. Flow (perm)	0	0	0	5068	0	0
Link Speed (mph)	45			45	45	
Link Distance (ft)	194			406	287	
Travel Time (s)	2.9			6.2	4.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	5%	2%	2%	2%
Adj. Flow (vph)	0	0	79	1516	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1595	0	0
Sign Control	Free			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 49.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	104	549	0	0	0	0
Future Volume (vph)	104	549	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1719	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1719	3539	0	0	0	0
Link Speed (mph)		25	25		25	
Link Distance (ft)		879	346		271	
Travel Time (s)		24.0	9.4		7.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	2%	2%	2%	2%	2%
Adj. Flow (vph)	113	597	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	113	597	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 49.5%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	518	0	0	81
Future Volume (vph)	0	0	518	0	0	81
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	0	0	1863	0	0	1565
Flt Permitted						
Satd. Flow (perm)	0	0	1863	0	0	1565
Link Speed (mph)		30	45		45	
Link Distance (ft)		874	182		254	
Travel Time (s)		19.9	2.8		3.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	5%
Adj. Flow (vph)	0	0	563	0	0	88
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	563	0	0	88
Sign Control		Free	Free		Yield	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 52.8%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBR	SBL	SBR	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	0	0	0	0	518	1019
Future Volume (vph)	0	0	0	0	518	1019
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.91
Frt					0.975	0.850
Flt Protected					0.960	
Satd. Flow (prot)	0	0	0	0	1735	2799
Flt Permitted					0.960	
Satd. Flow (perm)	0	0	0	0	1735	2799
Link Speed (mph)	30		30		30	
Link Distance (ft)	182		207		337	
Travel Time (s)	4.1		4.7		7.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	5%
Adj. Flow (vph)	0	0	0	0	563	1108
Shared Lane Traffic (%)						10%
Lane Group Flow (vph)	0	0	0	0	674	997
Sign Control	Stop		Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 52.8%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↱					
Traffic Volume (vph)	900	81	0	0	0	0
Future Volume (vph)	900	81	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00
Frt	0.988					
Flt Protected						
Satd. Flow (prot)	3397	0	0	0	0	0
Flt Permitted						
Satd. Flow (perm)	3397	0	0	0	0	0
Link Speed (mph)	30			45	25	
Link Distance (ft)	306			190	254	
Travel Time (s)	7.0			2.9	6.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	5%	2%	2%	2%	2%
Adj. Flow (vph)	978	88	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1066	0	0	0	0	0
Sign Control	Free			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 54.6%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	0	568	151	0	0
Future Volume (vph)	0	0	568	151	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			250	0	0
Storage Lanes	0			1	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	1.00
Frt				0.850		
Flt Protected						
Satd. Flow (prot)	0	0	3539	1538	0	0
Flt Permitted						
Satd. Flow (perm)	0	0	3539	1538	0	0
Link Speed (mph)		25	25		25	
Link Distance (ft)		241	1465		317	
Travel Time (s)		6.6	40.0		8.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	5%	2%	2%
Adj. Flow (vph)	0	0	617	164	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	617	164	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 20.7%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑↑	↰	
Traffic Volume (vph)	0	0	0	1170	64	0
Future Volume (vph)	0	0	0	1170	64	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	4940	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	4940	1770	0
Link Speed (mph)	55			30	25	
Link Distance (ft)	598			415	105	
Travel Time (s)	7.4			9.4	2.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	5%	2%	2%
Adj. Flow (vph)	0	0	0	1272	70	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1272	70	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 56.4%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	64	981	0	0	0	0
Future Volume (vph)	64	981	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3438	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3438	0	0	0	0
Link Speed (mph)		55	30		25	
Link Distance (ft)		597	306		105	
Travel Time (s)		7.4	7.0		2.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	5%	2%	2%	2%	2%
Adj. Flow (vph)	70	1066	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	70	1066	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 56.4% ICU Level of Service B

Analysis Period (min) 15

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑	↰	
Traffic Volume (vph)	0	0	0	720	0	0
Future Volume (vph)	0	0	0	720	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	0	0	0	3539	1863	0
Flt Permitted						
Satd. Flow (perm)	0	0	0	3539	1863	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	586			210	99	
Travel Time (s)	7.3			2.6	2.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	783	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	783	0	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 29.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	611	0	0	0	0
Future Volume (vph)	0	611	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	1863	3539	0	0	0	0
Flt Permitted						
Satd. Flow (perm)	1863	3539	0	0	0	0
Link Speed (mph)		55	55		25	
Link Distance (ft)		589	212		99	
Travel Time (s)		7.3	2.6		2.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	664	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	664	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 29.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	720	0	0
Future Volume (vph)	0	0	0	720	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	0	0	0	3539	0	0
Flt Permitted						
Satd. Flow (perm)	0	0	0	3539	0	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	723			586	81	
Travel Time (s)	9.0			7.3	2.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	783	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	783	0	0
Sign Control	Free			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 29.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	611	0	0	0	0	0	0	0	0	0	0
Future Volume (vph)	0	611	0	0	0	0	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	3539	0	0	0	0	0	0	1863	0	1863	0
Flt Permitted												
Satd. Flow (perm)	0	3539	0	0	0	0	0	0	1863	0	1863	0
Link Speed (mph)		55			55			25			25	
Link Distance (ft)		719			589			84			81	
Travel Time (s)		8.9			7.3			2.3			2.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	664	0	0	0	0	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	664	0	0	0	0	0	0	0	0	0	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 26.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	0	611	0	720	0	0
Future Volume (vph)	0	611	0	720	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.88	1.00	0.95	1.00	1.00
Frt		0.850				
Flt Protected						
Satd. Flow (prot)	0	2787	0	3539	0	0
Flt Permitted						
Satd. Flow (perm)	0	2787	0	3539	0	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	997			723	719	
Travel Time (s)	12.4			9.0	19.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	664	0	783	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	664	0	783	0	0
Sign Control	Free			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 24.7%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	286	747	0	0	0	0
Future Volume (vph)	286	747	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		55	
Link Distance (ft)		2077	2379		116	
Travel Time (s)		25.7	29.5		1.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	311	812	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	311	812	0	0	0	0
Sign Control		Free	Stop		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 46.9% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBT	EBR	WBL	WBT	NEL	NER
Lane Configurations				↑↑	↰	
Traffic Volume (vph)	0	0	0	710	286	0
Future Volume (vph)	0	0	0	710	286	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	607			2382	116	
Travel Time (s)	7.5			29.5	3.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	772	311	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	772	311	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 53.6%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	0	0	14	710	0	0
Future Volume (vph)	0	0	14	710	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	250		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	3539	0	0
Link Speed (mph)	55			55	55	
Link Distance (ft)	2382			560	108	
Travel Time (s)	29.5			6.9	1.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	15	772	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	15	772	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 29.8% ICU Level of Service A

Analysis Period (min) 15

Lane Group	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	0	747	0	0	14	0
Future Volume (vph)	0	747	0	0	14	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	1770	0
Link Speed (mph)		55	55		25	
Link Distance (ft)		2379	608		108	
Travel Time (s)		29.5	7.5		2.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	812	0	0	15	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	812	0	0	15	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 46.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	722	39	0	0	0	32
Future Volume (vph)	722	39	0	0	0	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		600	600		0	0
Storage Lanes		0	0		0	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00
Frt	0.992					0.865
Flt Protected						
Satd. Flow (prot)	3511	0	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	3511	0	0	0	0	1611
Link Speed (mph)	55			55	45	
Link Distance (ft)	608			628	1089	
Travel Time (s)	7.5			7.8	16.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	785	42	0	0	0	35
Shared Lane Traffic (%)						
Lane Group Flow (vph)	827	0	0	0	0	35
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 31.2%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑	↰	
Traffic Volume (vph)	0	0	0	715	9	0
Future Volume (vph)	0	0	0	715	9	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	645			3831	112	
Travel Time (s)	8.0			47.5	3.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	777	10	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	777	10	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 47.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	9	745	0	0	0	0
Future Volume (vph)	9	745	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		55	
Link Distance (ft)		628	3825		112	
Travel Time (s)		7.8	47.4		1.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	10	810	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	10	810	0	0	0	0
Sign Control		Free	Stop		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 47.0%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	10	715	0	0
Future Volume (vph)	0	0	10	715	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	250		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	3539	0	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	3831			538	97	
Travel Time (s)	47.5			6.7	2.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	11	777	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	11	777	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 30.6%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	745	0	0	10	0
Future Volume (vph)	0	745	0	0	10	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	1770	0
Link Speed (mph)		55	55		25	
Link Distance (ft)		3825	591		97	
Travel Time (s)		47.4	7.3		2.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	810	0	0	11	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	810	0	0	11	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 47.0%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	743	12	0	0	0	16
Future Volume (vph)	743	12	0	0	0	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00
Frt	0.998					0.865
Flt Protected						
Satd. Flow (prot)	3532	0	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	3532	0	0	0	0	1611
Link Speed (mph)	55			55	45	
Link Distance (ft)	591			1206	1073	
Travel Time (s)	7.3			15.0	16.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	808	13	0	0	0	17
Shared Lane Traffic (%)						
Lane Group Flow (vph)	821	0	0	0	0	17
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 30.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑	↰	
Traffic Volume (vph)	0	0	0	717	9	0
Future Volume (vph)	0	0	0	717	9	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	1254			1793	105	
Travel Time (s)	15.5			22.2	2.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	779	10	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	779	10	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 49.0%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	9	750	0	0	0	0
Future Volume (vph)	9	750	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		55	
Link Distance (ft)		1206	1786		105	
Travel Time (s)		15.0	22.1		1.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	10	815	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	10	815	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 47.2%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	354	717	0	0
Future Volume (vph)	0	0	354	717	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	500		0	0
Storage Lanes		0	2		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	0.97	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	3433	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	3433	3539	0	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	1793			596	109	
Travel Time (s)	22.2			7.4	3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	385	779	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	385	779	0	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 82.6%	ICU Level of Service E
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	1036	35	0
Future Volume (vph)	0	0	0	1036	35	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	631			2681	109	
Travel Time (s)	7.8			33.2	3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	1126	38	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1126	38	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 57.3%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	35	1069	0	0	0	0
Future Volume (vph)	35	1069	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		55	
Link Distance (ft)		627	2678		109	
Travel Time (s)		7.8	33.2		1.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	38	1162	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	38	1162	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 64.9%	ICU Level of Service C
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	198	1036	0	0
Future Volume (vph)	0	0	198	1036	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	500		0	0
Storage Lanes		0	2		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	0.97	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	3433	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	3433	3539	0	0
Link Speed (mph)	55			55	55	
Link Distance (ft)	2681			671	109	
Travel Time (s)	33.2			8.3	1.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	215	1126	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	215	1126	0	0
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 91.6% ICU Level of Service F

Analysis Period (min) 15

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	1217	17	0
Future Volume (vph)	0	0	0	1217	17	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	654			797	95	
Travel Time (s)	8.1			9.9	2.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	1323	18	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1323	18	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 64.3%	ICU Level of Service C
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	17	1250	0	0	0	0
Future Volume (vph)	17	1250	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		55	
Link Distance (ft)		659	784		95	
Travel Time (s)		8.2	9.7		1.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	18	1359	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	18	1359	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 74.9%	ICU Level of Service D
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1015	18	0	0	0	18
Future Volume (vph)	1015	18	0	0	0	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00
Frt	0.997					0.865
Flt Protected						
Satd. Flow (prot)	3529	0	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	3529	0	0	0	0	1611
Link Speed (mph)	55			55	25	
Link Distance (ft)	576			2077	205	
Travel Time (s)	7.1			25.7	5.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1103	20	0	0	0	20
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1123	0	0	0	0	20
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 38.6% ICU Level of Service A
Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	1179	0	0	1172	0
Future Volume (vph)	0	1179	0	0	1172	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	0.97	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	3433	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	3433	0
Link Speed (mph)		45	45		45	
Link Distance (ft)		1021	744		215	
Travel Time (s)		15.5	11.3		3.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1282	0	0	1274	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1282	0	0	1274	0
Sign Control		Free	Stop		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 72.7%	ICU Level of Service C
Analysis Period (min) 15	

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	0	0	641	1583
Future Volume (vph)	0	0	0	0	641	1583
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		0	250	
Storage Lanes	0	0		0	2	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.97	0.91
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	0	3433	5085
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	0	3433	5085
Link Speed (mph)	55		45			30
Link Distance (ft)	167		773			587
Travel Time (s)	2.1		11.7			13.3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	697	1721
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	0	697	1721
Sign Control	Stop		Stop			Free

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 55.5%	ICU Level of Service B
Analysis Period (min) 15	

1005: WB M-96 (Michigan Avenue) & SB I-69 Off-Ramp (Push Button) Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	4.8	13.9	9.2

1007: EB M-96 (Michigan Avenue) (Push Button) & SB I-69 Off-Ramp/EB M-96 (Michigan Avenue) Perfor

Approach	EB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	28.3	2.0	3.6

1008: WB M-96 (Michigan Avenue)/NB I-69 Off-Ramp & WB M-96 (Michigan Avenue) (Push Button) Perf

Approach	WB	SW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	19.5	2.2	8.1

1009: WB M-96 (Michigan Avenue) (Push Button)/WB M-96 (Michigan Avenue) & EB M-96 (Michigan Ave

Approach	EB	SW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	18.6	14.0	16.2

1010: NB I-69 Off-Ramp (Push Button) & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	3.7	20.7	6.2

3003: M-227/West Drive & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.2	0.0
Total Del/Veh (s)	8.5	7.5	17.9	9.7

3093: M-227/West Drive & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	0.0	2.0	0.0	0.3
Total Del/Veh (s)	3.6	30.5	2.3	7.3

4001: M-96 (Michigan Avenue) & WB Main Entrance/WB M-96 (Michigan Avenue) Performance by appro

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	12.8	14.7	13.4

4003: EB to WB Xover E of 15 Mile Rd (North) & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	7.8	1.1
Total Del/Veh (s)	8.0	31.2	11.4

4004: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	3.9	48.9	11.3

4005: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	8.3	24.3	13.5

4006: M-311 (11 Mile Rd) & Site Driveway West Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	0.3	0.8	0.0	0.2
Total Del/Veh (s)	39.1	8.6	7.7	20.9

4007: M-311 (11 Mile Rd) & F Drive N Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	0.2	0.0	0.0	0.0
Total Del/Veh (s)	44.2	8.3	5.3	12.9

4010: EB M-96 (Michigan Avenue)/EB M-96 (Michigan Avenue) (Push Button) & WB M-96 (Michigan Ave

Approach	WB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	19.1	11.3	14.4

4030: NB M-311 (11 Mile Rd)/WB M-96 (Michigan Avenue)/11 Mile Rd (North) & EB M-96 (Michigan Ave

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	22.6	22.9	22.8

4031: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & WB M-96 (Michigan Avenue) Performance by a

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	27.0	3.9	14.1

4033: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & NB to SB Xover N of M-96 (Michigan Avenue) P

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	31.5	3.7	7.0

4034: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & EB I-94 Off-ramp Performance by approach

Approach	SB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.8	22.7	7.5

4035: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & WB M-96 (Michigan Avenue)/11 Mile Rd (North)

Approach	SB	NW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	12.3	17.1	14.7

4036: EB I-94 Off-ramp & WB M-96 (Michigan Avenue)/11 Mile Rd (North) Performance by approach

Approach	NB	NW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	19.4	2.2	3.5

4037: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & WB I-94 Off-ramp Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.2	0.1
Total Del/Veh (s)	1.5	23.2	9.8

4038: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & EB M-96 (Michigan Avenue)/11 Mile Rd (South)

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	16.9	28.3	22.9

4039: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & WB I-94 Off-ramp Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	18.1	4.4	6.2

4040: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & 11 Mile Rd Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	17.7	2.5	11.4

4041: 11 Mile Rd & WB M-96 (Michigan Avenue)/11 Mile Rd (North) Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	14.9	25.3	17.9

4042: 11 Mile Rd & H Dr N Performance by approach

Approach	NE	SW	All
Denied Del/Veh (s)	0.0	0.4	0.2
Total Del/Veh (s)	4.3	4.3	4.3

4050: Prop Site Drive E & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	3.7	45.6	10.1

4051: Prop Site Drive W & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	4.6	41.1	14.1

4061: WB M-96 (Michigan Avenue) & Firekeepers Main Drive Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	3.9	48.8	8.5

4065: WB M-96 (Michigan Avenue) & 15 Mile Rd (North) Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	6.6	42.6	10.8

4066: EB M-96 (Michigan Avenue) & WB to EB Xover W of 15 Mile Rd (South) Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	3.5	42.0	5.7

4067: 15 Mile Rd (South) & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.6	0.1
Total Del/Veh (s)	7.9	47.5	11.8

4068: EB to WB Xover E of 15 Mile Rd (South) & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	4.4	36.9	6.1

4070: M-311 (11 Mile Rd) & Site Drive East Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	1.2	0.0	0.0	0.2
Total Del/Veh (s)	12.6	8.7	14.2	12.1

4071: 15 Mile Rd & Verona Rd Performance by approach

Approach	NB	SB	SE	NW	All
Denied Del/Veh (s)	0.4	0.1	3.0	0.2	1.4
Total Del/Veh (s)	14.0	7.9	10.2	28.5	14.8

4075: 11 Mile Road & Verona Road Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.5	3.1	0.5	0.9
Total Del/Veh (s)	14.0	24.6	54.4	43.9	28.5

9002: WB M-96 (Michigan Avenue) & Firekeepers Gas Station Driveway Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.2	0.0
Total Del/Veh (s)	2.1	10.6	3.5

9003: WB M-96 (Michigan Avenue) & Firekeepers E Drive Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.0	9.4	3.0

9004: WB M-96 (Michigan Avenue) & Ackerson Drive Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	1.4	7.1	1.4

9006: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	1.1	3.7	1.1

9008: 15 Mile Rd (North) & Old M-96 (Michigan Ave) Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.0	0.0	0.0
Total Del/Veh (s)	2.8	0.6	0.6	0.6

9013: SB I-69 On-Ramp & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	13.1	13.1

9016: EB M-96 (Michigan Avenue) & NB I-69 On-Ramp Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	12.1	12.1

9017: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	1.8	1.8

9018: EB M-96 (Michigan Avenue) & WB to EB Xover W of M-227/West Drive Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.3	7.4	2.3

9019: EB to WB Xover W of M-227/West Drive & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.6	13.8	3.6

9020: EB M-96 (Michigan Avenue) & WB to EB Xover E of M-227/West Drive Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.0	9.3	1.8

9021: EB to WB Xover E of M-227/West Drive & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.2	0.0	0.2
Total Del/Veh (s)	1.2	9.1	1.7

9023: M-311 (11 Mile Rd) & B Drive North Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	1.3	0.2	1.0	0.5	0.8
Total Del/Veh (s)	1.5	1.0	9.0	7.9	3.4

9025: M-294 (Beadle Lake Road) & EB I-94 Off-Ramp & EB I-94 On-Ramp Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	2.5	0.3	0.0	0.5
Total Del/Veh (s)	6.6	1.5	1.7	2.5

9026: WB I-94 On-Ramp & M-294 (Beadle Lake Road) & WB I-94 Off-Ramp Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	2.0	0.0	0.4	0.5
Total Del/Veh (s)	7.2	1.6	1.3	2.5

9027: Old US-27 & EB I-94 to Old US-27 Off Ramp Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0
Total Del/Veh (s)	7.8	0.2	0.9	2.9

9028: Old US-27 & NB Old US-27 to EB I-94 On Ramp Performance by approach

Approach	NB	SB	All
Denied Del/Veh (s)	0.6	0.0	0.3
Total Del/Veh (s)	0.8	0.4	0.6

9029: SB Old US-27 WB I-94 On Ramp & Old US-27 & WB I-94 to Old US-27 Off Ramp Performance by

Approach	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	1.1	0.4
Total Del/Veh (s)	4.9	0.2	0.8	1.1

9030: I-94BL/Partello Rd & EB I-94 to I-94BL/Partello Off Ramp Performance by approach

Approach	SE	NE	SW	All
Denied Del/Veh (s)	0.0	0.2	0.0	0.1
Total Del/Veh (s)	4.5	1.5	0.2	1.8

9031: I-94BL/Partello Rd & I-94/Partello Rd to EB I-94 On Ramp Performance by approach

Approach	NE	SW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.2	0.6	0.4

9032: I-94BL/Partello Rd & WB I-94 to I-94/Partello Rd Performance by approach

Approach	EB	NE	SW	All
Denied Del/Veh (s)	0.0	0.0	0.8	0.2
Total Del/Veh (s)	3.4	1.3	0.5	1.8

9034: Dummy Node & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	1.6	5.5	1.6

9035: Dummy Node & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	0.5	9.0	0.7

9036: WB M-96 (Michigan Avenue) & Dummy Node Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	0.6	4.1	0.7

9037: WB M-96 (Michigan Avenue) & Dummy Node Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.5	0.5

9040: Old US-27 & NB Old US-27 to WB I-94 On Ramp Performance by approach

Approach	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.0	0.3	0.8

9041: WB to EB Xover E of M-227/West Drive/McDonald's Dr & WB M-96 (Michigan Avenue) Performanc

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	1.5	15.6	2.6

9128: M-96 (Michigan Avenue)/WB M-96 (Michigan Avenue) & EB M-96 (Michigan Avenue) Performance

Approach	NB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.1	4.3	2.7

9137: SB I-69 On-Ramp Performance by approach

Approach	SB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	7.0	0.2	1.7

9143: NB I-69 On-Ramp Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	7.0	2.8	3.4

9146: WB to EB Xover W of M-227/West Drive & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.9	0.9

9147: EB M-96 (Michigan Avenue) & EB to WB Xover W of M-227/West Drive Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	1.8	1.8

9150: M-311 (11 Mile Rd) /NB M-311 (11 Mile Rd) & SB M-311 (11 Mile Rd) Performance by approach

Approach	NB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	4.7	1.0	2.9

9151: EB M-96 (Michigan Avenue) & EB to WB Xover E of M-227/West Drive Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.5	0.5

9157: SB I-69 On-Ramp & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.3	2.3

9158: SB I-69 Off-Ramp (Push Button) & SB I-69 Off-Ramp Performance by approach

Approach	SB	All
Denied Del/Veh (s)	0.3	0.3
Total Del/Veh (s)	1.7	1.7

9159: NB I-69 Off-Ramp & NB I-69 Off-Ramp (Push Button) Performance by approach

Approach	NB	All
Denied Del/Veh (s)	0.5	0.5
Total Del/Veh (s)	3.4	3.4

9178: WB I-94 to BL-94/Partello Rd Off Ramp/WB I-94 to I-94/Partello Rd & BL-94/Partello Rd to WB I-94

Approach	EB	WB	All
Denied Del/Veh (s)	0.1	0.0	0.1
Total Del/Veh (s)	0.2	0.3	0.2

9304: WB to EB Xover W of 15 Mile Rd (North) & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.6	2.6

9305: EB M-96 (Michigan Avenue) & WB to EB Xover W of 15 Mile Rd (North) Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.9	41.8	2.8

9307: EB M-96 (Michigan Avenue) & EB to WB Xover E of 15 Mile Rd (North) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	3.8	3.8

9310: WB to EB Xover W of 15 Mile Rd (South) & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	3.3	3.3

9311: EB M-96 (Michigan Avenue) & EB to WB Xover E of 15 Mile Rd (South) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.8	2.8

9330: EB to WB Xover E of Old M-311 (11 Mile Rd) & WB M-96 (Michigan Avenue) Performance by appr

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.9	8.6	2.0

9331: EB M-96 (Michigan Avenue) & EB to WB Xover E of Old M-311 (11 Mile Rd) Performance by appro

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.1	2.1

9332: WB M-96 (Michigan Avenue) & Old M-311 (11 Mile Rd) Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.2	6.9	1.4

9336: WB to EB Xover W of Old M-311 (11 Mile Rd) & WB M-96 (Michigan Avenue) Performance by app

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.9	2.9

9337: EB M-96 (Michigan Avenue) & WB to EB Xover W of Old M-311 (11 Mile Rd) Performance by appr

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	3.6	9.4	4.5

9338: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & NB to SB Xover N of M-96 (Michigan Avenue) P

Approach	NB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	3.9	3.9

9339: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & EB I-94 On Ramp Performance by approach

Approach	NB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	9.4	9.4

9340: EB I-94 On Ramp Performance by approach

Approach	EB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	8.2	0.2	1.1

9342: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & EB I-94 On Ramp Performance by approach

Approach	SB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	10.0	10.0

9343: EB I-94 Off-ramp Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.8	0.8
Total Del/Veh (s)	0.9	0.9

9346: WB I-94 On Ramp Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.2	10.2	3.3

9347: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & WB I-94 On Ramp Performance by approach

Approach	NW	All
Denied Del/Veh (s)	0.1	0.1
Total Del/Veh (s)	12.3	12.3

9348: WB I-94 On Ramp & EB M-96 (Michigan Avenue)/11 Mile Rd (South) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.6	2.6

9349: WB I-94 Off-ramp Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.6	0.6
Total Del/Veh (s)	1.3	1.3

9351: SB to NB Xover E of 11 Mile Rd & WB M-96 (Michigan Avenue)/11 Mile Rd (North) Performance b

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.4	3.5	1.5

9352: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & SB to NB Xover E of 11 Mile Rd Performance b

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	5.4	5.4

9354: EB to WB Xover W of 11 Mile Rd & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	3.7	3.7

9355: EB M-96 (Michigan Avenue) & EB to WB Xover W of 11 Mile Rd Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.6	2.6

9356: WB to EB Xover W of 11 Mile Rd & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.5	2.5

9357: EB M-96 (Michigan Avenue) & WB to EB Xover W of 11 Mile Rd Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.3	0.3

9359: EB M-96 (Michigan Avenue) & M-96 (Michigan Avenue)/WB M-96 (Michigan Avenue) Performance

Approach	EB	WB	All
Denied Del/Veh (s)	0.2	0.0	0.1
Total Del/Veh (s)	2.1	0.8	1.4

9381: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.6	2.6

9382: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.8	6.6	3.8

9383: WB M-96 (Michigan Avenue) Performance by approach

Approach	NW	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.6	0.6

9384: EB M-96 (Michigan Avenue) Performance by approach

Approach	SE	SW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.8	4.6	1.8

9385: Ceresco Road/12 Mile Road & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	0.9	3.9	1.0

9386: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	3.2	4.1	3.2

9387: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.6	0.6

9388: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.5	0.5

9389: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.7	4.4	2.8

9390: 13 Mile Rd & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	0.6	3.8	0.7

9392: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.3	3.8	1.3

9393: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	1.0	1.0

9394: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	3.7	3.7

9396: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.0	7.5	2.2

9397: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	1.7	1.7

9398: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	1.5	1.5

9400: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.6	9.4	0.7

9401: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	1.8	1.8

9410: Retail Drive & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	0.7	7.3	0.8

9415: EB Main Entrance/EB M-96 (Michigan Avenue) & M-96 (Michigan Avenue) Performance by approa

Approach	EB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.1	1.4	1.3

9416: SB M-311 (11 Mile Rd)/EB M-96 (Michigan Avenue)/11 Mile Rd (South) & EB M-96 (Michigan Aver

Approach	SB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	1.7	1.7

Total Network Performance

Denied Del/Veh (s)	0.8
Total Del/Veh (s)	62.4

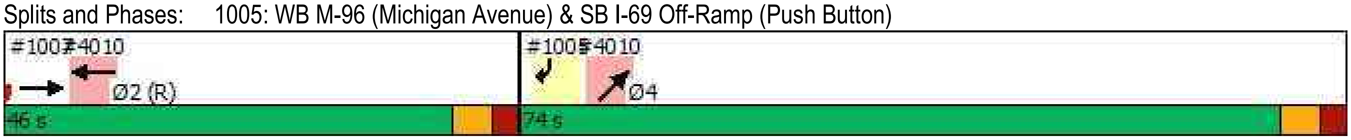
Scenario M1&S2

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø2
Lane Configurations							
Traffic Volume (vph)	0	0	1265	0	0	1019	
Future Volume (vph)	0	0	1265	0	0	1019	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	0.91	1.00	1.00	0.76	
Frt						0.850	
Flt Protected							
Satd. Flow (prot)	0	0	5085	0	0	3610	
Flt Permitted							
Satd. Flow (perm)	0	0	5085	0	0	3610	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)						410	
Link Speed (mph)		45	45		25		
Link Distance (ft)		275	194		266		
Travel Time (s)		4.2	2.9		7.3		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.84	0.75	
Heavy Vehicles (%)	2%	2%	2%	2%	3%	2%	
Adj. Flow (vph)	0	0	1375	0	0	1359	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	1375	0	0	1359	
Turn Type			NA			Prot	
Protected Phases			Free!			4!	2
Permitted Phases							
Minimum Split (s)						17.0	17.0
Total Split (s)						74.0	46.0
Total Split (%)						61.7%	38%
Yellow Time (s)						3.5	3.5
All-Red Time (s)						2.5	2.5
Lost Time Adjust (s)						0.0	
Total Lost Time (s)						6.0	
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)			120.0			68.0	
Actuated g/C Ratio			1.00			0.57	
v/c Ratio			0.27			0.61	
Control Delay			0.1			12.7	
Queue Delay			0.0			0.0	
Total Delay			0.1			12.7	
LOS			A			B	
Approach Delay			0.1		12.7		
Approach LOS			A		B		
Queue Length 50th (ft)			0			201	
Queue Length 95th (ft)			0			174	
Internal Link Dist (ft)		195	114		186		
Turn Bay Length (ft)							
Base Capacity (vph)			5085			2223	
Starvation Cap Reductn			0			0	
Spillback Cap Reductn			392			31	
Storage Cap Reductn			0			0	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø2
Reduced v/c Ratio			0.29			0.62	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 100 (83%), Referenced to phase 2:EBT, Start of Green	
Natural Cycle: 50	
Control Type: Pretimed	
Maximum v/c Ratio: 0.81	
Intersection Signal Delay: 6.4	Intersection LOS: A
Intersection Capacity Utilization 67.6%	ICU Level of Service C
Analysis Period (min) 15	
! Phase conflict between lane groups.	

Splits and Phases: 1005: WB M-96 (Michigan Avenue) & SB I-69 Off-Ramp (Push Button)

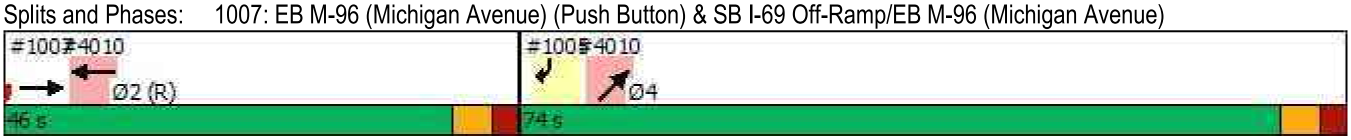


Lane Group	EBT	EBR	WBL	WBT	NEL	NER	Ø4
Lane Configurations							
Traffic Volume (vph)	112	0	0	0	0	1717	
Future Volume (vph)	112	0	0	0	0	1717	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Storage Length (ft)		260	285		0	0	
Storage Lanes		0	0		0	3	
Taper Length (ft)			240		25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.76	
Frt						0.850	
Flt Protected							
Satd. Flow (prot)	1863	0	0	0	0	3610	
Flt Permitted							
Satd. Flow (perm)	1863	0	0	0	0	3610	
Right Turn on Red		Yes				Yes	
Satd. Flow (RTOR)						2086	
Link Speed (mph)	25			45	45		
Link Distance (ft)	301			619	190		
Travel Time (s)	8.2			9.4	2.9		
Peak Hour Factor	0.75	0.84	0.92	0.92	0.90	0.90	
Heavy Vehicles (%)	2%	3%	2%	2%	2%	2%	
Adj. Flow (vph)	149	0	0	0	0	1908	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	149	0	0	0	0	1908	
Turn Type	NA					Free	
Protected Phases	2						4
Permitted Phases						Free	
Minimum Split (s)	17.0						17.0
Total Split (s)	46.0						74.0
Total Split (%)	38.3%						62%
Yellow Time (s)	3.5						3.5
All-Red Time (s)	2.5						2.5
Lost Time Adjust (s)	0.0						
Total Lost Time (s)	6.0						
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)	40.0					120.0	
Actuated g/C Ratio	0.33					1.00	
v/c Ratio	0.24					0.53	
Control Delay	30.3					4.0	
Queue Delay	0.0					0.0	
Total Delay	30.3					4.0	
LOS	C					A	
Approach Delay	30.3				4.0		
Approach LOS	C				A		
Queue Length 50th (ft)	83					114	
Queue Length 95th (ft)	111					218	
Internal Link Dist (ft)	221			539	110		
Turn Bay Length (ft)							
Base Capacity (vph)	621					3610	

Lane Group	EBT	EBR	WBL	WBT	NEL	NER	Ø4
Starvation Cap Reductn	0					0	
Spillback Cap Reductn	0					0	
Storage Cap Reductn	0					0	
Reduced v/c Ratio	0.24					0.53	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 100 (83%), Referenced to phase 2:EBT, Start of Green	
Natural Cycle: 50	
Control Type: Pretimed	
Maximum v/c Ratio: 0.81	
Intersection Signal Delay: 5.9	Intersection LOS: A
Intersection Capacity Utilization 31.5%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 1007: EB M-96 (Michigan Avenue) (Push Button) & SB I-69 Off-Ramp/EB M-96 (Michigan Avenue)

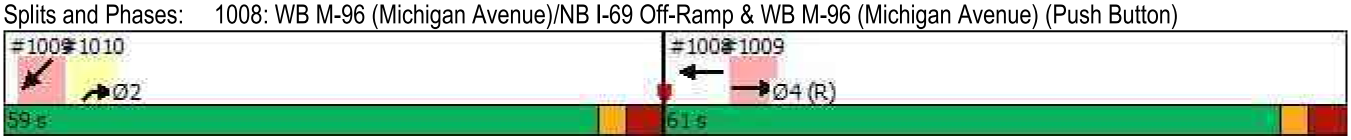


Lane Group	EBL	EBT	WBT	WBR	SWL	SWR	Ø2
Lane Configurations							
Traffic Volume (vph)	0	0	556	0	0	828	
Future Volume (vph)	0	0	556	0	0	828	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.88	
Frt						0.850	
Flt Protected							
Satd. Flow (prot)	0	0	3539	0	0	2787	
Flt Permitted							
Satd. Flow (perm)	0	0	3539	0	0	2787	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)						1058	
Link Speed (mph)		45	25		45		
Link Distance (ft)		217	252		223		
Travel Time (s)		3.3	6.9		3.4		
Peak Hour Factor	0.92	0.92	0.75	0.93	0.92	0.92	
Heavy Vehicles (%)	2%	2%	2%	6%	2%	2%	
Adj. Flow (vph)	0	0	741	0	0	900	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	741	0	0	900	
Turn Type			NA			Free	
Protected Phases			4				2
Permitted Phases						Free	
Minimum Split (s)			16.0				16.0
Total Split (s)			61.0				59.0
Total Split (%)			50.8%				49%
Yellow Time (s)			2.5				2.5
All-Red Time (s)			3.5				3.5
Lost Time Adjust (s)			0.0				
Total Lost Time (s)			6.0				
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)			55.0			120.0	
Actuated g/C Ratio			0.46			1.00	
v/c Ratio			0.46			0.32	
Control Delay			23.4			3.1	
Queue Delay			0.0			0.0	
Total Delay			23.4			3.1	
LOS			C			A	
Approach Delay			23.4		3.1		
Approach LOS			C		A		
Queue Length 50th (ft)			202			69	
Queue Length 95th (ft)			201			69	
Internal Link Dist (ft)		137	172		143		
Turn Bay Length (ft)							
Base Capacity (vph)			1622			2787	
Starvation Cap Reductn			0			0	
Spillback Cap Reductn			0			0	
Storage Cap Reductn			0			0	

Lane Group	EBL	EBT	WBT	WBR	SWL	SWR	Ø2
Reduced v/c Ratio			0.46			0.32	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 92 (77%), Referenced to phase 4:WBT, Start of Green	
Natural Cycle: 45	
Control Type: Pretimed	
Maximum v/c Ratio: 0.58	
Intersection Signal Delay: 12.3	Intersection LOS: B
Intersection Capacity Utilization 52.0%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 1008: WB M-96 (Michigan Avenue)/NB I-69 Off-Ramp & WB M-96 (Michigan Avenue) (Push Button)



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↑↑									↑↑	
Traffic Volume (vph)	0	806	0	0	0	0	0	0	0	0	828	0
Future Volume (vph)	0	806	0	0	0	0	0	0	0	0	828	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	3539	0	0	0	0	0	0	0	0	3539	0
Flt Permitted												
Satd. Flow (perm)	0	3539	0	0	0	0	0	0	0	0	3539	0
Right Turn on Red			Yes			Yes			Yes	Yes		Yes
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		209			206			223			213	
Travel Time (s)		3.2			3.1			3.4			3.2	
Peak Hour Factor	0.86	0.86	0.86	0.92	0.92	0.92	0.92	0.92	0.92	0.91	0.91	0.91
Adj. Flow (vph)	0	937	0	0	0	0	0	0	0	0	910	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	937	0	0	0	0	0	0	0	0	910	0
Turn Type		NA									NA	
Protected Phases		4									2	
Permitted Phases												
Minimum Split (s)		16.0									16.0	
Total Split (s)		61.0									59.0	
Total Split (%)		50.8%									49.2%	
Yellow Time (s)		2.5									2.5	
All-Red Time (s)		3.5									3.5	
Lost Time Adjust (s)		0.0									0.0	
Total Lost Time (s)		6.0									6.0	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		55.0									53.0	
Actuated g/C Ratio		0.46									0.44	
v/c Ratio		0.58									0.58	
Control Delay		32.4									24.7	
Queue Delay		0.0									0.0	
Total Delay		32.4									24.7	
LOS		C									C	
Approach Delay		32.4									24.7	
Approach LOS		C									C	
Queue Length 50th (ft)		391									290	
Queue Length 95th (ft)		438									362	
Internal Link Dist (ft)		129			126			143			133	
Turn Bay Length (ft)												
Base Capacity (vph)		1622									1563	
Starvation Cap Reductn		0									0	
Spillback Cap Reductn		0									0	
Storage Cap Reductn		0									0	
Reduced v/c Ratio		0.58									0.58	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 92 (77%), Referenced to phase 4:WBT, Start of Green	
Natural Cycle: 45	
Control Type: Pretimed	
Maximum v/c Ratio: 0.58	
Intersection Signal Delay: 28.6	Intersection LOS: C
Intersection Capacity Utilization 55.2%	ICU Level of Service B
Analysis Period (min) 15	

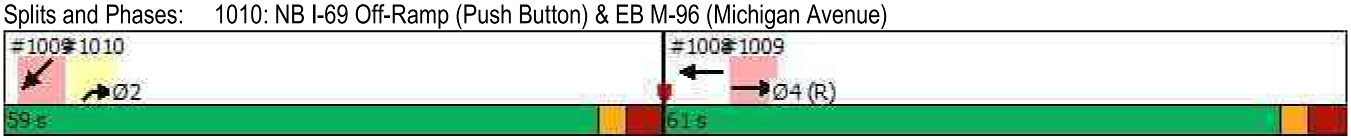
Splits and Phases: 1009: WB M-96 (Michigan Avenue) (Push Button)/WB M-96 (Michigan Avenue) & EB M-96 (Michigan Avenue)

Lane Group	EBT	EBR	WBL	WBT	NEL	NER	Ø4
Lane Configurations							
Traffic Volume (vph)	806	0	0	0	0	122	
Future Volume (vph)	806	0	0	0	0	122	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	0.95	1.00	1.00	1.00	1.00	1.00	
Frt						0.865	
Flt Protected							
Satd. Flow (prot)	3539	0	0	0	0	1611	
Flt Permitted							
Satd. Flow (perm)	3539	0	0	0	0	1611	
Right Turn on Red		Yes				Yes	
Satd. Flow (RTOR)						324	
Link Speed (mph)	45			45	25		
Link Distance (ft)	206			309	315		
Travel Time (s)	3.1			4.7	8.6		
Peak Hour Factor	0.86	0.86	0.92	0.92	0.93	0.75	
Heavy Vehicles (%)	2%	2%	2%	2%	6%	2%	
Adj. Flow (vph)	937	0	0	0	0	163	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	937	0	0	0	0	163	
Turn Type	NA					Prot	
Protected Phases	Free!					2!	4
Permitted Phases							
Minimum Split (s)						16.0	16.0
Total Split (s)						59.0	61.0
Total Split (%)						49.2%	51%
Yellow Time (s)						2.5	2.5
All-Red Time (s)						3.5	3.5
Lost Time Adjust (s)						0.0	
Total Lost Time (s)						6.0	
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)	120.0					53.0	
Actuated g/C Ratio	1.00					0.44	
v/c Ratio	0.26					0.18	
Control Delay	0.2					0.5	
Queue Delay	0.0					0.0	
Total Delay	0.2					0.5	
LOS	A					A	
Approach Delay	0.2				0.5		
Approach LOS	A				A		
Queue Length 50th (ft)	0					0	
Queue Length 95th (ft)	0					0	
Internal Link Dist (ft)	126			229	235		
Turn Bay Length (ft)							
Base Capacity (vph)	3539					892	
Starvation Cap Reductn	0					0	
Spillback Cap Reductn	0					0	
Storage Cap Reductn	0					0	

Lane Group	EBT	EBR	WBL	WBT	NEL	NER	Ø4
Reduced v/c Ratio	0.26					0.18	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 92 (77%), Referenced to phase 4:WBT, Start of Green	
Natural Cycle: 45	
Control Type: Pretimed	
Maximum v/c Ratio: 0.58	
Intersection Signal Delay: 0.2	Intersection LOS: A
Intersection Capacity Utilization 55.2%	ICU Level of Service B
Analysis Period (min) 15	
! Phase conflict between lane groups.	

Splits and Phases: 1010: NB I-69 Off-Ramp (Push Button) & EB M-96 (Michigan Avenue)



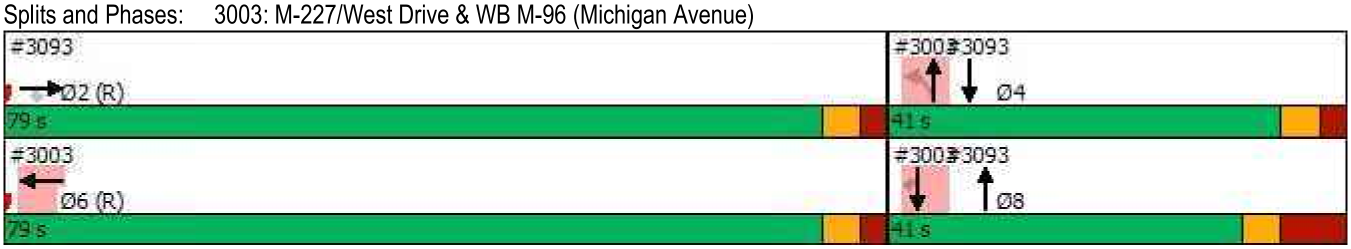
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	780	192	76	50	0	0	84	85
Future Volume (vph)	0	0	0	0	780	192	76	50	0	0	84	85
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		80	0		0	0		0
Storage Lanes	0		0	0		1	1		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.970							0.850
Flt Protected							0.950					
Satd. Flow (prot)	0	0	0	0	4982	0	1671	1863	0	0	1845	1568
Flt Permitted							0.687					
Satd. Flow (perm)	0	0	0	0	4982	0	1209	1863	0	0	1845	1568
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					90							110
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		152			212			101			1197	
Travel Time (s)		2.3			3.2			2.0			23.3	
Peak Hour Factor	0.92	0.92	0.92	0.87	0.87	0.87	0.67	0.67	0.67	0.77	0.77	0.77
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	8%	2%	2%	3%	3%	3%
Adj. Flow (vph)	0	0	0	0	897	221	113	75	0	0	109	110
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1118	0	113	75	0	0	109	110
Turn Type					NA		Perm	NA			NA	Perm
Protected Phases					6			4			8	
Permitted Phases							4					8
Minimum Split (s)					31.0		17.0	17.0			17.0	17.0
Total Split (s)					79.0		41.0	41.0			41.0	41.0
Total Split (%)					65.8%		34.2%	34.2%			34.2%	34.2%
Yellow Time (s)					3.5		3.5	3.5			3.5	3.5
All-Red Time (s)					2.5		2.5	2.5			6.0	6.0
Lost Time Adjust (s)					0.0		0.0	0.0			0.0	0.0
Total Lost Time (s)					6.0		6.0	6.0			9.5	9.5
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)					73.0		35.0	35.0			31.5	31.5
Actuated g/C Ratio					0.61		0.29	0.29			0.26	0.26
v/c Ratio					0.36		0.32	0.14			0.23	0.22
Control Delay					11.1		8.6	5.5			36.2	7.5
Queue Delay					0.0		0.0	0.0			0.0	0.0
Total Delay					11.1		8.6	5.5			36.2	7.5
LOS					B		A	A			D	A
Approach Delay					11.1			7.4			21.8	
Approach LOS					B			A			C	
Queue Length 50th (ft)					136		11	7			66	0
Queue Length 95th (ft)					156		11	8			98	28
Internal Link Dist (ft)		72			132			21			1117	
Turn Bay Length (ft)												
Base Capacity (vph)					3065		352	543			484	492

Lane Group	Ø2
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	2
Permitted Phases	
Minimum Split (s)	16.0
Total Split (s)	79.0
Total Split (%)	66%
Yellow Time (s)	3.5
All-Red Time (s)	2.5
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
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)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
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					0.36		0.32	0.14			0.23	0.22

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 112 (93%), Referenced to phase 2:EBT and 6:, Start of Green	
Natural Cycle: 50	
Control Type: Pretimed	
Maximum v/c Ratio: 0.42	
Intersection Signal Delay: 12.2	Intersection LOS: B
Intersection Capacity Utilization 48.9%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 3003: M-227/West Drive & WB M-96 (Michigan Avenue)



Lane Group	Ø2
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)	0	876	59	0	0	0	0	126	30	0	84	0
Future Volume (vph)	0	876	59	0	0	0	0	126	30	0	84	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		65	0		0	100		0	0		0
Storage Lanes	0		1	0		0	1		0	0		0
Taper Length (ft)	25			25			70			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Frt			0.850					0.971				
Flt Protected												
Satd. Flow (prot)	0	3574	1442	0	0	0	0	3344	0	0	1881	0
Flt Permitted												
Satd. Flow (perm)	0	3574	1442	0	0	0	0	3344	0	0	1881	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			59					24				
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		161			222			1117			101	
Travel Time (s)		2.4			3.4			21.8			2.0	
Peak Hour Factor	0.95	0.95	0.95	0.92	0.92	0.92	0.72	0.72	0.72	0.83	0.83	0.83
Heavy Vehicles (%)	2%	1%	12%	2%	2%	2%	2%	6%	0%	2%	1%	2%
Adj. Flow (vph)	0	922	62	0	0	0	0	175	42	0	101	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	922	62	0	0	0	0	217	0	0	101	0
Turn Type		NA	Perm					NA			NA	
Protected Phases		2						8			4	
Permitted Phases			2									
Minimum Split (s)		16.0	16.0					17.0			17.0	
Total Split (s)		79.0	79.0					41.0			41.0	
Total Split (%)		65.8%	65.8%					34.2%			34.2%	
Yellow Time (s)		3.5	3.5					3.5			3.5	
All-Red Time (s)		2.5	2.5					6.0			2.5	
Lost Time Adjust (s)		0.0	0.0					0.0			0.0	
Total Lost Time (s)		6.0	6.0					9.5			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		73.0	73.0					31.5			35.0	
Actuated g/C Ratio		0.61	0.61					0.26			0.29	
v/c Ratio		0.42	0.07					0.24			0.18	
Control Delay		4.5	0.2					31.7			0.7	
Queue Delay		0.0	0.0					0.0			0.0	
Total Delay		4.5	0.2					31.7			0.7	
LOS		A	A					C			A	
Approach Delay		4.2						31.7			0.7	
Approach LOS		A						C			A	
Queue Length 50th (ft)		43	1					61			0	
Queue Length 95th (ft)		51	0					73			0	
Internal Link Dist (ft)		81			142			1037			21	
Turn Bay Length (ft)			65									
Base Capacity (vph)		2174	900					895			548	

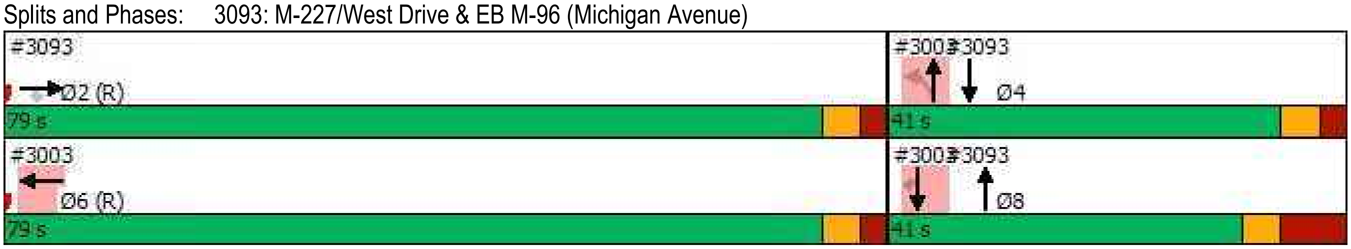
Lane Group	Ø6
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	6
Permitted Phases	
Minimum Split (s)	31.0
Total Split (s)	79.0
Total Split (%)	66%
Yellow Time (s)	3.5
All-Red Time (s)	2.5
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
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)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn		0	0					0			0	
Spillback Cap Reductn		0	0					18			0	
Storage Cap Reductn		0	0					0			0	
Reduced v/c Ratio		0.42	0.07					0.25			0.18	

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 112 (93%), Referenced to phase 2:EBT and 6:, Start of Green
Natural Cycle: 50
Control Type: Pretimed
Maximum v/c Ratio: 0.42
Intersection Signal Delay: 8.5 Intersection LOS: A
Intersection Capacity Utilization 48.9% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 3093: M-227/West Drive & EB M-96 (Michigan Avenue)



Lane Group	Ø6
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

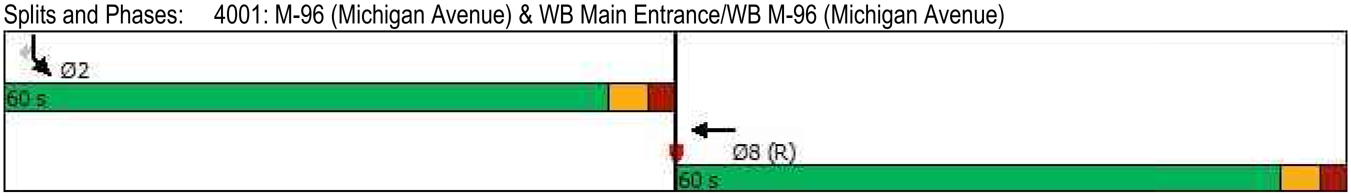
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations										
Traffic Volume (vph)	0	0	0	0	1100	1428	1383	78	0	0
Future Volume (vph)	0	0	0	0	1100	1428	1383	78	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	300		300	0	200	0	0
Storage Lanes	0		0	0		1	2	1	0	0
Taper Length (ft)	25			25			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.88	0.97	1.00	1.00	1.00
Frt						0.850		0.850		
Flt Protected							0.950			
Satd. Flow (prot)	0	0	0	0	3539	2787	3433	1583	0	0
Flt Permitted							0.950			
Satd. Flow (perm)	0	0	0	0	3539	2787	3433	1583	0	0
Right Turn on Red			Yes	Yes		Yes		Yes		
Satd. Flow (RTOR)						814		30		
Link Speed (mph)		45			45		55		45	
Link Distance (ft)		858			894		434		215	
Travel Time (s)		13.0			13.5		5.4		3.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	1196	1552	1503	85	0	0
Shared Lane Traffic (%)										
Lane Group Flow (vph)	0	0	0	0	1196	1552	1503	85	0	0
Turn Type					NA	Free	Prot	Perm		
Protected Phases					8		2			
Permitted Phases						Free		2		
Minimum Split (s)					16.0		16.0	16.0		
Total Split (s)					60.0		60.0	60.0		
Total Split (%)					50.0%		50.0%	50.0%		
Yellow Time (s)					3.5		3.5	3.5		
All-Red Time (s)					2.5		2.5	2.5		
Lost Time Adjust (s)					0.0		0.0	0.0		
Total Lost Time (s)					6.0		6.0	6.0		
Lead/Lag										
Lead-Lag Optimize?										
Act Effct Green (s)					54.0	120.0	54.0	54.0		
Actuated g/C Ratio					0.45	1.00	0.45	0.45		
v/c Ratio					0.75	0.56	0.97	0.12		
Control Delay					27.5	0.6	39.8	4.5		
Queue Delay					0.0	0.0	0.0	0.0		
Total Delay					27.5	0.6	39.8	4.5		
LOS					C	A	D	A		
Approach Delay					12.3		37.9			
Approach LOS					B		D			
Queue Length 50th (ft)					412	0	598	8		
Queue Length 95th (ft)					529	0	#752	26		
Internal Link Dist (ft)		778			814		354		135	
Turn Bay Length (ft)						300		200		
Base Capacity (vph)					1592	2787	1544	728		
Starvation Cap Reductn					0	0	0	0		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Spillback Cap Reductn					0	0	0	0		
Storage Cap Reductn					0	0	0	0		
Reduced v/c Ratio					0.75	0.56	0.97	0.12		

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 36 (30%), Referenced to phase 8:WBT, Start of Green	
Natural Cycle: 75	
Control Type: Pretimed	
Maximum v/c Ratio: 0.97	
Intersection Signal Delay: 21.7	Intersection LOS: C
Intersection Capacity Utilization 79.9%	ICU Level of Service D
Analysis Period (min) 15	

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

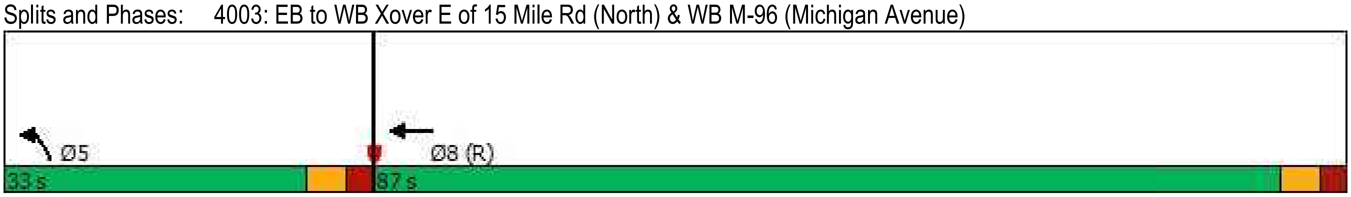
Splits and Phases: 4001: M-96 (Michigan Avenue) & WB Main Entrance/WB M-96 (Michigan Avenue)



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	2278	338	0
Future Volume (vph)	0	0	0	2278	338	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	0.97	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	5085	3433	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	5085	3433	0
Right Turn on Red		Yes			Yes	Yes
Satd. Flow (RTOR)					13	
Link Speed (mph)	45			45	25	
Link Distance (ft)	660			254	113	
Travel Time (s)	10.0			3.8	3.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.70	0.92
Adj. Flow (vph)	0	0	0	2476	483	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	2476	483	0
Turn Type				NA	Prot	
Protected Phases				8	5	
Permitted Phases						
Minimum Split (s)				16.0	13.0	
Total Split (s)				87.0	33.0	
Total Split (%)				72.5%	27.5%	
Yellow Time (s)				3.5	3.5	
All-Red Time (s)				2.5	2.5	
Lost Time Adjust (s)				0.0	0.0	
Total Lost Time (s)				6.0	6.0	
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)				81.0	27.0	
Actuated g/C Ratio				0.68	0.22	
v/c Ratio				0.72	0.62	
Control Delay				6.6	49.3	
Queue Delay				0.0	0.0	
Total Delay				6.6	49.3	
LOS				A	D	
Approach Delay				6.6	49.3	
Approach LOS				A	D	
Queue Length 50th (ft)				153	184	
Queue Length 95th (ft)				194	181	
Internal Link Dist (ft)	580			174	33	
Turn Bay Length (ft)						
Base Capacity (vph)				3432	782	
Starvation Cap Reductn				0	0	
Spillback Cap Reductn				0	0	
Storage Cap Reductn				0	0	
Reduced v/c Ratio				0.72	0.62	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 116 (97%), Referenced to phase 8:WBT, Start of Green	
Natural Cycle: 60	
Control Type: Pretimed	
Maximum v/c Ratio: 0.72	
Intersection Signal Delay: 13.6	Intersection LOS: B
Intersection Capacity Utilization 85.3%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 4003: EB to WB Xover E of 15 Mile Rd (North) & WB M-96 (Michigan Avenue)

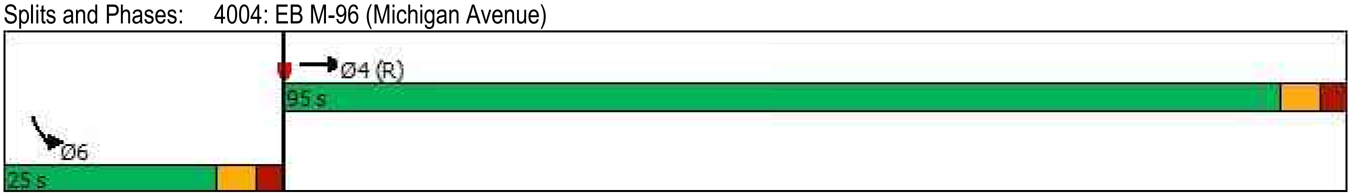


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	1280	0	0	198	0
Future Volume (vph)	0	1280	0	0	198	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	0.97	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	3433	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	3433	0
Right Turn on Red				Yes	Yes	Yes
Satd. Flow (RTOR)					175	
Link Speed (mph)		55	55		25	
Link Distance (ft)		2678	669		109	
Travel Time (s)		33.2	8.3		3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1391	0	0	215	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1391	0	0	215	0
Turn Type		NA			Prot	
Protected Phases		4			6	
Permitted Phases						
Detector Phase		4			6	
Switch Phase						
Minimum Initial (s)		10.0			7.0	
Minimum Split (s)		16.0			13.0	
Total Split (s)		95.0			25.0	
Total Split (%)		79.2%			20.8%	
Yellow Time (s)		3.5			3.5	
All-Red Time (s)		2.5			2.5	
Lost Time Adjust (s)		0.0			0.0	
Total Lost Time (s)		6.0			6.0	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode		C-Max			None	
Act Effct Green (s)		100.0			8.0	
Actuated g/C Ratio		0.83			0.07	
v/c Ratio		0.47			0.55	
Control Delay		1.2			14.9	
Queue Delay		0.0			0.0	
Total Delay		1.2			14.9	
LOS		A			B	
Approach Delay		1.2			14.9	
Approach LOS		A			B	
Queue Length 50th (ft)		16			11	
Queue Length 95th (ft)		17			33	
Internal Link Dist (ft)		2598	589		29	
Turn Bay Length (ft)						
Base Capacity (vph)		2949			690	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Starvation Cap Reductn		0			0	
Spillback Cap Reductn		0			0	
Storage Cap Reductn		0			0	
Reduced v/c Ratio		0.47			0.31	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 20 (17%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 40	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.55	
Intersection Signal Delay: 3.0	Intersection LOS: A
Intersection Capacity Utilization 78.2%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 4004: EB M-96 (Michigan Avenue)

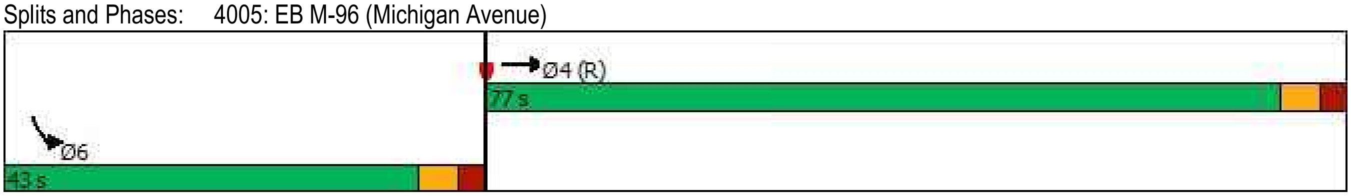


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	961	0	0	354	0
Future Volume (vph)	0	961	0	0	354	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	0.97	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	3433	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	3433	0
Right Turn on Red				Yes	Yes	Yes
Satd. Flow (RTOR)					204	
Link Speed (mph)		55	55		25	
Link Distance (ft)		1786	608		109	
Travel Time (s)		22.1	7.5		3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1045	0	0	385	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1045	0	0	385	0
Turn Type		NA			Prot	
Protected Phases		4			6	
Permitted Phases						
Detector Phase		4			6	
Switch Phase						
Minimum Initial (s)		10.0			7.0	
Minimum Split (s)		16.0			13.0	
Total Split (s)		77.0			43.0	
Total Split (%)		64.2%			35.8%	
Yellow Time (s)		3.5			3.5	
All-Red Time (s)		2.5			2.5	
Lost Time Adjust (s)		0.0			0.0	
Total Lost Time (s)		6.0			6.0	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode		C-Max			Max	
Act Effct Green (s)		71.0			37.0	
Actuated g/C Ratio		0.59			0.31	
v/c Ratio		0.50			0.32	
Control Delay		15.2			20.3	
Queue Delay		0.0			0.0	
Total Delay		15.2			20.3	
LOS		B			C	
Approach Delay		15.2			20.3	
Approach LOS		B			C	
Queue Length 50th (ft)		233			81	
Queue Length 95th (ft)		286			128	
Internal Link Dist (ft)		1706	528		29	
Turn Bay Length (ft)						
Base Capacity (vph)		2093			1199	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Starvation Cap Reductn		0			0	
Spillback Cap Reductn		0			0	
Storage Cap Reductn		0			0	
Reduced v/c Ratio		0.50			0.32	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 112 (93%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 40	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.50	
Intersection Signal Delay: 16.6	Intersection LOS: B
Intersection Capacity Utilization 60.6%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 4005: EB M-96 (Michigan Avenue)

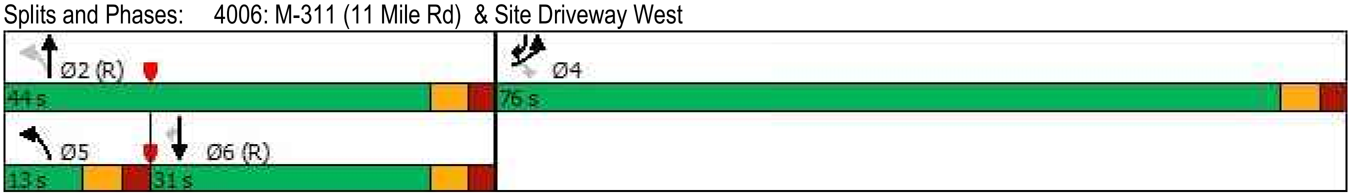


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	1152	61	61	162	189	1152
Future Volume (vph)	1152	61	61	162	189	1152
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	250	250			0
Storage Lanes	2	1	1			1
Taper Length (ft)	25		25			
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	1.00
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	3433	1583	1770	1863	1863	1583
Flt Permitted	0.950		0.440			
Satd. Flow (perm)	3433	1583	820	1863	1863	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		66				679
Link Speed (mph)	25			55	55	
Link Distance (ft)	1178			1461	940	
Travel Time (s)	32.1			18.1	11.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1252	66	66	176	205	1252
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1252	66	66	176	205	1252
Turn Type	Prot	Perm	pm+pt	NA	NA	pm+ov
Protected Phases	4		5	2	6	4
Permitted Phases		4	2			6
Detector Phase	4	4	5	2	6	4
Switch Phase						
Minimum Initial (s)	7.0	7.0	7.0	10.0	10.0	7.0
Minimum Split (s)	14.0	14.0	13.0	17.0	17.0	14.0
Total Split (s)	76.0	76.0	13.0	44.0	31.0	76.0
Total Split (%)	63.3%	63.3%	10.8%	36.7%	25.8%	63.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.5	2.5	2.5	2.5	2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None	None	Min	C-Max	C-Max	None
Act Effct Green (s)	63.3	63.3	44.7	44.7	31.7	101.0
Actuated g/C Ratio	0.53	0.53	0.37	0.37	0.26	0.84
v/c Ratio	0.69	0.08	0.18	0.25	0.42	0.87
Control Delay	22.9	2.8	29.2	29.7	53.3	20.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	22.9	2.8	29.2	29.7	53.3	20.9
LOS	C	A	C	C	D	C
Approach Delay	21.9			29.5	25.5	
Approach LOS	C			C	C	
Queue Length 50th (ft)	310	0	36	103	167	334
Queue Length 95th (ft)	379	19	71	164	246	1101

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Internal Link Dist (ft)	1098			1381	860	
Turn Bay Length (ft)		250	250			
Base Capacity (vph)	2002	950	361	693	491	1487
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	0.63	0.07	0.18	0.25	0.42	0.84

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 60 (50%), Referenced to phase 2:NBTL and 6:SBT, Start of Green	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.87	
Intersection Signal Delay: 24.2	Intersection LOS: C
Intersection Capacity Utilization 87.2%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 4006: M-311 (11 Mile Rd) & Site Driveway West



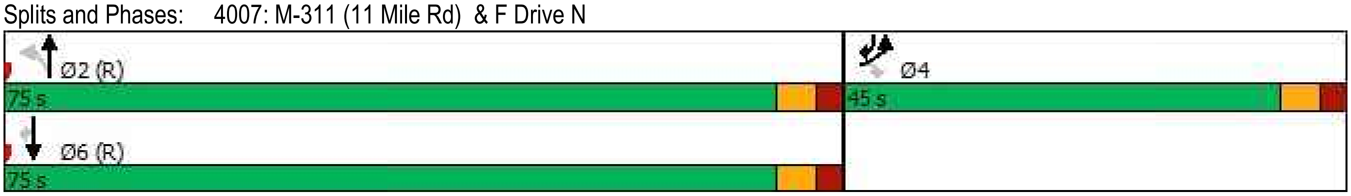
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	1030	30	30	1981	2008	1030
Future Volume (vph)	1030	30	30	1981	2008	1030
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	250	400			0
Storage Lanes	2	1	1			1
Taper Length (ft)	25		25			
Lane Util. Factor	0.97	1.00	1.00	0.95	0.95	1.00
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	3433	1583	1770	3539	3539	1583
Flt Permitted	0.950		0.058			
Satd. Flow (perm)	3433	1583	108	3539	3539	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		6				
Link Speed (mph)	45			55	55	
Link Distance (ft)	1846			974	1093	
Travel Time (s)	28.0			12.1	13.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1120	33	33	2153	2183	1120
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1120	33	33	2153	2183	1120
Turn Type	Prot	Perm	Perm	NA	NA	pm+ov
Protected Phases	4			2	6	4
Permitted Phases		4	2			6
Detector Phase	4	4	2	2	6	4
Switch Phase						
Minimum Initial (s)	7.0	7.0	10.0	10.0	10.0	7.0
Minimum Split (s)	13.0	13.0	16.0	16.0	16.0	13.0
Total Split (s)	45.0	45.0	75.0	75.0	75.0	45.0
Total Split (%)	37.5%	37.5%	62.5%	62.5%	62.5%	37.5%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.5	2.5	2.5	2.5	2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None	None	C-Max	C-Max	C-Max	None
Act Effct Green (s)	39.0	39.0	69.0	69.0	69.0	120.0
Actuated g/C Ratio	0.32	0.32	0.58	0.58	0.58	1.00
v/c Ratio	1.00	0.06	0.53	1.06	1.07	0.71
Control Delay	68.7	24.5	31.0	50.0	57.8	1.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	68.7	24.5	31.0	50.0	57.8	1.0
LOS	E	C	C	D	E	A
Approach Delay	67.4			49.8	38.5	
Approach LOS	E			D	D	
Queue Length 50th (ft)	~449	14	6	~957	~1001	0
Queue Length 95th (ft)	#600	39	m13	m#976	m#1111	m0

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Internal Link Dist (ft)	1766			894	1013	
Turn Bay Length (ft)		250	400			
Base Capacity (vph)	1115	518	62	2034	2034	1583
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	1.00	0.06	0.53	1.06	1.07	0.71

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 20 (17%), Referenced to phase 2:NBTL and 6:SBT, Start of Green	
Natural Cycle: 140	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.07	
Intersection Signal Delay: 47.2	Intersection LOS: D
Intersection Capacity Utilization 94.9%	ICU Level of Service F
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

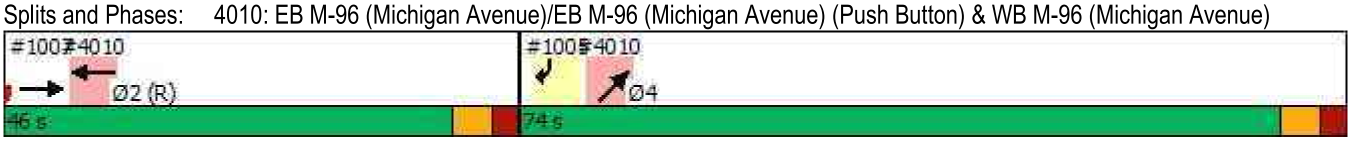
Splits and Phases: 4007: M-311 (11 Mile Rd) & F Drive N



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations					↑↑↑			↑↑↑				
Traffic Volume (vph)	0	0	0	0	1265	0	0	1717	0	0	0	0
Future Volume (vph)	0	0	0	0	1265	0	0	1717	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.91	1.00	1.00	1.00	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	0	0	0	5085	0	0	5085	0	0	0	0
Flt Permitted												
Satd. Flow (perm)	0	0	0	0	5085	0	0	5085	0	0	0	0
Right Turn on Red			Yes			Yes	Yes		Yes			Yes
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		194			183			156			190	
Travel Time (s)		2.9			2.8			2.4			2.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.90	0.90	0.90	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	1375	0	0	1908	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1375	0	0	1908	0	0	0	0
Turn Type					NA			NA				
Protected Phases					2			4				
Permitted Phases												
Minimum Split (s)					17.0			17.0				
Total Split (s)					46.0			74.0				
Total Split (%)					38.3%			61.7%				
Yellow Time (s)					3.5			3.5				
All-Red Time (s)					2.5			2.5				
Lost Time Adjust (s)					0.0			0.0				
Total Lost Time (s)					6.0			6.0				
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)					40.0			68.0				
Actuated g/C Ratio					0.33			0.57				
v/c Ratio					0.81			0.66				
Control Delay					36.7			10.4				
Queue Delay					0.0			0.0				
Total Delay					36.7			10.4				
LOS					D			B				
Approach Delay					36.7			10.4				
Approach LOS					D			B				
Queue Length 50th (ft)					395			226				
Queue Length 95th (ft)					448			260				
Internal Link Dist (ft)		114			103			76			110	
Turn Bay Length (ft)												
Base Capacity (vph)					1695			2881				
Starvation Cap Reductn					0			0				
Spillback Cap Reductn					0			0				
Storage Cap Reductn					0			0				
Reduced v/c Ratio					0.81			0.66				

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 100 (83%), Referenced to phase 2:EBT, Start of Green	
Natural Cycle: 50	
Control Type: Pretimed	
Maximum v/c Ratio: 0.81	
Intersection Signal Delay: 21.4	Intersection LOS: C
Intersection Capacity Utilization 67.6%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 4010: EB M-96 (Michigan Avenue)/EB M-96 (Michigan Avenue) (Push Button) & WB M-96 (Michigan Avenue)



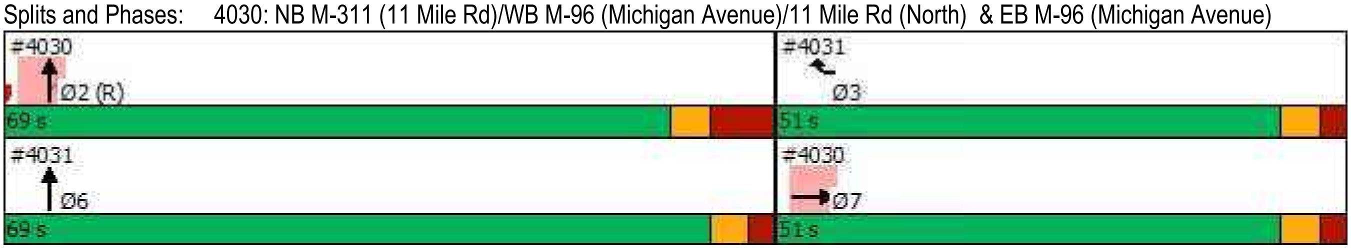
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	641	0	0	0	0	0	2549	462	0	0	0
Future Volume (vph)	0	641	0	0	0	0	0	2549	462	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		250	0		0
Storage Lanes	0		0	0		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	1.00	1.00
Frt									0.850			
Flt Protected												
Satd. Flow (prot)	0	3539	0	0	0	0	0	5085	1583	0	0	0
Flt Permitted												
Satd. Flow (perm)	0	3539	0	0	0	0	0	5085	1583	0	0	0
Right Turn on Red	Yes		Yes			Yes			Yes			Yes
Satd. Flow (RTOR)									92			
Link Speed (mph)		55			55			55			30	
Link Distance (ft)		167			316			655			182	
Travel Time (s)		2.1			3.9			8.1			4.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	697	0	0	0	0	0	2771	502	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	697	0	0	0	0	0	2771	502	0	0	0
Turn Type		NA						NA	Perm			
Protected Phases		7						2				
Permitted Phases									2			
Minimum Split (s)		16.0						19.5	19.5			
Total Split (s)		51.0						69.0	69.0			
Total Split (%)		42.5%						57.5%	57.5%			
Yellow Time (s)		3.5						3.5	3.5			
All-Red Time (s)		2.5						6.0	6.0			
Lost Time Adjust (s)		0.0						0.0	0.0			
Total Lost Time (s)		6.0						9.5	9.5			
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		45.0						59.5	59.5			
Actuated g/C Ratio		0.38						0.50	0.50			
v/c Ratio		0.53						1.10	0.60			
Control Delay		29.6						74.0	17.1			
Queue Delay		0.0						0.4	0.0			
Total Delay		29.6						74.4	17.1			
LOS		C						E	B			
Approach Delay		29.6						65.6				
Approach LOS		C						E				
Queue Length 50th (ft)		247						~893	239			
Queue Length 95th (ft)		m250						m#831	m223			
Internal Link Dist (ft)		87			236			575			102	
Turn Bay Length (ft)									250			
Base Capacity (vph)		1327						2521	831			
Starvation Cap Reductn		0						0	0			

Lane Group	Ø3	Ø6
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Ideal Flow (vphpl)		
Storage Length (ft)		
Storage Lanes		
Taper Length (ft)		
Lane Util. Factor		
Frt		
Flt Protected		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Peak Hour Factor		
Adj. Flow (vph)		
Shared Lane Traffic (%)		
Lane Group Flow (vph)		
Turn Type		
Protected Phases	3	6
Permitted Phases		
Minimum Split (s)	16.0	16.0
Total Split (s)	51.0	69.0
Total Split (%)	43%	58%
Yellow Time (s)	3.5	3.5
All-Red Time (s)	2.5	2.5
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag		
Lead-Lag Optimize?		
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		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn		0						71	0			
Storage Cap Reductn		0						0	0			
Reduced v/c Ratio		0.53						1.13	0.60			

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 88 (73%), Referenced to phase 2:NBT, Start of Green	
Natural Cycle: 120	
Control Type: Pretimed	
Maximum v/c Ratio: 1.10	
Intersection Signal Delay: 59.3	Intersection LOS: E
Intersection Capacity Utilization 88.3%	ICU Level of Service E
Analysis Period (min) 15	
~ Volume exceeds capacity, queue is theoretically infinite.	
Queue shown is maximum after two cycles.	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 4030: NB M-311 (11 Mile Rd)/WB M-96 (Michigan Avenue)/11 Mile Rd (North) & EB M-96 (Michigan Avenue)



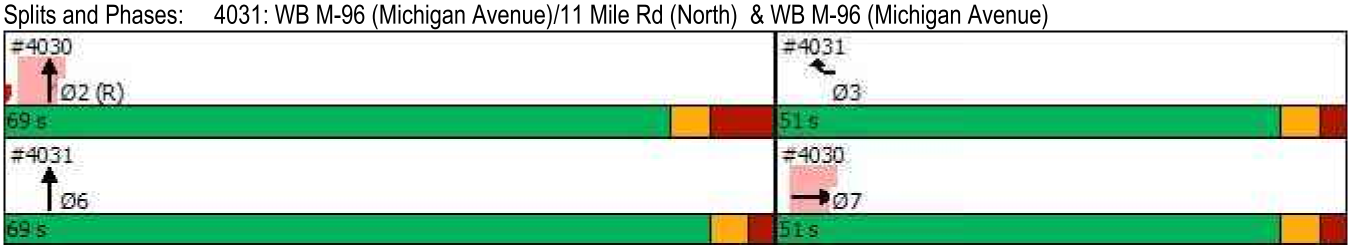
Lane Group	Ø3	Ø6
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		

Intersection Summary

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø2	Ø7
Lane Configurations								
Traffic Volume (vph)	0	1247	2549	0	0	0		
Future Volume (vph)	0	1247	2549	0	0	0		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Lane Util. Factor	1.00	0.76	0.91	1.00	1.00	1.00		
Frt		0.850						
Flt Protected								
Satd. Flow (prot)	0	3610	5085	0	0	0		
Flt Permitted								
Satd. Flow (perm)	0	3610	5085	0	0	0		
Right Turn on Red		Yes		Yes				
Satd. Flow (RTOR)		1						
Link Speed (mph)	55		55			55		
Link Distance (ft)	405		182			493		
Travel Time (s)	5.0		2.3			6.1		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Adj. Flow (vph)	0	1355	2771	0	0	0		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	0	1355	2771	0	0	0		
Turn Type		Prot	NA					
Protected Phases		3	6				2	7
Permitted Phases								
Minimum Split (s)		16.0	16.0				19.5	16.0
Total Split (s)		51.0	69.0				69.0	51.0
Total Split (%)		42.5%	57.5%				58%	43%
Yellow Time (s)		3.5	3.5				3.5	3.5
All-Red Time (s)		2.5	2.5				6.0	2.5
Lost Time Adjust (s)		0.0	0.0					
Total Lost Time (s)		6.0	6.0					
Lead/Lag								
Lead-Lag Optimize?								
Act Effct Green (s)		45.0	63.0					
Actuated g/C Ratio		0.38	0.52					
v/c Ratio		1.00	1.04					
Control Delay		59.1	24.7					
Queue Delay		0.0	8.0					
Total Delay		59.1	32.7					
LOS		E	C					
Approach Delay	59.1		32.7					
Approach LOS	E		C					
Queue Length 50th (ft)		454	~73					
Queue Length 95th (ft)		#595	m0					
Internal Link Dist (ft)	325		102			413		
Turn Bay Length (ft)								
Base Capacity (vph)		1354	2669					
Starvation Cap Reductn		0	51					
Spillback Cap Reductn		0	0					
Storage Cap Reductn		0	0					
Reduced v/c Ratio		1.00	1.06					

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 88 (73%), Referenced to phase 2:NBT, Start of Green	
Natural Cycle: 120	
Control Type: Pretimed	
Maximum v/c Ratio: 1.10	
Intersection Signal Delay: 41.4	Intersection LOS: D
Intersection Capacity Utilization 88.3%	ICU Level of Service E
Analysis Period (min) 15	
~ Volume exceeds capacity, queue is theoretically infinite.	
Queue shown is maximum after two cycles.	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 4031: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & WB M-96 (Michigan Avenue)

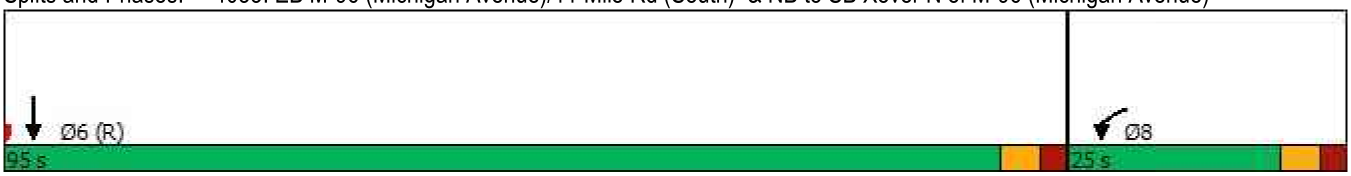


Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	491	0	0	0	0	3188
Future Volume (vph)	491	0	0	0	0	3188
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	0.91
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	3433	0	0	0	0	5085
Flt Permitted	0.950					
Satd. Flow (perm)	3433	0	0	0	0	5085
Right Turn on Red	Yes	Yes		Yes		
Satd. Flow (RTOR)	3					
Link Speed (mph)	25		55			30
Link Distance (ft)	105		587			495
Travel Time (s)	2.9		7.3			11.3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	534	0	0	0	0	3465
Shared Lane Traffic (%)						
Lane Group Flow (vph)	534	0	0	0	0	3465
Turn Type	Prot					NA
Protected Phases	8					6
Permitted Phases						
Minimum Split (s)	13.0					16.0
Total Split (s)	25.0					95.0
Total Split (%)	20.8%					79.2%
Yellow Time (s)	3.5					3.5
All-Red Time (s)	2.5					2.5
Lost Time Adjust (s)	0.0					0.0
Total Lost Time (s)	6.0					6.0
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)	19.0					89.0
Actuated g/C Ratio	0.16					0.74
v/c Ratio	0.98					0.92
Control Delay	33.0					9.7
Queue Delay	0.0					0.5
Total Delay	33.0					10.2
LOS	C					B
Approach Delay	33.0					10.2
Approach LOS	C					B
Queue Length 50th (ft)	172					176
Queue Length 95th (ft)	m172					210
Internal Link Dist (ft)	25		507			415
Turn Bay Length (ft)						
Base Capacity (vph)	546					3771
Starvation Cap Reductn	0					76
Spillback Cap Reductn	0					0
Storage Cap Reductn	0					0
Reduced v/c Ratio	0.98					0.94

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 89 (74%), Referenced to phase 6:SBT, Start of Green	
Natural Cycle: 90	
Control Type: Pretimed	
Maximum v/c Ratio: 0.98	
Intersection Signal Delay: 13.3	Intersection LOS: B
Intersection Capacity Utilization 133.8%	ICU Level of Service H
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

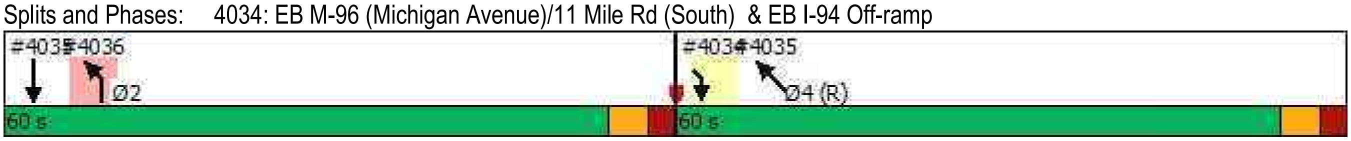
Splits and Phases: 4033: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & NB to SB Xover N of M-96 (Michigan Avenue)



Lane Group	NBL	NBT	SBT	SBR	SEL	SER	Ø2
Lane Configurations			↑↑↑			↱↱	
Traffic Volume (vph)	0	0	2200	0	0	988	
Future Volume (vph)	0	0	2200	0	0	988	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	0.91	1.00	1.00	0.88	
Frt						0.850	
Flt Protected							
Satd. Flow (prot)	0	0	5085	0	0	2787	
Flt Permitted							
Satd. Flow (perm)	0	0	5085	0	0	2787	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)						77	
Link Speed (mph)		30	30		30		
Link Distance (ft)		495	145		346		
Travel Time (s)		11.3	3.3		7.9		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	0	0	2391	0	0	1074	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	2391	0	0	1074	
Turn Type			NA			Prot	
Protected Phases			Free!			4!	2
Permitted Phases							
Minimum Split (s)						16.0	16.0
Total Split (s)						60.0	60.0
Total Split (%)						50.0%	50%
Yellow Time (s)						3.5	3.5
All-Red Time (s)						2.5	2.5
Lost Time Adjust (s)						0.0	
Total Lost Time (s)						6.0	
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)			120.0			54.0	
Actuated g/C Ratio			1.00			0.45	
v/c Ratio			0.47			0.83	
Control Delay			2.1			33.5	
Queue Delay			0.0			0.0	
Total Delay			2.1			33.5	
LOS			A			C	
Approach Delay			2.1		33.5		
Approach LOS			A		C		
Queue Length 50th (ft)			13			381	
Queue Length 95th (ft)			m0			486	
Internal Link Dist (ft)		415	65		266		
Turn Bay Length (ft)							
Base Capacity (vph)			5085			1296	
Starvation Cap Reductn			0			0	
Spillback Cap Reductn			108			1	
Storage Cap Reductn			0			0	
Reduced v/c Ratio			0.48			0.83	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 27 (23%), Referenced to phase 4:SER, Start of Green	
Natural Cycle: 130	
Control Type: Pretimed	
Maximum v/c Ratio: 1.05	
Intersection Signal Delay: 11.8	Intersection LOS: B
Intersection Capacity Utilization 95.1%	ICU Level of Service F
Analysis Period (min) 15	
m Volume for 95th percentile queue is metered by upstream signal.	
! Phase conflict between lane groups.	

Splits and Phases: 4034: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & EB I-94 Off-ramp

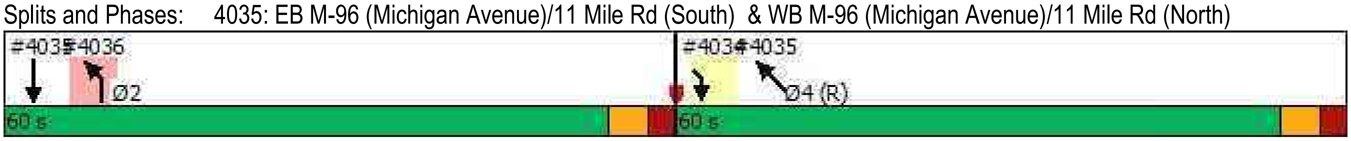


Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	2200	0	0	0	0	0	2206	0
Future Volume (vph)	0	0	0	0	2200	0	0	0	0	0	2206	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.91	1.00	1.00	1.00	1.00	1.00	0.91	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	0	0	0	5085	0	0	0	0	0	5085	0
Flt Permitted												
Satd. Flow (perm)	0	0	0	0	5085	0	0	0	0	0	5085	0
Right Turn on Red			Yes			Yes			Yes	Yes		Yes
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		145			194			233			108	
Travel Time (s)		3.3			4.4			5.3			2.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	2391	0	0	0	0	0	2398	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	2391	0	0	0	0	0	2398	0
Turn Type					NA						NA	
Protected Phases					2						4	
Permitted Phases												
Minimum Split (s)					16.0						16.0	
Total Split (s)					60.0						60.0	
Total Split (%)					50.0%						50.0%	
Yellow Time (s)					3.5						3.5	
All-Red Time (s)					2.5						2.5	
Lost Time Adjust (s)					0.0						0.0	
Total Lost Time (s)					6.0						6.0	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)					54.0						54.0	
Actuated g/C Ratio					0.45						0.45	
v/c Ratio					1.05						1.05	
Control Delay					53.8						55.4	
Queue Delay					0.0						0.0	
Total Delay					53.8						55.4	
LOS					D						E	
Approach Delay					53.8						55.4	
Approach LOS					D						E	
Queue Length 50th (ft)					~732						~751	
Queue Length 95th (ft)					#828						m#710	
Internal Link Dist (ft)		65			114			153			28	
Turn Bay Length (ft)												
Base Capacity (vph)					2288						2288	
Starvation Cap Reductn					0						0	
Spillback Cap Reductn					0						0	
Storage Cap Reductn					0						0	
Reduced v/c Ratio					1.05						1.05	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 27 (23%), Referenced to phase 4:SER, Start of Green	
Natural Cycle: 130	
Control Type: Pretimed	
Maximum v/c Ratio: 1.05	
Intersection Signal Delay: 54.6	Intersection LOS: D
Intersection Capacity Utilization 108.7%	ICU Level of Service G
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4035: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & WB M-96 (Michigan Avenue)/11 Mile Rd (North)



Lane Group	NBL	NBR	SET	SER	NWL	NWT	Ø4
Lane Configurations							
Traffic Volume (vph)	104	0	0	0	0	2206	
Future Volume (vph)	104	0	0	0	0	2206	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.91	
Frt							
Flt Protected	0.950						
Satd. Flow (prot)	1719	0	0	0	0	5085	
Flt Permitted	0.950						
Satd. Flow (perm)	1719	0	0	0	0	5085	
Right Turn on Red	Yes	Yes		Yes			
Satd. Flow (RTOR)	43						
Link Speed (mph)	30		30			30	
Link Distance (ft)	271		337			233	
Travel Time (s)	6.2		7.7			5.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Heavy Vehicles (%)	5%	2%	2%	2%	2%	2%	
Adj. Flow (vph)	113	0	0	0	0	2398	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	113	0	0	0	0	2398	
Turn Type	Prot					NA	
Protected Phases	2!					Free!	4
Permitted Phases							
Minimum Split (s)	16.0						16.0
Total Split (s)	60.0						60.0
Total Split (%)	50.0%						50%
Yellow Time (s)	3.5						3.5
All-Red Time (s)	2.5						2.5
Lost Time Adjust (s)	0.0						
Total Lost Time (s)	6.0						
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)	54.0					120.0	
Actuated g/C Ratio	0.45					1.00	
v/c Ratio	0.14					0.47	
Control Delay	12.5					2.2	
Queue Delay	0.0					0.0	
Total Delay	12.5					2.2	
LOS	B					A	
Approach Delay	12.5					2.2	
Approach LOS	B					A	
Queue Length 50th (ft)	30					32	
Queue Length 95th (ft)	66					m0	
Internal Link Dist (ft)	191		257			153	
Turn Bay Length (ft)							
Base Capacity (vph)	797					5085	
Starvation Cap Reductn	0					0	
Spillback Cap Reductn	0					0	
Storage Cap Reductn	0					0	

Lane Group	NBL	NBR	SET	SER	NWL	NWT	Ø4
Reduced v/c Ratio	0.14					0.47	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 27 (23%), Referenced to phase 4:SER, Start of Green	
Natural Cycle: 130	
Control Type: Pretimed	
Maximum v/c Ratio: 1.05	
Intersection Signal Delay: 2.6	Intersection LOS: A
Intersection Capacity Utilization 77.1%	ICU Level of Service D
Analysis Period (min) 15	
m Volume for 95th percentile queue is metered by upstream signal.	
! Phase conflict between lane groups.	

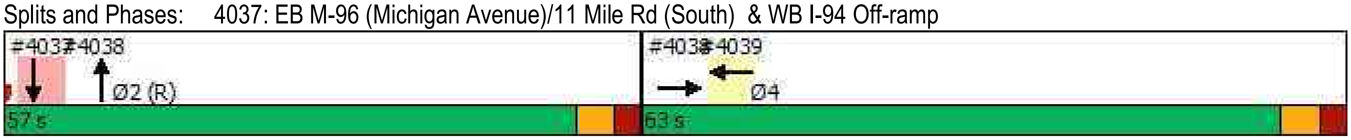
Splits and Phases: 4036: EB I-94 Off-ramp & WB M-96 (Michigan Avenue)/11 Mile Rd (North)

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø4
Lane Configurations							
Traffic Volume (vph)	0	1234	0	0	1039	0	
Future Volume (vph)	0	1234	0	0	1039	0	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	0.88	1.00	1.00	0.95	1.00	
Frt		0.850					
Flt Protected							
Satd. Flow (prot)	0	2707	0	0	3438	0	
Flt Permitted							
Satd. Flow (perm)	0	2707	0	0	3438	0	
Right Turn on Red		Yes				Yes	
Satd. Flow (RTOR)		1038					
Link Speed (mph)	30			30	30		
Link Distance (ft)	222			406	241		
Travel Time (s)	5.0			9.2	5.5		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Heavy Vehicles (%)	2%	5%	2%	2%	5%	2%	
Adj. Flow (vph)	0	1341	0	0	1129	0	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	1341	0	0	1129	0	
Turn Type		Free			NA		
Protected Phases					2		4
Permitted Phases		Free					
Minimum Split (s)					16.0		16.0
Total Split (s)					57.0		63.0
Total Split (%)					47.5%		53%
Yellow Time (s)					3.5		3.5
All-Red Time (s)					2.5		2.5
Lost Time Adjust (s)					0.0		
Total Lost Time (s)					6.0		
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)		120.0			51.0		
Actuated g/C Ratio		1.00			0.42		
v/c Ratio		0.50			0.77		
Control Delay		6.5			34.0		
Queue Delay		0.1			22.7		
Total Delay		6.6			56.7		
LOS		A			E		
Approach Delay	6.6				56.7		
Approach LOS	A				E		
Queue Length 50th (ft)		149			387		
Queue Length 95th (ft)		121			475		
Internal Link Dist (ft)	142			326	161		
Turn Bay Length (ft)							
Base Capacity (vph)		2707			1461		
Starvation Cap Reductn		0			0		
Spillback Cap Reductn		289			367		
Storage Cap Reductn		0			0		

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø4
Reduced v/c Ratio		0.55			1.03		

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 96 (80%), Referenced to phase 2:SBT, Start of Green	
Natural Cycle: 60	
Control Type: Pretimed	
Maximum v/c Ratio: 0.82	
Intersection Signal Delay: 29.5	Intersection LOS: C
Intersection Capacity Utilization 33.7%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4037: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & WB I-94 Off-ramp



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑						↑↑↑				
Traffic Volume (vph)	0	1234	0	0	0	0	0	1353	0	0	0	0
Future Volume (vph)	0	1234	0	0	0	0	0	1353	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	1.00	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	3438	0	0	0	0	0	4940	0	0	0	0
Flt Permitted												
Satd. Flow (perm)	0	3438	0	0	0	0	0	4940	0	0	0	0
Right Turn on Red	Yes		Yes			Yes			Yes			Yes
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		190			222			207			131	
Travel Time (s)		4.3			5.0			4.7			3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	5%	2%	2%	2%	2%	2%	5%	2%	2%	2%	2%
Adj. Flow (vph)	0	1341	0	0	0	0	0	1471	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1341	0	0	0	0	0	1471	0	0	0	0
Turn Type		NA						NA				
Protected Phases		4						2				
Permitted Phases												
Minimum Split (s)		16.0						16.0				
Total Split (s)		63.0						57.0				
Total Split (%)		52.5%						47.5%				
Yellow Time (s)		3.5						3.5				
All-Red Time (s)		2.5						2.5				
Lost Time Adjust (s)		0.0						0.0				
Total Lost Time (s)		6.0						6.0				
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		57.0						51.0				
Actuated g/C Ratio		0.48						0.42				
v/c Ratio		0.82						0.70				
Control Delay		31.5						41.6				
Queue Delay		0.0						0.0				
Total Delay		31.5						41.6				
LOS		C						D				
Approach Delay		31.5						41.6				
Approach LOS		C						D				
Queue Length 50th (ft)		538						445				
Queue Length 95th (ft)		623						495				
Internal Link Dist (ft)		110			142			127			51	
Turn Bay Length (ft)												
Base Capacity (vph)		1633						2099				
Starvation Cap Reductn		0						0				
Spillback Cap Reductn		0						0				
Storage Cap Reductn		0						0				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio		0.82						0.70				

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 96 (80%), Referenced to phase 2:SBT, Start of Green	
Natural Cycle: 60	
Control Type: Pretimed	
Maximum v/c Ratio: 0.82	
Intersection Signal Delay: 36.8	Intersection LOS: D
Intersection Capacity Utilization 70.3%	ICU Level of Service C
Analysis Period (min) 15	

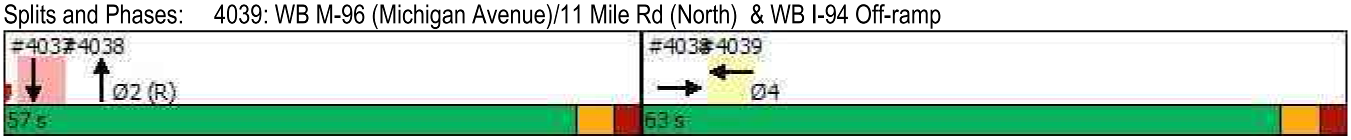
Splits and Phases: 4038: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & EB M-96 (Michigan Avenue)/11 Mile Rd (South)

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø2
Lane Configurations							
Traffic Volume (vph)	0	0	0	151	1353	0	
Future Volume (vph)	0	0	0	151	1353	0	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.94	1.00	
Frt							
Flt Protected					0.950		
Satd. Flow (prot)	0	0	0	1810	4848	0	
Flt Permitted					0.950		
Satd. Flow (perm)	0	0	0	1810	4848	0	
Right Turn on Red		Yes			Yes	Yes	
Satd. Flow (RTOR)					2497		
Link Speed (mph)	30			30	30		
Link Distance (ft)	415			317	131		
Travel Time (s)	9.4			7.2	3.0		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Heavy Vehicles (%)	2%	2%	2%	5%	5%	2%	
Adj. Flow (vph)	0	0	0	164	1471	0	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	0	164	1471	0	
Turn Type				NA	Perm		
Protected Phases				4!			2
Permitted Phases					Free!		
Minimum Split (s)				16.0			16.0
Total Split (s)				63.0			57.0
Total Split (%)				52.5%			48%
Yellow Time (s)				3.5			3.5
All-Red Time (s)				2.5			2.5
Lost Time Adjust (s)				0.0			
Total Lost Time (s)				6.0			
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)				57.0	120.0		
Actuated g/C Ratio				0.48	1.00		
v/c Ratio				0.19	0.30		
Control Delay				18.9	0.5		
Queue Delay				0.0	0.0		
Total Delay				18.9	0.5		
LOS				B	A		
Approach Delay				18.9	0.5		
Approach LOS				B	A		
Queue Length 50th (ft)				71	2		
Queue Length 95th (ft)				116	0		
Internal Link Dist (ft)	335			237	51		
Turn Bay Length (ft)							
Base Capacity (vph)				859	4848		
Starvation Cap Reductn				0	0		
Spillback Cap Reductn				0	0		
Storage Cap Reductn				0	0		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø2
Reduced v/c Ratio				0.19	0.30		

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 96 (80%), Referenced to phase 2:SBT, Start of Green	
Natural Cycle: 60	
Control Type: Pretimed	
Maximum v/c Ratio: 0.82	
Intersection Signal Delay: 2.3	Intersection LOS: A
Intersection Capacity Utilization 97.0%	ICU Level of Service F
Analysis Period (min) 15	
! Phase conflict between lane groups.	

Splits and Phases: 4039: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & WB I-94 Off-ramp



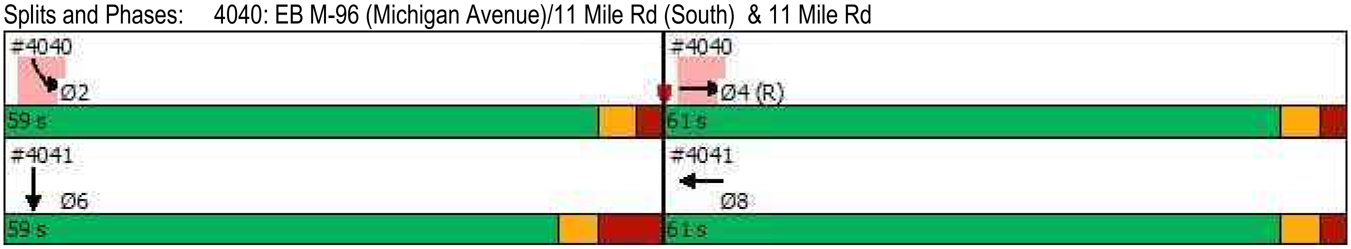
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø6	Ø8
Lane Configurations		↑↑			↰↰			
Traffic Volume (vph)	0	717	0	0	662	0		
Future Volume (vph)	0	717	0	0	662	0		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.97	1.00		
Frt								
Flt Protected					0.950			
Satd. Flow (prot)	0	3539	0	0	3335	0		
Flt Permitted					0.950			
Satd. Flow (perm)	0	3539	0	0	3335	0		
Right Turn on Red				Yes	Yes	Yes		
Satd. Flow (RTOR)					224			
Link Speed (mph)		55	55		45			
Link Distance (ft)		212	597		92			
Travel Time (s)		2.6	7.4		1.4			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Heavy Vehicles (%)	2%	2%	2%	2%	5%	2%		
Adj. Flow (vph)	0	779	0	0	720	0		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	0	779	0	0	720	0		
Turn Type		NA			Prot			
Protected Phases		4			2		6	8
Permitted Phases								
Minimum Split (s)		16.0			19.5		19.5	16.0
Total Split (s)		61.0			59.0		59.0	61.0
Total Split (%)		50.8%			49.2%		49%	51%
Yellow Time (s)		3.5			3.5		3.5	3.5
All-Red Time (s)		2.5			2.5		6.0	2.5
Lost Time Adjust (s)		0.0			0.0			
Total Lost Time (s)		6.0			6.0			
Lead/Lag								
Lead-Lag Optimize?								
Act Effct Green (s)		55.0			53.0			
Actuated g/C Ratio		0.46			0.44			
v/c Ratio		0.48			0.45			
Control Delay		23.8			0.8			
Queue Delay		0.0			0.0			
Total Delay		23.8			0.8			
LOS		C			A			
Approach Delay		23.8			0.8			
Approach LOS		C			A			
Queue Length 50th (ft)		215			0			
Queue Length 95th (ft)		271			0			
Internal Link Dist (ft)		132	517		12			
Turn Bay Length (ft)								
Base Capacity (vph)		1622			1598			
Starvation Cap Reductn		0			0			
Spillback Cap Reductn		0			0			
Storage Cap Reductn		0			0			

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø6	Ø8
Reduced v/c Ratio		0.48			0.45			

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 32 (27%), Referenced to phase 4:EBT, Start of Green
Natural Cycle: 50
Control Type: Pretimed
Maximum v/c Ratio: 0.56
Intersection Signal Delay: 12.8 Intersection LOS: B
Intersection Capacity Utilization 54.3% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 4040: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & 11 Mile Rd



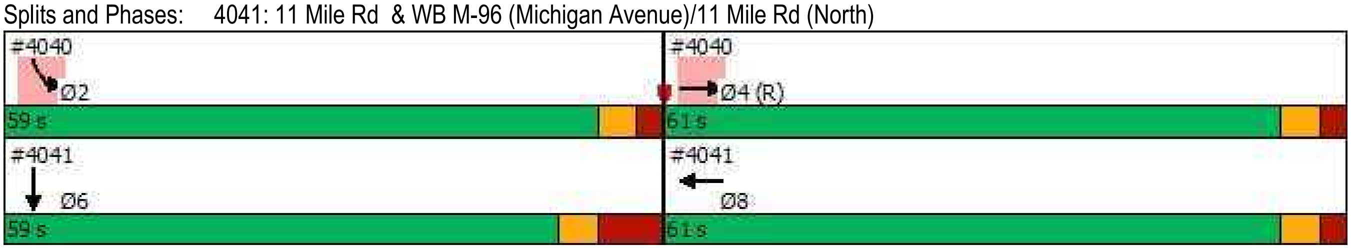
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	770	798	0	0	0	0	662	56
Future Volume (vph)	0	0	0	0	770	798	0	0	0	0	662	56
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		250	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Frt						0.850					0.988	
Flt Protected												
Satd. Flow (prot)	0	0	0	0	3539	1538	0	0	0	0	3404	0
Flt Permitted												
Satd. Flow (perm)	0	0	0	0	3539	1538	0	0	0	0	3404	0
Right Turn on Red			Yes	Yes		Yes			Yes			Yes
Satd. Flow (RTOR)						649					9	
Link Speed (mph)		55			55			45			55	
Link Distance (ft)		210			598			92			259	
Travel Time (s)		2.6			7.4			1.4			3.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	5%	2%	2%	2%	2%	5%	2%
Adj. Flow (vph)	0	0	0	0	837	867	0	0	0	0	720	61
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	837	867	0	0	0	0	781	0
Turn Type					NA	custom					NA	
Protected Phases					8	Free					6	
Permitted Phases												
Minimum Split (s)					16.0						19.5	
Total Split (s)					61.0						59.0	
Total Split (%)					50.8%						49.2%	
Yellow Time (s)					3.5						3.5	
All-Red Time (s)					2.5						6.0	
Lost Time Adjust (s)					0.0						0.0	
Total Lost Time (s)					6.0						9.5	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)					55.0	120.0					49.5	
Actuated g/C Ratio					0.46	1.00					0.41	
v/c Ratio					0.52	0.56					0.55	
Control Delay					30.3	12.4					39.0	
Queue Delay					0.0	0.0					0.0	
Total Delay					30.3	12.4					39.0	
LOS					C	B					D	
Approach Delay					21.2						39.0	
Approach LOS					C						D	
Queue Length 50th (ft)					341	619					304	
Queue Length 95th (ft)					415	788					384	
Internal Link Dist (ft)		130			518			12			179	
Turn Bay Length (ft)						250						
Base Capacity (vph)					1622	1538					1409	

Lane Group	Ø2	Ø4
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Ideal Flow (vphpl)		
Storage Length (ft)		
Storage Lanes		
Taper Length (ft)		
Lane Util. Factor		
Frt		
Flt Protected		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Peak Hour Factor		
Heavy Vehicles (%)		
Adj. Flow (vph)		
Shared Lane Traffic (%)		
Lane Group Flow (vph)		
Turn Type		
Protected Phases	2	4
Permitted Phases		
Minimum Split (s)	19.5	16.0
Total Split (s)	59.0	61.0
Total Split (%)	49%	51%
Yellow Time (s)	3.5	3.5
All-Red Time (s)	2.5	2.5
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag		
Lead-Lag Optimize?		
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)		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn					0	0					0	
Spillback Cap Reductn					0	0					0	
Storage Cap Reductn					0	0					0	
Reduced v/c Ratio					0.52	0.56					0.55	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 32 (27%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 50	
Control Type: Pretimed	
Maximum v/c Ratio: 0.56	
Intersection Signal Delay: 26.8	Intersection LOS: C
Intersection Capacity Utilization 54.3%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4041: 11 Mile Rd & WB M-96 (Michigan Avenue)/11 Mile Rd (North)



Lane Group	Ø2	Ø4
Starvation Cap Reductn		
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		

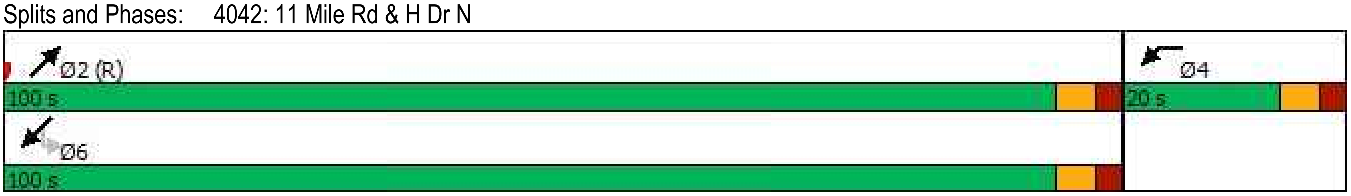
Intersection Summary

Lane Group	WBL	WBR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	0	0	798	0	0	718
Future Volume (vph)	0	0	798	0	0	718
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	1810	0	1863	0	0	1863
Flt Permitted						
Satd. Flow (perm)	1810	0	1863	0	0	1863
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)						
Link Speed (mph)	25		55			55
Link Distance (ft)	1262		1787			680
Travel Time (s)	34.4		22.2			8.4
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	2%	2%	5%	2%	2%
Adj. Flow (vph)	0	0	867	0	0	780
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	867	0	0	780
Turn Type	Prot		NA			NA
Protected Phases	4		2			6
Permitted Phases					6	
Minimum Split (s)	13.0		16.0		13.0	13.0
Total Split (s)	20.0		100.0		100.0	100.0
Total Split (%)	16.7%		83.3%		83.3%	83.3%
Yellow Time (s)	3.5		3.5		3.5	3.5
All-Red Time (s)	2.5		2.5		2.5	2.5
Lost Time Adjust (s)	0.0		0.0			0.0
Total Lost Time (s)	6.0		6.0			6.0
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)			94.0			94.0
Actuated g/C Ratio			0.78			0.78
v/c Ratio			0.59			0.53
Control Delay			2.5			6.4
Queue Delay			0.0			0.0
Total Delay			2.5			6.4
LOS			A			A
Approach Delay			2.5			6.4
Approach LOS			A			A
Queue Length 50th (ft)			18			187
Queue Length 95th (ft)			106			258
Internal Link Dist (ft)	1182		1707			600
Turn Bay Length (ft)						
Base Capacity (vph)			1459			1459
Starvation Cap Reductn			0			0
Spillback Cap Reductn			0			0
Storage Cap Reductn			0			0

Lane Group	WBL	WBR	NET	NER	SWL	SWT
Reduced v/c Ratio			0.59			0.53

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NET, Start of Green	
Natural Cycle: 50	
Control Type: Pretimed	
Maximum v/c Ratio: 0.59	
Intersection Signal Delay: 4.4	Intersection LOS: A
Intersection Capacity Utilization 47.0%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4042: 11 Mile Rd & H Dr N

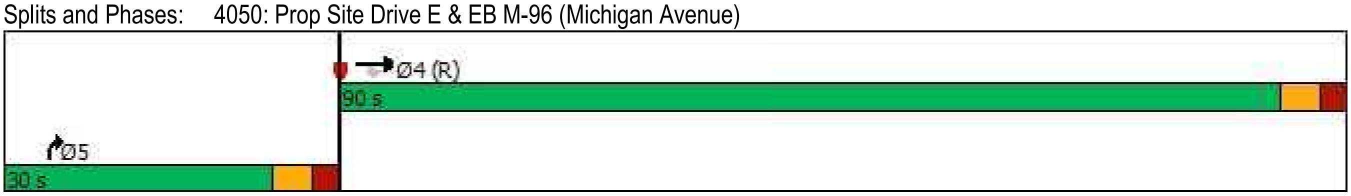


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1263	215	0	0	0	215
Future Volume (vph)	1263	215	0	0	0	215
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		500	600		0	0
Storage Lanes		2	0		0	2
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	0.88	1.00	1.00	1.00	0.88
Frt		0.850				0.850
Flt Protected						
Satd. Flow (prot)	3539	2787	0	0	0	2787
Flt Permitted						
Satd. Flow (perm)	3539	2787	0	0	0	2787
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		234				141
Link Speed (mph)	55			55	25	
Link Distance (ft)	669			659	1093	
Travel Time (s)	8.3			8.2	29.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1373	234	0	0	0	234
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1373	234	0	0	0	234
Turn Type	NA	Perm				Prot
Protected Phases	4					5
Permitted Phases		4				
Detector Phase	4	4				5
Switch Phase						
Minimum Initial (s)	10.0	10.0				10.0
Minimum Split (s)	16.0	16.0				16.0
Total Split (s)	90.0	90.0				30.0
Total Split (%)	75.0%	75.0%				25.0%
Yellow Time (s)	3.5	3.5				3.5
All-Red Time (s)	2.5	2.5				2.5
Lost Time Adjust (s)	0.0	0.0				0.0
Total Lost Time (s)	6.0	6.0				6.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max	C-Max				None
Act Effct Green (s)	96.8	96.8				11.2
Actuated g/C Ratio	0.81	0.81				0.09
v/c Ratio	0.48	0.10				0.60
Control Delay	3.5	0.2				27.8
Queue Delay	0.2	0.0				0.0
Total Delay	3.7	0.2				27.8
LOS	A	A				C
Approach Delay	3.2				27.8	
Approach LOS	A				C	
Queue Length 50th (ft)	0	0				39
Queue Length 95th (ft)	166	2				82

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Internal Link Dist (ft)	589			579	1013	
Turn Bay Length (ft)		500				
Base Capacity (vph)	2855	2293				670
Starvation Cap Reductn	631	0				0
Spillback Cap Reductn	0	0				0
Storage Cap Reductn	0	0				0
Reduced v/c Ratio	0.62	0.10				0.35

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 52 (43%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 45	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.60	
Intersection Signal Delay: 6.3	Intersection LOS: A
Intersection Capacity Utilization 53.2%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4050: Prop Site Drive E & EB M-96 (Michigan Avenue)



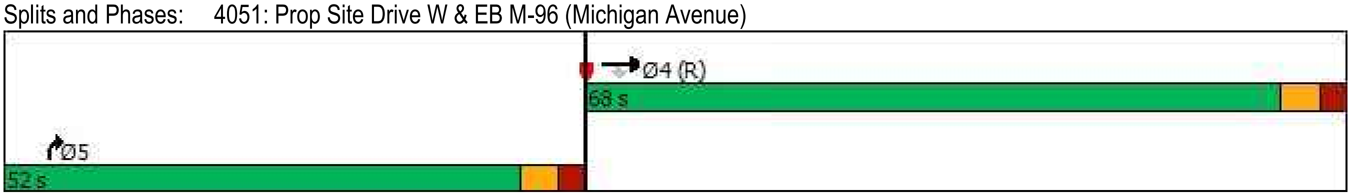
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	926	389	0	0	0	389
Future Volume (vph)	926	389	0	0	0	389
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		500	600		0	0
Storage Lanes		2	0		0	2
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	0.88	1.00	1.00	1.00	0.88
Frt		0.850				0.850
Flt Protected						
Satd. Flow (prot)	3539	2787	0	0	0	2787
Flt Permitted						
Satd. Flow (perm)	3539	2787	0	0	0	2787
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		423				143
Link Speed (mph)	55			55	25	
Link Distance (ft)	608			627	1293	
Travel Time (s)	7.5			7.8	35.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1007	423	0	0	0	423
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1007	423	0	0	0	423
Turn Type	NA	Perm				Prot
Protected Phases	4					5
Permitted Phases		4				
Detector Phase	4	4				5
Switch Phase						
Minimum Initial (s)	10.0	10.0				10.0
Minimum Split (s)	16.0	16.0				16.0
Total Split (s)	68.0	68.0				52.0
Total Split (%)	56.7%	56.7%				43.3%
Yellow Time (s)	3.5	3.5				3.5
All-Red Time (s)	2.5	2.5				2.5
Lost Time Adjust (s)	0.0	0.0				0.0
Total Lost Time (s)	6.0	6.0				6.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max	C-Max				None
Act Effct Green (s)	89.7	89.7				18.3
Actuated g/C Ratio	0.75	0.75				0.15
v/c Ratio	0.38	0.19				0.78
Control Delay	3.7	0.6				41.8
Queue Delay	0.2	0.0				0.0
Total Delay	3.9	0.6				41.8
LOS	A	A				D
Approach Delay	2.9				41.8	
Approach LOS	A				D	
Queue Length 50th (ft)	0	3				120
Queue Length 95th (ft)	308	25				172

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Internal Link Dist (ft)	528			547	1213	
Turn Bay Length (ft)		500				
Base Capacity (vph)	2646	2191				1156
Starvation Cap Reductn	739	0				0
Spillback Cap Reductn	0	0				0
Storage Cap Reductn	0	0				0
Reduced v/c Ratio	0.53	0.19				0.37

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 32 (27%), Referenced to phase 4:EBT, Start of Green
Natural Cycle: 40
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.78
Intersection Signal Delay: 11.8 Intersection LOS: B
Intersection Capacity Utilization 49.2% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 4051: Prop Site Drive W & EB M-96 (Michigan Avenue)

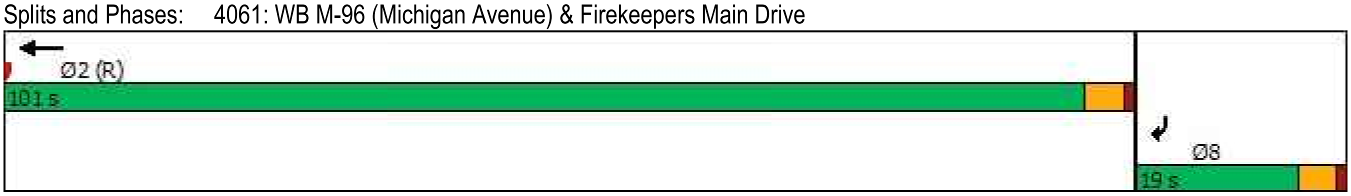


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	1236	168	0	134
Future Volume (vph)	0	0	1236	168	0	134
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			0	0	0
Storage Lanes	0			0	0	2
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	0.88
Frt			0.983			0.850
Flt Protected						
Satd. Flow (prot)	0	0	3487	0	0	2787
Flt Permitted						
Satd. Flow (perm)	0	0	3487	0	0	2787
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			44			211
Link Speed (mph)		55	55		25	
Link Distance (ft)		574	509		701	
Travel Time (s)		7.1	6.3		19.1	
Peak Hour Factor	0.92	0.92	0.92	0.95	0.67	0.92
Heavy Vehicles (%)	2%	2%	2%	0%	0%	2%
Adj. Flow (vph)	0	0	1343	177	0	146
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1520	0	0	146
Turn Type			NA			Prot
Protected Phases			2			8
Permitted Phases						
Detector Phase			2			8
Switch Phase						
Minimum Initial (s)			10.0			10.0
Minimum Split (s)			22.5			14.5
Total Split (s)			101.0			19.0
Total Split (%)			84.2%			15.8%
Yellow Time (s)			3.5			3.5
All-Red Time (s)			1.0			1.0
Lost Time Adjust (s)			0.0			0.0
Total Lost Time (s)			4.5			4.5
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode			C-Max			None
Act Effct Green (s)			101.0			10.0
Actuated g/C Ratio			0.84			0.08
v/c Ratio			0.52			0.34
Control Delay			3.3			3.6
Queue Delay			0.0			0.0
Total Delay			3.3			3.6
LOS			A			A
Approach Delay			3.3		3.6	
Approach LOS			A		A	
Queue Length 50th (ft)			122			0

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Queue Length 95th (ft)			149			7
Internal Link Dist (ft)		494	429		621	
Turn Bay Length (ft)						
Base Capacity (vph)			2941			522
Starvation Cap Reductn			0			0
Spillback Cap Reductn			0			0
Storage Cap Reductn			0			0
Reduced v/c Ratio			0.52			0.28

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:WBT, Start of Green	
Natural Cycle: 45	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.52	
Intersection Signal Delay: 3.3	Intersection LOS: A
Intersection Capacity Utilization 55.4%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 4061: WB M-96 (Michigan Avenue) & Firekeepers Main Drive

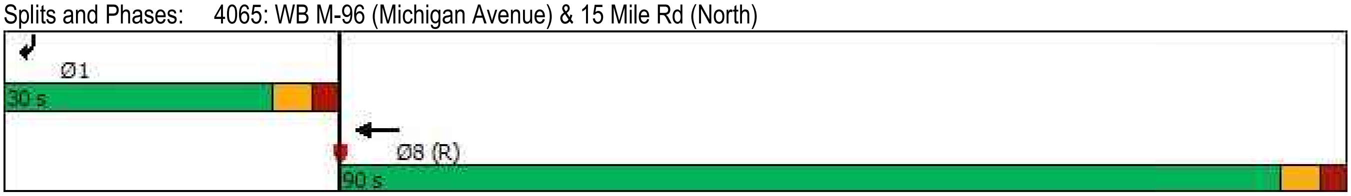


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	2264	352	0	317
Future Volume (vph)	0	0	2264	352	0	317
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			250	0	200
Storage Lanes	0			0	0	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.91	1.00	1.00	0.88
Frt				0.850		0.850
Flt Protected						
Satd. Flow (prot)	0	0	5085	1583	0	2787
Flt Permitted						
Satd. Flow (perm)	0	0	5085	1583	0	2787
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				140		15
Link Speed (mph)		45	45		45	
Link Distance (ft)		534	660		516	
Travel Time (s)		8.1	10.0		7.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	2461	383	0	345
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	2461	383	0	345
Turn Type			NA	custom		Prot
Protected Phases			8	Free		1
Permitted Phases						
Minimum Split (s)			16.0			13.0
Total Split (s)			90.0			30.0
Total Split (%)			75.0%			25.0%
Yellow Time (s)			3.5			3.5
All-Red Time (s)			2.5			2.5
Lost Time Adjust (s)			0.0			0.0
Total Lost Time (s)			6.0			6.0
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)			84.0	120.0		24.0
Actuated g/C Ratio			0.70	1.00		0.20
v/c Ratio			0.69	0.24		0.61
Control Delay			2.7	5.4		46.9
Queue Delay			0.0	0.0		0.0
Total Delay			2.7	5.4		46.9
LOS			A	A		D
Approach Delay			3.1		46.9	
Approach LOS			A		D	
Queue Length 50th (ft)			58	111		133
Queue Length 95th (ft)			58	127		189
Internal Link Dist (ft)		454	580		436	
Turn Bay Length (ft)				250		200
Base Capacity (vph)			3559	1583		569
Starvation Cap Reductn			65	0		0

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Spillback Cap Reductn			0	0		0
Storage Cap Reductn			0	0		0
Reduced v/c Ratio			0.70	0.24		0.61

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 8:WBT, Start of Green	
Natural Cycle: 55	
Control Type: Pretimed	
Maximum v/c Ratio: 0.69	
Intersection Signal Delay: 7.8	Intersection LOS: A
Intersection Capacity Utilization 64.8%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 4065: WB M-96 (Michigan Avenue) & 15 Mile Rd (North)

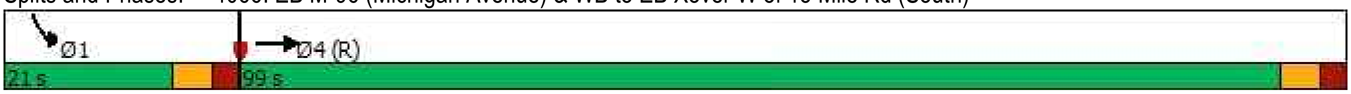


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑			↰	
Traffic Volume (vph)	0	2277	0	0	119	0
Future Volume (vph)	0	2277	0	0	119	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.91	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	5085	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	5085	0	0	1770	0
Right Turn on Red				Yes	Yes	Yes
Satd. Flow (RTOR)					14	
Link Speed (mph)		45	45		25	
Link Distance (ft)		262	1016		123	
Travel Time (s)		4.0	15.4		3.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.90	0.92
Adj. Flow (vph)	0	2475	0	0	132	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	2475	0	0	132	0
Turn Type		NA			Prot	
Protected Phases		4			1	
Permitted Phases						
Minimum Split (s)		16.0			16.0	
Total Split (s)		99.0			21.0	
Total Split (%)		82.5%			17.5%	
Yellow Time (s)		3.5			3.5	
All-Red Time (s)		2.5			2.5	
Lost Time Adjust (s)		0.0			0.0	
Total Lost Time (s)		6.0			6.0	
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)		93.0			15.0	
Actuated g/C Ratio		0.78			0.12	
v/c Ratio		0.63			0.57	
Control Delay		2.5			50.7	
Queue Delay		0.0			0.0	
Total Delay		2.5			50.7	
LOS		A			D	
Approach Delay		2.5			50.7	
Approach LOS		A			D	
Queue Length 50th (ft)		80			94	
Queue Length 95th (ft)		m85			m153	
Internal Link Dist (ft)		182	936		43	
Turn Bay Length (ft)						
Base Capacity (vph)		3940			233	
Starvation Cap Reductn		0			0	
Spillback Cap Reductn		0			0	
Storage Cap Reductn		0			0	
Reduced v/c Ratio		0.63			0.57	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 116 (97%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 50	
Control Type: Pretimed	
Maximum v/c Ratio: 0.63	
Intersection Signal Delay: 5.0	Intersection LOS: A
Intersection Capacity Utilization 96.3%	ICU Level of Service F
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4066: EB M-96 (Michigan Avenue) & WB to EB Xover W of 15 Mile Rd (South)

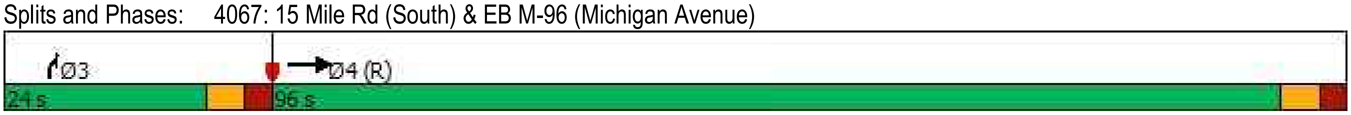


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	2173	223	0	0	0	224
Future Volume (vph)	2173	223	0	0	0	224
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		50	0		0	250
Storage Lanes		0	0		0	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	1.00	1.00	1.00	0.88
Frt	0.986					0.850
Flt Protected						
Satd. Flow (prot)	5014	0	0	0	0	2814
Flt Permitted						
Satd. Flow (perm)	5014	0	0	0	0	2814
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	41					26
Link Speed (mph)	45			45	45	
Link Distance (ft)	1016			704	1375	
Travel Time (s)	15.4			10.7	20.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.88	0.88
Heavy Vehicles (%)	2%	2%	2%	2%	1%	1%
Adj. Flow (vph)	2362	242	0	0	0	255
Shared Lane Traffic (%)						
Lane Group Flow (vph)	2604	0	0	0	0	255
Turn Type	NA					Prot
Protected Phases	4					3
Permitted Phases						
Minimum Split (s)	17.0					16.0
Total Split (s)	96.0					24.0
Total Split (%)	80.0%					20.0%
Yellow Time (s)	3.5					3.5
All-Red Time (s)	2.5					2.5
Lost Time Adjust (s)	0.0					0.0
Total Lost Time (s)	6.0					6.0
Lead/Lag	Lag					Lead
Lead-Lag Optimize?	Yes					Yes
Act Effct Green (s)	90.0					18.0
Actuated g/C Ratio	0.75					0.15
v/c Ratio	0.69					0.57
Control Delay	2.4					48.2
Queue Delay	0.0					0.0
Total Delay	2.4					48.2
LOS	A					D
Approach Delay	2.4				48.2	
Approach LOS	A				D	
Queue Length 50th (ft)	64					94
Queue Length 95th (ft)	66					139
Internal Link Dist (ft)	936			624	1295	
Turn Bay Length (ft)						250
Base Capacity (vph)	3770					444

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Starvation Cap Reductn	0					0
Spillback Cap Reductn	0					0
Storage Cap Reductn	0					0
Reduced v/c Ratio	0.69					0.57

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 4 (3%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 55	
Control Type: Pretimed	
Maximum v/c Ratio: 0.69	
Intersection Signal Delay: 6.5	Intersection LOS: A
Intersection Capacity Utilization 65.3%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 4067: 15 Mile Rd (South) & EB M-96 (Michigan Avenue)

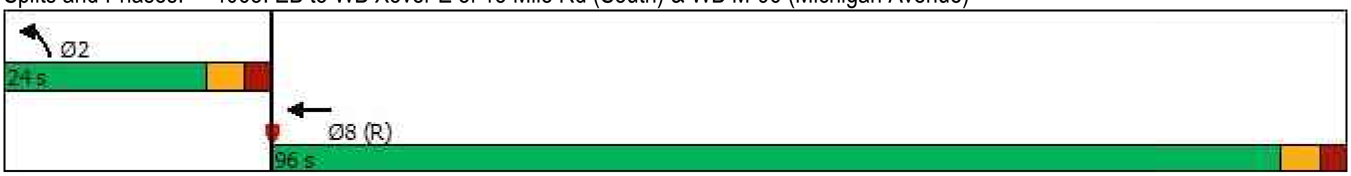


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑↑	↰	
Traffic Volume (vph)	0	0	0	2284	113	0
Future Volume (vph)	0	0	0	2284	113	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	5085	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	5085	1770	0
Right Turn on Red		Yes			Yes	Yes
Satd. Flow (RTOR)					12	
Link Speed (mph)	45			45	25	
Link Distance (ft)	687			275	111	
Travel Time (s)	10.4			4.2	3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	2483	123	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	2483	123	0
Turn Type				NA	Prot	
Protected Phases				8	2	
Permitted Phases						
Minimum Split (s)				16.0	13.0	
Total Split (s)				96.0	24.0	
Total Split (%)				80.0%	20.0%	
Yellow Time (s)				3.5	3.5	
All-Red Time (s)				2.5	2.5	
Lost Time Adjust (s)				0.0	0.0	
Total Lost Time (s)				6.0	6.0	
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)				90.0	18.0	
Actuated g/C Ratio				0.75	0.15	
v/c Ratio				0.65	0.45	
Control Delay				7.6	38.9	
Queue Delay				0.2	0.0	
Total Delay				7.7	38.9	
LOS				A	D	
Approach Delay				7.7	38.9	
Approach LOS				A	D	
Queue Length 50th (ft)				466	83	
Queue Length 95th (ft)				410	m132	
Internal Link Dist (ft)	607			195	31	
Turn Bay Length (ft)						
Base Capacity (vph)				3813	275	
Starvation Cap Reductn				437	0	
Spillback Cap Reductn				0	0	
Storage Cap Reductn				0	0	
Reduced v/c Ratio				0.74	0.45	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 112 (93%), Referenced to phase 8:WBT, Start of Green	
Natural Cycle: 50	
Control Type: Pretimed	
Maximum v/c Ratio: 0.65	
Intersection Signal Delay: 9.2	Intersection LOS: A
Intersection Capacity Utilization 92.1%	ICU Level of Service F
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4068: EB to WB Xover E of 15 Mile Rd (South) & WB M-96 (Michigan Avenue)



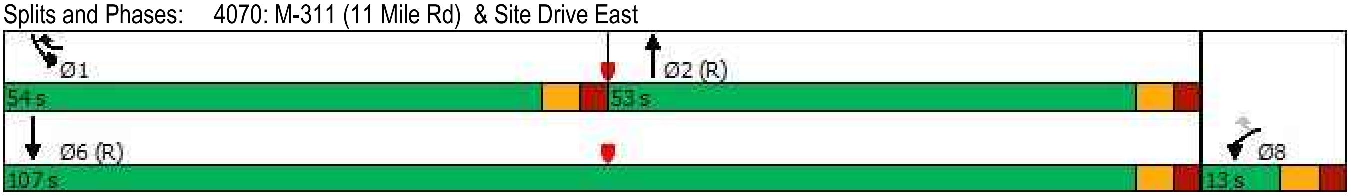
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	30	727	1284	30	727	1311
Future Volume (vph)	30	727	1284	30	727	1311
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	500		0	400	
Storage Lanes	1	1		0	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.88	0.95	0.95	1.00	0.95
Frt		0.850	0.997			
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	2787	3529	0	1770	3539
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1770	2787	3529	0	1770	3539
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		14	2			
Link Speed (mph)	25		55			55
Link Distance (ft)	750		940			974
Travel Time (s)	20.5		11.7			12.1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	33	790	1396	33	790	1425
Shared Lane Traffic (%)						
Lane Group Flow (vph)	33	790	1429	0	790	1425
Turn Type	Prot	pm+ov	NA		Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8				
Detector Phase	8	1	2		1	6
Switch Phase						
Minimum Initial (s)	7.0	7.0	10.0		7.0	10.0
Minimum Split (s)	13.0	13.0	16.0		13.0	16.0
Total Split (s)	13.0	54.0	53.0		54.0	107.0
Total Split (%)	10.8%	45.0%	44.2%		45.0%	89.2%
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5
All-Red Time (s)	2.5	2.5	2.5		2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0		6.0	6.0
Lead/Lag		Lead	Lag		Lead	
Lead-Lag Optimize?						
Recall Mode	None	None	C-Max		None	C-Max
Act Effct Green (s)	7.0	61.0	47.0		53.2	108.6
Actuated g/C Ratio	0.06	0.51	0.39		0.44	0.90
v/c Ratio	0.32	0.56	1.03		1.01	0.45
Control Delay	62.9	21.7	59.8		41.8	5.8
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	62.9	21.7	59.8		41.8	5.8
LOS	E	C	E		D	A
Approach Delay	23.3		59.8			18.6
Approach LOS	C		E			B
Queue Length 50th (ft)	25	226	~97		~727	375
Queue Length 95th (ft)	60	291	#413		m#642	m307

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Internal Link Dist (ft)	670		860			894
Turn Bay Length (ft)		500			400	
Base Capacity (vph)	103	1423	1383		784	3202
Starvation Cap Reductn	0	0	0		0	0
Spillback Cap Reductn	0	0	0		0	138
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.32	0.56	1.03		1.01	0.47

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 8 (7%), Referenced to phase 2:NBT and 6:SBT, Start of Green	
Natural Cycle: 150	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.03	
Intersection Signal Delay: 32.7	Intersection LOS: C
Intersection Capacity Utilization 97.6%	ICU Level of Service F
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4070: M-311 (11 Mile Rd) & Site Drive East

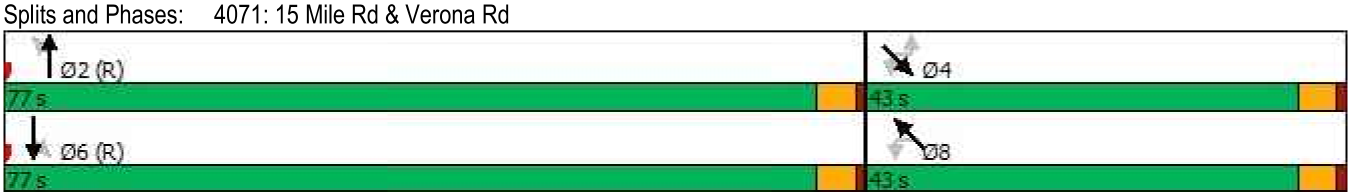


Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	310	13	13	5	9	4	0	87	290	6	118	14
Future Volume (vph)	310	13	13	5	9	4	0	87	290	6	118	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		70	0		0
Storage Lanes	0		0	0		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
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
Frt		0.995			0.968				0.850		0.986	
Flt Protected		0.956			0.987						0.998	
Satd. Flow (prot)	0	1789	0	0	1715	0	0	1845	1392	0	1851	0
Flt Permitted		0.720			0.914						0.991	
Satd. Flow (perm)	0	1348	0	0	1588	0	0	1845	1392	0	1838	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		3			7				326		5	
Link Speed (mph)		45			55			55			55	
Link Distance (ft)		682			426			745			951	
Travel Time (s)		10.3			5.3			9.2			11.8	
Peak Hour Factor	0.80	0.80	0.80	0.60	0.60	0.60	0.89	0.89	0.89	0.86	0.86	0.86
Heavy Vehicles (%)	1%	1%	1%	0%	0%	25%	0%	3%	16%	1%	1%	1%
Adj. Flow (vph)	388	16	16	8	15	7	0	98	326	7	137	16
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	420	0	0	30	0	0	98	326	0	160	0
Turn Type	Perm	NA		Perm	NA			NA	Perm	Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4		4	8		
Minimum Split (s)	22.5	22.5		22.5	22.5		22.5	22.5	22.5	22.5	22.5	
Total Split (s)	77.0	77.0		77.0	77.0		43.0	43.0	43.0	43.0	43.0	
Total Split (%)	64.2%	64.2%		64.2%	64.2%		35.8%	35.8%	35.8%	35.8%	35.8%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0	0.0		0.0	
Total Lost Time (s)		4.5			4.5			4.5	4.5		4.5	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		72.5			72.5			38.5	38.5		38.5	
Actuated g/C Ratio		0.60			0.60			0.32	0.32		0.32	
v/c Ratio		0.52			0.03			0.17	0.49		0.27	
Control Delay		16.3			8.0			30.2	5.9		30.8	
Queue Delay		0.0			0.0			0.0	0.0		0.0	
Total Delay		16.3			8.0			30.2	5.9		30.8	
LOS		B			A			C	A		C	
Approach Delay		16.3			8.0			11.5			30.8	
Approach LOS		B			A			B			C	
Queue Length 50th (ft)		174			7			54	0		89	
Queue Length 95th (ft)		216			12			96	63		139	
Internal Link Dist (ft)		602			346			665			871	
Turn Bay Length (ft)									70			
Base Capacity (vph)		815			962			591	668		593	

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
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		0.52			0.03			0.17	0.49		0.27	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 55	
Control Type: Pretimed	
Maximum v/c Ratio: 0.52	
Intersection Signal Delay: 16.4	Intersection LOS: B
Intersection Capacity Utilization 45.9%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4071: 15 Mile Rd & Verona Rd



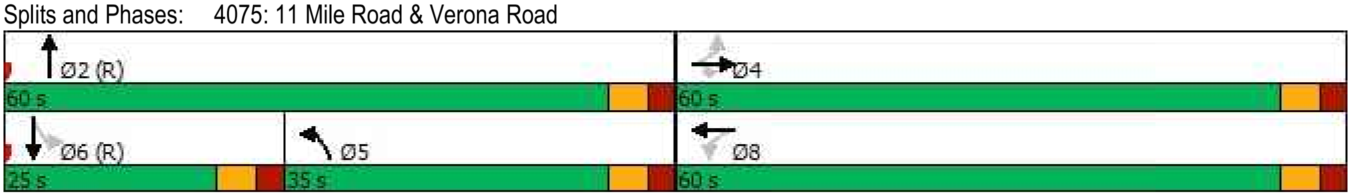
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	375	550	17	394	19	548	68	13	10	82	8
Future Volume (vph)	11	375	550	17	394	19	548	68	13	10	82	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	190		70	190		0	140		0	215		0
Storage Lanes	1		1	1		0	2		0	1		0
Taper Length (ft)	115			140			200			165		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.993			0.976			0.987	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	1900	1468	1805	1882	0	3072	1854	0	1687	1753	0
Flt Permitted	0.331			0.331			0.950			0.697		
Satd. Flow (perm)	629	1900	1468	629	1882	0	3072	1854	0	1238	1753	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			304		3			10			3	
Link Speed (mph)		55			55			45			55	
Link Distance (ft)		519			1585			1015			821	
Travel Time (s)		6.4			19.6			15.4			10.2	
Peak Hour Factor	0.79	0.79	0.79	0.87	0.87	0.87	0.87	0.87	0.87	0.66	0.66	0.66
Heavy Vehicles (%)	0%	0%	10%	0%	0%	5%	14%	0%	0%	7%	7%	7%
Adj. Flow (vph)	14	475	696	20	453	22	630	78	15	15	124	12
Shared Lane Traffic (%)												
Lane Group Flow (vph)	14	475	696	20	475	0	630	93	0	15	136	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Perm	NA	
Protected Phases		4			8		5	2			6	
Permitted Phases	4		4	8						6		
Minimum Split (s)	25.0	25.0	25.0	25.0	25.0		16.0	25.0		25.0	25.0	
Total Split (s)	60.0	60.0	60.0	60.0	60.0		35.0	60.0		25.0	25.0	
Total Split (%)	50.0%	50.0%	50.0%	50.0%	50.0%		29.2%	50.0%		20.8%	20.8%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	2.5	2.5	2.5	2.5	2.5		2.5	2.5		2.5	2.5	
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)	6.0	6.0	6.0	6.0	6.0		6.0	6.0		6.0	6.0	
Lead/Lag							Lag			Lead	Lead	
Lead-Lag Optimize?							Yes			Yes	Yes	
Act Effct Green (s)	54.0	54.0	54.0	54.0	54.0		29.0	54.0		19.0	19.0	
Actuated g/C Ratio	0.45	0.45	0.45	0.45	0.45		0.24	0.45		0.16	0.16	
v/c Ratio	0.05	0.56	0.84	0.07	0.56		0.85	0.11		0.08	0.49	
Control Delay	19.4	27.3	26.7	19.8	27.3		55.5	17.5		44.3	51.6	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	19.4	27.3	26.7	19.8	27.3		55.5	17.5		44.3	51.6	
LOS	B	C	C	B	C		E	B		D	D	
Approach Delay		26.9			27.0			50.6			50.9	
Approach LOS		C			C			D			D	
Queue Length 50th (ft)	6	264	287	9	263		241	36		10	95	
Queue Length 95th (ft)	17	306	339	24	351		#301	67		22	113	
Internal Link Dist (ft)		439			1505			935			741	
Turn Bay Length (ft)	190		70	190			140			215		
Base Capacity (vph)	283	855	827	283	848		742	839		196	280	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0	0	0	0		0	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	0.05	0.56	0.84	0.07	0.56		0.85	0.11		0.08	0.49	

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green
Natural Cycle: 90
Control Type: Pretimed
Maximum v/c Ratio: 0.85
Intersection Signal Delay: 35.0 Intersection LOS: D
Intersection Capacity Utilization 65.7% ICU Level of Service C
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 4075: 11 Mile Road & Verona Road



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	1173	143	0	231
Future Volume (vph)	0	0	1173	143	0	231
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200			300	245	245
Storage Lanes	0			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.984			0.865
Flt Protected						
Satd. Flow (prot)	0	0	3344	0	0	1644
Flt Permitted						
Satd. Flow (perm)	0	0	3344	0	0	1644
Link Speed (mph)		55	55		25	
Link Distance (ft)		509	395		760	
Travel Time (s)		6.3	4.9		20.7	
Peak Hour Factor	0.88	0.88	0.91	0.91	0.79	0.79
Heavy Vehicles (%)	1%	1%	7%	0%	0%	0%
Adj. Flow (vph)	0	0	1289	157	0	292
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1446	0	0	292
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 58.0% ICU Level of Service B
Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	1159	43	0	157
Future Volume (vph)	0	0	1159	43	0	157
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	175			50	0	0
Storage Lanes	0			0	0	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.995			0.865
Flt Protected						
Satd. Flow (prot)	0	0	3365	0	0	1565
Flt Permitted						
Satd. Flow (perm)	0	0	3365	0	0	1565
Link Speed (mph)		55	55		25	
Link Distance (ft)		395	586		185	
Travel Time (s)		4.9	7.3		5.0	
Peak Hour Factor	0.90	0.90	0.95	0.95	0.70	0.70
Heavy Vehicles (%)	1%	1%	7%	0%	5%	5%
Adj. Flow (vph)	0	0	1220	45	0	224
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1265	0	0	224
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 49.8%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	1195	12	0	7
Future Volume (vph)	0	0	1195	12	0	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150			600	0	0
Storage Lanes	0			0	0	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.999			0.865
Flt Protected						
Satd. Flow (prot)	0	0	3373	0	0	1644
Flt Permitted						
Satd. Flow (perm)	0	0	3373	0	0	1644
Link Speed (mph)		55	55		25	
Link Distance (ft)		586	607		1086	
Travel Time (s)		7.3	7.5		29.6	
Peak Hour Factor	0.83	0.83	0.92	0.92	0.60	0.60
Heavy Vehicles (%)	10%	1%	7%	0%	33%	0%
Adj. Flow (vph)	0	0	1299	13	0	12
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1312	0	0	12
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 43.4% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	929	8	0	7
Future Volume (vph)	0	0	929	8	0	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.999			0.865
Flt Protected						
Satd. Flow (prot)	0	0	3536	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	0	3536	0	0	1611
Link Speed (mph)		55	55		55	
Link Distance (ft)		538	1254		1399	
Travel Time (s)		6.7	15.5		17.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	1010	9	0	8
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1019	0	0	8
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 35.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	0	5	0	352	0	0	317	0
Future Volume (vph)	0	0	0	0	0	5	0	352	0	0	317	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
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
Frt					0.865							
Flt Protected												
Satd. Flow (prot)	0	1863	0	0	1611	0	0	1863	0	0	1863	0
Flt Permitted												
Satd. Flow (perm)	0	1863	0	0	1611	0	0	1863	0	0	1863	0
Link Speed (mph)		45			45			25			45	
Link Distance (ft)		957			1038			516			593	
Travel Time (s)		14.5			15.7			14.1			9.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	0	5	0	383	0	0	345	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	5	0	0	383	0	0	345	0
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 28.5%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	0	0	119	1265	0	0
Future Volume (vph)	0	0	119	1265	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.91	0.91	1.00	1.00
Frt						
Flt Protected				0.996		
Satd. Flow (prot)	0	0	0	5065	0	0
Flt Permitted				0.996		
Satd. Flow (perm)	0	0	0	5065	0	0
Link Speed (mph)	45			45	25	
Link Distance (ft)	183			382	263	
Travel Time (s)	2.8			5.8	7.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	129	1375	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1504	0	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 48.0%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	1023	806	0	0	0	0
Future Volume (vph)	1023	806	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950	0.983				
Satd. Flow (prot)	1610	3333	0	0	0	0
Flt Permitted	0.950	0.983				
Satd. Flow (perm)	1610	3333	0	0	0	0
Link Speed (mph)		45	45		25	
Link Distance (ft)		619	209		329	
Travel Time (s)		9.4	3.2		9.0	
Peak Hour Factor	0.86	0.86	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1190	937	0	0	0	0
Shared Lane Traffic (%)	42%					
Lane Group Flow (vph)	690	1437	0	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 53.0%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations			↑↑	↱		
Traffic Volume (vph)	0	0	828	168	0	0
Future Volume (vph)	0	0	828	168	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	1.00
Frt				0.850		
Flt Protected						
Satd. Flow (prot)	0	0	3539	1583	0	0
Flt Permitted						
Satd. Flow (perm)	0	0	3539	1583	0	0
Link Speed (mph)		45	45		30	
Link Distance (ft)		213	315		137	
Travel Time (s)		3.2	4.8		3.1	
Peak Hour Factor	0.92	0.92	0.91	0.91	0.92	0.92
Adj. Flow (vph)	0	0	910	185	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	910	185	0	0
Sign Control		Stop	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 53.5%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	928	0	0	159	0
Future Volume (vph)	0	928	0	0	159	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3505	0	0	1787	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3505	0	0	1787	0
Link Speed (mph)		45	45		25	
Link Distance (ft)		309	168		108	
Travel Time (s)		4.7	2.5		2.9	
Peak Hour Factor	0.86	0.86	0.92	0.92	0.87	0.87
Heavy Vehicles (%)	3%	3%	2%	2%	1%	1%
Adj. Flow (vph)	0	1079	0	0	183	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1079	0	0	183	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 51.6%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑↑	↰	
Traffic Volume (vph)	0	0	0	941	182	0
Future Volume (vph)	0	0	0	941	182	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	5036	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	5036	1770	0
Link Speed (mph)	45			45	25	
Link Distance (ft)	134			152	111	
Travel Time (s)	2.0			2.3	3.0	
Peak Hour Factor	0.92	0.92	0.89	0.89	0.94	0.94
Heavy Vehicles (%)	2%	2%	3%	3%	2%	2%
Adj. Flow (vph)	0	0	0	1057	194	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1057	194	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 38.3%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	906	0	0	80	0
Future Volume (vph)	0	906	0	0	80	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3574	0	0	1787	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3574	0	0	1787	0
Link Speed (mph)		45	45		25	
Link Distance (ft)		222	290		102	
Travel Time (s)		3.4	4.4		2.8	
Peak Hour Factor	0.95	0.95	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	1%	1%	2%	2%	1%	1%
Adj. Flow (vph)	0	954	0	0	87	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	954	0	0	87	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 65.4%	ICU Level of Service C
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑	↰	
Traffic Volume (vph)	0	0	0	960	65	0
Future Volume (vph)	0	0	0	960	65	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	30			45	25	
Link Distance (ft)	114			1105	101	
Travel Time (s)	2.6			16.7	2.8	
Peak Hour Factor	0.92	0.92	0.88	0.88	0.94	0.94
Adj. Flow (vph)	0	0	0	1091	69	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1091	69	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 61.3%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	174	227	31	4	162	12	14	37	3	13	81	156
Future Volume (vph)	174	227	31	4	162	12	14	37	3	13	81	156
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	80		0	80		0	110		0	115		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	180			180			140			175		
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
Frt		0.982			0.989			0.988			0.901	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	1866	0	1770	1842	0	1703	1771	0	1770	1678	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1805	1866	0	1770	1842	0	1703	1771	0	1770	1678	0
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		1365			1319			666			571	
Travel Time (s)		20.7			20.0			10.1			8.7	
Peak Hour Factor	0.94	0.94	0.94	0.88	0.88	0.88	0.78	0.78	0.78	0.91	0.91	0.91
Heavy Vehicles (%)	0%	0%	0%	2%	2%	2%	6%	6%	6%	2%	2%	2%
Adj. Flow (vph)	185	241	33	5	184	14	18	47	4	14	89	171
Shared Lane Traffic (%)												
Lane Group Flow (vph)	185	274	0	5	198	0	18	51	0	14	260	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 42.7%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL2	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	SWL	SWR
Lane Configurations											
Traffic Volume (vph)	55	0	112	0	270	79	81	385	0	0	0
Future Volume (vph)	55	0	112	0	270	79	81	385	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	240	0		0	105		0	0	0
Storage Lanes		1	1	0		0	1		0	0	0
Taper Length (ft)		25		25			70			25	
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
Frt			0.850		0.969						
Flt Protected	0.950						0.950				
Satd. Flow (prot)	1687	0	1615	0	1805	0	1752	1845	0	0	0
Flt Permitted	0.950						0.950				
Satd. Flow (perm)	1687	0	1615	0	1805	0	1752	1845	0	0	0
Link Speed (mph)		25			45			45		25	
Link Distance (ft)		894			1167			685		897	
Travel Time (s)		24.4			17.7			10.4		24.5	
Peak Hour Factor	0.93	0.93	0.93	0.91	0.91	0.91	0.95	0.95	0.95	0.92	0.92
Heavy Vehicles (%)	7%	0%	0%	2%	2%	2%	3%	3%	3%	2%	2%
Adj. Flow (vph)	59	0	120	0	297	87	85	405	0	0	0
Shared Lane Traffic (%)											
Lane Group Flow (vph)	59	0	120	0	384	0	85	405	0	0	0
Sign Control		Stop			Free			Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 33.9%	ICU Level of Service A
Analysis Period (min) 15	

9026: WB I-94 On-Ramp & M-294 (Beadle Lake Road) & WB I-94 Off-Ramp

Lane Group	WBL2	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NER
Lane Configurations											
Traffic Volume (vph)	93	0	84	61	264	0	0	373	50	0	0
Future Volume (vph)	93	0	84	61	264	0	0	373	50	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	185	165		0	0		0	0	0
Storage Lanes		1	1	1		0	0		0	0	0
Taper Length (ft)		25		110			25			25	
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
Frt			0.850					0.984			
Flt Protected	0.950			0.950							
Satd. Flow (prot)	1805	0	1455	1752	1845	0	0	1815	0	0	0
Flt Permitted	0.950			0.950							
Satd. Flow (perm)	1805	0	1455	1752	1845	0	0	1815	0	0	0
Link Speed (mph)		25			45			45		25	
Link Distance (ft)		613			685			608		913	
Travel Time (s)		16.7			10.4			9.2		24.9	
Peak Hour Factor	0.81	0.81	0.81	0.87	0.87	0.87	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	11%	3%	3%	3%	3%	3%	3%	2%	2%
Adj. Flow (vph)	115	0	104	70	303	0	0	405	54	0	0
Shared Lane Traffic (%)											
Lane Group Flow (vph)	115	0	104	70	303	0	0	459	0	0	0
Sign Control		Stop			Free			Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 33.9% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	184	140	0	396	272	0
Future Volume (vph)	184	140	0	396	272	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.850				
Flt Protected	0.950					
Satd. Flow (prot)	1543	1553	0	3505	3374	0
Flt Permitted	0.950					
Satd. Flow (perm)	1543	1553	0	3505	3374	0
Link Speed (mph)	25			55	55	
Link Distance (ft)	119			105	620	
Travel Time (s)	3.2			1.3	7.7	
Peak Hour Factor	0.93	0.93	0.82	0.82	0.92	0.92
Heavy Vehicles (%)	17%	4%	0%	3%	7%	0%
Adj. Flow (vph)	198	151	0	483	296	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	198	151	0	483	296	0
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 27.8%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	396	61	35	377
Future Volume (vph)	0	0	396	61	35	377
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		340	0	
Storage Lanes	0	0		1	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	1.00	0.95	0.95
Frt				0.850		
Flt Protected						0.996
Satd. Flow (prot)	0	0	3505	1568	0	3383
Flt Permitted						0.996
Satd. Flow (perm)	0	0	3505	1568	0	3383
Link Speed (mph)	25		55			55
Link Distance (ft)	664		1109			105
Travel Time (s)	18.1		13.7			1.3
Peak Hour Factor	0.92	0.92	0.82	0.82	0.92	0.92
Heavy Vehicles (%)	2%	2%	3%	3%	20%	5%
Adj. Flow (vph)	0	0	483	74	38	410
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	483	74	0	448
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 29.1%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	WBL2	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NER
Lane Configurations											
Traffic Volume (vph)	52	0	60	0	352	0	0	220	86	0	0
Future Volume (vph)	52	0	60	0	352	0	0	220	86	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	205	0		0	0		135	0	0
Storage Lanes		1	1	0		0	0		1	0	0
Taper Length (ft)		25		25			25			25	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00
Frt			0.850						0.850		
Flt Protected	0.950										
Satd. Flow (prot)	1736	0	1380	0	3438	0	0	3343	1272	0	0
Flt Permitted	0.950										
Satd. Flow (perm)	1736	0	1380	0	3438	0	0	3343	1272	0	0
Link Speed (mph)		25			55			55		25	
Link Distance (ft)		296			230			1367		908	
Travel Time (s)		8.1			2.9			16.9		24.8	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.95	0.95	0.95	0.92	0.92
Heavy Vehicles (%)	4%	0%	17%	0%	5%	0%	0%	8%	27%	2%	2%
Adj. Flow (vph)	59	0	68	0	400	0	0	232	91	0	0
Shared Lane Traffic (%)											
Lane Group Flow (vph)	59	0	68	0	400	0	0	232	91	0	0
Sign Control		Stop			Free			Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 20.4% ICU Level of Service A

Analysis Period (min) 15

Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	33	80	0	270	154	0
Future Volume (vph)	33	80	0	270	154	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				
Flt Protected	0.950					
Satd. Flow (prot)	1752	1077	0	1624	1696	0
Flt Permitted	0.950					
Satd. Flow (perm)	1752	1077	0	1624	1696	0
Link Speed (mph)	25			45	45	
Link Distance (ft)	189			1063	114	
Travel Time (s)	5.2			16.1	1.7	
Peak Hour Factor	0.74	0.74	0.93	0.93	0.89	0.89
Heavy Vehicles (%)	3%	50%	17%	17%	12%	12%
Adj. Flow (vph)	45	108	0	290	173	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	45	108	0	290	173	0
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 24.2%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	0	0	182	121	3	154
Future Volume (vph)	0	0	182	121	3	154
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.850		
Flt Protected						0.999
Satd. Flow (prot)	0	0	1624	1380	0	1689
Flt Permitted						0.999
Satd. Flow (perm)	0	0	1624	1380	0	1689
Link Speed (mph)	25		45			45
Link Distance (ft)	105		114			727
Travel Time (s)	2.9		1.7			11.0
Peak Hour Factor	0.92	0.92	0.93	0.93	0.89	0.89
Heavy Vehicles (%)	2%	2%	17%	17%	33%	12%
Adj. Flow (vph)	0	0	196	130	3	173
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	196	130	0	176
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 22.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBR	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	6	97	58	124	60	11
Future Volume (vph)	6	97	58	124	60	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	195	0	0			90
Storage Lanes	1	1	0			1
Taper Length (ft)	135		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				0.850
Flt Protected	0.950			0.984		
Satd. Flow (prot)	1570	1404	0	1615	1776	1509
Flt Permitted	0.950			0.984		
Satd. Flow (perm)	1570	1404	0	1615	1776	1509
Link Speed (mph)	25			45	45	
Link Distance (ft)	597			727	1165	
Travel Time (s)	16.3			11.0	17.7	
Peak Hour Factor	0.83	0.83	0.91	0.91	0.78	0.78
Heavy Vehicles (%)	15%	15%	43%	3%	7%	7%
Adj. Flow (vph)	7	117	64	136	77	14
Shared Lane Traffic (%)						
Lane Group Flow (vph)	7	117	0	200	77	14
Sign Control	Stop			Free	Free	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 26.4% ICU Level of Service A
Analysis Period (min) 15

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	18	1366	18	0
Future Volume (vph)	0	0	18	1366	18	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.91	0.91	1.00	1.00
Frt						
Flt Protected				0.999	0.950	
Satd. Flow (prot)	0	0	0	5080	1770	0
Flt Permitted				0.999	0.950	
Satd. Flow (perm)	0	0	0	5080	1770	0
Link Speed (mph)	45			45	25	
Link Distance (ft)	382			217	236	
Travel Time (s)	5.8			3.3	6.4	
Peak Hour Factor	0.90	0.90	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	20	1485	20	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1505	20	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 36.8%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1087	0	0	0	0	30
Future Volume (vph)	1087	0	0	0	0	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	1.00	1.00	1.00	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	3539	0	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	3539	0	0	0	0	1611
Link Speed (mph)	45			45	25	
Link Distance (ft)	168			432	770	
Travel Time (s)	2.5			6.5	21.0	
Peak Hour Factor	0.87	0.87	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1249	0	0	0	0	33
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1249	0	0	0	0	33
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 47.8%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations			↑↑↑			↱
Traffic Volume (vph)	0	0	1123	0	0	32
Future Volume (vph)	0	0	1123	0	0	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.91	1.00	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	0	0	5036	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	0	5036	0	0	1611
Link Speed (mph)		45	45		25	
Link Distance (ft)		494	134		230	
Travel Time (s)		7.5	2.0		6.3	
Peak Hour Factor	0.92	0.92	0.89	0.89	0.92	0.92
Heavy Vehicles (%)	2%	2%	3%	3%	2%	2%
Adj. Flow (vph)	0	0	1262	0	0	35
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1262	0	0	35
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 41.6%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	975	50	0	0
Future Volume (vph)	0	0	975	50	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.993			
Flt Protected						
Satd. Flow (prot)	0	0	3514	0	0	0
Flt Permitted						
Satd. Flow (perm)	0	0	3514	0	0	0
Link Speed (mph)		30	45		25	
Link Distance (ft)		176	114		201	
Travel Time (s)		4.0	1.7		5.5	
Peak Hour Factor	0.92	0.92	0.88	0.88	0.92	0.92
Adj. Flow (vph)	0	0	1108	57	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1165	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 37.0%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	NBT	NBR	SBL	SBT	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	352	228	0	272	0	0
Future Volume (vph)	352	228	0	272	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	1.00	0.95	1.00	1.00
Frt	0.941					
Flt Protected						
Satd. Flow (prot)	3164	0	0	3343	0	0
Flt Permitted						
Satd. Flow (perm)	3164	0	0	3343	0	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	620			230	1088	
Travel Time (s)	7.7			2.9	29.7	
Peak Hour Factor	0.88	0.88	0.95	0.95	0.92	0.92
Heavy Vehicles (%)	5%	11%	8%	8%	2%	2%
Adj. Flow (vph)	400	259	0	286	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	659	0	0	286	0	0
Sign Control	Free			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 20.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	32	943	0	0	0	0	0	48	29
Future Volume (vph)	0	0	0	32	943	0	0	0	0	0	48	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	165		0	0		0	0		0
Storage Lanes	0		0	1		0	0		0	0		0
Taper Length (ft)	25			85			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt											0.949	
Flt Protected				0.950								
Satd. Flow (prot)	0	0	0	1770	3539	0	0	0	0	0	1785	0
Flt Permitted				0.950								
Satd. Flow (perm)	0	0	0	1770	3539	0	0	0	0	0	1785	0
Link Speed (mph)		30			45			30			30	
Link Distance (ft)		212			176			102			496	
Travel Time (s)		4.8			2.7			2.3			11.3	
Peak Hour Factor	0.92	0.92	0.92	0.86	0.86	0.86	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	1%	1%	1%
Adj. Flow (vph)	0	0	0	37	1097	0	0	0	0	0	52	32
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	37	1097	0	0	0	0	0	84	0
Sign Control		Free			Free			Yield			Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 37.0%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	1428	0	0	0	1461
Future Volume (vph)	0	1428	0	0	0	1461
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	0.88
Frt						0.850
Flt Protected						
Satd. Flow (prot)	0	3539	0	0	0	2787
Flt Permitted						
Satd. Flow (perm)	0	3539	0	0	0	2787
Link Speed (mph)		55	55		55	
Link Distance (ft)		434	1242		1194	
Travel Time (s)		5.4	15.4		14.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1552	0	0	0	1588
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1552	0	0	0	1588
Sign Control		Free	Free		Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 54.4% ICU Level of Service A

Analysis Period (min) 15

Lane Group	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	0	119	0	0	567
Future Volume (vph)	0	0	119	0	0	567
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	0	0	1863	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	0	1863	0	0	1611
Link Speed (mph)		25	25		30	
Link Distance (ft)		1199	263		174	
Travel Time (s)		32.7	7.2		4.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.90	0.90
Adj. Flow (vph)	0	0	129	0	0	630
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	129	0	0	630
Sign Control		Free	Yield		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 48.0%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	WBL	WBR	NBL	NBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	168	1023	0	0	0
Future Volume (vph)	0	168	1023	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.97	1.00	1.00	1.00
Frt		0.865				
Flt Protected			0.950			
Satd. Flow (prot)	0	1627	3303	0	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	1627	3303	0	0	0
Link Speed (mph)	45		45		45	
Link Distance (ft)	255		329		551	
Travel Time (s)	3.9		5.0		8.3	
Peak Hour Factor	0.91	0.91	0.93	0.93	0.92	0.92
Heavy Vehicles (%)	1%	1%	6%	6%	2%	2%
Adj. Flow (vph)	0	185	1100	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	185	1100	0	0	0
Sign Control	Yield		Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 51.7%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	159	996	0	0
Future Volume (vph)	0	0	159	996	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	450		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			85		25	
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	5085	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	5085	0	0
Link Speed (mph)	45			45	30	
Link Distance (ft)	315			494	108	
Travel Time (s)	4.8			7.5	2.5	
Peak Hour Factor	0.92	0.92	0.87	0.87	0.92	0.92
Adj. Flow (vph)	0	0	183	1145	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	183	1145	0	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 41.5%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	182	935	0	0	0	0
Future Volume (vph)	182	935	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	275			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	110				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		45	45		30	
Link Distance (ft)		432	161		111	
Travel Time (s)		6.5	2.4		2.5	
Peak Hour Factor	0.94	0.94	0.92	0.92	0.92	0.92
Adj. Flow (vph)	194	995	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	194	995	0	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 50.7%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	3011	0	0	0	3038
Future Volume (vph)	0	3011	0	0	0	3038
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	0.76
Frt						0.850
Flt Protected						
Satd. Flow (prot)	0	3539	0	0	0	3610
Flt Permitted						
Satd. Flow (perm)	0	3539	0	0	0	3610
Link Speed (mph)		55	55		45	
Link Distance (ft)		1093	655		773	
Travel Time (s)		13.5	8.1		11.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	3273	0	0	0	3302
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	3273	0	0	0	3302
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 86.6%	ICU Level of Service E
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	65	921	0	0	0	0
Future Volume (vph)	65	921	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	180			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	75				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		45	45		30	
Link Distance (ft)		290	1089		101	
Travel Time (s)		4.4	16.5		2.3	
Peak Hour Factor	0.94	0.94	0.92	0.92	0.92	0.92
Adj. Flow (vph)	69	980	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	69	980	0	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 58.7%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	1717	567	0	0	0	0
Future Volume (vph)	1717	567	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	1.00	1.00	1.00	1.00
Frt	0.963					
Flt Protected						
Satd. Flow (prot)	4897	0	0	0	0	0
Flt Permitted						
Satd. Flow (perm)	4897	0	0	0	0	0
Link Speed (mph)	45			45	30	
Link Distance (ft)	311			156	174	
Travel Time (s)	4.7			2.4	4.0	
Peak Hour Factor	0.90	0.90	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1908	630	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	2538	0	0	0	0	0
Sign Control	Free			Stop	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 67.6%	ICU Level of Service C
Analysis Period (min) 15	

Lane Group	NBT	NBR	SBL	SBT	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	0	0	112	1019	0	0
Future Volume (vph)	0	0	112	1019	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	500		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			100		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	3539	0	0
Link Speed (mph)	30			25	25	
Link Distance (ft)	266			1471	301	
Travel Time (s)	6.0			40.1	8.2	
Peak Hour Factor	0.92	0.92	0.75	0.75	0.92	0.92
Adj. Flow (vph)	0	0	149	1359	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	149	1359	0	0
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 31.5%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	556	122	0	0	0	0
Future Volume (vph)	556	122	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected		0.961				
Satd. Flow (prot)	0	1790	0	0	0	0
Flt Permitted		0.961				
Satd. Flow (perm)	0	1790	0	0	0	0
Link Speed (mph)		25	30		25	
Link Distance (ft)		1207	315		252	
Travel Time (s)		32.9	7.2		6.9	
Peak Hour Factor	0.75	0.75	0.92	0.92	0.92	0.92
Adj. Flow (vph)	741	163	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	904	0	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 52.0%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	103	0	69	0	0
Future Volume (vph)	0	103	0	69	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.865		
Flt Protected						
Satd. Flow (prot)	0	1652	0	1191	0	0
Flt Permitted						
Satd. Flow (perm)	0	1652	0	1191	0	0
Link Speed (mph)		25	25		25	
Link Distance (ft)		995	597		1154	
Travel Time (s)		27.1	16.3		31.5	
Peak Hour Factor	0.83	0.83	0.89	0.89	0.92	0.92
Heavy Vehicles (%)	15%	15%	38%	38%	2%	2%
Adj. Flow (vph)	0	124	0	78	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	124	0	78	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 8.8%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	53	2528	0	0
Future Volume (vph)	0	0	53	2528	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	250		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	5085	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	5085	0	0
Link Speed (mph)	45			45	25	
Link Distance (ft)	894			534	137	
Travel Time (s)	13.5			8.1	3.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	58	2748	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	58	2748	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 52.2%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	2562	0	0	53	0
Future Volume (vph)	0	2562	0	0	53	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.86	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	6408	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	6408	0	0	1770	0
Link Speed (mph)		45	45		25	
Link Distance (ft)		744	1191		137	
Travel Time (s)		11.3	18.0		3.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	2785	0	0	58	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	2785	0	0	58	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 92.6%	ICU Level of Service F
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	338	2277	0	0	0	0
Future Volume (vph)	338	2277	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	400			0	0	0
Storage Lanes	2			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	0.97	0.86	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	3433	6408	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	3433	6408	0	0	0	0
Link Speed (mph)		45	45		25	
Link Distance (ft)		1191	262		113	
Travel Time (s)		18.0	4.0		3.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	367	2475	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	367	2475	0	0	0	0
Sign Control		Free	Stop		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 85.3%	ICU Level of Service E
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	119	2278	0	0
Future Volume (vph)	0	0	119	2278	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	250		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	5085	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	5085	0	0
Link Speed (mph)	45			45	25	
Link Distance (ft)	254			1016	123	
Travel Time (s)	3.8			15.4	3.4	
Peak Hour Factor	0.92	0.92	0.90	0.87	0.92	0.92
Adj. Flow (vph)	0	0	132	2618	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	132	2618	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 135.1%	ICU Level of Service H
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	113	2284	0	0	0	0
Future Volume (vph)	113	2284	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.91	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	5085	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	5085	0	0	0	0
Link Speed (mph)		45	45		30	
Link Distance (ft)		704	311		111	
Travel Time (s)		10.7	4.7		2.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	123	2483	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	123	2483	0	0	0	0
Sign Control		Free	Stop		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 96.6%	ICU Level of Service F
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑	↰	
Traffic Volume (vph)	0	0	0	1370	27	0
Future Volume (vph)	0	0	0	1370	27	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	30	
Link Distance (ft)	583			574	107	
Travel Time (s)	7.2			7.1	2.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	1489	29	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1489	29	0
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 78.9% ICU Level of Service D
Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	27	1244	0	0	0	0
Future Volume (vph)	27	1244	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		30	
Link Distance (ft)		1122	576		107	
Travel Time (s)		13.9	7.1		2.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	29	1352	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	29	1352	0	0	0	0
Sign Control		Free	Stop		Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 78.9% ICU Level of Service D

Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	1361	36	0	54
Future Volume (vph)	0	0	1361	36	0	54
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.996			0.865
Flt Protected						
Satd. Flow (prot)	0	0	3525	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	0	3525	0	0	1611
Link Speed (mph)		55	55		30	
Link Distance (ft)		590	583		121	
Travel Time (s)		7.3	7.2		2.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	1479	39	0	59
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1518	0	0	59
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 48.8%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	168	1247	0	0
Future Volume (vph)	0	0	168	1247	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	250		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	3539	0	0
Link Speed (mph)	55			55	30	
Link Distance (ft)	405			590	104	
Travel Time (s)	5.0			7.3	2.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	183	1355	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	183	1355	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 46.0%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑			↰	
Traffic Volume (vph)	0	1103	0	0	168	0
Future Volume (vph)	0	1103	0	0	168	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	1770	0
Link Speed (mph)		55	55		30	
Link Distance (ft)		316	1122		104	
Travel Time (s)		3.9	13.9		2.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1199	0	0	183	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1199	0	0	183	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 71.6%	ICU Level of Service C
Analysis Period (min) 15	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	491	3305	0	0
Future Volume (vph)	0	0	491	3305	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	250			0
Storage Lanes	0	0	2			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	0.97	0.91	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	3433	5085	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	3433	5085	0	0
Link Speed (mph)	45			55	30	
Link Distance (ft)	105			493	555	
Travel Time (s)	1.6			6.1	12.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	534	3592	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	534	3592	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 133.8%	ICU Level of Service H
Analysis Period (min) 15	

Lane Group	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	2206	1099	0	0	0	0
Future Volume (vph)	2206	1099	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.94	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	4990	1863	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	4990	1863	0	0	0	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		555	271		108	
Travel Time (s)		12.6	6.2		2.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2398	1195	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	2398	1195	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 108.7%	ICU Level of Service G
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NEL	NER
Lane Configurations	↑					↱
Traffic Volume (vph)	73	0	0	0	0	1099
Future Volume (vph)	73	0	0	0	0	1099
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	1863	0	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	1863	0	0	0	0	1611
Link Speed (mph)	25			30	25	
Link Distance (ft)	287			1072	271	
Travel Time (s)	7.8			24.4	7.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	79	0	0	0	0	1195
Shared Lane Traffic (%)						
Lane Group Flow (vph)	79	0	0	0	0	1195
Sign Control	Yield			Free	Free	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 78.6% ICU Level of Service D
Analysis Period (min) 15

Lane Group	NBT	NBR	SBL	SBT	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	0	0	73	2200	0	0
Future Volume (vph)	0	0	73	2200	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.91	0.91	1.00	1.00
Frt						
Flt Protected				0.998		
Satd. Flow (prot)	0	0	0	5070	0	0
Flt Permitted				0.998		
Satd. Flow (perm)	0	0	0	5070	0	0
Link Speed (mph)	45			45	45	
Link Distance (ft)	194			406	287	
Travel Time (s)	2.9			6.2	4.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	5%	2%	2%	2%
Adj. Flow (vph)	0	0	79	2391	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	2470	0	0
Sign Control	Free			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 78.6%	ICU Level of Service D
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	104	988	0	0	0	0
Future Volume (vph)	104	988	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1719	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1719	3539	0	0	0	0
Link Speed (mph)		25	25		25	
Link Distance (ft)		879	346		271	
Travel Time (s)		24.0	9.4		7.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	2%	2%	2%	2%	2%
Adj. Flow (vph)	113	1074	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	113	1074	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 76.6%	ICU Level of Service D
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	957	0	0	81
Future Volume (vph)	0	0	957	0	0	81
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	0	0	1863	0	0	1565
Flt Permitted						
Satd. Flow (perm)	0	0	1863	0	0	1565
Link Speed (mph)		30	45		45	
Link Distance (ft)		874	182		254	
Travel Time (s)		19.9	2.8		3.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	5%
Adj. Flow (vph)	0	0	1040	0	0	88
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1040	0	0	88
Sign Control		Free	Free		Yield	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 81.2%	ICU Level of Service D
Analysis Period (min) 15	

Lane Group	EBL	EBR	SBL	SBR	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	0	0	0	0	957	1353
Future Volume (vph)	0	0	0	0	957	1353
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.91
Frt					0.981	0.850
Flt Protected					0.958	
Satd. Flow (prot)	0	0	0	0	1744	2799
Flt Permitted					0.958	
Satd. Flow (perm)	0	0	0	0	1744	2799
Link Speed (mph)	30		30		30	
Link Distance (ft)	182		207		337	
Travel Time (s)	4.1		4.7		7.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	5%
Adj. Flow (vph)	0	0	0	0	1040	1471
Shared Lane Traffic (%)						10%
Lane Group Flow (vph)	0	0	0	0	1187	1324
Sign Control	Stop		Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 81.2%	ICU Level of Service D
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↱					
Traffic Volume (vph)	1234	81	0	0	0	0
Future Volume (vph)	1234	81	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00
Frt	0.991					
Flt Protected						
Satd. Flow (prot)	3407	0	0	0	0	0
Flt Permitted						
Satd. Flow (perm)	3407	0	0	0	0	0
Link Speed (mph)	30			45	25	
Link Distance (ft)	306			190	254	
Travel Time (s)	7.0			2.9	6.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	5%	2%	2%	2%	2%
Adj. Flow (vph)	1341	88	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1429	0	0	0	0	0
Sign Control	Free			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 70.3%	ICU Level of Service C
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	0	1039	151	0	0
Future Volume (vph)	0	0	1039	151	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			250	0	0
Storage Lanes	0			1	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	1.00
Frt				0.850		
Flt Protected						
Satd. Flow (prot)	0	0	3539	1538	0	0
Flt Permitted						
Satd. Flow (perm)	0	0	3539	1538	0	0
Link Speed (mph)		25	25		25	
Link Distance (ft)		241	1465		317	
Travel Time (s)		6.6	40.0		8.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	5%	2%	2%
Adj. Flow (vph)	0	0	1129	164	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1129	164	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 33.7%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑↑	↰	
Traffic Volume (vph)	0	0	0	1504	64	0
Future Volume (vph)	0	0	0	1504	64	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	4940	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	4940	1770	0
Link Speed (mph)	55			30	25	
Link Distance (ft)	598			415	105	
Travel Time (s)	7.4			9.4	2.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	5%	2%	2%
Adj. Flow (vph)	0	0	0	1635	70	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1635	70	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 72.1%	ICU Level of Service C
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	64	1315	0	0	0	0
Future Volume (vph)	64	1315	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3438	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3438	0	0	0	0
Link Speed (mph)		55	30		25	
Link Distance (ft)		597	306		105	
Travel Time (s)		7.4	7.0		2.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	5%	2%	2%	2%	2%
Adj. Flow (vph)	70	1429	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	70	1429	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 72.1% ICU Level of Service C

Analysis Period (min) 15

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑	↰	
Traffic Volume (vph)	0	0	0	826	0	0
Future Volume (vph)	0	0	0	826	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	0	0	0	3539	1863	0
Flt Permitted						
Satd. Flow (perm)	0	0	0	3539	1863	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	586			210	99	
Travel Time (s)	7.3			2.6	2.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	898	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	898	0	0
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 32.8% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	717	0	0	0	0
Future Volume (vph)	0	717	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	1863	3539	0	0	0	0
Flt Permitted						
Satd. Flow (perm)	1863	3539	0	0	0	0
Link Speed (mph)		55	55		25	
Link Distance (ft)		589	212		99	
Travel Time (s)		7.3	2.6		2.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	779	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	779	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 32.8% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	826	0	0
Future Volume (vph)	0	0	0	826	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	0	0	0	3539	0	0
Flt Permitted						
Satd. Flow (perm)	0	0	0	3539	0	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	723			586	81	
Travel Time (s)	9.0			7.3	2.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	898	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	898	0	0
Sign Control	Free			Free	Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 32.8% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↱							↱		↑	
Traffic Volume (vph)	0	717	0	0	0	0	0	0	0	0	0	0
Future Volume (vph)	0	717	0	0	0	0	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	3539	0	0	0	0	0	0	1863	0	1863	0
Flt Permitted												
Satd. Flow (perm)	0	3539	0	0	0	0	0	0	1863	0	1863	0
Link Speed (mph)		55			55			25			25	
Link Distance (ft)		719			589			84			81	
Travel Time (s)		8.9			7.3			2.3			2.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	779	0	0	0	0	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	779	0	0	0	0	0	0	0	0	0	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 29.8%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	0	717	0	826	0	0
Future Volume (vph)	0	717	0	826	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.88	1.00	0.95	1.00	1.00
Frt		0.850				
Flt Protected						
Satd. Flow (prot)	0	2787	0	3539	0	0
Flt Permitted						
Satd. Flow (perm)	0	2787	0	3539	0	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	997			723	719	
Travel Time (s)	12.4			9.0	19.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	779	0	898	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	779	0	898	0	0
Sign Control	Free			Free	Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 28.4% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	286	958	0	0	0	0
Future Volume (vph)	286	958	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		55	
Link Distance (ft)		2077	2379		116	
Travel Time (s)		25.7	29.5		1.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	311	1041	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	311	1041	0	0	0	0
Sign Control		Free	Stop		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 58.6%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NEL	NER
Lane Configurations				↑↑	↰	
Traffic Volume (vph)	0	0	0	921	286	0
Future Volume (vph)	0	0	0	921	286	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	607			2382	116	
Travel Time (s)	7.5			29.5	3.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	1001	311	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1001	311	0
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 65.3% ICU Level of Service C

Analysis Period (min) 15

Lane Group	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	0	0	14	921	0	0
Future Volume (vph)	0	0	14	921	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	250		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	3539	0	0
Link Speed (mph)	55			55	55	
Link Distance (ft)	2382			560	108	
Travel Time (s)	29.5			6.9	1.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	15	1001	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	15	1001	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary		
Area Type:	Other	
Control Type: Unsignalized		
Intersection Capacity Utilization 35.6%		ICU Level of Service A
Analysis Period (min) 15		

Lane Group	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	0	958	0	0	14	0
Future Volume (vph)	0	958	0	0	14	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	1770	0
Link Speed (mph)		55	55		25	
Link Distance (ft)		2379	608		108	
Travel Time (s)		29.5	7.5		2.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1041	0	0	15	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1041	0	0	15	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 58.6%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	933	39	0	0	0	32
Future Volume (vph)	933	39	0	0	0	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		600	600		0	0
Storage Lanes		0	0		0	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00
Frt	0.994					0.865
Flt Protected						
Satd. Flow (prot)	3518	0	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	3518	0	0	0	0	1611
Link Speed (mph)	55			55	45	
Link Distance (ft)	608			628	1089	
Travel Time (s)	7.5			7.8	16.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1014	42	0	0	0	35
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1056	0	0	0	0	35
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 37.0%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑	↰	
Traffic Volume (vph)	0	0	0	926	9	0
Future Volume (vph)	0	0	0	926	9	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	645			3831	112	
Travel Time (s)	8.0			47.5	3.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	1007	10	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1007	10	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 53.8%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	9	956	0	0	0	0
Future Volume (vph)	9	956	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		55	
Link Distance (ft)		628	3825		112	
Travel Time (s)		7.8	47.4		1.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	10	1039	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	10	1039	0	0	0	0
Sign Control		Free	Stop		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 58.7%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	10	926	0	0
Future Volume (vph)	0	0	10	926	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	250		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	3539	0	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	3831			538	97	
Travel Time (s)	47.5			6.7	2.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	11	1007	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	11	1007	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 36.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	956	0	0	10	0
Future Volume (vph)	0	956	0	0	10	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	1770	0
Link Speed (mph)		55	55		25	
Link Distance (ft)		3825	591		97	
Travel Time (s)		47.4	7.3		2.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1039	0	0	11	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1039	0	0	11	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 58.7%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	954	12	0	0	0	16
Future Volume (vph)	954	12	0	0	0	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00
Frt	0.998					0.865
Flt Protected						
Satd. Flow (prot)	3532	0	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	3532	0	0	0	0	1611
Link Speed (mph)	55			55	45	
Link Distance (ft)	591			1206	1073	
Travel Time (s)	7.3			15.0	16.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1037	13	0	0	0	17
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1050	0	0	0	0	17
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 36.8%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑	↰	
Traffic Volume (vph)	0	0	0	928	9	0
Future Volume (vph)	0	0	0	928	9	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	1254			1793	105	
Travel Time (s)	15.5			22.2	2.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	1009	10	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1009	10	0
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 58.9% ICU Level of Service B

Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	9	961	0	0	0	0
Future Volume (vph)	9	961	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		55	
Link Distance (ft)		1206	1786		105	
Travel Time (s)		15.0	22.1		1.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	10	1045	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	10	1045	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary		
Area Type:	Other	
Control Type: Unsignalized		
Intersection Capacity Utilization 58.9%		ICU Level of Service B
Analysis Period (min) 15		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	354	928	0	0
Future Volume (vph)	0	0	354	928	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	500		0	0
Storage Lanes		0	2		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	0.97	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	3433	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	3433	3539	0	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	1793			596	109	
Travel Time (s)	22.2			7.4	3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	385	1009	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	385	1009	0	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 88.5%	ICU Level of Service E
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑	↰	
Traffic Volume (vph)	0	0	0	1247	35	0
Future Volume (vph)	0	0	0	1247	35	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	631			2681	109	
Travel Time (s)	7.8			33.2	3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	1355	38	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1355	38	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 63.1%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	35	1280	0	0	0	0
Future Volume (vph)	35	1280	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		55	
Link Distance (ft)		627	2678		109	
Travel Time (s)		7.8	33.2		1.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	38	1391	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	38	1391	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 76.5%	ICU Level of Service D
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	198	1247	0	0
Future Volume (vph)	0	0	198	1247	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	500		0	0
Storage Lanes		0	2		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	0.97	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	3433	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	3433	3539	0	0
Link Speed (mph)	55			55	55	
Link Distance (ft)	2681			671	109	
Travel Time (s)	33.2			8.3	1.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	215	1355	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	215	1355	0	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 97.5%	ICU Level of Service F
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑	↰	
Traffic Volume (vph)	0	0	0	1428	17	0
Future Volume (vph)	0	0	0	1428	17	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	654			797	95	
Travel Time (s)	8.1			9.9	2.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	1552	18	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1552	18	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 70.1%	ICU Level of Service C
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	17	1461	0	0	0	0
Future Volume (vph)	17	1461	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		55	
Link Distance (ft)		659	784		95	
Travel Time (s)		8.2	9.7		1.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	18	1588	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	18	1588	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 86.5%	ICU Level of Service E
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↱					↱
Traffic Volume (vph)	1226	18	0	0	0	18
Future Volume (vph)	1226	18	0	0	0	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00
Frt	0.998					0.865
Flt Protected						
Satd. Flow (prot)	3532	0	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	3532	0	0	0	0	1611
Link Speed (mph)	55			55	25	
Link Distance (ft)	576			2077	205	
Travel Time (s)	7.1			25.7	5.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1333	20	0	0	0	20
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1353	0	0	0	0	20
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 44.5%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	1179	0	0	1383	0
Future Volume (vph)	0	1179	0	0	1383	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	0.97	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	3433	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	3433	0
Link Speed (mph)		45	45		45	
Link Distance (ft)		1021	744		215	
Travel Time (s)		15.5	11.3		3.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1282	0	0	1503	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1282	0	0	1503	0
Sign Control		Free	Stop		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 78.7%	ICU Level of Service D
Analysis Period (min) 15	

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	0	0	641	3038
Future Volume (vph)	0	0	0	0	641	3038
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		0	250	
Storage Lanes	0	0		0	2	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.97	0.91
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	0	3433	5085
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	0	3433	5085
Link Speed (mph)	55		45			30
Link Distance (ft)	167		773			587
Travel Time (s)	2.1		11.7			13.3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	697	3302
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	0	697	3302
Sign Control	Stop		Stop			Free

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 85.6%	ICU Level of Service E
Analysis Period (min) 15	

1005: WB M-96 (Michigan Avenue) & SB I-69 Off-Ramp (Push Button) Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	4.9	14.6	9.2

1007: EB M-96 (Michigan Avenue) (Push Button) & SB I-69 Off-Ramp/EB M-96 (Michigan Avenue) Perfor

Approach	EB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	28.4	2.0	3.7

1008: WB M-96 (Michigan Avenue)/NB I-69 Off-Ramp & WB M-96 (Michigan Avenue) (Push Button) Perf

Approach	WB	SW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	19.7	2.2	9.1

1009: WB M-96 (Michigan Avenue) (Push Button)/WB M-96 (Michigan Avenue) & EB M-96 (Michigan Ave

Approach	EB	SW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	18.5	13.5	15.9

1010: NB I-69 Off-Ramp (Push Button) & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	3.8	20.0	6.1

3003: M-227/West Drive & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.2	0.0
Total Del/Veh (s)	8.6	5.0	18.5	9.5

3093: M-227/West Drive & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	0.0	2.0	0.0	0.3
Total Del/Veh (s)	3.7	31.4	2.9	7.8

4001: M-96 (Michigan Avenue) & WB Main Entrance/WB M-96 (Michigan Avenue) Performance by appro

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	13.8	17.6	15.1

4003: EB to WB Xover E of 15 Mile Rd (North) & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	4.4	0.6
Total Del/Veh (s)	9.7	29.3	12.3

4004: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	4.5	50.9	11.1

4005: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	10.1	25.9	14.6

4006: M-311 (11 Mile Rd) & Site Driveway West Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	257.3	1.2	0.0	115.9
Total Del/Veh (s)	233.4	32.3	23.1	106.5

4007: M-311 (11 Mile Rd) & F Drive N Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	3.9	0.0	0.0	0.7
Total Del/Veh (s)	235.7	121.9	46.2	104.8

4010: EB M-96 (Michigan Avenue)/EB M-96 (Michigan Avenue) (Push Button) & WB M-96 (Michigan Ave

Approach	WB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	17.6	11.5	14.2

4030: NB M-311 (11 Mile Rd)/WB M-96 (Michigan Avenue)/11 Mile Rd (North) & EB M-96 (Michigan Ave

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	23.0	58.6	51.6

4031: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & WB M-96 (Michigan Avenue) Performance by a

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	63.0	12.2	30.1

4033: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & NB to SB Xover N of M-96 (Michigan Avenue) P

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	53.3	10.1	15.2

4034: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & EB I-94 Off-ramp Performance by approach

Approach	SB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.8	35.4	13.2

4035: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & WB M-96 (Michigan Avenue)/11 Mile Rd (North)

Approach	SB	NW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	14.8	17.6	16.1

4036: EB I-94 Off-ramp & WB M-96 (Michigan Avenue)/11 Mile Rd (North) Performance by approach

Approach	NB	NW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	44.9	4.7	6.8

4037: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & WB I-94 Off-ramp Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	12.4	5.7
Total Del/Veh (s)	4.5	46.3	24.0

4038: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & EB M-96 (Michigan Avenue)/11 Mile Rd (South)

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	22.2	27.1	24.6

4039: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & WB I-94 Off-ramp Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	13.9	4.4	5.5

4040: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & 11 Mile Rd Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	18.5	2.5	10.9

4041: 11 Mile Rd & WB M-96 (Michigan Avenue)/11 Mile Rd (North) Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.2	0.1
Total Del/Veh (s)	13.5	25.2	17.6

4042: 11 Mile Rd & H Dr N Performance by approach

Approach	NE	SW	All
Denied Del/Veh (s)	0.0	0.7	0.3
Total Del/Veh (s)	6.7	5.6	6.2

4050: Prop Site Drive E & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	4.0	46.8	9.6

4051: Prop Site Drive W & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	5.4	41.8	14.0

4061: WB M-96 (Michigan Avenue) & Firekeepers Main Drive Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.3	0.1	0.3
Total Del/Veh (s)	8.8	52.3	12.7

4065: WB M-96 (Michigan Avenue) & 15 Mile Rd (North) Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	8.6	39.7	11.9

4066: EB M-96 (Michigan Avenue) & WB to EB Xover W of 15 Mile Rd (South) Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	4.0	40.0	5.8

4067: 15 Mile Rd (South) & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.7	0.1
Total Del/Veh (s)	9.3	48.1	12.8

4068: EB to WB Xover E of 15 Mile Rd (South) & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	4.7	35.3	6.1

4070: M-311 (11 Mile Rd) & Site Drive East Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	1.2	0.2	0.0	0.3
Total Del/Veh (s)	23.8	188.4	30.3	70.8

4071: 15 Mile Rd & Verona Rd Performance by approach

Approach	NB	SB	SE	NW	All
Denied Del/Veh (s)	0.3	0.1	3.0	0.2	1.4
Total Del/Veh (s)	13.3	7.4	11.0	31.1	15.1

4075: 11 Mile Road & Verona Road Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.5	527.5	0.5	161.6
Total Del/Veh (s)	15.5	29.8	263.3	45.4	81.2

9002: WB M-96 (Michigan Avenue) & Firekeepers Gas Station Driveway Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.1	0.2	0.1
Total Del/Veh (s)	4.8	28.0	8.3

9003: WB M-96 (Michigan Avenue) & Firekeepers E Drive Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.7	15.7	4.1

9004: WB M-96 (Michigan Avenue) & Ackerson Drive Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	1.6	10.5	1.6

9006: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	1.2	3.8	1.3

9008: 15 Mile Rd (North) & Old M-96 (Michigan Ave) Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.0	0.0	0.0
Total Del/Veh (s)	1.9	0.6	0.6	0.6

9013: SB I-69 On-Ramp & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	14.7	14.7

9016: EB M-96 (Michigan Avenue) & NB I-69 On-Ramp Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	12.5	12.5

9017: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	1.8	1.8

9018: EB M-96 (Michigan Avenue) & WB to EB Xover W of M-227/West Drive Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.4	8.0	2.4

9019: EB to WB Xover W of M-227/West Drive & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.6	14.4	3.6

9020: EB M-96 (Michigan Avenue) & WB to EB Xover E of M-227/West Drive Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.0	10.1	1.7

9021: EB to WB Xover E of M-227/West Drive & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.3	0.0	0.2
Total Del/Veh (s)	1.2	10.4	1.7

9023: M-311 (11 Mile Rd) & B Drive North Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	1.7	0.3	1.1	0.5	1.0
Total Del/Veh (s)	2.1	1.2	10.6	9.0	4.3

9025: M-294 (Beadle Lake Road) & EB I-94 Off-Ramp & EB I-94 On-Ramp Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	2.5	0.3	0.0	0.5
Total Del/Veh (s)	6.7	1.4	1.6	2.4

9026: WB I-94 On-Ramp & M-294 (Beadle Lake Road) & WB I-94 Off-Ramp Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	2.0	0.0	0.3	0.5
Total Del/Veh (s)	7.4	1.6	1.3	2.5

9027: Old US-27 & EB I-94 to Old US-27 Off Ramp Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0
Total Del/Veh (s)	6.7	0.2	0.9	2.6

9028: Old US-27 & NB Old US-27 to EB I-94 On Ramp Performance by approach

Approach	NB	SB	All
Denied Del/Veh (s)	0.7	0.0	0.3
Total Del/Veh (s)	0.9	0.4	0.7

9029: SB Old US-27 WB I-94 On Ramp & Old US-27 & WB I-94 to Old US-27 Off Ramp Performance by

Approach	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	1.2	0.5
Total Del/Veh (s)	4.7	0.2	0.8	1.1

9030: I-94BL/Partello Rd & EB I-94 to I-94BL/Partello Off Ramp Performance by approach

Approach	SE	NE	SW	All
Denied Del/Veh (s)	0.0	0.3	0.0	0.1
Total Del/Veh (s)	4.4	1.5	0.1	1.7

9031: I-94BL/Partello Rd & I-94/Partello Rd to EB I-94 On Ramp Performance by approach

Approach	NE	SW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.2	0.6	0.4

9032: I-94BL/Partello Rd & WB I-94 to I-94/Partello Rd Performance by approach

Approach	EB	NE	SW	All
Denied Del/Veh (s)	0.0	0.0	0.6	0.1
Total Del/Veh (s)	3.6	1.1	0.5	1.7

9034: Dummy Node & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	1.7	5.7	1.7

9035: Dummy Node & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	0.6	8.7	0.8

9036: WB M-96 (Michigan Avenue) & Dummy Node Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	0.6	5.3	0.8

9037: WB M-96 (Michigan Avenue) & Dummy Node Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.5	0.5

9040: Old US-27 & NB Old US-27 to WB I-94 On Ramp Performance by approach

Approach	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.1	0.3	0.8

9041: WB to EB Xover E of M-227/West Drive/McDonald's Dr & WB M-96 (Michigan Avenue) Performanc

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	1.4	17.1	2.5

9128: M-96 (Michigan Avenue)/WB M-96 (Michigan Avenue) & EB M-96 (Michigan Avenue) Performance

Approach	NB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.2	5.7	3.4

9137: SB I-69 On-Ramp Performance by approach

Approach	SB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	8.4	0.2	1.6

9143: NB I-69 On-Ramp Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	6.6	2.8	3.4

9146: WB to EB Xover W of M-227/West Drive & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.9	0.9

9147: EB M-96 (Michigan Avenue) & EB to WB Xover W of M-227/West Drive Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.0	2.0

9150: M-311 (11 Mile Rd) /NB M-311 (11 Mile Rd) & SB M-311 (11 Mile Rd) Performance by approach

Approach	NB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	62.4	12.2	35.6

9151: EB M-96 (Michigan Avenue) & EB to WB Xover E of M-227/West Drive Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.5	0.5

9157: SB I-69 On-Ramp & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.4	2.4

9158: SB I-69 Off-Ramp (Push Button) & SB I-69 Off-Ramp Performance by approach

Approach	SB	All
Denied Del/Veh (s)	0.3	0.3
Total Del/Veh (s)	1.6	1.6

9159: NB I-69 Off-Ramp & NB I-69 Off-Ramp (Push Button) Performance by approach

Approach	NB	All
Denied Del/Veh (s)	0.6	0.6
Total Del/Veh (s)	4.4	4.4

9178: WB I-94 to BL-94/Partello Rd Off Ramp/WB I-94 to I-94/Partello Rd & BL-94/Partello Rd to WB I-94

Approach	EB	WB	All
Denied Del/Veh (s)	0.2	0.0	0.1
Total Del/Veh (s)	0.2	0.3	0.3

9304: WB to EB Xover W of 15 Mile Rd (North) & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	3.9	3.9

9305: EB M-96 (Michigan Avenue) & WB to EB Xover W of 15 Mile Rd (North) Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.2	46.0	3.1

9307: EB M-96 (Michigan Avenue) & EB to WB Xover E of 15 Mile Rd (North) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	3.8	3.8

9310: WB to EB Xover W of 15 Mile Rd (South) & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	4.6	4.6

9311: EB M-96 (Michigan Avenue) & EB to WB Xover E of 15 Mile Rd (South) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	3.2	3.2

9330: EB to WB Xover E of Old M-311 (11 Mile Rd) & WB M-96 (Michigan Avenue) Performance by appr

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	10.2	29.7	10.6

9331: EB M-96 (Michigan Avenue) & EB to WB Xover E of Old M-311 (11 Mile Rd) Performance by appro

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	1.8	1.8

9332: WB M-96 (Michigan Avenue) & Old M-311 (11 Mile Rd) Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	18.6	51.0	19.7

9336: WB to EB Xover W of Old M-311 (11 Mile Rd) & WB M-96 (Michigan Avenue) Performance by app

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	32.6	32.6

9337: EB M-96 (Michigan Avenue) & WB to EB Xover W of Old M-311 (11 Mile Rd) Performance by appr

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	3.0	9.7	3.9

9338: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & NB to SB Xover N of M-96 (Michigan Avenue) F

Approach	NB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	19.0	19.0

9339: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & EB I-94 On Ramp Performance by approach

Approach	NB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	38.5	38.5

9340: EB I-94 On Ramp Performance by approach

Approach	EB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	20.8	0.4	1.9

9342: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & EB I-94 On Ramp Performance by approach

Approach	SB	All
Denied Del/Veh (s)	0.4	0.4
Total Del/Veh (s)	31.5	31.5

9343: EB I-94 Off-ramp Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.6	0.6
Total Del/Veh (s)	4.5	4.5

9346: WB I-94 On Ramp Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.3	22.8	4.3

9347: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & WB I-94 On Ramp Performance by approach

Approach	NW	All
Denied Del/Veh (s)	0.3	0.3
Total Del/Veh (s)	20.4	20.4

9348: WB I-94 On Ramp & EB M-96 (Michigan Avenue)/11 Mile Rd (South) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	14.4	14.4

9349: WB I-94 Off-ramp Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.5	0.5
Total Del/Veh (s)	49.2	49.2

9351: SB to NB Xover E of 11 Mile Rd & WB M-96 (Michigan Avenue)/11 Mile Rd (North) Performance b

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.5	3.8	1.6

9352: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & SB to NB Xover E of 11 Mile Rd Performance b

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	9.1	9.1

9354: EB to WB Xover W of 11 Mile Rd & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	3.7	3.7

9355: EB M-96 (Michigan Avenue) & EB to WB Xover W of 11 Mile Rd Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	3.0	3.0

9356: WB to EB Xover W of 11 Mile Rd & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.6	2.6

9357: EB M-96 (Michigan Avenue) & WB to EB Xover W of 11 Mile Rd Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.4	0.4

9359: EB M-96 (Michigan Avenue) & M-96 (Michigan Avenue)/WB M-96 (Michigan Avenue) Performance

Approach	EB	WB	All
Denied Del/Veh (s)	0.2	0.0	0.1
Total Del/Veh (s)	2.5	0.8	1.7

9381: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.2	2.2

9382: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	3.3	6.8	4.0

9383: WB M-96 (Michigan Avenue) Performance by approach

Approach	NW	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.6	0.6

9384: EB M-96 (Michigan Avenue) Performance by approach

Approach	SE	SW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.8	4.1	1.8

9385: Ceresco Road/12 Mile Road & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	0.9	4.8	1.0

9386: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	3.7	4.6	3.7

9387: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.6	0.6

9388: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.5	0.5

9389: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.9	5.5	2.9

9390: 13 Mile Rd & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	0.7	5.0	0.7

9392: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.5	4.6	1.5

9393: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	1.1	1.1

9394: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	3.1	3.1

9396: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.3	9.8	2.5

9397: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.2	2.2

9398: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	1.7	1.7

9400: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.6	12.0	0.8

9401: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.0	2.0

9410: Retail Drive & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	0.6	7.8	0.7

9415: EB Main Entrance/EB M-96 (Michigan Avenue) & M-96 (Michigan Avenue) Performance by approa

Approach	EB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.1	1.7	1.4

9416: SB M-311 (11 Mile Rd)/EB M-96 (Michigan Avenue)/11 Mile Rd (South) & EB M-96 (Michigan Ave

Approach	SB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	5.7	5.7

Total Network Performance

Denied Del/Veh (s)	32.7
Total Del/Veh (s)	153.7

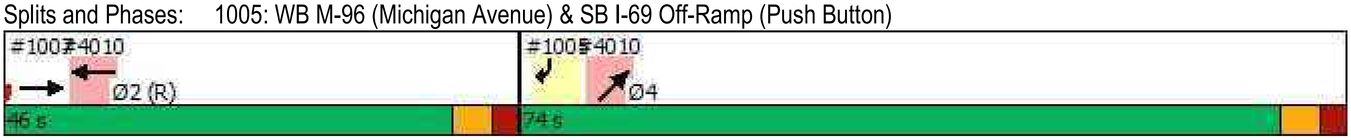
Scenario M2&S1

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø2
Lane Configurations							
Traffic Volume (vph)	0	0	1216	0	0	1563	
Future Volume (vph)	0	0	1216	0	0	1563	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	0.91	1.00	1.00	0.76	
Frt						0.850	
Flt Protected							
Satd. Flow (prot)	0	0	5085	0	0	3610	
Flt Permitted							
Satd. Flow (perm)	0	0	5085	0	0	3610	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)						440	
Link Speed (mph)		45	45		25		
Link Distance (ft)		275	194		266		
Travel Time (s)		4.2	2.9		7.3		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.84	0.75	
Heavy Vehicles (%)	2%	2%	2%	2%	3%	2%	
Adj. Flow (vph)	0	0	1322	0	0	2084	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	1322	0	0	2084	
Turn Type			NA			Prot	
Protected Phases			Free!			4!	2
Permitted Phases							
Minimum Split (s)						17.0	17.0
Total Split (s)						74.0	46.0
Total Split (%)						61.7%	38%
Yellow Time (s)						3.5	3.5
All-Red Time (s)						2.5	2.5
Lost Time Adjust (s)						0.0	
Total Lost Time (s)						6.0	
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)			120.0			68.0	
Actuated g/C Ratio			1.00			0.57	
v/c Ratio			0.26			0.93	
Control Delay			0.1			27.7	
Queue Delay			0.0			1.2	
Total Delay			0.1			28.9	
LOS			A			C	
Approach Delay			0.1		28.9		
Approach LOS			A		C		
Queue Length 50th (ft)			0			526	
Queue Length 95th (ft)			0			399	
Internal Link Dist (ft)		195	114		186		
Turn Bay Length (ft)							
Base Capacity (vph)			5085			2236	
Starvation Cap Reductn			0			0	
Spillback Cap Reductn			577			49	
Storage Cap Reductn			0			0	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø2
Reduced v/c Ratio			0.29			0.95	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 100 (83%), Referenced to phase 2:EBT, Start of Green	
Natural Cycle: 75	
Control Type: Pretimed	
Maximum v/c Ratio: 0.93	
Intersection Signal Delay: 17.7	Intersection LOS: B
Intersection Capacity Utilization 77.3%	ICU Level of Service D
Analysis Period (min) 15	
! Phase conflict between lane groups.	

Splits and Phases: 1005: WB M-96 (Michigan Avenue) & SB I-69 Off-Ramp (Push Button)

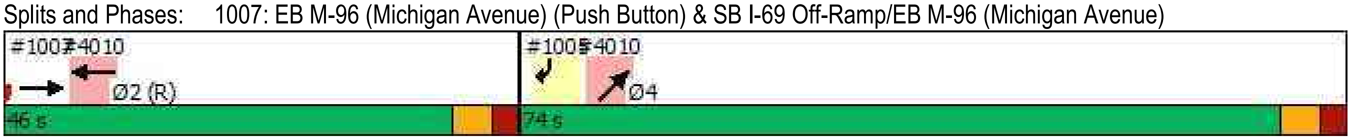


Lane Group	EBT	EBR	WBL	WBT	NEL	NER	Ø4
Lane Configurations							
Traffic Volume (vph)	112	0	0	0	0	2266	
Future Volume (vph)	112	0	0	0	0	2266	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Storage Length (ft)		260	285		0	0	
Storage Lanes		0	0		0	3	
Taper Length (ft)			240		25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.76	
Frt						0.850	
Flt Protected							
Satd. Flow (prot)	1863	0	0	0	0	3610	
Flt Permitted							
Satd. Flow (perm)	1863	0	0	0	0	3610	
Right Turn on Red		Yes				Yes	
Satd. Flow (RTOR)						2086	
Link Speed (mph)	25			45	45		
Link Distance (ft)	301			619	190		
Travel Time (s)	8.2			9.4	2.9		
Peak Hour Factor	0.75	0.84	0.92	0.92	0.90	0.90	
Heavy Vehicles (%)	2%	3%	2%	2%	2%	2%	
Adj. Flow (vph)	149	0	0	0	0	2518	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	149	0	0	0	0	2518	
Turn Type	NA					Free	
Protected Phases	2						4
Permitted Phases						Free	
Minimum Split (s)	17.0						17.0
Total Split (s)	46.0						74.0
Total Split (%)	38.3%						62%
Yellow Time (s)	3.5						3.5
All-Red Time (s)	2.5						2.5
Lost Time Adjust (s)	0.0						
Total Lost Time (s)	6.0						
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)	40.0					120.0	
Actuated g/C Ratio	0.33					1.00	
v/c Ratio	0.24					0.70	
Control Delay	30.3					11.4	
Queue Delay	0.0					0.0	
Total Delay	30.3					11.4	
LOS	C					B	
Approach Delay	30.3				11.4		
Approach LOS	C				B		
Queue Length 50th (ft)	83					453	
Queue Length 95th (ft)	111					239	
Internal Link Dist (ft)	221			539	110		
Turn Bay Length (ft)							
Base Capacity (vph)	621					3610	

Lane Group	EBT	EBR	WBL	WBT	NEL	NER	Ø4
Starvation Cap Reductn	0					0	
Spillback Cap Reductn	0					0	
Storage Cap Reductn	0					0	
Reduced v/c Ratio	0.24					0.70	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 100 (83%), Referenced to phase 2:EBT, Start of Green	
Natural Cycle: 75	
Control Type: Pretimed	
Maximum v/c Ratio: 0.93	
Intersection Signal Delay: 12.5	Intersection LOS: B
Intersection Capacity Utilization 46.5%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 1007: EB M-96 (Michigan Avenue) (Push Button) & SB I-69 Off-Ramp/EB M-96 (Michigan Avenue)



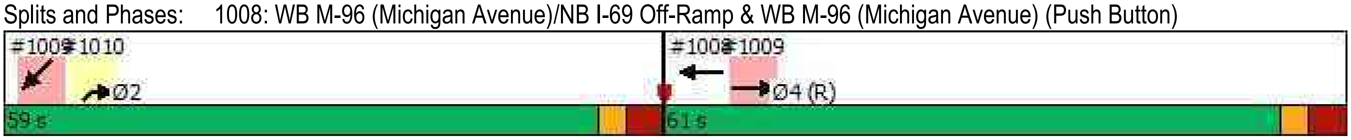
1008: WB M-96 (Michigan Avenue)/NB I-69 Off-Ramp & WB M-96 (Michigan Avenue) (Push Button)

Lane Group	EBL	EBT	WBT	WBR	SWL	SWR	Ø2
Lane Configurations							
Traffic Volume (vph)	0	0	501	0	0	834	
Future Volume (vph)	0	0	501	0	0	834	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.88	
Frt						0.850	
Flt Protected							
Satd. Flow (prot)	0	0	3539	0	0	2787	
Flt Permitted							
Satd. Flow (perm)	0	0	3539	0	0	2787	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)						1086	
Link Speed (mph)		45	25		45		
Link Distance (ft)		217	252		223		
Travel Time (s)		3.3	6.9		3.4		
Peak Hour Factor	0.92	0.92	0.75	0.93	0.92	0.92	
Heavy Vehicles (%)	2%	2%	2%	6%	2%	2%	
Adj. Flow (vph)	0	0	668	0	0	907	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	668	0	0	907	
Turn Type			NA			Free	
Protected Phases			4				2
Permitted Phases						Free	
Minimum Split (s)			16.0				16.0
Total Split (s)			61.0				59.0
Total Split (%)			50.8%				49%
Yellow Time (s)			2.5				2.5
All-Red Time (s)			3.5				3.5
Lost Time Adjust (s)			0.0				
Total Lost Time (s)			6.0				
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)			55.0			120.0	
Actuated g/C Ratio			0.46			1.00	
v/c Ratio			0.41			0.33	
Control Delay			22.7			3.2	
Queue Delay			0.0			0.0	
Total Delay			22.7			3.2	
LOS			C			A	
Approach Delay			22.7		3.2		
Approach LOS			C		A		
Queue Length 50th (ft)			177			71	
Queue Length 95th (ft)			180			72	
Internal Link Dist (ft)		137	172		143		
Turn Bay Length (ft)							
Base Capacity (vph)			1622			2787	
Starvation Cap Reductn			0			0	
Spillback Cap Reductn			0			0	
Storage Cap Reductn			0			0	

Lane Group	EBL	EBT	WBT	WBR	SWL	SWR	Ø2
Reduced v/c Ratio			0.41			0.33	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 92 (77%), Referenced to phase 4:WBT, Start of Green	
Natural Cycle: 45	
Control Type: Pretimed	
Maximum v/c Ratio: 0.59	
Intersection Signal Delay: 11.4	Intersection LOS: B
Intersection Capacity Utilization 49.0%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 1008: WB M-96 (Michigan Avenue)/NB I-69 Off-Ramp & WB M-96 (Michigan Avenue) (Push Button)



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	0	812	0	0	0	0	0	0	0	0	834	0
Future Volume (vph)	0	812	0	0	0	0	0	0	0	0	834	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	3539	0	0	0	0	0	0	0	0	3539	0
Flt Permitted												
Satd. Flow (perm)	0	3539	0	0	0	0	0	0	0	0	3539	0
Right Turn on Red			Yes			Yes			Yes	Yes		Yes
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		209			206			223			213	
Travel Time (s)		3.2			3.1			3.4			3.2	
Peak Hour Factor	0.86	0.86	0.86	0.92	0.92	0.92	0.92	0.92	0.92	0.91	0.91	0.91
Adj. Flow (vph)	0	944	0	0	0	0	0	0	0	0	916	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	944	0	0	0	0	0	0	0	0	916	0
Turn Type		NA									NA	
Protected Phases		4									2	
Permitted Phases												
Minimum Split (s)		16.0									16.0	
Total Split (s)		61.0									59.0	
Total Split (%)		50.8%									49.2%	
Yellow Time (s)		2.5									2.5	
All-Red Time (s)		3.5									3.5	
Lost Time Adjust (s)		0.0									0.0	
Total Lost Time (s)		6.0									6.0	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		55.0									53.0	
Actuated g/C Ratio		0.46									0.44	
v/c Ratio		0.58									0.59	
Control Delay		24.1									24.7	
Queue Delay		0.0									0.0	
Total Delay		24.1									24.7	
LOS		C									C	
Approach Delay		24.1									24.7	
Approach LOS		C									C	
Queue Length 50th (ft)		325									291	
Queue Length 95th (ft)		315									365	
Internal Link Dist (ft)		129			126			143			133	
Turn Bay Length (ft)												
Base Capacity (vph)		1622									1563	
Starvation Cap Reductn		0									0	
Spillback Cap Reductn		0									0	
Storage Cap Reductn		0									0	
Reduced v/c Ratio		0.58									0.59	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 92 (77%), Referenced to phase 4:WBT, Start of Green	
Natural Cycle: 45	
Control Type: Pretimed	
Maximum v/c Ratio: 0.59	
Intersection Signal Delay: 24.4	Intersection LOS: C
Intersection Capacity Utilization 55.5%	ICU Level of Service B
Analysis Period (min) 15	

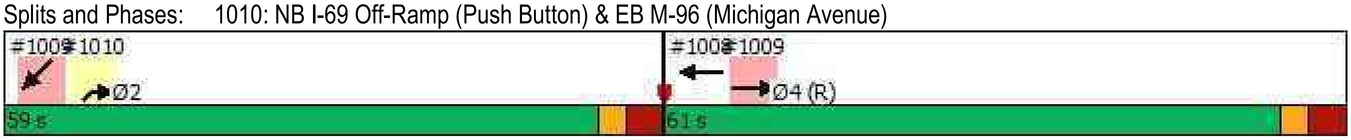
Splits and Phases: 1009: WB M-96 (Michigan Avenue) (Push Button)/WB M-96 (Michigan Avenue) & EB M-96 (Michigan Avenue)

Lane Group	EBT	EBR	WBL	WBT	NEL	NER	Ø4
Lane Configurations							
Traffic Volume (vph)	812	0	0	0	0	122	
Future Volume (vph)	812	0	0	0	0	122	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	0.95	1.00	1.00	1.00	1.00	1.00	
Frt						0.865	
Flt Protected							
Satd. Flow (prot)	3539	0	0	0	0	1611	
Flt Permitted							
Satd. Flow (perm)	3539	0	0	0	0	1611	
Right Turn on Red		Yes				Yes	
Satd. Flow (RTOR)						321	
Link Speed (mph)	45			45	25		
Link Distance (ft)	206			309	315		
Travel Time (s)	3.1			4.7	8.6		
Peak Hour Factor	0.86	0.86	0.92	0.92	0.93	0.75	
Heavy Vehicles (%)	2%	2%	2%	2%	6%	2%	
Adj. Flow (vph)	944	0	0	0	0	163	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	944	0	0	0	0	163	
Turn Type	NA					Prot	
Protected Phases	Free!					2!	4
Permitted Phases							
Minimum Split (s)						16.0	16.0
Total Split (s)						59.0	61.0
Total Split (%)						49.2%	51%
Yellow Time (s)						2.5	2.5
All-Red Time (s)						3.5	3.5
Lost Time Adjust (s)						0.0	
Total Lost Time (s)						6.0	
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)	120.0					53.0	
Actuated g/C Ratio	1.00					0.44	
v/c Ratio	0.27					0.18	
Control Delay	0.2					0.5	
Queue Delay	0.0					0.0	
Total Delay	0.2					0.5	
LOS	A					A	
Approach Delay	0.2				0.5		
Approach LOS	A				A		
Queue Length 50th (ft)	0					0	
Queue Length 95th (ft)	0					0	
Internal Link Dist (ft)	126			229	235		
Turn Bay Length (ft)							
Base Capacity (vph)	3539					890	
Starvation Cap Reductn	0					0	
Spillback Cap Reductn	0					0	
Storage Cap Reductn	0					0	

Lane Group	EBT	EBR	WBL	WBT	NEL	NER	Ø4
Reduced v/c Ratio	0.27					0.18	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 92 (77%), Referenced to phase 4:WBT, Start of Green	
Natural Cycle: 45	
Control Type: Pretimed	
Maximum v/c Ratio: 0.59	
Intersection Signal Delay: 0.2	Intersection LOS: A
Intersection Capacity Utilization 55.5%	ICU Level of Service B
Analysis Period (min) 15	
! Phase conflict between lane groups.	

Splits and Phases: 1010: NB I-69 Off-Ramp (Push Button) & EB M-96 (Michigan Avenue)



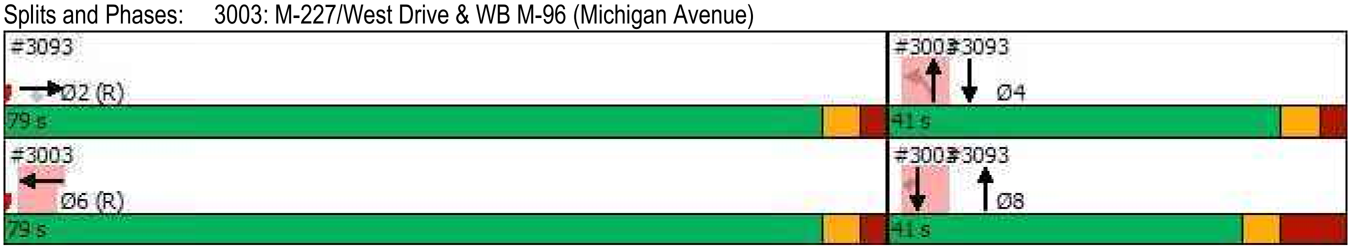
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	786	192	76	50	0	0	84	85
Future Volume (vph)	0	0	0	0	786	192	76	50	0	0	84	85
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		80	0		0	0		0
Storage Lanes	0		0	0		1	1		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.971							0.850
Flt Protected							0.950					
Satd. Flow (prot)	0	0	0	0	4987	0	1671	1863	0	0	1845	1568
Flt Permitted							0.687					
Satd. Flow (perm)	0	0	0	0	4987	0	1209	1863	0	0	1845	1568
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					89							110
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		152			212			101			1197	
Travel Time (s)		2.3			3.2			2.0			23.3	
Peak Hour Factor	0.92	0.92	0.92	0.87	0.87	0.87	0.67	0.67	0.67	0.77	0.77	0.77
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	8%	2%	2%	3%	3%	3%
Adj. Flow (vph)	0	0	0	0	903	221	113	75	0	0	109	110
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1124	0	113	75	0	0	109	110
Turn Type					NA		Perm	NA			NA	Perm
Protected Phases					6			4			8	
Permitted Phases							4					8
Minimum Split (s)					31.0		17.0	17.0			17.0	17.0
Total Split (s)					79.0		41.0	41.0			41.0	41.0
Total Split (%)					65.8%		34.2%	34.2%			34.2%	34.2%
Yellow Time (s)					3.5		3.5	3.5			3.5	3.5
All-Red Time (s)					2.5		2.5	2.5			6.0	6.0
Lost Time Adjust (s)					0.0		0.0	0.0			0.0	0.0
Total Lost Time (s)					6.0		6.0	6.0			9.5	9.5
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)					73.0		35.0	35.0			31.5	31.5
Actuated g/C Ratio					0.61		0.29	0.29			0.26	0.26
v/c Ratio					0.37		0.32	0.14			0.23	0.22
Control Delay					11.2		8.6	5.5			36.2	7.5
Queue Delay					0.0		0.0	0.0			0.0	0.0
Total Delay					11.2		8.6	5.5			36.2	7.5
LOS					B		A	A			D	A
Approach Delay					11.2			7.4			21.8	
Approach LOS					B			A			C	
Queue Length 50th (ft)					137		11	7			66	0
Queue Length 95th (ft)					158		11	8			98	28
Internal Link Dist (ft)		72			132			21			1117	
Turn Bay Length (ft)												
Base Capacity (vph)					3068		352	543			484	492

Lane Group	Ø2
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	2
Permitted Phases	
Minimum Split (s)	16.0
Total Split (s)	79.0
Total Split (%)	66%
Yellow Time (s)	3.5
All-Red Time (s)	2.5
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
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)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
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					0.37		0.32	0.14			0.23	0.22

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 112 (93%), Referenced to phase 2:EBT and 6:, Start of Green	
Natural Cycle: 50	
Control Type: Pretimed	
Maximum v/c Ratio: 0.43	
Intersection Signal Delay: 12.2	Intersection LOS: B
Intersection Capacity Utilization 49.1%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 3003: M-227/West Drive & WB M-96 (Michigan Avenue)



Lane Group	Ø2
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

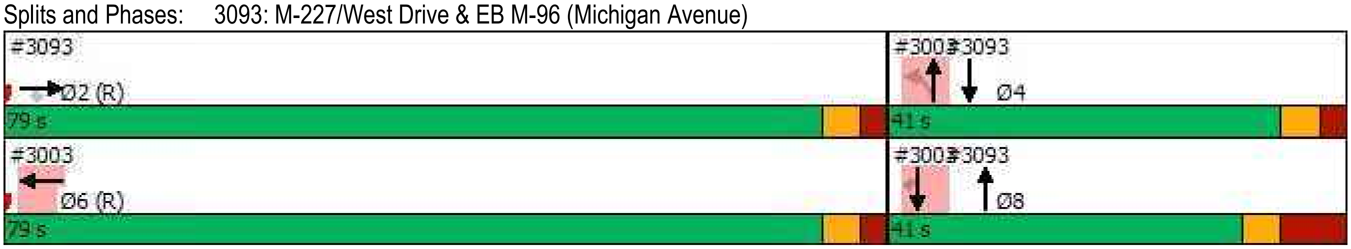
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	882	59	0	0	0	0	126	30	0	84	0
Future Volume (vph)	0	882	59	0	0	0	0	126	30	0	84	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		65	0		0	100		0	0		0
Storage Lanes	0		1	0		0	1		0	0		0
Taper Length (ft)	25			25			70			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Frt			0.850					0.971				
Flt Protected												
Satd. Flow (prot)	0	3574	1442	0	0	0	0	3344	0	0	1881	0
Flt Permitted												
Satd. Flow (perm)	0	3574	1442	0	0	0	0	3344	0	0	1881	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			59					24				
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		161			222			1117			101	
Travel Time (s)		2.4			3.4			21.8			2.0	
Peak Hour Factor	0.95	0.95	0.95	0.92	0.92	0.92	0.72	0.72	0.72	0.83	0.83	0.83
Heavy Vehicles (%)	2%	1%	12%	2%	2%	2%	2%	6%	0%	2%	1%	2%
Adj. Flow (vph)	0	928	62	0	0	0	0	175	42	0	101	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	928	62	0	0	0	0	217	0	0	101	0
Turn Type		NA	Perm					NA			NA	
Protected Phases		2						8			4	
Permitted Phases			2									
Minimum Split (s)		16.0	16.0					17.0			17.0	
Total Split (s)		79.0	79.0					41.0			41.0	
Total Split (%)		65.8%	65.8%					34.2%			34.2%	
Yellow Time (s)		3.5	3.5					3.5			3.5	
All-Red Time (s)		2.5	2.5					6.0			2.5	
Lost Time Adjust (s)		0.0	0.0					0.0			0.0	
Total Lost Time (s)		6.0	6.0					9.5			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		73.0	73.0					31.5			35.0	
Actuated g/C Ratio		0.61	0.61					0.26			0.29	
v/c Ratio		0.43	0.07					0.24			0.18	
Control Delay		4.5	0.2					31.7			0.7	
Queue Delay		0.0	0.0					0.0			0.0	
Total Delay		4.5	0.2					31.7			0.7	
LOS		A	A					C			A	
Approach Delay		4.2						31.7			0.7	
Approach LOS		A						C			A	
Queue Length 50th (ft)		43	1					61			0	
Queue Length 95th (ft)		51	0					73			0	
Internal Link Dist (ft)		81			142			1037			21	
Turn Bay Length (ft)			65									
Base Capacity (vph)		2174	900					895			548	

Lane Group	Ø6
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	6
Permitted Phases	
Minimum Split (s)	31.0
Total Split (s)	79.0
Total Split (%)	66%
Yellow Time (s)	3.5
All-Red Time (s)	2.5
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
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)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn		0	0					0			0	
Spillback Cap Reductn		0	0					18			0	
Storage Cap Reductn		0	0					0			0	
Reduced v/c Ratio		0.43	0.07					0.25			0.18	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 112 (93%), Referenced to phase 2:EBT and 6:, Start of Green	
Natural Cycle: 50	
Control Type: Pretimed	
Maximum v/c Ratio: 0.43	
Intersection Signal Delay: 8.5	Intersection LOS: A
Intersection Capacity Utilization 49.1%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 3093: M-227/West Drive & EB M-96 (Michigan Avenue)



Lane Group	Ø6
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations										
Traffic Volume (vph)	0	0	0	0	1681	1561	1477	116	0	0
Future Volume (vph)	0	0	0	0	1681	1561	1477	116	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	300		300	0	200	0	0
Storage Lanes	0		0	0		1	2	1	0	0
Taper Length (ft)	25			25			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.88	0.97	1.00	1.00	1.00
Frt						0.850		0.850		
Flt Protected							0.950			
Satd. Flow (prot)	0	0	0	0	3539	2787	3433	1583	0	0
Flt Permitted							0.950			
Satd. Flow (perm)	0	0	0	0	3539	2787	3433	1583	0	0
Right Turn on Red			Yes	Yes		Yes		Yes		
Satd. Flow (RTOR)						582		27		
Link Speed (mph)		45			45		55		45	
Link Distance (ft)		858			894		434		215	
Travel Time (s)		13.0			13.5		5.4		3.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	1827	1697	1605	126	0	0
Shared Lane Traffic (%)										
Lane Group Flow (vph)	0	0	0	0	1827	1697	1605	126	0	0
Turn Type					NA	Free	Prot	Perm		
Protected Phases					8		2			
Permitted Phases						Free		2		
Minimum Split (s)					16.0		16.0	16.0		
Total Split (s)					60.0		60.0	60.0		
Total Split (%)					50.0%		50.0%	50.0%		
Yellow Time (s)					3.5		3.5	3.5		
All-Red Time (s)					2.5		2.5	2.5		
Lost Time Adjust (s)					0.0		0.0	0.0		
Total Lost Time (s)					6.0		6.0	6.0		
Lead/Lag										
Lead-Lag Optimize?										
Act Effct Green (s)					54.0	120.0	54.0	54.0		
Actuated g/C Ratio					0.45	1.00	0.45	0.45		
v/c Ratio					1.15	0.61	1.04	0.17		
Control Delay					97.7	0.5	57.3	6.1		
Queue Delay					0.0	0.0	0.0	0.0		
Total Delay					97.7	0.5	57.3	6.1		
LOS					F	A	E	A		
Approach Delay					50.9		53.6			
Approach LOS					D		D			
Queue Length 50th (ft)					~893	0	~701	27		
Queue Length 95th (ft)					#1014	0	#841	24		
Internal Link Dist (ft)		778			814		354		135	
Turn Bay Length (ft)						300		200		
Base Capacity (vph)					1592	2787	1544	727		
Starvation Cap Reductn					0	0	0	0		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Spillback Cap Reductn					0	0	0	0		
Storage Cap Reductn					0	0	0	0		
Reduced v/c Ratio					1.15	0.61	1.04	0.17		

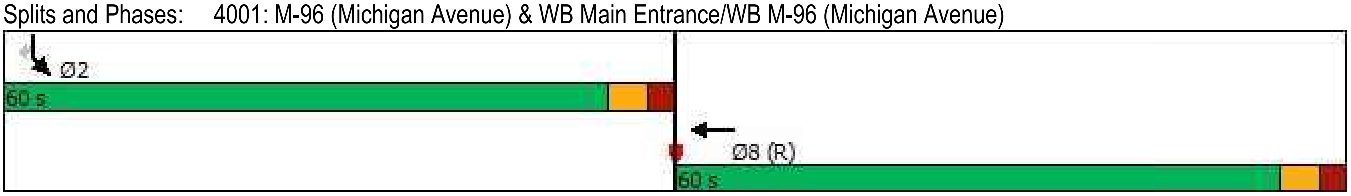
Intersection Summary

Area Type:	Other	
Cycle Length: 120		
Actuated Cycle Length: 120		
Offset: 36 (30%), Referenced to phase 8:WBT, Start of Green		
Natural Cycle: 150		
Control Type: Pretimed		
Maximum v/c Ratio: 1.15		
Intersection Signal Delay: 51.8		Intersection LOS: D
Intersection Capacity Utilization 98.6%		ICU Level of Service F
Analysis Period (min) 15		

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

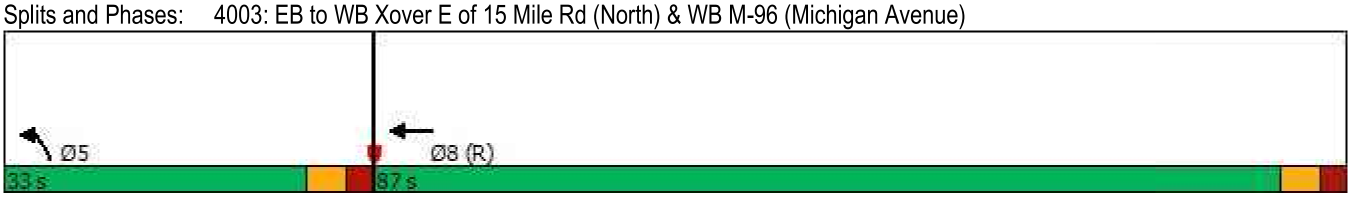
Splits and Phases: 4001: M-96 (Michigan Avenue) & WB Main Entrance/WB M-96 (Michigan Avenue)



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑↑	↰↰	
Traffic Volume (vph)	0	0	0	2811	519	0
Future Volume (vph)	0	0	0	2811	519	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	0.97	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	5085	3433	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	5085	3433	0
Right Turn on Red		Yes			Yes	Yes
Satd. Flow (RTOR)					4	
Link Speed (mph)	45			45	25	
Link Distance (ft)	660			254	113	
Travel Time (s)	10.0			3.8	3.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.70	0.92
Adj. Flow (vph)	0	0	0	3055	741	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	3055	741	0
Turn Type				NA	Prot	
Protected Phases				8	5	
Permitted Phases						
Minimum Split (s)				16.0	13.0	
Total Split (s)				87.0	33.0	
Total Split (%)				72.5%	27.5%	
Yellow Time (s)				3.5	3.5	
All-Red Time (s)				2.5	2.5	
Lost Time Adjust (s)				0.0	0.0	
Total Lost Time (s)				6.0	6.0	
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)				81.0	27.0	
Actuated g/C Ratio				0.68	0.22	
v/c Ratio				0.89	0.96	
Control Delay				13.2	72.4	
Queue Delay				0.0	0.0	
Total Delay				13.2	72.4	
LOS				B	E	
Approach Delay				13.2	72.4	
Approach LOS				B	E	
Queue Length 50th (ft)				325	302	
Queue Length 95th (ft)				345	278	
Internal Link Dist (ft)	580			174	33	
Turn Bay Length (ft)						
Base Capacity (vph)				3432	775	
Starvation Cap Reductn				0	0	
Spillback Cap Reductn				3	0	
Storage Cap Reductn				0	0	
Reduced v/c Ratio				0.89	0.96	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 116 (97%), Referenced to phase 8:WBT, Start of Green	
Natural Cycle: 90	
Control Type: Pretimed	
Maximum v/c Ratio: 0.96	
Intersection Signal Delay: 24.8	Intersection LOS: C
Intersection Capacity Utilization 106.5%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 4003: EB to WB Xover E of 15 Mile Rd (North) & WB M-96 (Michigan Avenue)

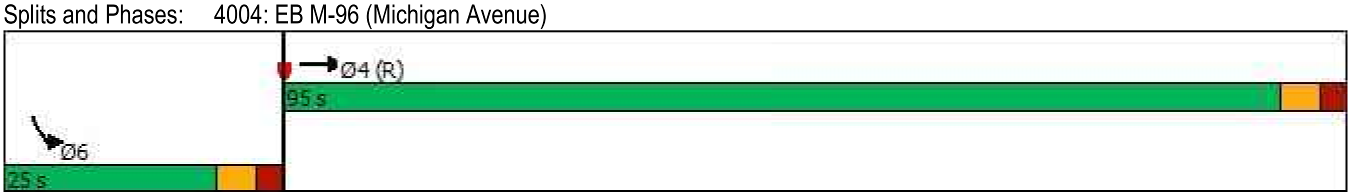


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	1312	0	0	308	0
Future Volume (vph)	0	1312	0	0	308	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	0.97	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	3433	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	3433	0
Right Turn on Red				Yes	Yes	Yes
Satd. Flow (RTOR)					164	
Link Speed (mph)		55	55		25	
Link Distance (ft)		2678	669		109	
Travel Time (s)		33.2	8.3		3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1426	0	0	335	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1426	0	0	335	0
Turn Type		NA			Prot	
Protected Phases		4			6	
Permitted Phases						
Detector Phase		4			6	
Switch Phase						
Minimum Initial (s)		10.0			7.0	
Minimum Split (s)		16.0			13.0	
Total Split (s)		95.0			25.0	
Total Split (%)		79.2%			20.8%	
Yellow Time (s)		3.5			3.5	
All-Red Time (s)		2.5			2.5	
Lost Time Adjust (s)		0.0			0.0	
Total Lost Time (s)		6.0			6.0	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode		C-Max			None	
Act Effct Green (s)		96.4			11.6	
Actuated g/C Ratio		0.80			0.10	
v/c Ratio		0.50			0.70	
Control Delay		1.5			28.2	
Queue Delay		0.0			0.0	
Total Delay		1.5			28.2	
LOS		A			C	
Approach Delay		1.5			28.2	
Approach LOS		A			C	
Queue Length 50th (ft)		23			53	
Queue Length 95th (ft)		25			103	
Internal Link Dist (ft)		2598	589		29	
Turn Bay Length (ft)						
Base Capacity (vph)		2842			681	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Starvation Cap Reductn		0			0	
Spillback Cap Reductn		1			0	
Storage Cap Reductn		0			0	
Reduced v/c Ratio		0.50			0.49	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 20 (17%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 40	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.70	
Intersection Signal Delay: 6.6	Intersection LOS: A
Intersection Capacity Utilization 80.0%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 4004: EB M-96 (Michigan Avenue)

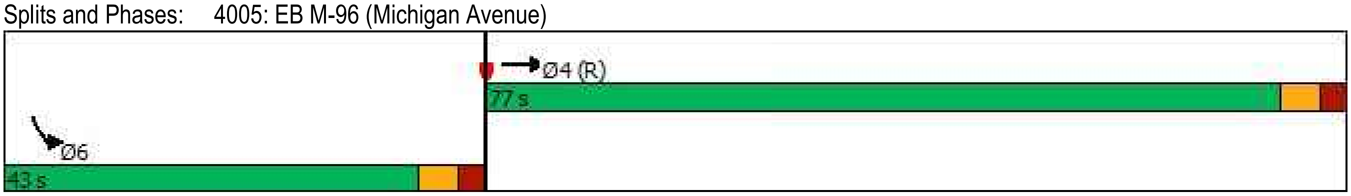


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	816	0	0	549	0
Future Volume (vph)	0	816	0	0	549	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	0.97	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	3433	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	3433	0
Right Turn on Red				Yes	Yes	Yes
Satd. Flow (RTOR)					294	
Link Speed (mph)		55	55		25	
Link Distance (ft)		1786	608		109	
Travel Time (s)		22.1	7.5		3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	887	0	0	597	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	887	0	0	597	0
Turn Type		NA			Prot	
Protected Phases		4			6	
Permitted Phases						
Detector Phase		4			6	
Switch Phase						
Minimum Initial (s)		10.0			7.0	
Minimum Split (s)		16.0			13.0	
Total Split (s)		77.0			43.0	
Total Split (%)		64.2%			35.8%	
Yellow Time (s)		3.5			3.5	
All-Red Time (s)		2.5			2.5	
Lost Time Adjust (s)		0.0			0.0	
Total Lost Time (s)		6.0			6.0	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode		C-Max			Max	
Act Effct Green (s)		71.0			37.0	
Actuated g/C Ratio		0.59			0.31	
v/c Ratio		0.42			0.47	
Control Delay		14.1			20.6	
Queue Delay		0.0			0.0	
Total Delay		14.1			20.6	
LOS		B			C	
Approach Delay		14.1			20.6	
Approach LOS		B			C	
Queue Length 50th (ft)		185			131	
Queue Length 95th (ft)		231			183	
Internal Link Dist (ft)		1706	528		29	
Turn Bay Length (ft)						
Base Capacity (vph)		2093			1261	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Starvation Cap Reductn		0			0	
Spillback Cap Reductn		0			0	
Storage Cap Reductn		0			0	
Reduced v/c Ratio		0.42			0.47	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 112 (93%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 40	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.47	
Intersection Signal Delay: 16.7	Intersection LOS: B
Intersection Capacity Utilization 52.5%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4005: EB M-96 (Michigan Avenue)

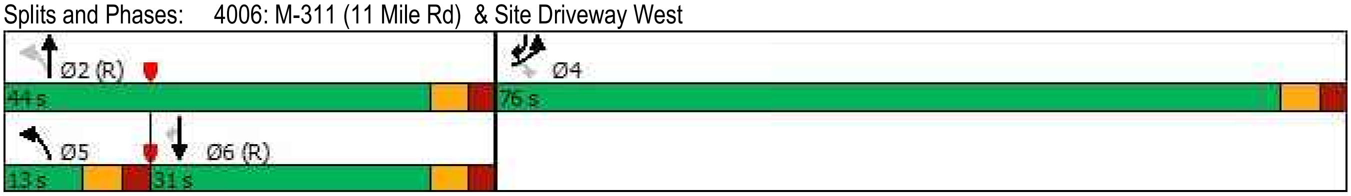


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	575	31	31	132	159	575
Future Volume (vph)	575	31	31	132	159	575
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	250	250			0
Storage Lanes	2	1	1			1
Taper Length (ft)	25		25			
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	1.00
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	3433	1583	1770	1863	1863	1583
Flt Permitted	0.950		0.592			
Satd. Flow (perm)	3433	1583	1103	1863	1863	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		34				625
Link Speed (mph)	25			55	55	
Link Distance (ft)	1178			1461	940	
Travel Time (s)	32.1			18.1	11.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	625	34	34	143	173	625
Shared Lane Traffic (%)						
Lane Group Flow (vph)	625	34	34	143	173	625
Turn Type	Prot	Perm	pm+pt	NA	NA	pm+ov
Protected Phases	4		5	2	6	4
Permitted Phases		4	2			6
Detector Phase	4	4	5	2	6	4
Switch Phase						
Minimum Initial (s)	7.0	7.0	7.0	10.0	10.0	7.0
Minimum Split (s)	14.0	14.0	13.0	17.0	17.0	14.0
Total Split (s)	76.0	76.0	13.0	44.0	31.0	76.0
Total Split (%)	63.3%	63.3%	10.8%	36.7%	25.8%	63.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.5	2.5	2.5	2.5	2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None	None	Min	C-Max	C-Max	None
Act Effct Green (s)	31.2	31.2	76.8	76.8	63.7	100.9
Actuated g/C Ratio	0.26	0.26	0.64	0.64	0.53	0.84
v/c Ratio	0.70	0.08	0.05	0.12	0.18	0.44
Control Delay	44.1	9.7	9.9	9.9	16.1	2.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	44.1	9.7	9.9	9.9	16.1	2.2
LOS	D	A	A	A	B	A
Approach Delay	42.3			9.9	5.2	
Approach LOS	D			A	A	
Queue Length 50th (ft)	226	0	9	40	38	32
Queue Length 95th (ft)	261	23	26	82	86	56

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Internal Link Dist (ft)	1098			1381	860	
Turn Bay Length (ft)		250	250			
Base Capacity (vph)	2002	937	745	1192	988	1583
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	0.31	0.04	0.05	0.12	0.18	0.39

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 60 (50%), Referenced to phase 2:NBTL and 6:SBT, Start of Green	
Natural Cycle: 45	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.70	
Intersection Signal Delay: 20.7	Intersection LOS: C
Intersection Capacity Utilization 51.4%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4006: M-311 (11 Mile Rd) & Site Driveway West

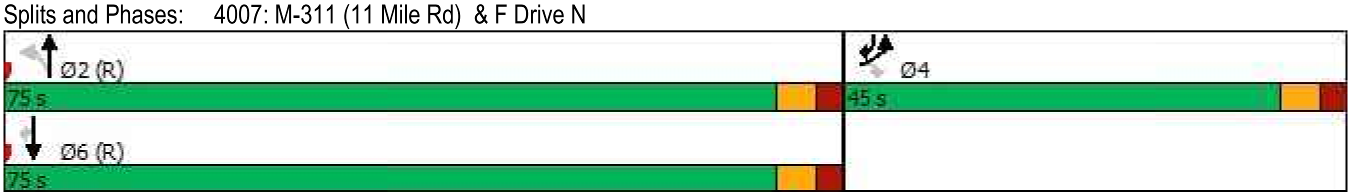


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	515	15	15	1041	1068	515
Future Volume (vph)	515	15	15	1041	1068	515
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	250	400			0
Storage Lanes	2	1	1			1
Taper Length (ft)	25		25			
Lane Util. Factor	0.97	1.00	1.00	0.95	0.95	1.00
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	3433	1583	1770	3539	3539	1583
Flt Permitted	0.950		0.203			
Satd. Flow (perm)	3433	1583	378	3539	3539	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		16				
Link Speed (mph)	45			55	55	
Link Distance (ft)	1846			974	1093	
Travel Time (s)	28.0			12.1	13.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	560	16	16	1132	1161	560
Shared Lane Traffic (%)						
Lane Group Flow (vph)	560	16	16	1132	1161	560
Turn Type	Prot	Perm	Perm	NA	NA	pm+ov
Protected Phases	4			2	6	4
Permitted Phases		4	2			6
Detector Phase	4	4	2	2	6	4
Switch Phase						
Minimum Initial (s)	7.0	7.0	10.0	10.0	10.0	7.0
Minimum Split (s)	13.0	13.0	16.0	16.0	16.0	13.0
Total Split (s)	45.0	45.0	75.0	75.0	75.0	45.0
Total Split (%)	37.5%	37.5%	62.5%	62.5%	62.5%	37.5%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.5	2.5	2.5	2.5	2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None	None	C-Max	C-Max	C-Max	None
Act Effct Green (s)	26.5	26.5	81.5	81.5	81.5	120.0
Actuated g/C Ratio	0.22	0.22	0.68	0.68	0.68	1.00
v/c Ratio	0.74	0.04	0.06	0.47	0.48	0.35
Control Delay	49.5	14.5	3.7	8.4	4.6	0.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	49.5	14.5	3.7	8.4	4.6	0.5
LOS	D	B	A	A	A	A
Approach Delay	48.5			8.4	3.3	
Approach LOS	D			A	A	
Queue Length 50th (ft)	208	0	4	333	64	0
Queue Length 95th (ft)	253	18	m4	67	133	0

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Internal Link Dist (ft)	1766			894	1013	
Turn Bay Length (ft)		250	400			
Base Capacity (vph)	1115	525	256	2404	2404	1583
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	0.50	0.03	0.06	0.47	0.48	0.35

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 20 (17%), Referenced to phase 2:NBTL and 6:SBT, Start of Green	
Natural Cycle: 40	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.74	
Intersection Signal Delay: 12.5	Intersection LOS: B
Intersection Capacity Utilization 54.2%	ICU Level of Service A
Analysis Period (min) 15	
m Volume for 95th percentile queue is metered by upstream signal.	

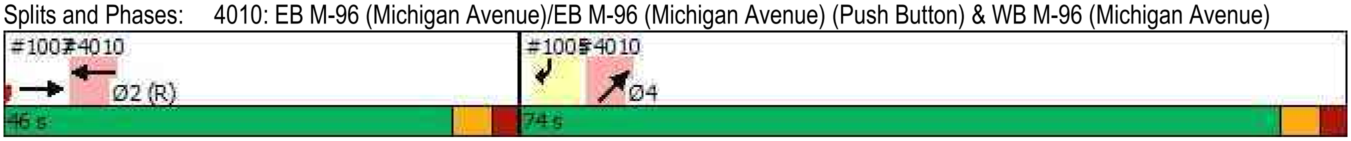
Splits and Phases: 4007: M-311 (11 Mile Rd) & F Drive N



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations					↑↑↑			↑↑↑				
Traffic Volume (vph)	0	0	0	0	1216	0	0	2266	0	0	0	0
Future Volume (vph)	0	0	0	0	1216	0	0	2266	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.91	1.00	1.00	1.00	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	0	0	0	5085	0	0	5085	0	0	0	0
Flt Permitted												
Satd. Flow (perm)	0	0	0	0	5085	0	0	5085	0	0	0	0
Right Turn on Red			Yes			Yes	Yes		Yes			Yes
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		194			183			156			190	
Travel Time (s)		2.9			2.8			2.4			2.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.90	0.90	0.90	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	1322	0	0	2518	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1322	0	0	2518	0	0	0	0
Turn Type					NA			NA				
Protected Phases					2			4				
Permitted Phases												
Minimum Split (s)					17.0			17.0				
Total Split (s)					46.0			74.0				
Total Split (%)					38.3%			61.7%				
Yellow Time (s)					3.5			3.5				
All-Red Time (s)					2.5			2.5				
Lost Time Adjust (s)					0.0			0.0				
Total Lost Time (s)					6.0			6.0				
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)					40.0			68.0				
Actuated g/C Ratio					0.33			0.57				
v/c Ratio					0.78			0.87				
Control Delay					36.5			15.6				
Queue Delay					0.0			0.0				
Total Delay					36.5			15.6				
LOS					D			B				
Approach Delay					36.5			15.6				
Approach LOS					D			B				
Queue Length 50th (ft)					379			397				
Queue Length 95th (ft)					432			535				
Internal Link Dist (ft)		114			103			76			110	
Turn Bay Length (ft)												
Base Capacity (vph)					1695			2881				
Starvation Cap Reductn					0			0				
Spillback Cap Reductn					0			0				
Storage Cap Reductn					0			0				
Reduced v/c Ratio					0.78			0.87				

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 100 (83%), Referenced to phase 2:EBT, Start of Green	
Natural Cycle: 75	
Control Type: Pretimed	
Maximum v/c Ratio: 0.93	
Intersection Signal Delay: 22.8	Intersection LOS: C
Intersection Capacity Utilization 77.3%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 4010: EB M-96 (Michigan Avenue)/EB M-96 (Michigan Avenue) (Push Button) & WB M-96 (Michigan Avenue)



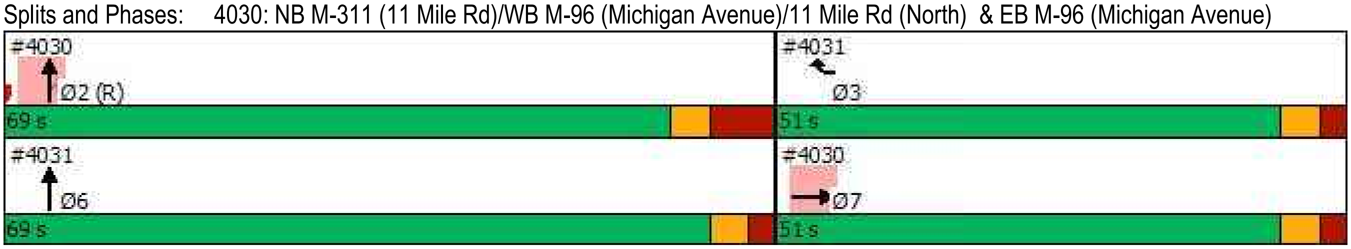
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑						↑↑↑	↱			
Traffic Volume (vph)	0	707	0	0	0	0	0	1305	251	0	0	0
Future Volume (vph)	0	707	0	0	0	0	0	1305	251	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		250	0		0
Storage Lanes	0		0	0		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	1.00	1.00
Frt									0.850			
Flt Protected												
Satd. Flow (prot)	0	3539	0	0	0	0	0	5085	1583	0	0	0
Flt Permitted												
Satd. Flow (perm)	0	3539	0	0	0	0	0	5085	1583	0	0	0
Right Turn on Red	Yes		Yes			Yes			Yes			Yes
Satd. Flow (RTOR)									71			
Link Speed (mph)		55			55			55			30	
Link Distance (ft)		167			316			655			182	
Travel Time (s)		2.1			3.9			8.1			4.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	768	0	0	0	0	0	1418	273	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	768	0	0	0	0	0	1418	273	0	0	0
Turn Type		NA						NA	Perm			
Protected Phases		7						2				
Permitted Phases									2			
Minimum Split (s)		16.0						19.5	19.5			
Total Split (s)		51.0						69.0	69.0			
Total Split (%)		42.5%						57.5%	57.5%			
Yellow Time (s)		3.5						3.5	3.5			
All-Red Time (s)		2.5						6.0	6.0			
Lost Time Adjust (s)		0.0						0.0	0.0			
Total Lost Time (s)		6.0						9.5	9.5			
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		45.0						59.5	59.5			
Actuated g/C Ratio		0.38						0.50	0.50			
v/c Ratio		0.58						0.56	0.33			
Control Delay		33.2						27.7	20.4			
Queue Delay		0.0						0.0	0.0			
Total Delay		33.2						27.7	20.4			
LOS		C						C	C			
Approach Delay		33.2						26.5				
Approach LOS		C						C				
Queue Length 50th (ft)		285						283	98			
Queue Length 95th (ft)		353						322	152			
Internal Link Dist (ft)		87			236			575			102	
Turn Bay Length (ft)									250			
Base Capacity (vph)		1327						2521	820			
Starvation Cap Reductn		0						0	0			

Lane Group	Ø3	Ø6
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Ideal Flow (vphpl)		
Storage Length (ft)		
Storage Lanes		
Taper Length (ft)		
Lane Util. Factor		
Frt		
Flt Protected		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Peak Hour Factor		
Adj. Flow (vph)		
Shared Lane Traffic (%)		
Lane Group Flow (vph)		
Turn Type		
Protected Phases	3	6
Permitted Phases		
Minimum Split (s)	16.0	16.0
Total Split (s)	51.0	69.0
Total Split (%)	43%	58%
Yellow Time (s)	3.5	3.5
All-Red Time (s)	2.5	2.5
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag		
Lead-Lag Optimize?		
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		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn		0						0	0			
Storage Cap Reductn		0						0	0			
Reduced v/c Ratio		0.58						0.56	0.33			

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 88 (73%), Referenced to phase 2:NBT, Start of Green	
Natural Cycle: 60	
Control Type: Pretimed	
Maximum v/c Ratio: 0.86	
Intersection Signal Delay: 28.6	Intersection LOS: C
Intersection Capacity Utilization 60.9%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 4030: NB M-311 (11 Mile Rd)/WB M-96 (Michigan Avenue)/11 Mile Rd (North) & EB M-96 (Michigan Avenue)



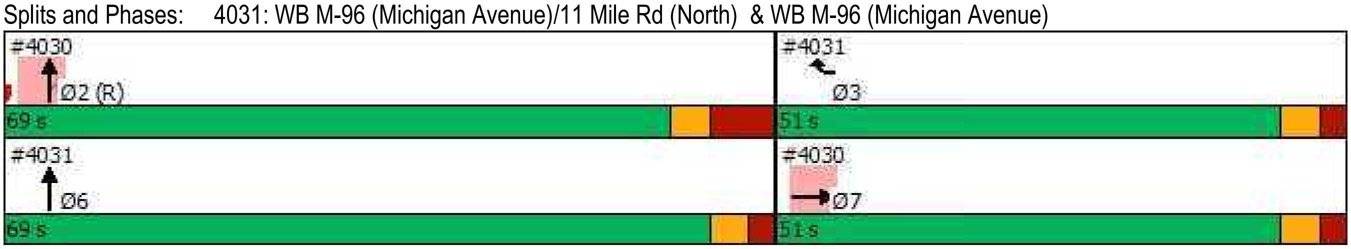
Lane Group	Ø3	Ø6
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		

Intersection Summary

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø2	Ø7
Lane Configurations								
Traffic Volume (vph)	0	1102	1305	0	0	0		
Future Volume (vph)	0	1102	1305	0	0	0		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Lane Util. Factor	1.00	0.76	0.91	1.00	1.00	1.00		
Frt		0.850						
Flt Protected								
Satd. Flow (prot)	0	3610	5085	0	0	0		
Flt Permitted								
Satd. Flow (perm)	0	3610	5085	0	0	0		
Right Turn on Red		Yes		Yes				
Satd. Flow (RTOR)		64						
Link Speed (mph)	55		55			55		
Link Distance (ft)	405		182			493		
Travel Time (s)	5.0		2.3			6.1		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Adj. Flow (vph)	0	1198	1418	0	0	0		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	0	1198	1418	0	0	0		
Turn Type		Prot	NA					
Protected Phases		3	6				2	7
Permitted Phases								
Minimum Split (s)		16.0	16.0				19.5	16.0
Total Split (s)		51.0	69.0				69.0	51.0
Total Split (%)		42.5%	57.5%				58%	43%
Yellow Time (s)		3.5	3.5				3.5	3.5
All-Red Time (s)		2.5	2.5				6.0	2.5
Lost Time Adjust (s)		0.0	0.0					
Total Lost Time (s)		6.0	6.0					
Lead/Lag								
Lead-Lag Optimize?								
Act Effct Green (s)		45.0	63.0					
Actuated g/C Ratio		0.38	0.52					
v/c Ratio		0.86	0.53					
Control Delay		37.8	0.7					
Queue Delay		0.0	0.0					
Total Delay		37.8	0.7					
LOS		D	A					
Approach Delay	37.8		0.7					
Approach LOS	D		A					
Queue Length 50th (ft)		355	0					
Queue Length 95th (ft)		435	0					
Internal Link Dist (ft)	325		102			413		
Turn Bay Length (ft)								
Base Capacity (vph)		1393	2669					
Starvation Cap Reductn		0	51					
Spillback Cap Reductn		0	0					
Storage Cap Reductn		0	0					
Reduced v/c Ratio		0.86	0.54					

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 88 (73%), Referenced to phase 2:NBT, Start of Green	
Natural Cycle: 60	
Control Type: Pretimed	
Maximum v/c Ratio: 0.86	
Intersection Signal Delay: 17.7	Intersection LOS: B
Intersection Capacity Utilization 60.9%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 4031: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & WB M-96 (Michigan Avenue)

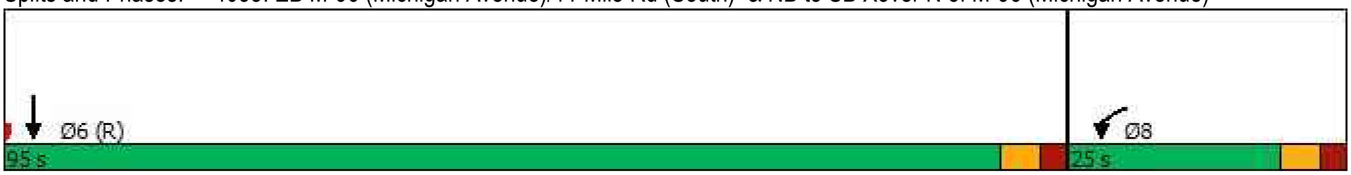


Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	280	0	0	0	0	2010
Future Volume (vph)	280	0	0	0	0	2010
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	0.91
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	3433	0	0	0	0	5085
Flt Permitted	0.950					
Satd. Flow (perm)	3433	0	0	0	0	5085
Right Turn on Red	Yes	Yes		Yes		
Satd. Flow (RTOR)	38					
Link Speed (mph)	25		55			30
Link Distance (ft)	105		587			495
Travel Time (s)	2.9		7.3			11.3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	304	0	0	0	0	2185
Shared Lane Traffic (%)						
Lane Group Flow (vph)	304	0	0	0	0	2185
Turn Type	Prot					NA
Protected Phases	8					6
Permitted Phases						
Minimum Split (s)	13.0					16.0
Total Split (s)	25.0					95.0
Total Split (%)	20.8%					79.2%
Yellow Time (s)	3.5					3.5
All-Red Time (s)	2.5					2.5
Lost Time Adjust (s)	0.0					0.0
Total Lost Time (s)	6.0					6.0
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)	19.0					89.0
Actuated g/C Ratio	0.16					0.74
v/c Ratio	0.53					0.58
Control Delay	14.6					2.4
Queue Delay	0.0					0.1
Total Delay	14.6					2.6
LOS	B					A
Approach Delay	14.6					2.6
Approach LOS	B					A
Queue Length 50th (ft)	52					43
Queue Length 95th (ft)	m76					46
Internal Link Dist (ft)	25		507			415
Turn Bay Length (ft)						
Base Capacity (vph)	575					3771
Starvation Cap Reductn	0					510
Spillback Cap Reductn	0					0
Storage Cap Reductn	0					0
Reduced v/c Ratio	0.53					0.67

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 89 (74%), Referenced to phase 6:SBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.58	
Intersection Signal Delay: 4.1	Intersection LOS: A
Intersection Capacity Utilization 88.3%	ICU Level of Service E
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4033: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & NB to SB Xover N of M-96 (Michigan Avenue)



Lane Group	NBL	NBT	SBT	SBR	SEL	SER	Ø2
Lane Configurations							
Traffic Volume (vph)	0	0	1461	0	0	549	
Future Volume (vph)	0	0	1461	0	0	549	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	0.91	1.00	1.00	0.88	
Frt						0.850	
Flt Protected							
Satd. Flow (prot)	0	0	5085	0	0	2787	
Flt Permitted							
Satd. Flow (perm)	0	0	5085	0	0	2787	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)						237	
Link Speed (mph)		30	30		30		
Link Distance (ft)		495	145		346		
Travel Time (s)		11.3	3.3		7.9		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	0	0	1588	0	0	597	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	1588	0	0	597	
Turn Type			NA			Prot	
Protected Phases			Free!			4!	2
Permitted Phases							
Minimum Split (s)						16.0	16.0
Total Split (s)						60.0	60.0
Total Split (%)						50.0%	50%
Yellow Time (s)						3.5	3.5
All-Red Time (s)						2.5	2.5
Lost Time Adjust (s)						0.0	
Total Lost Time (s)						6.0	
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)			120.0			54.0	
Actuated g/C Ratio			1.00			0.45	
v/c Ratio			0.31			0.43	
Control Delay			0.1			14.0	
Queue Delay			0.0			0.0	
Total Delay			0.1			14.0	
LOS			A			B	
Approach Delay			0.1		14.0		
Approach LOS			A		B		
Queue Length 50th (ft)			0			101	
Queue Length 95th (ft)			0			152	
Internal Link Dist (ft)		415	65		266		
Turn Bay Length (ft)							
Base Capacity (vph)			5085			1384	
Starvation Cap Reductn			0			0	
Spillback Cap Reductn			0			0	
Storage Cap Reductn			0			0	
Reduced v/c Ratio			0.31			0.43	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 27 (23%), Referenced to phase 4:SER, Start of Green	
Natural Cycle: 55	
Control Type: Pretimed	
Maximum v/c Ratio: 0.71	
Intersection Signal Delay: 3.9	Intersection LOS: A
Intersection Capacity Utilization 67.2%	ICU Level of Service C
Analysis Period (min) 15	

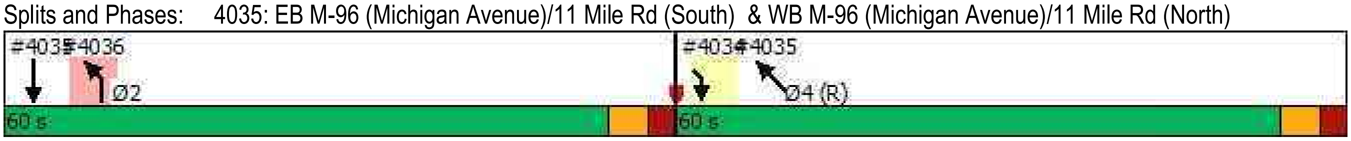
! Phase conflict between lane groups.

Splits and Phases: 4034: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & EB I-94 Off-ramp

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	1461	0	0	0	0	0	1499	0
Future Volume (vph)	0	0	0	0	1461	0	0	0	0	0	1499	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.91	1.00	1.00	1.00	1.00	1.00	0.91	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	0	0	0	5085	0	0	0	0	0	5085	0
Flt Permitted												
Satd. Flow (perm)	0	0	0	0	5085	0	0	0	0	0	5085	0
Right Turn on Red			Yes			Yes			Yes	Yes		Yes
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		145			194			233			108	
Travel Time (s)		3.3			4.4			5.3			2.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	1588	0	0	0	0	0	1629	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1588	0	0	0	0	0	1629	0
Turn Type					NA						NA	
Protected Phases					2						4	
Permitted Phases												
Minimum Split (s)					16.0						16.0	
Total Split (s)					60.0						60.0	
Total Split (%)					50.0%						50.0%	
Yellow Time (s)					3.5						3.5	
All-Red Time (s)					2.5						2.5	
Lost Time Adjust (s)					0.0						0.0	
Total Lost Time (s)					6.0						6.0	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)					54.0						54.0	
Actuated g/C Ratio					0.45						0.45	
v/c Ratio					0.69						0.71	
Control Delay					23.4						30.6	
Queue Delay					0.0						0.0	
Total Delay					23.4						30.6	
LOS					C						C	
Approach Delay					23.4						30.6	
Approach LOS					C						C	
Queue Length 50th (ft)					330						387	
Queue Length 95th (ft)					406						443	
Internal Link Dist (ft)		65			114			153			28	
Turn Bay Length (ft)												
Base Capacity (vph)					2288						2288	
Starvation Cap Reductn					40						0	
Spillback Cap Reductn					0						0	
Storage Cap Reductn					0						0	
Reduced v/c Ratio					0.71						0.71	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 27 (23%), Referenced to phase 4:SER, Start of Green	
Natural Cycle: 55	
Control Type: Pretimed	
Maximum v/c Ratio: 0.71	
Intersection Signal Delay: 27.1	Intersection LOS: C
Intersection Capacity Utilization 69.6%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 4035: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & WB M-96 (Michigan Avenue)/11 Mile Rd (North)



Lane Group	NBL	NBR	SET	SER	NWL	NWT	Ø4
Lane Configurations							
Traffic Volume (vph)	104	0	0	0	0	1499	
Future Volume (vph)	104	0	0	0	0	1499	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.91	
Frt							
Flt Protected	0.950						
Satd. Flow (prot)	1719	0	0	0	0	5085	
Flt Permitted	0.950						
Satd. Flow (perm)	1719	0	0	0	0	5085	
Right Turn on Red	Yes	Yes		Yes			
Satd. Flow (RTOR)	127						
Link Speed (mph)	30		30			30	
Link Distance (ft)	271		337			233	
Travel Time (s)	6.2		7.7			5.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Heavy Vehicles (%)	5%	2%	2%	2%	2%	2%	
Adj. Flow (vph)	113	0	0	0	0	1629	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	113	0	0	0	0	1629	
Turn Type	Prot					NA	
Protected Phases	2!					Free!	4
Permitted Phases							
Minimum Split (s)	16.0						16.0
Total Split (s)	60.0						60.0
Total Split (%)	50.0%						50%
Yellow Time (s)	3.5						3.5
All-Red Time (s)	2.5						2.5
Lost Time Adjust (s)	0.0						
Total Lost Time (s)	6.0						
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)	54.0					120.0	
Actuated g/C Ratio	0.45					1.00	
v/c Ratio	0.13					0.32	
Control Delay	2.9					0.1	
Queue Delay	0.0					0.0	
Total Delay	2.9					0.1	
LOS	A					A	
Approach Delay	2.9					0.1	
Approach LOS	A					A	
Queue Length 50th (ft)	0					0	
Queue Length 95th (ft)	26					0	
Internal Link Dist (ft)	191		257			153	
Turn Bay Length (ft)							
Base Capacity (vph)	843					5085	
Starvation Cap Reductn	0					0	
Spillback Cap Reductn	0					0	
Storage Cap Reductn	0					0	

Lane Group	NBL	NBR	SET	SER	NWL	NWT	Ø4
Reduced v/c Ratio	0.13					0.32	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 27 (23%), Referenced to phase 4:SER, Start of Green	
Natural Cycle: 55	
Control Type: Pretimed	
Maximum v/c Ratio: 0.71	
Intersection Signal Delay: 0.3	Intersection LOS: A
Intersection Capacity Utilization 51.3%	ICU Level of Service A
Analysis Period (min) 15	
! Phase conflict between lane groups.	

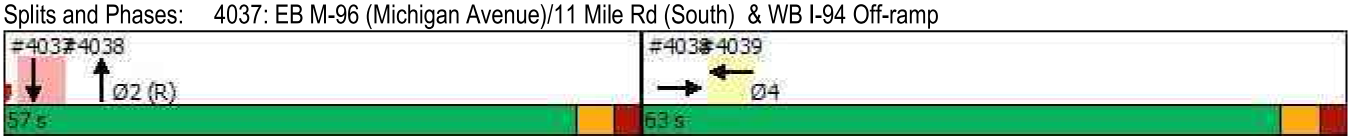
Splits and Phases: 4036: EB I-94 Off-ramp & WB M-96 (Michigan Avenue)/11 Mile Rd (North)

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø4
Lane Configurations							
Traffic Volume (vph)	0	966	0	0	568	0	
Future Volume (vph)	0	966	0	0	568	0	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	0.88	1.00	1.00	0.95	1.00	
Frt		0.850					
Flt Protected							
Satd. Flow (prot)	0	2707	0	0	3438	0	
Flt Permitted							
Satd. Flow (perm)	0	2707	0	0	3438	0	
Right Turn on Red		Yes				Yes	
Satd. Flow (RTOR)		1148					
Link Speed (mph)	30			30	30		
Link Distance (ft)	222			406	241		
Travel Time (s)	5.0			9.2	5.5		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Heavy Vehicles (%)	2%	5%	2%	2%	5%	2%	
Adj. Flow (vph)	0	1050	0	0	617	0	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	1050	0	0	617	0	
Turn Type		Free			NA		
Protected Phases					2		4
Permitted Phases		Free					
Minimum Split (s)					16.0		16.0
Total Split (s)					57.0		63.0
Total Split (%)					47.5%		53%
Yellow Time (s)					3.5		3.5
All-Red Time (s)					2.5		2.5
Lost Time Adjust (s)					0.0		
Total Lost Time (s)					6.0		
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)		120.0			51.0		
Actuated g/C Ratio		1.00			0.42		
v/c Ratio		0.39			0.42		
Control Delay		4.1			25.3		
Queue Delay		0.0			0.0		
Total Delay		4.1			25.3		
LOS		A			C		
Approach Delay	4.1				25.3		
Approach LOS	A				C		
Queue Length 50th (ft)		239			173		
Queue Length 95th (ft)		96			223		
Internal Link Dist (ft)	142			326	161		
Turn Bay Length (ft)							
Base Capacity (vph)		2707			1461		
Starvation Cap Reductn		0			0		
Spillback Cap Reductn		2			2		
Storage Cap Reductn		0			0		

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø4
Reduced v/c Ratio		0.39			0.42		

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 96 (80%), Referenced to phase 2:SBT, Start of Green	
Natural Cycle: 45	
Control Type: Pretimed	
Maximum v/c Ratio: 0.64	
Intersection Signal Delay: 11.9	Intersection LOS: B
Intersection Capacity Utilization 20.7%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4037: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & WB I-94 Off-ramp

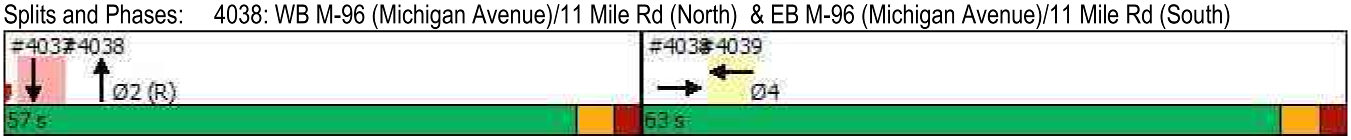


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑						↑↑↑				
Traffic Volume (vph)	0	966	0	0	0	0	0	1085	0	0	0	0
Future Volume (vph)	0	966	0	0	0	0	0	1085	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	1.00	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	3438	0	0	0	0	0	4940	0	0	0	0
Flt Permitted												
Satd. Flow (perm)	0	3438	0	0	0	0	0	4940	0	0	0	0
Right Turn on Red	Yes		Yes			Yes			Yes			Yes
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		190			222			207			131	
Travel Time (s)		4.3			5.0			4.7			3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	5%	2%	2%	2%	2%	2%	5%	2%	2%	2%	2%
Adj. Flow (vph)	0	1050	0	0	0	0	0	1179	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1050	0	0	0	0	0	1179	0	0	0	0
Turn Type		NA						NA				
Protected Phases		4						2				
Permitted Phases												
Minimum Split (s)		16.0						16.0				
Total Split (s)		63.0						57.0				
Total Split (%)		52.5%						47.5%				
Yellow Time (s)		3.5						3.5				
All-Red Time (s)		2.5						2.5				
Lost Time Adjust (s)		0.0						0.0				
Total Lost Time (s)		6.0						6.0				
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		57.0						51.0				
Actuated g/C Ratio		0.48						0.42				
v/c Ratio		0.64						0.56				
Control Delay		23.0						44.1				
Queue Delay		0.0						0.0				
Total Delay		23.0						44.1				
LOS		C						D				
Approach Delay		23.0						44.1				
Approach LOS		C						D				
Queue Length 50th (ft)		224						354				
Queue Length 95th (ft)		259						403				
Internal Link Dist (ft)		110			142			127			51	
Turn Bay Length (ft)												
Base Capacity (vph)		1633						2099				
Starvation Cap Reductn		0						0				
Spillback Cap Reductn		0						0				
Storage Cap Reductn		0						0				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio		0.64						0.56				

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 96 (80%), Referenced to phase 2:SBT, Start of Green	
Natural Cycle: 45	
Control Type: Pretimed	
Maximum v/c Ratio: 0.64	
Intersection Signal Delay: 34.2	Intersection LOS: C
Intersection Capacity Utilization 57.7%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 4038: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & EB M-96 (Michigan Avenue)/11 Mile Rd (South)

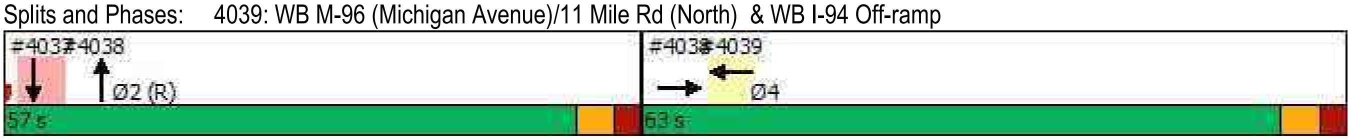


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø2
Lane Configurations							
Traffic Volume (vph)	0	0	0	151	1085	0	
Future Volume (vph)	0	0	0	151	1085	0	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.94	1.00	
Frt							
Flt Protected					0.950		
Satd. Flow (prot)	0	0	0	1810	4848	0	
Flt Permitted					0.950		
Satd. Flow (perm)	0	0	0	1810	4848	0	
Right Turn on Red		Yes			Yes	Yes	
Satd. Flow (RTOR)					2497		
Link Speed (mph)	30			30	30		
Link Distance (ft)	415			317	131		
Travel Time (s)	9.4			7.2	3.0		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Heavy Vehicles (%)	2%	2%	2%	5%	5%	2%	
Adj. Flow (vph)	0	0	0	164	1179	0	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	0	164	1179	0	
Turn Type				NA	Perm		
Protected Phases				4!			2
Permitted Phases					Free!		
Minimum Split (s)				16.0			16.0
Total Split (s)				63.0			57.0
Total Split (%)				52.5%			48%
Yellow Time (s)				3.5			3.5
All-Red Time (s)				2.5			2.5
Lost Time Adjust (s)				0.0			
Total Lost Time (s)				6.0			
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)				57.0	120.0		
Actuated g/C Ratio				0.48	1.00		
v/c Ratio				0.19	0.24		
Control Delay				18.9	0.4		
Queue Delay				0.0	0.0		
Total Delay				18.9	0.4		
LOS				B	A		
Approach Delay				18.9	0.4		
Approach LOS				B	A		
Queue Length 50th (ft)				71	3		
Queue Length 95th (ft)				116	0		
Internal Link Dist (ft)	335			237	51		
Turn Bay Length (ft)							
Base Capacity (vph)				859	4848		
Starvation Cap Reductn				0	0		
Spillback Cap Reductn				0	0		
Storage Cap Reductn				0	0		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø2
Reduced v/c Ratio				0.19	0.24		

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 96 (80%), Referenced to phase 2:SBT, Start of Green	
Natural Cycle: 45	
Control Type: Pretimed	
Maximum v/c Ratio: 0.64	
Intersection Signal Delay: 2.7	Intersection LOS: A
Intersection Capacity Utilization 79.3%	ICU Level of Service D
Analysis Period (min) 15	
! Phase conflict between lane groups.	

Splits and Phases: 4039: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & WB I-94 Off-ramp

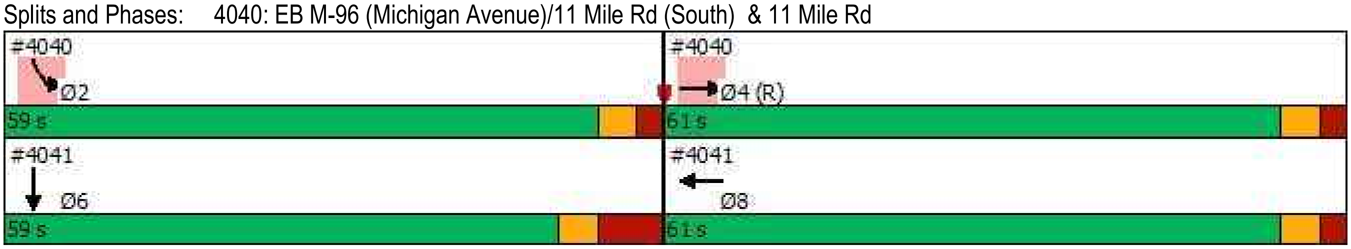


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø6	Ø8
Lane Configurations								
Traffic Volume (vph)	0	677	0	0	434	0		
Future Volume (vph)	0	677	0	0	434	0		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.97	1.00		
Frt								
Flt Protected					0.950			
Satd. Flow (prot)	0	3539	0	0	3335	0		
Flt Permitted					0.950			
Satd. Flow (perm)	0	3539	0	0	3335	0		
Right Turn on Red				Yes	Yes	Yes		
Satd. Flow (RTOR)					254			
Link Speed (mph)		55	55		45			
Link Distance (ft)		212	597		92			
Travel Time (s)		2.6	7.4		1.4			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Heavy Vehicles (%)	2%	2%	2%	2%	5%	2%		
Adj. Flow (vph)	0	736	0	0	472	0		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	0	736	0	0	472	0		
Turn Type		NA			Prot			
Protected Phases		4			2		6	8
Permitted Phases								
Minimum Split (s)		16.0			19.5		19.5	16.0
Total Split (s)		61.0			59.0		59.0	61.0
Total Split (%)		50.8%			49.2%		49%	51%
Yellow Time (s)		3.5			3.5		3.5	3.5
All-Red Time (s)		2.5			2.5		6.0	2.5
Lost Time Adjust (s)		0.0			0.0			
Total Lost Time (s)		6.0			6.0			
Lead/Lag								
Lead-Lag Optimize?								
Act Effct Green (s)		55.0			53.0			
Actuated g/C Ratio		0.46			0.44			
v/c Ratio		0.45			0.29			
Control Delay		23.4			0.4			
Queue Delay		0.0			0.0			
Total Delay		23.4			0.4			
LOS		C			A			
Approach Delay		23.4			0.4			
Approach LOS		C			A			
Queue Length 50th (ft)		200			0			
Queue Length 95th (ft)		253			0			
Internal Link Dist (ft)		132	517		12			
Turn Bay Length (ft)								
Base Capacity (vph)		1622			1614			
Starvation Cap Reductn		0			0			
Spillback Cap Reductn		0			0			
Storage Cap Reductn		0			0			

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø6	Ø8
Reduced v/c Ratio		0.45			0.29			

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 32 (27%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.49	
Intersection Signal Delay: 14.4	Intersection LOS: B
Intersection Capacity Utilization 46.9%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4040: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & 11 Mile Rd



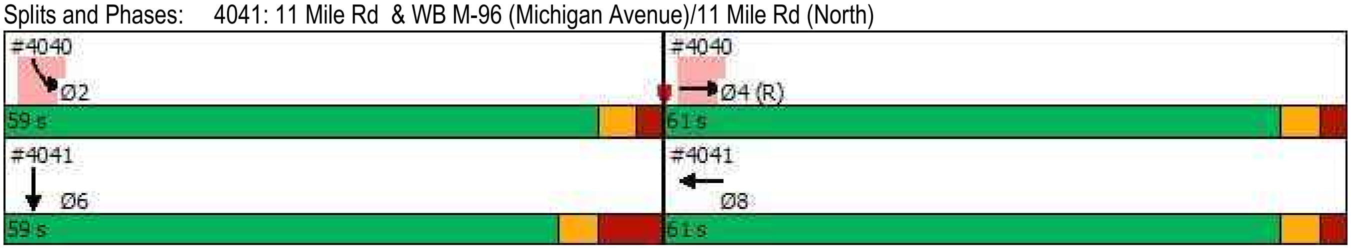
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	730	570	0	0	0	0	434	56
Future Volume (vph)	0	0	0	0	730	570	0	0	0	0	434	56
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		250	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Frt						0.850					0.983	
Flt Protected												
Satd. Flow (prot)	0	0	0	0	3539	1538	0	0	0	0	3391	0
Flt Permitted												
Satd. Flow (perm)	0	0	0	0	3539	1538	0	0	0	0	3391	0
Right Turn on Red			Yes	Yes		Yes			Yes			Yes
Satd. Flow (RTOR)						491					14	
Link Speed (mph)		55			55			45			55	
Link Distance (ft)		210			598			92			259	
Travel Time (s)		2.6			7.4			1.4			3.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	5%	2%	2%	2%	2%	5%	2%
Adj. Flow (vph)	0	0	0	0	793	620	0	0	0	0	472	61
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	793	620	0	0	0	0	533	0
Turn Type					NA	custom					NA	
Protected Phases					8	Free					6	
Permitted Phases												
Minimum Split (s)					16.0						19.5	
Total Split (s)					61.0						59.0	
Total Split (%)					50.8%						49.2%	
Yellow Time (s)					3.5						3.5	
All-Red Time (s)					2.5						6.0	
Lost Time Adjust (s)					0.0						0.0	
Total Lost Time (s)					6.0						9.5	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)					55.0	120.0					49.5	
Actuated g/C Ratio					0.46	1.00					0.41	
v/c Ratio					0.49	0.40					0.38	
Control Delay					31.8	6.1					35.3	
Queue Delay					0.0	0.0					0.0	
Total Delay					31.8	6.1					35.3	
LOS					C	A					D	
Approach Delay					20.5						35.3	
Approach LOS					C						D	
Queue Length 50th (ft)					309	417					187	
Queue Length 95th (ft)					385	520					247	
Internal Link Dist (ft)		130			518			12			179	
Turn Bay Length (ft)						250						
Base Capacity (vph)					1622	1538					1407	

Lane Group	Ø2	Ø4
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Ideal Flow (vphpl)		
Storage Length (ft)		
Storage Lanes		
Taper Length (ft)		
Lane Util. Factor		
Frt		
Flt Protected		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Peak Hour Factor		
Heavy Vehicles (%)		
Adj. Flow (vph)		
Shared Lane Traffic (%)		
Lane Group Flow (vph)		
Turn Type		
Protected Phases	2	4
Permitted Phases		
Minimum Split (s)	19.5	16.0
Total Split (s)	59.0	61.0
Total Split (%)	49%	51%
Yellow Time (s)	3.5	3.5
All-Red Time (s)	2.5	2.5
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag		
Lead-Lag Optimize?		
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)		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn					0	0					0	
Spillback Cap Reductn					0	0					0	
Storage Cap Reductn					0	0					0	
Reduced v/c Ratio					0.49	0.40					0.38	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 32 (27%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.49	
Intersection Signal Delay: 24.6	Intersection LOS: C
Intersection Capacity Utilization 46.9%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4041: 11 Mile Rd & WB M-96 (Michigan Avenue)/11 Mile Rd (North)



Lane Group	Ø2	Ø4
Starvation Cap Reductn		
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		

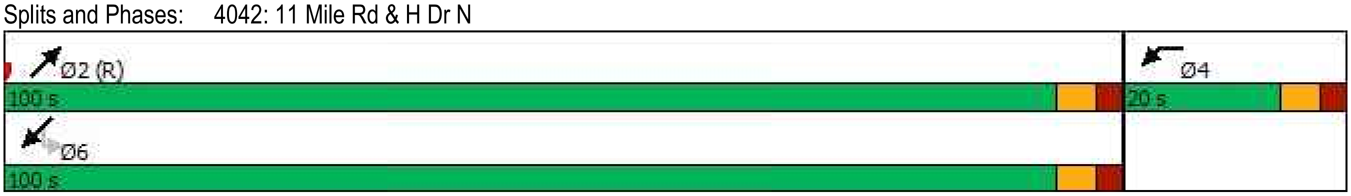
Intersection Summary

Lane Group	WBL	WBR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	0	0	570	0	0	490
Future Volume (vph)	0	0	570	0	0	490
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	1810	0	1863	0	0	1863
Flt Permitted						
Satd. Flow (perm)	1810	0	1863	0	0	1863
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)						
Link Speed (mph)	25		55			55
Link Distance (ft)	1262		1787			680
Travel Time (s)	34.4		22.2			8.4
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	2%	2%	5%	2%	2%
Adj. Flow (vph)	0	0	620	0	0	533
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	620	0	0	533
Turn Type	Prot		NA			NA
Protected Phases	4		2			6
Permitted Phases					6	
Minimum Split (s)	13.0		16.0		13.0	13.0
Total Split (s)	20.0		100.0		100.0	100.0
Total Split (%)	16.7%		83.3%		83.3%	83.3%
Yellow Time (s)	3.5		3.5		3.5	3.5
All-Red Time (s)	2.5		2.5		2.5	2.5
Lost Time Adjust (s)	0.0		0.0			0.0
Total Lost Time (s)	6.0		6.0			6.0
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)			94.0			94.0
Actuated g/C Ratio			0.78			0.78
v/c Ratio			0.42			0.37
Control Delay			1.3			4.7
Queue Delay			0.0			0.0
Total Delay			1.3			4.7
LOS			A			A
Approach Delay			1.3			4.7
Approach LOS			A			A
Queue Length 50th (ft)			15			104
Queue Length 95th (ft)			19			145
Internal Link Dist (ft)	1182		1707			600
Turn Bay Length (ft)						
Base Capacity (vph)			1459			1459
Starvation Cap Reductn			0			0
Spillback Cap Reductn			0			0
Storage Cap Reductn			0			0

Lane Group	WBL	WBR	NET	NER	SWL	SWT
Reduced v/c Ratio			0.42			0.37

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NET, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.42	
Intersection Signal Delay: 2.9	Intersection LOS: A
Intersection Capacity Utilization 35.0%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4042: 11 Mile Rd & H Dr N



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1285	335	0	0	0	335
Future Volume (vph)	1285	335	0	0	0	335
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		500	600		0	0
Storage Lanes		2	0		0	2
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	0.88	1.00	1.00	1.00	0.88
Frt		0.850				0.850
Flt Protected						
Satd. Flow (prot)	3539	2787	0	0	0	2787
Flt Permitted						
Satd. Flow (perm)	3539	2787	0	0	0	2787
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		364				135
Link Speed (mph)	55			55	25	
Link Distance (ft)	669			659	1093	
Travel Time (s)	8.3			8.2	29.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1397	364	0	0	0	364
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1397	364	0	0	0	364
Turn Type	NA	Perm				Prot
Protected Phases	4					5
Permitted Phases		4				
Detector Phase	4	4				5
Switch Phase						
Minimum Initial (s)	10.0	10.0				10.0
Minimum Split (s)	16.0	16.0				16.0
Total Split (s)	90.0	90.0				30.0
Total Split (%)	75.0%	75.0%				25.0%
Yellow Time (s)	3.5	3.5				3.5
All-Red Time (s)	2.5	2.5				2.5
Lost Time Adjust (s)	0.0	0.0				0.0
Total Lost Time (s)	6.0	6.0				6.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max	C-Max				None
Act Effct Green (s)	92.3	92.3				15.7
Actuated g/C Ratio	0.77	0.77				0.13
v/c Ratio	0.51	0.16				0.76
Control Delay	6.4	0.5				41.3
Queue Delay	0.3	0.0				0.0
Total Delay	6.7	0.5				41.3
LOS	A	A				D
Approach Delay	5.4				41.3	
Approach LOS	A				D	
Queue Length 50th (ft)	221	0				98
Queue Length 95th (ft)	256	20				149

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Internal Link Dist (ft)	589			579	1013	
Turn Bay Length (ft)		500				
Base Capacity (vph)	2722	2228				665
Starvation Cap Reductn	584	0				0
Spillback Cap Reductn	0	0				0
Storage Cap Reductn	0	0				0
Reduced v/c Ratio	0.65	0.16				0.55

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 52 (43%), Referenced to phase 4:EBT, Start of Green

Natural Cycle: 45

Control Type: Actuated-Coordinated

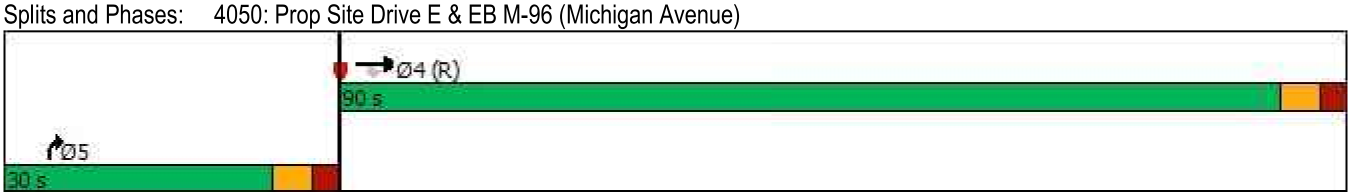
Maximum v/c Ratio: 0.76

Intersection Signal Delay: 11.6 Intersection LOS: B

Intersection Capacity Utilization 57.2% ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 4050: Prop Site Drive E & EB M-96 (Michigan Avenue)

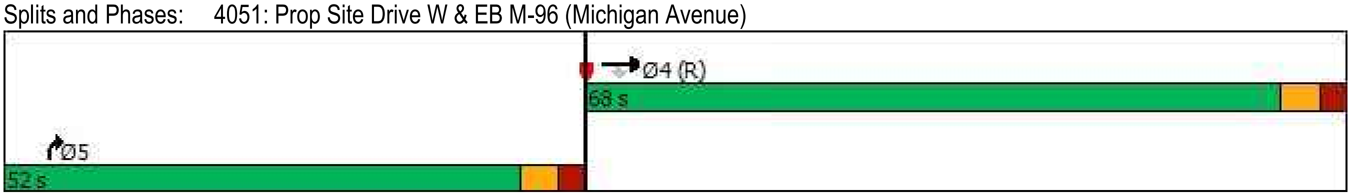


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↱↱				↱↱
Traffic Volume (vph)	763	602	0	0	0	602
Future Volume (vph)	763	602	0	0	0	602
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		500	600		0	0
Storage Lanes		2	0		0	2
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	0.88	1.00	1.00	1.00	0.88
Frt		0.850				0.850
Flt Protected						
Satd. Flow (prot)	3539	2787	0	0	0	2787
Flt Permitted						
Satd. Flow (perm)	3539	2787	0	0	0	2787
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		654				231
Link Speed (mph)	55			55	25	
Link Distance (ft)	608			627	1293	
Travel Time (s)	7.5			7.8	35.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	829	654	0	0	0	654
Shared Lane Traffic (%)						
Lane Group Flow (vph)	829	654	0	0	0	654
Turn Type	NA	Perm				Prot
Protected Phases	4					5
Permitted Phases		4				
Detector Phase	4	4				5
Switch Phase						
Minimum Initial (s)	10.0	10.0				10.0
Minimum Split (s)	16.0	16.0				16.0
Total Split (s)	68.0	68.0				52.0
Total Split (%)	56.7%	56.7%				43.3%
Yellow Time (s)	3.5	3.5				3.5
All-Red Time (s)	2.5	2.5				2.5
Lost Time Adjust (s)	0.0	0.0				0.0
Total Lost Time (s)	6.0	6.0				6.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max	C-Max				None
Act Effct Green (s)	82.1	82.1				25.9
Actuated g/C Ratio	0.68	0.68				0.22
v/c Ratio	0.34	0.31				0.84
Control Delay	8.4	1.7				38.2
Queue Delay	0.0	0.0				0.0
Total Delay	8.4	1.7				38.2
LOS	A	A				D
Approach Delay	5.4				38.2	
Approach LOS	A				D	
Queue Length 50th (ft)	203	19				185
Queue Length 95th (ft)	275	40				239

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Internal Link Dist (ft)	528			547	1213	
Turn Bay Length (ft)		500				
Base Capacity (vph)	2420	2112				1210
Starvation Cap Reductn	0	0				0
Spillback Cap Reductn	0	0				0
Storage Cap Reductn	0	0				0
Reduced v/c Ratio	0.34	0.31				0.54

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 32 (27%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 40	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.84	
Intersection Signal Delay: 15.4	Intersection LOS: B
Intersection Capacity Utilization 52.2%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4051: Prop Site Drive W & EB M-96 (Michigan Avenue)

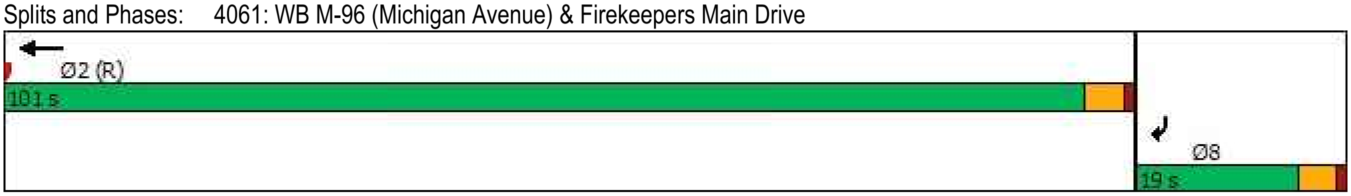


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	1091	168	0	134
Future Volume (vph)	0	0	1091	168	0	134
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			0	0	0
Storage Lanes	0			0	0	2
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	0.88
Frt			0.981			0.850
Flt Protected						
Satd. Flow (prot)	0	0	3481	0	0	2787
Flt Permitted						
Satd. Flow (perm)	0	0	3481	0	0	2787
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			50			276
Link Speed (mph)		55	55		25	
Link Distance (ft)		574	509		701	
Travel Time (s)		7.1	6.3		19.1	
Peak Hour Factor	0.92	0.92	0.92	0.95	0.67	0.92
Heavy Vehicles (%)	2%	2%	2%	0%	0%	2%
Adj. Flow (vph)	0	0	1186	177	0	146
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1363	0	0	146
Turn Type			NA			Prot
Protected Phases			2			8
Permitted Phases						
Detector Phase			2			8
Switch Phase						
Minimum Initial (s)			10.0			10.0
Minimum Split (s)			22.5			14.5
Total Split (s)			101.0			19.0
Total Split (%)			84.2%			15.8%
Yellow Time (s)			3.5			3.5
All-Red Time (s)			1.0			1.0
Lost Time Adjust (s)			0.0			0.0
Total Lost Time (s)			4.5			4.5
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode			C-Max			None
Act Effct Green (s)			101.0			10.0
Actuated g/C Ratio			0.84			0.08
v/c Ratio			0.46			0.30
Control Delay			2.9			1.6
Queue Delay			0.0			0.0
Total Delay			2.9			1.6
LOS			A			A
Approach Delay			2.9		1.6	
Approach LOS			A		A	
Queue Length 50th (ft)			101			0

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Queue Length 95th (ft)			123			0
Internal Link Dist (ft)		494	429		621	
Turn Bay Length (ft)						
Base Capacity (vph)			2937			579
Starvation Cap Reductn			0			0
Spillback Cap Reductn			0			0
Storage Cap Reductn			0			0
Reduced v/c Ratio			0.46			0.25

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:WBT, Start of Green	
Natural Cycle: 40	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.46	
Intersection Signal Delay: 2.8	Intersection LOS: A
Intersection Capacity Utilization 51.3%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4061: WB M-96 (Michigan Avenue) & Firekeepers Main Drive



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	2835	495	0	460
Future Volume (vph)	0	0	2835	495	0	460
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			250	0	200
Storage Lanes	0			0	0	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.91	1.00	1.00	0.88
Frt				0.850		0.850
Flt Protected						
Satd. Flow (prot)	0	0	5085	1583	0	2787
Flt Permitted						
Satd. Flow (perm)	0	0	5085	1583	0	2787
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				157		4
Link Speed (mph)		45	45		45	
Link Distance (ft)		534	660		516	
Travel Time (s)		8.1	10.0		7.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	3082	538	0	500
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	3082	538	0	500
Turn Type			NA	custom		Prot
Protected Phases			8	Free		1
Permitted Phases						
Minimum Split (s)			16.0			13.0
Total Split (s)			90.0			30.0
Total Split (%)			75.0%			25.0%
Yellow Time (s)			3.5			3.5
All-Red Time (s)			2.5			2.5
Lost Time Adjust (s)			0.0			0.0
Total Lost Time (s)			6.0			6.0
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)			84.0	120.0		24.0
Actuated g/C Ratio			0.70	1.00		0.20
v/c Ratio			0.87	0.34		0.89
Control Delay			3.8	7.9		66.0
Queue Delay			0.2	0.0		0.0
Total Delay			4.0	7.9		66.0
LOS			A	A		E
Approach Delay			4.6		66.0	
Approach LOS			A		E	
Queue Length 50th (ft)			87	157		214
Queue Length 95th (ft)			102	m158		#321
Internal Link Dist (ft)		454	580		436	
Turn Bay Length (ft)				250		200
Base Capacity (vph)			3559	1583		560
Starvation Cap Reductn			81	0		0

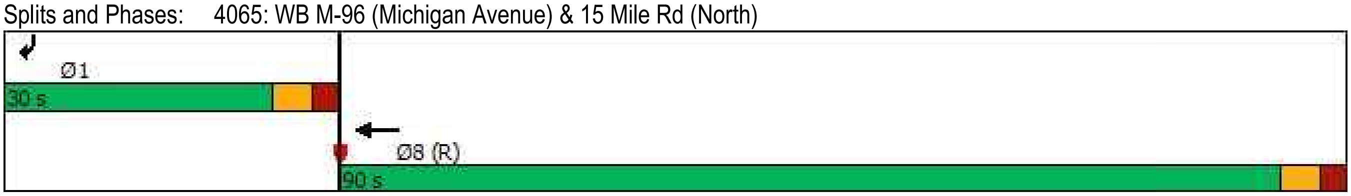
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Spillback Cap Reductn			0	0		0
Storage Cap Reductn			0	0		0
Reduced v/c Ratio			0.89	0.34		0.89

Intersection Summary		
Area Type: Other		
Cycle Length: 120		
Actuated Cycle Length: 120		
Offset: 0 (0%), Referenced to phase 8:WBT, Start of Green		
Natural Cycle: 80		
Control Type: Pretimed		
Maximum v/c Ratio: 0.89		
Intersection Signal Delay: 12.0	Intersection LOS: B	
Intersection Capacity Utilization 80.9%	ICU Level of Service D	
Analysis Period (min) 15		

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4065: WB M-96 (Michigan Avenue) & 15 Mile Rd (North)

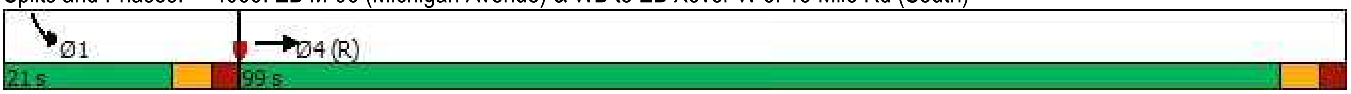


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	2809	0	0	119	0
Future Volume (vph)	0	2809	0	0	119	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.91	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	5085	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	5085	0	0	1770	0
Right Turn on Red				Yes	Yes	Yes
Satd. Flow (RTOR)					5	
Link Speed (mph)		45	45		25	
Link Distance (ft)		262	1016		123	
Travel Time (s)		4.0	15.4		3.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.90	0.92
Adj. Flow (vph)	0	3053	0	0	132	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	3053	0	0	132	0
Turn Type		NA			Prot	
Protected Phases		4			1	
Permitted Phases						
Minimum Split (s)		16.0			16.0	
Total Split (s)		99.0			21.0	
Total Split (%)		82.5%			17.5%	
Yellow Time (s)		3.5			3.5	
All-Red Time (s)		2.5			2.5	
Lost Time Adjust (s)		0.0			0.0	
Total Lost Time (s)		6.0			6.0	
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)		93.0			15.0	
Actuated g/C Ratio		0.78			0.12	
v/c Ratio		0.77			0.59	
Control Delay		4.1			48.7	
Queue Delay		0.0			0.0	
Total Delay		4.1			48.7	
LOS		A			D	
Approach Delay		4.1			48.7	
Approach LOS		A			D	
Queue Length 50th (ft)		136			94	
Queue Length 95th (ft)		m138			m127	
Internal Link Dist (ft)		182	936		43	
Turn Bay Length (ft)						
Base Capacity (vph)		3940			225	
Starvation Cap Reductn		0			0	
Spillback Cap Reductn		0			0	
Storage Cap Reductn		0			0	
Reduced v/c Ratio		0.77			0.59	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 116 (97%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 60	
Control Type: Pretimed	
Maximum v/c Ratio: 0.77	
Intersection Signal Delay: 6.0	Intersection LOS: A
Intersection Capacity Utilization 116.9%	ICU Level of Service H
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4066: EB M-96 (Michigan Avenue) & WB to EB Xover W of 15 Mile Rd (South)

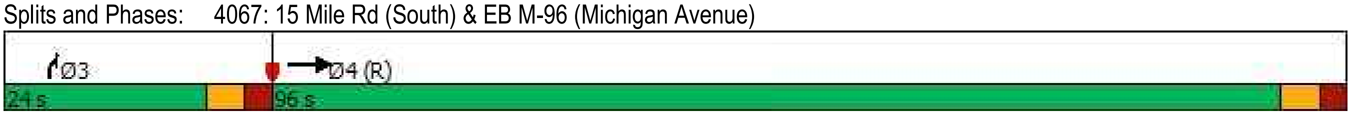


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	2667	261	0	0	0	262
Future Volume (vph)	2667	261	0	0	0	262
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		50	0		0	250
Storage Lanes		0	0		0	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	1.00	1.00	1.00	0.88
Frt	0.987					0.850
Flt Protected						
Satd. Flow (prot)	5019	0	0	0	0	2814
Flt Permitted						
Satd. Flow (perm)	5019	0	0	0	0	2814
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	39					9
Link Speed (mph)	45			45	45	
Link Distance (ft)	1016			704	1375	
Travel Time (s)	15.4			10.7	20.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.88	0.88
Heavy Vehicles (%)	2%	2%	2%	2%	1%	1%
Adj. Flow (vph)	2899	284	0	0	0	298
Shared Lane Traffic (%)						
Lane Group Flow (vph)	3183	0	0	0	0	298
Turn Type	NA					Prot
Protected Phases	4					3
Permitted Phases						
Minimum Split (s)	17.0					16.0
Total Split (s)	96.0					24.0
Total Split (%)	80.0%					20.0%
Yellow Time (s)	3.5					3.5
All-Red Time (s)	2.5					2.5
Lost Time Adjust (s)	0.0					0.0
Total Lost Time (s)	6.0					6.0
Lead/Lag	Lag					Lead
Lead-Lag Optimize?	Yes					Yes
Act Effct Green (s)	90.0					18.0
Actuated g/C Ratio	0.75					0.15
v/c Ratio	0.84					0.69
Control Delay	3.3					56.3
Queue Delay	0.0					0.0
Total Delay	3.3					56.3
LOS	A					E
Approach Delay	3.3				56.3	
Approach LOS	A				E	
Queue Length 50th (ft)	80					122
Queue Length 95th (ft)	84					172
Internal Link Dist (ft)	936			624	1295	
Turn Bay Length (ft)						250
Base Capacity (vph)	3774					429

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Starvation Cap Reductn	1					0
Spillback Cap Reductn	0					0
Storage Cap Reductn	0					0
Reduced v/c Ratio	0.84					0.69

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 4 (3%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 65	
Control Type: Pretimed	
Maximum v/c Ratio: 0.84	
Intersection Signal Delay: 7.9	Intersection LOS: A
Intersection Capacity Utilization 76.5%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 4067: 15 Mile Rd (South) & EB M-96 (Michigan Avenue)

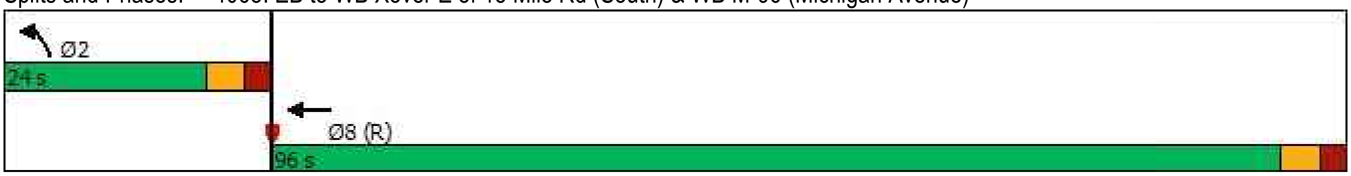


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	2779	151	0
Future Volume (vph)	0	0	0	2779	151	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	5085	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	5085	1770	0
Right Turn on Red		Yes			Yes	Yes
Satd. Flow (RTOR)					4	
Link Speed (mph)	45			45	25	
Link Distance (ft)	687			275	111	
Travel Time (s)	10.4			4.2	3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	3021	164	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	3021	164	0
Turn Type				NA	Prot	
Protected Phases				8	2	
Permitted Phases						
Minimum Split (s)				16.0	13.0	
Total Split (s)				96.0	24.0	
Total Split (%)				80.0%	20.0%	
Yellow Time (s)				3.5	3.5	
All-Red Time (s)				2.5	2.5	
Lost Time Adjust (s)				0.0	0.0	
Total Lost Time (s)				6.0	6.0	
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)				90.0	18.0	
Actuated g/C Ratio				0.75	0.15	
v/c Ratio				0.79	0.61	
Control Delay				9.9	45.5	
Queue Delay				0.9	0.0	
Total Delay				10.8	45.5	
LOS				B	D	
Approach Delay				10.8	45.5	
Approach LOS				B	D	
Queue Length 50th (ft)				489	122	
Queue Length 95th (ft)				552	m147	
Internal Link Dist (ft)	607			195	31	
Turn Bay Length (ft)						
Base Capacity (vph)				3813	268	
Starvation Cap Reductn				465	0	
Spillback Cap Reductn				0	0	
Storage Cap Reductn				0	0	
Reduced v/c Ratio				0.90	0.61	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 112 (93%), Referenced to phase 8:WBT, Start of Green	
Natural Cycle: 60	
Control Type: Pretimed	
Maximum v/c Ratio: 0.79	
Intersection Signal Delay: 12.6	Intersection LOS: B
Intersection Capacity Utilization 101.7%	ICU Level of Service G
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4068: EB to WB Xover E of 15 Mile Rd (South) & WB M-96 (Michigan Avenue)



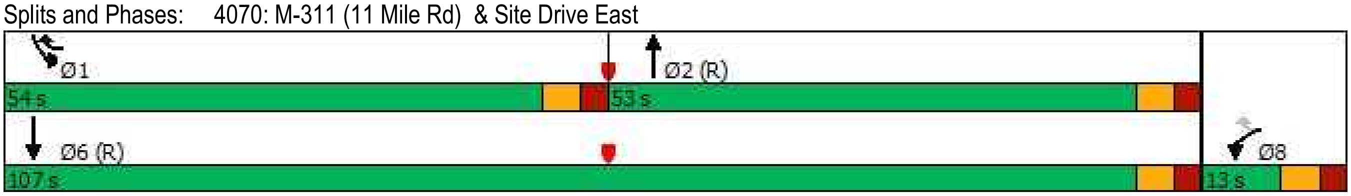
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	15	364	692	15	364	719
Future Volume (vph)	15	364	692	15	364	719
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	500		0	400	
Storage Lanes	1	1		0	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.88	0.95	0.95	1.00	0.95
Frt		0.850	0.997			
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	2787	3529	0	1770	3539
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1770	2787	3529	0	1770	3539
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		150	2			
Link Speed (mph)	25		55			55
Link Distance (ft)	750		940			974
Travel Time (s)	20.5		11.7			12.1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	16	396	752	16	396	782
Shared Lane Traffic (%)						
Lane Group Flow (vph)	16	396	768	0	396	782
Turn Type	Prot	pm+ov	NA		Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8				
Detector Phase	8	1	2		1	6
Switch Phase						
Minimum Initial (s)	7.0	7.0	10.0		7.0	10.0
Minimum Split (s)	13.0	13.0	16.0		13.0	16.0
Total Split (s)	13.0	54.0	53.0		54.0	107.0
Total Split (%)	10.8%	45.0%	44.2%		45.0%	89.2%
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5
All-Red Time (s)	2.5	2.5	2.5		2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0		6.0	6.0
Lead/Lag		Lead	Lag		Lead	
Lead-Lag Optimize?						
Recall Mode	None	None	C-Max		None	C-Max
Act Effct Green (s)	7.0	38.5	69.5		33.3	112.4
Actuated g/C Ratio	0.06	0.32	0.58		0.28	0.94
v/c Ratio	0.16	0.40	0.38		0.81	0.24
Control Delay	57.3	18.5	9.8		46.2	2.0
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	57.3	18.5	9.8		46.2	2.0
LOS	E	B	A		D	A
Approach Delay	20.0		9.8			16.8
Approach LOS	B		A			B
Queue Length 50th (ft)	12	86	19		296	0
Queue Length 95th (ft)	36	98	352		428	113

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Internal Link Dist (ft)	670		860			894
Turn Bay Length (ft)		500			400	
Base Capacity (vph)	103	1318	2043		708	3315
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	0.16	0.30	0.38		0.56	0.24

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 8 (7%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.81
Intersection Signal Delay: 15.1 Intersection LOS: B
Intersection Capacity Utilization 60.6% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 4070: M-311 (11 Mile Rd) & Site Drive East

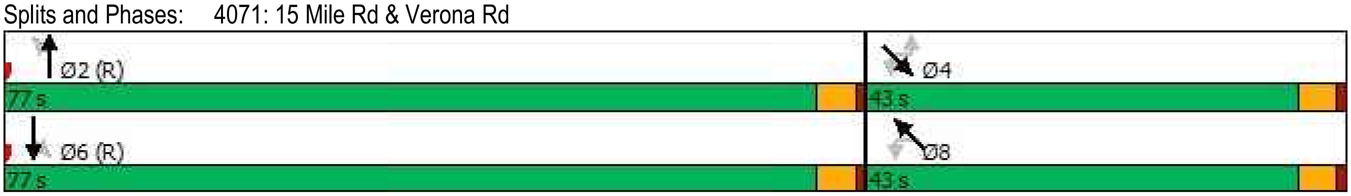


Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	453	13	13	5	9	4	0	87	433	6	118	14
Future Volume (vph)	453	13	13	5	9	4	0	87	433	6	118	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		70	0		0
Storage Lanes	0		0	0		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
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
Frt		0.996			0.968				0.850		0.986	
Flt Protected		0.955			0.987						0.998	
Satd. Flow (prot)	0	1789	0	0	1715	0	0	1845	1392	0	1851	0
Flt Permitted		0.716			0.891						0.991	
Satd. Flow (perm)	0	1342	0	0	1548	0	0	1845	1392	0	1838	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2			7				487		5	
Link Speed (mph)		45			55			55			55	
Link Distance (ft)		682			426			745			951	
Travel Time (s)		10.3			5.3			9.2			11.8	
Peak Hour Factor	0.80	0.80	0.80	0.60	0.60	0.60	0.89	0.89	0.89	0.86	0.86	0.86
Heavy Vehicles (%)	1%	1%	1%	0%	0%	25%	0%	3%	16%	1%	1%	1%
Adj. Flow (vph)	566	16	16	8	15	7	0	98	487	7	137	16
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	598	0	0	30	0	0	98	487	0	160	0
Turn Type	Perm	NA		Perm	NA			NA	Perm	Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4		4	8		
Minimum Split (s)	22.5	22.5		22.5	22.5		22.5	22.5	22.5	22.5	22.5	
Total Split (s)	77.0	77.0		77.0	77.0		43.0	43.0	43.0	43.0	43.0	
Total Split (%)	64.2%	64.2%		64.2%	64.2%		35.8%	35.8%	35.8%	35.8%	35.8%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0	0.0		0.0	
Total Lost Time (s)		4.5			4.5			4.5	4.5		4.5	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		72.5			72.5			38.5	38.5		38.5	
Actuated g/C Ratio		0.60			0.60			0.32	0.32		0.32	
v/c Ratio		0.74			0.03			0.17	0.63		0.27	
Control Delay		23.8			8.0			30.2	6.7		30.8	
Queue Delay		0.0			0.0			0.0	0.0		0.0	
Total Delay		23.8			8.0			30.2	6.7		30.8	
LOS		C			A			C	A		C	
Approach Delay		23.8			8.0			10.6			30.8	
Approach LOS		C			A			B			C	
Queue Length 50th (ft)		310			7			54	0		89	
Queue Length 95th (ft)		367			12			96	80		139	
Internal Link Dist (ft)		602			346			665			871	
Turn Bay Length (ft)									70			
Base Capacity (vph)		811			938			591	777		593	

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
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		0.74			0.03			0.17	0.63		0.27	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 60	
Control Type: Pretimed	
Maximum v/c Ratio: 0.74	
Intersection Signal Delay: 18.7	Intersection LOS: B
Intersection Capacity Utilization 54.7%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4071: 15 Mile Rd & Verona Rd

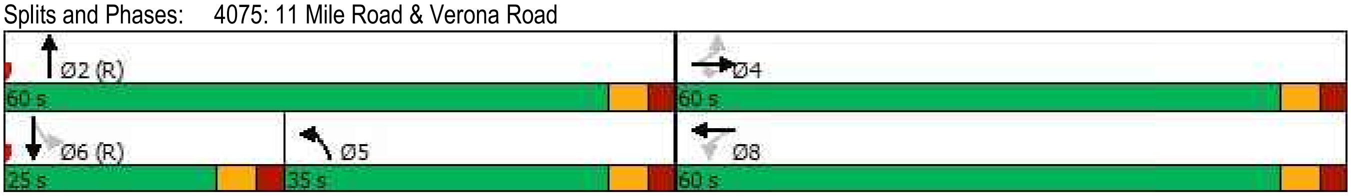


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	518	322	17	537	19	320	68	13	10	82	8
Future Volume (vph)	11	518	322	17	537	19	320	68	13	10	82	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	190		70	190		0	140		0	215		0
Storage Lanes	1		1	1		0	2		0	1		0
Taper Length (ft)	115			140			200			165		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.995			0.976			0.987	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	1900	1468	1805	1887	0	3072	1854	0	1687	1753	0
Flt Permitted	0.185			0.170			0.950			0.697		
Satd. Flow (perm)	352	1900	1468	323	1887	0	3072	1854	0	1238	1753	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			129		2			10			3	
Link Speed (mph)		55			55			45			55	
Link Distance (ft)		519			1585			1015			821	
Travel Time (s)		6.4			19.6			15.4			10.2	
Peak Hour Factor	0.79	0.79	0.79	0.87	0.87	0.87	0.87	0.87	0.87	0.66	0.66	0.66
Heavy Vehicles (%)	0%	0%	10%	0%	0%	5%	14%	0%	0%	7%	7%	7%
Adj. Flow (vph)	14	656	408	20	617	22	368	78	15	15	124	12
Shared Lane Traffic (%)												
Lane Group Flow (vph)	14	656	408	20	639	0	368	93	0	15	136	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Perm	NA	
Protected Phases		4			8		5	2			6	
Permitted Phases	4		4	8						6		
Minimum Split (s)	25.0	25.0	25.0	25.0	25.0		16.0	25.0		25.0	25.0	
Total Split (s)	60.0	60.0	60.0	60.0	60.0		35.0	60.0		25.0	25.0	
Total Split (%)	50.0%	50.0%	50.0%	50.0%	50.0%		29.2%	50.0%		20.8%	20.8%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	2.5	2.5	2.5	2.5	2.5		2.5	2.5		2.5	2.5	
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)	6.0	6.0	6.0	6.0	6.0		6.0	6.0		6.0	6.0	
Lead/Lag							Lag			Lead	Lead	
Lead-Lag Optimize?							Yes			Yes	Yes	
Act Effct Green (s)	54.0	54.0	54.0	54.0	54.0		29.0	54.0		19.0	19.0	
Actuated g/C Ratio	0.45	0.45	0.45	0.45	0.45		0.24	0.45		0.16	0.16	
v/c Ratio	0.09	0.77	0.56	0.14	0.75		0.50	0.11		0.08	0.49	
Control Delay	20.9	35.0	19.4	22.5	34.2		41.9	17.5		44.3	51.6	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	20.9	35.0	19.4	22.5	34.2		41.9	17.5		44.3	51.6	
LOS	C	D	B	C	C		D	B		D	D	
Approach Delay		28.9			33.8			37.0			50.9	
Approach LOS		C			C			D			D	
Queue Length 50th (ft)	6	418	154	9	401		127	36		10	95	
Queue Length 95th (ft)	18	463	198	26	522		169	67		22	113	
Internal Link Dist (ft)		439			1505			935			741	
Turn Bay Length (ft)	190		70	190			140			215		
Base Capacity (vph)	158	855	731	145	850		742	839		196	280	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0	0	0	0		0	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	0.77	0.56	0.14	0.75		0.50	0.11		0.08	0.49	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green	
Natural Cycle: 75	
Control Type: Pretimed	
Maximum v/c Ratio: 0.77	
Intersection Signal Delay: 33.3	Intersection LOS: C
Intersection Capacity Utilization 55.2%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 4075: 11 Mile Road & Verona Road



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	1028	143	0	231
Future Volume (vph)	0	0	1028	143	0	231
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200			300	245	245
Storage Lanes	0			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.982			0.865
Flt Protected						
Satd. Flow (prot)	0	0	3340	0	0	1644
Flt Permitted						
Satd. Flow (perm)	0	0	3340	0	0	1644
Link Speed (mph)		55	55		25	
Link Distance (ft)		509	395		760	
Travel Time (s)		6.3	4.9		20.7	
Peak Hour Factor	0.88	0.88	0.91	0.91	0.79	0.79
Heavy Vehicles (%)	1%	1%	7%	0%	0%	0%
Adj. Flow (vph)	0	0	1130	157	0	292
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1287	0	0	292
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 53.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	1014	43	0	157
Future Volume (vph)	0	0	1014	43	0	157
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	175			50	0	0
Storage Lanes	0			0	0	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.994			0.865
Flt Protected						
Satd. Flow (prot)	0	0	3362	0	0	1565
Flt Permitted						
Satd. Flow (perm)	0	0	3362	0	0	1565
Link Speed (mph)		55	55		25	
Link Distance (ft)		395	586		185	
Travel Time (s)		4.9	7.3		5.0	
Peak Hour Factor	0.90	0.90	0.95	0.95	0.70	0.70
Heavy Vehicles (%)	1%	1%	7%	0%	5%	5%
Adj. Flow (vph)	0	0	1067	45	0	224
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1112	0	0	224
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 45.8% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	1050	12	0	7
Future Volume (vph)	0	0	1050	12	0	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150			600	0	0
Storage Lanes	0			0	0	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.998			0.865
Flt Protected						
Satd. Flow (prot)	0	0	3370	0	0	1644
Flt Permitted						
Satd. Flow (perm)	0	0	3370	0	0	1644
Link Speed (mph)		55	55		25	
Link Distance (ft)		586	607		1086	
Travel Time (s)		7.3	7.5		29.6	
Peak Hour Factor	0.83	0.83	0.92	0.92	0.60	0.60
Heavy Vehicles (%)	10%	1%	7%	0%	33%	0%
Adj. Flow (vph)	0	0	1141	13	0	12
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1154	0	0	12
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 39.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	784	8	0	7
Future Volume (vph)	0	0	784	8	0	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.998			0.865
Flt Protected						
Satd. Flow (prot)	0	0	3532	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	0	3532	0	0	1611
Link Speed (mph)		55	55		55	
Link Distance (ft)		538	1254		1399	
Travel Time (s)		6.7	15.5		17.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	852	9	0	8
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	861	0	0	8
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 31.9% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	0	5	0	495	0	0	460	0
Future Volume (vph)	0	0	0	0	0	5	0	495	0	0	460	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
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
Frt					0.865							
Flt Protected												
Satd. Flow (prot)	0	1863	0	0	1611	0	0	1863	0	0	1863	0
Flt Permitted												
Satd. Flow (perm)	0	1863	0	0	1611	0	0	1863	0	0	1863	0
Link Speed (mph)		45			45			25			45	
Link Distance (ft)		957			1038			516			593	
Travel Time (s)		14.5			15.7			14.1			9.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	0	5	0	538	0	0	500	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	5	0	0	538	0	0	500	0
Sign Control		Stop			Stop			Free			Free	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 36.1% ICU Level of Service A
Analysis Period (min) 15

Lane Group	EBT	EBR	WBL	WBT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	0	0	119	1216	0	0
Future Volume (vph)	0	0	119	1216	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.91	0.91	1.00	1.00
Frt						
Flt Protected				0.996		
Satd. Flow (prot)	0	0	0	5065	0	0
Flt Permitted				0.996		
Satd. Flow (perm)	0	0	0	5065	0	0
Link Speed (mph)	45			45	25	
Link Distance (ft)	183			382	263	
Travel Time (s)	2.8			5.8	7.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	129	1322	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1451	0	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 44.6%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	1566	812	0	0	0	0
Future Volume (vph)	1566	812	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950	0.976				
Satd. Flow (prot)	1610	3309	0	0	0	0
Flt Permitted	0.950	0.976				
Satd. Flow (perm)	1610	3309	0	0	0	0
Link Speed (mph)		45	45		25	
Link Distance (ft)		619	209		329	
Travel Time (s)		9.4	3.2		9.0	
Peak Hour Factor	0.86	0.86	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1821	944	0	0	0	0
Shared Lane Traffic (%)	50%					
Lane Group Flow (vph)	910	1855	0	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 63.6%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations			↑↑	↱		
Traffic Volume (vph)	0	0	834	168	0	0
Future Volume (vph)	0	0	834	168	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	1.00
Frt				0.850		
Flt Protected						
Satd. Flow (prot)	0	0	3539	1583	0	0
Flt Permitted						
Satd. Flow (perm)	0	0	3539	1583	0	0
Link Speed (mph)		45	45		30	
Link Distance (ft)		213	315		137	
Travel Time (s)		3.2	4.8		3.1	
Peak Hour Factor	0.92	0.92	0.91	0.91	0.92	0.92
Adj. Flow (vph)	0	0	916	185	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	916	185	0	0
Sign Control		Stop	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 53.8%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	934	0	0	159	0
Future Volume (vph)	0	934	0	0	159	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3505	0	0	1787	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3505	0	0	1787	0
Link Speed (mph)		45	45		25	
Link Distance (ft)		309	168		108	
Travel Time (s)		4.7	2.5		2.9	
Peak Hour Factor	0.86	0.86	0.92	0.92	0.87	0.87
Heavy Vehicles (%)	3%	3%	2%	2%	1%	1%
Adj. Flow (vph)	0	1086	0	0	183	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1086	0	0	183	0
Sign Control		Free	Free		Stop	

Intersection Summary		
Area Type:	Other	
Control Type: Unsignalized		
Intersection Capacity Utilization 51.8%		ICU Level of Service A
Analysis Period (min) 15		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑↑	↰	
Traffic Volume (vph)	0	0	0	947	182	0
Future Volume (vph)	0	0	0	947	182	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	5036	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	5036	1770	0
Link Speed (mph)	45			45	25	
Link Distance (ft)	134			152	111	
Travel Time (s)	2.0			2.3	3.0	
Peak Hour Factor	0.92	0.92	0.89	0.89	0.94	0.94
Heavy Vehicles (%)	2%	2%	3%	3%	2%	2%
Adj. Flow (vph)	0	0	0	1064	194	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1064	194	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 38.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	912	0	0	80	0
Future Volume (vph)	0	912	0	0	80	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3574	0	0	1787	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3574	0	0	1787	0
Link Speed (mph)		45	45		25	
Link Distance (ft)		222	290		102	
Travel Time (s)		3.4	4.4		2.8	
Peak Hour Factor	0.95	0.95	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	1%	1%	2%	2%	1%	1%
Adj. Flow (vph)	0	960	0	0	87	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	960	0	0	87	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 65.7%	ICU Level of Service C
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	966	65	0
Future Volume (vph)	0	0	0	966	65	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	30			45	25	
Link Distance (ft)	114			1105	101	
Travel Time (s)	2.6			16.7	2.8	
Peak Hour Factor	0.92	0.92	0.88	0.88	0.94	0.94
Adj. Flow (vph)	0	0	0	1098	69	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1098	69	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 61.6%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	114	265	31	4	200	12	14	37	3	13	81	96
Future Volume (vph)	114	265	31	4	200	12	14	37	3	13	81	96
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	80		0	80		0	110		0	115		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	180			180			140			175		
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
Frt		0.984			0.991			0.988			0.919	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	1870	0	1770	1846	0	1703	1771	0	1770	1712	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1805	1870	0	1770	1846	0	1703	1771	0	1770	1712	0
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		1365			1319			666			571	
Travel Time (s)		20.7			20.0			10.1			8.7	
Peak Hour Factor	0.94	0.94	0.94	0.88	0.88	0.88	0.78	0.78	0.78	0.91	0.91	0.91
Heavy Vehicles (%)	0%	0%	0%	2%	2%	2%	6%	6%	6%	2%	2%	2%
Adj. Flow (vph)	121	282	33	5	227	14	18	47	4	14	89	105
Shared Lane Traffic (%)												
Lane Group Flow (vph)	121	315	0	5	241	0	18	51	0	14	194	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary		
Area Type:	Other	
Control Type: Unsignalized		
Intersection Capacity Utilization 40.8%		ICU Level of Service A
Analysis Period (min) 15		

Lane Group	EBL2	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	SWL	SWR
Lane Configurations											
Traffic Volume (vph)	55	0	112	0	270	79	81	385	0	0	0
Future Volume (vph)	55	0	112	0	270	79	81	385	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	240	0		0	105		0	0	0
Storage Lanes		1	1	0		0	1		0	0	0
Taper Length (ft)		25		25			70			25	
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
Frt			0.850		0.969						
Flt Protected	0.950						0.950				
Satd. Flow (prot)	1687	0	1615	0	1805	0	1752	1845	0	0	0
Flt Permitted	0.950						0.950				
Satd. Flow (perm)	1687	0	1615	0	1805	0	1752	1845	0	0	0
Link Speed (mph)		25			45			45		25	
Link Distance (ft)		894			1167			685		897	
Travel Time (s)		24.4			17.7			10.4		24.5	
Peak Hour Factor	0.93	0.93	0.93	0.91	0.91	0.91	0.95	0.95	0.95	0.92	0.92
Heavy Vehicles (%)	7%	0%	0%	2%	2%	2%	3%	3%	3%	2%	2%
Adj. Flow (vph)	59	0	120	0	297	87	85	405	0	0	0
Shared Lane Traffic (%)											
Lane Group Flow (vph)	59	0	120	0	384	0	85	405	0	0	0
Sign Control		Stop			Free			Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 33.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	WBL2	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NER
Lane Configurations											
Traffic Volume (vph)	93	0	84	61	264	0	0	373	50	0	0
Future Volume (vph)	93	0	84	61	264	0	0	373	50	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	185	165		0	0		0	0	0
Storage Lanes		1	1	1		0	0		0	0	0
Taper Length (ft)		25		110			25			25	
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
Frt			0.850					0.984			
Flt Protected	0.950			0.950							
Satd. Flow (prot)	1805	0	1455	1752	1845	0	0	1815	0	0	0
Flt Permitted	0.950			0.950							
Satd. Flow (perm)	1805	0	1455	1752	1845	0	0	1815	0	0	0
Link Speed (mph)		25			45			45		25	
Link Distance (ft)		613			685			608		913	
Travel Time (s)		16.7			10.4			9.2		24.9	
Peak Hour Factor	0.81	0.81	0.81	0.87	0.87	0.87	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	11%	3%	3%	3%	3%	3%	3%	2%	2%
Adj. Flow (vph)	115	0	104	70	303	0	0	405	54	0	0
Shared Lane Traffic (%)											
Lane Group Flow (vph)	115	0	104	70	303	0	0	459	0	0	0
Sign Control		Stop			Free			Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 33.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	184	140	0	396	272	0
Future Volume (vph)	184	140	0	396	272	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.850				
Flt Protected	0.950					
Satd. Flow (prot)	1543	1553	0	3505	3374	0
Flt Permitted	0.950					
Satd. Flow (perm)	1543	1553	0	3505	3374	0
Link Speed (mph)	25			55	55	
Link Distance (ft)	119			105	620	
Travel Time (s)	3.2			1.3	7.7	
Peak Hour Factor	0.93	0.93	0.82	0.82	0.92	0.92
Heavy Vehicles (%)	17%	4%	0%	3%	7%	0%
Adj. Flow (vph)	198	151	0	483	296	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	198	151	0	483	296	0
Sign Control	Stop			Free	Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 27.8% ICU Level of Service A

Analysis Period (min) 15

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			↑↑	↱		↰↑
Traffic Volume (vph)	0	0	396	61	35	377
Future Volume (vph)	0	0	396	61	35	377
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		340	0	
Storage Lanes	0	0		1	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	1.00	0.95	0.95
Frt				0.850		
Flt Protected						0.996
Satd. Flow (prot)	0	0	3505	1568	0	3383
Flt Permitted						0.996
Satd. Flow (perm)	0	0	3505	1568	0	3383
Link Speed (mph)	25		55			55
Link Distance (ft)	664		1109			105
Travel Time (s)	18.1		13.7			1.3
Peak Hour Factor	0.92	0.92	0.82	0.82	0.92	0.92
Heavy Vehicles (%)	2%	2%	3%	3%	20%	5%
Adj. Flow (vph)	0	0	483	74	38	410
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	483	74	0	448
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 29.1%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	WBL2	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NER
Lane Configurations											
Traffic Volume (vph)	52	0	60	0	352	0	0	220	86	0	0
Future Volume (vph)	52	0	60	0	352	0	0	220	86	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	205	0		0	0		135	0	0
Storage Lanes		1	1	0		0	0		1	0	0
Taper Length (ft)		25		25			25			25	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00
Frt			0.850						0.850		
Flt Protected	0.950										
Satd. Flow (prot)	1736	0	1380	0	3438	0	0	3343	1272	0	0
Flt Permitted	0.950										
Satd. Flow (perm)	1736	0	1380	0	3438	0	0	3343	1272	0	0
Link Speed (mph)		25			55			55		25	
Link Distance (ft)		296			230			1367		908	
Travel Time (s)		8.1			2.9			16.9		24.8	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.95	0.95	0.95	0.92	0.92
Heavy Vehicles (%)	4%	0%	17%	0%	5%	0%	0%	8%	27%	2%	2%
Adj. Flow (vph)	59	0	68	0	400	0	0	232	91	0	0
Shared Lane Traffic (%)											
Lane Group Flow (vph)	59	0	68	0	400	0	0	232	91	0	0
Sign Control		Stop			Free			Free		Stop	

Intersection Summary		
Area Type:	Other	
Control Type: Unsignalized		
Intersection Capacity Utilization 20.4%		ICU Level of Service A
Analysis Period (min) 15		

Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	33	80	0	270	154	0
Future Volume (vph)	33	80	0	270	154	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				
Flt Protected	0.950					
Satd. Flow (prot)	1752	1077	0	1624	1696	0
Flt Permitted	0.950					
Satd. Flow (perm)	1752	1077	0	1624	1696	0
Link Speed (mph)	25			45	45	
Link Distance (ft)	189			1063	114	
Travel Time (s)	5.2			16.1	1.7	
Peak Hour Factor	0.74	0.74	0.93	0.93	0.89	0.89
Heavy Vehicles (%)	3%	50%	17%	17%	12%	12%
Adj. Flow (vph)	45	108	0	290	173	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	45	108	0	290	173	0
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 24.2%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	0	0	182	121	3	154
Future Volume (vph)	0	0	182	121	3	154
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.850		
Flt Protected						0.999
Satd. Flow (prot)	0	0	1624	1380	0	1689
Flt Permitted						0.999
Satd. Flow (perm)	0	0	1624	1380	0	1689
Link Speed (mph)	25		45			45
Link Distance (ft)	105		114			727
Travel Time (s)	2.9		1.7			11.0
Peak Hour Factor	0.92	0.92	0.93	0.93	0.89	0.89
Heavy Vehicles (%)	2%	2%	17%	17%	33%	12%
Adj. Flow (vph)	0	0	196	130	3	173
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	196	130	0	176
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 22.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBR	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	6	97	58	124	60	11
Future Volume (vph)	6	97	58	124	60	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	195	0	0			90
Storage Lanes	1	1	0			1
Taper Length (ft)	135		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				0.850
Flt Protected	0.950			0.984		
Satd. Flow (prot)	1570	1404	0	1615	1776	1509
Flt Permitted	0.950			0.984		
Satd. Flow (perm)	1570	1404	0	1615	1776	1509
Link Speed (mph)	25			45	45	
Link Distance (ft)	597			727	1165	
Travel Time (s)	16.3			11.0	17.7	
Peak Hour Factor	0.83	0.83	0.91	0.91	0.78	0.78
Heavy Vehicles (%)	15%	15%	43%	3%	7%	7%
Adj. Flow (vph)	7	117	64	136	77	14
Shared Lane Traffic (%)						
Lane Group Flow (vph)	7	117	0	200	77	14
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 26.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	18	1317	18	0
Future Volume (vph)	0	0	18	1317	18	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.91	0.91	1.00	1.00
Frt						
Flt Protected				0.999	0.950	
Satd. Flow (prot)	0	0	0	5080	1770	0
Flt Permitted				0.999	0.950	
Satd. Flow (perm)	0	0	0	5080	1770	0
Link Speed (mph)	45			45	25	
Link Distance (ft)	382			217	236	
Travel Time (s)	5.8			3.3	6.4	
Peak Hour Factor	0.90	0.90	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	20	1432	20	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1452	20	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 35.8%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑					↱
Traffic Volume (vph)	1093	0	0	0	0	30
Future Volume (vph)	1093	0	0	0	0	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	1.00	1.00	1.00	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	3539	0	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	3539	0	0	0	0	1611
Link Speed (mph)	45			45	25	
Link Distance (ft)	168			432	770	
Travel Time (s)	2.5			6.5	21.0	
Peak Hour Factor	0.87	0.87	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1256	0	0	0	0	33
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1256	0	0	0	0	33
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 48.0%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations			↑↑↑			↱
Traffic Volume (vph)	0	0	1129	0	0	32
Future Volume (vph)	0	0	1129	0	0	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.91	1.00	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	0	0	5036	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	0	5036	0	0	1611
Link Speed (mph)		45	45		25	
Link Distance (ft)		494	134		230	
Travel Time (s)		7.5	2.0		6.3	
Peak Hour Factor	0.92	0.92	0.89	0.89	0.92	0.92
Heavy Vehicles (%)	2%	2%	3%	3%	2%	2%
Adj. Flow (vph)	0	0	1269	0	0	35
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1269	0	0	35
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 41.7%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	981	50	0	0
Future Volume (vph)	0	0	981	50	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.993			
Flt Protected						
Satd. Flow (prot)	0	0	3514	0	0	0
Flt Permitted						
Satd. Flow (perm)	0	0	3514	0	0	0
Link Speed (mph)		30	45		25	
Link Distance (ft)		176	114		201	
Travel Time (s)		4.0	1.7		5.5	
Peak Hour Factor	0.92	0.92	0.88	0.88	0.92	0.92
Adj. Flow (vph)	0	0	1115	57	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1172	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary		
Area Type:	Other	
Control Type: Unsignalized		
Intersection Capacity Utilization 37.2%		ICU Level of Service A
Analysis Period (min) 15		

Lane Group	NBT	NBR	SBL	SBT	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	352	228	0	272	0	0
Future Volume (vph)	352	228	0	272	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	1.00	0.95	1.00	1.00
Frt	0.941					
Flt Protected						
Satd. Flow (prot)	3164	0	0	3343	0	0
Flt Permitted						
Satd. Flow (perm)	3164	0	0	3343	0	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	620			230	1088	
Travel Time (s)	7.7			2.9	29.7	
Peak Hour Factor	0.88	0.88	0.95	0.95	0.92	0.92
Heavy Vehicles (%)	5%	11%	8%	8%	2%	2%
Adj. Flow (vph)	400	259	0	286	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	659	0	0	286	0	0
Sign Control	Free			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 20.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	32	949	0	0	0	0	0	48	29
Future Volume (vph)	0	0	0	32	949	0	0	0	0	0	48	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	165		0	0		0	0		0
Storage Lanes	0		0	1		0	0		0	0		0
Taper Length (ft)	25			85			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt											0.949	
Flt Protected				0.950								
Satd. Flow (prot)	0	0	0	1770	3539	0	0	0	0	0	1785	0
Flt Permitted				0.950								
Satd. Flow (perm)	0	0	0	1770	3539	0	0	0	0	0	1785	0
Link Speed (mph)		30			45			30			30	
Link Distance (ft)		212			176			102			496	
Travel Time (s)		4.8			2.7			2.3			11.3	
Peak Hour Factor	0.92	0.92	0.92	0.86	0.86	0.86	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	1%	1%	1%
Adj. Flow (vph)	0	0	0	37	1103	0	0	0	0	0	52	32
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	37	1103	0	0	0	0	0	84	0
Sign Control		Free			Free			Yield			Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 37.2% ICU Level of Service A

Analysis Period (min) 15

Lane Group	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	1560	0	0	0	1593
Future Volume (vph)	0	1560	0	0	0	1593
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	0.88
Frt						0.850
Flt Protected						
Satd. Flow (prot)	0	3539	0	0	0	2787
Flt Permitted						
Satd. Flow (perm)	0	3539	0	0	0	2787
Link Speed (mph)		55	55		55	
Link Distance (ft)		434	1242		1194	
Travel Time (s)		5.4	15.4		14.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1696	0	0	0	1732
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1696	0	0	0	1732
Sign Control		Free	Free		Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 59.1% ICU Level of Service B

Analysis Period (min) 15

Lane Group	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	0	119	0	0	512
Future Volume (vph)	0	0	119	0	0	512
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	0	0	1863	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	0	1863	0	0	1611
Link Speed (mph)		25	25		30	
Link Distance (ft)		1199	263		174	
Travel Time (s)		32.7	7.2		4.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.90	0.90
Adj. Flow (vph)	0	0	129	0	0	569
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	129	0	0	569
Sign Control		Free	Yield		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 44.6%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	WBL	WBR	NBL	NBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	168	1566	0	0	0
Future Volume (vph)	0	168	1566	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.97	1.00	1.00	1.00
Frt		0.865				
Flt Protected			0.950			
Satd. Flow (prot)	0	1627	3303	0	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	1627	3303	0	0	0
Link Speed (mph)	45		45		45	
Link Distance (ft)	255		329		551	
Travel Time (s)	3.9		5.0		8.3	
Peak Hour Factor	0.91	0.91	0.93	0.93	0.92	0.92
Heavy Vehicles (%)	1%	1%	6%	6%	2%	2%
Adj. Flow (vph)	0	185	1684	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	185	1684	0	0	0
Sign Control	Yield		Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 62.4%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	159	1002	0	0
Future Volume (vph)	0	0	159	1002	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	450		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			85		25	
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	5085	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	5085	0	0
Link Speed (mph)	45			45	30	
Link Distance (ft)	315			494	108	
Travel Time (s)	4.8			7.5	2.5	
Peak Hour Factor	0.92	0.92	0.87	0.87	0.92	0.92
Adj. Flow (vph)	0	0	183	1152	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	183	1152	0	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 41.7%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	182	941	0	0	0	0
Future Volume (vph)	182	941	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	275			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	110				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		45	45		30	
Link Distance (ft)		432	161		111	
Travel Time (s)		6.5	2.4		2.5	
Peak Hour Factor	0.94	0.94	0.92	0.92	0.92	0.92
Adj. Flow (vph)	194	1001	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	194	1001	0	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 51.0%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	1556	0	0	0	1583
Future Volume (vph)	0	1556	0	0	0	1583
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	0.76
Frt						0.850
Flt Protected						
Satd. Flow (prot)	0	3539	0	0	0	3610
Flt Permitted						
Satd. Flow (perm)	0	3539	0	0	0	3610
Link Speed (mph)		55	55		45	
Link Distance (ft)		1093	655		773	
Travel Time (s)		13.5	8.1		11.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1691	0	0	0	1721
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1691	0	0	0	1721
Sign Control		Free	Free		Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 46.3% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	65	927	0	0	0	0
Future Volume (vph)	65	927	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	180			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	75				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		45	45		30	
Link Distance (ft)		290	1089		101	
Travel Time (s)		4.4	16.5		2.3	
Peak Hour Factor	0.94	0.94	0.92	0.92	0.92	0.92
Adj. Flow (vph)	69	986	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	69	986	0	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 59.0%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	2266	512	0	0	0	0
Future Volume (vph)	2266	512	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	1.00	1.00	1.00	1.00
Frt	0.972					
Flt Protected						
Satd. Flow (prot)	4943	0	0	0	0	0
Flt Permitted						
Satd. Flow (perm)	4943	0	0	0	0	0
Link Speed (mph)	45			45	30	
Link Distance (ft)	311			156	174	
Travel Time (s)	4.7			2.4	4.0	
Peak Hour Factor	0.90	0.90	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2518	569	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	3087	0	0	0	0	0
Sign Control	Free			Stop	Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 77.3% ICU Level of Service D

Analysis Period (min) 15

Lane Group	NBT	NBR	SBL	SBT	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	0	0	112	1563	0	0
Future Volume (vph)	0	0	112	1563	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	500		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			100		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	3539	0	0
Link Speed (mph)	30			25	25	
Link Distance (ft)	266			1471	301	
Travel Time (s)	6.0			40.1	8.2	
Peak Hour Factor	0.92	0.92	0.75	0.75	0.92	0.92
Adj. Flow (vph)	0	0	149	2084	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	149	2084	0	0
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 46.5%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	501	122	0	0	0	0
Future Volume (vph)	501	122	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected		0.961				
Satd. Flow (prot)	0	1790	0	0	0	0
Flt Permitted		0.961				
Satd. Flow (perm)	0	1790	0	0	0	0
Link Speed (mph)		25	30		25	
Link Distance (ft)		1207	315		252	
Travel Time (s)		32.9	7.2		6.9	
Peak Hour Factor	0.75	0.75	0.92	0.92	0.92	0.92
Adj. Flow (vph)	668	163	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	831	0	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 49.0% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	103	0	69	0	0
Future Volume (vph)	0	103	0	69	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.865		
Flt Protected						
Satd. Flow (prot)	0	1652	0	1191	0	0
Flt Permitted						
Satd. Flow (perm)	0	1652	0	1191	0	0
Link Speed (mph)		25	25		25	
Link Distance (ft)		995	597		1154	
Travel Time (s)		27.1	16.3		31.5	
Peak Hour Factor	0.83	0.83	0.89	0.89	0.92	0.92
Heavy Vehicles (%)	15%	15%	38%	38%	2%	2%
Adj. Flow (vph)	0	124	0	78	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	124	0	78	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 8.8%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	53	3242	0	0
Future Volume (vph)	0	0	53	3242	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	250		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	5085	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	5085	0	0
Link Speed (mph)	45			45	25	
Link Distance (ft)	894			534	137	
Travel Time (s)	13.5			8.1	3.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	58	3524	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	58	3524	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 64.3%	ICU Level of Service C
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	3275	0	0	53	0
Future Volume (vph)	0	3275	0	0	53	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.86	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	6408	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	6408	0	0	1770	0
Link Speed (mph)		45	45		25	
Link Distance (ft)		744	1191		137	
Travel Time (s)		11.3	18.0		3.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	3560	0	0	58	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	3560	0	0	58	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 116.8%	ICU Level of Service H
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	519	2809	0	0	0	0
Future Volume (vph)	519	2809	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	400			0	0	0
Storage Lanes	2			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	0.97	0.86	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	3433	6408	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	3433	6408	0	0	0	0
Link Speed (mph)		45	45		25	
Link Distance (ft)		1191	262		113	
Travel Time (s)		18.0	4.0		3.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	564	3053	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	564	3053	0	0	0	0
Sign Control		Free	Stop		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 103.4%	ICU Level of Service G
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	119	2811	0	0
Future Volume (vph)	0	0	119	2811	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	250		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	5085	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	5085	0	0
Link Speed (mph)	45			45	25	
Link Distance (ft)	254			1016	123	
Travel Time (s)	3.8			15.4	3.4	
Peak Hour Factor	0.92	0.92	0.90	0.87	0.92	0.92
Adj. Flow (vph)	0	0	132	3231	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	132	3231	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary		
Area Type:	Other	
Control Type: Unsignalized		
Intersection Capacity Utilization 144.7%		ICU Level of Service H
Analysis Period (min) 15		

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	151	2778	0	0	0	0
Future Volume (vph)	151	2778	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.91	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	5085	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	5085	0	0	0	0
Link Speed (mph)		45	45		30	
Link Distance (ft)		704	311		111	
Travel Time (s)		10.7	4.7		2.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	164	3020	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	164	3020	0	0	0	0
Sign Control		Free	Stop		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 115.7%	ICU Level of Service H
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑	↰	
Traffic Volume (vph)	0	0	0	1225	27	0
Future Volume (vph)	0	0	0	1225	27	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	30	
Link Distance (ft)	583			574	107	
Travel Time (s)	7.2			7.1	2.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	1332	29	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1332	29	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 70.9%	ICU Level of Service C
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	27	1099	0	0	0	0
Future Volume (vph)	27	1099	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		30	
Link Distance (ft)		1122	576		107	
Travel Time (s)		13.9	7.1		2.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	29	1195	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	29	1195	0	0	0	0
Sign Control		Free	Stop		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 70.9%	ICU Level of Service C
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	1216	36	0	54
Future Volume (vph)	0	0	1216	36	0	54
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.996			0.865
Flt Protected						
Satd. Flow (prot)	0	0	3525	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	0	3525	0	0	1611
Link Speed (mph)		55	55		30	
Link Distance (ft)		590	583		121	
Travel Time (s)		7.3	7.2		2.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	1322	39	0	59
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1361	0	0	59
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 44.8%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	168	1102	0	0
Future Volume (vph)	0	0	168	1102	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	250		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	3539	0	0
Link Speed (mph)	55			55	30	
Link Distance (ft)	405			590	104	
Travel Time (s)	5.0			7.3	2.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	183	1198	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	183	1198	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 42.0%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	958	0	0	168	0
Future Volume (vph)	0	958	0	0	168	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	1770	0
Link Speed (mph)		55	55		30	
Link Distance (ft)		316	1122		104	
Travel Time (s)		3.9	13.9		2.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1041	0	0	183	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1041	0	0	183	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 63.6%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	280	2127	0	0
Future Volume (vph)	0	0	280	2127	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	250			0
Storage Lanes	0	0	2			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	0.97	0.91	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	3433	5085	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	3433	5085	0	0
Link Speed (mph)	45			55	30	
Link Distance (ft)	105			493	555	
Travel Time (s)	1.6			6.1	12.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	304	2312	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	304	2312	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 88.3%	ICU Level of Service E
Analysis Period (min) 15	

Lane Group	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	1499	628	0	0	0	0
Future Volume (vph)	1499	628	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.94	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	4990	1863	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	4990	1863	0	0	0	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		555	271		108	
Travel Time (s)		12.6	6.2		2.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1629	683	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1629	683	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 69.6%	ICU Level of Service C
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	73	0	0	0	0	628
Future Volume (vph)	73	0	0	0	0	628
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	1863	0	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	1863	0	0	0	0	1611
Link Speed (mph)	25			30	25	
Link Distance (ft)	287			1072	271	
Travel Time (s)	7.8			24.4	7.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	79	0	0	0	0	683
Shared Lane Traffic (%)						
Lane Group Flow (vph)	79	0	0	0	0	683
Sign Control	Yield			Free	Free	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 49.4% ICU Level of Service A
Analysis Period (min) 15

Lane Group	NBT	NBR	SBL	SBT	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	0	0	73	1461	0	0
Future Volume (vph)	0	0	73	1461	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.91	0.91	1.00	1.00
Frt						
Flt Protected				0.998		
Satd. Flow (prot)	0	0	0	5068	0	0
Flt Permitted				0.998		
Satd. Flow (perm)	0	0	0	5068	0	0
Link Speed (mph)	45			45	45	
Link Distance (ft)	194			406	287	
Travel Time (s)	2.9			6.2	4.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	5%	2%	2%	2%
Adj. Flow (vph)	0	0	79	1588	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1667	0	0
Sign Control	Free			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 49.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	104	549	0	0	0	0
Future Volume (vph)	104	549	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1719	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1719	3539	0	0	0	0
Link Speed (mph)		25	25		25	
Link Distance (ft)		879	346		271	
Travel Time (s)		24.0	9.4		7.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	2%	2%	2%	2%	2%
Adj. Flow (vph)	113	597	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	113	597	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 50.8%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	518	0	0	81
Future Volume (vph)	0	0	518	0	0	81
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	0	0	1863	0	0	1565
Flt Permitted						
Satd. Flow (perm)	0	0	1863	0	0	1565
Link Speed (mph)		30	45		45	
Link Distance (ft)		874	182		254	
Travel Time (s)		19.9	2.8		3.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	5%
Adj. Flow (vph)	0	0	563	0	0	88
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	563	0	0	88
Sign Control		Free	Free		Yield	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 53.6%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBR	SBL	SBR	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	0	0	0	0	518	1085
Future Volume (vph)	0	0	0	0	518	1085
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.91
Frt					0.974	0.850
Flt Protected					0.960	
Satd. Flow (prot)	0	0	0	0	1733	2799
Flt Permitted					0.960	
Satd. Flow (perm)	0	0	0	0	1733	2799
Link Speed (mph)	30		30		30	
Link Distance (ft)	182		207		337	
Travel Time (s)	4.1		4.7		7.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	5%
Adj. Flow (vph)	0	0	0	0	563	1179
Shared Lane Traffic (%)						10%
Lane Group Flow (vph)	0	0	0	0	681	1061
Sign Control	Stop		Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 53.6%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	966	81	0	0	0	0
Future Volume (vph)	966	81	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00
Frt	0.988					
Flt Protected						
Satd. Flow (prot)	3397	0	0	0	0	0
Flt Permitted						
Satd. Flow (perm)	3397	0	0	0	0	0
Link Speed (mph)	30			45	25	
Link Distance (ft)	306			190	254	
Travel Time (s)	7.0			2.9	6.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	5%	2%	2%	2%	2%
Adj. Flow (vph)	1050	88	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1138	0	0	0	0	0
Sign Control	Free			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 57.7%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	0	568	151	0	0
Future Volume (vph)	0	0	568	151	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			250	0	0
Storage Lanes	0			1	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	1.00
Frt				0.850		
Flt Protected						
Satd. Flow (prot)	0	0	3539	1538	0	0
Flt Permitted						
Satd. Flow (perm)	0	0	3539	1538	0	0
Link Speed (mph)		25	25		25	
Link Distance (ft)		241	1465		317	
Travel Time (s)		6.6	40.0		8.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	5%	2%	2%
Adj. Flow (vph)	0	0	617	164	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	617	164	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 20.7%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑↑	↰	
Traffic Volume (vph)	0	0	0	1236	64	0
Future Volume (vph)	0	0	0	1236	64	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	4940	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	4940	1770	0
Link Speed (mph)	55			30	25	
Link Distance (ft)	598			415	105	
Travel Time (s)	7.4			9.4	2.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	5%	2%	2%
Adj. Flow (vph)	0	0	0	1343	70	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1343	70	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 59.5%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	64	1047	0	0	0	0
Future Volume (vph)	64	1047	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3438	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3438	0	0	0	0
Link Speed (mph)		55	30		25	
Link Distance (ft)		597	306		105	
Travel Time (s)		7.4	7.0		2.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	5%	2%	2%	2%	2%
Adj. Flow (vph)	70	1138	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	70	1138	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 59.5% ICU Level of Service B
Analysis Period (min) 15

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑	↰	
Traffic Volume (vph)	0	0	0	786	0	0
Future Volume (vph)	0	0	0	786	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	0	0	0	3539	1863	0
Flt Permitted						
Satd. Flow (perm)	0	0	0	3539	1863	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	586			210	99	
Travel Time (s)	7.3			2.6	2.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	854	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	854	0	0
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 31.7% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	677	0	0	0	0
Future Volume (vph)	0	677	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	1863	3539	0	0	0	0
Flt Permitted						
Satd. Flow (perm)	1863	3539	0	0	0	0
Link Speed (mph)		55	55		25	
Link Distance (ft)		589	212		99	
Travel Time (s)		7.3	2.6		2.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	736	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	736	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 31.7%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	786	0	0
Future Volume (vph)	0	0	0	786	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	0	0	0	3539	0	0
Flt Permitted						
Satd. Flow (perm)	0	0	0	3539	0	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	723			586	81	
Travel Time (s)	9.0			7.3	2.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	854	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	854	0	0
Sign Control	Free			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 31.7%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	677	0	0	0	0	0	0	0	0	0	0
Future Volume (vph)	0	677	0	0	0	0	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	3539	0	0	0	0	0	0	1863	0	1863	0
Flt Permitted												
Satd. Flow (perm)	0	3539	0	0	0	0	0	0	1863	0	1863	0
Link Speed (mph)		55			55			25			25	
Link Distance (ft)		719			589			84			81	
Travel Time (s)		8.9			7.3			2.3			2.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	736	0	0	0	0	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	736	0	0	0	0	0	0	0	0	0	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary		
Area Type:	Other	
Control Type: Unsignalized		
Intersection Capacity Utilization 28.7%		ICU Level of Service A
Analysis Period (min) 15		

Lane Group	EBT	EBR	WBL	WBT	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	0	677	0	786	0	0
Future Volume (vph)	0	677	0	786	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.88	1.00	0.95	1.00	1.00
Frt		0.850				
Flt Protected						
Satd. Flow (prot)	0	2787	0	3539	0	0
Flt Permitted						
Satd. Flow (perm)	0	2787	0	3539	0	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	997			723	719	
Travel Time (s)	12.4			9.0	19.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	736	0	854	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	736	0	854	0	0
Sign Control	Free			Free	Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 27.0% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	286	813	0	0	0	0
Future Volume (vph)	286	813	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		55	
Link Distance (ft)		2077	2379		116	
Travel Time (s)		25.7	29.5		1.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	311	884	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	311	884	0	0	0	0
Sign Control		Free	Stop		Stop	

Intersection Summary		
Area Type:	Other	
Control Type: Unsignalized		
Intersection Capacity Utilization 50.6%		ICU Level of Service A
Analysis Period (min) 15		

Lane Group	EBT	EBR	WBL	WBT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	0	0	0	776	286	0
Future Volume (vph)	0	0	0	776	286	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	607			2382	116	
Travel Time (s)	7.5			29.5	3.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	843	311	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	843	311	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 57.3%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	0	0	14	776	0	0
Future Volume (vph)	0	0	14	776	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	250		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	3539	0	0
Link Speed (mph)	55			55	55	
Link Distance (ft)	2382			560	108	
Travel Time (s)	29.5			6.9	1.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	15	843	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	15	843	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 31.6%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	0	813	0	0	14	0
Future Volume (vph)	0	813	0	0	14	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	1770	0
Link Speed (mph)		55	55		25	
Link Distance (ft)		2379	608		108	
Travel Time (s)		29.5	7.5		2.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	884	0	0	15	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	884	0	0	15	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 50.6%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	788	39	0	0	0	32
Future Volume (vph)	788	39	0	0	0	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		600	600		0	0
Storage Lanes		0	0		0	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00
Frt	0.993					0.865
Flt Protected						
Satd. Flow (prot)	3514	0	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	3514	0	0	0	0	1611
Link Speed (mph)	55			55	45	
Link Distance (ft)	608			628	1089	
Travel Time (s)	7.5			7.8	16.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	857	42	0	0	0	35
Shared Lane Traffic (%)						
Lane Group Flow (vph)	899	0	0	0	0	35
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 33.0%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	781	9	0
Future Volume (vph)	0	0	0	781	9	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	645			3831	112	
Travel Time (s)	8.0			47.5	3.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	849	10	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	849	10	0
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 49.8% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	9	811	0	0	0	0
Future Volume (vph)	9	811	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		55	
Link Distance (ft)		628	3825		112	
Travel Time (s)		7.8	47.4		1.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	10	882	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	10	882	0	0	0	0
Sign Control		Free	Stop		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 50.7%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	10	781	0	0
Future Volume (vph)	0	0	10	781	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	250		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	3539	0	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	3831			538	97	
Travel Time (s)	47.5			6.7	2.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	11	849	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	11	849	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 32.4% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	811	0	0	10	0
Future Volume (vph)	0	811	0	0	10	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	1770	0
Link Speed (mph)		55	55		25	
Link Distance (ft)		3825	591		97	
Travel Time (s)		47.4	7.3		2.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	882	0	0	11	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	882	0	0	11	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 50.7%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	809	12	0	0	0	16
Future Volume (vph)	809	12	0	0	0	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00
Frt	0.998					0.865
Flt Protected						
Satd. Flow (prot)	3532	0	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	3532	0	0	0	0	1611
Link Speed (mph)	55			55	45	
Link Distance (ft)	591			1206	1073	
Travel Time (s)	7.3			15.0	16.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	879	13	0	0	0	17
Shared Lane Traffic (%)						
Lane Group Flow (vph)	892	0	0	0	0	17
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 32.7%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑	↰	
Traffic Volume (vph)	0	0	0	783	9	0
Future Volume (vph)	0	0	0	783	9	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	1254			1793	105	
Travel Time (s)	15.5			22.2	2.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	851	10	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	851	10	0
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 50.9% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	9	816	0	0	0	0
Future Volume (vph)	9	816	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		55	
Link Distance (ft)		1206	1786		105	
Travel Time (s)		15.0	22.1		1.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	10	887	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	10	887	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 50.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	549	783	0	0
Future Volume (vph)	0	0	549	783	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	500		0	0
Storage Lanes		0	2		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	0.97	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	3433	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	3433	3539	0	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	1793			596	109	
Travel Time (s)	22.2			7.4	3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	597	851	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	597	851	0	0
Sign Control	Free			Free	Stop	

Intersection Summary		
Area Type:	Other	
Control Type: Unsignalized		
Intersection Capacity Utilization 89.4%		ICU Level of Service E
Analysis Period (min) 15		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑	↰	
Traffic Volume (vph)	0	0	0	1279	53	0
Future Volume (vph)	0	0	0	1279	53	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	631			2681	109	
Travel Time (s)	7.8			33.2	3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	1390	58	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1390	58	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 64.0%	ICU Level of Service C
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	53	1312	0	0	0	0
Future Volume (vph)	53	1312	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		55	
Link Distance (ft)		627	2678		109	
Travel Time (s)		7.8	33.2		1.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	58	1426	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	58	1426	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 78.3%	ICU Level of Service D
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	308	1279	0	0
Future Volume (vph)	0	0	308	1279	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	500		0	0
Storage Lanes		0	2		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	0.97	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	3433	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	3433	3539	0	0
Link Speed (mph)	55			55	55	
Link Distance (ft)	2681			671	109	
Travel Time (s)	33.2			8.3	1.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	335	1390	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	335	1390	0	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 101.1%	ICU Level of Service G
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑	↰	
Traffic Volume (vph)	0	0	0	1560	27	0
Future Volume (vph)	0	0	0	1560	27	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	654			797	95	
Travel Time (s)	8.1			9.9	2.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	1696	29	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1696	29	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 73.8%	ICU Level of Service D
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	27	1593	0	0	0	0
Future Volume (vph)	27	1593	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		55	
Link Distance (ft)		659	784		95	
Travel Time (s)		8.2	9.7		1.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	29	1732	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	29	1732	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 93.8%	ICU Level of Service F
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1081	18	0	0	0	18
Future Volume (vph)	1081	18	0	0	0	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00
Frt	0.997					0.865
Flt Protected						
Satd. Flow (prot)	3529	0	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	3529	0	0	0	0	1611
Link Speed (mph)	55			55	25	
Link Distance (ft)	576			2077	205	
Travel Time (s)	7.1			25.7	5.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1175	20	0	0	0	20
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1195	0	0	0	0	20
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 40.5%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	1798	0	0	1477	0
Future Volume (vph)	0	1798	0	0	1477	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	0.97	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	3433	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	3433	0
Link Speed (mph)		45	45		45	
Link Distance (ft)		1021	744		215	
Travel Time (s)		15.5	11.3		3.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1954	0	0	1605	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1954	0	0	1605	0
Sign Control		Free	Stop		Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 98.5% ICU Level of Service F

Analysis Period (min) 15

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	0	0	707	1583
Future Volume (vph)	0	0	0	0	707	1583
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		0	250	
Storage Lanes	0	0		0	2	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.97	0.91
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	0	3433	5085
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	0	3433	5085
Link Speed (mph)	55		45			30
Link Distance (ft)	167		773			587
Travel Time (s)	2.1		11.7			13.3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	768	1721
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	0	768	1721
Sign Control	Stop		Stop			Free

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 56.8%	ICU Level of Service B
Analysis Period (min) 15	

1005: WB M-96 (Michigan Avenue) & SB I-69 Off-Ramp (Push Button) Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	5.8	19.8	13.6

1007: EB M-96 (Michigan Avenue) (Push Button) & SB I-69 Off-Ramp/EB M-96 (Michigan Avenue) Perfor

Approach	EB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	28.2	2.8	4.1

1008: WB M-96 (Michigan Avenue)/NB I-69 Off-Ramp & WB M-96 (Michigan Avenue) (Push Button) Perf

Approach	WB	SW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	18.9	2.2	8.4

1009: WB M-96 (Michigan Avenue) (Push Button)/WB M-96 (Michigan Avenue) & EB M-96 (Michigan Ave

Approach	EB	SW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	16.8	13.8	15.3

1010: NB I-69 Off-Ramp (Push Button) & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	3.7	19.2	5.8

3003: M-227/West Drive & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.2	0.0
Total Del/Veh (s)	8.5	5.1	18.6	9.4

3093: M-227/West Drive & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	0.0	1.9	0.2	0.3
Total Del/Veh (s)	3.6	30.4	2.9	7.2

4001: M-96 (Michigan Avenue) & WB Main Entrance/WB M-96 (Michigan Avenue) Performance by appro

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	69.3	24.3	54.5

4003: EB to WB Xover E of 15 Mile Rd (North) & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	2.9	97.0	19.0
Total Del/Veh (s)	25.0	34.6	26.6

4004: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	5.0	55.6	14.3

4005: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	8.6	26.9	15.7

4006: M-311 (11 Mile Rd) & Site Driveway West Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	0.3	0.9	0.0	0.2
Total Del/Veh (s)	38.5	8.7	8.8	20.7

4007: M-311 (11 Mile Rd) & F Drive N Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	0.2	0.0	0.0	0.0
Total Del/Veh (s)	41.9	8.9	5.2	12.5

4010: EB M-96 (Michigan Avenue)/EB M-96 (Michigan Avenue) (Push Button) & WB M-96 (Michigan Ave

Approach	WB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	19.3	13.6	15.6

4030: NB M-311 (11 Mile Rd)/WB M-96 (Michigan Avenue)/11 Mile Rd (North) & EB M-96 (Michigan Ave

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	23.3	22.8	23.0

4031: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & WB M-96 (Michigan Avenue) Performance by a

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	27.9	3.9	14.8

4033: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & NB to SB Xover N of M-96 (Michigan Avenue) P

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	33.9	4.3	7.8

4034: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & EB I-94 Off-ramp Performance by approach

Approach	SB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.9	22.6	7.7

4035: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & WB M-96 (Michigan Avenue)/11 Mile Rd (North)

Approach	SB	NW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	12.3	17.3	14.8

4036: EB I-94 Off-ramp & WB M-96 (Michigan Avenue)/11 Mile Rd (North) Performance by approach

Approach	NB	NW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	20.5	2.4	3.6

4037: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & WB I-94 Off-ramp Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.1
Total Del/Veh (s)	1.5	23.1	9.5

4038: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & EB M-96 (Michigan Avenue)/11 Mile Rd (South)

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	17.2	28.0	22.9

4039: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & WB I-94 Off-ramp Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	16.4	4.4	5.8

4040: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & 11 Mile Rd Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	17.4	2.6	11.6

4041: 11 Mile Rd & WB M-96 (Michigan Avenue)/11 Mile Rd (North) Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	15.7	25.4	18.5

4042: 11 Mile Rd & H Dr N Performance by approach

Approach	NE	SW	All
Denied Del/Veh (s)	0.0	0.4	0.2
Total Del/Veh (s)	4.5	4.2	4.4

4050: Prop Site Drive E & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	5.0	46.6	12.3

4051: Prop Site Drive W & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	8.1	37.2	17.6

4061: WB M-96 (Michigan Avenue) & Firekeepers Main Drive Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	4.0	50.0	8.3

4065: WB M-96 (Michigan Avenue) & 15 Mile Rd (North) Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.4	0.0	0.3
Total Del/Veh (s)	40.4	50.9	41.8

4066: EB M-96 (Michigan Avenue) & WB to EB Xover W of 15 Mile Rd (South) Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	7.7	38.8	9.0

4067: 15 Mile Rd (South) & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.6	0.1
Total Del/Veh (s)	13.6	47.0	16.5

4068: EB to WB Xover E of 15 Mile Rd (South) & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.2	0.0	0.2
Total Del/Veh (s)	8.1	37.5	9.5

4070: M-311 (11 Mile Rd) & Site Drive East Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	1.2	0.0	0.0	0.2
Total Del/Veh (s)	14.0	9.0	14.0	12.4

4071: 15 Mile Rd & Verona Rd Performance by approach

Approach	NB	SB	SE	NW	All
Denied Del/Veh (s)	0.5	0.1	3.2	0.2	1.6
Total Del/Veh (s)	16.3	9.9	10.3	31.2	15.3

4075: 11 Mile Road & Verona Road Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.5	3.0	0.6	0.8
Total Del/Veh (s)	20.7	31.7	50.1	46.3	31.2

9002: WB M-96 (Michigan Avenue) & Firekeepers Gas Station Driveway Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.2	0.0
Total Del/Veh (s)	2.2	11.4	3.8

9003: WB M-96 (Michigan Avenue) & Firekeepers E Drive Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.0	10.5	3.2

9004: WB M-96 (Michigan Avenue) & Ackerson Drive Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	1.5	8.4	1.5

9006: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	1.0	2.7	1.1

9008: 15 Mile Rd (North) & Old M-96 (Michigan Ave) Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.0	0.0	0.0
Total Del/Veh (s)	4.7	0.7	1.1	0.9

9013: SB I-69 On-Ramp & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	15.9	15.9

9016: EB M-96 (Michigan Avenue) & NB I-69 On-Ramp Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	15.3	15.3

9017: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	1.9	1.9

9018: EB M-96 (Michigan Avenue) & WB to EB Xover W of M-227/West Drive Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.2	8.4	2.2

9019: EB to WB Xover W of M-227/West Drive & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.6	13.7	3.4

9020: EB M-96 (Michigan Avenue) & WB to EB Xover E of M-227/West Drive Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.0	9.5	1.6

9021: EB to WB Xover E of M-227/West Drive & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.2	0.0	0.2
Total Del/Veh (s)	1.2	12.6	1.9

9023: M-311 (11 Mile Rd) & B Drive North Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	1.3	0.3	1.1	0.4	0.8
Total Del/Veh (s)	1.6	1.1	9.7	8.7	3.5

9025: M-294 (Beadle Lake Road) & EB I-94 Off-Ramp & EB I-94 On-Ramp Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	2.5	0.3	0.0	0.6
Total Del/Veh (s)	6.3	1.5	1.7	2.4

9026: WB I-94 On-Ramp & M-294 (Beadle Lake Road) & WB I-94 Off-Ramp Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	2.0	0.0	0.3	0.5
Total Del/Veh (s)	7.4	1.7	1.4	2.6

9027: Old US-27 & EB I-94 to Old US-27 Off Ramp Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0
Total Del/Veh (s)	7.1	0.2	0.8	2.7

9028: Old US-27 & NB Old US-27 to EB I-94 On Ramp Performance by approach

Approach	NB	SB	All
Denied Del/Veh (s)	0.6	0.0	0.3
Total Del/Veh (s)	0.8	0.4	0.6

9029: SB Old US-27 WB I-94 On Ramp & Old US-27 & WB I-94 to Old US-27 Off Ramp Performance by

Approach	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	1.1	0.4
Total Del/Veh (s)	4.8	0.2	0.8	1.1

9030: I-94BL/Partello Rd & EB I-94 to I-94BL/Partello Off Ramp Performance by approach

Approach	SE	NE	SW	All
Denied Del/Veh (s)	0.0	0.2	0.0	0.1
Total Del/Veh (s)	4.3	1.5	0.2	1.7

9031: I-94BL/Partello Rd & I-94/Partello Rd to EB I-94 On Ramp Performance by approach

Approach	NE	SW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.2	0.7	0.4

9032: I-94BL/Partello Rd & WB I-94 to I-94/Partello Rd Performance by approach

Approach	EB	NE	SW	All
Denied Del/Veh (s)	0.0	0.0	0.9	0.2
Total Del/Veh (s)	3.4	1.2	0.5	1.7

9034: Dummy Node & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	1.7	5.6	1.7

9035: Dummy Node & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	0.5	11.0	0.8

9036: WB M-96 (Michigan Avenue) & Dummy Node Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	0.6	4.9	0.8

9037: WB M-96 (Michigan Avenue) & Dummy Node Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.5	0.5

9040: Old US-27 & NB Old US-27 to WB I-94 On Ramp Performance by approach

Approach	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.0	0.3	0.8

9041: WB to EB Xover E of M-227/West Drive/McDonald's Dr & WB M-96 (Michigan Avenue) Performanc

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.2	0.0
Total Del/Veh (s)	1.5	16.8	2.6

9128: M-96 (Michigan Avenue)/WB M-96 (Michigan Avenue) & EB M-96 (Michigan Avenue) Performance

Approach	NB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.2	7.8	4.6

9137: SB I-69 On-Ramp Performance by approach

Approach	SB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	8.0	0.4	1.9

9143: NB I-69 On-Ramp Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	14.3	3.2	4.3

9146: WB to EB Xover W of M-227/West Drive & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	1.0	1.0

9147: EB M-96 (Michigan Avenue) & EB to WB Xover W of M-227/West Drive Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	1.8	1.8

9150: M-311 (11 Mile Rd) /NB M-311 (11 Mile Rd) & SB M-311 (11 Mile Rd) Performance by approach

Approach	NB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	5.0	1.0	3.0

9151: EB M-96 (Michigan Avenue) & EB to WB Xover E of M-227/West Drive Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.5	0.5

9157: SB I-69 On-Ramp & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	6.4	6.4

9158: SB I-69 Off-Ramp (Push Button) & SB I-69 Off-Ramp Performance by approach

Approach	SB	All
Denied Del/Veh (s)	0.5	0.5
Total Del/Veh (s)	9.2	9.2

9159: NB I-69 Off-Ramp & NB I-69 Off-Ramp (Push Button) Performance by approach

Approach	NB	All
Denied Del/Veh (s)	0.6	0.6
Total Del/Veh (s)	4.0	4.0

9178: WB I-94 to BL-94/Partello Rd Off Ramp/WB I-94 to I-94/Partello Rd & BL-94/Partello Rd to WB I-94

Approach	EB	WB	All
Denied Del/Veh (s)	0.1	0.0	0.1
Total Del/Veh (s)	0.2	0.3	0.2

9304: WB to EB Xover W of 15 Mile Rd (North) & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	28.1	28.1

9305: EB M-96 (Michigan Avenue) & WB to EB Xover W of 15 Mile Rd (North) Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	3.4	51.8	4.1

9307: EB M-96 (Michigan Avenue) & EB to WB Xover E of 15 Mile Rd (North) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	14.6	14.6

9310: WB to EB Xover W of 15 Mile Rd (South) & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.1	0.1
Total Del/Veh (s)	57.7	57.7

9311: EB M-96 (Michigan Avenue) & EB to WB Xover E of 15 Mile Rd (South) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	5.8	5.8

9330: EB to WB Xover E of Old M-311 (11 Mile Rd) & WB M-96 (Michigan Avenue) Performance by appr

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.9	6.5	2.0

9331: EB M-96 (Michigan Avenue) & EB to WB Xover E of Old M-311 (11 Mile Rd) Performance by appro

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.3	2.3

9332: WB M-96 (Michigan Avenue) & Old M-311 (11 Mile Rd) Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.3	7.9	1.5

9336: WB to EB Xover W of Old M-311 (11 Mile Rd) & WB M-96 (Michigan Avenue) Performance by app

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	3.2	3.2

9337: EB M-96 (Michigan Avenue) & WB to EB Xover W of Old M-311 (11 Mile Rd) Performance by appr

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	3.8	9.8	4.6

9338: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & NB to SB Xover N of M-96 (Michigan Avenue) F

Approach	NB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	4.0	4.0

9339: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & EB I-94 On Ramp Performance by approach

Approach	NB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	10.5	10.5

9340: EB I-94 On Ramp Performance by approach

Approach	EB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	7.6	0.2	1.1

9342: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & EB I-94 On Ramp Performance by approach

Approach	SB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	10.8	10.8

9343: EB I-94 Off-ramp Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.7	0.7
Total Del/Veh (s)	1.0	1.0

9346: WB I-94 On Ramp Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.4	11.9	3.7

9347: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & WB I-94 On Ramp Performance by approach

Approach	NW	All
Denied Del/Veh (s)	0.1	0.1
Total Del/Veh (s)	14.0	14.0

9348: WB I-94 On Ramp & EB M-96 (Michigan Avenue)/11 Mile Rd (South) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.9	2.9

9349: WB I-94 Off-ramp Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.5	0.5
Total Del/Veh (s)	1.3	1.3

9351: SB to NB Xover E of 11 Mile Rd & WB M-96 (Michigan Avenue)/11 Mile Rd (North) Performance b

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.3	3.7	1.4

9352: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & SB to NB Xover E of 11 Mile Rd Performance b

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	5.5	5.5

9354: EB to WB Xover W of 11 Mile Rd & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	3.8	3.8

9355: EB M-96 (Michigan Avenue) & EB to WB Xover W of 11 Mile Rd Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.7	2.7

9356: WB to EB Xover W of 11 Mile Rd & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.7	2.7

9357: EB M-96 (Michigan Avenue) & WB to EB Xover W of 11 Mile Rd Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.4	0.4

9359: EB M-96 (Michigan Avenue) & M-96 (Michigan Avenue)/WB M-96 (Michigan Avenue) Performance

Approach	EB	WB	All
Denied Del/Veh (s)	0.2	0.0	0.1
Total Del/Veh (s)	2.3	0.9	1.5

9381: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.7	2.7

9382: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.9	6.3	3.9

9383: WB M-96 (Michigan Avenue) Performance by approach

Approach	NW	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.5	0.5

9384: EB M-96 (Michigan Avenue) Performance by approach

Approach	SE	SW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.8	4.7	1.8

9385: Ceresco Road/12 Mile Road & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	0.9	4.6	1.0

9386: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	3.2	4.1	3.2

9387: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.6	0.6

9388: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.4	0.4

9389: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.8	4.5	2.8

9390: 13 Mile Rd & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	0.7	3.7	0.7

9392: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.3	3.7	1.3

9393: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	1.0	1.0

9394: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	18.1	18.1

9396: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.2	8.9	2.5

9397: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.7	2.7

9398: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	18.1	18.1

9400: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.6	18.8	1.9

9401: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.6	2.6

9410: Retail Drive & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	0.7	8.2	0.8

9415: EB Main Entrance/EB M-96 (Michigan Avenue) & M-96 (Michigan Avenue) Performance by approa

Approach	EB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.2	2.2	2.2

9416: SB M-311 (11 Mile Rd)/EB M-96 (Michigan Avenue)/11 Mile Rd (South) & EB M-96 (Michigan Ave

Approach	SB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.1	2.1

Total Network Performance

Denied Del/Veh (s)	3.8
Total Del/Veh (s)	103.2

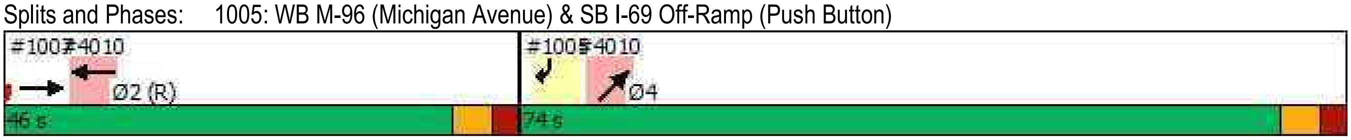
Scenario M2&S2

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø2
Lane Configurations							
Traffic Volume (vph)	0	0	1427	0	0	1563	
Future Volume (vph)	0	0	1427	0	0	1563	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	0.91	1.00	1.00	0.76	
Frt						0.850	
Flt Protected							
Satd. Flow (prot)	0	0	5085	0	0	3610	
Flt Permitted							
Satd. Flow (perm)	0	0	5085	0	0	3610	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)						322	
Link Speed (mph)		45	45		25		
Link Distance (ft)		275	194		266		
Travel Time (s)		4.2	2.9		7.3		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.84	0.75	
Heavy Vehicles (%)	2%	2%	2%	2%	3%	2%	
Adj. Flow (vph)	0	0	1551	0	0	2084	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	1551	0	0	2084	
Turn Type			NA			Prot	
Protected Phases			Free!			4!	2
Permitted Phases							
Minimum Split (s)						17.0	17.0
Total Split (s)						74.0	46.0
Total Split (%)						61.7%	38%
Yellow Time (s)						3.5	3.5
All-Red Time (s)						2.5	2.5
Lost Time Adjust (s)						0.0	
Total Lost Time (s)						6.0	
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)			120.0			68.0	
Actuated g/C Ratio			1.00			0.57	
v/c Ratio			0.31			0.95	
Control Delay			0.4			32.2	
Queue Delay			0.0			1.5	
Total Delay			0.5			33.7	
LOS			A			C	
Approach Delay			0.5		33.7		
Approach LOS			A		C		
Queue Length 50th (ft)			0			570	
Queue Length 95th (ft)			m0			439	
Internal Link Dist (ft)		195	114		186		
Turn Bay Length (ft)							
Base Capacity (vph)			5085			2185	
Starvation Cap Reductn			0			0	
Spillback Cap Reductn			604			37	
Storage Cap Reductn			0			0	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø2
Reduced v/c Ratio			0.35			0.97	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 100 (83%), Referenced to phase 2:EBT, Start of Green	
Natural Cycle: 90	
Control Type: Pretimed	
Maximum v/c Ratio: 0.95	
Intersection Signal Delay: 19.5	Intersection LOS: B
Intersection Capacity Utilization 82.5%	ICU Level of Service E
Analysis Period (min) 15	
m Volume for 95th percentile queue is metered by upstream signal.	
! Phase conflict between lane groups.	

Splits and Phases: 1005: WB M-96 (Michigan Avenue) & SB I-69 Off-Ramp (Push Button)

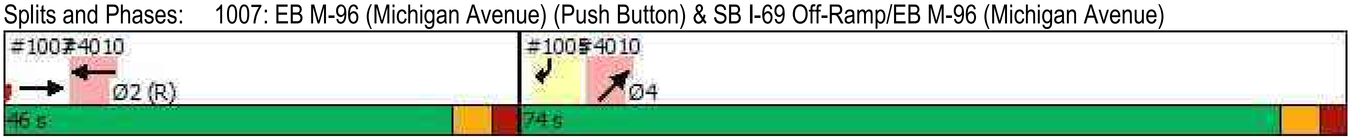


Lane Group	EBT	EBR	WBL	WBT	NEL	NER	Ø4
Lane Configurations							
Traffic Volume (vph)	112	0	0	0	0	2326	
Future Volume (vph)	112	0	0	0	0	2326	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Storage Length (ft)		260	285		0	0	
Storage Lanes		0	0		0	3	
Taper Length (ft)			240		25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.76	
Frt						0.850	
Flt Protected							
Satd. Flow (prot)	1863	0	0	0	0	3610	
Flt Permitted							
Satd. Flow (perm)	1863	0	0	0	0	3610	
Right Turn on Red		Yes				Yes	
Satd. Flow (RTOR)						2086	
Link Speed (mph)	25			45	45		
Link Distance (ft)	301			619	190		
Travel Time (s)	8.2			9.4	2.9		
Peak Hour Factor	0.75	0.84	0.92	0.92	0.90	0.90	
Heavy Vehicles (%)	2%	3%	2%	2%	2%	2%	
Adj. Flow (vph)	149	0	0	0	0	2584	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	149	0	0	0	0	2584	
Turn Type	NA					Free	
Protected Phases	2						4
Permitted Phases						Free	
Minimum Split (s)	17.0						17.0
Total Split (s)	46.0						74.0
Total Split (%)	38.3%						62%
Yellow Time (s)	3.5						3.5
All-Red Time (s)	2.5						2.5
Lost Time Adjust (s)	0.0						
Total Lost Time (s)	6.0						
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)	40.0					120.0	
Actuated g/C Ratio	0.33					1.00	
v/c Ratio	0.24					0.72	
Control Delay	30.3					12.1	
Queue Delay	0.0					0.0	
Total Delay	30.3					12.1	
LOS	C					B	
Approach Delay	30.3				12.1		
Approach LOS	C				B		
Queue Length 50th (ft)	83					439	
Queue Length 95th (ft)	111					253	
Internal Link Dist (ft)	221			539	110		
Turn Bay Length (ft)							
Base Capacity (vph)	621					3610	

Lane Group	EBT	EBR	WBL	WBT	NEL	NER	Ø4
Starvation Cap Reductn	0					0	
Spillback Cap Reductn	0					0	
Storage Cap Reductn	0					0	
Reduced v/c Ratio	0.24					0.72	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 100 (83%), Referenced to phase 2:EBT, Start of Green	
Natural Cycle: 90	
Control Type: Pretimed	
Maximum v/c Ratio: 0.95	
Intersection Signal Delay: 13.1	Intersection LOS: B
Intersection Capacity Utilization 46.5%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 1007: EB M-96 (Michigan Avenue) (Push Button) & SB I-69 Off-Ramp/EB M-96 (Michigan Avenue)

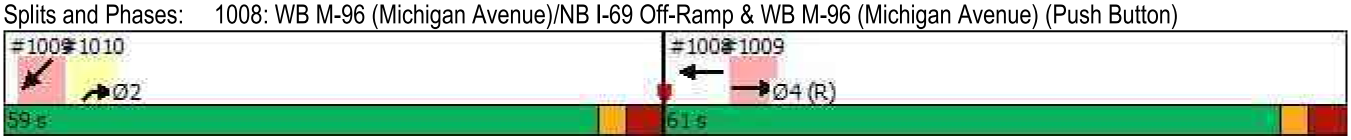


Lane Group	EBL	EBT	WBT	WBR	SWL	SWR	Ø2
Lane Configurations							
Traffic Volume (vph)	0	0	652	0	0	894	
Future Volume (vph)	0	0	652	0	0	894	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.88	
Frt						0.850	
Flt Protected							
Satd. Flow (prot)	0	0	3539	0	0	2787	
Flt Permitted							
Satd. Flow (perm)	0	0	3539	0	0	2787	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)						1021	
Link Speed (mph)		45	25		45		
Link Distance (ft)		217	252		223		
Travel Time (s)		3.3	6.9		3.4		
Peak Hour Factor	0.92	0.92	0.75	0.93	0.92	0.92	
Heavy Vehicles (%)	2%	2%	2%	6%	2%	2%	
Adj. Flow (vph)	0	0	869	0	0	972	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	869	0	0	972	
Turn Type			NA			Free	
Protected Phases			4				2
Permitted Phases						Free	
Minimum Split (s)			16.0				16.0
Total Split (s)			61.0				59.0
Total Split (%)			50.8%				49%
Yellow Time (s)			2.5				2.5
All-Red Time (s)			3.5				3.5
Lost Time Adjust (s)			0.0				
Total Lost Time (s)			6.0				
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)			55.0			120.0	
Actuated g/C Ratio			0.46			1.00	
v/c Ratio			0.54			0.35	
Control Delay			24.9			3.6	
Queue Delay			0.0			0.0	
Total Delay			24.9			3.6	
LOS			C			A	
Approach Delay			24.9		3.6		
Approach LOS			C		A		
Queue Length 50th (ft)			248			81	
Queue Length 95th (ft)			241			80	
Internal Link Dist (ft)		137	172		143		
Turn Bay Length (ft)							
Base Capacity (vph)			1622			2787	
Starvation Cap Reductn			0			0	
Spillback Cap Reductn			0			0	
Storage Cap Reductn			0			0	

Lane Group	EBL	EBT	WBT	WBR	SWL	SWR	Ø2
Reduced v/c Ratio			0.54			0.35	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 92 (77%), Referenced to phase 4:WBT, Start of Green	
Natural Cycle: 50	
Control Type: Pretimed	
Maximum v/c Ratio: 0.63	
Intersection Signal Delay: 13.6	Intersection LOS: B
Intersection Capacity Utilization 57.4%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 1008: WB M-96 (Michigan Avenue)/NB I-69 Off-Ramp & WB M-96 (Michigan Avenue) (Push Button)



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	0	872	0	0	0	0	0	0	0	0	894	0
Future Volume (vph)	0	872	0	0	0	0	0	0	0	0	894	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	3539	0	0	0	0	0	0	0	0	3539	0
Flt Permitted												
Satd. Flow (perm)	0	3539	0	0	0	0	0	0	0	0	3539	0
Right Turn on Red			Yes			Yes			Yes	Yes		Yes
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		209			206			223			213	
Travel Time (s)		3.2			3.1			3.4			3.2	
Peak Hour Factor	0.86	0.86	0.86	0.92	0.92	0.92	0.92	0.92	0.92	0.91	0.91	0.91
Adj. Flow (vph)	0	1014	0	0	0	0	0	0	0	0	982	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1014	0	0	0	0	0	0	0	0	982	0
Turn Type		NA									NA	
Protected Phases		4									2	
Permitted Phases												
Minimum Split (s)		16.0									16.0	
Total Split (s)		61.0									59.0	
Total Split (%)		50.8%									49.2%	
Yellow Time (s)		2.5									2.5	
All-Red Time (s)		3.5									3.5	
Lost Time Adjust (s)		0.0									0.0	
Total Lost Time (s)		6.0									6.0	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		55.0									53.0	
Actuated g/C Ratio		0.46									0.44	
v/c Ratio		0.63									0.63	
Control Delay		24.4									25.2	
Queue Delay		0.0									0.0	
Total Delay		24.4									25.2	
LOS		C									C	
Approach Delay		24.4									25.2	
Approach LOS		C									C	
Queue Length 50th (ft)		354									320	
Queue Length 95th (ft)		336									397	
Internal Link Dist (ft)		129			126			143			133	
Turn Bay Length (ft)												
Base Capacity (vph)		1622									1563	
Starvation Cap Reductn		0									0	
Spillback Cap Reductn		0									0	
Storage Cap Reductn		0									0	
Reduced v/c Ratio		0.63									0.63	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 92 (77%), Referenced to phase 4:WBT, Start of Green	
Natural Cycle: 50	
Control Type: Pretimed	
Maximum v/c Ratio: 0.63	
Intersection Signal Delay: 24.8	Intersection LOS: C
Intersection Capacity Utilization 58.8%	ICU Level of Service B
Analysis Period (min) 15	

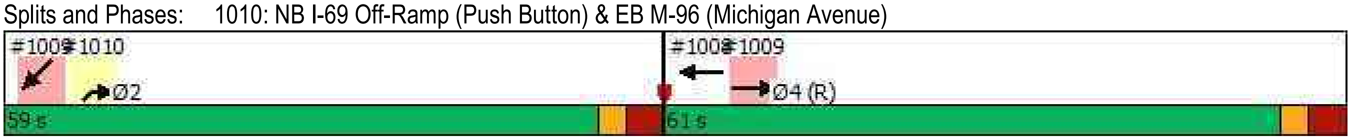
Splits and Phases: 1009: WB M-96 (Michigan Avenue) (Push Button)/WB M-96 (Michigan Avenue) & EB M-96 (Michigan Avenue)

Lane Group	EBT	EBR	WBL	WBT	NEL	NER	Ø4
Lane Configurations							
Traffic Volume (vph)	872	0	0	0	0	122	
Future Volume (vph)	872	0	0	0	0	122	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	0.95	1.00	1.00	1.00	1.00	1.00	
Frt						0.865	
Flt Protected							
Satd. Flow (prot)	3539	0	0	0	0	1611	
Flt Permitted							
Satd. Flow (perm)	3539	0	0	0	0	1611	
Right Turn on Red		Yes				Yes	
Satd. Flow (RTOR)						292	
Link Speed (mph)	45			45	25		
Link Distance (ft)	206			309	315		
Travel Time (s)	3.1			4.7	8.6		
Peak Hour Factor	0.86	0.86	0.92	0.92	0.93	0.75	
Heavy Vehicles (%)	2%	2%	2%	2%	6%	2%	
Adj. Flow (vph)	1014	0	0	0	0	163	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	1014	0	0	0	0	163	
Turn Type	NA					Prot	
Protected Phases	Free!					2!	4
Permitted Phases							
Minimum Split (s)						16.0	16.0
Total Split (s)						59.0	61.0
Total Split (%)						49.2%	51%
Yellow Time (s)						2.5	2.5
All-Red Time (s)						3.5	3.5
Lost Time Adjust (s)						0.0	
Total Lost Time (s)						6.0	
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)	120.0					53.0	
Actuated g/C Ratio	1.00					0.44	
v/c Ratio	0.29					0.19	
Control Delay	0.2					0.5	
Queue Delay	0.0					0.0	
Total Delay	0.2					0.5	
LOS	A					A	
Approach Delay	0.2				0.5		
Approach LOS	A				A		
Queue Length 50th (ft)	0					0	
Queue Length 95th (ft)	0					0	
Internal Link Dist (ft)	126			229	235		
Turn Bay Length (ft)							
Base Capacity (vph)	3539					874	
Starvation Cap Reductn	0					0	
Spillback Cap Reductn	0					0	
Storage Cap Reductn	0					0	

Lane Group	EBT	EBR	WBL	WBT	NEL	NER	Ø4
Reduced v/c Ratio	0.29					0.19	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 92 (77%), Referenced to phase 4:WBT, Start of Green	
Natural Cycle: 50	
Control Type: Pretimed	
Maximum v/c Ratio: 0.63	
Intersection Signal Delay: 0.2	Intersection LOS: A
Intersection Capacity Utilization 58.8%	ICU Level of Service B
Analysis Period (min) 15	
! Phase conflict between lane groups.	

Splits and Phases: 1010: NB I-69 Off-Ramp (Push Button) & EB M-96 (Michigan Avenue)



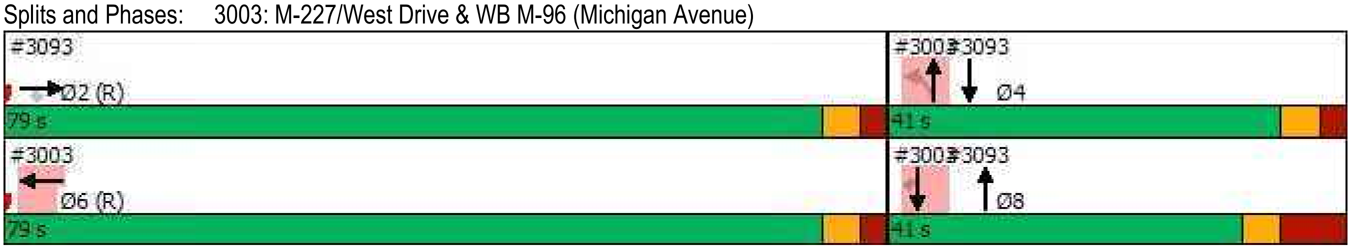
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	846	192	76	50	0	0	84	85
Future Volume (vph)	0	0	0	0	846	192	76	50	0	0	84	85
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		80	0		0	0		0
Storage Lanes	0		0	0		1	1		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.972							0.850
Flt Protected							0.950					
Satd. Flow (prot)	0	0	0	0	4992	0	1671	1863	0	0	1845	1568
Flt Permitted							0.687					
Satd. Flow (perm)	0	0	0	0	4992	0	1209	1863	0	0	1845	1568
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					78							110
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		152			212			101			1197	
Travel Time (s)		2.3			3.2			2.0			23.3	
Peak Hour Factor	0.92	0.92	0.92	0.87	0.87	0.87	0.67	0.67	0.67	0.77	0.77	0.77
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	8%	2%	2%	3%	3%	3%
Adj. Flow (vph)	0	0	0	0	972	221	113	75	0	0	109	110
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1193	0	113	75	0	0	109	110
Turn Type					NA		Perm	NA			NA	Perm
Protected Phases					6			4			8	
Permitted Phases							4					8
Minimum Split (s)					31.0		17.0	17.0			17.0	17.0
Total Split (s)					79.0		41.0	41.0			41.0	41.0
Total Split (%)					65.8%		34.2%	34.2%			34.2%	34.2%
Yellow Time (s)					3.5		3.5	3.5			3.5	3.5
All-Red Time (s)					2.5		2.5	2.5			6.0	6.0
Lost Time Adjust (s)					0.0		0.0	0.0			0.0	0.0
Total Lost Time (s)					6.0		6.0	6.0			9.5	9.5
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)					73.0		35.0	35.0			31.5	31.5
Actuated g/C Ratio					0.61		0.29	0.29			0.26	0.26
v/c Ratio					0.39		0.32	0.14			0.23	0.22
Control Delay					11.6		8.6	5.5			36.2	7.5
Queue Delay					0.0		0.0	0.0			0.0	0.0
Total Delay					11.6		8.6	5.5			36.2	7.5
LOS					B		A	A			D	A
Approach Delay					11.6			7.4			21.8	
Approach LOS					B			A			C	
Queue Length 50th (ft)					151		11	7			66	0
Queue Length 95th (ft)					172		11	8			98	28
Internal Link Dist (ft)		72			132			21			1117	
Turn Bay Length (ft)												
Base Capacity (vph)					3067		352	543			484	492

Lane Group	Ø2
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	2
Permitted Phases	
Minimum Split (s)	16.0
Total Split (s)	79.0
Total Split (%)	66%
Yellow Time (s)	3.5
All-Red Time (s)	2.5
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
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)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
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					0.39		0.32	0.14			0.23	0.22

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 112 (93%), Referenced to phase 2:EBT and 6:, Start of Green	
Natural Cycle: 50	
Control Type: Pretimed	
Maximum v/c Ratio: 0.46	
Intersection Signal Delay: 12.5	Intersection LOS: B
Intersection Capacity Utilization 50.2%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 3003: M-227/West Drive & WB M-96 (Michigan Avenue)



Lane Group	Ø2
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

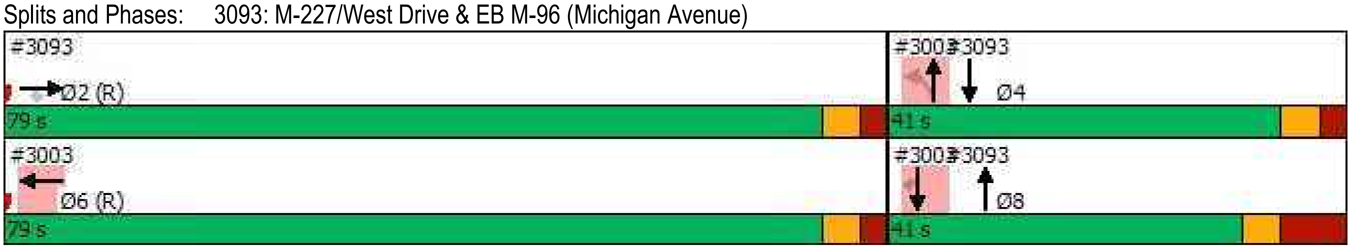
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	942	59	0	0	0	0	126	30	0	84	0
Future Volume (vph)	0	942	59	0	0	0	0	126	30	0	84	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		65	0		0	100		0	0		0
Storage Lanes	0		1	0		0	1		0	0		0
Taper Length (ft)	25			25			70			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Frt			0.850					0.971				
Flt Protected												
Satd. Flow (prot)	0	3574	1442	0	0	0	0	3344	0	0	1881	0
Flt Permitted												
Satd. Flow (perm)	0	3574	1442	0	0	0	0	3344	0	0	1881	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			59					24				
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		161			222			1117			101	
Travel Time (s)		2.4			3.4			21.8			2.0	
Peak Hour Factor	0.95	0.95	0.95	0.92	0.92	0.92	0.72	0.72	0.72	0.83	0.83	0.83
Heavy Vehicles (%)	2%	1%	12%	2%	2%	2%	2%	6%	0%	2%	1%	2%
Adj. Flow (vph)	0	992	62	0	0	0	0	175	42	0	101	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	992	62	0	0	0	0	217	0	0	101	0
Turn Type		NA	Perm					NA			NA	
Protected Phases		2						8			4	
Permitted Phases			2									
Minimum Split (s)		16.0	16.0					17.0			17.0	
Total Split (s)		79.0	79.0					41.0			41.0	
Total Split (%)		65.8%	65.8%					34.2%			34.2%	
Yellow Time (s)		3.5	3.5					3.5			3.5	
All-Red Time (s)		2.5	2.5					6.0			2.5	
Lost Time Adjust (s)		0.0	0.0					0.0			0.0	
Total Lost Time (s)		6.0	6.0					9.5			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		73.0	73.0					31.5			35.0	
Actuated g/C Ratio		0.61	0.61					0.26			0.29	
v/c Ratio		0.46	0.07					0.24			0.18	
Control Delay		4.4	0.2					31.7			0.7	
Queue Delay		0.0	0.0					0.0			0.0	
Total Delay		4.4	0.2					31.7			0.7	
LOS		A	A					C			A	
Approach Delay		4.2						31.7			0.7	
Approach LOS		A						C			A	
Queue Length 50th (ft)		44	1					61			0	
Queue Length 95th (ft)		52	0					73			0	
Internal Link Dist (ft)		81			142			1037			21	
Turn Bay Length (ft)			65									
Base Capacity (vph)		2174	900					895			548	

Lane Group	Ø6
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	6
Permitted Phases	
Minimum Split (s)	31.0
Total Split (s)	79.0
Total Split (%)	66%
Yellow Time (s)	3.5
All-Red Time (s)	2.5
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
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)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn		0	0					0			0	
Spillback Cap Reductn		0	0					18			0	
Storage Cap Reductn		0	0					0			0	
Reduced v/c Ratio		0.46	0.07					0.25			0.18	

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 112 (93%), Referenced to phase 2:EBT and 6:, Start of Green	
Natural Cycle: 50	
Control Type: Pretimed	
Maximum v/c Ratio: 0.46	
Intersection Signal Delay: 8.3	Intersection LOS: A
Intersection Capacity Utilization 50.2%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 3093: M-227/West Drive & EB M-96 (Michigan Avenue)



Lane Group	Ø6
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

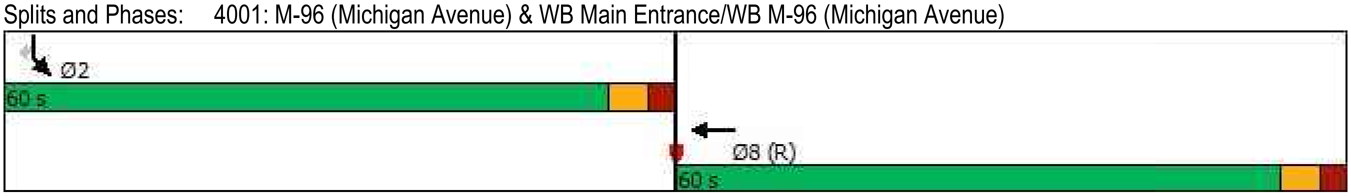
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations										
Traffic Volume (vph)	0	0	0	0	1681	1772	1688	116	0	0
Future Volume (vph)	0	0	0	0	1681	1772	1688	116	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	300		300	0	200	0	0
Storage Lanes	0		0	0		1	2	1	0	0
Taper Length (ft)	25			25			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.88	0.97	1.00	1.00	1.00
Frt						0.850		0.850		
Flt Protected							0.950			
Satd. Flow (prot)	0	0	0	0	3539	2787	3433	1583	0	0
Flt Permitted							0.950			
Satd. Flow (perm)	0	0	0	0	3539	2787	3433	1583	0	0
Right Turn on Red			Yes	Yes		Yes		Yes		
Satd. Flow (RTOR)						661		27		
Link Speed (mph)		45			45		55		45	
Link Distance (ft)		858			894		434		215	
Travel Time (s)		13.0			13.5		5.4		3.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	1827	1926	1835	126	0	0
Shared Lane Traffic (%)										
Lane Group Flow (vph)	0	0	0	0	1827	1926	1835	126	0	0
Turn Type					NA	Free	Prot	Perm		
Protected Phases					8		2			
Permitted Phases						Free		2		
Minimum Split (s)					16.0		16.0	16.0		
Total Split (s)					60.0		60.0	60.0		
Total Split (%)					50.0%		50.0%	50.0%		
Yellow Time (s)					3.5		3.5	3.5		
All-Red Time (s)					2.5		2.5	2.5		
Lost Time Adjust (s)					0.0		0.0	0.0		
Total Lost Time (s)					6.0		6.0	6.0		
Lead/Lag										
Lead-Lag Optimize?										
Act Effct Green (s)					54.0	120.0	54.0	54.0		
Actuated g/C Ratio					0.45	1.00	0.45	0.45		
v/c Ratio					1.15	0.69	1.19	0.17		
Control Delay					96.3	0.6	113.2	5.4		
Queue Delay					0.0	0.0	0.0	0.0		
Total Delay					96.3	0.6	113.2	5.4		
LOS					F	A	F	A		
Approach Delay					47.2		106.3			
Approach LOS					D		F			
Queue Length 50th (ft)					~873	0	~897	19		
Queue Length 95th (ft)					m#992	m0	#1011	24		
Internal Link Dist (ft)		778			814		354		135	
Turn Bay Length (ft)						300		200		
Base Capacity (vph)					1592	2787	1544	727		
Starvation Cap Reductn					0	0	0	0		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Spillback Cap Reductn					0	0	0	0		
Storage Cap Reductn					0	0	0	0		
Reduced v/c Ratio					1.15	0.69	1.19	0.17		

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 36 (30%), Referenced to phase 8:WBT, Start of Green	
Natural Cycle: 150	
Control Type: Pretimed	
Maximum v/c Ratio: 1.19	
Intersection Signal Delay: 67.5	Intersection LOS: E
Intersection Capacity Utilization 104.6%	ICU Level of Service G
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4001: M-96 (Michigan Avenue) & WB Main Entrance/WB M-96 (Michigan Avenue)

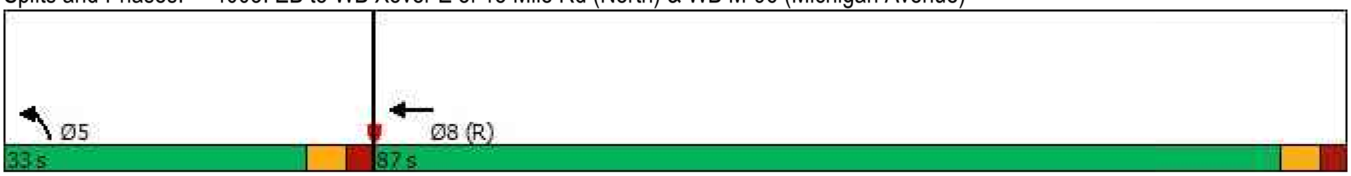


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑↑	↰↰	
Traffic Volume (vph)	0	0	0	3022	519	0
Future Volume (vph)	0	0	0	3022	519	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	0.97	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	5085	3433	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	5085	3433	0
Right Turn on Red		Yes			Yes	Yes
Satd. Flow (RTOR)					2	
Link Speed (mph)	45			45	25	
Link Distance (ft)	660			254	113	
Travel Time (s)	10.0			3.8	3.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.70	0.92
Adj. Flow (vph)	0	0	0	3285	741	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	3285	741	0
Turn Type				NA	Prot	
Protected Phases				8	5	
Permitted Phases						
Minimum Split (s)				16.0	13.0	
Total Split (s)				87.0	33.0	
Total Split (%)				72.5%	27.5%	
Yellow Time (s)				3.5	3.5	
All-Red Time (s)				2.5	2.5	
Lost Time Adjust (s)				0.0	0.0	
Total Lost Time (s)				6.0	6.0	
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)				81.0	27.0	
Actuated g/C Ratio				0.68	0.22	
v/c Ratio				0.96	0.96	
Control Delay				17.8	72.5	
Queue Delay				0.7	0.0	
Total Delay				18.5	72.5	
LOS				B	E	
Approach Delay				18.5	72.5	
Approach LOS				B	E	
Queue Length 50th (ft)				330	303	
Queue Length 95th (ft)				453	m268	
Internal Link Dist (ft)	580			174	33	
Turn Bay Length (ft)						
Base Capacity (vph)				3432	773	
Starvation Cap Reductn				0	0	
Spillback Cap Reductn				37	0	
Storage Cap Reductn				0	0	
Reduced v/c Ratio				0.97	0.96	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 116 (97%), Referenced to phase 8:WBT, Start of Green	
Natural Cycle: 90	
Control Type: Pretimed	
Maximum v/c Ratio: 0.96	
Intersection Signal Delay: 28.5	Intersection LOS: C
Intersection Capacity Utilization 113.6%	ICU Level of Service H
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4003: EB to WB Xover E of 15 Mile Rd (North) & WB M-96 (Michigan Avenue)

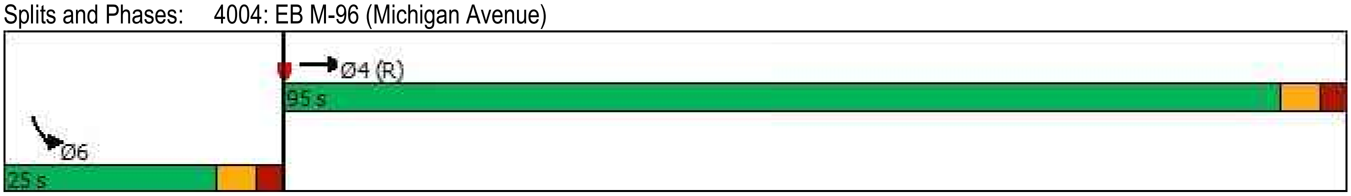


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	1523	0	0	308	0
Future Volume (vph)	0	1523	0	0	308	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	0.97	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	3433	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	3433	0
Right Turn on Red				Yes	Yes	Yes
Satd. Flow (RTOR)					106	
Link Speed (mph)		55	55		25	
Link Distance (ft)		2678	669		109	
Travel Time (s)		33.2	8.3		3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1655	0	0	335	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1655	0	0	335	0
Turn Type		NA			Prot	
Protected Phases		4			6	
Permitted Phases						
Detector Phase		4			6	
Switch Phase						
Minimum Initial (s)		10.0			7.0	
Minimum Split (s)		16.0			13.0	
Total Split (s)		95.0			25.0	
Total Split (%)		79.2%			20.8%	
Yellow Time (s)		3.5			3.5	
All-Red Time (s)		2.5			2.5	
Lost Time Adjust (s)		0.0			0.0	
Total Lost Time (s)		6.0			6.0	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode		C-Max			None	
Act Effct Green (s)		94.5			13.5	
Actuated g/C Ratio		0.79			0.11	
v/c Ratio		0.59			0.70	
Control Delay		1.6			35.7	
Queue Delay		0.0			0.0	
Total Delay		1.6			35.7	
LOS		A			D	
Approach Delay		1.6			35.7	
Approach LOS		A			D	
Queue Length 50th (ft)		18			85	
Queue Length 95th (ft)		20			125	
Internal Link Dist (ft)		2598	589		29	
Turn Bay Length (ft)						
Base Capacity (vph)		2785			632	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Starvation Cap Reductn		0			0	
Spillback Cap Reductn		2			0	
Storage Cap Reductn		0			0	
Reduced v/c Ratio		0.59			0.53	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 20 (17%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 45	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.70	
Intersection Signal Delay: 7.4	Intersection LOS: A
Intersection Capacity Utilization 91.6%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 4004: EB M-96 (Michigan Avenue)

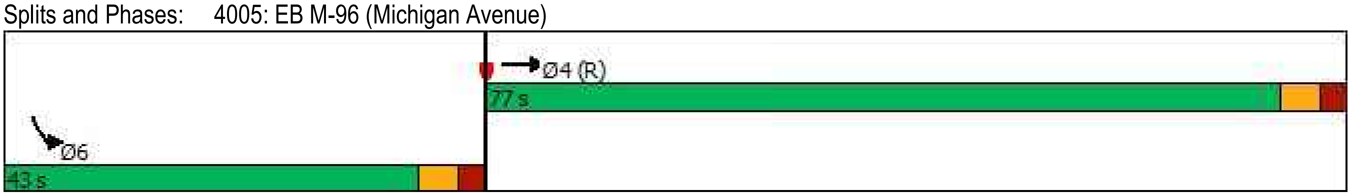


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	1027	0	0	549	0
Future Volume (vph)	0	1027	0	0	549	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	0.97	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	3433	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	3433	0
Right Turn on Red				Yes	Yes	Yes
Satd. Flow (RTOR)					173	
Link Speed (mph)		55	55		25	
Link Distance (ft)		1786	608		109	
Travel Time (s)		22.1	7.5		3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1116	0	0	597	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1116	0	0	597	0
Turn Type		NA			Prot	
Protected Phases		4			6	
Permitted Phases						
Detector Phase		4			6	
Switch Phase						
Minimum Initial (s)		10.0			7.0	
Minimum Split (s)		16.0			13.0	
Total Split (s)		77.0			43.0	
Total Split (%)		64.2%			35.8%	
Yellow Time (s)		3.5			3.5	
All-Red Time (s)		2.5			2.5	
Lost Time Adjust (s)		0.0			0.0	
Total Lost Time (s)		6.0			6.0	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode		C-Max			Max	
Act Effct Green (s)		71.0			37.0	
Actuated g/C Ratio		0.59			0.31	
v/c Ratio		0.53			0.51	
Control Delay		15.8			26.2	
Queue Delay		0.0			0.0	
Total Delay		15.8			26.2	
LOS		B			C	
Approach Delay		15.8			26.2	
Approach LOS		B			C	
Queue Length 50th (ft)		256			162	
Queue Length 95th (ft)		313			227	
Internal Link Dist (ft)		1706	528		29	
Turn Bay Length (ft)						
Base Capacity (vph)		2093			1178	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Starvation Cap Reductn		0			0	
Spillback Cap Reductn		0			0	
Storage Cap Reductn		0			0	
Reduced v/c Ratio		0.53			0.51	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 112 (93%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 40	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.53	
Intersection Signal Delay: 19.4	Intersection LOS: B
Intersection Capacity Utilization 64.2%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 4005: EB M-96 (Michigan Avenue)

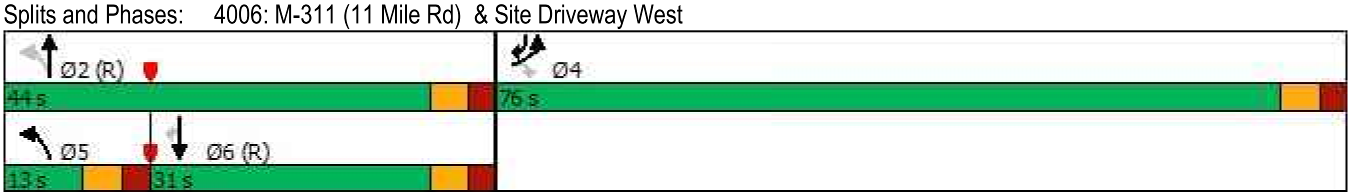


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	1152	61	61	162	189	1152
Future Volume (vph)	1152	61	61	162	189	1152
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	250	250			0
Storage Lanes	2	1	1			1
Taper Length (ft)	25		25			
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	1.00
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	3433	1583	1770	1863	1863	1583
Flt Permitted	0.950		0.437			
Satd. Flow (perm)	3433	1583	814	1863	1863	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		66				678
Link Speed (mph)	25			55	55	
Link Distance (ft)	1178			1461	940	
Travel Time (s)	32.1			18.1	11.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1252	66	66	176	205	1252
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1252	66	66	176	205	1252
Turn Type	Prot	Perm	pm+pt	NA	NA	pm+ov
Protected Phases	4		5	2	6	4
Permitted Phases		4	2			6
Detector Phase	4	4	5	2	6	4
Switch Phase						
Minimum Initial (s)	7.0	7.0	7.0	10.0	10.0	7.0
Minimum Split (s)	14.0	14.0	13.0	17.0	17.0	14.0
Total Split (s)	76.0	76.0	13.0	44.0	31.0	76.0
Total Split (%)	63.3%	63.3%	10.8%	36.7%	25.8%	63.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.5	2.5	2.5	2.5	2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None	None	Min	C-Max	C-Max	None
Act Effct Green (s)	63.7	63.7	44.3	44.3	31.2	101.0
Actuated g/C Ratio	0.53	0.53	0.37	0.37	0.26	0.84
v/c Ratio	0.69	0.08	0.19	0.26	0.42	0.87
Control Delay	22.5	2.8	29.4	29.9	53.6	21.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	22.5	2.8	29.4	29.9	53.6	21.2
LOS	C	A	C	C	D	C
Approach Delay	21.5			29.8	25.7	
Approach LOS	C			C	C	
Queue Length 50th (ft)	310	0	36	103	167	334
Queue Length 95th (ft)	379	19	71	164	246	1102

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Internal Link Dist (ft)	1098			1381	860	
Turn Bay Length (ft)		250	250			
Base Capacity (vph)	2002	950	356	686	484	1484
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	0.63	0.07	0.19	0.26	0.42	0.84

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 60 (50%), Referenced to phase 2:NBTL and 6:SBT, Start of Green	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.87	
Intersection Signal Delay: 24.2	Intersection LOS: C
Intersection Capacity Utilization 87.2%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 4006: M-311 (11 Mile Rd) & Site Driveway West



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	1030	30	30	1981	2008	1030
Future Volume (vph)	1030	30	30	1981	2008	1030
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	250	400			0
Storage Lanes	2	1	1			1
Taper Length (ft)	25		25			
Lane Util. Factor	0.97	1.00	1.00	0.95	0.95	1.00
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	3433	1583	1770	3539	3539	1583
Flt Permitted	0.950		0.058			
Satd. Flow (perm)	3433	1583	108	3539	3539	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		6				
Link Speed (mph)	45			55	55	
Link Distance (ft)	1846			974	1093	
Travel Time (s)	28.0			12.1	13.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1120	33	33	2153	2183	1120
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1120	33	33	2153	2183	1120
Turn Type	Prot	Perm	Perm	NA	NA	pm+ov
Protected Phases	4			2	6	4
Permitted Phases		4	2			6
Detector Phase	4	4	2	2	6	4
Switch Phase						
Minimum Initial (s)	7.0	7.0	10.0	10.0	10.0	7.0
Minimum Split (s)	13.0	13.0	16.0	16.0	16.0	13.0
Total Split (s)	45.0	45.0	75.0	75.0	75.0	45.0
Total Split (%)	37.5%	37.5%	62.5%	62.5%	62.5%	37.5%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.5	2.5	2.5	2.5	2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None	None	C-Max	C-Max	C-Max	None
Act Effct Green (s)	39.0	39.0	69.0	69.0	69.0	120.0
Actuated g/C Ratio	0.32	0.32	0.58	0.58	0.58	1.00
v/c Ratio	1.00	0.06	0.53	1.06	1.07	0.71
Control Delay	68.7	24.5	31.0	50.0	57.3	1.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	68.7	24.5	31.0	50.0	57.3	1.0
LOS	E	C	C	D	E	A
Approach Delay	67.4			49.8	38.2	
Approach LOS	E			D	D	
Queue Length 50th (ft)	~449	14	6	~957	~1001	0
Queue Length 95th (ft)	#600	39	m13	m#976	m#1100	m0

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Internal Link Dist (ft)	1766			894	1013	
Turn Bay Length (ft)		250	400			
Base Capacity (vph)	1115	518	62	2034	2034	1583
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	1.00	0.06	0.53	1.06	1.07	0.71

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 20 (17%), Referenced to phase 2:NBTL and 6:SBT, Start of Green

Natural Cycle: 140

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.07

Intersection Signal Delay: 47.1 Intersection LOS: D

Intersection Capacity Utilization 94.9% ICU Level of Service F

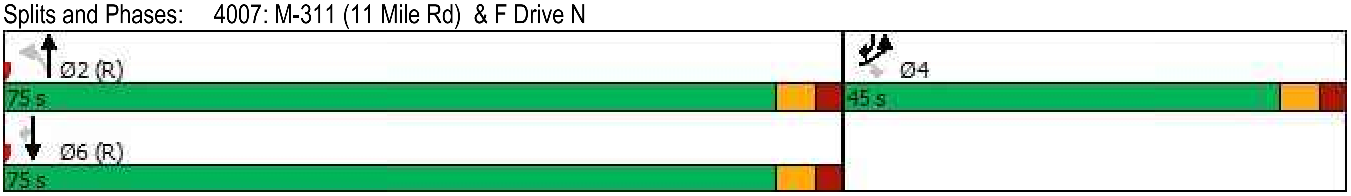
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

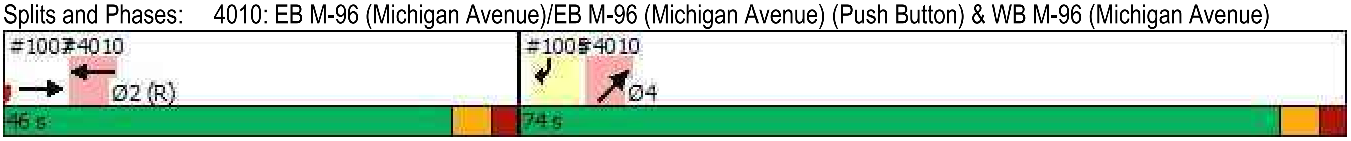
Splits and Phases: 4007: M-311 (11 Mile Rd) & F Drive N



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations					↑↑↑			↑↑↑				
Traffic Volume (vph)	0	0	0	0	1427	0	0	2326	0	0	0	0
Future Volume (vph)	0	0	0	0	1427	0	0	2326	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.91	1.00	1.00	1.00	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	0	0	0	5085	0	0	5085	0	0	0	0
Flt Permitted												
Satd. Flow (perm)	0	0	0	0	5085	0	0	5085	0	0	0	0
Right Turn on Red			Yes			Yes	Yes		Yes			Yes
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		194			183			156			190	
Travel Time (s)		2.9			2.8			2.4			2.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.90	0.90	0.90	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	1551	0	0	2584	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1551	0	0	2584	0	0	0	0
Turn Type					NA			NA				
Protected Phases					2			4				
Permitted Phases												
Minimum Split (s)					17.0			17.0				
Total Split (s)					46.0			74.0				
Total Split (%)					38.3%			61.7%				
Yellow Time (s)					3.5			3.5				
All-Red Time (s)					2.5			2.5				
Lost Time Adjust (s)					0.0			0.0				
Total Lost Time (s)					6.0			6.0				
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)					40.0			68.0				
Actuated g/C Ratio					0.33			0.57				
v/c Ratio					0.92			0.90				
Control Delay					41.4			17.7				
Queue Delay					0.0			0.0				
Total Delay					41.4			17.7				
LOS					D			B				
Approach Delay					41.4			17.7				
Approach LOS					D			B				
Queue Length 50th (ft)					452			429				
Queue Length 95th (ft)					#521			609				
Internal Link Dist (ft)		114			103			76			110	
Turn Bay Length (ft)												
Base Capacity (vph)					1695			2881				
Starvation Cap Reductn					0			0				
Spillback Cap Reductn					0			0				
Storage Cap Reductn					0			0				
Reduced v/c Ratio					0.92			0.90				

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 100 (83%), Referenced to phase 2:EBT, Start of Green	
Natural Cycle: 90	
Control Type: Pretimed	
Maximum v/c Ratio: 0.95	
Intersection Signal Delay: 26.6	Intersection LOS: C
Intersection Capacity Utilization 82.5%	ICU Level of Service E
Analysis Period (min) 15	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	

Splits and Phases: 4010: EB M-96 (Michigan Avenue)/EB M-96 (Michigan Avenue) (Push Button) & WB M-96 (Michigan Avenue)



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑						↑↑↑	↱			
Traffic Volume (vph)	0	707	0	0	0	0	0	2549	462	0	0	0
Future Volume (vph)	0	707	0	0	0	0	0	2549	462	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		250	0		0
Storage Lanes	0		0	0		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	1.00	1.00
Frt									0.850			
Flt Protected												
Satd. Flow (prot)	0	3539	0	0	0	0	0	5085	1583	0	0	0
Flt Permitted												
Satd. Flow (perm)	0	3539	0	0	0	0	0	5085	1583	0	0	0
Right Turn on Red	Yes		Yes			Yes			Yes			Yes
Satd. Flow (RTOR)									71			
Link Speed (mph)		55			55			55			30	
Link Distance (ft)		167			316			655			182	
Travel Time (s)		2.1			3.9			8.1			4.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	768	0	0	0	0	0	2771	502	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	768	0	0	0	0	0	2771	502	0	0	0
Turn Type		NA						NA	Perm			
Protected Phases		7						2				
Permitted Phases									2			
Minimum Split (s)		16.0						19.5	19.5			
Total Split (s)		51.0						69.0	69.0			
Total Split (%)		42.5%						57.5%	57.5%			
Yellow Time (s)		3.5						3.5	3.5			
All-Red Time (s)		2.5						6.0	6.0			
Lost Time Adjust (s)		0.0						0.0	0.0			
Total Lost Time (s)		6.0						9.5	9.5			
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		45.0						59.5	59.5			
Actuated g/C Ratio		0.38						0.50	0.50			
v/c Ratio		0.58						1.10	0.61			
Control Delay		30.1						74.0	18.2			
Queue Delay		0.0						0.4	0.0			
Total Delay		30.1						74.4	18.2			
LOS		C						E	B			
Approach Delay		30.1						65.8				
Approach LOS		C						E				
Queue Length 50th (ft)		276						~893	253			
Queue Length 95th (ft)		m277						m#831	m236			
Internal Link Dist (ft)		87			236			575			102	
Turn Bay Length (ft)									250			
Base Capacity (vph)		1327						2521	820			
Starvation Cap Reductn		0						0	0			

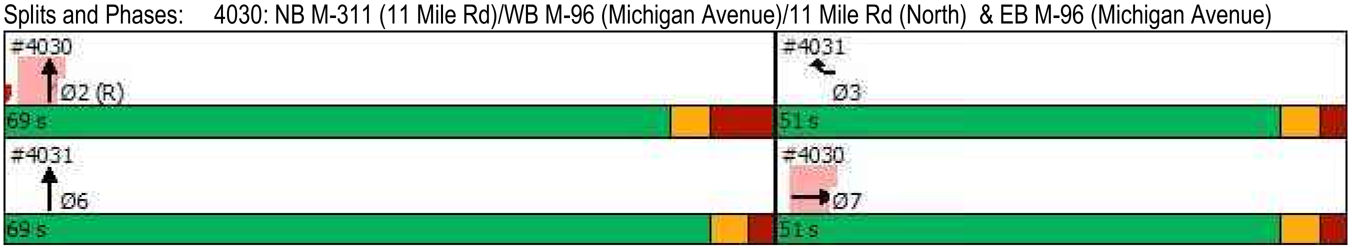
Lane Group	Ø3	Ø6
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Ideal Flow (vphpl)		
Storage Length (ft)		
Storage Lanes		
Taper Length (ft)		
Lane Util. Factor		
Frt		
Flt Protected		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Peak Hour Factor		
Adj. Flow (vph)		
Shared Lane Traffic (%)		
Lane Group Flow (vph)		
Turn Type		
Protected Phases	3	6
Permitted Phases		
Minimum Split (s)	16.0	16.0
Total Split (s)	51.0	69.0
Total Split (%)	43%	58%
Yellow Time (s)	3.5	3.5
All-Red Time (s)	2.5	2.5
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag		
Lead-Lag Optimize?		
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		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn		0						71	0			
Storage Cap Reductn		0						0	0			
Reduced v/c Ratio		0.58						1.13	0.61			

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 88 (73%), Referenced to phase 2:NBT, Start of Green	
Natural Cycle: 140	
Control Type: Pretimed	
Maximum v/c Ratio: 1.10	
Intersection Signal Delay: 59.0	Intersection LOS: E
Intersection Capacity Utilization 89.9%	ICU Level of Service E
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4030: NB M-311 (11 Mile Rd)/WB M-96 (Michigan Avenue)/11 Mile Rd (North) & EB M-96 (Michigan Avenue)



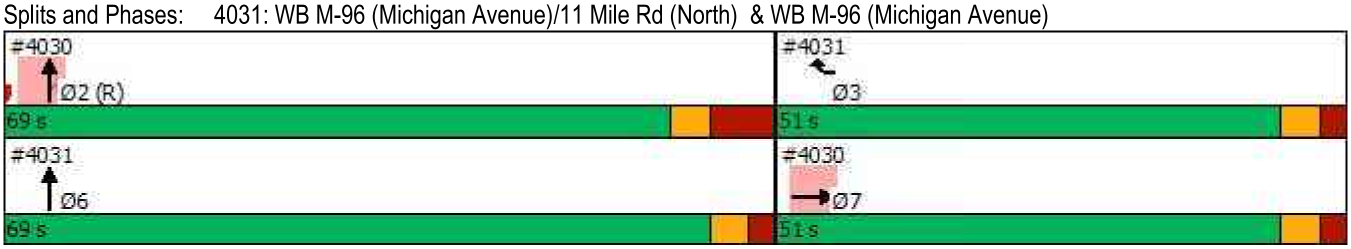
Lane Group	Ø3	Ø6
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		
Intersection Summary		

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø2	Ø7
Lane Configurations								
Traffic Volume (vph)	0	1313	2549	0	0	0		
Future Volume (vph)	0	1313	2549	0	0	0		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Lane Util. Factor	1.00	0.76	0.91	1.00	1.00	1.00		
Frt		0.850						
Flt Protected								
Satd. Flow (prot)	0	3610	5085	0	0	0		
Flt Permitted								
Satd. Flow (perm)	0	3610	5085	0	0	0		
Right Turn on Red		Yes		Yes				
Satd. Flow (RTOR)		1						
Link Speed (mph)	55		55			55		
Link Distance (ft)	405		182			493		
Travel Time (s)	5.0		2.3			6.1		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Adj. Flow (vph)	0	1427	2771	0	0	0		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	0	1427	2771	0	0	0		
Turn Type		Prot	NA					
Protected Phases		3	6				2	7
Permitted Phases								
Minimum Split (s)		16.0	16.0				19.5	16.0
Total Split (s)		51.0	69.0				69.0	51.0
Total Split (%)		42.5%	57.5%				58%	43%
Yellow Time (s)		3.5	3.5				3.5	3.5
All-Red Time (s)		2.5	2.5				6.0	2.5
Lost Time Adjust (s)		0.0	0.0					
Total Lost Time (s)		6.0	6.0					
Lead/Lag								
Lead-Lag Optimize?								
Act Effct Green (s)		45.0	63.0					
Actuated g/C Ratio		0.38	0.52					
v/c Ratio		1.05	1.04					
Control Delay		73.5	24.7					
Queue Delay		0.0	8.0					
Total Delay		73.5	32.7					
LOS		E	C					
Approach Delay	73.5		32.7					
Approach LOS	E		C					
Queue Length 50th (ft)		~530	~73					
Queue Length 95th (ft)		#648	m0					
Internal Link Dist (ft)	325		102			413		
Turn Bay Length (ft)								
Base Capacity (vph)		1354	2669					
Starvation Cap Reductn		0	51					
Spillback Cap Reductn		0	0					
Storage Cap Reductn		0	0					
Reduced v/c Ratio		1.05	1.06					

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 88 (73%), Referenced to phase 2:NBT, Start of Green	
Natural Cycle: 140	
Control Type: Pretimed	
Maximum v/c Ratio: 1.10	
Intersection Signal Delay: 46.6	Intersection LOS: D
Intersection Capacity Utilization 89.9%	ICU Level of Service E
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4031: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & WB M-96 (Michigan Avenue)

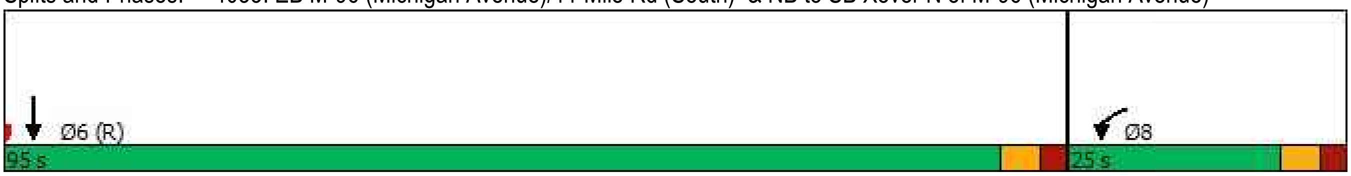


Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	491	0	0	0	0	3254
Future Volume (vph)	491	0	0	0	0	3254
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	0.91
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	3433	0	0	0	0	5085
Flt Permitted	0.950					
Satd. Flow (perm)	3433	0	0	0	0	5085
Right Turn on Red	Yes	Yes		Yes		
Satd. Flow (RTOR)	3					
Link Speed (mph)	25		55			30
Link Distance (ft)	105		587			495
Travel Time (s)	2.9		7.3			11.3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	534	0	0	0	0	3537
Shared Lane Traffic (%)						
Lane Group Flow (vph)	534	0	0	0	0	3537
Turn Type	Prot					NA
Protected Phases	8					6
Permitted Phases						
Minimum Split (s)	13.0					16.0
Total Split (s)	25.0					95.0
Total Split (%)	20.8%					79.2%
Yellow Time (s)	3.5					3.5
All-Red Time (s)	2.5					2.5
Lost Time Adjust (s)	0.0					0.0
Total Lost Time (s)	6.0					6.0
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)	19.0					89.0
Actuated g/C Ratio	0.16					0.74
v/c Ratio	0.98					0.94
Control Delay	33.6					10.8
Queue Delay	0.0					0.3
Total Delay	33.6					11.1
LOS	C					B
Approach Delay	33.6					11.1
Approach LOS	C					B
Queue Length 50th (ft)	171					177
Queue Length 95th (ft)	m156					210
Internal Link Dist (ft)	25		507			415
Turn Bay Length (ft)						
Base Capacity (vph)	546					3771
Starvation Cap Reductn	0					36
Spillback Cap Reductn	0					0
Storage Cap Reductn	0					0
Reduced v/c Ratio	0.98					0.95

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 89 (74%), Referenced to phase 6:SBT, Start of Green	
Natural Cycle: 90	
Control Type: Pretimed	
Maximum v/c Ratio: 0.98	
Intersection Signal Delay: 14.1	Intersection LOS: B
Intersection Capacity Utilization 136.3%	ICU Level of Service H
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

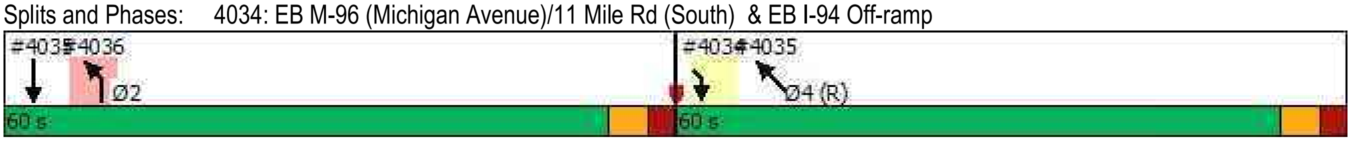
Splits and Phases: 4033: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & NB to SB Xover N of M-96 (Michigan Avenue)



Lane Group	NBL	NBT	SBT	SBR	SEL	SER	Ø2
Lane Configurations							
Traffic Volume (vph)	0	0	2266	0	0	988	
Future Volume (vph)	0	0	2266	0	0	988	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	0.91	1.00	1.00	0.88	
Frt						0.850	
Flt Protected							
Satd. Flow (prot)	0	0	5085	0	0	2787	
Flt Permitted							
Satd. Flow (perm)	0	0	5085	0	0	2787	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)						70	
Link Speed (mph)		30	30		30		
Link Distance (ft)		495	145		346		
Travel Time (s)		11.3	3.3		7.9		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	0	0	2463	0	0	1074	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	2463	0	0	1074	
Turn Type			NA			Prot	
Protected Phases			Free!			4!	2
Permitted Phases							
Minimum Split (s)						16.0	16.0
Total Split (s)						60.0	60.0
Total Split (%)						50.0%	50%
Yellow Time (s)						3.5	3.5
All-Red Time (s)						2.5	2.5
Lost Time Adjust (s)						0.0	
Total Lost Time (s)						6.0	
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)			120.0			54.0	
Actuated g/C Ratio			1.00			0.45	
v/c Ratio			0.48			0.83	
Control Delay			2.7			33.9	
Queue Delay			0.0			0.0	
Total Delay			2.7			33.9	
LOS			A			C	
Approach Delay			2.7		33.9		
Approach LOS			A		C		
Queue Length 50th (ft)			23			384	
Queue Length 95th (ft)			m0			490	
Internal Link Dist (ft)		415	65		266		
Turn Bay Length (ft)							
Base Capacity (vph)			5085			1292	
Starvation Cap Reductn			0			0	
Spillback Cap Reductn			111			0	
Storage Cap Reductn			0			0	
Reduced v/c Ratio			0.50			0.83	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 27 (23%), Referenced to phase 4:SER, Start of Green	
Natural Cycle: 140	
Control Type: Pretimed	
Maximum v/c Ratio: 1.08	
Intersection Signal Delay: 12.2	Intersection LOS: B
Intersection Capacity Utilization 97.7%	ICU Level of Service F
Analysis Period (min) 15	
m Volume for 95th percentile queue is metered by upstream signal.	
! Phase conflict between lane groups.	

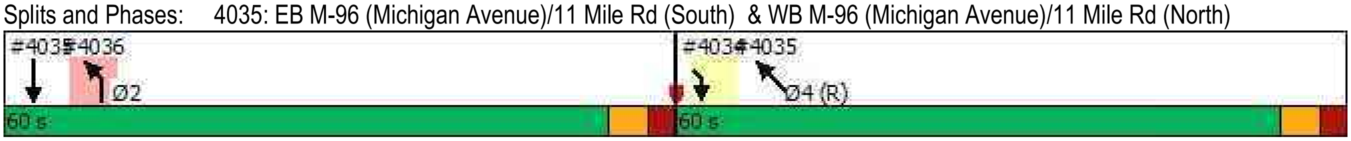
Splits and Phases: 4034: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & EB I-94 Off-ramp



Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	2266	0	0	0	0	0	2272	0
Future Volume (vph)	0	0	0	0	2266	0	0	0	0	0	2272	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.91	1.00	1.00	1.00	1.00	1.00	0.91	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	0	0	0	5085	0	0	0	0	0	5085	0
Flt Permitted												
Satd. Flow (perm)	0	0	0	0	5085	0	0	0	0	0	5085	0
Right Turn on Red			Yes			Yes			Yes	Yes		Yes
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		145			194			233			108	
Travel Time (s)		3.3			4.4			5.3			2.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	2463	0	0	0	0	0	2470	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	2463	0	0	0	0	0	2470	0
Turn Type					NA						NA	
Protected Phases					2						4	
Permitted Phases												
Minimum Split (s)					16.0						16.0	
Total Split (s)					60.0						60.0	
Total Split (%)					50.0%						50.0%	
Yellow Time (s)					3.5						3.5	
All-Red Time (s)					2.5						2.5	
Lost Time Adjust (s)					0.0						0.0	
Total Lost Time (s)					6.0						6.0	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)					54.0						54.0	
Actuated g/C Ratio					0.45						0.45	
v/c Ratio					1.08						1.08	
Control Delay					65.0						69.0	
Queue Delay					0.0						0.0	
Total Delay					65.0						69.0	
LOS					E						E	
Approach Delay					65.0						69.0	
Approach LOS					E						E	
Queue Length 50th (ft)					~775						~794	
Queue Length 95th (ft)					#871						m#735	
Internal Link Dist (ft)		65			114			153			28	
Turn Bay Length (ft)												
Base Capacity (vph)					2288						2288	
Starvation Cap Reductn					0						0	
Spillback Cap Reductn					0						0	
Storage Cap Reductn					0						0	
Reduced v/c Ratio					1.08						1.08	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 27 (23%), Referenced to phase 4:SER, Start of Green	
Natural Cycle: 140	
Control Type: Pretimed	
Maximum v/c Ratio: 1.08	
Intersection Signal Delay: 67.0	Intersection LOS: E
Intersection Capacity Utilization 110.0%	ICU Level of Service H
Analysis Period (min) 15	
~ Volume exceeds capacity, queue is theoretically infinite.	
Queue shown is maximum after two cycles.	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 4035: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & WB M-96 (Michigan Avenue)/11 Mile Rd (North)



Lane Group	NBL	NBR	SET	SER	NWL	NWT	Ø4
Lane Configurations							
Traffic Volume (vph)	104	0	0	0	0	2272	
Future Volume (vph)	104	0	0	0	0	2272	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.91	
Frt							
Flt Protected	0.950						
Satd. Flow (prot)	1719	0	0	0	0	5085	
Flt Permitted	0.950						
Satd. Flow (perm)	1719	0	0	0	0	5085	
Right Turn on Red	Yes	Yes		Yes			
Satd. Flow (RTOR)	39						
Link Speed (mph)	30		30			30	
Link Distance (ft)	271		337			233	
Travel Time (s)	6.2		7.7			5.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Heavy Vehicles (%)	5%	2%	2%	2%	2%	2%	
Adj. Flow (vph)	113	0	0	0	0	2470	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	113	0	0	0	0	2470	
Turn Type	Prot					NA	
Protected Phases	2!					Free!	4
Permitted Phases							
Minimum Split (s)	16.0						16.0
Total Split (s)	60.0						60.0
Total Split (%)	50.0%						50%
Yellow Time (s)	3.5						3.5
All-Red Time (s)	2.5						2.5
Lost Time Adjust (s)	0.0						
Total Lost Time (s)	6.0						
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)	54.0					120.0	
Actuated g/C Ratio	0.45					1.00	
v/c Ratio	0.14					0.49	
Control Delay	13.1					2.8	
Queue Delay	0.0					0.0	
Total Delay	13.1					2.8	
LOS	B					A	
Approach Delay	13.1					2.8	
Approach LOS	B					A	
Queue Length 50th (ft)	32					53	
Queue Length 95th (ft)	68					m0	
Internal Link Dist (ft)	191		257			153	
Turn Bay Length (ft)							
Base Capacity (vph)	795					5085	
Starvation Cap Reductn	0					0	
Spillback Cap Reductn	0					0	
Storage Cap Reductn	0					0	

Lane Group	NBL	NBR	SET	SER	NWL	NWT	Ø4
Reduced v/c Ratio	0.14					0.49	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 27 (23%), Referenced to phase 4:SER, Start of Green	
Natural Cycle: 140	
Control Type: Pretimed	
Maximum v/c Ratio: 1.08	
Intersection Signal Delay: 3.2	Intersection LOS: A
Intersection Capacity Utilization 78.4%	ICU Level of Service D
Analysis Period (min) 15	
m Volume for 95th percentile queue is metered by upstream signal.	
! Phase conflict between lane groups.	

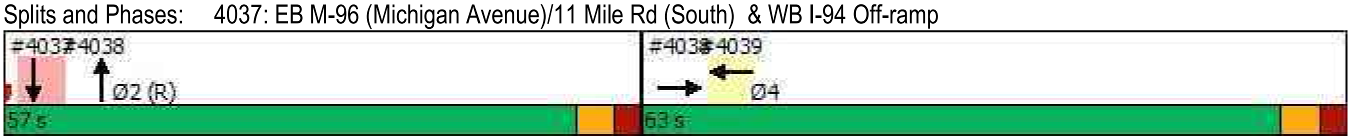
Splits and Phases: 4036: EB I-94 Off-ramp & WB M-96 (Michigan Avenue)/11 Mile Rd (North)

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø4
Lane Configurations							
Traffic Volume (vph)	0	1300	0	0	1039	0	
Future Volume (vph)	0	1300	0	0	1039	0	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	0.88	1.00	1.00	0.95	1.00	
Frt		0.850					
Flt Protected							
Satd. Flow (prot)	0	2707	0	0	3438	0	
Flt Permitted							
Satd. Flow (perm)	0	2707	0	0	3438	0	
Right Turn on Red		Yes				Yes	
Satd. Flow (RTOR)		1038					
Link Speed (mph)	30			30	30		
Link Distance (ft)	222			406	241		
Travel Time (s)	5.0			9.2	5.5		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Heavy Vehicles (%)	2%	5%	2%	2%	5%	2%	
Adj. Flow (vph)	0	1413	0	0	1129	0	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	1413	0	0	1129	0	
Turn Type		Free			NA		
Protected Phases					2		4
Permitted Phases		Free					
Minimum Split (s)					16.0		16.0
Total Split (s)					57.0		63.0
Total Split (%)					47.5%		53%
Yellow Time (s)					3.5		3.5
All-Red Time (s)					2.5		2.5
Lost Time Adjust (s)					0.0		
Total Lost Time (s)					6.0		
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)		120.0			51.0		
Actuated g/C Ratio		1.00			0.42		
v/c Ratio		0.52			0.77		
Control Delay		7.1			34.0		
Queue Delay		0.1			41.3		
Total Delay		7.2			75.3		
LOS		A			E		
Approach Delay	7.2				75.3		
Approach LOS	A				E		
Queue Length 50th (ft)		163			387		
Queue Length 95th (ft)		139			475		
Internal Link Dist (ft)	142			326	161		
Turn Bay Length (ft)							
Base Capacity (vph)		2707			1461		
Starvation Cap Reductn		0			0		
Spillback Cap Reductn		329			417		
Storage Cap Reductn		0			0		

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø4
Reduced v/c Ratio		0.59			1.08		

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 96 (80%), Referenced to phase 2:SBT, Start of Green	
Natural Cycle: 65	
Control Type: Pretimed	
Maximum v/c Ratio: 0.87	
Intersection Signal Delay: 37.5	Intersection LOS: D
Intersection Capacity Utilization 33.7%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4037: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & WB I-94 Off-ramp

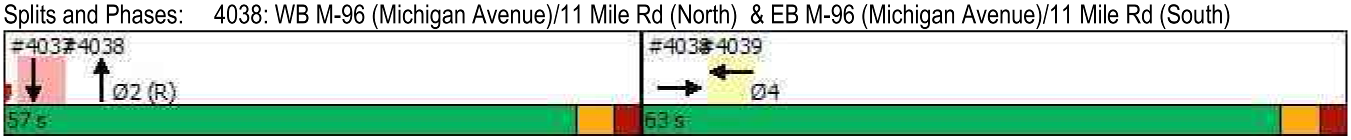


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑						↑↑↑				
Traffic Volume (vph)	0	1300	0	0	0	0	0	1419	0	0	0	0
Future Volume (vph)	0	1300	0	0	0	0	0	1419	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	1.00	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	3438	0	0	0	0	0	4940	0	0	0	0
Flt Permitted												
Satd. Flow (perm)	0	3438	0	0	0	0	0	4940	0	0	0	0
Right Turn on Red	Yes		Yes			Yes			Yes			Yes
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		190			222			207			131	
Travel Time (s)		4.3			5.0			4.7			3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	5%	2%	2%	2%	2%	2%	5%	2%	2%	2%	2%
Adj. Flow (vph)	0	1413	0	0	0	0	0	1542	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1413	0	0	0	0	0	1542	0	0	0	0
Turn Type		NA						NA				
Protected Phases		4						2				
Permitted Phases												
Minimum Split (s)		16.0						16.0				
Total Split (s)		63.0						57.0				
Total Split (%)		52.5%						47.5%				
Yellow Time (s)		3.5						3.5				
All-Red Time (s)		2.5						2.5				
Lost Time Adjust (s)		0.0						0.0				
Total Lost Time (s)		6.0						6.0				
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		57.0						51.0				
Actuated g/C Ratio		0.48						0.42				
v/c Ratio		0.87						0.73				
Control Delay		32.7						41.9				
Queue Delay		0.0						0.0				
Total Delay		32.7						41.9				
LOS		C						D				
Approach Delay		32.7						41.9				
Approach LOS		C						D				
Queue Length 50th (ft)		572						467				
Queue Length 95th (ft)		660						517				
Internal Link Dist (ft)		110			142			127			51	
Turn Bay Length (ft)												
Base Capacity (vph)		1633						2099				
Starvation Cap Reductn		0						0				
Spillback Cap Reductn		0						0				
Storage Cap Reductn		0						0				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio		0.87						0.73				

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 96 (80%), Referenced to phase 2:SBT, Start of Green	
Natural Cycle: 65	
Control Type: Pretimed	
Maximum v/c Ratio: 0.87	
Intersection Signal Delay: 37.5	Intersection LOS: D
Intersection Capacity Utilization 73.4%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 4038: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & EB M-96 (Michigan Avenue)/11 Mile Rd (South)

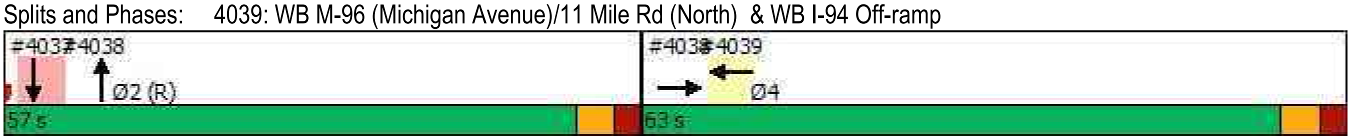


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø2
Lane Configurations							
Traffic Volume (vph)	0	0	0	151	1419	0	
Future Volume (vph)	0	0	0	151	1419	0	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.94	1.00	
Frt							
Flt Protected					0.950		
Satd. Flow (prot)	0	0	0	1810	4848	0	
Flt Permitted					0.950		
Satd. Flow (perm)	0	0	0	1810	4848	0	
Right Turn on Red		Yes			Yes	Yes	
Satd. Flow (RTOR)					2497		
Link Speed (mph)	30			30	30		
Link Distance (ft)	415			317	131		
Travel Time (s)	9.4			7.2	3.0		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Heavy Vehicles (%)	2%	2%	2%	5%	5%	2%	
Adj. Flow (vph)	0	0	0	164	1542	0	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	0	164	1542	0	
Turn Type				NA	Perm		
Protected Phases				4!			2
Permitted Phases					Free!		
Minimum Split (s)				16.0			16.0
Total Split (s)				63.0			57.0
Total Split (%)				52.5%			48%
Yellow Time (s)				3.5			3.5
All-Red Time (s)				2.5			2.5
Lost Time Adjust (s)				0.0			
Total Lost Time (s)				6.0			
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)				57.0	120.0		
Actuated g/C Ratio				0.48	1.00		
v/c Ratio				0.19	0.32		
Control Delay				18.9	0.5		
Queue Delay				0.0	0.0		
Total Delay				18.9	0.5		
LOS				B	A		
Approach Delay				18.9	0.5		
Approach LOS				B	A		
Queue Length 50th (ft)				71	3		
Queue Length 95th (ft)				116	0		
Internal Link Dist (ft)	335			237	51		
Turn Bay Length (ft)							
Base Capacity (vph)				859	4848		
Starvation Cap Reductn				0	0		
Spillback Cap Reductn				0	0		
Storage Cap Reductn				0	0		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø2
Reduced v/c Ratio				0.19	0.32		

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 96 (80%), Referenced to phase 2:SBT, Start of Green	
Natural Cycle: 65	
Control Type: Pretimed	
Maximum v/c Ratio: 0.87	
Intersection Signal Delay: 2.3	Intersection LOS: A
Intersection Capacity Utilization 101.3%	ICU Level of Service G
Analysis Period (min) 15	
! Phase conflict between lane groups.	

Splits and Phases: 4039: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & WB I-94 Off-ramp

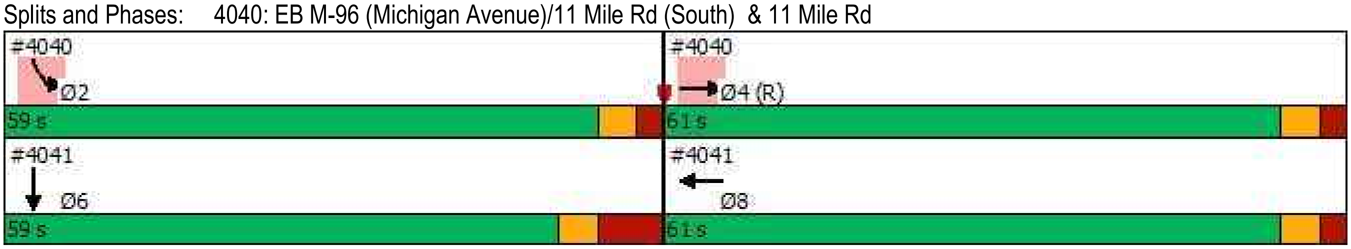


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø6	Ø8
Lane Configurations								
Traffic Volume (vph)	0	783	0	0	662	0		
Future Volume (vph)	0	783	0	0	662	0		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.97	1.00		
Frt								
Flt Protected					0.950			
Satd. Flow (prot)	0	3539	0	0	3335	0		
Flt Permitted					0.950			
Satd. Flow (perm)	0	3539	0	0	3335	0		
Right Turn on Red				Yes	Yes	Yes		
Satd. Flow (RTOR)					180			
Link Speed (mph)		55	55		45			
Link Distance (ft)		212	597		92			
Travel Time (s)		2.6	7.4		1.4			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Heavy Vehicles (%)	2%	2%	2%	2%	5%	2%		
Adj. Flow (vph)	0	851	0	0	720	0		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	0	851	0	0	720	0		
Turn Type		NA			Prot			
Protected Phases		4			2		6	8
Permitted Phases								
Minimum Split (s)		16.0			19.5		19.5	16.0
Total Split (s)		61.0			59.0		59.0	61.0
Total Split (%)		50.8%			49.2%		49%	51%
Yellow Time (s)		3.5			3.5		3.5	3.5
All-Red Time (s)		2.5			2.5		6.0	2.5
Lost Time Adjust (s)		0.0			0.0			
Total Lost Time (s)		6.0			6.0			
Lead/Lag								
Lead-Lag Optimize?								
Act Effct Green (s)		55.0			53.0			
Actuated g/C Ratio		0.46			0.44			
v/c Ratio		0.52			0.46			
Control Delay		24.6			0.8			
Queue Delay		0.0			0.0			
Total Delay		24.6			0.8			
LOS		C			A			
Approach Delay		24.6			0.8			
Approach LOS		C			A			
Queue Length 50th (ft)		241			0			
Queue Length 95th (ft)		302			0			
Internal Link Dist (ft)		132	517		12			
Turn Bay Length (ft)								
Base Capacity (vph)		1622			1573			
Starvation Cap Reductn		0			0			
Spillback Cap Reductn		0			0			
Storage Cap Reductn		0			0			

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø6	Ø8
Reduced v/c Ratio		0.52			0.46			

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 32 (27%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 50	
Control Type: Pretimed	
Maximum v/c Ratio: 0.56	
Intersection Signal Delay: 13.7	Intersection LOS: B
Intersection Capacity Utilization 56.1%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 4040: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & 11 Mile Rd



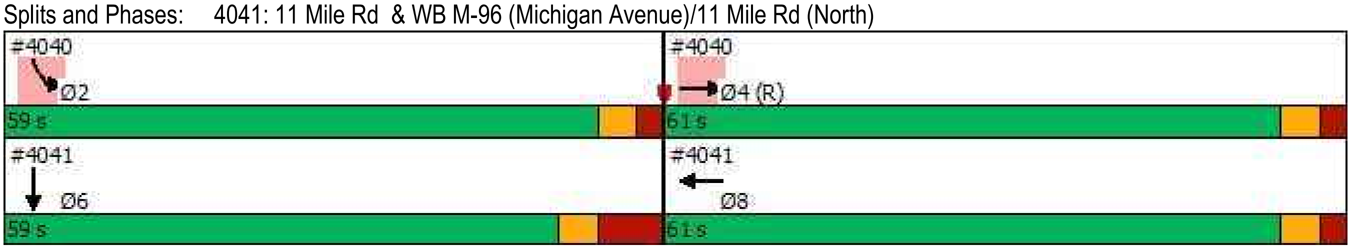
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	836	798	0	0	0	0	662	56
Future Volume (vph)	0	0	0	0	836	798	0	0	0	0	662	56
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		250	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Frt						0.850					0.988	
Flt Protected												
Satd. Flow (prot)	0	0	0	0	3539	1538	0	0	0	0	3404	0
Flt Permitted												
Satd. Flow (perm)	0	0	0	0	3539	1538	0	0	0	0	3404	0
Right Turn on Red			Yes	Yes		Yes			Yes			Yes
Satd. Flow (RTOR)						599					9	
Link Speed (mph)		55			55			45			55	
Link Distance (ft)		210			598			92			259	
Travel Time (s)		2.6			7.4			1.4			3.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	5%	2%	2%	2%	2%	5%	2%
Adj. Flow (vph)	0	0	0	0	909	867	0	0	0	0	720	61
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	909	867	0	0	0	0	781	0
Turn Type					NA	custom					NA	
Protected Phases					8	Free					6	
Permitted Phases												
Minimum Split (s)					16.0						19.5	
Total Split (s)					61.0						59.0	
Total Split (%)					50.8%						49.2%	
Yellow Time (s)					3.5						3.5	
All-Red Time (s)					2.5						6.0	
Lost Time Adjust (s)					0.0						0.0	
Total Lost Time (s)					6.0						9.5	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)					55.0	120.0					49.5	
Actuated g/C Ratio					0.46	1.00					0.41	
v/c Ratio					0.56	0.56					0.55	
Control Delay					31.0	11.8					39.0	
Queue Delay					0.0	0.0					0.0	
Total Delay					31.0	11.8					39.0	
LOS					C	B					D	
Approach Delay					21.6						39.0	
Approach LOS					C						D	
Queue Length 50th (ft)					383	622					304	
Queue Length 95th (ft)					453	790					384	
Internal Link Dist (ft)		130			518			12			179	
Turn Bay Length (ft)						250						
Base Capacity (vph)					1622	1538					1409	

Lane Group	Ø2	Ø4
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Ideal Flow (vphpl)		
Storage Length (ft)		
Storage Lanes		
Taper Length (ft)		
Lane Util. Factor		
Frt		
Flt Protected		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Peak Hour Factor		
Heavy Vehicles (%)		
Adj. Flow (vph)		
Shared Lane Traffic (%)		
Lane Group Flow (vph)		
Turn Type		
Protected Phases	2	4
Permitted Phases		
Minimum Split (s)	19.5	16.0
Total Split (s)	59.0	61.0
Total Split (%)	49%	51%
Yellow Time (s)	3.5	3.5
All-Red Time (s)	2.5	2.5
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag		
Lead-Lag Optimize?		
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)		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn					0	0					0	
Spillback Cap Reductn					0	0					0	
Storage Cap Reductn					0	0					0	
Reduced v/c Ratio					0.56	0.56					0.55	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 32 (27%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 50	
Control Type: Pretimed	
Maximum v/c Ratio: 0.56	
Intersection Signal Delay: 26.9	Intersection LOS: C
Intersection Capacity Utilization 56.1%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 4041: 11 Mile Rd & WB M-96 (Michigan Avenue)/11 Mile Rd (North)



Lane Group	Ø2	Ø4
Starvation Cap Reductn		
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		

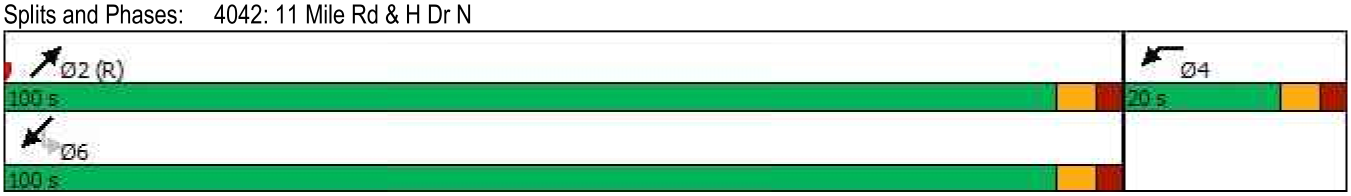
Intersection Summary

Lane Group	WBL	WBR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	0	0	798	0	0	718
Future Volume (vph)	0	0	798	0	0	718
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	1810	0	1863	0	0	1863
Flt Permitted						
Satd. Flow (perm)	1810	0	1863	0	0	1863
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)						
Link Speed (mph)	25		55			55
Link Distance (ft)	1262		1787			680
Travel Time (s)	34.4		22.2			8.4
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	2%	2%	5%	2%	2%
Adj. Flow (vph)	0	0	867	0	0	780
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	867	0	0	780
Turn Type	Prot		NA			NA
Protected Phases	4		2			6
Permitted Phases					6	
Minimum Split (s)	13.0		16.0		13.0	13.0
Total Split (s)	20.0		100.0		100.0	100.0
Total Split (%)	16.7%		83.3%		83.3%	83.3%
Yellow Time (s)	3.5		3.5		3.5	3.5
All-Red Time (s)	2.5		2.5		2.5	2.5
Lost Time Adjust (s)	0.0		0.0			0.0
Total Lost Time (s)	6.0		6.0			6.0
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)			94.0			94.0
Actuated g/C Ratio			0.78			0.78
v/c Ratio			0.59			0.53
Control Delay			2.5			6.4
Queue Delay			0.0			0.0
Total Delay			2.5			6.4
LOS			A			A
Approach Delay			2.5			6.4
Approach LOS			A			A
Queue Length 50th (ft)			17			187
Queue Length 95th (ft)			106			258
Internal Link Dist (ft)	1182		1707			600
Turn Bay Length (ft)						
Base Capacity (vph)			1459			1459
Starvation Cap Reductn			0			0
Spillback Cap Reductn			0			0
Storage Cap Reductn			0			0

Lane Group	WBL	WBR	NET	NER	SWL	SWT
Reduced v/c Ratio			0.59			0.53

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NET, Start of Green	
Natural Cycle: 50	
Control Type: Pretimed	
Maximum v/c Ratio: 0.59	
Intersection Signal Delay: 4.4	Intersection LOS: A
Intersection Capacity Utilization 47.0%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4042: 11 Mile Rd & H Dr N

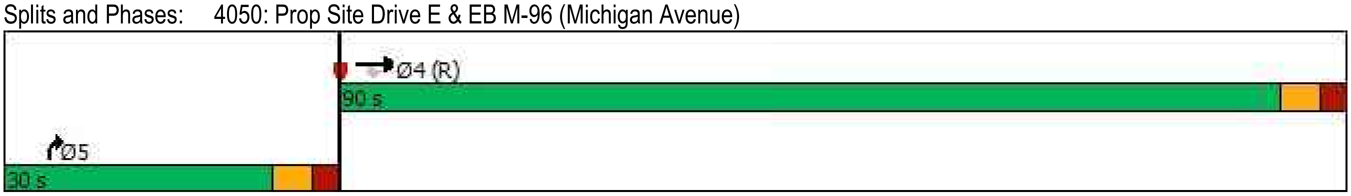


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↱↱				↱↱
Traffic Volume (vph)	1496	335	0	0	0	335
Future Volume (vph)	1496	335	0	0	0	335
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		500	600		0	0
Storage Lanes		2	0		0	2
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	0.88	1.00	1.00	1.00	0.88
Frt		0.850				0.850
Flt Protected						
Satd. Flow (prot)	3539	2787	0	0	0	2787
Flt Permitted						
Satd. Flow (perm)	3539	2787	0	0	0	2787
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		364				85
Link Speed (mph)	55			55	25	
Link Distance (ft)	669			659	1093	
Travel Time (s)	8.3			8.2	29.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1626	364	0	0	0	364
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1626	364	0	0	0	364
Turn Type	NA	Perm				Prot
Protected Phases	4					5
Permitted Phases		4				
Detector Phase	4	4				5
Switch Phase						
Minimum Initial (s)	10.0	10.0				10.0
Minimum Split (s)	16.0	16.0				16.0
Total Split (s)	90.0	90.0				30.0
Total Split (%)	75.0%	75.0%				25.0%
Yellow Time (s)	3.5	3.5				3.5
All-Red Time (s)	2.5	2.5				2.5
Lost Time Adjust (s)	0.0	0.0				0.0
Total Lost Time (s)	6.0	6.0				6.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max	C-Max				None
Act Effct Green (s)	90.4	90.4				17.6
Actuated g/C Ratio	0.75	0.75				0.15
v/c Ratio	0.61	0.17				0.76
Control Delay	6.5	1.4				47.5
Queue Delay	0.6	0.0				0.0
Total Delay	7.1	1.4				47.5
LOS	A	A				D
Approach Delay	6.1				47.5	
Approach LOS	A				D	
Queue Length 50th (ft)	250	5				119
Queue Length 95th (ft)	275	29				169

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Internal Link Dist (ft)	589			579	1013	
Turn Bay Length (ft)		500				
Base Capacity (vph)	2666	2189				625
Starvation Cap Reductn	578	0				0
Spillback Cap Reductn	0	0				0
Storage Cap Reductn	0	0				0
Reduced v/c Ratio	0.78	0.17				0.58

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 52 (43%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.76	
Intersection Signal Delay: 12.5	Intersection LOS: B
Intersection Capacity Utilization 63.1%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 4050: Prop Site Drive E & EB M-96 (Michigan Avenue)

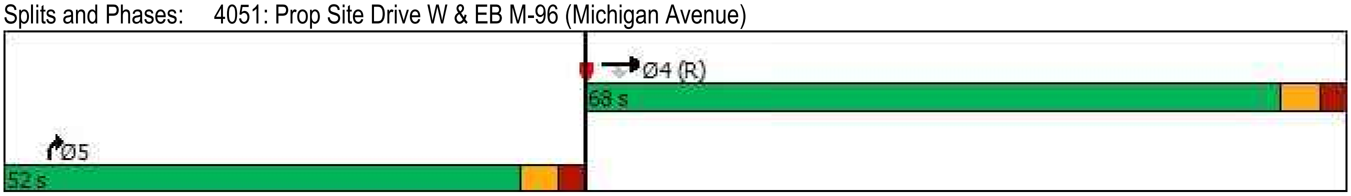


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	974	602	0	0	0	602
Future Volume (vph)	974	602	0	0	0	602
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		500	600		0	0
Storage Lanes		2	0		0	2
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	0.88	1.00	1.00	1.00	0.88
Frt		0.850				0.850
Flt Protected						
Satd. Flow (prot)	3539	2787	0	0	0	2787
Flt Permitted						
Satd. Flow (perm)	3539	2787	0	0	0	2787
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		654				125
Link Speed (mph)	55			55	25	
Link Distance (ft)	608			627	1293	
Travel Time (s)	7.5			7.8	35.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1059	654	0	0	0	654
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1059	654	0	0	0	654
Turn Type	NA	Perm				Prot
Protected Phases	4					5
Permitted Phases		4				
Detector Phase	4	4				5
Switch Phase						
Minimum Initial (s)	10.0	10.0				10.0
Minimum Split (s)	16.0	16.0				16.0
Total Split (s)	68.0	68.0				52.0
Total Split (%)	56.7%	56.7%				43.3%
Yellow Time (s)	3.5	3.5				3.5
All-Red Time (s)	2.5	2.5				2.5
Lost Time Adjust (s)	0.0	0.0				0.0
Total Lost Time (s)	6.0	6.0				6.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max	C-Max				None
Act Effct Green (s)	78.0	78.0				30.0
Actuated g/C Ratio	0.65	0.65				0.25
v/c Ratio	0.46	0.32				0.83
Control Delay	12.2	3.3				43.2
Queue Delay	0.5	0.0				0.0
Total Delay	12.7	3.3				43.2
LOS	B	A				D
Approach Delay	9.1				43.2	
Approach LOS	A				D	
Queue Length 50th (ft)	305	29				225
Queue Length 95th (ft)	400	85				275

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Internal Link Dist (ft)	528			547	1213	
Turn Bay Length (ft)		500				
Base Capacity (vph)	2300	2041				1145
Starvation Cap Reductn	718	0				0
Spillback Cap Reductn	0	0				0
Storage Cap Reductn	0	0				0
Reduced v/c Ratio	0.67	0.32				0.57

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 32 (27%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 50	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.83	
Intersection Signal Delay: 18.5	Intersection LOS: B
Intersection Capacity Utilization 58.0%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 4051: Prop Site Drive W & EB M-96 (Michigan Avenue)

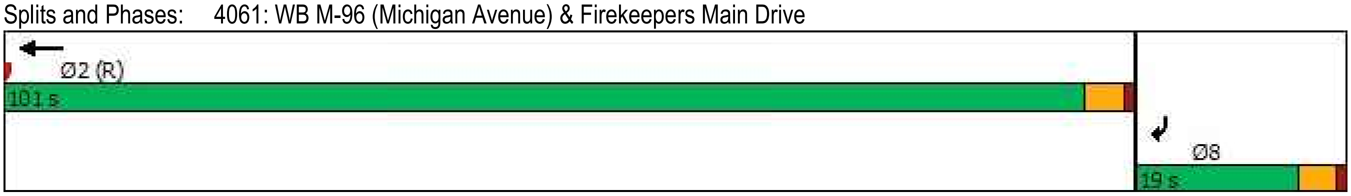


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	1302	168	0	134
Future Volume (vph)	0	0	1302	168	0	134
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			0	0	0
Storage Lanes	0			0	0	2
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	0.88
Frt			0.983			0.850
Flt Protected						
Satd. Flow (prot)	0	0	3487	0	0	2787
Flt Permitted						
Satd. Flow (perm)	0	0	3487	0	0	2787
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			41			187
Link Speed (mph)		55	55		25	
Link Distance (ft)		574	509		701	
Travel Time (s)		7.1	6.3		19.1	
Peak Hour Factor	0.92	0.92	0.92	0.95	0.67	0.92
Heavy Vehicles (%)	2%	2%	2%	0%	0%	2%
Adj. Flow (vph)	0	0	1415	177	0	146
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1592	0	0	146
Turn Type			NA			Prot
Protected Phases			2			8
Permitted Phases						
Detector Phase			2			8
Switch Phase						
Minimum Initial (s)			10.0			10.0
Minimum Split (s)			22.5			14.5
Total Split (s)			101.0			19.0
Total Split (%)			84.2%			15.8%
Yellow Time (s)			3.5			3.5
All-Red Time (s)			1.0			1.0
Lost Time Adjust (s)			0.0			0.0
Total Lost Time (s)			4.5			4.5
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode			C-Max			None
Act Effct Green (s)			101.0			10.0
Actuated g/C Ratio			0.84			0.08
v/c Ratio			0.54			0.36
Control Delay			3.4			5.6
Queue Delay			0.0			0.0
Total Delay			3.4			5.6
LOS			A			A
Approach Delay			3.4		5.6	
Approach LOS			A		A	
Queue Length 50th (ft)			134			0

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Queue Length 95th (ft)			163			18
Internal Link Dist (ft)		494	429		621	
Turn Bay Length (ft)						
Base Capacity (vph)			2941			501
Starvation Cap Reductn			0			0
Spillback Cap Reductn			0			0
Storage Cap Reductn			0			0
Reduced v/c Ratio			0.54			0.29

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:WBT, Start of Green	
Natural Cycle: 50	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.54	
Intersection Signal Delay: 3.6	Intersection LOS: A
Intersection Capacity Utilization 57.2%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 4061: WB M-96 (Michigan Avenue) & Firekeepers Main Drive

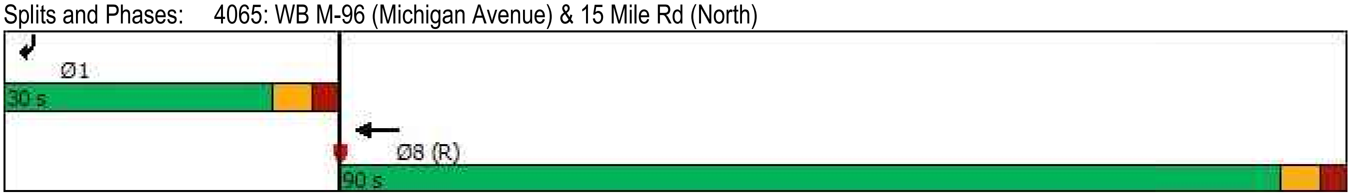


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	3046	495	0	460
Future Volume (vph)	0	0	3046	495	0	460
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			250	0	200
Storage Lanes	0			0	0	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.91	1.00	1.00	0.88
Frt				0.850		0.850
Flt Protected						
Satd. Flow (prot)	0	0	5085	1583	0	2787
Flt Permitted						
Satd. Flow (perm)	0	0	5085	1583	0	2787
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				146		2
Link Speed (mph)		45	45		45	
Link Distance (ft)		534	660		516	
Travel Time (s)		8.1	10.0		7.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	3311	538	0	500
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	3311	538	0	500
Turn Type			NA	custom		Prot
Protected Phases			8	Free		1
Permitted Phases						
Minimum Split (s)			16.0			13.0
Total Split (s)			90.0			30.0
Total Split (%)			75.0%			25.0%
Yellow Time (s)			3.5			3.5
All-Red Time (s)			2.5			2.5
Lost Time Adjust (s)			0.0			0.0
Total Lost Time (s)			6.0			6.0
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)			84.0	120.0		24.0
Actuated g/C Ratio			0.70	1.00		0.20
v/c Ratio			0.93	0.34		0.89
Control Delay			5.2	8.0		66.4
Queue Delay			0.8	0.0		0.0
Total Delay			6.0	8.0		66.4
LOS			A	A		E
Approach Delay			6.3		66.4	
Approach LOS			A		E	
Queue Length 50th (ft)			93	158		215
Queue Length 95th (ft)			105	m156		#322
Internal Link Dist (ft)		454	580		436	
Turn Bay Length (ft)				250		200
Base Capacity (vph)			3559	1583		559
Starvation Cap Reductn			76	0		0

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Spillback Cap Reductn			0	0		0
Storage Cap Reductn			0	0		0
Reduced v/c Ratio			0.95	0.34		0.89

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 8:WBT, Start of Green	
Natural Cycle: 90	
Control Type: Pretimed	
Maximum v/c Ratio: 0.93	
Intersection Signal Delay: 13.2	Intersection LOS: B
Intersection Capacity Utilization 84.9%	ICU Level of Service E
Analysis Period (min) 15	
# 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 4065: WB M-96 (Michigan Avenue) & 15 Mile Rd (North)

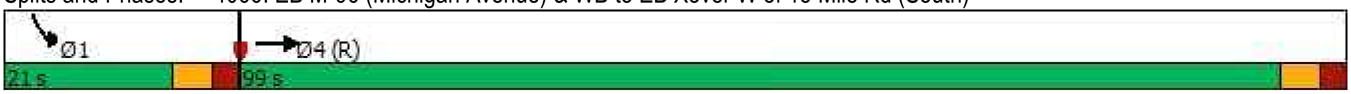


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	3020	0	0	119	0
Future Volume (vph)	0	3020	0	0	119	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.91	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	5085	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	5085	0	0	1770	0
Right Turn on Red				Yes	Yes	Yes
Satd. Flow (RTOR)					3	
Link Speed (mph)		45	45		25	
Link Distance (ft)		262	1016		123	
Travel Time (s)		4.0	15.4		3.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.90	0.92
Adj. Flow (vph)	0	3283	0	0	132	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	3283	0	0	132	0
Turn Type		NA			Prot	
Protected Phases		4			1	
Permitted Phases						
Minimum Split (s)		16.0			16.0	
Total Split (s)		99.0			21.0	
Total Split (%)		82.5%			17.5%	
Yellow Time (s)		3.5			3.5	
All-Red Time (s)		2.5			2.5	
Lost Time Adjust (s)		0.0			0.0	
Total Lost Time (s)		6.0			6.0	
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)		93.0			15.0	
Actuated g/C Ratio		0.78			0.12	
v/c Ratio		0.83			0.59	
Control Delay		5.3			47.7	
Queue Delay		0.0			0.0	
Total Delay		5.4			47.7	
LOS		A			D	
Approach Delay		5.4			47.7	
Approach LOS		A			D	
Queue Length 50th (ft)		138			96	
Queue Length 95th (ft)		m127			m121	
Internal Link Dist (ft)		182	936		43	
Turn Bay Length (ft)						
Base Capacity (vph)		3940			223	
Starvation Cap Reductn		0			0	
Spillback Cap Reductn		12			0	
Storage Cap Reductn		0			0	
Reduced v/c Ratio		0.84			0.59	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 116 (97%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 65	
Control Type: Pretimed	
Maximum v/c Ratio: 0.83	
Intersection Signal Delay: 7.0	Intersection LOS: A
Intersection Capacity Utilization 125.1%	ICU Level of Service H
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4066: EB M-96 (Michigan Avenue) & WB to EB Xover W of 15 Mile Rd (South)

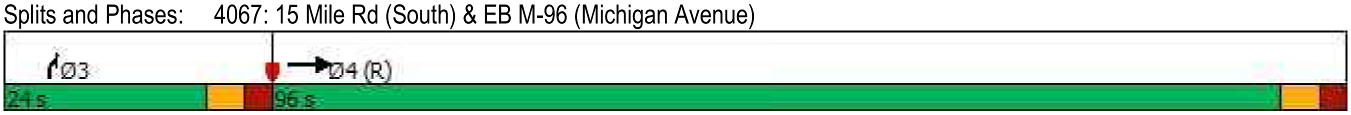


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	2878	261	0	0	0	262
Future Volume (vph)	2878	261	0	0	0	262
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		50	0		0	250
Storage Lanes		0	0		0	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	1.00	1.00	1.00	0.88
Frt	0.988					0.850
Flt Protected						
Satd. Flow (prot)	5024	0	0	0	0	2814
Flt Permitted						
Satd. Flow (perm)	5024	0	0	0	0	2814
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	35					6
Link Speed (mph)	45			45	45	
Link Distance (ft)	1016			704	1375	
Travel Time (s)	15.4			10.7	20.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.88	0.88
Heavy Vehicles (%)	2%	2%	2%	2%	1%	1%
Adj. Flow (vph)	3128	284	0	0	0	298
Shared Lane Traffic (%)						
Lane Group Flow (vph)	3412	0	0	0	0	298
Turn Type	NA					Prot
Protected Phases	4					3
Permitted Phases						
Minimum Split (s)	17.0					16.0
Total Split (s)	96.0					24.0
Total Split (%)	80.0%					20.0%
Yellow Time (s)	3.5					3.5
All-Red Time (s)	2.5					2.5
Lost Time Adjust (s)	0.0					0.0
Total Lost Time (s)	6.0					6.0
Lead/Lag	Lag					Lead
Lead-Lag Optimize?	Yes					Yes
Act Effct Green (s)	90.0					18.0
Actuated g/C Ratio	0.75					0.15
v/c Ratio	0.90					0.70
Control Delay	4.3					57.0
Queue Delay	0.0					0.0
Total Delay	4.3					57.0
LOS	A					E
Approach Delay	4.3				57.0	
Approach LOS	A				E	
Queue Length 50th (ft)	82					123
Queue Length 95th (ft)	91					173
Internal Link Dist (ft)	936			624	1295	
Turn Bay Length (ft)						250
Base Capacity (vph)	3776					427

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Starvation Cap Reductn	2					0
Spillback Cap Reductn	0					0
Storage Cap Reductn	0					0
Reduced v/c Ratio	0.90					0.70

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 4 (3%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 75	
Control Type: Pretimed	
Maximum v/c Ratio: 0.90	
Intersection Signal Delay: 8.5	Intersection LOS: A
Intersection Capacity Utilization 80.6%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 4067: 15 Mile Rd (South) & EB M-96 (Michigan Avenue)

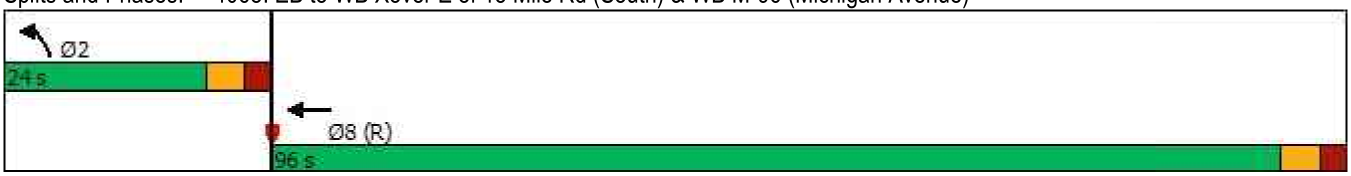


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	2990	151	0
Future Volume (vph)	0	0	0	2990	151	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	5085	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	5085	1770	0
Right Turn on Red		Yes			Yes	Yes
Satd. Flow (RTOR)					3	
Link Speed (mph)	45			45	25	
Link Distance (ft)	687			275	111	
Travel Time (s)	10.4			4.2	3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	3250	164	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	3250	164	0
Turn Type				NA	Prot	
Protected Phases				8	2	
Permitted Phases						
Minimum Split (s)				16.0	13.0	
Total Split (s)				96.0	24.0	
Total Split (%)				80.0%	20.0%	
Yellow Time (s)				3.5	3.5	
All-Red Time (s)				2.5	2.5	
Lost Time Adjust (s)				0.0	0.0	
Total Lost Time (s)				6.0	6.0	
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)				90.0	18.0	
Actuated g/C Ratio				0.75	0.15	
v/c Ratio				0.85	0.61	
Control Delay				11.4	43.2	
Queue Delay				2.0	0.0	
Total Delay				13.4	43.2	
LOS				B	D	
Approach Delay				13.4	43.2	
Approach LOS				B	D	
Queue Length 50th (ft)				566	120	
Queue Length 95th (ft)				680	m132	
Internal Link Dist (ft)	607			195	31	
Turn Bay Length (ft)						
Base Capacity (vph)				3813	268	
Starvation Cap Reductn				402	0	
Spillback Cap Reductn				0	0	
Storage Cap Reductn				0	0	
Reduced v/c Ratio				0.95	0.61	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 112 (93%), Referenced to phase 8:WBT, Start of Green	
Natural Cycle: 60	
Control Type: Pretimed	
Maximum v/c Ratio: 0.85	
Intersection Signal Delay: 14.8	Intersection LOS: B
Intersection Capacity Utilization 105.8%	ICU Level of Service G
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4068: EB to WB Xover E of 15 Mile Rd (South) & WB M-96 (Michigan Avenue)

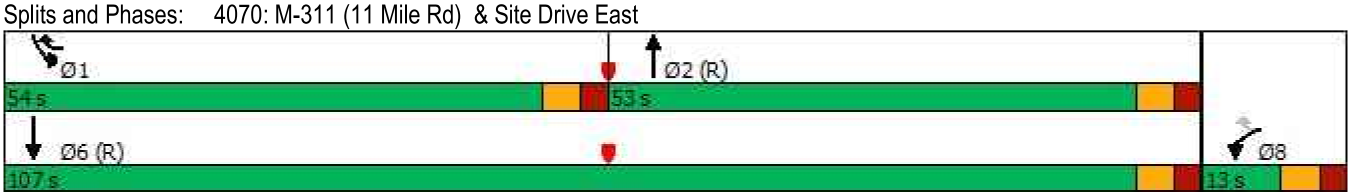


Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	30	727	1284	30	727	1311
Future Volume (vph)	30	727	1284	30	727	1311
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	500		0	400	
Storage Lanes	1	1		0	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.88	0.95	0.95	1.00	0.95
Frt		0.850	0.997			
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	2787	3529	0	1770	3539
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1770	2787	3529	0	1770	3539
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		14	2			
Link Speed (mph)	25		55			55
Link Distance (ft)	750		940			974
Travel Time (s)	20.5		11.7			12.1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	33	790	1396	33	790	1425
Shared Lane Traffic (%)						
Lane Group Flow (vph)	33	790	1429	0	790	1425
Turn Type	Prot	pm+ov	NA		Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8				
Detector Phase	8	1	2		1	6
Switch Phase						
Minimum Initial (s)	7.0	7.0	10.0		7.0	10.0
Minimum Split (s)	13.0	13.0	16.0		13.0	16.0
Total Split (s)	13.0	54.0	53.0		54.0	107.0
Total Split (%)	10.8%	45.0%	44.2%		45.0%	89.2%
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5
All-Red Time (s)	2.5	2.5	2.5		2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0		6.0	6.0
Lead/Lag		Lead	Lag		Lead	
Lead-Lag Optimize?						
Recall Mode	None	None	C-Max		None	C-Max
Act Effct Green (s)	7.0	61.0	47.0		53.2	108.6
Actuated g/C Ratio	0.06	0.51	0.39		0.44	0.90
v/c Ratio	0.32	0.56	1.03		1.01	0.45
Control Delay	62.9	21.7	59.7		41.8	5.8
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	62.9	21.7	59.7		41.8	5.8
LOS	E	C	E		D	A
Approach Delay	23.3		59.7			18.6
Approach LOS	C		E			B
Queue Length 50th (ft)	25	226	~97		~727	375
Queue Length 95th (ft)	60	291	#413		m#642	m307

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Internal Link Dist (ft)	670		860			894
Turn Bay Length (ft)		500			400	
Base Capacity (vph)	103	1423	1383		784	3202
Starvation Cap Reductn	0	0	0		0	0
Spillback Cap Reductn	0	0	0		0	138
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.32	0.56	1.03		1.01	0.47

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 8 (7%), Referenced to phase 2:NBT and 6:SBT, Start of Green	
Natural Cycle: 150	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.03	
Intersection Signal Delay: 32.6	Intersection LOS: C
Intersection Capacity Utilization 97.6%	ICU Level of Service F
Analysis Period (min) 15	
~ Volume exceeds capacity, queue is theoretically infinite. Queue shown is maximum after two cycles.	
# 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 4070: M-311 (11 Mile Rd) & Site Drive East

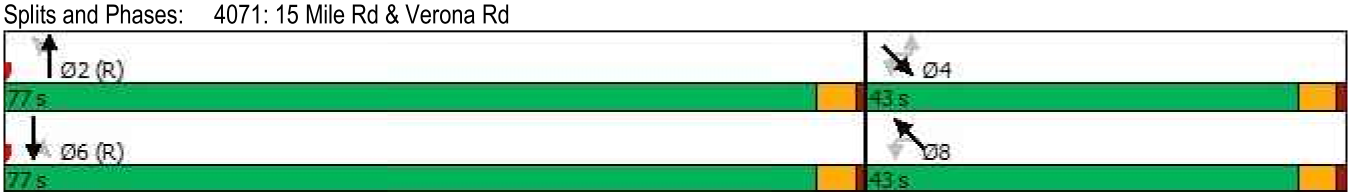


Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	453	13	13	5	9	4	0	87	433	6	118	14
Future Volume (vph)	453	13	13	5	9	4	0	87	433	6	118	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		70	0		0
Storage Lanes	0		0	0		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
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
Frt		0.996			0.968				0.850		0.986	
Flt Protected		0.955			0.987						0.998	
Satd. Flow (prot)	0	1789	0	0	1715	0	0	1845	1392	0	1851	0
Flt Permitted		0.716			0.891						0.991	
Satd. Flow (perm)	0	1342	0	0	1548	0	0	1845	1392	0	1838	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2			7				487		5	
Link Speed (mph)		45			55			55			55	
Link Distance (ft)		682			426			745			951	
Travel Time (s)		10.3			5.3			9.2			11.8	
Peak Hour Factor	0.80	0.80	0.80	0.60	0.60	0.60	0.89	0.89	0.89	0.86	0.86	0.86
Heavy Vehicles (%)	1%	1%	1%	0%	0%	25%	0%	3%	16%	1%	1%	1%
Adj. Flow (vph)	566	16	16	8	15	7	0	98	487	7	137	16
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	598	0	0	30	0	0	98	487	0	160	0
Turn Type	Perm	NA		Perm	NA			NA	Perm	Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4		4	8		
Minimum Split (s)	22.5	22.5		22.5	22.5		22.5	22.5	22.5	22.5	22.5	
Total Split (s)	77.0	77.0		77.0	77.0		43.0	43.0	43.0	43.0	43.0	
Total Split (%)	64.2%	64.2%		64.2%	64.2%		35.8%	35.8%	35.8%	35.8%	35.8%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0	0.0		0.0	
Total Lost Time (s)		4.5			4.5			4.5	4.5		4.5	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		72.5			72.5			38.5	38.5		38.5	
Actuated g/C Ratio		0.60			0.60			0.32	0.32		0.32	
v/c Ratio		0.74			0.03			0.17	0.63		0.27	
Control Delay		23.8			8.0			30.2	6.7		30.8	
Queue Delay		0.0			0.0			0.0	0.0		0.0	
Total Delay		23.8			8.0			30.2	6.7		30.8	
LOS		C			A			C	A		C	
Approach Delay		23.8			8.0			10.6			30.8	
Approach LOS		C			A			B			C	
Queue Length 50th (ft)		310			7			54	0		89	
Queue Length 95th (ft)		367			12			96	80		139	
Internal Link Dist (ft)		602			346			665			871	
Turn Bay Length (ft)									70			
Base Capacity (vph)		811			938			591	777		593	

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
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		0.74			0.03			0.17	0.63		0.27	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 60	
Control Type: Pretimed	
Maximum v/c Ratio: 0.74	
Intersection Signal Delay: 18.7	Intersection LOS: B
Intersection Capacity Utilization 54.7%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4071: 15 Mile Rd & Verona Rd



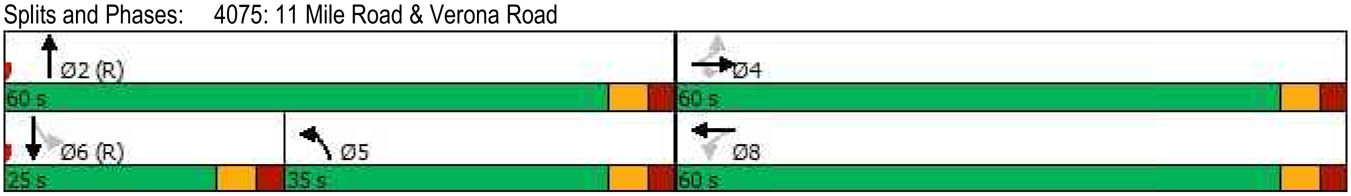
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	518	550	17	537	19	548	68	13	10	82	8
Future Volume (vph)	11	518	550	17	537	19	548	68	13	10	82	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	190		70	190		0	140		0	215		0
Storage Lanes	1		1	1		0	2		0	1		0
Taper Length (ft)	115			140			200			165		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.995			0.976			0.987	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	1900	1468	1805	1887	0	3072	1854	0	1687	1753	0
Flt Permitted	0.185			0.170			0.950			0.697		
Satd. Flow (perm)	352	1900	1468	323	1887	0	3072	1854	0	1238	1753	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			220		2			10			3	
Link Speed (mph)		55			55			45			55	
Link Distance (ft)		519			1585			1015			821	
Travel Time (s)		6.4			19.6			15.4			10.2	
Peak Hour Factor	0.79	0.79	0.79	0.87	0.87	0.87	0.87	0.87	0.87	0.66	0.66	0.66
Heavy Vehicles (%)	0%	0%	10%	0%	0%	5%	14%	0%	0%	7%	7%	7%
Adj. Flow (vph)	14	656	696	20	617	22	630	78	15	15	124	12
Shared Lane Traffic (%)												
Lane Group Flow (vph)	14	656	696	20	639	0	630	93	0	15	136	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Perm	NA	
Protected Phases		4			8		5	2			6	
Permitted Phases	4		4	8						6		
Minimum Split (s)	25.0	25.0	25.0	25.0	25.0		16.0	25.0		25.0	25.0	
Total Split (s)	60.0	60.0	60.0	60.0	60.0		35.0	60.0		25.0	25.0	
Total Split (%)	50.0%	50.0%	50.0%	50.0%	50.0%		29.2%	50.0%		20.8%	20.8%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	2.5	2.5	2.5	2.5	2.5		2.5	2.5		2.5	2.5	
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)	6.0	6.0	6.0	6.0	6.0		6.0	6.0		6.0	6.0	
Lead/Lag							Lag			Lead	Lead	
Lead-Lag Optimize?							Yes			Yes	Yes	
Act Effct Green (s)	54.0	54.0	54.0	54.0	54.0		29.0	54.0		19.0	19.0	
Actuated g/C Ratio	0.45	0.45	0.45	0.45	0.45		0.24	0.45		0.16	0.16	
v/c Ratio	0.09	0.77	0.89	0.14	0.75		0.85	0.11		0.08	0.49	
Control Delay	20.9	35.0	35.8	22.5	34.2		55.5	17.5		44.3	51.6	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	20.9	35.0	35.8	22.5	34.2		55.5	17.5		44.3	51.6	
LOS	C	D	D	C	C		E	B		D	D	
Approach Delay		35.3			33.8			50.6			50.9	
Approach LOS		D			C			D			D	
Queue Length 50th (ft)	6	418	360	9	401		241	36		10	95	
Queue Length 95th (ft)	18	463	416	26	522		#301	67		22	113	
Internal Link Dist (ft)		439			1505			935			741	
Turn Bay Length (ft)	190		70	190			140			215		
Base Capacity (vph)	158	855	781	145	850		742	839		196	280	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0	0	0	0		0	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	0.77	0.89	0.14	0.75		0.85	0.11		0.08	0.49	

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green
Natural Cycle: 90
Control Type: Pretimed
Maximum v/c Ratio: 0.89
Intersection Signal Delay: 39.6 Intersection LOS: D
Intersection Capacity Utilization 65.7% ICU Level of Service C
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 4075: 11 Mile Road & Verona Road



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	1239	143	0	231
Future Volume (vph)	0	0	1239	143	0	231
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200			300	245	245
Storage Lanes	0			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.984			0.865
Flt Protected						
Satd. Flow (prot)	0	0	3342	0	0	1644
Flt Permitted						
Satd. Flow (perm)	0	0	3342	0	0	1644
Link Speed (mph)		55	55		25	
Link Distance (ft)		509	395		760	
Travel Time (s)		6.3	4.9		20.7	
Peak Hour Factor	0.88	0.88	0.91	0.91	0.79	0.79
Heavy Vehicles (%)	1%	1%	7%	0%	0%	0%
Adj. Flow (vph)	0	0	1362	157	0	292
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1519	0	0	292
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 59.8% ICU Level of Service B

Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	1225	43	0	157
Future Volume (vph)	0	0	1225	43	0	157
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	175			50	0	0
Storage Lanes	0			0	0	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.995			0.865
Flt Protected						
Satd. Flow (prot)	0	0	3364	0	0	1565
Flt Permitted						
Satd. Flow (perm)	0	0	3364	0	0	1565
Link Speed (mph)		55	55		25	
Link Distance (ft)		395	586		185	
Travel Time (s)		4.9	7.3		5.0	
Peak Hour Factor	0.90	0.90	0.95	0.95	0.70	0.70
Heavy Vehicles (%)	1%	1%	7%	0%	5%	5%
Adj. Flow (vph)	0	0	1289	45	0	224
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1334	0	0	224
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 51.6% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	1261	12	0	7
Future Volume (vph)	0	0	1261	12	0	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150			600	0	0
Storage Lanes	0			0	0	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.999			0.865
Flt Protected						
Satd. Flow (prot)	0	0	3373	0	0	1644
Flt Permitted						
Satd. Flow (perm)	0	0	3373	0	0	1644
Link Speed (mph)		55	55		25	
Link Distance (ft)		586	607		1086	
Travel Time (s)		7.3	7.5		29.6	
Peak Hour Factor	0.83	0.83	0.92	0.92	0.60	0.60
Heavy Vehicles (%)	10%	1%	7%	0%	33%	0%
Adj. Flow (vph)	0	0	1371	13	0	12
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1384	0	0	12
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 45.2% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	995	8	0	7
Future Volume (vph)	0	0	995	8	0	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.999			0.865
Flt Protected						
Satd. Flow (prot)	0	0	3536	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	0	3536	0	0	1611
Link Speed (mph)		55	55		55	
Link Distance (ft)		538	1254		1399	
Travel Time (s)		6.7	15.5		17.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	1082	9	0	8
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1091	0	0	8
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 37.8%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	0	5	0	495	0	0	460	0
Future Volume (vph)	0	0	0	0	0	5	0	495	0	0	460	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
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
Frt					0.865							
Flt Protected												
Satd. Flow (prot)	0	1863	0	0	1611	0	0	1863	0	0	1863	0
Flt Permitted												
Satd. Flow (perm)	0	1863	0	0	1611	0	0	1863	0	0	1863	0
Link Speed (mph)		45			45			25			45	
Link Distance (ft)		957			1038			516			593	
Travel Time (s)		14.5			15.7			14.1			9.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	0	5	0	538	0	0	500	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	5	0	0	538	0	0	500	0
Sign Control		Stop			Stop			Free			Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 36.1% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBT	EBR	WBL	WBT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	0	0	119	1427	0	0
Future Volume (vph)	0	0	119	1427	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.91	0.91	1.00	1.00
Frt						
Flt Protected				0.996		
Satd. Flow (prot)	0	0	0	5065	0	0
Flt Permitted				0.996		
Satd. Flow (perm)	0	0	0	5065	0	0
Link Speed (mph)	45			45	25	
Link Distance (ft)	183			382	263	
Travel Time (s)	2.8			5.8	7.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	129	1551	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1680	0	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 54.0%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	1566	872	0	0	0	0
Future Volume (vph)	1566	872	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950	0.977				
Satd. Flow (prot)	1610	3312	0	0	0	0
Flt Permitted	0.950	0.977				
Satd. Flow (perm)	1610	3312	0	0	0	0
Link Speed (mph)		45	45		25	
Link Distance (ft)		619	209		329	
Travel Time (s)		9.4	3.2		9.0	
Peak Hour Factor	0.86	0.86	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1821	1014	0	0	0	0
Shared Lane Traffic (%)	49%					
Lane Group Flow (vph)	929	1906	0	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 64.8%	ICU Level of Service C
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations			↑↑	↱		
Traffic Volume (vph)	0	0	894	168	0	0
Future Volume (vph)	0	0	894	168	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	1.00
Frt				0.850		
Flt Protected						
Satd. Flow (prot)	0	0	3539	1583	0	0
Flt Permitted						
Satd. Flow (perm)	0	0	3539	1583	0	0
Link Speed (mph)		45	45		30	
Link Distance (ft)		213	315		137	
Travel Time (s)		3.2	4.8		3.1	
Peak Hour Factor	0.92	0.92	0.91	0.91	0.92	0.92
Adj. Flow (vph)	0	0	982	185	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	982	185	0	0
Sign Control		Stop	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 57.2%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	994	0	0	159	0
Future Volume (vph)	0	994	0	0	159	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3505	0	0	1787	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3505	0	0	1787	0
Link Speed (mph)		45	45		25	
Link Distance (ft)		309	168		108	
Travel Time (s)		4.7	2.5		2.9	
Peak Hour Factor	0.86	0.86	0.92	0.92	0.87	0.87
Heavy Vehicles (%)	3%	3%	2%	2%	1%	1%
Adj. Flow (vph)	0	1156	0	0	183	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1156	0	0	183	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 54.7%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	1007	182	0
Future Volume (vph)	0	0	0	1007	182	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	5036	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	5036	1770	0
Link Speed (mph)	45			45	25	
Link Distance (ft)	134			152	111	
Travel Time (s)	2.0			2.3	3.0	
Peak Hour Factor	0.92	0.92	0.89	0.89	0.94	0.94
Heavy Vehicles (%)	2%	2%	3%	3%	2%	2%
Adj. Flow (vph)	0	0	0	1131	194	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1131	194	0
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 39.5% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑			↰	
Traffic Volume (vph)	0	972	0	0	80	0
Future Volume (vph)	0	972	0	0	80	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3574	0	0	1787	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3574	0	0	1787	0
Link Speed (mph)		45	45		25	
Link Distance (ft)		222	290		102	
Travel Time (s)		3.4	4.4		2.8	
Peak Hour Factor	0.95	0.95	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	1%	1%	2%	2%	1%	1%
Adj. Flow (vph)	0	1023	0	0	87	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1023	0	0	87	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 69.1%	ICU Level of Service C
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	1026	65	0
Future Volume (vph)	0	0	0	1026	65	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	30			45	25	
Link Distance (ft)	114			1105	101	
Travel Time (s)	2.6			16.7	2.8	
Peak Hour Factor	0.92	0.92	0.88	0.88	0.94	0.94
Adj. Flow (vph)	0	0	0	1166	69	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1166	69	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 64.9%	ICU Level of Service C
Analysis Period (min) 15	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	174	265	31	4	200	12	14	37	3	13	81	156
Future Volume (vph)	174	265	31	4	200	12	14	37	3	13	81	156
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	80		0	80		0	110		0	115		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	180			180			140			175		
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
Frt		0.984			0.991			0.988			0.901	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	1870	0	1770	1846	0	1703	1771	0	1770	1678	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1805	1870	0	1770	1846	0	1703	1771	0	1770	1678	0
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		1365			1319			666			571	
Travel Time (s)		20.7			20.0			10.1			8.7	
Peak Hour Factor	0.94	0.94	0.94	0.88	0.88	0.88	0.78	0.78	0.78	0.91	0.91	0.91
Heavy Vehicles (%)	0%	0%	0%	2%	2%	2%	6%	6%	6%	2%	2%	2%
Adj. Flow (vph)	185	282	33	5	227	14	18	47	4	14	89	171
Shared Lane Traffic (%)												
Lane Group Flow (vph)	185	315	0	5	241	0	18	51	0	14	260	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 44.7% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBL2	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	SWL	SWR
Lane Configurations											
Traffic Volume (vph)	55	0	112	0	270	79	81	385	0	0	0
Future Volume (vph)	55	0	112	0	270	79	81	385	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	240	0		0	105		0	0	0
Storage Lanes		1	1	0		0	1		0	0	0
Taper Length (ft)		25		25			70			25	
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
Frt			0.850		0.969						
Flt Protected	0.950						0.950				
Satd. Flow (prot)	1687	0	1615	0	1805	0	1752	1845	0	0	0
Flt Permitted	0.950						0.950				
Satd. Flow (perm)	1687	0	1615	0	1805	0	1752	1845	0	0	0
Link Speed (mph)		25			45			45		25	
Link Distance (ft)		894			1167			685		897	
Travel Time (s)		24.4			17.7			10.4		24.5	
Peak Hour Factor	0.93	0.93	0.93	0.91	0.91	0.91	0.95	0.95	0.95	0.92	0.92
Heavy Vehicles (%)	7%	0%	0%	2%	2%	2%	3%	3%	3%	2%	2%
Adj. Flow (vph)	59	0	120	0	297	87	85	405	0	0	0
Shared Lane Traffic (%)											
Lane Group Flow (vph)	59	0	120	0	384	0	85	405	0	0	0
Sign Control		Stop			Free			Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 33.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	WBL2	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NER
Lane Configurations											
Traffic Volume (vph)	93	0	84	61	264	0	0	373	50	0	0
Future Volume (vph)	93	0	84	61	264	0	0	373	50	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	185	165		0	0		0	0	0
Storage Lanes		1	1	1		0	0		0	0	0
Taper Length (ft)		25		110			25			25	
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
Frt			0.850					0.984			
Flt Protected	0.950			0.950							
Satd. Flow (prot)	1805	0	1455	1752	1845	0	0	1815	0	0	0
Flt Permitted	0.950			0.950							
Satd. Flow (perm)	1805	0	1455	1752	1845	0	0	1815	0	0	0
Link Speed (mph)		25			45			45		25	
Link Distance (ft)		613			685			608		913	
Travel Time (s)		16.7			10.4			9.2		24.9	
Peak Hour Factor	0.81	0.81	0.81	0.87	0.87	0.87	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	11%	3%	3%	3%	3%	3%	3%	2%	2%
Adj. Flow (vph)	115	0	104	70	303	0	0	405	54	0	0
Shared Lane Traffic (%)											
Lane Group Flow (vph)	115	0	104	70	303	0	0	459	0	0	0
Sign Control		Stop			Free			Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 33.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	184	140	0	396	272	0
Future Volume (vph)	184	140	0	396	272	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.850				
Flt Protected	0.950					
Satd. Flow (prot)	1543	1553	0	3505	3374	0
Flt Permitted	0.950					
Satd. Flow (perm)	1543	1553	0	3505	3374	0
Link Speed (mph)	25			55	55	
Link Distance (ft)	119			105	620	
Travel Time (s)	3.2			1.3	7.7	
Peak Hour Factor	0.93	0.93	0.82	0.82	0.92	0.92
Heavy Vehicles (%)	17%	4%	0%	3%	7%	0%
Adj. Flow (vph)	198	151	0	483	296	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	198	151	0	483	296	0
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 27.8%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	396	61	35	377
Future Volume (vph)	0	0	396	61	35	377
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		340	0	
Storage Lanes	0	0		1	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	1.00	0.95	0.95
Frt				0.850		
Flt Protected						0.996
Satd. Flow (prot)	0	0	3505	1568	0	3383
Flt Permitted						0.996
Satd. Flow (perm)	0	0	3505	1568	0	3383
Link Speed (mph)	25		55			55
Link Distance (ft)	664		1109			105
Travel Time (s)	18.1		13.7			1.3
Peak Hour Factor	0.92	0.92	0.82	0.82	0.92	0.92
Heavy Vehicles (%)	2%	2%	3%	3%	20%	5%
Adj. Flow (vph)	0	0	483	74	38	410
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	483	74	0	448
Sign Control	Stop		Free			Free

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 29.1% ICU Level of Service A

Analysis Period (min) 15

Lane Group	WBL2	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NER
Lane Configurations											
Traffic Volume (vph)	52	0	60	0	352	0	0	220	86	0	0
Future Volume (vph)	52	0	60	0	352	0	0	220	86	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	205	0		0	0		135	0	0
Storage Lanes		1	1	0		0	0		1	0	0
Taper Length (ft)		25		25			25			25	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00
Frt			0.850						0.850		
Flt Protected	0.950										
Satd. Flow (prot)	1736	0	1380	0	3438	0	0	3343	1272	0	0
Flt Permitted	0.950										
Satd. Flow (perm)	1736	0	1380	0	3438	0	0	3343	1272	0	0
Link Speed (mph)		25			55			55		25	
Link Distance (ft)		296			230			1367		908	
Travel Time (s)		8.1			2.9			16.9		24.8	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.95	0.95	0.95	0.92	0.92
Heavy Vehicles (%)	4%	0%	17%	0%	5%	0%	0%	8%	27%	2%	2%
Adj. Flow (vph)	59	0	68	0	400	0	0	232	91	0	0
Shared Lane Traffic (%)											
Lane Group Flow (vph)	59	0	68	0	400	0	0	232	91	0	0
Sign Control		Stop			Free			Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 20.4% ICU Level of Service A

Analysis Period (min) 15

Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	33	80	0	270	154	0
Future Volume (vph)	33	80	0	270	154	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				
Flt Protected	0.950					
Satd. Flow (prot)	1752	1077	0	1624	1696	0
Flt Permitted	0.950					
Satd. Flow (perm)	1752	1077	0	1624	1696	0
Link Speed (mph)	25			45	45	
Link Distance (ft)	189			1063	114	
Travel Time (s)	5.2			16.1	1.7	
Peak Hour Factor	0.74	0.74	0.93	0.93	0.89	0.89
Heavy Vehicles (%)	3%	50%	17%	17%	12%	12%
Adj. Flow (vph)	45	108	0	290	173	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	45	108	0	290	173	0
Sign Control	Stop			Free	Free	

Intersection Summary		
Area Type:	Other	
Control Type: Unsignalized		
Intersection Capacity Utilization 24.2%		ICU Level of Service A
Analysis Period (min) 15		

Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	0	0	182	121	3	154
Future Volume (vph)	0	0	182	121	3	154
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.850		
Flt Protected						0.999
Satd. Flow (prot)	0	0	1624	1380	0	1689
Flt Permitted						0.999
Satd. Flow (perm)	0	0	1624	1380	0	1689
Link Speed (mph)	25		45			45
Link Distance (ft)	105		114			727
Travel Time (s)	2.9		1.7			11.0
Peak Hour Factor	0.92	0.92	0.93	0.93	0.89	0.89
Heavy Vehicles (%)	2%	2%	17%	17%	33%	12%
Adj. Flow (vph)	0	0	196	130	3	173
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	196	130	0	176
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 22.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBR	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	6	97	58	124	60	11
Future Volume (vph)	6	97	58	124	60	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	195	0	0			90
Storage Lanes	1	1	0			1
Taper Length (ft)	135		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				0.850
Flt Protected	0.950			0.984		
Satd. Flow (prot)	1570	1404	0	1615	1776	1509
Flt Permitted	0.950			0.984		
Satd. Flow (perm)	1570	1404	0	1615	1776	1509
Link Speed (mph)	25			45	45	
Link Distance (ft)	597			727	1165	
Travel Time (s)	16.3			11.0	17.7	
Peak Hour Factor	0.83	0.83	0.91	0.91	0.78	0.78
Heavy Vehicles (%)	15%	15%	43%	3%	7%	7%
Adj. Flow (vph)	7	117	64	136	77	14
Shared Lane Traffic (%)						
Lane Group Flow (vph)	7	117	0	200	77	14
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 26.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	18	1528	18	0
Future Volume (vph)	0	0	18	1528	18	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.91	0.91	1.00	1.00
Frt						
Flt Protected				0.999	0.950	
Satd. Flow (prot)	0	0	0	5080	1770	0
Flt Permitted				0.999	0.950	
Satd. Flow (perm)	0	0	0	5080	1770	0
Link Speed (mph)	45			45	25	
Link Distance (ft)	382			217	236	
Travel Time (s)	5.8			3.3	6.4	
Peak Hour Factor	0.90	0.90	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	20	1661	20	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1681	20	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 39.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1153	0	0	0	0	30
Future Volume (vph)	1153	0	0	0	0	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	1.00	1.00	1.00	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	3539	0	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	3539	0	0	0	0	1611
Link Speed (mph)	45			45	25	
Link Distance (ft)	168			432	770	
Travel Time (s)	2.5			6.5	21.0	
Peak Hour Factor	0.87	0.87	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1325	0	0	0	0	33
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1325	0	0	0	0	33
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 49.6% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations			↑↑↑			↱
Traffic Volume (vph)	0	0	1189	0	0	32
Future Volume (vph)	0	0	1189	0	0	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.91	1.00	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	0	0	5036	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	0	5036	0	0	1611
Link Speed (mph)		45	45		25	
Link Distance (ft)		494	134		230	
Travel Time (s)		7.5	2.0		6.3	
Peak Hour Factor	0.92	0.92	0.89	0.89	0.92	0.92
Heavy Vehicles (%)	2%	2%	3%	3%	2%	2%
Adj. Flow (vph)	0	0	1336	0	0	35
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1336	0	0	35
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 42.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations			↑↱			
Traffic Volume (vph)	0	0	1041	50	0	0
Future Volume (vph)	0	0	1041	50	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.993			
Flt Protected						
Satd. Flow (prot)	0	0	3514	0	0	0
Flt Permitted						
Satd. Flow (perm)	0	0	3514	0	0	0
Link Speed (mph)		30	45		25	
Link Distance (ft)		176	114		201	
Travel Time (s)		4.0	1.7		5.5	
Peak Hour Factor	0.92	0.92	0.88	0.88	0.92	0.92
Adj. Flow (vph)	0	0	1183	57	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1240	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 38.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	NBT	NBR	SBL	SBT	SWL	SWR
Lane Configurations	↑↱			↑↑		
Traffic Volume (vph)	352	228	0	272	0	0
Future Volume (vph)	352	228	0	272	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	1.00	0.95	1.00	1.00
Frt	0.941					
Flt Protected						
Satd. Flow (prot)	3164	0	0	3343	0	0
Flt Permitted						
Satd. Flow (perm)	3164	0	0	3343	0	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	620			230	1088	
Travel Time (s)	7.7			2.9	29.7	
Peak Hour Factor	0.88	0.88	0.95	0.95	0.92	0.92
Heavy Vehicles (%)	5%	11%	8%	8%	2%	2%
Adj. Flow (vph)	400	259	0	286	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	659	0	0	286	0	0
Sign Control	Free			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 20.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	32	1009	0	0	0	0	0	48	29
Future Volume (vph)	0	0	0	32	1009	0	0	0	0	0	48	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	165		0	0		0	0		0
Storage Lanes	0		0	1		0	0		0	0		0
Taper Length (ft)	25			85			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt											0.949	
Flt Protected				0.950								
Satd. Flow (prot)	0	0	0	1770	3539	0	0	0	0	0	1785	0
Flt Permitted				0.950								
Satd. Flow (perm)	0	0	0	1770	3539	0	0	0	0	0	1785	0
Link Speed (mph)		30			45			30			30	
Link Distance (ft)		212			176			102			496	
Travel Time (s)		4.8			2.7			2.3			11.3	
Peak Hour Factor	0.92	0.92	0.92	0.86	0.86	0.86	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	1%	1%	1%
Adj. Flow (vph)	0	0	0	37	1173	0	0	0	0	0	52	32
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	37	1173	0	0	0	0	0	84	0
Sign Control		Free			Free			Yield			Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 38.9% ICU Level of Service A

Analysis Period (min) 15

Lane Group	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	1772	0	0	0	1804
Future Volume (vph)	0	1772	0	0	0	1804
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	0.88
Frt						0.850
Flt Protected						
Satd. Flow (prot)	0	3539	0	0	0	2787
Flt Permitted						
Satd. Flow (perm)	0	3539	0	0	0	2787
Link Speed (mph)		55	55		55	
Link Distance (ft)		434	1242		1194	
Travel Time (s)		5.4	15.4		14.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1926	0	0	0	1961
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1926	0	0	0	1961
Sign Control		Free	Free		Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 66.4% ICU Level of Service C

Analysis Period (min) 15

Lane Group	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	0	119	0	0	663
Future Volume (vph)	0	0	119	0	0	663
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	0	0	1863	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	0	1863	0	0	1611
Link Speed (mph)		25	25		30	
Link Distance (ft)		1199	263		174	
Travel Time (s)		32.7	7.2		4.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.90	0.90
Adj. Flow (vph)	0	0	129	0	0	737
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	129	0	0	737
Sign Control		Free	Yield		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 54.0%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	WBL	WBR	NBL	NBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	168	1566	0	0	0
Future Volume (vph)	0	168	1566	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.97	1.00	1.00	1.00
Frt		0.865				
Flt Protected			0.950			
Satd. Flow (prot)	0	1627	3303	0	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	1627	3303	0	0	0
Link Speed (mph)	45		45		45	
Link Distance (ft)	255		329		551	
Travel Time (s)	3.9		5.0		8.3	
Peak Hour Factor	0.91	0.91	0.93	0.93	0.92	0.92
Heavy Vehicles (%)	1%	1%	6%	6%	2%	2%
Adj. Flow (vph)	0	185	1684	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	185	1684	0	0	0
Sign Control	Yield		Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 63.5%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	159	1062	0	0
Future Volume (vph)	0	0	159	1062	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	450		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			85		25	
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	5085	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	5085	0	0
Link Speed (mph)	45			45	30	
Link Distance (ft)	315			494	108	
Travel Time (s)	4.8			7.5	2.5	
Peak Hour Factor	0.92	0.92	0.87	0.87	0.92	0.92
Adj. Flow (vph)	0	0	183	1221	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	183	1221	0	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 43.3%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	182	1001	0	0	0	0
Future Volume (vph)	182	1001	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	275			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	110				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		45	45		30	
Link Distance (ft)		432	161		111	
Travel Time (s)		6.5	2.4		2.5	
Peak Hour Factor	0.94	0.94	0.92	0.92	0.92	0.92
Adj. Flow (vph)	194	1065	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	194	1065	0	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 53.8%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	3011	0	0	0	3038
Future Volume (vph)	0	3011	0	0	0	3038
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	0.76
Frt						0.850
Flt Protected						
Satd. Flow (prot)	0	3539	0	0	0	3610
Flt Permitted						
Satd. Flow (perm)	0	3539	0	0	0	3610
Link Speed (mph)		55	55		45	
Link Distance (ft)		1093	655		773	
Travel Time (s)		13.5	8.1		11.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	3273	0	0	0	3302
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	3273	0	0	0	3302
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 86.6%	ICU Level of Service E
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	65	987	0	0	0	0
Future Volume (vph)	65	987	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	180			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	75				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		45	45		30	
Link Distance (ft)		290	1089		101	
Travel Time (s)		4.4	16.5		2.3	
Peak Hour Factor	0.94	0.94	0.92	0.92	0.92	0.92
Adj. Flow (vph)	69	1050	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	69	1050	0	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 62.3%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NWL	NWR
Lane Configurations	↑↑↑↱					
Traffic Volume (vph)	2326	663	0	0	0	0
Future Volume (vph)	2326	663	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	1.00	1.00	1.00	1.00
Frt	0.967					
Flt Protected						
Satd. Flow (prot)	4917	0	0	0	0	0
Flt Permitted						
Satd. Flow (perm)	4917	0	0	0	0	0
Link Speed (mph)	45			45	30	
Link Distance (ft)	311			156	174	
Travel Time (s)	4.7			2.4	4.0	
Peak Hour Factor	0.90	0.90	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2584	737	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	3321	0	0	0	0	0
Sign Control	Free			Stop	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 82.5%	ICU Level of Service E
Analysis Period (min) 15	

Lane Group	NBT	NBR	SBL	SBT	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	0	0	112	1563	0	0
Future Volume (vph)	0	0	112	1563	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	500		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			100		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	3539	0	0
Link Speed (mph)	30			25	25	
Link Distance (ft)	266			1471	301	
Travel Time (s)	6.0			40.1	8.2	
Peak Hour Factor	0.92	0.92	0.75	0.75	0.92	0.92
Adj. Flow (vph)	0	0	149	2084	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	149	2084	0	0
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 46.5%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	652	122	0	0	0	0
Future Volume (vph)	652	122	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected		0.960				
Satd. Flow (prot)	0	1788	0	0	0	0
Flt Permitted		0.960				
Satd. Flow (perm)	0	1788	0	0	0	0
Link Speed (mph)		25	30		25	
Link Distance (ft)		1207	315		252	
Travel Time (s)		32.9	7.2		6.9	
Peak Hour Factor	0.75	0.75	0.92	0.92	0.92	0.92
Adj. Flow (vph)	869	163	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1032	0	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 57.4%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	103	0	69	0	0
Future Volume (vph)	0	103	0	69	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.865		
Flt Protected						
Satd. Flow (prot)	0	1652	0	1191	0	0
Flt Permitted						
Satd. Flow (perm)	0	1652	0	1191	0	0
Link Speed (mph)		25	25		25	
Link Distance (ft)		995	597		1154	
Travel Time (s)		27.1	16.3		31.5	
Peak Hour Factor	0.83	0.83	0.89	0.89	0.92	0.92
Heavy Vehicles (%)	15%	15%	38%	38%	2%	2%
Adj. Flow (vph)	0	124	0	78	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	124	0	78	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 8.8%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	53	3453	0	0
Future Volume (vph)	0	0	53	3453	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	250		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	5085	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	5085	0	0
Link Speed (mph)	45			45	25	
Link Distance (ft)	894			534	137	
Travel Time (s)	13.5			8.1	3.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	58	3753	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	58	3753	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 67.3%	ICU Level of Service C
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	3486	0	0	53	0
Future Volume (vph)	0	3486	0	0	53	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.86	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	6408	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	6408	0	0	1770	0
Link Speed (mph)		45	45		25	
Link Distance (ft)		744	1191		137	
Travel Time (s)		11.3	18.0		3.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	3789	0	0	58	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	3789	0	0	58	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 123.9%	ICU Level of Service H
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	519	3020	0	0	0	0
Future Volume (vph)	519	3020	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	400			0	0	0
Storage Lanes	2			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	0.97	0.86	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	3433	6408	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	3433	6408	0	0	0	0
Link Speed (mph)		45	45		25	
Link Distance (ft)		1191	262		113	
Travel Time (s)		18.0	4.0		3.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	564	3283	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	564	3283	0	0	0	0
Sign Control		Free	Stop		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 110.5%	ICU Level of Service H
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	119	3022	0	0
Future Volume (vph)	0	0	119	3022	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	250		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	5085	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	5085	0	0
Link Speed (mph)	45			45	25	
Link Distance (ft)	254			1016	123	
Travel Time (s)	3.8			15.4	3.4	
Peak Hour Factor	0.92	0.92	0.90	0.87	0.92	0.92
Adj. Flow (vph)	0	0	132	3474	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	132	3474	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 148.8%	ICU Level of Service H
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	151	2989	0	0	0	0
Future Volume (vph)	151	2989	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.91	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	5085	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	5085	0	0	0	0
Link Speed (mph)		45	45		30	
Link Distance (ft)		704	311		111	
Travel Time (s)		10.7	4.7		2.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	164	3249	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	164	3249	0	0	0	0
Sign Control		Free	Stop		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 123.9%	ICU Level of Service H
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑	↰	
Traffic Volume (vph)	0	0	0	1436	27	0
Future Volume (vph)	0	0	0	1436	27	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	30	
Link Distance (ft)	583			574	107	
Travel Time (s)	7.2			7.1	2.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	1561	29	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1561	29	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 82.6%	ICU Level of Service E
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	27	1310	0	0	0	0
Future Volume (vph)	27	1310	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		30	
Link Distance (ft)		1122	576		107	
Travel Time (s)		13.9	7.1		2.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	29	1424	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	29	1424	0	0	0	0
Sign Control		Free	Stop		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 82.6%	ICU Level of Service E
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	1427	36	0	54
Future Volume (vph)	0	0	1427	36	0	54
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.996			0.865
Flt Protected						
Satd. Flow (prot)	0	0	3525	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	0	3525	0	0	1611
Link Speed (mph)		55	55		30	
Link Distance (ft)		590	583		121	
Travel Time (s)		7.3	7.2		2.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	1551	39	0	59
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1590	0	0	59
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 50.6%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	168	1313	0	0
Future Volume (vph)	0	0	168	1313	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	250		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	3539	0	0
Link Speed (mph)	55			55	30	
Link Distance (ft)	405			590	104	
Travel Time (s)	5.0			7.3	2.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	183	1427	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	183	1427	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 47.8%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	1169	0	0	168	0
Future Volume (vph)	0	1169	0	0	168	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	1770	0
Link Speed (mph)		55	55		30	
Link Distance (ft)		316	1122		104	
Travel Time (s)		3.9	13.9		2.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1271	0	0	183	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1271	0	0	183	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 75.3%	ICU Level of Service D
Analysis Period (min) 15	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	491	3371	0	0
Future Volume (vph)	0	0	491	3371	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	250			0
Storage Lanes	0	0	2			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	0.97	0.91	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	3433	5085	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	3433	5085	0	0
Link Speed (mph)	45			55	30	
Link Distance (ft)	105			493	555	
Travel Time (s)	1.6			6.1	12.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	534	3664	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	534	3664	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 136.3%	ICU Level of Service H
Analysis Period (min) 15	

Lane Group	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	2272	1099	0	0	0	0
Future Volume (vph)	2272	1099	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.94	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	4990	1863	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	4990	1863	0	0	0	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		555	271		108	
Travel Time (s)		12.6	6.2		2.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2470	1195	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	2470	1195	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 110.0%	ICU Level of Service H
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NEL	NER
Lane Configurations	↑					↱
Traffic Volume (vph)	73	0	0	0	0	1099
Future Volume (vph)	73	0	0	0	0	1099
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	1863	0	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	1863	0	0	0	0	1611
Link Speed (mph)	25			30	25	
Link Distance (ft)	287			1072	271	
Travel Time (s)	7.8			24.4	7.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	79	0	0	0	0	1195
Shared Lane Traffic (%)						
Lane Group Flow (vph)	79	0	0	0	0	1195
Sign Control	Yield			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 78.6%	ICU Level of Service D
Analysis Period (min) 15	

Lane Group	NBT	NBR	SBL	SBT	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	0	0	73	2266	0	0
Future Volume (vph)	0	0	73	2266	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.91	0.91	1.00	1.00
Frt						
Flt Protected				0.998		
Satd. Flow (prot)	0	0	0	5070	0	0
Flt Permitted				0.998		
Satd. Flow (perm)	0	0	0	5070	0	0
Link Speed (mph)	45			45	45	
Link Distance (ft)	194			406	287	
Travel Time (s)	2.9			6.2	4.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	5%	2%	2%	2%
Adj. Flow (vph)	0	0	79	2463	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	2542	0	0
Sign Control	Free			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 78.6%	ICU Level of Service D
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	104	988	0	0	0	0
Future Volume (vph)	104	988	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1719	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1719	3539	0	0	0	0
Link Speed (mph)		25	25		25	
Link Distance (ft)		879	346		271	
Travel Time (s)		24.0	9.4		7.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	2%	2%	2%	2%	2%
Adj. Flow (vph)	113	1074	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	113	1074	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 77.9%	ICU Level of Service D
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	957	0	0	81
Future Volume (vph)	0	0	957	0	0	81
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	0	0	1863	0	0	1565
Flt Permitted						
Satd. Flow (perm)	0	0	1863	0	0	1565
Link Speed (mph)		30	45		45	
Link Distance (ft)		874	182		254	
Travel Time (s)		19.9	2.8		3.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	5%
Adj. Flow (vph)	0	0	1040	0	0	88
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1040	0	0	88
Sign Control		Free	Free		Yield	

Intersection Summary		
Area Type:	Other	
Control Type: Unsignalized		
Intersection Capacity Utilization 82.0%		ICU Level of Service E
Analysis Period (min) 15		

Lane Group	EBL	EBR	SBL	SBR	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	0	0	0	0	957	1419
Future Volume (vph)	0	0	0	0	957	1419
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.91
Frt					0.981	0.850
Flt Protected					0.958	
Satd. Flow (prot)	0	0	0	0	1744	2799
Flt Permitted					0.958	
Satd. Flow (perm)	0	0	0	0	1744	2799
Link Speed (mph)	30		30		30	
Link Distance (ft)	182		207		337	
Travel Time (s)	4.1		4.7		7.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	5%
Adj. Flow (vph)	0	0	0	0	1040	1542
Shared Lane Traffic (%)						10%
Lane Group Flow (vph)	0	0	0	0	1194	1388
Sign Control	Stop		Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 82.0%	ICU Level of Service E
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↱					
Traffic Volume (vph)	1300	81	0	0	0	0
Future Volume (vph)	1300	81	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00
Frt	0.991					
Flt Protected						
Satd. Flow (prot)	3407	0	0	0	0	0
Flt Permitted						
Satd. Flow (perm)	3407	0	0	0	0	0
Link Speed (mph)	30			45	25	
Link Distance (ft)	306			190	254	
Travel Time (s)	7.0			2.9	6.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	5%	2%	2%	2%	2%
Adj. Flow (vph)	1413	88	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1501	0	0	0	0	0
Sign Control	Free			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 73.4%	ICU Level of Service D
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	0	1039	151	0	0
Future Volume (vph)	0	0	1039	151	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			250	0	0
Storage Lanes	0			1	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	1.00
Frt				0.850		
Flt Protected						
Satd. Flow (prot)	0	0	3539	1538	0	0
Flt Permitted						
Satd. Flow (perm)	0	0	3539	1538	0	0
Link Speed (mph)		25	25		25	
Link Distance (ft)		241	1465		317	
Travel Time (s)		6.6	40.0		8.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	5%	2%	2%
Adj. Flow (vph)	0	0	1129	164	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1129	164	0	0
Sign Control		Free	Free		Free	

Intersection Summary
Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 33.7% ICU Level of Service A
Analysis Period (min) 15

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑↑	↰	
Traffic Volume (vph)	0	0	0	1570	64	0
Future Volume (vph)	0	0	0	1570	64	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	4940	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	4940	1770	0
Link Speed (mph)	55			30	25	
Link Distance (ft)	598			415	105	
Travel Time (s)	7.4			9.4	2.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	5%	2%	2%
Adj. Flow (vph)	0	0	0	1707	70	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1707	70	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 75.2%	ICU Level of Service D
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	64	1381	0	0	0	0
Future Volume (vph)	64	1381	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3438	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3438	0	0	0	0
Link Speed (mph)		55	30		25	
Link Distance (ft)		597	306		105	
Travel Time (s)		7.4	7.0		2.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	5%	2%	2%	2%	2%
Adj. Flow (vph)	70	1501	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	70	1501	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 75.2%	ICU Level of Service D
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑	↰	
Traffic Volume (vph)	0	0	0	892	0	0
Future Volume (vph)	0	0	0	892	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	0	0	0	3539	1863	0
Flt Permitted						
Satd. Flow (perm)	0	0	0	3539	1863	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	586			210	99	
Travel Time (s)	7.3			2.6	2.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	970	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	970	0	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 34.7%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	783	0	0	0	0
Future Volume (vph)	0	783	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	1863	3539	0	0	0	0
Flt Permitted						
Satd. Flow (perm)	1863	3539	0	0	0	0
Link Speed (mph)		55	55		25	
Link Distance (ft)		589	212		99	
Travel Time (s)		7.3	2.6		2.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	851	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	851	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 34.7%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	892	0	0
Future Volume (vph)	0	0	0	892	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	0	0	0	3539	0	0
Flt Permitted						
Satd. Flow (perm)	0	0	0	3539	0	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	723			586	81	
Travel Time (s)	9.0			7.3	2.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	970	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	970	0	0
Sign Control	Free			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 34.7%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	783	0	0	0	0	0	0	0	0	0	0
Future Volume (vph)	0	783	0	0	0	0	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	3539	0	0	0	0	0	0	1863	0	1863	0
Flt Permitted												
Satd. Flow (perm)	0	3539	0	0	0	0	0	0	1863	0	1863	0
Link Speed (mph)		55			55			25			25	
Link Distance (ft)		719			589			84			81	
Travel Time (s)		8.9			7.3			2.3			2.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	851	0	0	0	0	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	851	0	0	0	0	0	0	0	0	0	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 31.6% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBT	EBR	WBL	WBT	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	0	783	0	892	0	0
Future Volume (vph)	0	783	0	892	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.88	1.00	0.95	1.00	1.00
Frt		0.850				
Flt Protected						
Satd. Flow (prot)	0	2787	0	3539	0	0
Flt Permitted						
Satd. Flow (perm)	0	2787	0	3539	0	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	997			723	719	
Travel Time (s)	12.4			9.0	19.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	851	0	970	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	851	0	970	0	0
Sign Control	Free			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 30.7%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	286	1024	0	0	0	0
Future Volume (vph)	286	1024	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		55	
Link Distance (ft)		2077	2379		116	
Travel Time (s)		25.7	29.5		1.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	311	1113	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	311	1113	0	0	0	0
Sign Control		Free	Stop		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 62.3%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	0	0	0	987	286	0
Future Volume (vph)	0	0	0	987	286	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	607			2382	116	
Travel Time (s)	7.5			29.5	3.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	1073	311	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1073	311	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 68.9%	ICU Level of Service C
Analysis Period (min) 15	

Lane Group	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	0	0	14	987	0	0
Future Volume (vph)	0	0	14	987	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	250		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	3539	0	0
Link Speed (mph)	55			55	55	
Link Distance (ft)	2382			560	108	
Travel Time (s)	29.5			6.9	1.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	15	1073	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	15	1073	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 80.4%	ICU Level of Service D
Analysis Period (min) 15	

Lane Group	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	0	1024	0	0	14	0
Future Volume (vph)	0	1024	0	0	14	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	1770	0
Link Speed (mph)		55	55		25	
Link Distance (ft)		2379	608		108	
Travel Time (s)		29.5	7.5		2.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1113	0	0	15	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1113	0	0	15	0
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 62.3% ICU Level of Service B

Analysis Period (min) 15

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	999	39	0	0	0	32
Future Volume (vph)	999	39	0	0	0	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		600	600		0	0
Storage Lanes		0	0		0	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00
Frt	0.994					0.865
Flt Protected						
Satd. Flow (prot)	3518	0	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	3518	0	0	0	0	1611
Link Speed (mph)	55			55	45	
Link Distance (ft)	608			628	1089	
Travel Time (s)	7.5			7.8	16.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1086	42	0	0	0	35
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1128	0	0	0	0	35
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 38.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	992	9	0
Future Volume (vph)	0	0	0	992	9	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	645			3831	112	
Travel Time (s)	8.0			47.5	3.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	1078	10	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1078	10	0
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 55.6% ICU Level of Service B

Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	9	1022	0	0	0	0
Future Volume (vph)	9	1022	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		55	
Link Distance (ft)		628	3825		112	
Travel Time (s)		7.8	47.4		1.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	10	1111	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	10	1111	0	0	0	0
Sign Control		Free	Stop		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 62.3%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	10	992	0	0
Future Volume (vph)	0	0	10	992	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	250		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	3539	0	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	3831			538	97	
Travel Time (s)	47.5			6.7	2.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	11	1078	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	11	1078	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 42.8%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	1022	0	0	10	0
Future Volume (vph)	0	1022	0	0	10	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	1770	0
Link Speed (mph)		55	55		25	
Link Distance (ft)		3825	591		97	
Travel Time (s)		47.4	7.3		2.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1111	0	0	11	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1111	0	0	11	0
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 62.3% ICU Level of Service B

Analysis Period (min) 15

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1020	12	0	0	0	16
Future Volume (vph)	1020	12	0	0	0	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00
Frt	0.998					0.865
Flt Protected						
Satd. Flow (prot)	3532	0	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	3532	0	0	0	0	1611
Link Speed (mph)	55			55	45	
Link Distance (ft)	591			1206	1073	
Travel Time (s)	7.3			15.0	16.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1109	13	0	0	0	17
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1122	0	0	0	0	17
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 38.6%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	994	9	0
Future Volume (vph)	0	0	0	994	9	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	1254			1793	105	
Travel Time (s)	15.5			22.2	2.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	1080	10	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1080	10	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 62.5%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	9	1027	0	0	0	0
Future Volume (vph)	9	1027	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		55	
Link Distance (ft)		1206	1786		105	
Travel Time (s)		15.0	22.1		1.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	10	1116	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	10	1116	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 62.5%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	549	994	0	0
Future Volume (vph)	0	0	549	994	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	500		0	0
Storage Lanes		0	2		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	0.97	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	3433	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	3433	3539	0	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	1793			596	109	
Travel Time (s)	22.2			7.4	3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	597	1080	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	597	1080	0	0
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 95.2% ICU Level of Service F

Analysis Period (min) 15

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑	↰	
Traffic Volume (vph)	0	0	0	1490	53	0
Future Volume (vph)	0	0	0	1490	53	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	631			2681	109	
Travel Time (s)	7.8			33.2	3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	1620	58	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1620	58	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 69.9%	ICU Level of Service C
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	53	1523	0	0	0	0
Future Volume (vph)	53	1523	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		55	
Link Distance (ft)		627	2678		109	
Travel Time (s)		7.8	33.2		1.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	58	1655	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	58	1655	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 90.0%	ICU Level of Service E
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	308	1490	0	0
Future Volume (vph)	0	0	308	1490	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	500		0	0
Storage Lanes		0	2		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	0.97	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	3433	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	3433	3539	0	0
Link Speed (mph)	55			55	55	
Link Distance (ft)	2681			671	109	
Travel Time (s)	33.2			8.3	1.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	335	1620	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	335	1620	0	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 107.0%	ICU Level of Service G
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	1771	27	0
Future Volume (vph)	0	0	0	1771	27	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	654			797	95	
Travel Time (s)	8.1			9.9	2.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	1925	29	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1925	29	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 79.6%	ICU Level of Service D
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	27	1804	0	0	0	0
Future Volume (vph)	27	1804	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		55	
Link Distance (ft)		659	784		95	
Travel Time (s)		8.2	9.7		1.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	29	1961	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	29	1961	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary		
Area Type:	Other	
Control Type: Unsignalized		
Intersection Capacity Utilization 105.5%		ICU Level of Service G
Analysis Period (min) 15		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1292	18	0	0	0	18
Future Volume (vph)	1292	18	0	0	0	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00
Frt	0.998					0.865
Flt Protected						
Satd. Flow (prot)	3532	0	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	3532	0	0	0	0	1611
Link Speed (mph)	55			55	25	
Link Distance (ft)	576			2077	205	
Travel Time (s)	7.1			25.7	5.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1404	20	0	0	0	20
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1424	0	0	0	0	20
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 46.3%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	1798	0	0	1688	0
Future Volume (vph)	0	1798	0	0	1688	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	0.97	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	3433	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	3433	0
Link Speed (mph)		45	45		45	
Link Distance (ft)		1021	744		215	
Travel Time (s)		15.5	11.3		3.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1954	0	0	1835	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1954	0	0	1835	0
Sign Control		Free	Stop		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 104.5%	ICU Level of Service G
Analysis Period (min) 15	

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	0	0	707	3038
Future Volume (vph)	0	0	0	0	707	3038
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		0	250	
Storage Lanes	0	0		0	2	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.97	0.91
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	0	3433	5085
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	0	3433	5085
Link Speed (mph)	55		45			30
Link Distance (ft)	167		773			587
Travel Time (s)	2.1		11.7			13.3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	768	3302
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	0	768	3302
Sign Control	Stop		Stop			Free

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 86.9% ICU Level of Service E

Analysis Period (min) 15

1005: WB M-96 (Michigan Avenue) & SB I-69 Off-Ramp (Push Button) Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	7.1	25.0	16.6

1007: EB M-96 (Michigan Avenue) (Push Button) & SB I-69 Off-Ramp/EB M-96 (Michigan Avenue) Perfor

Approach	EB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	27.6	2.7	3.9

1008: WB M-96 (Michigan Avenue)/NB I-69 Off-Ramp & WB M-96 (Michigan Avenue) (Push Button) Perf

Approach	WB	SW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	21.3	2.5	10.6

1009: WB M-96 (Michigan Avenue) (Push Button)/WB M-96 (Michigan Avenue) & EB M-96 (Michigan Ave

Approach	EB	SW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	16.7	13.9	15.2

1010: NB I-69 Off-Ramp (Push Button) & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	3.8	19.1	5.8

3003: M-227/West Drive & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.2	0.0
Total Del/Veh (s)	8.7	5.4	19.5	9.8

3093: M-227/West Drive & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	0.0	1.9	0.0	0.3
Total Del/Veh (s)	3.6	31.6	2.3	7.2

4001: M-96 (Michigan Avenue) & WB Main Entrance/WB M-96 (Michigan Avenue) Performance by appro

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	52.1	44.3	49.5

4003: EB to WB Xover E of 15 Mile Rd (North) & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	2.1	65.9	12.0
Total Del/Veh (s)	24.3	34.5	25.9

4004: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	6.0	55.4	14.2

4005: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	10.1	25.7	15.6

4006: M-311 (11 Mile Rd) & Site Driveway West Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	310.9	1.2	0.0	142.9
Total Del/Veh (s)	239.1	31.7	23.3	108.3

4007: M-311 (11 Mile Rd) & F Drive N Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	11.6	0.0	0.0	2.2
Total Del/Veh (s)	249.8	126.5	41.8	106.7

4010: EB M-96 (Michigan Avenue)/EB M-96 (Michigan Avenue) (Push Button) & WB M-96 (Michigan Ave

Approach	WB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	23.2	13.4	17.2

4030: NB M-311 (11 Mile Rd)/WB M-96 (Michigan Avenue)/11 Mile Rd (North) & EB M-96 (Michigan Ave

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.1
Total Del/Veh (s)	21.9	60.9	52.9

4031: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & WB M-96 (Michigan Avenue) Performance by a

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	73.6	12.8	34.1

4033: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & NB to SB Xover N of M-96 (Michigan Avenue) P

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	52.7	9.5	14.5

4034: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & EB I-94 Off-ramp Performance by approach

Approach	SB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.8	36.6	13.4

4035: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & WB M-96 (Michigan Avenue)/11 Mile Rd (North)

Approach	SB	NW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	15.1	17.3	16.1

4036: EB I-94 Off-ramp & WB M-96 (Michigan Avenue)/11 Mile Rd (North) Performance by approach

Approach	NB	NW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	38.3	4.7	6.4

4037: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & WB I-94 Off-ramp Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	24.8	11.0
Total Del/Veh (s)	6.0	57.0	28.5

4038: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & EB M-96 (Michigan Avenue)/11 Mile Rd (South)

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	26.2	27.7	26.9

4039: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & WB I-94 Off-ramp Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	9.5	4.4	4.9

4040: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & 11 Mile Rd Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	22.6	2.7	13.4

4041: 11 Mile Rd & WB M-96 (Michigan Avenue)/11 Mile Rd (North) Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.2	0.1
Total Del/Veh (s)	13.6	25.5	17.7

4042: 11 Mile Rd & H Dr N Performance by approach

Approach	NE	SW	All
Denied Del/Veh (s)	0.0	0.7	0.3
Total Del/Veh (s)	6.8	5.4	6.1

4050: Prop Site Drive E & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	5.7	44.3	12.1

4051: Prop Site Drive W & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	9.1	37.0	17.6

4061: WB M-96 (Michigan Avenue) & Firekeepers Main Drive Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.7	0.1	0.6
Total Del/Veh (s)	11.8	56.0	16.0

4065: WB M-96 (Michigan Avenue) & 15 Mile Rd (North) Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.2	0.0	0.2
Total Del/Veh (s)	37.5	50.2	39.1

4066: EB M-96 (Michigan Avenue) & WB to EB Xover W of 15 Mile Rd (South) Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	8.3	39.4	9.5

4067: 15 Mile Rd (South) & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.7	0.1
Total Del/Veh (s)	15.1	47.8	17.8

4068: EB to WB Xover E of 15 Mile Rd (South) & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.7	0.0	0.7
Total Del/Veh (s)	12.0	38.4	13.2

4070: M-311 (11 Mile Rd) & Site Drive East Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	1.2	0.8	0.0	0.5
Total Del/Veh (s)	22.1	198.9	24.6	69.9

4071: 15 Mile Rd & Verona Rd Performance by approach

Approach	NB	SB	SE	NW	All
Denied Del/Veh (s)	0.4	0.1	3.1	0.2	1.6
Total Del/Veh (s)	15.2	9.0	11.1	33.4	15.5

4075: 11 Mile Road & Verona Road Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.5	539.0	0.6	143.8
Total Del/Veh (s)	21.6	34.5	264.0	46.4	76.9

9002: WB M-96 (Michigan Avenue) & Firekeepers Gas Station Driveway Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.3	0.0
Total Del/Veh (s)	4.0	40.3	9.6

9003: WB M-96 (Michigan Avenue) & Firekeepers E Drive Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.5	16.8	4.2

9004: WB M-96 (Michigan Avenue) & Ackerson Drive Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	1.6	7.5	1.6

9006: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	1.2	2.7	1.2

9008: 15 Mile Rd (North) & Old M-96 (Michigan Ave) Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.0	0.0	0.0
Total Del/Veh (s)	5.8	0.7	1.1	0.9

9013: SB I-69 On-Ramp & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.1	0.1
Total Del/Veh (s)	34.4	34.4

9016: EB M-96 (Michigan Avenue) & NB I-69 On-Ramp Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	15.5	15.5

9017: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.1	2.1

9018: EB M-96 (Michigan Avenue) & WB to EB Xover W of M-227/West Drive Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.2	8.0	2.2

9019: EB to WB Xover W of M-227/West Drive & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.6	14.7	3.5

9020: EB M-96 (Michigan Avenue) & WB to EB Xover E of M-227/West Drive Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.0	10.1	1.8

9021: EB to WB Xover E of M-227/West Drive & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.3	0.0	0.2
Total Del/Veh (s)	1.3	10.5	1.8

9023: M-311 (11 Mile Rd) & B Drive North Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	1.5	0.3	1.2	0.4	0.9
Total Del/Veh (s)	2.0	1.4	10.2	9.7	4.3

9025: M-294 (Beadle Lake Road) & EB I-94 Off-Ramp & EB I-94 On-Ramp Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	2.6	0.3	0.0	0.6
Total Del/Veh (s)	6.8	1.7	1.7	2.6

9026: WB I-94 On-Ramp & M-294 (Beadle Lake Road) & WB I-94 Off-Ramp Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	2.0	0.0	0.4	0.6
Total Del/Veh (s)	7.2	1.6	1.2	2.5

9027: Old US-27 & EB I-94 to Old US-27 Off Ramp Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0
Total Del/Veh (s)	6.4	0.2	0.9	2.4

9028: Old US-27 & NB Old US-27 to EB I-94 On Ramp Performance by approach

Approach	NB	SB	All
Denied Del/Veh (s)	0.6	0.0	0.3
Total Del/Veh (s)	0.8	0.4	0.6

9029: SB Old US-27 WB I-94 On Ramp & Old US-27 & WB I-94 to Old US-27 Off Ramp Performance by

Approach	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	1.1	0.5
Total Del/Veh (s)	4.9	0.2	0.8	1.2

9030: I-94BL/Partello Rd & EB I-94 to I-94BL/Partello Off Ramp Performance by approach

Approach	SE	NE	SW	All
Denied Del/Veh (s)	0.0	0.3	0.0	0.1
Total Del/Veh (s)	4.3	1.5	0.2	1.8

9031: I-94BL/Partello Rd & I-94/Partello Rd to EB I-94 On Ramp Performance by approach

Approach	NE	SW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.2	0.6	0.4

9032: I-94BL/Partello Rd & WB I-94 to I-94/Partello Rd Performance by approach

Approach	EB	NE	SW	All
Denied Del/Veh (s)	0.0	0.0	0.8	0.2
Total Del/Veh (s)	3.5	1.0	0.5	1.6

9034: Dummy Node & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	4.2	25.2	4.5

9035: Dummy Node & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	0.5	9.8	0.8

9036: WB M-96 (Michigan Avenue) & Dummy Node Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	0.6	4.7	0.7

9037: WB M-96 (Michigan Avenue) & Dummy Node Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.5	0.5

9040: Old US-27 & NB Old US-27 to WB I-94 On Ramp Performance by approach

Approach	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.0	0.3	0.8

9041: WB to EB Xover E of M-227/West Drive/McDonald's Dr & WB M-96 (Michigan Avenue) Performanc

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	1.7	20.8	3.0

9128: M-96 (Michigan Avenue)/WB M-96 (Michigan Avenue) & EB M-96 (Michigan Avenue) Performance

Approach	NB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.2	52.3	26.9

9137: SB I-69 On-Ramp Performance by approach

Approach	SB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	10.0	0.4	2.0

9143: NB I-69 On-Ramp Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	11.9	3.1	4.0

9146: WB to EB Xover W of M-227/West Drive & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	1.0	1.0

9147: EB M-96 (Michigan Avenue) & EB to WB Xover W of M-227/West Drive Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	1.9	1.9

9150: M-311 (11 Mile Rd) /NB M-311 (11 Mile Rd) & SB M-311 (11 Mile Rd) Performance by approach

Approach	NB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	64.4	5.3	32.9

9151: EB M-96 (Michigan Avenue) & EB to WB Xover E of M-227/West Drive Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.5	0.5

9157: SB I-69 On-Ramp & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	5.9	5.9

9158: SB I-69 Off-Ramp (Push Button) & SB I-69 Off-Ramp Performance by approach

Approach	SB	All
Denied Del/Veh (s)	0.5	0.5
Total Del/Veh (s)	7.3	7.3

9159: NB I-69 Off-Ramp & NB I-69 Off-Ramp (Push Button) Performance by approach

Approach	NB	All
Denied Del/Veh (s)	0.8	0.8
Total Del/Veh (s)	6.4	6.4

9178: WB I-94 to BL-94/Partello Rd Off Ramp/WB I-94 to I-94/Partello Rd & BL-94/Partello Rd to WB I-94

Approach	EB	WB	All
Denied Del/Veh (s)	0.2	0.0	0.1
Total Del/Veh (s)	0.2	0.3	0.2

9304: WB to EB Xover W of 15 Mile Rd (North) & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	22.9	22.9

9305: EB M-96 (Michigan Avenue) & WB to EB Xover W of 15 Mile Rd (North) Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	3.6	56.7	4.5

9307: EB M-96 (Michigan Avenue) & EB to WB Xover E of 15 Mile Rd (North) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	14.6	14.6

9310: WB to EB Xover W of 15 Mile Rd (South) & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.7	0.7
Total Del/Veh (s)	68.4	68.4

9311: EB M-96 (Michigan Avenue) & EB to WB Xover E of 15 Mile Rd (South) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	6.0	6.0

9330: EB to WB Xover E of Old M-311 (11 Mile Rd) & WB M-96 (Michigan Avenue) Performance by appr

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	22.5	107.9	24.1

9331: EB M-96 (Michigan Avenue) & EB to WB Xover E of Old M-311 (11 Mile Rd) Performance by appro

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.7	2.7

9332: WB M-96 (Michigan Avenue) & Old M-311 (11 Mile Rd) Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	34.6	150.6	38.2

9336: WB to EB Xover W of Old M-311 (11 Mile Rd) & WB M-96 (Michigan Avenue) Performance by app

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	49.9	49.9

9337: EB M-96 (Michigan Avenue) & WB to EB Xover W of Old M-311 (11 Mile Rd) Performance by appr

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	3.1	8.2	3.7

9338: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & NB to SB Xover N of M-96 (Michigan Avenue) F

Approach	NB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	20.2	20.2

9339: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & EB I-94 On Ramp Performance by approach

Approach	NB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	41.1	41.1

9340: EB I-94 On Ramp Performance by approach

Approach	EB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	16.6	0.4	1.6

9342: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & EB I-94 On Ramp Performance by approach

Approach	SB	All
Denied Del/Veh (s)	0.4	0.4
Total Del/Veh (s)	35.1	35.1

9343: EB I-94 Off-ramp Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.6	0.6
Total Del/Veh (s)	3.9	3.9

9346: WB I-94 On Ramp Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.4	27.9	4.8

9347: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & WB I-94 On Ramp Performance by approach

Approach	NW	All
Denied Del/Veh (s)	0.3	0.3
Total Del/Veh (s)	21.2	21.2

9348: WB I-94 On Ramp & EB M-96 (Michigan Avenue)/11 Mile Rd (South) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	29.5	29.5

9349: WB I-94 Off-ramp Performance by approach

Approach	WB	All
Denied Del/Veh (s)	1.5	1.5
Total Del/Veh (s)	115.1	115.1

9351: SB to NB Xover E of 11 Mile Rd & WB M-96 (Michigan Avenue)/11 Mile Rd (North) Performance b

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.5	6.4	1.7

9352: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & SB to NB Xover E of 11 Mile Rd Performance b

Approach	EB	All
Denied Del/Veh (s)	0.2	0.2
Total Del/Veh (s)	27.5	27.5

9354: EB to WB Xover W of 11 Mile Rd & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	3.7	3.7

9355: EB M-96 (Michigan Avenue) & EB to WB Xover W of 11 Mile Rd Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	4.0	4.0

9356: WB to EB Xover W of 11 Mile Rd & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.7	2.7

9357: EB M-96 (Michigan Avenue) & WB to EB Xover W of 11 Mile Rd Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.4	0.4

9359: EB M-96 (Michigan Avenue) & M-96 (Michigan Avenue)/WB M-96 (Michigan Avenue) Performance

Approach	EB	WB	All
Denied Del/Veh (s)	0.2	0.0	0.1
Total Del/Veh (s)	2.7	1.0	1.8

9381: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.4	2.4

9382: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	3.1	6.7	3.9

9383: WB M-96 (Michigan Avenue) Performance by approach

Approach	NW	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.6	0.6

9384: EB M-96 (Michigan Avenue) Performance by approach

Approach	SE	SW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.8	4.5	1.9

9385: Ceresco Road/12 Mile Road & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	0.9	4.6	1.0

9386: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	3.6	4.4	3.7

9387: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.6	0.6

9388: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.5	0.5

9389: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	3.0	4.4	3.0

9390: 13 Mile Rd & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	0.7	4.4	0.8

9392: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.5	4.3	1.5

9393: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	1.1	1.1

9394: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	16.4	16.4

9396: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.5	10.4	2.7

9397: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	3.3	3.3

9398: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	10.1	10.1

9400: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.8	15.1	1.0

9401: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	3.1	3.1

9410: Retail Drive & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	0.6	8.5	0.7

9415: EB Main Entrance/EB M-96 (Michigan Avenue) & M-96 (Michigan Avenue) Performance by approa

Approach	EB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.3	2.6	2.5

9416: SB M-311 (11 Mile Rd)/EB M-96 (Michigan Avenue)/11 Mile Rd (South) & EB M-96 (Michigan Ave

Approach	SB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	3.7	3.7

Total Network Performance

Denied Del/Veh (s)	35.6
Total Del/Veh (s)	193.5

Scenario M3&S1

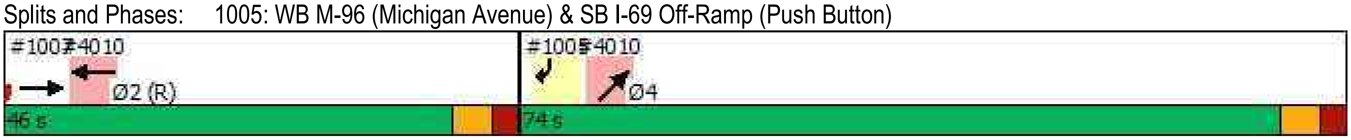
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø2
Lane Configurations							
Traffic Volume (vph)	0	0	1443	0	0	2322	
Future Volume (vph)	0	0	1443	0	0	2322	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	0.91	1.00	1.00	0.76	
Frt						0.850	
Flt Protected							
Satd. Flow (prot)	0	0	5085	0	0	3610	
Flt Permitted							
Satd. Flow (perm)	0	0	5085	0	0	3610	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)						315	
Link Speed (mph)		45	45		25		
Link Distance (ft)		275	194		266		
Travel Time (s)		4.2	2.9		7.3		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.84	0.75	
Heavy Vehicles (%)	2%	2%	2%	2%	3%	2%	
Adj. Flow (vph)	0	0	1568	0	0	3096	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	1568	0	0	3096	
Turn Type			NA			Prot	
Protected Phases			Free!			4!	2
Permitted Phases							
Minimum Split (s)						17.0	17.0
Total Split (s)						74.0	46.0
Total Split (%)						61.7%	38%
Yellow Time (s)						3.5	3.5
All-Red Time (s)						2.5	2.5
Lost Time Adjust (s)						0.0	
Total Lost Time (s)						6.0	
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)			120.0			68.0	
Actuated g/C Ratio			1.00			0.57	
v/c Ratio			0.31			1.42	
Control Delay			0.5			214.8	
Queue Delay			0.0			0.1	
Total Delay			0.5			214.9	
LOS			A			F	
Approach Delay			0.5		214.9		
Approach LOS			A		F		
Queue Length 50th (ft)			0			~1378	
Queue Length 95th (ft)			m0			#1092	
Internal Link Dist (ft)		195	114		186		
Turn Bay Length (ft)							
Base Capacity (vph)			5085			2182	
Starvation Cap Reductn			0			0	
Spillback Cap Reductn			1022			72	
Storage Cap Reductn			0			0	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø2
Reduced v/c Ratio			0.39			1.47	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 100 (83%), Referenced to phase 2:EBT, Start of Green	
Natural Cycle: 150	
Control Type: Pretimed	
Maximum v/c Ratio: 1.42	
Intersection Signal Delay: 142.8	Intersection LOS: F
Intersection Capacity Utilization 98.2%	ICU Level of Service F
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.
! Phase conflict between lane groups.

Splits and Phases: 1005: WB M-96 (Michigan Avenue) & SB I-69 Off-Ramp (Push Button)



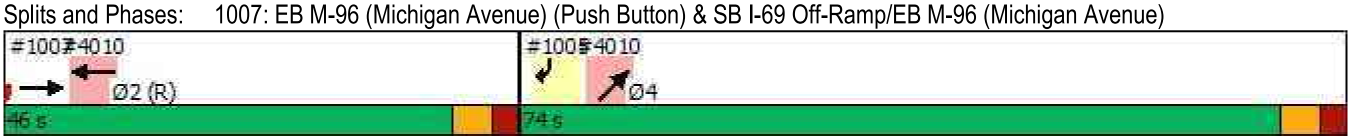
Lane Group	EBT	EBR	WBL	WBT	NEL	NER	Ø4
Lane Configurations							
Traffic Volume (vph)	112	0	0	0	0	3120	
Future Volume (vph)	112	0	0	0	0	3120	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Storage Length (ft)		260	285		0	0	
Storage Lanes		0	0		0	3	
Taper Length (ft)			240		25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.76	
Frt						0.850	
Flt Protected							
Satd. Flow (prot)	1863	0	0	0	0	3610	
Flt Permitted							
Satd. Flow (perm)	1863	0	0	0	0	3610	
Right Turn on Red		Yes				Yes	
Satd. Flow (RTOR)						2086	
Link Speed (mph)	25			45	45		
Link Distance (ft)	301			619	190		
Travel Time (s)	8.2			9.4	2.9		
Peak Hour Factor	0.75	0.84	0.92	0.92	0.90	0.90	
Heavy Vehicles (%)	2%	3%	2%	2%	2%	2%	
Adj. Flow (vph)	149	0	0	0	0	3467	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	149	0	0	0	0	3467	
Turn Type	NA					Free	
Protected Phases	2						4
Permitted Phases						Free	
Minimum Split (s)	17.0						17.0
Total Split (s)	46.0						74.0
Total Split (%)	38.3%						62%
Yellow Time (s)	3.5						3.5
All-Red Time (s)	2.5						2.5
Lost Time Adjust (s)	0.0						
Total Lost Time (s)	6.0						
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)	40.0					120.0	
Actuated g/C Ratio	0.33					1.00	
v/c Ratio	0.24					0.96	
Control Delay	30.3					24.5	
Queue Delay	0.0					0.0	
Total Delay	30.3					24.5	
LOS	C					C	
Approach Delay	30.3				24.5		
Approach LOS	C				C		
Queue Length 50th (ft)	83					519	
Queue Length 95th (ft)	111					m305	
Internal Link Dist (ft)	221			539	110		
Turn Bay Length (ft)							
Base Capacity (vph)	621					3610	

Lane Group	EBT	EBR	WBL	WBT	NEL	NER	Ø4
Starvation Cap Reductn	0					0	
Spillback Cap Reductn	0					0	
Storage Cap Reductn	0					0	
Reduced v/c Ratio	0.24					0.96	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 100 (83%), Referenced to phase 2:EBT, Start of Green	
Natural Cycle: 150	
Control Type: Pretimed	
Maximum v/c Ratio: 1.42	
Intersection Signal Delay: 24.8	Intersection LOS: C
Intersection Capacity Utilization 67.5%	ICU Level of Service C
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1007: EB M-96 (Michigan Avenue) (Push Button) & SB I-69 Off-Ramp/EB M-96 (Michigan Avenue)



Lane Group	EBL	EBT	WBT	WBR	SWL	SWR	Ø2
Lane Configurations							
Traffic Volume (vph)	0	0	634	0	0	928	
Future Volume (vph)	0	0	634	0	0	928	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.88	
Frt						0.850	
Flt Protected							
Satd. Flow (prot)	0	0	3539	0	0	2787	
Flt Permitted							
Satd. Flow (perm)	0	0	3539	0	0	2787	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)						1027	
Link Speed (mph)		45	25		45		
Link Distance (ft)		217	252		223		
Travel Time (s)		3.3	6.9		3.4		
Peak Hour Factor	0.92	0.92	0.75	0.93	0.92	0.92	
Heavy Vehicles (%)	2%	2%	2%	6%	2%	2%	
Adj. Flow (vph)	0	0	845	0	0	1009	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	845	0	0	1009	
Turn Type			NA			Free	
Protected Phases			4				2
Permitted Phases						Free	
Minimum Split (s)			16.0				16.0
Total Split (s)			61.0				59.0
Total Split (%)			50.8%				49%
Yellow Time (s)			2.5				2.5
All-Red Time (s)			3.5				3.5
Lost Time Adjust (s)			0.0				
Total Lost Time (s)			6.0				
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)			55.0			120.0	
Actuated g/C Ratio			0.46			1.00	
v/c Ratio			0.52			0.36	
Control Delay			24.6			3.8	
Queue Delay			0.0			0.0	
Total Delay			24.6			3.8	
LOS			C			A	
Approach Delay			24.6		3.8		
Approach LOS			C		A		
Queue Length 50th (ft)			238			86	
Queue Length 95th (ft)			234			87	
Internal Link Dist (ft)		137	172		143		
Turn Bay Length (ft)							
Base Capacity (vph)			1622			2787	
Starvation Cap Reductn			0			0	
Spillback Cap Reductn			0			0	
Storage Cap Reductn			0			0	

Lane Group	EBL	EBT	WBT	WBR	SWL	SWR	Ø2
Reduced v/c Ratio			0.52			0.36	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 92 (77%), Referenced to phase 4:WBT, Start of Green

Natural Cycle: 50

Control Type: Pretimed

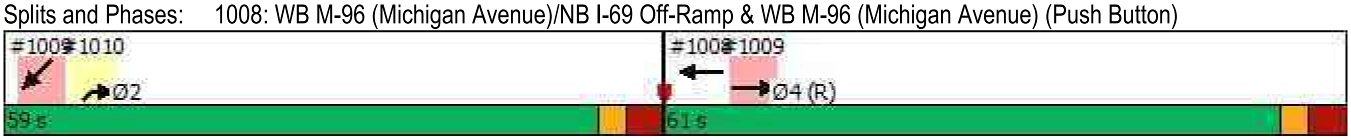
Maximum v/c Ratio: 0.65

Intersection Signal Delay: 13.3 Intersection LOS: B

Intersection Capacity Utilization 56.4% ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 1008: WB M-96 (Michigan Avenue)/NB I-69 Off-Ramp & WB M-96 (Michigan Avenue) (Push Button)



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	0	906	0	0	0	0	0	0	0	0	928	0
Future Volume (vph)	0	906	0	0	0	0	0	0	0	0	928	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	3539	0	0	0	0	0	0	0	0	3539	0
Flt Permitted												
Satd. Flow (perm)	0	3539	0	0	0	0	0	0	0	0	3539	0
Right Turn on Red			Yes			Yes			Yes	Yes		Yes
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		209			206			223			213	
Travel Time (s)		3.2			3.1			3.4			3.2	
Peak Hour Factor	0.86	0.86	0.86	0.92	0.92	0.92	0.92	0.92	0.92	0.91	0.91	0.91
Adj. Flow (vph)	0	1053	0	0	0	0	0	0	0	0	1020	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1053	0	0	0	0	0	0	0	0	1020	0
Turn Type		NA									NA	
Protected Phases		4									2	
Permitted Phases												
Minimum Split (s)		16.0									16.0	
Total Split (s)		61.0									59.0	
Total Split (%)		50.8%									49.2%	
Yellow Time (s)		2.5									2.5	
All-Red Time (s)		3.5									3.5	
Lost Time Adjust (s)		0.0									0.0	
Total Lost Time (s)		6.0									6.0	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		55.0									53.0	
Actuated g/C Ratio		0.46									0.44	
v/c Ratio		0.65									0.65	
Control Delay		23.2									25.5	
Queue Delay		0.0									0.0	
Total Delay		23.2									25.5	
LOS		C									C	
Approach Delay		23.2									25.5	
Approach LOS		C									C	
Queue Length 50th (ft)		298									336	
Queue Length 95th (ft)		m327									416	
Internal Link Dist (ft)		129			126			143			133	
Turn Bay Length (ft)												
Base Capacity (vph)		1622									1563	
Starvation Cap Reductn		0									0	
Spillback Cap Reductn		0									0	
Storage Cap Reductn		0									0	
Reduced v/c Ratio		0.65									0.65	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 92 (77%), Referenced to phase 4:WBT, Start of Green	
Natural Cycle: 50	
Control Type: Pretimed	
Maximum v/c Ratio: 0.65	
Intersection Signal Delay: 24.3	Intersection LOS: C
Intersection Capacity Utilization 60.7%	ICU Level of Service B
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

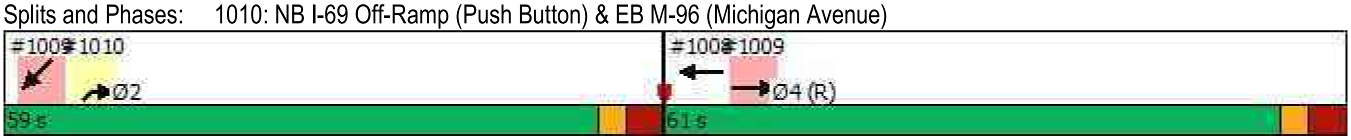
Splits and Phases: 1009: WB M-96 (Michigan Avenue) (Push Button)/WB M-96 (Michigan Avenue) & EB M-96 (Michigan Avenue)

Lane Group	EBT	EBR	WBL	WBT	NEL	NER	Ø4
Lane Configurations							
Traffic Volume (vph)	906	0	0	0	0	122	
Future Volume (vph)	906	0	0	0	0	122	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	0.95	1.00	1.00	1.00	1.00	1.00	
Frt						0.865	
Flt Protected							
Satd. Flow (prot)	3539	0	0	0	0	1611	
Flt Permitted							
Satd. Flow (perm)	3539	0	0	0	0	1611	
Right Turn on Red		Yes				Yes	
Satd. Flow (RTOR)						277	
Link Speed (mph)	45			45	25		
Link Distance (ft)	206			309	315		
Travel Time (s)	3.1			4.7	8.6		
Peak Hour Factor	0.86	0.86	0.92	0.92	0.93	0.75	
Heavy Vehicles (%)	2%	2%	2%	2%	6%	2%	
Adj. Flow (vph)	1053	0	0	0	0	163	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	1053	0	0	0	0	163	
Turn Type	NA					Prot	
Protected Phases	Free!					2!	4
Permitted Phases							
Minimum Split (s)						16.0	16.0
Total Split (s)						59.0	61.0
Total Split (%)						49.2%	51%
Yellow Time (s)						2.5	2.5
All-Red Time (s)						3.5	3.5
Lost Time Adjust (s)						0.0	
Total Lost Time (s)						6.0	
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)	120.0					53.0	
Actuated g/C Ratio	1.00					0.44	
v/c Ratio	0.30					0.19	
Control Delay	0.2					0.5	
Queue Delay	0.0					0.0	
Total Delay	0.2					0.5	
LOS	A					A	
Approach Delay	0.2				0.5		
Approach LOS	A				A		
Queue Length 50th (ft)	0					0	
Queue Length 95th (ft)	0					0	
Internal Link Dist (ft)	126			229	235		
Turn Bay Length (ft)							
Base Capacity (vph)	3539					866	
Starvation Cap Reductn	0					0	
Spillback Cap Reductn	0					0	
Storage Cap Reductn	0					0	

Lane Group	EBT	EBR	WBL	WBT	NEL	NER	Ø4
Reduced v/c Ratio	0.30					0.19	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 92 (77%), Referenced to phase 4:WBT, Start of Green	
Natural Cycle: 50	
Control Type: Pretimed	
Maximum v/c Ratio: 0.65	
Intersection Signal Delay: 0.2	Intersection LOS: A
Intersection Capacity Utilization 60.7%	ICU Level of Service B
Analysis Period (min) 15	
! Phase conflict between lane groups.	

Splits and Phases: 1010: NB I-69 Off-Ramp (Push Button) & EB M-96 (Michigan Avenue)



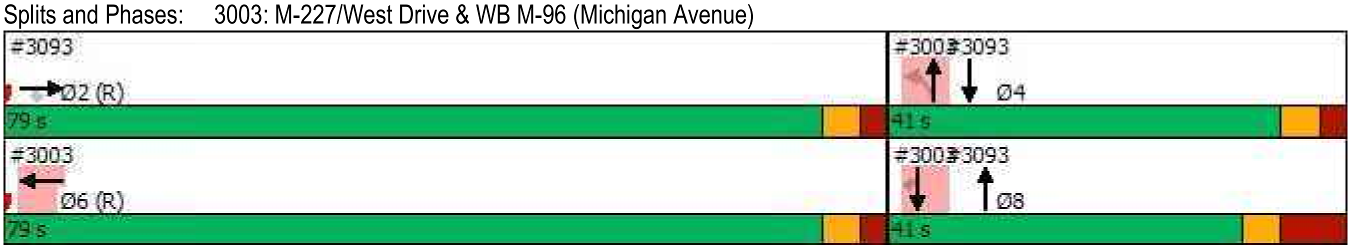
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	880	192	76	50	0	0	84	85
Future Volume (vph)	0	0	0	0	880	192	76	50	0	0	84	85
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		80	0		0	0		0
Storage Lanes	0		0	0		1	1		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.973							0.850
Flt Protected							0.950					
Satd. Flow (prot)	0	0	0	0	4997	0	1671	1863	0	0	1845	1568
Flt Permitted							0.687					
Satd. Flow (perm)	0	0	0	0	4997	0	1209	1863	0	0	1845	1568
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					74							110
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		152			212			101			1197	
Travel Time (s)		2.3			3.2			2.0			23.3	
Peak Hour Factor	0.92	0.92	0.92	0.87	0.87	0.87	0.67	0.67	0.67	0.77	0.77	0.77
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	8%	2%	2%	3%	3%	3%
Adj. Flow (vph)	0	0	0	0	1011	221	113	75	0	0	109	110
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1232	0	113	75	0	0	109	110
Turn Type					NA		Perm	NA			NA	Perm
Protected Phases					6			4			8	
Permitted Phases							4					8
Minimum Split (s)					31.0		17.0	17.0			17.0	17.0
Total Split (s)					79.0		41.0	41.0			41.0	41.0
Total Split (%)					65.8%		34.2%	34.2%			34.2%	34.2%
Yellow Time (s)					3.5		3.5	3.5			3.5	3.5
All-Red Time (s)					2.5		2.5	2.5			6.0	6.0
Lost Time Adjust (s)					0.0		0.0	0.0			0.0	0.0
Total Lost Time (s)					6.0		6.0	6.0			9.5	9.5
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)					73.0		35.0	35.0			31.5	31.5
Actuated g/C Ratio					0.61		0.29	0.29			0.26	0.26
v/c Ratio					0.40		0.32	0.14			0.23	0.22
Control Delay					11.8		8.6	5.5			36.2	7.5
Queue Delay					0.0		0.0	0.0			0.0	0.0
Total Delay					11.8		8.6	5.5			36.2	7.5
LOS					B		A	A			D	A
Approach Delay					11.8			7.4			21.8	
Approach LOS					B			A			C	
Queue Length 50th (ft)					158		11	7			66	0
Queue Length 95th (ft)					180		11	8			98	28
Internal Link Dist (ft)		72			132			21			1117	
Turn Bay Length (ft)												
Base Capacity (vph)					3068		352	543			484	492

Lane Group	Ø2
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	2
Permitted Phases	
Minimum Split (s)	16.0
Total Split (s)	79.0
Total Split (%)	66%
Yellow Time (s)	3.5
All-Red Time (s)	2.5
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
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)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
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					0.40		0.32	0.14			0.23	0.22

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 112 (93%), Referenced to phase 2:EBT and 6:, Start of Green	
Natural Cycle: 50	
Control Type: Pretimed	
Maximum v/c Ratio: 0.47	
Intersection Signal Delay: 12.6	Intersection LOS: B
Intersection Capacity Utilization 50.9%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 3003: M-227/West Drive & WB M-96 (Michigan Avenue)



Lane Group	Ø2
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

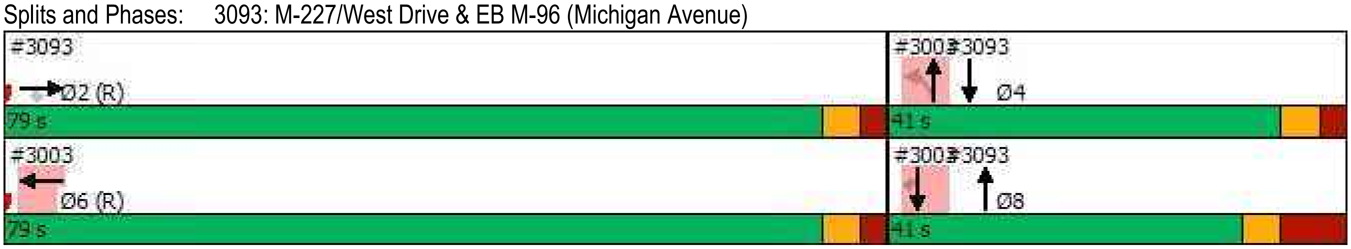
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	976	59	0	0	0	0	126	30	0	84	0
Future Volume (vph)	0	976	59	0	0	0	0	126	30	0	84	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		65	0		0	100		0	0		0
Storage Lanes	0		1	0		0	1		0	0		0
Taper Length (ft)	25			25			70			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Frt			0.850					0.971				
Flt Protected												
Satd. Flow (prot)	0	3574	1442	0	0	0	0	3344	0	0	1881	0
Flt Permitted												
Satd. Flow (perm)	0	3574	1442	0	0	0	0	3344	0	0	1881	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			59					24				
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		161			222			1117			101	
Travel Time (s)		2.4			3.4			21.8			2.0	
Peak Hour Factor	0.95	0.95	0.95	0.92	0.92	0.92	0.72	0.72	0.72	0.83	0.83	0.83
Heavy Vehicles (%)	2%	1%	12%	2%	2%	2%	2%	6%	0%	2%	1%	2%
Adj. Flow (vph)	0	1027	62	0	0	0	0	175	42	0	101	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1027	62	0	0	0	0	217	0	0	101	0
Turn Type		NA	Perm					NA			NA	
Protected Phases		2						8			4	
Permitted Phases			2									
Minimum Split (s)		16.0	16.0					17.0			17.0	
Total Split (s)		79.0	79.0					41.0			41.0	
Total Split (%)		65.8%	65.8%					34.2%			34.2%	
Yellow Time (s)		3.5	3.5					3.5			3.5	
All-Red Time (s)		2.5	2.5					6.0			2.5	
Lost Time Adjust (s)		0.0	0.0					0.0			0.0	
Total Lost Time (s)		6.0	6.0					9.5			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		73.0	73.0					31.5			35.0	
Actuated g/C Ratio		0.61	0.61					0.26			0.29	
v/c Ratio		0.47	0.07					0.24			0.18	
Control Delay		4.4	0.2					31.7			0.7	
Queue Delay		0.0	0.0					0.0			0.0	
Total Delay		4.4	0.2					31.7			0.7	
LOS		A	A					C			A	
Approach Delay		4.2						31.7			0.7	
Approach LOS		A						C			A	
Queue Length 50th (ft)		44	1					61			0	
Queue Length 95th (ft)		52	0					73			0	
Internal Link Dist (ft)		81			142			1037			21	
Turn Bay Length (ft)			65									
Base Capacity (vph)		2174	900					895			548	

Lane Group	Ø6
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	6
Permitted Phases	
Minimum Split (s)	31.0
Total Split (s)	79.0
Total Split (%)	66%
Yellow Time (s)	3.5
All-Red Time (s)	2.5
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
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)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn		0	0					0			0	
Spillback Cap Reductn		0	0					18			0	
Storage Cap Reductn		0	0					0			0	
Reduced v/c Ratio		0.47	0.07					0.25			0.18	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 112 (93%), Referenced to phase 2:EBT and 6:, Start of Green	
Natural Cycle: 50	
Control Type: Pretimed	
Maximum v/c Ratio: 0.47	
Intersection Signal Delay: 8.2	Intersection LOS: A
Intersection Capacity Utilization 50.9%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 3093: M-227/West Drive & EB M-96 (Michigan Avenue)



Lane Group	Ø6
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

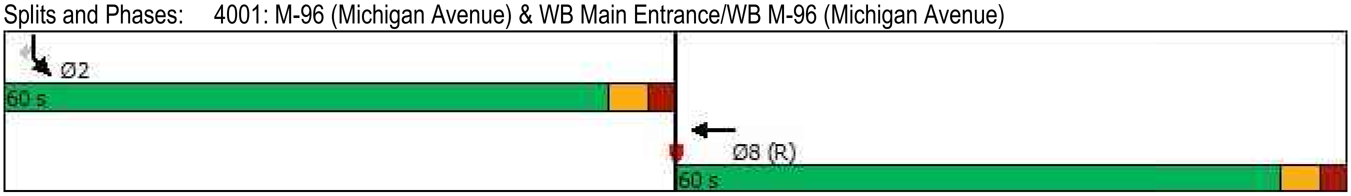
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations										
Traffic Volume (vph)	0	0	0	0	2494	2039	1903	169	0	0
Future Volume (vph)	0	0	0	0	2494	2039	1903	169	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	300		300	0	200	0	0
Storage Lanes	0		0	0		1	2	1	0	0
Taper Length (ft)	25			25			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.88	0.97	1.00	1.00	1.00
Frt						0.850		0.850		
Flt Protected							0.950			
Satd. Flow (prot)	0	0	0	0	3539	2787	3433	1583	0	0
Flt Permitted							0.950			
Satd. Flow (perm)	0	0	0	0	3539	2787	3433	1583	0	0
Right Turn on Red			Yes	Yes		Yes		Yes		
Satd. Flow (RTOR)						512		27		
Link Speed (mph)		45			45		55		45	
Link Distance (ft)		858			894		434		215	
Travel Time (s)		13.0			13.5		5.4		3.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	2711	2216	2068	184	0	0
Shared Lane Traffic (%)										
Lane Group Flow (vph)	0	0	0	0	2711	2216	2068	184	0	0
Turn Type					NA	Free	Prot	Perm		
Protected Phases					8		2			
Permitted Phases						Free		2		
Minimum Split (s)					16.0		16.0	16.0		
Total Split (s)					60.0		60.0	60.0		
Total Split (%)					50.0%		50.0%	50.0%		
Yellow Time (s)					3.5		3.5	3.5		
All-Red Time (s)					2.5		2.5	2.5		
Lost Time Adjust (s)					0.0		0.0	0.0		
Total Lost Time (s)					6.0		6.0	6.0		
Lead/Lag										
Lead-Lag Optimize?										
Act Effct Green (s)					54.0	120.0	54.0	54.0		
Actuated g/C Ratio					0.45	1.00	0.45	0.45		
v/c Ratio					1.70	0.80	1.34	0.25		
Control Delay					340.3	1.7	177.7	7.6		
Queue Delay					0.0	0.0	0.0	0.0		
Total Delay					340.3	1.7	177.7	7.6		
LOS					F	A	F	A		
Approach Delay					188.0		163.8			
Approach LOS					F		F			
Queue Length 50th (ft)					~1631	0	~1100	28		
Queue Length 95th (ft)					m#1226	m0	#1209	m63		
Internal Link Dist (ft)		778			814		354		135	
Turn Bay Length (ft)						300		200		
Base Capacity (vph)					1592	2787	1544	727		
Starvation Cap Reductn					0	0	0	0		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Spillback Cap Reductn					0	0	0	0		
Storage Cap Reductn					0	0	0	0		
Reduced v/c Ratio					1.70	0.80	1.34	0.25		

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 36 (30%), Referenced to phase 8:WBT, Start of Green	
Natural Cycle: 150	
Control Type: Pretimed	
Maximum v/c Ratio: 1.70	
Intersection Signal Delay: 180.4	Intersection LOS: F
Intersection Capacity Utilization 133.2%	ICU Level of Service H
Analysis Period (min) 15	
~ Volume exceeds capacity, queue is theoretically infinite. Queue shown is maximum after two cycles.	
# 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.	
m Volume for 95th percentile queue is metered by upstream signal.	

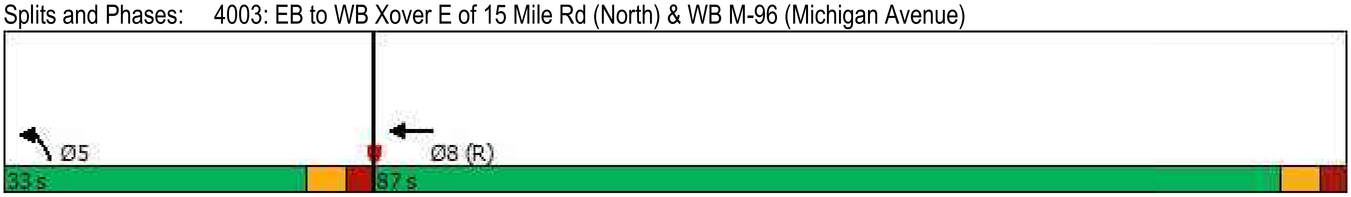
Splits and Phases: 4001: M-96 (Michigan Avenue) & WB Main Entrance/WB M-96 (Michigan Avenue)



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑↑	↰↰	
Traffic Volume (vph)	0	0	0	3850	771	0
Future Volume (vph)	0	0	0	3850	771	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	0.97	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	5085	3433	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	5085	3433	0
Right Turn on Red		Yes			Yes	Yes
Satd. Flow (RTOR)						
Link Speed (mph)	45			45	25	
Link Distance (ft)	660			254	113	
Travel Time (s)	10.0			3.8	3.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.70	0.92
Adj. Flow (vph)	0	0	0	4185	1101	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	4185	1101	0
Turn Type				NA	Prot	
Protected Phases				8	5	
Permitted Phases						
Minimum Split (s)				16.0	13.0	
Total Split (s)				87.0	33.0	
Total Split (%)				72.5%	27.5%	
Yellow Time (s)				3.5	3.5	
All-Red Time (s)				2.5	2.5	
Lost Time Adjust (s)				0.0	0.0	
Total Lost Time (s)				6.0	6.0	
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)				81.0	27.0	
Actuated g/C Ratio				0.68	0.22	
v/c Ratio				1.22	1.43	
Control Delay				119.1	235.9	
Queue Delay				0.2	0.0	
Total Delay				119.2	235.9	
LOS				F	F	
Approach Delay				119.2	235.9	
Approach LOS				F	F	
Queue Length 50th (ft)				~1454	~603	
Queue Length 95th (ft)				m#1309	m#459	
Internal Link Dist (ft)	580			174	33	
Turn Bay Length (ft)						
Base Capacity (vph)				3432	772	
Starvation Cap Reductn				0	0	
Spillback Cap Reductn				376	0	
Storage Cap Reductn				0	0	
Reduced v/c Ratio				1.37	1.43	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 116 (97%), Referenced to phase 8:WBT, Start of Green	
Natural Cycle: 150	
Control Type: Pretimed	
Maximum v/c Ratio: 1.43	
Intersection Signal Delay: 143.5	Intersection LOS: F
Intersection Capacity Utilization 148.8%	ICU Level of Service H
Analysis Period (min) 15	
~ Volume exceeds capacity, queue is theoretically infinite.	
Queue shown is maximum after two cycles.	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 4003: EB to WB Xover E of 15 Mile Rd (North) & WB M-96 (Michigan Avenue)



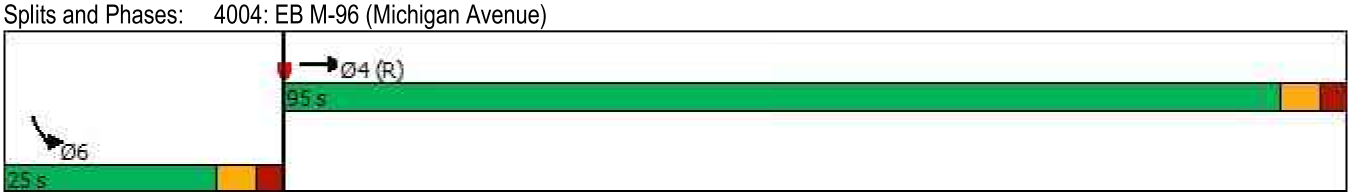
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	1652	0	0	461	0
Future Volume (vph)	0	1652	0	0	461	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	0.97	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	3433	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	3433	0
Right Turn on Red				Yes	Yes	Yes
Satd. Flow (RTOR)					81	
Link Speed (mph)		55	55		25	
Link Distance (ft)		2678	669		109	
Travel Time (s)		33.2	8.3		3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1796	0	0	501	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1796	0	0	501	0
Turn Type		NA			Prot	
Protected Phases		4			6	
Permitted Phases						
Detector Phase		4			6	
Switch Phase						
Minimum Initial (s)		10.0			7.0	
Minimum Split (s)		16.0			13.0	
Total Split (s)		95.0			25.0	
Total Split (%)		79.2%			20.8%	
Yellow Time (s)		3.5			3.5	
All-Red Time (s)		2.5			2.5	
Lost Time Adjust (s)		0.0			0.0	
Total Lost Time (s)		6.0			6.0	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode		C-Max			None	
Act Effct Green (s)		89.9			18.1	
Actuated g/C Ratio		0.75			0.15	
v/c Ratio		0.68			0.86	
Control Delay		2.1			47.7	
Queue Delay		0.1			0.0	
Total Delay		2.1			47.7	
LOS		A			D	
Approach Delay		2.1			47.7	
Approach LOS		A			D	
Queue Length 50th (ft)		25			158	
Queue Length 95th (ft)		24			m#235	
Internal Link Dist (ft)		2598	589		29	
Turn Bay Length (ft)						
Base Capacity (vph)		2651			611	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Starvation Cap Reductn		0			0	
Spillback Cap Reductn		73			0	
Storage Cap Reductn		0			0	
Reduced v/c Ratio		0.70			0.82	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 20 (17%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.86	
Intersection Signal Delay: 12.1	Intersection LOS: B
Intersection Capacity Utilization 98.8%	ICU Level of Service F
Analysis Period (min) 15	

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4004: EB M-96 (Michigan Avenue)

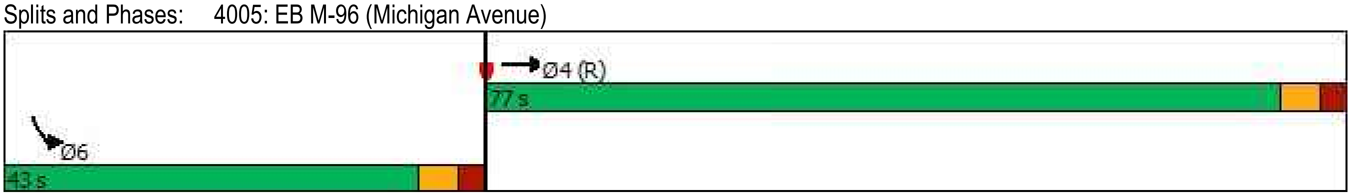


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	910	0	0	822	0
Future Volume (vph)	0	910	0	0	822	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	0.97	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	3433	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	3433	0
Right Turn on Red				Yes	Yes	Yes
Satd. Flow (RTOR)					232	
Link Speed (mph)		55	55		25	
Link Distance (ft)		1786	608		109	
Travel Time (s)		22.1	7.5		3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	989	0	0	893	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	989	0	0	893	0
Turn Type		NA			Prot	
Protected Phases		4			6	
Permitted Phases						
Detector Phase		4			6	
Switch Phase						
Minimum Initial (s)		10.0			7.0	
Minimum Split (s)		16.0			13.0	
Total Split (s)		77.0			43.0	
Total Split (%)		64.2%			35.8%	
Yellow Time (s)		3.5			3.5	
All-Red Time (s)		2.5			2.5	
Lost Time Adjust (s)		0.0			0.0	
Total Lost Time (s)		6.0			6.0	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode		C-Max			Max	
Act Effct Green (s)		71.0			37.0	
Actuated g/C Ratio		0.59			0.31	
v/c Ratio		0.47			0.73	
Control Delay		14.8			29.0	
Queue Delay		0.0			0.0	
Total Delay		14.8			29.0	
LOS		B			C	
Approach Delay		14.8			29.0	
Approach LOS		B			C	
Queue Length 50th (ft)		215			280	
Queue Length 95th (ft)		266			314	
Internal Link Dist (ft)		1706	528		29	
Turn Bay Length (ft)						
Base Capacity (vph)		2093			1218	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Starvation Cap Reductn		0			0	
Spillback Cap Reductn		0			0	
Storage Cap Reductn		0			0	
Reduced v/c Ratio		0.47			0.73	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 112 (93%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 50	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.73	
Intersection Signal Delay: 21.5	Intersection LOS: C
Intersection Capacity Utilization 57.7%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 4005: EB M-96 (Michigan Avenue)

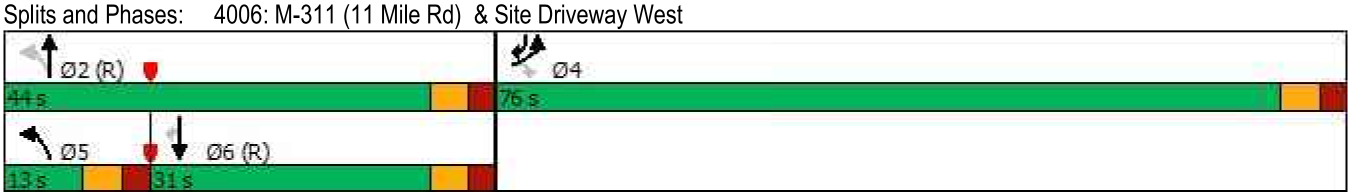


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	575	31	31	132	159	575
Future Volume (vph)	575	31	31	132	159	575
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	250	250			0
Storage Lanes	2	1	1			1
Taper Length (ft)	25		25			
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	1.00
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	3433	1583	1770	1863	1863	1583
Flt Permitted	0.950		0.592			
Satd. Flow (perm)	3433	1583	1103	1863	1863	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		34				625
Link Speed (mph)	25			55	55	
Link Distance (ft)	1178			1461	940	
Travel Time (s)	32.1			18.1	11.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	625	34	34	143	173	625
Shared Lane Traffic (%)						
Lane Group Flow (vph)	625	34	34	143	173	625
Turn Type	Prot	Perm	pm+pt	NA	NA	pm+ov
Protected Phases	4		5	2	6	4
Permitted Phases		4	2			6
Detector Phase	4	4	5	2	6	4
Switch Phase						
Minimum Initial (s)	7.0	7.0	7.0	10.0	10.0	7.0
Minimum Split (s)	14.0	14.0	13.0	17.0	17.0	14.0
Total Split (s)	76.0	76.0	13.0	44.0	31.0	76.0
Total Split (%)	63.3%	63.3%	10.8%	36.7%	25.8%	63.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.5	2.5	2.5	2.5	2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None	None	Min	C-Max	C-Max	None
Act Effct Green (s)	31.2	31.2	76.8	76.8	63.7	100.9
Actuated g/C Ratio	0.26	0.26	0.64	0.64	0.53	0.84
v/c Ratio	0.70	0.08	0.05	0.12	0.18	0.44
Control Delay	44.1	9.7	9.9	9.9	16.1	2.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	44.1	9.7	9.9	9.9	16.1	2.2
LOS	D	A	A	A	B	A
Approach Delay	42.3			9.9	5.2	
Approach LOS	D			A	A	
Queue Length 50th (ft)	226	0	9	40	39	29
Queue Length 95th (ft)	261	23	26	82	86	56

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Internal Link Dist (ft)	1098			1381	860	
Turn Bay Length (ft)		250	250			
Base Capacity (vph)	2002	937	745	1192	988	1583
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	0.31	0.04	0.05	0.12	0.18	0.39

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 60 (50%), Referenced to phase 2:NBTL and 6:SBT, Start of Green	
Natural Cycle: 45	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.70	
Intersection Signal Delay: 20.7	Intersection LOS: C
Intersection Capacity Utilization 51.4%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4006: M-311 (11 Mile Rd) & Site Driveway West

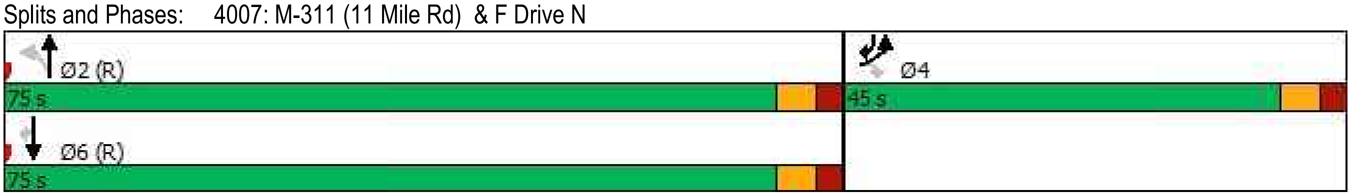


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	515	15	15	1041	1068	515
Future Volume (vph)	515	15	15	1041	1068	515
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	250	400			0
Storage Lanes	2	1	1			1
Taper Length (ft)	25		25			
Lane Util. Factor	0.97	1.00	1.00	0.95	0.95	1.00
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	3433	1583	1770	3539	3539	1583
Flt Permitted	0.950		0.203			
Satd. Flow (perm)	3433	1583	378	3539	3539	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		16				
Link Speed (mph)	45			55	55	
Link Distance (ft)	1846			974	1093	
Travel Time (s)	28.0			12.1	13.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	560	16	16	1132	1161	560
Shared Lane Traffic (%)						
Lane Group Flow (vph)	560	16	16	1132	1161	560
Turn Type	Prot	Perm	Perm	NA	NA	pm+ov
Protected Phases	4			2	6	4
Permitted Phases		4	2			6
Detector Phase	4	4	2	2	6	4
Switch Phase						
Minimum Initial (s)	7.0	7.0	10.0	10.0	10.0	7.0
Minimum Split (s)	13.0	13.0	16.0	16.0	16.0	13.0
Total Split (s)	45.0	45.0	75.0	75.0	75.0	45.0
Total Split (%)	37.5%	37.5%	62.5%	62.5%	62.5%	37.5%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.5	2.5	2.5	2.5	2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None	None	C-Max	C-Max	C-Max	None
Act Effct Green (s)	26.5	26.5	81.5	81.5	81.5	120.0
Actuated g/C Ratio	0.22	0.22	0.68	0.68	0.68	1.00
v/c Ratio	0.74	0.04	0.06	0.47	0.48	0.35
Control Delay	49.5	14.5	3.7	8.4	4.5	0.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	49.5	14.5	3.7	8.4	4.5	0.5
LOS	D	B	A	A	A	A
Approach Delay	48.5			8.4	3.2	
Approach LOS	D			A	A	
Queue Length 50th (ft)	208	0	4	333	63	0
Queue Length 95th (ft)	253	18	m4	67	131	0

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Internal Link Dist (ft)	1766			894	1013	
Turn Bay Length (ft)		250	400			
Base Capacity (vph)	1115	525	256	2404	2404	1583
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	0.50	0.03	0.06	0.47	0.48	0.35

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 20 (17%), Referenced to phase 2:NBTL and 6:SBT, Start of Green	
Natural Cycle: 40	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.74	
Intersection Signal Delay: 12.5	Intersection LOS: B
Intersection Capacity Utilization 54.2%	ICU Level of Service A
Analysis Period (min) 15	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 4007: M-311 (11 Mile Rd) & F Drive N

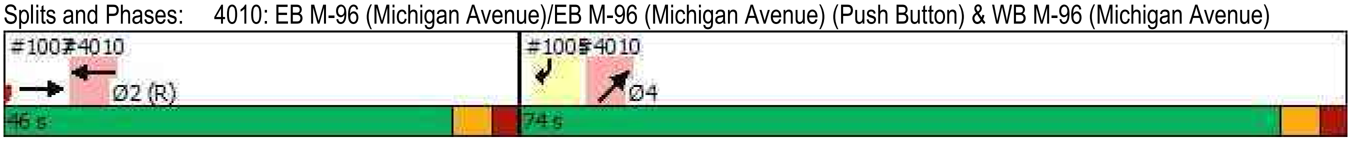


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations					↑↑↑			↑↑↑				
Traffic Volume (vph)	0	0	0	0	1443	0	0	3120	0	0	0	0
Future Volume (vph)	0	0	0	0	1443	0	0	3120	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.91	1.00	1.00	1.00	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	0	0	0	5085	0	0	5085	0	0	0	0
Flt Permitted												
Satd. Flow (perm)	0	0	0	0	5085	0	0	5085	0	0	0	0
Right Turn on Red			Yes			Yes	Yes		Yes			Yes
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		194			183			156			190	
Travel Time (s)		2.9			2.8			2.4			2.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.90	0.90	0.90	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	1568	0	0	3467	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1568	0	0	3467	0	0	0	0
Turn Type					NA			NA				
Protected Phases					2			4				
Permitted Phases												
Minimum Split (s)					17.0			17.0				
Total Split (s)					46.0			74.0				
Total Split (%)					38.3%			61.7%				
Yellow Time (s)					3.5			3.5				
All-Red Time (s)					2.5			2.5				
Lost Time Adjust (s)					0.0			0.0				
Total Lost Time (s)					6.0			6.0				
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)					40.0			68.0				
Actuated g/C Ratio					0.33			0.57				
v/c Ratio					0.93			1.20				
Control Delay					42.7			114.3				
Queue Delay					0.0			0.0				
Total Delay					42.7			114.3				
LOS					D			F				
Approach Delay					42.7			114.3				
Approach LOS					D			F				
Queue Length 50th (ft)					459			~1194				
Queue Length 95th (ft)					#532			m#972				
Internal Link Dist (ft)		114			103			76			110	
Turn Bay Length (ft)												
Base Capacity (vph)					1695			2881				
Starvation Cap Reductn					0			0				
Spillback Cap Reductn					0			0				
Storage Cap Reductn					0			0				
Reduced v/c Ratio					0.93			1.20				

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 100 (83%), Referenced to phase 2:EBT, Start of Green	
Natural Cycle: 150	
Control Type: Pretimed	
Maximum v/c Ratio: 1.42	
Intersection Signal Delay: 92.0	Intersection LOS: F
Intersection Capacity Utilization 98.2%	ICU Level of Service F
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4010: EB M-96 (Michigan Avenue)/EB M-96 (Michigan Avenue) (Push Button) & WB M-96 (Michigan Avenue)



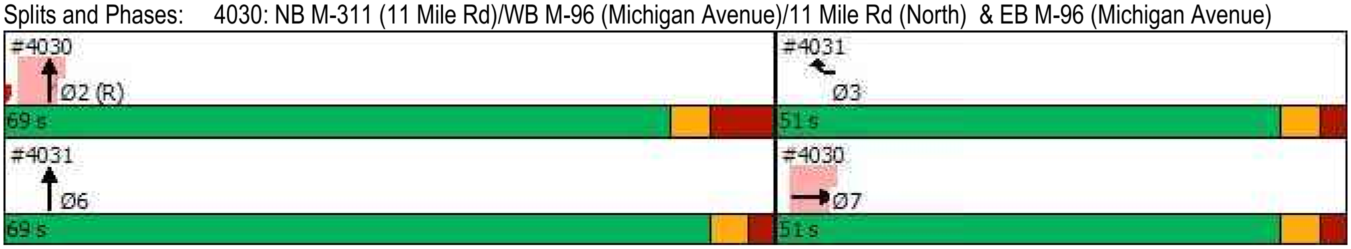
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑						↑↑↑	↱			
Traffic Volume (vph)	0	801	0	0	0	0	0	1305	251	0	0	0
Future Volume (vph)	0	801	0	0	0	0	0	1305	251	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		250	0		0
Storage Lanes	0		0	0		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	1.00	1.00
Frt									0.850			
Flt Protected												
Satd. Flow (prot)	0	3539	0	0	0	0	0	5085	1583	0	0	0
Flt Permitted												
Satd. Flow (perm)	0	3539	0	0	0	0	0	5085	1583	0	0	0
Right Turn on Red	Yes		Yes			Yes			Yes			Yes
Satd. Flow (RTOR)									48			
Link Speed (mph)		55			55			55			30	
Link Distance (ft)		167			316			655			182	
Travel Time (s)		2.1			3.9			8.1			4.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	871	0	0	0	0	0	1418	273	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	871	0	0	0	0	0	1418	273	0	0	0
Turn Type		NA						NA	Perm			
Protected Phases		7						2				
Permitted Phases									2			
Minimum Split (s)		16.0						19.5	19.5			
Total Split (s)		51.0						69.0	69.0			
Total Split (%)		42.5%						57.5%	57.5%			
Yellow Time (s)		3.5						3.5	3.5			
All-Red Time (s)		2.5						6.0	6.0			
Lost Time Adjust (s)		0.0						0.0	0.0			
Total Lost Time (s)		6.0						9.5	9.5			
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		45.0						59.5	59.5			
Actuated g/C Ratio		0.38						0.50	0.50			
v/c Ratio		0.66						0.56	0.34			
Control Delay		34.7						27.7	22.0			
Queue Delay		0.0						0.0	0.0			
Total Delay		34.7						27.7	22.0			
LOS		C						C	C			
Approach Delay		34.7						26.7				
Approach LOS		C						C				
Queue Length 50th (ft)		334						283	102			
Queue Length 95th (ft)		407						322	164			
Internal Link Dist (ft)		87			236			575			102	
Turn Bay Length (ft)									250			
Base Capacity (vph)		1327						2521	809			
Starvation Cap Reductn		0						0	0			

Lane Group	Ø3	Ø6
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Ideal Flow (vphpl)		
Storage Length (ft)		
Storage Lanes		
Taper Length (ft)		
Lane Util. Factor		
Frt		
Flt Protected		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Peak Hour Factor		
Adj. Flow (vph)		
Shared Lane Traffic (%)		
Lane Group Flow (vph)		
Turn Type		
Protected Phases	3	6
Permitted Phases		
Minimum Split (s)	16.0	16.0
Total Split (s)	51.0	69.0
Total Split (%)	43%	58%
Yellow Time (s)	3.5	3.5
All-Red Time (s)	2.5	2.5
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag		
Lead-Lag Optimize?		
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		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn		0						0	0			
Storage Cap Reductn		0						0	0			
Reduced v/c Ratio		0.66						0.56	0.34			

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 88 (73%), Referenced to phase 2:NBT, Start of Green	
Natural Cycle: 60	
Control Type: Pretimed	
Maximum v/c Ratio: 0.93	
Intersection Signal Delay: 29.4	Intersection LOS: C
Intersection Capacity Utilization 63.1%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 4030: NB M-311 (11 Mile Rd)/WB M-96 (Michigan Avenue)/11 Mile Rd (North) & EB M-96 (Michigan Avenue)



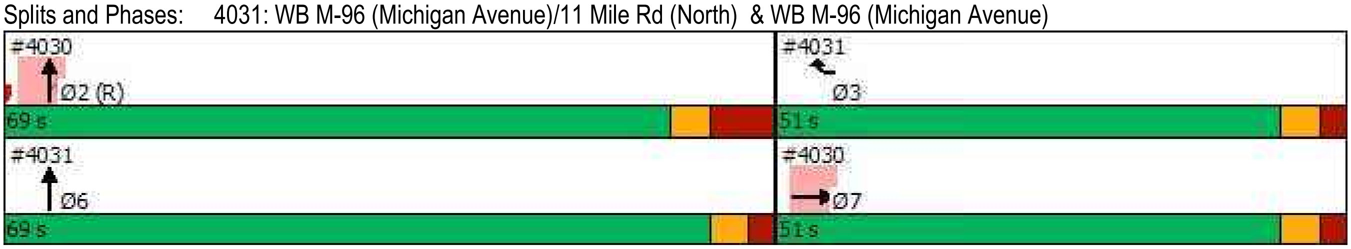
Lane Group	Ø3	Ø6
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		

Intersection Summary

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø2	Ø7
Lane Configurations								
Traffic Volume (vph)	0	1196	1305	0	0	0		
Future Volume (vph)	0	1196	1305	0	0	0		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Lane Util. Factor	1.00	0.76	0.91	1.00	1.00	1.00		
Frt		0.850						
Flt Protected								
Satd. Flow (prot)	0	3610	5085	0	0	0		
Flt Permitted								
Satd. Flow (perm)	0	3610	5085	0	0	0		
Right Turn on Red		Yes		Yes				
Satd. Flow (RTOR)		64						
Link Speed (mph)	55		55			55		
Link Distance (ft)	405		182			493		
Travel Time (s)	5.0		2.3			6.1		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Adj. Flow (vph)	0	1300	1418	0	0	0		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	0	1300	1418	0	0	0		
Turn Type		Prot	NA					
Protected Phases		3	6				2	7
Permitted Phases								
Minimum Split (s)		16.0	16.0				19.5	16.0
Total Split (s)		51.0	69.0				69.0	51.0
Total Split (%)		42.5%	57.5%				58%	43%
Yellow Time (s)		3.5	3.5				3.5	3.5
All-Red Time (s)		2.5	2.5				6.0	2.5
Lost Time Adjust (s)		0.0	0.0					
Total Lost Time (s)		6.0	6.0					
Lead/Lag								
Lead-Lag Optimize?								
Act Effct Green (s)		45.0	63.0					
Actuated g/C Ratio		0.38	0.52					
v/c Ratio		0.93	0.53					
Control Delay		44.4	0.7					
Queue Delay		0.0	0.0					
Total Delay		44.4	0.7					
LOS		D	A					
Approach Delay	44.4		0.7					
Approach LOS	D		A					
Queue Length 50th (ft)		404	0					
Queue Length 95th (ft)		#528	0					
Internal Link Dist (ft)	325		102			413		
Turn Bay Length (ft)								
Base Capacity (vph)		1393	2669					
Starvation Cap Reductn		0	51					
Spillback Cap Reductn		0	0					
Storage Cap Reductn		0	0					
Reduced v/c Ratio		0.93	0.54					

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 88 (73%), Referenced to phase 2:NBT, Start of Green	
Natural Cycle: 60	
Control Type: Pretimed	
Maximum v/c Ratio: 0.93	
Intersection Signal Delay: 21.6	Intersection LOS: C
Intersection Capacity Utilization 63.1%	ICU Level of Service B
Analysis Period (min) 15	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	

Splits and Phases: 4031: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & WB M-96 (Michigan Avenue)

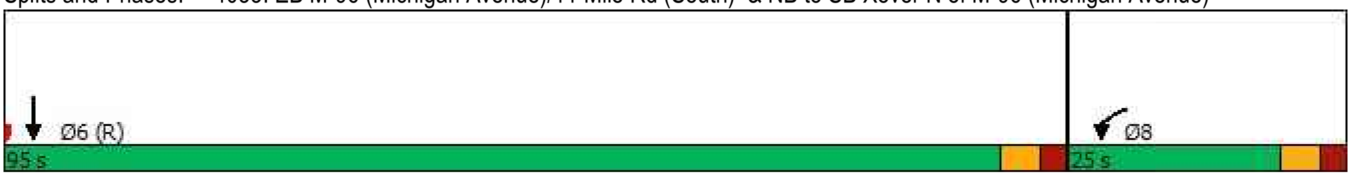


Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	280	0	0	0	0	2104
Future Volume (vph)	280	0	0	0	0	2104
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	0.91
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	3433	0	0	0	0	5085
Flt Permitted	0.950					
Satd. Flow (perm)	3433	0	0	0	0	5085
Right Turn on Red	Yes	Yes		Yes		
Satd. Flow (RTOR)	31					
Link Speed (mph)	25		55			30
Link Distance (ft)	105		587			495
Travel Time (s)	2.9		7.3			11.3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	304	0	0	0	0	2287
Shared Lane Traffic (%)						
Lane Group Flow (vph)	304	0	0	0	0	2287
Turn Type	Prot					NA
Protected Phases	8					6
Permitted Phases						
Minimum Split (s)	13.0					16.0
Total Split (s)	25.0					95.0
Total Split (%)	20.8%					79.2%
Yellow Time (s)	3.5					3.5
All-Red Time (s)	2.5					2.5
Lost Time Adjust (s)	0.0					0.0
Total Lost Time (s)	6.0					6.0
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)	19.0					89.0
Actuated g/C Ratio	0.16					0.74
v/c Ratio	0.53					0.61
Control Delay	17.2					2.4
Queue Delay	0.0					0.1
Total Delay	17.2					2.6
LOS	B					A
Approach Delay	17.2					2.6
Approach LOS	B					A
Queue Length 50th (ft)	57					43
Queue Length 95th (ft)	m70					46
Internal Link Dist (ft)	25		507			415
Turn Bay Length (ft)						
Base Capacity (vph)	569					3771
Starvation Cap Reductn	0					457
Spillback Cap Reductn	0					0
Storage Cap Reductn	0					0
Reduced v/c Ratio	0.53					0.69

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 89 (74%), Referenced to phase 6:SBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.61	
Intersection Signal Delay: 4.3	Intersection LOS: A
Intersection Capacity Utilization 91.9%	ICU Level of Service F
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4033: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & NB to SB Xover N of M-96 (Michigan Avenue)



Lane Group	NBL	NBT	SBT	SBR	SEL	SER	Ø2
Lane Configurations							
Traffic Volume (vph)	0	0	1555	0	0	549	
Future Volume (vph)	0	0	1555	0	0	549	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	0.91	1.00	1.00	0.88	
Frt						0.850	
Flt Protected							
Satd. Flow (prot)	0	0	5085	0	0	2787	
Flt Permitted							
Satd. Flow (perm)	0	0	5085	0	0	2787	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)						206	
Link Speed (mph)		30	30		30		
Link Distance (ft)		495	145		346		
Travel Time (s)		11.3	3.3		7.9		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	0	0	1690	0	0	597	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	1690	0	0	597	
Turn Type			NA			Prot	
Protected Phases			Free!			4!	2
Permitted Phases							
Minimum Split (s)						16.0	16.0
Total Split (s)						60.0	60.0
Total Split (%)						50.0%	50%
Yellow Time (s)						3.5	3.5
All-Red Time (s)						2.5	2.5
Lost Time Adjust (s)						0.0	
Total Lost Time (s)						6.0	
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)			120.0			54.0	
Actuated g/C Ratio			1.00			0.45	
v/c Ratio			0.33			0.44	
Control Delay			0.1			15.3	
Queue Delay			0.0			0.0	
Total Delay			0.1			15.3	
LOS			A			B	
Approach Delay			0.1		15.3		
Approach LOS			A		B		
Queue Length 50th (ft)			0			111	
Queue Length 95th (ft)			0			163	
Internal Link Dist (ft)		415	65		266		
Turn Bay Length (ft)							
Base Capacity (vph)			5085			1367	
Starvation Cap Reductn			0			0	
Spillback Cap Reductn			0			0	
Storage Cap Reductn			0			0	
Reduced v/c Ratio			0.33			0.44	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 27 (23%), Referenced to phase 4:SER, Start of Green			
Natural Cycle: 55			
Control Type: Pretimed			
Maximum v/c Ratio: 0.76			
Intersection Signal Delay: 4.1		Intersection LOS: A	
Intersection Capacity Utilization 70.8%		ICU Level of Service C	
Analysis Period (min) 15			

! Phase conflict between lane groups.

Splits and Phases: 4034: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & EB I-94 Off-ramp

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	1555	0	0	0	0	0	1593	0
Future Volume (vph)	0	0	0	0	1555	0	0	0	0	0	1593	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.91	1.00	1.00	1.00	1.00	1.00	0.91	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	0	0	0	5085	0	0	0	0	0	5085	0
Flt Permitted												
Satd. Flow (perm)	0	0	0	0	5085	0	0	0	0	0	5085	0
Right Turn on Red			Yes			Yes			Yes	Yes		Yes
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		145			194			233			108	
Travel Time (s)		3.3			4.4			5.3			2.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	1690	0	0	0	0	0	1732	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1690	0	0	0	0	0	1732	0
Turn Type					NA						NA	
Protected Phases					2						4	
Permitted Phases												
Minimum Split (s)					16.0						16.0	
Total Split (s)					60.0						60.0	
Total Split (%)					50.0%						50.0%	
Yellow Time (s)					3.5						3.5	
All-Red Time (s)					2.5						2.5	
Lost Time Adjust (s)					0.0						0.0	
Total Lost Time (s)					6.0						6.0	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)					54.0						54.0	
Actuated g/C Ratio					0.45						0.45	
v/c Ratio					0.74						0.76	
Control Delay					24.1						32.7	
Queue Delay					0.0						0.0	
Total Delay					24.2						32.7	
LOS					C						C	
Approach Delay					24.2						32.7	
Approach LOS					C						C	
Queue Length 50th (ft)					416						413	
Queue Length 95th (ft)					475						m457	
Internal Link Dist (ft)		65			114			153			28	
Turn Bay Length (ft)												
Base Capacity (vph)					2288						2288	
Starvation Cap Reductn					20						0	
Spillback Cap Reductn					0						0	
Storage Cap Reductn					0						0	
Reduced v/c Ratio					0.75						0.76	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 27 (23%), Referenced to phase 4:SER, Start of Green	
Natural Cycle: 55	
Control Type: Pretimed	
Maximum v/c Ratio: 0.76	
Intersection Signal Delay: 28.5	Intersection LOS: C
Intersection Capacity Utilization 71.4%	ICU Level of Service C
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4035: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & WB M-96 (Michigan Avenue)/11 Mile Rd (North)

Lane Group	NBL	NBR	SET	SER	NWL	NWT	Ø4
Lane Configurations							
Traffic Volume (vph)	104	0	0	0	0	1593	
Future Volume (vph)	104	0	0	0	0	1593	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.91	
Frt							
Flt Protected	0.950						
Satd. Flow (prot)	1719	0	0	0	0	5085	
Flt Permitted	0.950						
Satd. Flow (perm)	1719	0	0	0	0	5085	
Right Turn on Red	Yes	Yes		Yes			
Satd. Flow (RTOR)	110						
Link Speed (mph)	30		30			30	
Link Distance (ft)	271		337			233	
Travel Time (s)	6.2		7.7			5.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Heavy Vehicles (%)	5%	2%	2%	2%	2%	2%	
Adj. Flow (vph)	113	0	0	0	0	1732	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	113	0	0	0	0	1732	
Turn Type	Prot					NA	
Protected Phases	2!					Free!	4
Permitted Phases							
Minimum Split (s)	16.0						16.0
Total Split (s)	60.0						60.0
Total Split (%)	50.0%						50%
Yellow Time (s)	3.5						3.5
All-Red Time (s)	2.5						2.5
Lost Time Adjust (s)	0.0						
Total Lost Time (s)	6.0						
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)	54.0					120.0	
Actuated g/C Ratio	0.45					1.00	
v/c Ratio	0.14					0.34	
Control Delay	4.2					0.1	
Queue Delay	0.0					0.0	
Total Delay	4.2					0.1	
LOS	A					A	
Approach Delay	4.2					0.1	
Approach LOS	A					A	
Queue Length 50th (ft)	1					0	
Queue Length 95th (ft)	34					0	
Internal Link Dist (ft)	191		257			153	
Turn Bay Length (ft)							
Base Capacity (vph)	834					5085	
Starvation Cap Reductn	0					0	
Spillback Cap Reductn	0					0	
Storage Cap Reductn	0					0	

Lane Group	NBL	NBR	SET	SER	NWL	NWT	Ø4
Reduced v/c Ratio	0.14					0.34	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 27 (23%), Referenced to phase 4:SER, Start of Green	
Natural Cycle: 55	
Control Type: Pretimed	
Maximum v/c Ratio: 0.76	
Intersection Signal Delay: 0.4	Intersection LOS: A
Intersection Capacity Utilization 53.1%	ICU Level of Service A
Analysis Period (min) 15	
! Phase conflict between lane groups.	

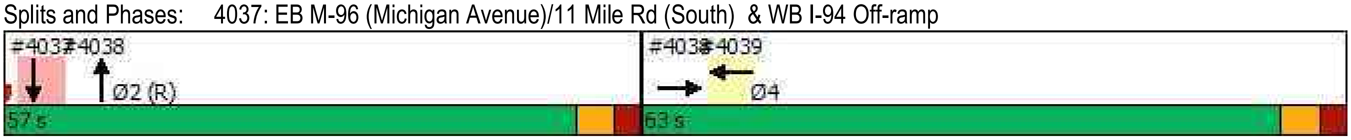
Splits and Phases: 4036: EB I-94 Off-ramp & WB M-96 (Michigan Avenue)/11 Mile Rd (North)

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø4
Lane Configurations							
Traffic Volume (vph)	0	1060	0	0	568	0	
Future Volume (vph)	0	1060	0	0	568	0	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	0.88	1.00	1.00	0.95	1.00	
Frt		0.850					
Flt Protected							
Satd. Flow (prot)	0	2707	0	0	3438	0	
Flt Permitted							
Satd. Flow (perm)	0	2707	0	0	3438	0	
Right Turn on Red		Yes				Yes	
Satd. Flow (RTOR)		1148					
Link Speed (mph)	30			30	30		
Link Distance (ft)	222			406	241		
Travel Time (s)	5.0			9.2	5.5		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Heavy Vehicles (%)	2%	5%	2%	2%	5%	2%	
Adj. Flow (vph)	0	1152	0	0	617	0	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	1152	0	0	617	0	
Turn Type		Free			NA		
Protected Phases					2		4
Permitted Phases		Free					
Minimum Split (s)					16.0		16.0
Total Split (s)					57.0		63.0
Total Split (%)					47.5%		53%
Yellow Time (s)					3.5		3.5
All-Red Time (s)					2.5		2.5
Lost Time Adjust (s)					0.0		
Total Lost Time (s)					6.0		
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)		120.0			51.0		
Actuated g/C Ratio		1.00			0.42		
v/c Ratio		0.43			0.42		
Control Delay		4.7			25.3		
Queue Delay		0.0			0.0		
Total Delay		4.7			25.3		
LOS		A			C		
Approach Delay	4.7				25.3		
Approach LOS	A				C		
Queue Length 50th (ft)		242			173		
Queue Length 95th (ft)		110			223		
Internal Link Dist (ft)	142			326	161		
Turn Bay Length (ft)							
Base Capacity (vph)		2707			1461		
Starvation Cap Reductn		0			0		
Spillback Cap Reductn		46			59		
Storage Cap Reductn		0			0		

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø4
Reduced v/c Ratio		0.43			0.44		

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 96 (80%), Referenced to phase 2:SBT, Start of Green	
Natural Cycle: 50	
Control Type: Pretimed	
Maximum v/c Ratio: 0.71	
Intersection Signal Delay: 11.9	Intersection LOS: B
Intersection Capacity Utilization 20.7%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4037: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & WB I-94 Off-ramp

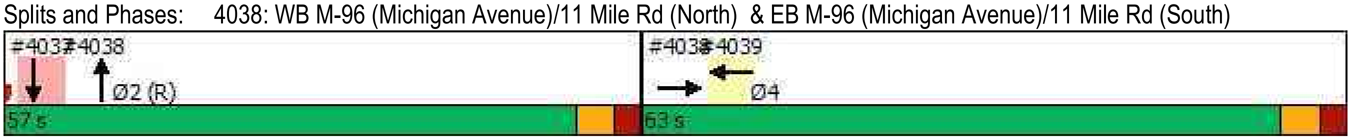


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑						↑↑↑				
Traffic Volume (vph)	0	1060	0	0	0	0	0	1179	0	0	0	0
Future Volume (vph)	0	1060	0	0	0	0	0	1179	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	1.00	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	3438	0	0	0	0	0	4940	0	0	0	0
Flt Permitted												
Satd. Flow (perm)	0	3438	0	0	0	0	0	4940	0	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		190			222			207			131	
Travel Time (s)		4.3			5.0			4.7			3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	5%	2%	2%	2%	2%	2%	5%	2%	2%	2%	2%
Adj. Flow (vph)	0	1152	0	0	0	0	0	1282	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1152	0	0	0	0	0	1282	0	0	0	0
Turn Type		NA						NA				
Protected Phases		4						2				
Permitted Phases												
Minimum Split (s)		16.0						16.0				
Total Split (s)		63.0						57.0				
Total Split (%)		52.5%						47.5%				
Yellow Time (s)		3.5						3.5				
All-Red Time (s)		2.5						2.5				
Lost Time Adjust (s)		0.0						0.0				
Total Lost Time (s)		6.0						6.0				
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		57.0						51.0				
Actuated g/C Ratio		0.48						0.42				
v/c Ratio		0.71						0.61				
Control Delay		22.8						44.9				
Queue Delay		0.0						0.0				
Total Delay		22.8						44.9				
LOS		C						D				
Approach Delay		22.8						44.9				
Approach LOS		C						D				
Queue Length 50th (ft)		232						386				
Queue Length 95th (ft)		264						436				
Internal Link Dist (ft)		110			142			127			51	
Turn Bay Length (ft)												
Base Capacity (vph)		1633						2099				
Starvation Cap Reductn		0						0				
Spillback Cap Reductn		0						0				
Storage Cap Reductn		0						0				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio		0.71						0.61				

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 96 (80%), Referenced to phase 2:SBT, Start of Green	
Natural Cycle: 50	
Control Type: Pretimed	
Maximum v/c Ratio: 0.71	
Intersection Signal Delay: 34.4	Intersection LOS: C
Intersection Capacity Utilization 62.1%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 4038: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & EB M-96 (Michigan Avenue)/11 Mile Rd (South)

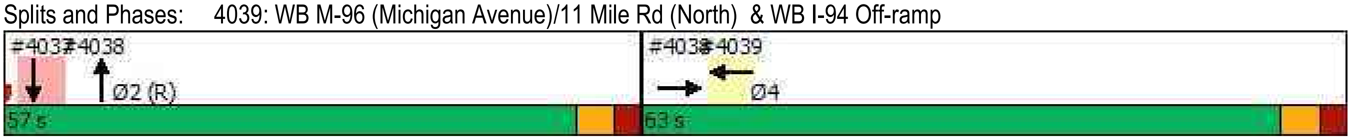


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø2
Lane Configurations							
Traffic Volume (vph)	0	0	0	151	1179	0	
Future Volume (vph)	0	0	0	151	1179	0	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.94	1.00	
Frt							
Flt Protected					0.950		
Satd. Flow (prot)	0	0	0	1810	4848	0	
Flt Permitted					0.950		
Satd. Flow (perm)	0	0	0	1810	4848	0	
Right Turn on Red		Yes			Yes	Yes	
Satd. Flow (RTOR)					2497		
Link Speed (mph)	30			30	30		
Link Distance (ft)	415			317	131		
Travel Time (s)	9.4			7.2	3.0		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Heavy Vehicles (%)	2%	2%	2%	5%	5%	2%	
Adj. Flow (vph)	0	0	0	164	1282	0	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	0	164	1282	0	
Turn Type				NA	Perm		
Protected Phases				4!			2
Permitted Phases					Free!		
Minimum Split (s)				16.0			16.0
Total Split (s)				63.0			57.0
Total Split (%)				52.5%			48%
Yellow Time (s)				3.5			3.5
All-Red Time (s)				2.5			2.5
Lost Time Adjust (s)				0.0			
Total Lost Time (s)				6.0			
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)				57.0	120.0		
Actuated g/C Ratio				0.48	1.00		
v/c Ratio				0.19	0.26		
Control Delay				18.9	0.4		
Queue Delay				0.0	0.0		
Total Delay				18.9	0.4		
LOS				B	A		
Approach Delay				18.9	0.4		
Approach LOS				B	A		
Queue Length 50th (ft)				71	3		
Queue Length 95th (ft)				116	0		
Internal Link Dist (ft)	335			237	51		
Turn Bay Length (ft)							
Base Capacity (vph)				859	4848		
Starvation Cap Reductn				0	0		
Spillback Cap Reductn				0	0		
Storage Cap Reductn				0	0		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø2
Reduced v/c Ratio				0.19	0.26		

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 96 (80%), Referenced to phase 2:SBT, Start of Green	
Natural Cycle: 50	
Control Type: Pretimed	
Maximum v/c Ratio: 0.71	
Intersection Signal Delay: 2.5	Intersection LOS: A
Intersection Capacity Utilization 85.5%	ICU Level of Service E
Analysis Period (min) 15	
! Phase conflict between lane groups.	

Splits and Phases: 4039: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & WB I-94 Off-ramp

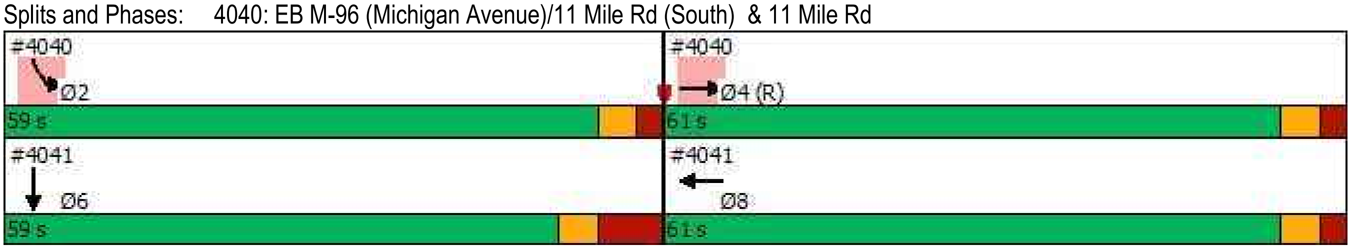


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø6	Ø8
Lane Configurations								
Traffic Volume (vph)	0	771	0	0	434	0		
Future Volume (vph)	0	771	0	0	434	0		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.97	1.00		
Frt								
Flt Protected					0.950			
Satd. Flow (prot)	0	3539	0	0	3335	0		
Flt Permitted					0.950			
Satd. Flow (perm)	0	3539	0	0	3335	0		
Right Turn on Red				Yes	Yes	Yes		
Satd. Flow (RTOR)					187			
Link Speed (mph)		55	55		45			
Link Distance (ft)		212	597		92			
Travel Time (s)		2.6	7.4		1.4			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Heavy Vehicles (%)	2%	2%	2%	2%	5%	2%		
Adj. Flow (vph)	0	838	0	0	472	0		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	0	838	0	0	472	0		
Turn Type		NA			Prot			
Protected Phases		4			2		6	8
Permitted Phases								
Minimum Split (s)		16.0			19.5		19.5	16.0
Total Split (s)		61.0			59.0		59.0	61.0
Total Split (%)		50.8%			49.2%		49%	51%
Yellow Time (s)		3.5			3.5		3.5	3.5
All-Red Time (s)		2.5			2.5		6.0	2.5
Lost Time Adjust (s)		0.0			0.0			
Total Lost Time (s)		6.0			6.0			
Lead/Lag								
Lead-Lag Optimize?								
Act Effct Green (s)		55.0			53.0			
Actuated g/C Ratio		0.46			0.44			
v/c Ratio		0.52			0.30			
Control Delay		24.5			0.5			
Queue Delay		0.0			0.0			
Total Delay		24.5			0.5			
LOS		C			A			
Approach Delay		24.5			0.5			
Approach LOS		C			A			
Queue Length 50th (ft)		236			0			
Queue Length 95th (ft)		296			0			
Internal Link Dist (ft)		132	517		12			
Turn Bay Length (ft)								
Base Capacity (vph)		1622			1577			
Starvation Cap Reductn		0			0			
Spillback Cap Reductn		0			0			
Storage Cap Reductn		0			0			

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø6	Ø8
Reduced v/c Ratio		0.52			0.30			

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 32 (27%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.55	
Intersection Signal Delay: 15.8	Intersection LOS: B
Intersection Capacity Utilization 49.5%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4040: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & 11 Mile Rd



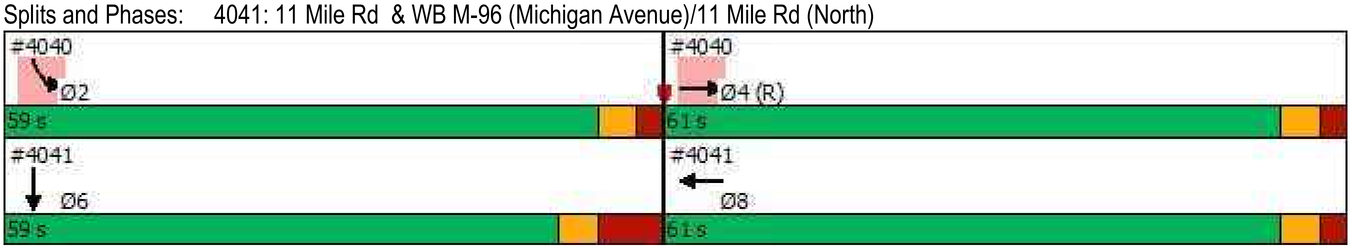
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	824	570	0	0	0	0	434	56
Future Volume (vph)	0	0	0	0	824	570	0	0	0	0	434	56
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		250	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Frt						0.850					0.983	
Flt Protected												
Satd. Flow (prot)	0	0	0	0	3539	1538	0	0	0	0	3391	0
Flt Permitted												
Satd. Flow (perm)	0	0	0	0	3539	1538	0	0	0	0	3391	0
Right Turn on Red			Yes	Yes		Yes			Yes			Yes
Satd. Flow (RTOR)						433					14	
Link Speed (mph)		55			55			45			55	
Link Distance (ft)		210			598			92			259	
Travel Time (s)		2.6			7.4			1.4			3.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	5%	2%	2%	2%	2%	5%	2%
Adj. Flow (vph)	0	0	0	0	896	620	0	0	0	0	472	61
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	896	620	0	0	0	0	533	0
Turn Type					NA	custom					NA	
Protected Phases					8	Free					6	
Permitted Phases												
Minimum Split (s)					16.0						19.5	
Total Split (s)					61.0						59.0	
Total Split (%)					50.8%						49.2%	
Yellow Time (s)					3.5						3.5	
All-Red Time (s)					2.5						6.0	
Lost Time Adjust (s)					0.0						0.0	
Total Lost Time (s)					6.0						9.5	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)					55.0	120.0					49.5	
Actuated g/C Ratio					0.46	1.00					0.41	
v/c Ratio					0.55	0.40					0.38	
Control Delay					33.0	5.3					35.3	
Queue Delay					0.0	0.0					0.0	
Total Delay					33.0	5.3					35.3	
LOS					C	A					D	
Approach Delay					21.6						35.3	
Approach LOS					C						D	
Queue Length 50th (ft)					372	422					187	
Queue Length 95th (ft)					444	527					247	
Internal Link Dist (ft)		130			518			12			179	
Turn Bay Length (ft)						250						
Base Capacity (vph)					1622	1538					1407	

Lane Group	Ø2	Ø4
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Ideal Flow (vphpl)		
Storage Length (ft)		
Storage Lanes		
Taper Length (ft)		
Lane Util. Factor		
Frt		
Flt Protected		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Peak Hour Factor		
Heavy Vehicles (%)		
Adj. Flow (vph)		
Shared Lane Traffic (%)		
Lane Group Flow (vph)		
Turn Type		
Protected Phases	2	4
Permitted Phases		
Minimum Split (s)	19.5	16.0
Total Split (s)	59.0	61.0
Total Split (%)	49%	51%
Yellow Time (s)	3.5	3.5
All-Red Time (s)	2.5	2.5
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag		
Lead-Lag Optimize?		
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)		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn					0	0					0	
Spillback Cap Reductn					0	0					0	
Storage Cap Reductn					0	0					0	
Reduced v/c Ratio					0.55	0.40					0.38	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 32 (27%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.55	
Intersection Signal Delay: 25.2	Intersection LOS: C
Intersection Capacity Utilization 49.5%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4041: 11 Mile Rd & WB M-96 (Michigan Avenue)/11 Mile Rd (North)



Lane Group	Ø2	Ø4
Starvation Cap Reductn		
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		

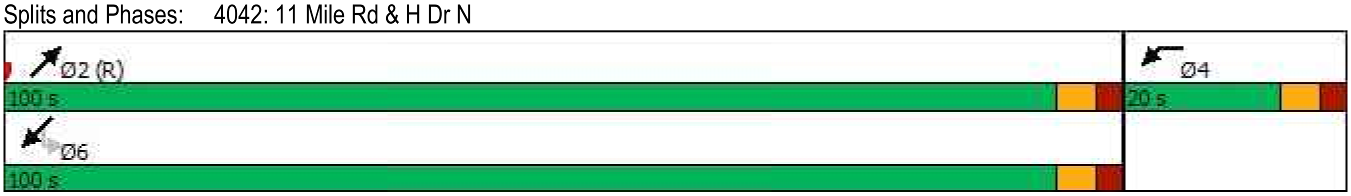
Intersection Summary

Lane Group	WBL	WBR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	0	0	570	0	0	490
Future Volume (vph)	0	0	570	0	0	490
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	1810	0	1863	0	0	1863
Flt Permitted						
Satd. Flow (perm)	1810	0	1863	0	0	1863
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)						
Link Speed (mph)	25		55			55
Link Distance (ft)	1262		1787			680
Travel Time (s)	34.4		22.2			8.4
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	2%	2%	5%	2%	2%
Adj. Flow (vph)	0	0	620	0	0	533
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	620	0	0	533
Turn Type	Prot		NA			NA
Protected Phases	4		2			6
Permitted Phases					6	
Minimum Split (s)	13.0		16.0		13.0	13.0
Total Split (s)	20.0		100.0		100.0	100.0
Total Split (%)	16.7%		83.3%		83.3%	83.3%
Yellow Time (s)	3.5		3.5		3.5	3.5
All-Red Time (s)	2.5		2.5		2.5	2.5
Lost Time Adjust (s)	0.0		0.0			0.0
Total Lost Time (s)	6.0		6.0			6.0
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)			94.0			94.0
Actuated g/C Ratio			0.78			0.78
v/c Ratio			0.42			0.37
Control Delay			1.3			4.7
Queue Delay			0.0			0.0
Total Delay			1.3			4.7
LOS			A			A
Approach Delay			1.3			4.7
Approach LOS			A			A
Queue Length 50th (ft)			14			104
Queue Length 95th (ft)			18			145
Internal Link Dist (ft)	1182		1707			600
Turn Bay Length (ft)						
Base Capacity (vph)			1459			1459
Starvation Cap Reductn			0			0
Spillback Cap Reductn			0			0
Storage Cap Reductn			0			0

Lane Group	WBL	WBR	NET	NER	SWL	SWT
Reduced v/c Ratio			0.42			0.37

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NET, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.42	
Intersection Signal Delay: 2.9	Intersection LOS: A
Intersection Capacity Utilization 35.0%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4042: 11 Mile Rd & H Dr N



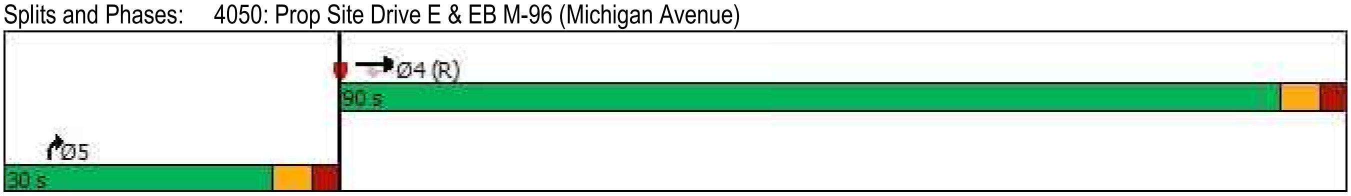
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1611	502	0	0	0	502
Future Volume (vph)	1611	502	0	0	0	502
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		500	600		0	0
Storage Lanes		2	0		0	2
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	0.88	1.00	1.00	1.00	0.88
Frt		0.850				0.850
Flt Protected						
Satd. Flow (prot)	3539	2787	0	0	0	2787
Flt Permitted						
Satd. Flow (perm)	3539	2787	0	0	0	2787
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		546				66
Link Speed (mph)	55			55	25	
Link Distance (ft)	669			659	1093	
Travel Time (s)	8.3			8.2	29.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1751	546	0	0	0	546
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1751	546	0	0	0	546
Turn Type	NA	Perm				Prot
Protected Phases	4					5
Permitted Phases		4				
Detector Phase	4	4				5
Switch Phase						
Minimum Initial (s)	10.0	10.0				10.0
Minimum Split (s)	16.0	16.0				16.0
Total Split (s)	90.0	90.0				30.0
Total Split (%)	75.0%	75.0%				25.0%
Yellow Time (s)	3.5	3.5				3.5
All-Red Time (s)	2.5	2.5				2.5
Lost Time Adjust (s)	0.0	0.0				0.0
Total Lost Time (s)	6.0	6.0				6.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max	C-Max				None
Act Effct Green (s)	84.7	84.7				23.3
Actuated g/C Ratio	0.71	0.71				0.19
v/c Ratio	0.70	0.26				0.92
Control Delay	11.8	6.3				63.3
Queue Delay	2.3	0.0				0.0
Total Delay	14.0	6.3				63.3
LOS	B	A				E
Approach Delay	12.2				63.3	
Approach LOS	B				E	
Queue Length 50th (ft)	369	51				210
Queue Length 95th (ft)	398	m131				#320

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Internal Link Dist (ft)	589			579	1013	
Turn Bay Length (ft)		500				
Base Capacity (vph)	2497	2127				610
Starvation Cap Reductn	580	0				0
Spillback Cap Reductn	0	0				0
Storage Cap Reductn	0	0				0
Reduced v/c Ratio	0.91	0.26				0.90

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 52 (43%), Referenced to phase 4:EBT, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.92
Intersection Signal Delay: 22.0 Intersection LOS: C
Intersection Capacity Utilization 72.1% ICU Level of Service C
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4050: Prop Site Drive E & EB M-96 (Michigan Avenue)

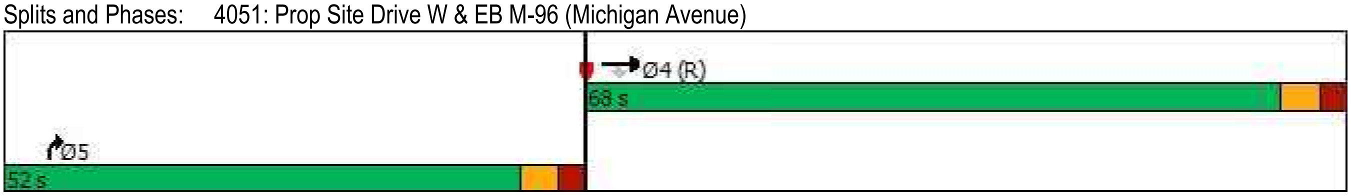


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	830	902	0	0	0	902
Future Volume (vph)	830	902	0	0	0	902
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		500	600		0	0
Storage Lanes		2	0		0	2
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	0.88	1.00	1.00	1.00	0.88
Frt		0.850				0.850
Flt Protected						
Satd. Flow (prot)	3539	2787	0	0	0	2787
Flt Permitted						
Satd. Flow (perm)	3539	2787	0	0	0	2787
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		980				190
Link Speed (mph)	55			55	25	
Link Distance (ft)	608			627	1293	
Travel Time (s)	7.5			7.8	35.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	902	980	0	0	0	980
Shared Lane Traffic (%)						
Lane Group Flow (vph)	902	980	0	0	0	980
Turn Type	NA	Perm				Prot
Protected Phases	4					5
Permitted Phases		4				
Detector Phase	4	4				5
Switch Phase						
Minimum Initial (s)	10.0	10.0				10.0
Minimum Split (s)	16.0	16.0				16.0
Total Split (s)	68.0	68.0				52.0
Total Split (%)	56.7%	56.7%				43.3%
Yellow Time (s)	3.5	3.5				3.5
All-Red Time (s)	2.5	2.5				2.5
Lost Time Adjust (s)	0.0	0.0				0.0
Total Lost Time (s)	6.0	6.0				6.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max	C-Max				None
Act Effct Green (s)	66.6	66.6				41.4
Actuated g/C Ratio	0.56	0.56				0.34
v/c Ratio	0.46	0.49				0.90
Control Delay	20.4	9.3				41.8
Queue Delay	0.0	0.0				0.0
Total Delay	20.4	9.3				41.8
LOS	C	A				D
Approach Delay	14.6				41.8	
Approach LOS	B				D	
Queue Length 50th (ft)	296	38				335
Queue Length 95th (ft)	356	232				421

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Internal Link Dist (ft)	528			547	1213	
Turn Bay Length (ft)		500				
Base Capacity (vph)	1964	1983				1185
Starvation Cap Reductn	0	110				0
Spillback Cap Reductn	0	0				0
Storage Cap Reductn	0	0				0
Reduced v/c Ratio	0.46	0.52				0.83

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 32 (27%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.90	
Intersection Signal Delay: 23.9	Intersection LOS: C
Intersection Capacity Utilization 64.5%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 4051: Prop Site Drive W & EB M-96 (Michigan Avenue)

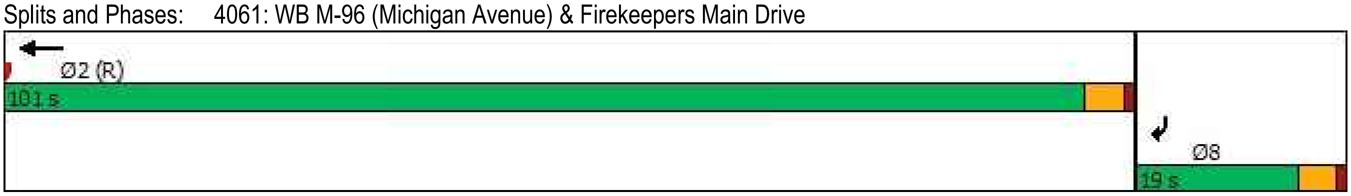


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	1185	168	0	134
Future Volume (vph)	0	0	1185	168	0	134
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			0	0	0
Storage Lanes	0			0	0	2
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	0.88
Frt			0.982			0.850
Flt Protected						
Satd. Flow (prot)	0	0	3484	0	0	2787
Flt Permitted						
Satd. Flow (perm)	0	0	3484	0	0	2787
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			46			232
Link Speed (mph)		55	55		25	
Link Distance (ft)		574	509		701	
Travel Time (s)		7.1	6.3		19.1	
Peak Hour Factor	0.92	0.92	0.92	0.95	0.67	0.92
Heavy Vehicles (%)	2%	2%	2%	0%	0%	2%
Adj. Flow (vph)	0	0	1288	177	0	146
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1465	0	0	146
Turn Type			NA			Prot
Protected Phases			2			8
Permitted Phases						
Detector Phase			2			8
Switch Phase						
Minimum Initial (s)			10.0			10.0
Minimum Split (s)			22.5			14.5
Total Split (s)			101.0			19.0
Total Split (%)			84.2%			15.8%
Yellow Time (s)			3.5			3.5
All-Red Time (s)			1.0			1.0
Lost Time Adjust (s)			0.0			0.0
Total Lost Time (s)			4.5			4.5
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode			C-Max			None
Act Effct Green (s)			101.0			10.0
Actuated g/C Ratio			0.84			0.08
v/c Ratio			0.50			0.33
Control Delay			3.1			2.0
Queue Delay			0.0			0.0
Total Delay			3.1			2.0
LOS			A			A
Approach Delay			3.1		2.0	
Approach LOS			A		A	
Queue Length 50th (ft)			114			0

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Queue Length 95th (ft)			140			0
Internal Link Dist (ft)		494	429		621	
Turn Bay Length (ft)						
Base Capacity (vph)			2939			540
Starvation Cap Reductn			0			0
Spillback Cap Reductn			0			0
Storage Cap Reductn			0			0
Reduced v/c Ratio			0.50			0.27

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:WBT, Start of Green	
Natural Cycle: 45	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.50	
Intersection Signal Delay: 3.0	Intersection LOS: A
Intersection Capacity Utilization 53.9%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4061: WB M-96 (Michigan Avenue) & Firekeepers Main Drive



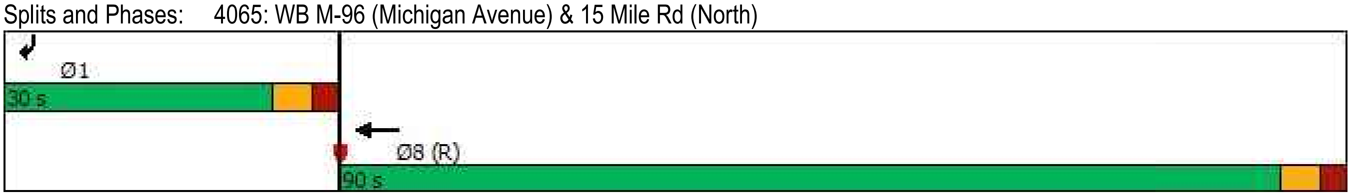
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	3927	694	0	659
Future Volume (vph)	0	0	3927	694	0	659
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			250	0	200
Storage Lanes	0			0	0	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.91	1.00	1.00	0.88
Frt				0.850		0.850
Flt Protected						
Satd. Flow (prot)	0	0	5085	1583	0	2787
Flt Permitted						
Satd. Flow (perm)	0	0	5085	1583	0	2787
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				159		
Link Speed (mph)		45	45		45	
Link Distance (ft)		534	660		516	
Travel Time (s)		8.1	10.0		7.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	4268	754	0	716
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	4268	754	0	716
Turn Type			NA	custom		Prot
Protected Phases			8	Free		1
Permitted Phases						
Minimum Split (s)			16.0			13.0
Total Split (s)			90.0			30.0
Total Split (%)			75.0%			25.0%
Yellow Time (s)			3.5			3.5
All-Red Time (s)			2.5			2.5
Lost Time Adjust (s)			0.0			0.0
Total Lost Time (s)			6.0			6.0
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)			84.0	120.0		24.0
Actuated g/C Ratio			0.70	1.00		0.20
v/c Ratio			1.20	0.48		1.29
Control Delay			101.6	15.1		181.1
Queue Delay			0.0	0.0		0.0
Total Delay			101.6	15.1		181.1
LOS			F	B		F
Approach Delay			88.6		181.1	
Approach LOS			F		F	
Queue Length 50th (ft)			~1475	337		~400
Queue Length 95th (ft)			m123	m141		#533
Internal Link Dist (ft)		454	580		436	
Turn Bay Length (ft)				250		200
Base Capacity (vph)			3559	1583		557
Starvation Cap Reductn			86	0		0

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Spillback Cap Reductn			0	0		0
Storage Cap Reductn			0	0		0
Reduced v/c Ratio			1.23	0.48		1.29

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 8:WBT, Start of Green	
Natural Cycle: 150	
Control Type: Pretimed	
Maximum v/c Ratio: 1.29	
Intersection Signal Delay: 100.1	Intersection LOS: F
Intersection Capacity Utilization 108.9%	ICU Level of Service G
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

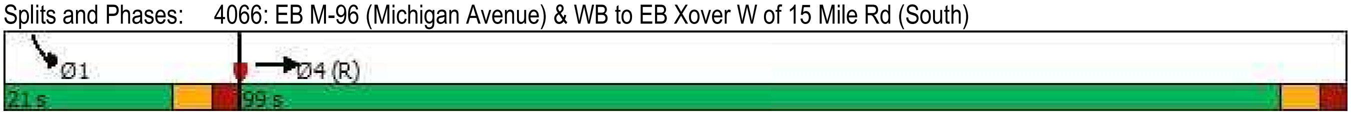
Splits and Phases: 4065: WB M-96 (Michigan Avenue) & 15 Mile Rd (North)



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑			↰	
Traffic Volume (vph)	0	3848	0	0	119	0
Future Volume (vph)	0	3848	0	0	119	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.91	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	5085	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	5085	0	0	1770	0
Right Turn on Red				Yes	Yes	Yes
Satd. Flow (RTOR)						
Link Speed (mph)		45	45		25	
Link Distance (ft)		262	1016		123	
Travel Time (s)		4.0	15.4		3.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.90	0.92
Adj. Flow (vph)	0	4183	0	0	132	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	4183	0	0	132	0
Turn Type		NA			Prot	
Protected Phases		4			1	
Permitted Phases						
Minimum Split (s)		16.0			16.0	
Total Split (s)		99.0			21.0	
Total Split (%)		82.5%			17.5%	
Yellow Time (s)		3.5			3.5	
All-Red Time (s)		2.5			2.5	
Lost Time Adjust (s)		0.0			0.0	
Total Lost Time (s)		6.0			6.0	
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)		93.0			15.0	
Actuated g/C Ratio		0.78			0.12	
v/c Ratio		1.06			0.60	
Control Delay		44.7			40.8	
Queue Delay		16.8			0.0	
Total Delay		61.5			40.8	
LOS		E			D	
Approach Delay		61.5			40.8	
Approach LOS		E			D	
Queue Length 50th (ft)		~1326			95	
Queue Length 95th (ft)		m1071			m92	
Internal Link Dist (ft)		182	936		43	
Turn Bay Length (ft)						
Base Capacity (vph)		3940			221	
Starvation Cap Reductn		0			0	
Spillback Cap Reductn		575			0	
Storage Cap Reductn		0			0	
Reduced v/c Ratio		1.24			0.60	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 116 (97%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 110	
Control Type: Pretimed	
Maximum v/c Ratio: 1.06	
Intersection Signal Delay: 60.9	Intersection LOS: E
Intersection Capacity Utilization 157.1%	ICU Level of Service H
Analysis Period (min) 15	
~ Volume exceeds capacity, queue is theoretically infinite.	
Queue shown is maximum after two cycles.	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 4066: EB M-96 (Michigan Avenue) & WB to EB Xover W of 15 Mile Rd (South)



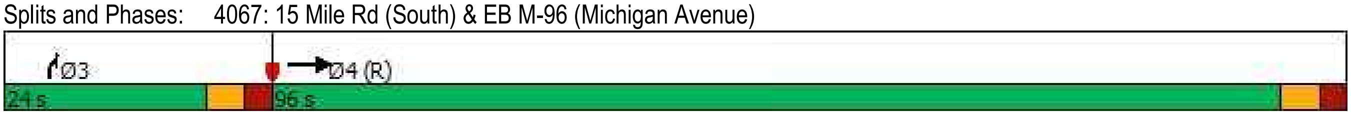
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	3654	314	0	0	0	315
Future Volume (vph)	3654	314	0	0	0	315
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		50	0		0	250
Storage Lanes		0	0		0	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	1.00	1.00	1.00	0.88
Frt	0.988					0.850
Flt Protected						
Satd. Flow (prot)	5024	0	0	0	0	2814
Flt Permitted						
Satd. Flow (perm)	5024	0	0	0	0	2814
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	33					1
Link Speed (mph)	45			45	45	
Link Distance (ft)	1016			704	1375	
Travel Time (s)	15.4			10.7	20.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.88	0.88
Heavy Vehicles (%)	2%	2%	2%	2%	1%	1%
Adj. Flow (vph)	3972	341	0	0	0	358
Shared Lane Traffic (%)						
Lane Group Flow (vph)	4313	0	0	0	0	358
Turn Type	NA					Prot
Protected Phases	4					3
Permitted Phases						
Minimum Split (s)	17.0					16.0
Total Split (s)	96.0					24.0
Total Split (%)	80.0%					20.0%
Yellow Time (s)	3.5					3.5
All-Red Time (s)	2.5					2.5
Lost Time Adjust (s)	0.0					0.0
Total Lost Time (s)	6.0					6.0
Lead/Lag	Lag					Lead
Lead-Lag Optimize?	Yes					Yes
Act Effct Green (s)	90.0					18.0
Actuated g/C Ratio	0.75					0.15
v/c Ratio	1.14					0.85
Control Delay	74.9					68.7
Queue Delay	0.0					0.0
Total Delay	74.9					68.7
LOS	E					E
Approach Delay	74.9				68.7	
Approach LOS	E				E	
Queue Length 50th (ft)	~1426					155
Queue Length 95th (ft)	m#243					#232
Internal Link Dist (ft)	936			624	1295	
Turn Bay Length (ft)						250
Base Capacity (vph)	3776					422

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Starvation Cap Reductn	1					0
Spillback Cap Reductn	0					0
Storage Cap Reductn	0					0
Reduced v/c Ratio	1.14					0.85

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 4 (3%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 150	
Control Type: Pretimed	
Maximum v/c Ratio: 1.14	
Intersection Signal Delay: 74.4	Intersection LOS: E
Intersection Capacity Utilization 98.6%	ICU Level of Service F
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

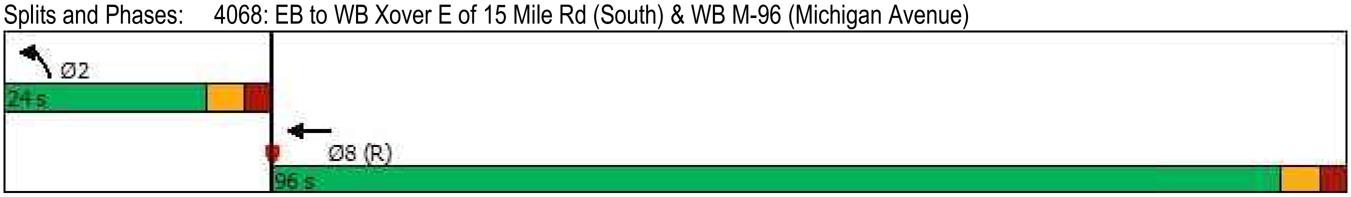
Splits and Phases: 4067: 15 Mile Rd (South) & EB M-96 (Michigan Avenue)



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑↑	↰	
Traffic Volume (vph)	0	0	0	3765	204	0
Future Volume (vph)	0	0	0	3765	204	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	5085	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	5085	1770	0
Right Turn on Red		Yes			Yes	Yes
Satd. Flow (RTOR)						
Link Speed (mph)	45			45	25	
Link Distance (ft)	687			275	111	
Travel Time (s)	10.4			4.2	3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	4092	222	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	4092	222	0
Turn Type				NA	Prot	
Protected Phases				8	2	
Permitted Phases						
Minimum Split (s)				16.0	13.0	
Total Split (s)				96.0	24.0	
Total Split (%)				80.0%	20.0%	
Yellow Time (s)				3.5	3.5	
All-Red Time (s)				2.5	2.5	
Lost Time Adjust (s)				0.0	0.0	
Total Lost Time (s)				6.0	6.0	
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)				90.0	18.0	
Actuated g/C Ratio				0.75	0.15	
v/c Ratio				1.07	0.84	
Control Delay				48.5	44.4	
Queue Delay				11.8	0.0	
Total Delay				60.3	44.4	
LOS				E	D	
Approach Delay				60.3	44.4	
Approach LOS				E	D	
Queue Length 50th (ft)				~1289	165	
Queue Length 95th (ft)				m449	m146	
Internal Link Dist (ft)	607			195	31	
Turn Bay Length (ft)						
Base Capacity (vph)				3813	265	
Starvation Cap Reductn				410	0	
Spillback Cap Reductn				0	0	
Storage Cap Reductn				0	0	
Reduced v/c Ratio				1.20	0.84	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 112 (93%), Referenced to phase 8:WBT, Start of Green	
Natural Cycle: 110	
Control Type: Pretimed	
Maximum v/c Ratio: 1.07	
Intersection Signal Delay: 59.5	Intersection LOS: E
Intersection Capacity Utilization 120.7%	ICU Level of Service H
Analysis Period (min) 15	
~ Volume exceeds capacity, queue is theoretically infinite.	
Queue shown is maximum after two cycles.	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 4068: EB to WB Xover E of 15 Mile Rd (South) & WB M-96 (Michigan Avenue)

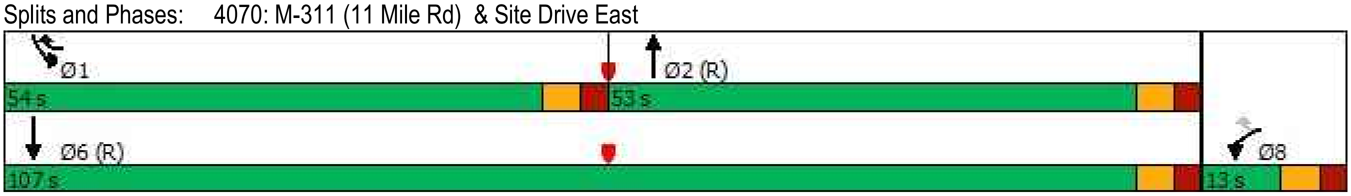


Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	15	364	692	15	364	719
Future Volume (vph)	15	364	692	15	364	719
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	500		0	400	
Storage Lanes	1	1		0	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.88	0.95	0.95	1.00	0.95
Frt		0.850	0.997			
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	2787	3529	0	1770	3539
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1770	2787	3529	0	1770	3539
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		150	2			
Link Speed (mph)	25		55			55
Link Distance (ft)	750		940			974
Travel Time (s)	20.5		11.7			12.1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	16	396	752	16	396	782
Shared Lane Traffic (%)						
Lane Group Flow (vph)	16	396	768	0	396	782
Turn Type	Prot	pm+ov	NA		Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8				
Detector Phase	8	1	2		1	6
Switch Phase						
Minimum Initial (s)	7.0	7.0	10.0		7.0	10.0
Minimum Split (s)	13.0	13.0	16.0		13.0	16.0
Total Split (s)	13.0	54.0	53.0		54.0	107.0
Total Split (%)	10.8%	45.0%	44.2%		45.0%	89.2%
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5
All-Red Time (s)	2.5	2.5	2.5		2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0		6.0	6.0
Lead/Lag		Lead	Lag		Lead	
Lead-Lag Optimize?						
Recall Mode	None	None	C-Max		None	C-Max
Act Effct Green (s)	7.0	38.5	69.5		33.3	112.4
Actuated g/C Ratio	0.06	0.32	0.58		0.28	0.94
v/c Ratio	0.16	0.40	0.38		0.81	0.24
Control Delay	57.3	18.5	9.8		45.9	2.1
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	57.3	18.5	9.8		45.9	2.1
LOS	E	B	A		D	A
Approach Delay	20.0		9.8			16.8
Approach LOS	B		A			B
Queue Length 50th (ft)	12	86	19		297	0
Queue Length 95th (ft)	36	98	352		428	123

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Internal Link Dist (ft)	670		860			894
Turn Bay Length (ft)		500			400	
Base Capacity (vph)	103	1318	2043		708	3315
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	0.16	0.30	0.38		0.56	0.24

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 8 (7%), Referenced to phase 2:NBT and 6:SBT, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.81	
Intersection Signal Delay: 15.1	Intersection LOS: B
Intersection Capacity Utilization 60.6%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 4070: M-311 (11 Mile Rd) & Site Drive East



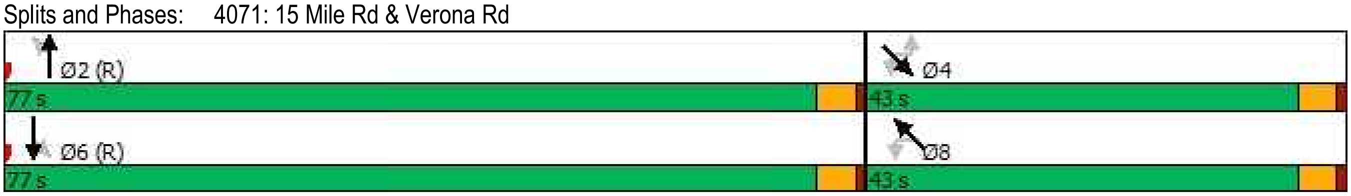
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	652	13	13	5	9	4	0	87	632	6	118	14
Future Volume (vph)	652	13	13	5	9	4	0	87	632	6	118	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		70	0		0
Storage Lanes	0		0	0		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
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
Frt		0.997			0.968				0.850		0.986	
Flt Protected		0.954			0.987						0.998	
Satd. Flow (prot)	0	1789	0	0	1715	0	0	1845	1392	0	1851	0
Flt Permitted		0.712			0.861						0.991	
Satd. Flow (perm)	0	1335	0	0	1496	0	0	1845	1392	0	1838	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1			7				710		5	
Link Speed (mph)		45			55			55			55	
Link Distance (ft)		682			426			745			951	
Travel Time (s)		10.3			5.3			9.2			11.8	
Peak Hour Factor	0.80	0.80	0.80	0.60	0.60	0.60	0.89	0.89	0.89	0.86	0.86	0.86
Heavy Vehicles (%)	1%	1%	1%	0%	0%	25%	0%	3%	16%	1%	1%	1%
Adj. Flow (vph)	815	16	16	8	15	7	0	98	710	7	137	16
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	847	0	0	30	0	0	98	710	0	160	0
Turn Type	Perm	NA		Perm	NA			NA	Perm	Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4		4	8		
Minimum Split (s)	22.5	22.5		22.5	22.5		22.5	22.5	22.5	22.5	22.5	
Total Split (s)	77.0	77.0		77.0	77.0		43.0	43.0	43.0	43.0	43.0	
Total Split (%)	64.2%	64.2%		64.2%	64.2%		35.8%	35.8%	35.8%	35.8%	35.8%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0	0.0		0.0	
Total Lost Time (s)		4.5			4.5			4.5	4.5		4.5	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		72.5			72.5			38.5	38.5		38.5	
Actuated g/C Ratio		0.60			0.60			0.32	0.32		0.32	
v/c Ratio		1.05			0.03			0.17	0.77		0.27	
Control Delay		70.7			8.1			30.2	8.7		30.8	
Queue Delay		0.0			0.0			0.0	0.0		0.0	
Total Delay		70.7			8.1			30.2	8.7		30.8	
LOS		E			A			C	A		C	
Approach Delay		70.7			8.1			11.3			30.8	
Approach LOS		E			A			B			C	
Queue Length 50th (ft)		~716			7			54	0		89	
Queue Length 95th (ft)		#781			12			96	107		139	
Internal Link Dist (ft)		602			346			665			871	
Turn Bay Length (ft)									70			
Base Capacity (vph)		806			906			591	928		593	

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
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		1.05			0.03			0.17	0.77		0.27	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 90	
Control Type: Pretimed	
Maximum v/c Ratio: 1.05	
Intersection Signal Delay: 40.2	Intersection LOS: D
Intersection Capacity Utilization 67.0%	ICU Level of Service C
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 4071: 15 Mile Rd & Verona Rd



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	717	322	17	736	19	320	68	13	10	82	8
Future Volume (vph)	11	717	322	17	736	19	320	68	13	10	82	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	190		70	190		0	140		0	215		0
Storage Lanes	1		1	1		0	2		0	1		0
Taper Length (ft)	115			140			200			165		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.996			0.976			0.987	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	1900	1468	1805	1890	0	3072	1854	0	1687	1753	0
Flt Permitted	0.074			0.074			0.950			0.697		
Satd. Flow (perm)	141	1900	1468	141	1890	0	3072	1854	0	1238	1753	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			93		1			10			3	
Link Speed (mph)		55			55			45			55	
Link Distance (ft)		519			1585			1015			821	
Travel Time (s)		6.4			19.6			15.4			10.2	
Peak Hour Factor	0.79	0.79	0.79	0.87	0.87	0.87	0.87	0.87	0.87	0.66	0.66	0.66
Heavy Vehicles (%)	0%	0%	10%	0%	0%	5%	14%	0%	0%	7%	7%	7%
Adj. Flow (vph)	14	908	408	20	846	22	368	78	15	15	124	12
Shared Lane Traffic (%)												
Lane Group Flow (vph)	14	908	408	20	868	0	368	93	0	15	136	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Perm	NA	
Protected Phases		4			8		5	2			6	
Permitted Phases	4		4	8						6		
Minimum Split (s)	25.0	25.0	25.0	25.0	25.0		16.0	25.0		25.0	25.0	
Total Split (s)	60.0	60.0	60.0	60.0	60.0		35.0	60.0		25.0	25.0	
Total Split (%)	50.0%	50.0%	50.0%	50.0%	50.0%		29.2%	50.0%		20.8%	20.8%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	2.5	2.5	2.5	2.5	2.5		2.5	2.5		2.5	2.5	
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)	6.0	6.0	6.0	6.0	6.0		6.0	6.0		6.0	6.0	
Lead/Lag							Lag			Lead	Lead	
Lead-Lag Optimize?							Yes			Yes	Yes	
Act Effct Green (s)	54.0	54.0	54.0	54.0	54.0		29.0	54.0		19.0	19.0	
Actuated g/C Ratio	0.45	0.45	0.45	0.45	0.45		0.24	0.45		0.16	0.16	
v/c Ratio	0.22	1.06	0.57	0.32	1.02		0.50	0.11		0.08	0.49	
Control Delay	31.2	81.4	22.2	37.9	69.2		41.9	17.5		44.3	51.6	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	31.2	81.4	22.2	37.9	69.2		41.9	17.5		44.3	51.6	
LOS	C	F	C	D	E		D	B		D	D	
Approach Delay		62.7			68.5			37.0			50.9	
Approach LOS		E			E			D			D	
Queue Length 50th (ft)	6	~775	177	10	~713		127	36		10	95	
Queue Length 95th (ft)	22	#812	222	34	#907		169	67		22	113	
Internal Link Dist (ft)		439			1505			935			741	
Turn Bay Length (ft)	190		70	190			140			215		
Base Capacity (vph)	63	855	711	63	851		742	839		196	280	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0	0	0	0		0	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	0.22	1.06	0.57	0.32	1.02		0.50	0.11		0.08	0.49	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green

Natural Cycle: 90

Control Type: Pretimed

Maximum v/c Ratio: 1.06

Intersection Signal Delay: 59.7 Intersection LOS: E

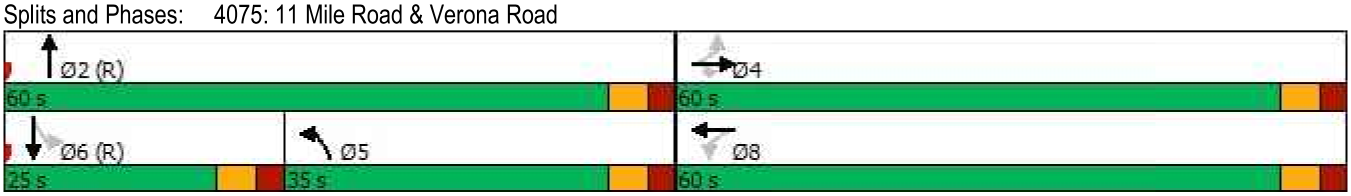
Intersection Capacity Utilization 65.7% ICU Level of Service C

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 4075: 11 Mile Road & Verona Road



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	1122	143	0	231
Future Volume (vph)	0	0	1122	143	0	231
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200			300	245	245
Storage Lanes	0			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.983			0.865
Flt Protected						
Satd. Flow (prot)	0	0	3341	0	0	1644
Flt Permitted						
Satd. Flow (perm)	0	0	3341	0	0	1644
Link Speed (mph)		55	55		25	
Link Distance (ft)		509	395		760	
Travel Time (s)		6.3	4.9		20.7	
Peak Hour Factor	0.88	0.88	0.91	0.91	0.79	0.79
Heavy Vehicles (%)	1%	1%	7%	0%	0%	0%
Adj. Flow (vph)	0	0	1233	157	0	292
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1390	0	0	292
Sign Control		Free	Free		Stop	

Intersection Summary
Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 56.5% ICU Level of Service B
Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations			↑↱			↱
Traffic Volume (vph)	0	0	1108	43	0	157
Future Volume (vph)	0	0	1108	43	0	157
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	175			50	0	0
Storage Lanes	0			0	0	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.994			0.865
Flt Protected						
Satd. Flow (prot)	0	0	3362	0	0	1565
Flt Permitted						
Satd. Flow (perm)	0	0	3362	0	0	1565
Link Speed (mph)		55	55		25	
Link Distance (ft)		395	586		185	
Travel Time (s)		4.9	7.3		5.0	
Peak Hour Factor	0.90	0.90	0.95	0.95	0.70	0.70
Heavy Vehicles (%)	1%	1%	7%	0%	5%	5%
Adj. Flow (vph)	0	0	1166	45	0	224
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1211	0	0	224
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 48.4% ICU Level of Service A
Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	1144	12	0	7
Future Volume (vph)	0	0	1144	12	0	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150			600	0	0
Storage Lanes	0			0	0	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.998			0.865
Flt Protected						
Satd. Flow (prot)	0	0	3369	0	0	1644
Flt Permitted						
Satd. Flow (perm)	0	0	3369	0	0	1644
Link Speed (mph)		55	55		25	
Link Distance (ft)		586	607		1086	
Travel Time (s)		7.3	7.5		29.6	
Peak Hour Factor	0.83	0.83	0.92	0.92	0.60	0.60
Heavy Vehicles (%)	10%	1%	7%	0%	33%	0%
Adj. Flow (vph)	0	0	1243	13	0	12
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1256	0	0	12
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 42.0% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	878	8	0	7
Future Volume (vph)	0	0	878	8	0	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.999			0.865
Flt Protected						
Satd. Flow (prot)	0	0	3536	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	0	3536	0	0	1611
Link Speed (mph)		55	55		55	
Link Distance (ft)		538	1254		1399	
Travel Time (s)		6.7	15.5		17.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	954	9	0	8
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	963	0	0	8
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 34.5%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	0	5	0	694	0	0	659	0
Future Volume (vph)	0	0	0	0	0	5	0	694	0	0	659	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
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
Frt					0.865							
Flt Protected												
Satd. Flow (prot)	0	1863	0	0	1611	0	0	1863	0	0	1863	0
Flt Permitted												
Satd. Flow (perm)	0	1863	0	0	1611	0	0	1863	0	0	1863	0
Link Speed (mph)		45			45			25			45	
Link Distance (ft)		957			1038			516			593	
Travel Time (s)		14.5			15.7			14.1			9.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	0	5	0	754	0	0	716	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	5	0	0	754	0	0	716	0
Sign Control		Stop			Stop			Free			Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 46.5% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBT	EBR	WBL	WBT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	0	0	119	1443	0	0
Future Volume (vph)	0	0	119	1443	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.91	0.91	1.00	1.00
Frt						
Flt Protected				0.996		
Satd. Flow (prot)	0	0	0	5065	0	0
Flt Permitted				0.996		
Satd. Flow (perm)	0	0	0	5065	0	0
Link Speed (mph)	45			45	25	
Link Distance (ft)	183			382	263	
Travel Time (s)	2.8			5.8	7.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	129	1568	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1697	0	0
Sign Control	Free			Free	Stop	

Intersection Summary		
Area Type:	Other	
Control Type: Unsignalized		
Intersection Capacity Utilization 52.9%		ICU Level of Service A
Analysis Period (min) 15		

Lane Group	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	2326	906	0	0	0	0
Future Volume (vph)	2326	906	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950	0.973				
Satd. Flow (prot)	1610	3299	0	0	0	0
Flt Permitted	0.950	0.973				
Satd. Flow (perm)	1610	3299	0	0	0	0
Link Speed (mph)		45	45		25	
Link Distance (ft)		619	209		329	
Travel Time (s)		9.4	3.2		9.0	
Peak Hour Factor	0.86	0.86	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2705	1053	0	0	0	0
Shared Lane Traffic (%)	50%					
Lane Group Flow (vph)	1352	2406	0	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 80.1%	ICU Level of Service D
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	0	928	168	0	0
Future Volume (vph)	0	0	928	168	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	1.00
Frt				0.850		
Flt Protected						
Satd. Flow (prot)	0	0	3539	1583	0	0
Flt Permitted						
Satd. Flow (perm)	0	0	3539	1583	0	0
Link Speed (mph)		45	45		30	
Link Distance (ft)		213	315		137	
Travel Time (s)		3.2	4.8		3.1	
Peak Hour Factor	0.92	0.92	0.91	0.91	0.92	0.92
Adj. Flow (vph)	0	0	1020	185	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1020	185	0	0
Sign Control		Stop	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 59.0%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	1028	0	0	159	0
Future Volume (vph)	0	1028	0	0	159	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3505	0	0	1787	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3505	0	0	1787	0
Link Speed (mph)		45	45		25	
Link Distance (ft)		309	168		108	
Travel Time (s)		4.7	2.5		2.9	
Peak Hour Factor	0.86	0.86	0.92	0.92	0.87	0.87
Heavy Vehicles (%)	3%	3%	2%	2%	1%	1%
Adj. Flow (vph)	0	1195	0	0	183	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1195	0	0	183	0
Sign Control		Free	Free		Stop	

Intersection Summary		
Area Type:	Other	
Control Type: Unsignalized		
Intersection Capacity Utilization 56.3%		ICU Level of Service B
Analysis Period (min) 15		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑↑	↰	
Traffic Volume (vph)	0	0	0	1041	182	0
Future Volume (vph)	0	0	0	1041	182	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	5036	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	5036	1770	0
Link Speed (mph)	45			45	25	
Link Distance (ft)	134			152	111	
Travel Time (s)	2.0			2.3	3.0	
Peak Hour Factor	0.92	0.92	0.89	0.89	0.94	0.94
Heavy Vehicles (%)	2%	2%	3%	3%	2%	2%
Adj. Flow (vph)	0	0	0	1170	194	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1170	194	0
Sign Control	Free			Free	Stop	

Intersection Summary		
Area Type:	Other	
Control Type: Unsignalized		
Intersection Capacity Utilization 40.2%		ICU Level of Service A
Analysis Period (min) 15		

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	1006	0	0	80	0
Future Volume (vph)	0	1006	0	0	80	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3574	0	0	1787	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3574	0	0	1787	0
Link Speed (mph)		45	45		25	
Link Distance (ft)		222	290		102	
Travel Time (s)		3.4	4.4		2.8	
Peak Hour Factor	0.95	0.95	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	1%	1%	2%	2%	1%	1%
Adj. Flow (vph)	0	1059	0	0	87	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1059	0	0	87	0
Sign Control		Free	Free		Stop	

Intersection Summary		
Area Type:	Other	
Control Type: Unsignalized		
Intersection Capacity Utilization 70.9%		ICU Level of Service C
Analysis Period (min) 15		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	1060	65	0
Future Volume (vph)	0	0	0	1060	65	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	30			45	25	
Link Distance (ft)	114			1105	101	
Travel Time (s)	2.6			16.7	2.8	
Peak Hour Factor	0.92	0.92	0.88	0.88	0.94	0.94
Adj. Flow (vph)	0	0	0	1205	69	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1205	69	0
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 66.8% ICU Level of Service C

Analysis Period (min) 15

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	114	318	31	4	253	12	14	37	3	13	81	96
Future Volume (vph)	114	318	31	4	253	12	14	37	3	13	81	96
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	80		0	80		0	110		0	115		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	180			180			140			175		
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
Frt		0.987			0.993			0.988			0.919	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	1875	0	1770	1850	0	1703	1771	0	1770	1712	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1805	1875	0	1770	1850	0	1703	1771	0	1770	1712	0
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		1365			1319			666			571	
Travel Time (s)		20.7			20.0			10.1			8.7	
Peak Hour Factor	0.94	0.94	0.94	0.88	0.88	0.88	0.78	0.78	0.78	0.91	0.91	0.91
Heavy Vehicles (%)	0%	0%	0%	2%	2%	2%	6%	6%	6%	2%	2%	2%
Adj. Flow (vph)	121	338	33	5	288	14	18	47	4	14	89	105
Shared Lane Traffic (%)												
Lane Group Flow (vph)	121	371	0	5	302	0	18	51	0	14	194	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 43.6%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL2	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	SWL	SWR
Lane Configurations											
Traffic Volume (vph)	55	0	112	0	270	79	81	385	0	0	0
Future Volume (vph)	55	0	112	0	270	79	81	385	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	240	0		0	105		0	0	0
Storage Lanes		1	1	0		0	1		0	0	0
Taper Length (ft)		25		25			70			25	
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
Frt			0.850		0.969						
Flt Protected	0.950						0.950				
Satd. Flow (prot)	1687	0	1615	0	1805	0	1752	1845	0	0	0
Flt Permitted	0.950						0.950				
Satd. Flow (perm)	1687	0	1615	0	1805	0	1752	1845	0	0	0
Link Speed (mph)		25			45			45		25	
Link Distance (ft)		894			1167			685		897	
Travel Time (s)		24.4			17.7			10.4		24.5	
Peak Hour Factor	0.93	0.93	0.93	0.91	0.91	0.91	0.95	0.95	0.95	0.92	0.92
Heavy Vehicles (%)	7%	0%	0%	2%	2%	2%	3%	3%	3%	2%	2%
Adj. Flow (vph)	59	0	120	0	297	87	85	405	0	0	0
Shared Lane Traffic (%)											
Lane Group Flow (vph)	59	0	120	0	384	0	85	405	0	0	0
Sign Control		Stop			Free			Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 33.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	WBL2	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NER
Lane Configurations											
Traffic Volume (vph)	93	0	84	61	264	0	0	373	50	0	0
Future Volume (vph)	93	0	84	61	264	0	0	373	50	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	185	165		0	0		0	0	0
Storage Lanes		1	1	1		0	0		0	0	0
Taper Length (ft)		25		110			25			25	
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
Frt			0.850					0.984			
Flt Protected	0.950			0.950							
Satd. Flow (prot)	1805	0	1455	1752	1845	0	0	1815	0	0	0
Flt Permitted	0.950			0.950							
Satd. Flow (perm)	1805	0	1455	1752	1845	0	0	1815	0	0	0
Link Speed (mph)		25			45			45		25	
Link Distance (ft)		613			685			608		913	
Travel Time (s)		16.7			10.4			9.2		24.9	
Peak Hour Factor	0.81	0.81	0.81	0.87	0.87	0.87	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	11%	3%	3%	3%	3%	3%	3%	2%	2%
Adj. Flow (vph)	115	0	104	70	303	0	0	405	54	0	0
Shared Lane Traffic (%)											
Lane Group Flow (vph)	115	0	104	70	303	0	0	459	0	0	0
Sign Control		Stop			Free			Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 33.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	184	140	0	396	272	0
Future Volume (vph)	184	140	0	396	272	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.850				
Flt Protected	0.950					
Satd. Flow (prot)	1543	1553	0	3505	3374	0
Flt Permitted	0.950					
Satd. Flow (perm)	1543	1553	0	3505	3374	0
Link Speed (mph)	25			55	55	
Link Distance (ft)	119			105	620	
Travel Time (s)	3.2			1.3	7.7	
Peak Hour Factor	0.93	0.93	0.82	0.82	0.92	0.92
Heavy Vehicles (%)	17%	4%	0%	3%	7%	0%
Adj. Flow (vph)	198	151	0	483	296	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	198	151	0	483	296	0
Sign Control	Stop			Free	Free	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 27.8% ICU Level of Service A
Analysis Period (min) 15

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	396	61	35	377
Future Volume (vph)	0	0	396	61	35	377
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		340	0	
Storage Lanes	0	0		1	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	1.00	0.95	0.95
Frt				0.850		
Flt Protected						0.996
Satd. Flow (prot)	0	0	3505	1568	0	3383
Flt Permitted						0.996
Satd. Flow (perm)	0	0	3505	1568	0	3383
Link Speed (mph)	25		55			55
Link Distance (ft)	664		1109			105
Travel Time (s)	18.1		13.7			1.3
Peak Hour Factor	0.92	0.92	0.82	0.82	0.92	0.92
Heavy Vehicles (%)	2%	2%	3%	3%	20%	5%
Adj. Flow (vph)	0	0	483	74	38	410
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	483	74	0	448
Sign Control	Stop		Free			Free

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 29.1% ICU Level of Service A
Analysis Period (min) 15

Lane Group	WBL2	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NER
Lane Configurations											
Traffic Volume (vph)	52	0	60	0	352	0	0	220	86	0	0
Future Volume (vph)	52	0	60	0	352	0	0	220	86	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	205	0		0	0		135	0	0
Storage Lanes		1	1	0		0	0		1	0	0
Taper Length (ft)		25		25			25			25	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00
Frt			0.850						0.850		
Flt Protected	0.950										
Satd. Flow (prot)	1736	0	1380	0	3438	0	0	3343	1272	0	0
Flt Permitted	0.950										
Satd. Flow (perm)	1736	0	1380	0	3438	0	0	3343	1272	0	0
Link Speed (mph)		25			55			55		25	
Link Distance (ft)		296			230			1367		908	
Travel Time (s)		8.1			2.9			16.9		24.8	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.95	0.95	0.95	0.92	0.92
Heavy Vehicles (%)	4%	0%	17%	0%	5%	0%	0%	8%	27%	2%	2%
Adj. Flow (vph)	59	0	68	0	400	0	0	232	91	0	0
Shared Lane Traffic (%)											
Lane Group Flow (vph)	59	0	68	0	400	0	0	232	91	0	0
Sign Control		Stop			Free			Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 20.4% ICU Level of Service A

Analysis Period (min) 15

Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	33	80	0	270	154	0
Future Volume (vph)	33	80	0	270	154	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				
Flt Protected	0.950					
Satd. Flow (prot)	1752	1077	0	1624	1696	0
Flt Permitted	0.950					
Satd. Flow (perm)	1752	1077	0	1624	1696	0
Link Speed (mph)	25			45	45	
Link Distance (ft)	189			1063	114	
Travel Time (s)	5.2			16.1	1.7	
Peak Hour Factor	0.74	0.74	0.93	0.93	0.89	0.89
Heavy Vehicles (%)	3%	50%	17%	17%	12%	12%
Adj. Flow (vph)	45	108	0	290	173	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	45	108	0	290	173	0
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 24.2%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	0	0	182	121	3	154
Future Volume (vph)	0	0	182	121	3	154
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.850		
Flt Protected						0.999
Satd. Flow (prot)	0	0	1624	1380	0	1689
Flt Permitted						0.999
Satd. Flow (perm)	0	0	1624	1380	0	1689
Link Speed (mph)	25		45			45
Link Distance (ft)	105		114			727
Travel Time (s)	2.9		1.7			11.0
Peak Hour Factor	0.92	0.92	0.93	0.93	0.89	0.89
Heavy Vehicles (%)	2%	2%	17%	17%	33%	12%
Adj. Flow (vph)	0	0	196	130	3	173
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	196	130	0	176
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 22.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBR	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	6	97	58	124	60	11
Future Volume (vph)	6	97	58	124	60	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	195	0	0			90
Storage Lanes	1	1	0			1
Taper Length (ft)	135		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				0.850
Flt Protected	0.950			0.984		
Satd. Flow (prot)	1570	1404	0	1615	1776	1509
Flt Permitted	0.950			0.984		
Satd. Flow (perm)	1570	1404	0	1615	1776	1509
Link Speed (mph)	25			45	45	
Link Distance (ft)	597			727	1165	
Travel Time (s)	16.3			11.0	17.7	
Peak Hour Factor	0.83	0.83	0.91	0.91	0.78	0.78
Heavy Vehicles (%)	15%	15%	43%	3%	7%	7%
Adj. Flow (vph)	7	117	64	136	77	14
Shared Lane Traffic (%)						
Lane Group Flow (vph)	7	117	0	200	77	14
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 26.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	18	1544	18	0
Future Volume (vph)	0	0	18	1544	18	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.91	0.91	1.00	1.00
Frt						
Flt Protected				0.999	0.950	
Satd. Flow (prot)	0	0	0	5080	1770	0
Flt Permitted				0.999	0.950	
Satd. Flow (perm)	0	0	0	5080	1770	0
Link Speed (mph)	45			45	25	
Link Distance (ft)	382			217	236	
Travel Time (s)	5.8			3.3	6.4	
Peak Hour Factor	0.90	0.90	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	20	1678	20	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1698	20	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 40.2%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑					↱
Traffic Volume (vph)	1187	0	0	0	0	30
Future Volume (vph)	1187	0	0	0	0	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	1.00	1.00	1.00	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	3539	0	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	3539	0	0	0	0	1611
Link Speed (mph)	45			45	25	
Link Distance (ft)	168			432	770	
Travel Time (s)	2.5			6.5	21.0	
Peak Hour Factor	0.87	0.87	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1364	0	0	0	0	33
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1364	0	0	0	0	33
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 50.6%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	1223	0	0	32
Future Volume (vph)	0	0	1223	0	0	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.91	1.00	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	0	0	5036	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	0	5036	0	0	1611
Link Speed (mph)		45	45		25	
Link Distance (ft)		494	134		230	
Travel Time (s)		7.5	2.0		6.3	
Peak Hour Factor	0.92	0.92	0.89	0.89	0.92	0.92
Heavy Vehicles (%)	2%	2%	3%	3%	2%	2%
Adj. Flow (vph)	0	0	1374	0	0	35
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1374	0	0	35
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 43.5%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations			↑↱			
Traffic Volume (vph)	0	0	1075	50	0	0
Future Volume (vph)	0	0	1075	50	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.993			
Flt Protected						
Satd. Flow (prot)	0	0	3514	0	0	0
Flt Permitted						
Satd. Flow (perm)	0	0	3514	0	0	0
Link Speed (mph)		30	45		25	
Link Distance (ft)		176	114		201	
Travel Time (s)		4.0	1.7		5.5	
Peak Hour Factor	0.92	0.92	0.88	0.88	0.92	0.92
Adj. Flow (vph)	0	0	1222	57	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1279	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 39.8%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	NBT	NBR	SBL	SBT	SWL	SWR
Lane Configurations	↑↱			↑↑		
Traffic Volume (vph)	352	228	0	272	0	0
Future Volume (vph)	352	228	0	272	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	1.00	0.95	1.00	1.00
Frt	0.941					
Flt Protected						
Satd. Flow (prot)	3164	0	0	3343	0	0
Flt Permitted						
Satd. Flow (perm)	3164	0	0	3343	0	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	620			230	1088	
Travel Time (s)	7.7			2.9	29.7	
Peak Hour Factor	0.88	0.88	0.95	0.95	0.92	0.92
Heavy Vehicles (%)	5%	11%	8%	8%	2%	2%
Adj. Flow (vph)	400	259	0	286	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	659	0	0	286	0	0
Sign Control	Free			Free	Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 20.4% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	32	1043	0	0	0	0	0	48	29
Future Volume (vph)	0	0	0	32	1043	0	0	0	0	0	48	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	165		0	0		0	0		0
Storage Lanes	0		0	1		0	0		0	0		0
Taper Length (ft)	25			85			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt											0.949	
Flt Protected				0.950								
Satd. Flow (prot)	0	0	0	1770	3539	0	0	0	0	0	1785	0
Flt Permitted				0.950								
Satd. Flow (perm)	0	0	0	1770	3539	0	0	0	0	0	1785	0
Link Speed (mph)		30			45			30			30	
Link Distance (ft)		212			176			102			496	
Travel Time (s)		4.8			2.7			2.3			11.3	
Peak Hour Factor	0.92	0.92	0.92	0.86	0.86	0.86	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	1%	1%	1%
Adj. Flow (vph)	0	0	0	37	1213	0	0	0	0	0	52	32
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	37	1213	0	0	0	0	0	84	0
Sign Control		Free			Free			Yield			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 39.8%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	2039	0	0	0	2072
Future Volume (vph)	0	2039	0	0	0	2072
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	0.88
Frt						0.850
Flt Protected						
Satd. Flow (prot)	0	3539	0	0	0	2787
Flt Permitted						
Satd. Flow (perm)	0	3539	0	0	0	2787
Link Speed (mph)		55	55		55	
Link Distance (ft)		434	1242		1194	
Travel Time (s)		5.4	15.4		14.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	2216	0	0	0	2252
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	2216	0	0	0	2252
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 75.8%	ICU Level of Service D
Analysis Period (min) 15	

Lane Group	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	0	119	0	0	645
Future Volume (vph)	0	0	119	0	0	645
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	0	0	1863	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	0	1863	0	0	1611
Link Speed (mph)		25	25		30	
Link Distance (ft)		1199	263		174	
Travel Time (s)		32.7	7.2		4.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.90	0.90
Adj. Flow (vph)	0	0	129	0	0	717
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	129	0	0	717
Sign Control		Free	Yield		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 52.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	WBL	WBR	NBL	NBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	168	2326	0	0	0
Future Volume (vph)	0	168	2326	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.97	1.00	1.00	1.00
Frt		0.865				
Flt Protected			0.950			
Satd. Flow (prot)	0	1627	3303	0	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	1627	3303	0	0	0
Link Speed (mph)	45		45		45	
Link Distance (ft)	255		329		551	
Travel Time (s)	3.9		5.0		8.3	
Peak Hour Factor	0.91	0.91	0.93	0.93	0.92	0.92
Heavy Vehicles (%)	1%	1%	6%	6%	2%	2%
Adj. Flow (vph)	0	185	2501	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	185	2501	0	0	0
Sign Control	Yield		Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 78.9%	ICU Level of Service D
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	159	1096	0	0
Future Volume (vph)	0	0	159	1096	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	450		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			85		25	
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	5085	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	5085	0	0
Link Speed (mph)	45			45	30	
Link Distance (ft)	315			494	108	
Travel Time (s)	4.8			7.5	2.5	
Peak Hour Factor	0.92	0.92	0.87	0.87	0.92	0.92
Adj. Flow (vph)	0	0	183	1260	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	183	1260	0	0
Sign Control	Free			Free	Stop	

Intersection Summary		
Area Type:	Other	
Control Type: Unsignalized		
Intersection Capacity Utilization 44.2%		ICU Level of Service A
Analysis Period (min) 15		

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	182	1035	0	0	0	0
Future Volume (vph)	182	1035	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	275			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	110				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		45	45		30	
Link Distance (ft)		432	161		111	
Travel Time (s)		6.5	2.4		2.5	
Peak Hour Factor	0.94	0.94	0.92	0.92	0.92	0.92
Adj. Flow (vph)	194	1101	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	194	1101	0	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 55.4%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	1556	0	0	0	1583
Future Volume (vph)	0	1556	0	0	0	1583
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	0.76
Frt						0.850
Flt Protected						
Satd. Flow (prot)	0	3539	0	0	0	3610
Flt Permitted						
Satd. Flow (perm)	0	3539	0	0	0	3610
Link Speed (mph)		55	55		45	
Link Distance (ft)		1093	655		773	
Travel Time (s)		13.5	8.1		11.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1691	0	0	0	1721
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1691	0	0	0	1721
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 46.3%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	65	1021	0	0	0	0
Future Volume (vph)	65	1021	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	180			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	75				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		45	45		30	
Link Distance (ft)		290	1089		101	
Travel Time (s)		4.4	16.5		2.3	
Peak Hour Factor	0.94	0.94	0.92	0.92	0.92	0.92
Adj. Flow (vph)	69	1086	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	69	1086	0	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 64.2%	ICU Level of Service C
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	3120	645	0	0	0	0
Future Volume (vph)	3120	645	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	1.00	1.00	1.00	1.00
Frt	0.974					
Flt Protected						
Satd. Flow (prot)	4953	0	0	0	0	0
Flt Permitted						
Satd. Flow (perm)	4953	0	0	0	0	0
Link Speed (mph)	45			45	30	
Link Distance (ft)	311			156	174	
Travel Time (s)	4.7			2.4	4.0	
Peak Hour Factor	0.90	0.90	0.92	0.92	0.92	0.92
Adj. Flow (vph)	3467	717	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	4184	0	0	0	0	0
Sign Control	Free			Stop	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 98.2%	ICU Level of Service F
Analysis Period (min) 15	

Lane Group	NBT	NBR	SBL	SBT	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	0	0	112	2322	0	0
Future Volume (vph)	0	0	112	2322	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	500		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			100		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	3539	0	0
Link Speed (mph)	30			25	25	
Link Distance (ft)	266			1471	301	
Travel Time (s)	6.0			40.1	8.2	
Peak Hour Factor	0.92	0.92	0.75	0.75	0.92	0.92
Adj. Flow (vph)	0	0	149	3096	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	149	3096	0	0
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 67.5%	ICU Level of Service C
Analysis Period (min) 15	

Lane Group	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	634	122	0	0	0	0
Future Volume (vph)	634	122	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected		0.960				
Satd. Flow (prot)	0	1788	0	0	0	0
Flt Permitted		0.960				
Satd. Flow (perm)	0	1788	0	0	0	0
Link Speed (mph)		25	30		25	
Link Distance (ft)		1207	315		252	
Travel Time (s)		32.9	7.2		6.9	
Peak Hour Factor	0.75	0.75	0.92	0.92	0.92	0.92
Adj. Flow (vph)	845	163	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1008	0	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 56.4%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	103	0	69	0	0
Future Volume (vph)	0	103	0	69	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.865		
Flt Protected						
Satd. Flow (prot)	0	1652	0	1191	0	0
Flt Permitted						
Satd. Flow (perm)	0	1652	0	1191	0	0
Link Speed (mph)		25	25		25	
Link Distance (ft)		995	597		1154	
Travel Time (s)		27.1	16.3		31.5	
Peak Hour Factor	0.83	0.83	0.89	0.89	0.92	0.92
Heavy Vehicles (%)	15%	15%	38%	38%	2%	2%
Adj. Flow (vph)	0	124	0	78	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	124	0	78	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 8.8%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	53	4533	0	0
Future Volume (vph)	0	0	53	4533	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	250		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	5085	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	5085	0	0
Link Speed (mph)	45			45	25	
Link Distance (ft)	894			534	137	
Travel Time (s)	13.5			8.1	3.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	58	4927	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	58	4927	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 83.0%	ICU Level of Service E
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	4566	0	0	53	0
Future Volume (vph)	0	4566	0	0	53	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.86	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	6408	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	6408	0	0	1770	0
Link Speed (mph)		45	45		25	
Link Distance (ft)		744	1191		137	
Travel Time (s)		11.3	18.0		3.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	4963	0	0	58	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	4963	0	0	58	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 160.4%	ICU Level of Service H
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	771	3848	0	0	0	0
Future Volume (vph)	771	3848	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	400			0	0	0
Storage Lanes	2			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	0.97	0.86	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	3433	6408	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	3433	6408	0	0	0	0
Link Speed (mph)		45	45		25	
Link Distance (ft)		1191	262		113	
Travel Time (s)		18.0	4.0		3.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	838	4183	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	838	4183	0	0	0	0
Sign Control		Free	Stop		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 138.5%	ICU Level of Service H
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	119	3850	0	0
Future Volume (vph)	0	0	119	3850	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	250		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	5085	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	5085	0	0
Link Speed (mph)	45			45	25	
Link Distance (ft)	254			1016	123	
Travel Time (s)	3.8			15.4	3.4	
Peak Hour Factor	0.92	0.92	0.90	0.87	0.92	0.92
Adj. Flow (vph)	0	0	132	4425	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	132	4425	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 163.7% ICU Level of Service H

Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	204	3765	0	0	0	0
Future Volume (vph)	204	3765	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.91	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	5085	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	5085	0	0	0	0
Link Speed (mph)		45	45		30	
Link Distance (ft)		704	311		111	
Travel Time (s)		10.7	4.7		2.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	222	4092	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	222	4092	0	0	0	0
Sign Control		Free	Stop		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 153.8%	ICU Level of Service H
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑	↰	
Traffic Volume (vph)	0	0	0	1319	27	0
Future Volume (vph)	0	0	0	1319	27	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	30	
Link Distance (ft)	583			574	107	
Travel Time (s)	7.2			7.1	2.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	1434	29	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1434	29	0
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 76.1% ICU Level of Service D

Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	27	1193	0	0	0	0
Future Volume (vph)	27	1193	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		30	
Link Distance (ft)		1122	576		107	
Travel Time (s)		13.9	7.1		2.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	29	1297	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	29	1297	0	0	0	0
Sign Control		Free	Stop		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 76.1%	ICU Level of Service D
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	1310	36	0	54
Future Volume (vph)	0	0	1310	36	0	54
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.996			0.865
Flt Protected						
Satd. Flow (prot)	0	0	3525	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	0	3525	0	0	1611
Link Speed (mph)		55	55		30	
Link Distance (ft)		590	583		121	
Travel Time (s)		7.3	7.2		2.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	1424	39	0	59
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1463	0	0	59
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 47.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	168	1196	0	0
Future Volume (vph)	0	0	168	1196	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	250		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	3539	0	0
Link Speed (mph)	55			55	30	
Link Distance (ft)	405			590	104	
Travel Time (s)	5.0			7.3	2.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	183	1300	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	183	1300	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 44.6%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	1052	0	0	168	0
Future Volume (vph)	0	1052	0	0	168	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	1770	0
Link Speed (mph)		55	55		30	
Link Distance (ft)		316	1122		104	
Travel Time (s)		3.9	13.9		2.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1143	0	0	183	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1143	0	0	183	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 68.8%	ICU Level of Service C
Analysis Period (min) 15	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	280	2221	0	0
Future Volume (vph)	0	0	280	2221	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	250			0
Storage Lanes	0	0	2			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	0.97	0.91	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	3433	5085	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	3433	5085	0	0
Link Speed (mph)	45			55	30	
Link Distance (ft)	105			493	555	
Travel Time (s)	1.6			6.1	12.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	304	2414	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	304	2414	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 91.9%	ICU Level of Service F
Analysis Period (min) 15	

Lane Group	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	1593	628	0	0	0	0
Future Volume (vph)	1593	628	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.94	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	4990	1863	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	4990	1863	0	0	0	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		555	271		108	
Travel Time (s)		12.6	6.2		2.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1732	683	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1732	683	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 71.4%	ICU Level of Service C
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	73	0	0	0	0	628
Future Volume (vph)	73	0	0	0	0	628
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	1863	0	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	1863	0	0	0	0	1611
Link Speed (mph)	25			30	25	
Link Distance (ft)	287			1072	271	
Travel Time (s)	7.8			24.4	7.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	79	0	0	0	0	683
Shared Lane Traffic (%)						
Lane Group Flow (vph)	79	0	0	0	0	683
Sign Control	Yield			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 49.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	NBT	NBR	SBL	SBT	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	0	0	73	1555	0	0
Future Volume (vph)	0	0	73	1555	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.91	0.91	1.00	1.00
Frt						
Flt Protected				0.998		
Satd. Flow (prot)	0	0	0	5068	0	0
Flt Permitted				0.998		
Satd. Flow (perm)	0	0	0	5068	0	0
Link Speed (mph)	45			45	45	
Link Distance (ft)	194			406	287	
Travel Time (s)	2.9			6.2	4.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	5%	2%	2%	2%
Adj. Flow (vph)	0	0	79	1690	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1769	0	0
Sign Control	Free			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 49.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	104	549	0	0	0	0
Future Volume (vph)	104	549	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1719	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1719	3539	0	0	0	0
Link Speed (mph)		25	25		25	
Link Distance (ft)		879	346		271	
Travel Time (s)		24.0	9.4		7.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	2%	2%	2%	2%	2%
Adj. Flow (vph)	113	597	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	113	597	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary		
Area Type: Other		
Control Type: Unsignalized		
Intersection Capacity Utilization 52.6%		ICU Level of Service A
Analysis Period (min) 15		

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	518	0	0	81
Future Volume (vph)	0	0	518	0	0	81
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	0	0	1863	0	0	1565
Flt Permitted						
Satd. Flow (perm)	0	0	1863	0	0	1565
Link Speed (mph)		30	45		45	
Link Distance (ft)		874	182		254	
Travel Time (s)		19.9	2.8		3.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	5%
Adj. Flow (vph)	0	0	563	0	0	88
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	563	0	0	88
Sign Control		Free	Free		Yield	

Intersection Summary		
Area Type:	Other	
Control Type: Unsignalized		
Intersection Capacity Utilization 54.8%		ICU Level of Service A
Analysis Period (min) 15		

Lane Group	EBL	EBR	SBL	SBR	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	0	0	0	0	518	1179
Future Volume (vph)	0	0	0	0	518	1179
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.91
Frt					0.972	0.850
Flt Protected					0.961	
Satd. Flow (prot)	0	0	0	0	1731	2799
Flt Permitted					0.961	
Satd. Flow (perm)	0	0	0	0	1731	2799
Link Speed (mph)	30		30		30	
Link Distance (ft)	182		207		337	
Travel Time (s)	4.1		4.7		7.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	5%
Adj. Flow (vph)	0	0	0	0	563	1282
Shared Lane Traffic (%)						10%
Lane Group Flow (vph)	0	0	0	0	691	1154
Sign Control	Stop		Free		Free	

Intersection Summary		
Area Type:	Other	
Control Type: Unsignalized		
Intersection Capacity Utilization 54.8%		ICU Level of Service A
Analysis Period (min) 15		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1060	81	0	0	0	0
Future Volume (vph)	1060	81	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00
Frt	0.989					
Flt Protected						
Satd. Flow (prot)	3400	0	0	0	0	0
Flt Permitted						
Satd. Flow (perm)	3400	0	0	0	0	0
Link Speed (mph)	30			45	25	
Link Distance (ft)	306			190	254	
Travel Time (s)	7.0			2.9	6.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	5%	2%	2%	2%	2%
Adj. Flow (vph)	1152	88	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1240	0	0	0	0	0
Sign Control	Free			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 62.1%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	0	568	151	0	0
Future Volume (vph)	0	0	568	151	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			250	0	0
Storage Lanes	0			1	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	1.00
Frt				0.850		
Flt Protected						
Satd. Flow (prot)	0	0	3539	1538	0	0
Flt Permitted						
Satd. Flow (perm)	0	0	3539	1538	0	0
Link Speed (mph)		25	25		25	
Link Distance (ft)		241	1465		317	
Travel Time (s)		6.6	40.0		8.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	5%	2%	2%
Adj. Flow (vph)	0	0	617	164	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	617	164	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 20.7%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑↑	↰	
Traffic Volume (vph)	0	0	0	1330	64	0
Future Volume (vph)	0	0	0	1330	64	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	4940	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	4940	1770	0
Link Speed (mph)	55			30	25	
Link Distance (ft)	598			415	105	
Travel Time (s)	7.4			9.4	2.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	5%	2%	2%
Adj. Flow (vph)	0	0	0	1446	70	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1446	70	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 63.9%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	64	1141	0	0	0	0
Future Volume (vph)	64	1141	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3438	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3438	0	0	0	0
Link Speed (mph)		55	30		25	
Link Distance (ft)		597	306		105	
Travel Time (s)		7.4	7.0		2.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	5%	2%	2%	2%	2%
Adj. Flow (vph)	70	1240	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	70	1240	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 63.9%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑	↰	
Traffic Volume (vph)	0	0	0	880	0	0
Future Volume (vph)	0	0	0	880	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	0	0	0	3539	1863	0
Flt Permitted						
Satd. Flow (perm)	0	0	0	3539	1863	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	586			210	99	
Travel Time (s)	7.3			2.6	2.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	957	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	957	0	0
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 34.3% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	771	0	0	0	0
Future Volume (vph)	0	771	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	1863	3539	0	0	0	0
Flt Permitted						
Satd. Flow (perm)	1863	3539	0	0	0	0
Link Speed (mph)		55	55		25	
Link Distance (ft)		589	212		99	
Travel Time (s)		7.3	2.6		2.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	838	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	838	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 34.3%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	880	0	0
Future Volume (vph)	0	0	0	880	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	0	0	0	3539	0	0
Flt Permitted						
Satd. Flow (perm)	0	0	0	3539	0	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	723			586	81	
Travel Time (s)	9.0			7.3	2.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	957	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	957	0	0
Sign Control	Free			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 34.3%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	771	0	0	0	0	0	0	0	0	0	0
Future Volume (vph)	0	771	0	0	0	0	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	3539	0	0	0	0	0	0	1863	0	1863	0
Flt Permitted												
Satd. Flow (perm)	0	3539	0	0	0	0	0	0	1863	0	1863	0
Link Speed (mph)		55			55			25			25	
Link Distance (ft)		719			589			84			81	
Travel Time (s)		8.9			7.3			2.3			2.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	838	0	0	0	0	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	838	0	0	0	0	0	0	0	0	0	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 31.3% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBT	EBR	WBL	WBT	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	0	771	0	880	0	0
Future Volume (vph)	0	771	0	880	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.88	1.00	0.95	1.00	1.00
Frt		0.850				
Flt Protected						
Satd. Flow (prot)	0	2787	0	3539	0	0
Flt Permitted						
Satd. Flow (perm)	0	2787	0	3539	0	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	997			723	719	
Travel Time (s)	12.4			9.0	19.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	838	0	957	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	838	0	957	0	0
Sign Control	Free			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 30.3%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	286	907	0	0	0	0
Future Volume (vph)	286	907	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		55	
Link Distance (ft)		2077	2379		116	
Travel Time (s)		25.7	29.5		1.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	311	986	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	311	986	0	0	0	0
Sign Control		Free	Stop		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 55.8%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NEL	NER
Lane Configurations				↑↑	↰	
Traffic Volume (vph)	0	0	0	870	286	0
Future Volume (vph)	0	0	0	870	286	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	607			2382	116	
Travel Time (s)	7.5			29.5	3.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	946	311	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	946	311	0
Sign Control	Free			Free	Stop	

Intersection Summary		
Area Type:	Other	
Control Type: Unsignalized		
Intersection Capacity Utilization 62.5%		ICU Level of Service B
Analysis Period (min) 15		

Lane Group	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	0	0	14	870	0	0
Future Volume (vph)	0	0	14	870	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	250		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	3539	0	0
Link Speed (mph)	55			55	55	
Link Distance (ft)	2382			560	108	
Travel Time (s)	29.5			6.9	1.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	15	946	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	15	946	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 34.2%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	0	907	0	0	14	0
Future Volume (vph)	0	907	0	0	14	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	1770	0
Link Speed (mph)		55	55		25	
Link Distance (ft)		2379	608		108	
Travel Time (s)		29.5	7.5		2.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	986	0	0	15	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	986	0	0	15	0
Sign Control		Free	Free		Stop	

Intersection Summary		
Area Type:	Other	
Control Type: Unsignalized		
Intersection Capacity Utilization 55.8%		ICU Level of Service B
Analysis Period (min) 15		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	882	39	0	0	0	32
Future Volume (vph)	882	39	0	0	0	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		600	600		0	0
Storage Lanes		0	0		0	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00
Frt	0.994					0.865
Flt Protected						
Satd. Flow (prot)	3518	0	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	3518	0	0	0	0	1611
Link Speed (mph)	55			55	45	
Link Distance (ft)	608			628	1089	
Travel Time (s)	7.5			7.8	16.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	959	42	0	0	0	35
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1001	0	0	0	0	35
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 35.6%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑	↰	
Traffic Volume (vph)	0	0	0	875	9	0
Future Volume (vph)	0	0	0	875	9	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	645			3831	112	
Travel Time (s)	8.0			47.5	3.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	951	10	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	951	10	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 52.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	9	905	0	0	0	0
Future Volume (vph)	9	905	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		55	
Link Distance (ft)		628	3825		112	
Travel Time (s)		7.8	47.4		1.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	10	984	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	10	984	0	0	0	0
Sign Control		Free	Stop		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 55.9%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	10	875	0	0
Future Volume (vph)	0	0	10	875	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	250		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	3539	0	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	3831			538	97	
Travel Time (s)	47.5			6.7	2.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	11	951	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	11	951	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 35.0%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	905	0	0	10	0
Future Volume (vph)	0	905	0	0	10	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	1770	0
Link Speed (mph)		55	55		25	
Link Distance (ft)		3825	591		97	
Travel Time (s)		47.4	7.3		2.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	984	0	0	11	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	984	0	0	11	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 55.9%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	903	12	0	0	0	16
Future Volume (vph)	903	12	0	0	0	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00
Frt	0.998					0.865
Flt Protected						
Satd. Flow (prot)	3532	0	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	3532	0	0	0	0	1611
Link Speed (mph)	55			55	45	
Link Distance (ft)	591			1206	1073	
Travel Time (s)	7.3			15.0	16.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	982	13	0	0	0	17
Shared Lane Traffic (%)						
Lane Group Flow (vph)	995	0	0	0	0	17
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 35.3%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑	↰	
Traffic Volume (vph)	0	0	0	877	9	0
Future Volume (vph)	0	0	0	877	9	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	1254			1793	105	
Travel Time (s)	15.5			22.2	2.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	953	10	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	953	10	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 56.1%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	9	910	0	0	0	0
Future Volume (vph)	9	910	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		55	
Link Distance (ft)		1206	1786		105	
Travel Time (s)		15.0	22.1		1.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	10	989	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	10	989	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 56.1% ICU Level of Service B

Analysis Period (min) 15

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	822	877	0	0
Future Volume (vph)	0	0	822	877	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	500		0	0
Storage Lanes		0	2		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	0.97	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	3433	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	3433	3539	0	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	1793			596	109	
Travel Time (s)	22.2			7.4	3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	893	953	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	893	953	0	0
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 98.8% ICU Level of Service F

Analysis Period (min) 15

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	1619	80	0
Future Volume (vph)	0	0	0	1619	80	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	631			2681	109	
Travel Time (s)	7.8			33.2	3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	1760	87	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1760	87	0
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 73.4% ICU Level of Service D

Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	80	1652	0	0	0	0
Future Volume (vph)	80	1652	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		55	
Link Distance (ft)		627	2678		109	
Travel Time (s)		7.8	33.2		1.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	87	1796	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	87	1796	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 97.1%	ICU Level of Service F
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	461	1619	0	0
Future Volume (vph)	0	0	461	1619	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	500		0	0
Storage Lanes		0	2		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	0.97	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	3433	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	3433	3539	0	0
Link Speed (mph)	55			55	55	
Link Distance (ft)	2681			671	109	
Travel Time (s)	33.2			8.3	1.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	501	1760	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	501	1760	0	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 114.4%	ICU Level of Service H
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑	↰	
Traffic Volume (vph)	0	0	0	2039	41	0
Future Volume (vph)	0	0	0	2039	41	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	654			797	95	
Travel Time (s)	8.1			9.9	2.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	2216	45	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	2216	45	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 87.0%	ICU Level of Service E
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	41	2072	0	0	0	0
Future Volume (vph)	41	2072	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		55	
Link Distance (ft)		659	784		95	
Travel Time (s)		8.2	9.7		1.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	45	2252	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	45	2252	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 120.3%	ICU Level of Service H
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1175	18	0	0	0	18
Future Volume (vph)	1175	18	0	0	0	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00
Frt	0.998					0.865
Flt Protected						
Satd. Flow (prot)	3532	0	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	3532	0	0	0	0	1611
Link Speed (mph)	55			55	25	
Link Distance (ft)	576			2077	205	
Travel Time (s)	7.1			25.7	5.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1277	20	0	0	0	20
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1297	0	0	0	0	20
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 43.1% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	2663	0	0	1903	0
Future Volume (vph)	0	2663	0	0	1903	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	0.97	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	3433	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	3433	0
Link Speed (mph)		45	45		45	
Link Distance (ft)		1021	744		215	
Travel Time (s)		15.5	11.3		3.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	2895	0	0	2068	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	2895	0	0	2068	0
Sign Control		Free	Stop		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 134.6%	ICU Level of Service H
Analysis Period (min) 15	

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	0	0	801	1583
Future Volume (vph)	0	0	0	0	801	1583
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		0	250	
Storage Lanes	0	0		0	2	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.97	0.91
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	0	3433	5085
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	0	3433	5085
Link Speed (mph)	55		45			30
Link Distance (ft)	167		773			587
Travel Time (s)	2.1		11.7			13.3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	871	1721
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	0	871	1721
Sign Control	Stop		Stop			Free

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 58.6%	ICU Level of Service B
Analysis Period (min) 15	

1005: WB M-96 (Michigan Avenue) & SB I-69 Off-Ramp (Push Button) Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	15.4	93.9	51.5

1007: EB M-96 (Michigan Avenue) (Push Button) & SB I-69 Off-Ramp/EB M-96 (Michigan Avenue) Perfor

Approach	EB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	37.1	3.9	4.7

1008: WB M-96 (Michigan Avenue)/NB I-69 Off-Ramp & WB M-96 (Michigan Avenue) (Push Button) Perf

Approach	WB	SW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	64.3	14.1	33.7

1009: WB M-96 (Michigan Avenue) (Push Button)/WB M-96 (Michigan Avenue) & EB M-96 (Michigan Ave

Approach	EB	SW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	35.6	38.0	37.0

1010: NB I-69 Off-Ramp (Push Button) & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	3.9	23.0	6.5

3003: M-227/West Drive & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.2	0.1	0.1
Total Del/Veh (s)	10.0	5.6	19.6	10.8

3093: M-227/West Drive & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	0.0	2.0	0.0	0.3
Total Del/Veh (s)	4.4	28.4	2.6	7.9

4001: M-96 (Michigan Avenue) & WB Main Entrance/WB M-96 (Michigan Avenue) Performance by appro

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	88.5	97.9	91.3

4003: EB to WB Xover E of 15 Mile Rd (North) & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	4.7	206.4	48.4
Total Del/Veh (s)	43.5	43.1	43.4

4004: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	310.9	101.5	285.5

4005: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	77.0	32.2	63.4

4006: M-311 (11 Mile Rd) & Site Driveway West Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	0.3	0.8	0.0	0.2
Total Del/Veh (s)	39.0	8.5	7.7	20.8

4007: M-311 (11 Mile Rd) & F Drive N Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	0.2	0.0	0.0	0.0
Total Del/Veh (s)	42.1	9.3	5.0	12.8

4010: EB M-96 (Michigan Avenue)/EB M-96 (Michigan Avenue) (Push Button) & WB M-96 (Michigan Ave

Approach	WB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	36.6	20.4	25.9

4030: NB M-311 (11 Mile Rd)/WB M-96 (Michigan Avenue)/11 Mile Rd (North) & EB M-96 (Michigan Ave

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	21.1	22.6	22.1

4031: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & WB M-96 (Michigan Avenue) Performance by a

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	27.0	3.8	13.7

4033: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & NB to SB Xover N of M-96 (Michigan Avenue) P

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	29.4	4.6	7.1

4034: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & EB I-94 Off-ramp Performance by approach

Approach	SB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.0	22.2	7.4

4035: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & WB M-96 (Michigan Avenue)/11 Mile Rd (North)

Approach	SB	NW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	12.3	16.6	14.4

4036: EB I-94 Off-ramp & WB M-96 (Michigan Avenue)/11 Mile Rd (North) Performance by approach

Approach	NB	NW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	20.5	2.3	3.5

4037: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & WB I-94 Off-ramp Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.2	0.1
Total Del/Veh (s)	1.5	23.8	9.5

4038: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & EB M-96 (Michigan Avenue)/11 Mile Rd (South)

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	17.5	27.7	22.7

4039: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & WB I-94 Off-ramp Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	16.7	4.4	5.8

4040: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & 11 Mile Rd Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	18.5	2.5	12.8

4041: 11 Mile Rd & WB M-96 (Michigan Avenue)/11 Mile Rd (North) Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	16.0	25.4	18.6

4042: 11 Mile Rd & H Dr N Performance by approach

Approach	NE	SW	All
Denied Del/Veh (s)	0.0	0.4	0.2
Total Del/Veh (s)	3.8	4.3	4.0

4050: Prop Site Drive E & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	103.4	30.0
Total Del/Veh (s)	90.6	400.3	171.4

4051: Prop Site Drive W & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	33.4	14.9
Total Del/Veh (s)	50.0	135.2	86.7

4061: WB M-96 (Michigan Avenue) & Firekeepers Main Drive Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	3.7	48.9	8.8

4065: WB M-96 (Michigan Avenue) & 15 Mile Rd (North) Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	1.9	0.0	1.6
Total Del/Veh (s)	75.7	142.0	86.9

4066: EB M-96 (Michigan Avenue) & WB to EB Xover W of 15 Mile Rd (South) Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	19.2	31.4	19.4

4067: 15 Mile Rd (South) & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.1	0.6	0.2
Total Del/Veh (s)	64.5	51.3	63.2

4068: EB to WB Xover E of 15 Mile Rd (South) & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	11.4	0.0	10.7
Total Del/Veh (s)	34.4	47.1	35.2

4070: M-311 (11 Mile Rd) & Site Drive East Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	1.2	0.0	0.0	0.2
Total Del/Veh (s)	12.3	9.9	14.3	12.5

4071: 15 Mile Rd & Verona Rd Performance by approach

Approach	NB	SB	SE	NW	All
Denied Del/Veh (s)	0.7	0.1	3.3	0.2	1.8
Total Del/Veh (s)	20.8	9.1	17.3	62.9	22.8

4075: 11 Mile Road & Verona Road Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.8	3.1	0.5	0.8
Total Del/Veh (s)	38.8	90.2	46.2	47.7	57.7

9002: WB M-96 (Michigan Avenue) & Firekeepers Gas Station Driveway Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.2	0.0
Total Del/Veh (s)	1.8	9.1	3.3

9003: WB M-96 (Michigan Avenue) & Firekeepers E Drive Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.7	7.7	2.7

9004: WB M-96 (Michigan Avenue) & Ackerson Drive Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	1.2	5.2	1.2

9006: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	0.9	2.7	0.9

9008: 15 Mile Rd (North) & Old M-96 (Michigan Ave) Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.0	0.0	0.0
Total Del/Veh (s)	2.9	0.7	115.9	65.3

9013: SB I-69 On-Ramp & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	101.1	101.1

9016: EB M-96 (Michigan Avenue) & NB I-69 On-Ramp Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.1	0.1
Total Del/Veh (s)	34.0	34.0

9017: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	1.6	1.6
Total Del/Veh (s)	22.6	22.6

9018: EB M-96 (Michigan Avenue) & WB to EB Xover W of M-227/West Drive Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.3	8.8	2.5

9019: EB to WB Xover W of M-227/West Drive & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.1	0.0	0.1
Total Del/Veh (s)	2.5	16.4	4.1

9020: EB M-96 (Michigan Avenue) & WB to EB Xover E of M-227/West Drive Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.1	8.4	1.7

9021: EB to WB Xover E of M-227/West Drive & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.3	0.0	0.2
Total Del/Veh (s)	1.7	10.7	2.1

9023: M-311 (11 Mile Rd) & B Drive North Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	1.1	0.3	1.1	0.5	0.8
Total Del/Veh (s)	1.8	1.2	11.0	10.1	3.7

9025: M-294 (Beadle Lake Road) & EB I-94 Off-Ramp & EB I-94 On-Ramp Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	2.5	0.3	0.0	0.6
Total Del/Veh (s)	7.1	1.5	1.7	2.6

9026: WB I-94 On-Ramp & M-294 (Beadle Lake Road) & WB I-94 Off-Ramp Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	2.1	0.0	0.3	0.5
Total Del/Veh (s)	7.1	1.6	1.2	2.4

9027: Old US-27 & EB I-94 to Old US-27 Off Ramp Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0
Total Del/Veh (s)	7.1	0.2	0.9	2.6

9028: Old US-27 & NB Old US-27 to EB I-94 On Ramp Performance by approach

Approach	NB	SB	All
Denied Del/Veh (s)	0.6	0.0	0.3
Total Del/Veh (s)	0.8	0.4	0.6

9029: SB Old US-27 WB I-94 On Ramp & Old US-27 & WB I-94 to Old US-27 Off Ramp Performance by

Approach	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	1.1	0.4
Total Del/Veh (s)	5.2	0.2	0.7	1.1

9030: I-94BL/Partello Rd & EB I-94 to I-94BL/Partello Off Ramp Performance by approach

Approach	SE	NE	SW	All
Denied Del/Veh (s)	0.0	0.2	0.0	0.1
Total Del/Veh (s)	4.6	1.5	0.2	1.8

9031: I-94BL/Partello Rd & I-94/Partello Rd to EB I-94 On Ramp Performance by approach

Approach	NE	SW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.2	0.7	0.4

9032: I-94BL/Partello Rd & WB I-94 to I-94/Partello Rd Performance by approach

Approach	EB	NE	SW	All
Denied Del/Veh (s)	0.0	0.0	0.9	0.2
Total Del/Veh (s)	3.4	1.2	0.6	1.7

9034: Dummy Node & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.9	51.3	1.6
Total Del/Veh (s)	34.9	799.8	43.8

9035: Dummy Node & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	0.5	7.4	0.7

9036: WB M-96 (Michigan Avenue) & Dummy Node Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	2.0	8.6	2.2

9037: WB M-96 (Michigan Avenue) & Dummy Node Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.8	0.8

9040: Old US-27 & NB Old US-27 to WB I-94 On Ramp Performance by approach

Approach	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.0	0.3	0.8

9041: WB to EB Xover E of M-227/West Drive/McDonald's Dr & WB M-96 (Michigan Avenue) Performanc

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	2.6	20.0	3.8

9128: M-96 (Michigan Avenue)/WB M-96 (Michigan Avenue) & EB M-96 (Michigan Avenue) Performance

Approach	NB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	17.1	247.9	135.6

9137: SB I-69 On-Ramp Performance by approach

Approach	SB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	11.7	1.5	3.3

9143: NB I-69 On-Ramp Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	15.8	3.4	4.4

9146: WB to EB Xover W of M-227/West Drive & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	14.4	14.4

9147: EB M-96 (Michigan Avenue) & EB to WB Xover W of M-227/West Drive Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	1.8	1.8

9150: M-311 (11 Mile Rd) /NB M-311 (11 Mile Rd) & SB M-311 (11 Mile Rd) Performance by approach

Approach	NB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	4.7	0.9	2.8

9151: EB M-96 (Michigan Avenue) & EB to WB Xover E of M-227/West Drive Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.5	0.5

9157: SB I-69 On-Ramp & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.2	0.2
Total Del/Veh (s)	31.7	31.7

9158: SB I-69 Off-Ramp (Push Button) & SB I-69 Off-Ramp Performance by approach

Approach	SB	All
Denied Del/Veh (s)	881.9	881.9
Total Del/Veh (s)	302.3	302.3

9159: NB I-69 Off-Ramp & NB I-69 Off-Ramp (Push Button) Performance by approach

Approach	NB	All
Denied Del/Veh (s)	136.0	136.0
Total Del/Veh (s)	118.4	118.4

9178: WB I-94 to BL-94/Partello Rd Off Ramp/WB I-94 to I-94/Partello Rd & BL-94/Partello Rd to WB I-94

Approach	EB	WB	All
Denied Del/Veh (s)	0.2	0.0	0.1
Total Del/Veh (s)	0.2	0.3	0.2

9304: WB to EB Xover W of 15 Mile Rd (North) & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	51.7	51.7

9305: EB M-96 (Michigan Avenue) & WB to EB Xover W of 15 Mile Rd (North) Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	42.4	516.1	46.5

9307: EB M-96 (Michigan Avenue) & EB to WB Xover E of 15 Mile Rd (North) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.1	0.1
Total Del/Veh (s)	88.6	88.6

9310: WB to EB Xover W of 15 Mile Rd (South) & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	50.3	50.3
Total Del/Veh (s)	173.3	173.3

9311: EB M-96 (Michigan Avenue) & EB to WB Xover E of 15 Mile Rd (South) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.1	0.1
Total Del/Veh (s)	50.2	50.2

9330: EB to WB Xover E of Old M-311 (11 Mile Rd) & WB M-96 (Michigan Avenue) Performance by appr

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.8	6.7	2.0

9331: EB M-96 (Michigan Avenue) & EB to WB Xover E of Old M-311 (11 Mile Rd) Performance by appro

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.4	2.4

9332: WB M-96 (Michigan Avenue) & Old M-311 (11 Mile Rd) Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.2	7.4	1.5

9336: WB to EB Xover W of Old M-311 (11 Mile Rd) & WB M-96 (Michigan Avenue) Performance by app

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.9	2.9

9337: EB M-96 (Michigan Avenue) & WB to EB Xover W of Old M-311 (11 Mile Rd) Performance by appr

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	3.8	11.9	4.7

9338: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & NB to SB Xover N of M-96 (Michigan Avenue) F

Approach	NB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	3.8	3.8

9339: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & EB I-94 On Ramp Performance by approach

Approach	NB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	10.0	10.0

9340: EB I-94 On Ramp Performance by approach

Approach	EB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	7.6	0.2	1.1

9342: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & EB I-94 On Ramp Performance by approach

Approach	SB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	12.8	12.8

9343: EB I-94 Off-ramp Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.7	0.7
Total Del/Veh (s)	1.0	1.0

9346: WB I-94 On Ramp Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.4	9.5	3.5

9347: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & WB I-94 On Ramp Performance by approach

Approach	NW	All
Denied Del/Veh (s)	0.1	0.1
Total Del/Veh (s)	13.7	13.7

9348: WB I-94 On Ramp & EB M-96 (Michigan Avenue)/11 Mile Rd (South) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	3.2	3.2

9349: WB I-94 Off-ramp Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.5	0.5
Total Del/Veh (s)	1.4	1.4

9351: SB to NB Xover E of 11 Mile Rd & WB M-96 (Michigan Avenue)/11 Mile Rd (North) Performance b

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.3	3.5	1.4

9352: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & SB to NB Xover E of 11 Mile Rd Performance b

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	5.8	5.8

9354: EB to WB Xover W of 11 Mile Rd & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	3.8	3.8

9355: EB M-96 (Michigan Avenue) & EB to WB Xover W of 11 Mile Rd Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	3.2	3.2

9356: WB to EB Xover W of 11 Mile Rd & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.9	2.9

9357: EB M-96 (Michigan Avenue) & WB to EB Xover W of 11 Mile Rd Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.4	0.4

9359: EB M-96 (Michigan Avenue) & M-96 (Michigan Avenue)/WB M-96 (Michigan Avenue) Performance

Approach	EB	WB	All
Denied Del/Veh (s)	0.2	0.0	0.1
Total Del/Veh (s)	2.7	0.9	1.8

9381: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.9	2.9

9382: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.6	5.2	3.5

9383: WB M-96 (Michigan Avenue) Performance by approach

Approach	NW	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.5	0.5

9384: EB M-96 (Michigan Avenue) Performance by approach

Approach	SE	SW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.8	4.5	1.8

9385: Ceresco Road/12 Mile Road & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	0.9	4.1	1.0

9386: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.8	3.6	2.9

9387: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.6	0.6

9388: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.4	0.4

9389: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.8	4.4	2.8

9390: 13 Mile Rd & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	0.7	5.3	0.8

9392: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.1	3.4	1.2

9393: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	6.3	6.3

9394: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	24.6	24.6

9396: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.0	6.9	2.4

9397: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	46.2	46.2

9398: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	72.6	72.6

9400: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	73.4	137.4	74.7

9401: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.4	0.4
Total Del/Veh (s)	88.4	88.4

9410: Retail Drive & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	0.7	10.1	0.8

9415: EB Main Entrance/EB M-96 (Michigan Avenue) & M-96 (Michigan Avenue) Performance by approa

Approach	EB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	53.7	13.4	42.4

9416: SB M-311 (11 Mile Rd)/EB M-96 (Michigan Avenue)/11 Mile Rd (South) & EB M-96 (Michigan Ave

Approach	SB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.4	2.4

Total Network Performance

Denied Del/Veh (s)	121.0
Total Del/Veh (s)	293.7

Scenario M3&S2

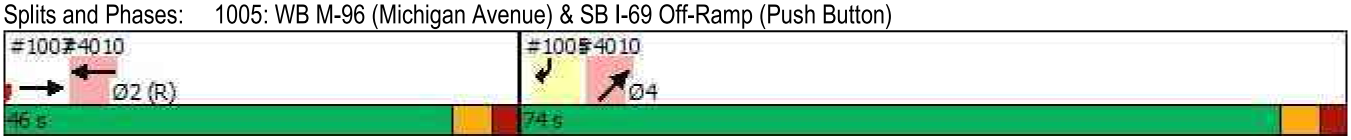
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø2
Lane Configurations							
Traffic Volume (vph)	0	0	1654	0	0	2322	
Future Volume (vph)	0	0	1654	0	0	2322	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	0.91	1.00	1.00	0.76	
Frt						0.850	
Flt Protected							
Satd. Flow (prot)	0	0	5085	0	0	3610	
Flt Permitted							
Satd. Flow (perm)	0	0	5085	0	0	3610	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)						229	
Link Speed (mph)		45	45		25		
Link Distance (ft)		275	194		266		
Travel Time (s)		4.2	2.9		7.3		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.84	0.75	
Heavy Vehicles (%)	2%	2%	2%	2%	3%	2%	
Adj. Flow (vph)	0	0	1798	0	0	3096	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	1798	0	0	3096	
Turn Type			NA			Prot	
Protected Phases			Free!			4!	2
Permitted Phases							
Minimum Split (s)						17.0	17.0
Total Split (s)						74.0	46.0
Total Split (%)						61.7%	38%
Yellow Time (s)						3.5	3.5
All-Red Time (s)						2.5	2.5
Lost Time Adjust (s)						0.0	
Total Lost Time (s)						6.0	
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)			120.0			68.0	
Actuated g/C Ratio			1.00			0.57	
v/c Ratio			0.35			1.44	
Control Delay			2.0			226.4	
Queue Delay			0.1			0.1	
Total Delay			2.0			226.5	
LOS			A			F	
Approach Delay			2.0		226.5		
Approach LOS			A		F		
Queue Length 50th (ft)			7			~1405	
Queue Length 95th (ft)			m0			#1119	
Internal Link Dist (ft)		195	114		186		
Turn Bay Length (ft)							
Base Capacity (vph)			5085			2144	
Starvation Cap Reductn			0			0	
Spillback Cap Reductn			1136			64	
Storage Cap Reductn			0			0	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø2
Reduced v/c Ratio			0.46			1.49	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 100 (83%), Referenced to phase 2:EBT, Start of Green	
Natural Cycle: 150	
Control Type: Pretimed	
Maximum v/c Ratio: 1.44	
Intersection Signal Delay: 144.0	Intersection LOS: F
Intersection Capacity Utilization 103.4%	ICU Level of Service G
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.
! Phase conflict between lane groups.

Splits and Phases: 1005: WB M-96 (Michigan Avenue) & SB I-69 Off-Ramp (Push Button)



Lane Group	EBT	EBR	WBL	WBT	NEL	NER	Ø4
Lane Configurations							
Traffic Volume (vph)	112	0	0	0	0	3180	
Future Volume (vph)	112	0	0	0	0	3180	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Storage Length (ft)		260	285		0	0	
Storage Lanes		0	0		0	3	
Taper Length (ft)			240		25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.76	
Frt						0.850	
Flt Protected							
Satd. Flow (prot)	1863	0	0	0	0	3610	
Flt Permitted							
Satd. Flow (perm)	1863	0	0	0	0	3610	
Right Turn on Red		Yes				Yes	
Satd. Flow (RTOR)						2086	
Link Speed (mph)	25			45	45		
Link Distance (ft)	301			619	190		
Travel Time (s)	8.2			9.4	2.9		
Peak Hour Factor	0.75	0.84	0.92	0.92	0.90	0.90	
Heavy Vehicles (%)	2%	3%	2%	2%	2%	2%	
Adj. Flow (vph)	149	0	0	0	0	3533	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	149	0	0	0	0	3533	
Turn Type	NA					Free	
Protected Phases	2						4
Permitted Phases						Free	
Minimum Split (s)	17.0						17.0
Total Split (s)	46.0						74.0
Total Split (%)	38.3%						62%
Yellow Time (s)	3.5						3.5
All-Red Time (s)	2.5						2.5
Lost Time Adjust (s)	0.0						
Total Lost Time (s)	6.0						
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)	40.0					120.0	
Actuated g/C Ratio	0.33					1.00	
v/c Ratio	0.24					0.98	
Control Delay	30.3					26.1	
Queue Delay	0.0					0.0	
Total Delay	30.3					26.1	
LOS	C					C	
Approach Delay	30.3				26.1		
Approach LOS	C				C		
Queue Length 50th (ft)	83					544	
Queue Length 95th (ft)	111					m307	
Internal Link Dist (ft)	221			539	110		
Turn Bay Length (ft)							
Base Capacity (vph)	621					3610	

Lane Group	EBT	EBR	WBL	WBT	NEL	NER	Ø4
Starvation Cap Reductn	0					0	
Spillback Cap Reductn	0					0	
Storage Cap Reductn	0					0	
Reduced v/c Ratio	0.24					0.98	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 100 (83%), Referenced to phase 2:EBT, Start of Green

Natural Cycle: 150

Control Type: Pretimed

Maximum v/c Ratio: 1.44

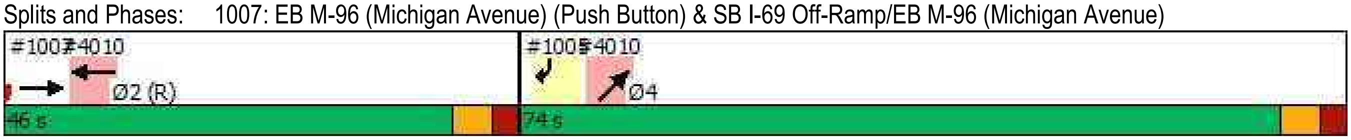
Intersection Signal Delay: 26.3 Intersection LOS: C

Intersection Capacity Utilization 67.5% ICU Level of Service C

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1007: EB M-96 (Michigan Avenue) (Push Button) & SB I-69 Off-Ramp/EB M-96 (Michigan Avenue)

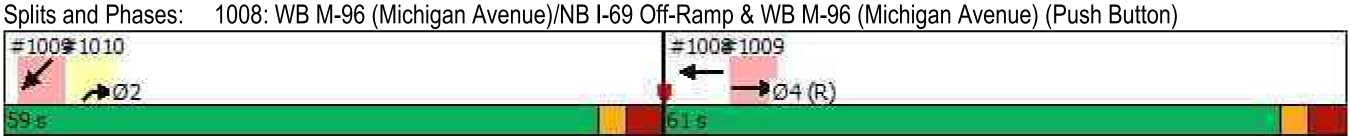


Lane Group	EBL	EBT	WBT	WBR	SWL	SWR	Ø2
Lane Configurations							
Traffic Volume (vph)	0	0	785	0	0	988	
Future Volume (vph)	0	0	785	0	0	988	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.88	
Frt						0.850	
Flt Protected							
Satd. Flow (prot)	0	0	3539	0	0	2787	
Flt Permitted							
Satd. Flow (perm)	0	0	3539	0	0	2787	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)						988	
Link Speed (mph)		45	25		45		
Link Distance (ft)		217	252		223		
Travel Time (s)		3.3	6.9		3.4		
Peak Hour Factor	0.92	0.92	0.75	0.93	0.92	0.92	
Heavy Vehicles (%)	2%	2%	2%	6%	2%	2%	
Adj. Flow (vph)	0	0	1047	0	0	1074	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	1047	0	0	1074	
Turn Type			NA			Free	
Protected Phases			4				2
Permitted Phases						Free	
Minimum Split (s)			16.0				16.0
Total Split (s)			61.0				59.0
Total Split (%)			50.8%				49%
Yellow Time (s)			2.5				2.5
All-Red Time (s)			3.5				3.5
Lost Time Adjust (s)			0.0				
Total Lost Time (s)			6.0				
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)			55.0			120.0	
Actuated g/C Ratio			0.46			1.00	
v/c Ratio			0.65			0.39	
Control Delay			27.3			4.2	
Queue Delay			0.0			0.0	
Total Delay			27.3			4.2	
LOS			C			A	
Approach Delay			27.3		4.2		
Approach LOS			C		A		
Queue Length 50th (ft)			321			98	
Queue Length 95th (ft)			302			96	
Internal Link Dist (ft)		137	172		143		
Turn Bay Length (ft)							
Base Capacity (vph)			1622			2787	
Starvation Cap Reductn			0			0	
Spillback Cap Reductn			0			0	
Storage Cap Reductn			0			0	

Lane Group	EBL	EBT	WBT	WBR	SWL	SWR	Ø2
Reduced v/c Ratio			0.65			0.39	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 92 (77%), Referenced to phase 4:WBT, Start of Green	
Natural Cycle: 55	
Control Type: Pretimed	
Maximum v/c Ratio: 0.69	
Intersection Signal Delay: 15.6	Intersection LOS: B
Intersection Capacity Utilization 64.7%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 1008: WB M-96 (Michigan Avenue)/NB I-69 Off-Ramp & WB M-96 (Michigan Avenue) (Push Button)



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↑↑									↑↑	
Traffic Volume (vph)	0	966	0	0	0	0	0	0	0	0	988	0
Future Volume (vph)	0	966	0	0	0	0	0	0	0	0	988	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	3539	0	0	0	0	0	0	0	0	3539	0
Flt Permitted												
Satd. Flow (perm)	0	3539	0	0	0	0	0	0	0	0	3539	0
Right Turn on Red			Yes			Yes			Yes	Yes		Yes
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		209			206			223			213	
Travel Time (s)		3.2			3.1			3.4			3.2	
Peak Hour Factor	0.86	0.86	0.86	0.92	0.92	0.92	0.92	0.92	0.92	0.91	0.91	0.91
Adj. Flow (vph)	0	1123	0	0	0	0	0	0	0	0	1086	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1123	0	0	0	0	0	0	0	0	1086	0
Turn Type		NA									NA	
Protected Phases		4									2	
Permitted Phases												
Minimum Split (s)		16.0									16.0	
Total Split (s)		61.0									59.0	
Total Split (%)		50.8%									49.2%	
Yellow Time (s)		2.5									2.5	
All-Red Time (s)		3.5									3.5	
Lost Time Adjust (s)		0.0									0.0	
Total Lost Time (s)		6.0									6.0	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		55.0									53.0	
Actuated g/C Ratio		0.46									0.44	
v/c Ratio		0.69									0.69	
Control Delay		24.3									26.2	
Queue Delay		0.0									0.0	
Total Delay		24.3									26.2	
LOS		C									C	
Approach Delay		24.3									26.2	
Approach LOS		C									C	
Queue Length 50th (ft)		332									366	
Queue Length 95th (ft)		m351									450	
Internal Link Dist (ft)		129			126			143			133	
Turn Bay Length (ft)												
Base Capacity (vph)		1622									1563	
Starvation Cap Reductn		0									0	
Spillback Cap Reductn		0									0	
Storage Cap Reductn		0									0	
Reduced v/c Ratio		0.69									0.69	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 92 (77%), Referenced to phase 4:WBT, Start of Green	
Natural Cycle: 55	
Control Type: Pretimed	
Maximum v/c Ratio: 0.69	
Intersection Signal Delay: 25.3	Intersection LOS: C
Intersection Capacity Utilization 64.0%	ICU Level of Service C
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

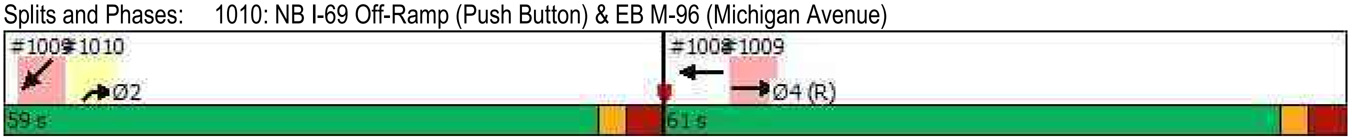
Splits and Phases: 1009: WB M-96 (Michigan Avenue) (Push Button)/WB M-96 (Michigan Avenue) & EB M-96 (Michigan Avenue)

Lane Group	EBT	EBR	WBL	WBT	NEL	NER	Ø4
Lane Configurations							
Traffic Volume (vph)	966	0	0	0	0	122	
Future Volume (vph)	966	0	0	0	0	122	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	0.95	1.00	1.00	1.00	1.00	1.00	
Frt						0.865	
Flt Protected							
Satd. Flow (prot)	3539	0	0	0	0	1611	
Flt Permitted							
Satd. Flow (perm)	3539	0	0	0	0	1611	
Right Turn on Red		Yes				Yes	
Satd. Flow (RTOR)						253	
Link Speed (mph)	45			45	25		
Link Distance (ft)	206			309	315		
Travel Time (s)	3.1			4.7	8.6		
Peak Hour Factor	0.86	0.86	0.92	0.92	0.93	0.75	
Heavy Vehicles (%)	2%	2%	2%	2%	6%	2%	
Adj. Flow (vph)	1123	0	0	0	0	163	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	1123	0	0	0	0	163	
Turn Type	NA					Prot	
Protected Phases	Free!					2!	4
Permitted Phases							
Minimum Split (s)						16.0	16.0
Total Split (s)						59.0	61.0
Total Split (%)						49.2%	51%
Yellow Time (s)						2.5	2.5
All-Red Time (s)						3.5	3.5
Lost Time Adjust (s)						0.0	
Total Lost Time (s)						6.0	
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)	120.0					53.0	
Actuated g/C Ratio	1.00					0.44	
v/c Ratio	0.32					0.19	
Control Delay	0.2					0.5	
Queue Delay	0.0					0.0	
Total Delay	0.2					0.5	
LOS	A					A	
Approach Delay	0.2				0.5		
Approach LOS	A				A		
Queue Length 50th (ft)	0					0	
Queue Length 95th (ft)	0					0	
Internal Link Dist (ft)	126			229	235		
Turn Bay Length (ft)							
Base Capacity (vph)	3539					852	
Starvation Cap Reductn	0					0	
Spillback Cap Reductn	0					0	
Storage Cap Reductn	0					0	

Lane Group	EBT	EBR	WBL	WBT	NEL	NER	Ø4
Reduced v/c Ratio	0.32					0.19	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 92 (77%), Referenced to phase 4:WBT, Start of Green	
Natural Cycle: 55	
Control Type: Pretimed	
Maximum v/c Ratio: 0.69	
Intersection Signal Delay: 0.2	Intersection LOS: A
Intersection Capacity Utilization 64.0%	ICU Level of Service C
Analysis Period (min) 15	
! Phase conflict between lane groups.	

Splits and Phases: 1010: NB I-69 Off-Ramp (Push Button) & EB M-96 (Michigan Avenue)



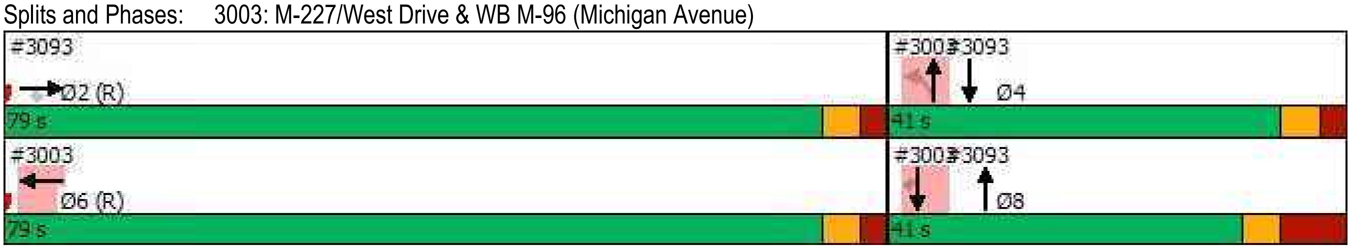
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	940	192	76	50	0	0	84	85
Future Volume (vph)	0	0	0	0	940	192	76	50	0	0	84	85
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		80	0		0	0		0
Storage Lanes	0		0	0		1	1		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.975							0.850
Flt Protected							0.950					
Satd. Flow (prot)	0	0	0	0	5007	0	1671	1863	0	0	1845	1568
Flt Permitted							0.687					
Satd. Flow (perm)	0	0	0	0	5007	0	1209	1863	0	0	1845	1568
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					66							104
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		152			212			101			1197	
Travel Time (s)		2.3			3.2			2.0			23.3	
Peak Hour Factor	0.92	0.92	0.92	0.87	0.87	0.87	0.67	0.67	0.67	0.77	0.77	0.77
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	8%	2%	2%	3%	3%	3%
Adj. Flow (vph)	0	0	0	0	1080	221	113	75	0	0	109	110
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1301	0	113	75	0	0	109	110
Turn Type					NA		Perm	NA			NA	Perm
Protected Phases					6			4			8	
Permitted Phases							4					8
Minimum Split (s)					31.0		17.0	17.0			17.0	17.0
Total Split (s)					79.0		41.0	41.0			41.0	41.0
Total Split (%)					65.8%		34.2%	34.2%			34.2%	34.2%
Yellow Time (s)					3.5		3.5	3.5			3.5	3.5
All-Red Time (s)					2.5		2.5	2.5			6.0	6.0
Lost Time Adjust (s)					0.0		0.0	0.0			0.0	0.0
Total Lost Time (s)					6.0		6.0	6.0			9.5	9.5
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)					73.0		35.0	35.0			31.5	31.5
Actuated g/C Ratio					0.61		0.29	0.29			0.26	0.26
v/c Ratio					0.42		0.32	0.14			0.23	0.23
Control Delay					12.2		8.6	5.5			36.2	8.6
Queue Delay					0.0		0.0	0.0			0.0	0.0
Total Delay					12.2		8.6	5.5			36.2	8.6
LOS					B		A	A			D	A
Approach Delay					12.2			7.4			22.4	
Approach LOS					B			A			C	
Queue Length 50th (ft)					172		11	7			66	4
Queue Length 95th (ft)					194		11	8			98	32
Internal Link Dist (ft)		72			132			21			1117	
Turn Bay Length (ft)												
Base Capacity (vph)					3071		352	543			484	488

Lane Group	Ø2
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	2
Permitted Phases	
Minimum Split (s)	16.0
Total Split (s)	79.0
Total Split (%)	66%
Yellow Time (s)	3.5
All-Red Time (s)	2.5
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
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)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
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		0.32	0.14			0.23	0.23

Intersection Summary		
Area Type:	Other	
Cycle Length: 120		
Actuated Cycle Length: 120		
Offset: 112 (93%), Referenced to phase 2:EBT and 6:, Start of Green		
Natural Cycle: 50		
Control Type: Pretimed		
Maximum v/c Ratio: 0.50		
Intersection Signal Delay: 13.0		Intersection LOS: B
Intersection Capacity Utilization 52.0%		ICU Level of Service A
Analysis Period (min) 15		

Splits and Phases: 3003: M-227/West Drive & WB M-96 (Michigan Avenue)



Lane Group	Ø2
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

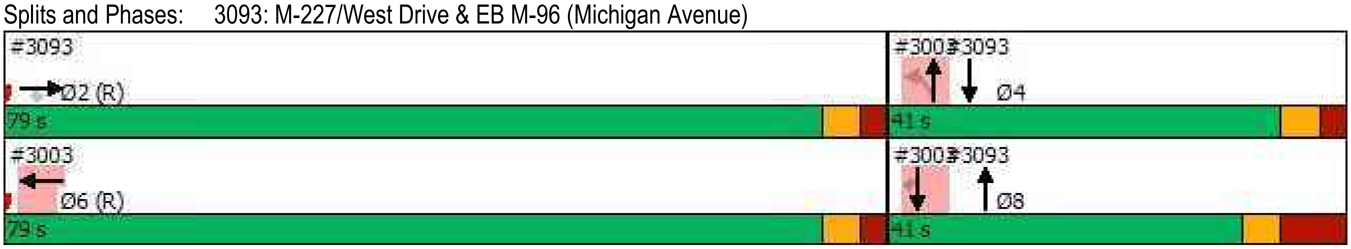
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1036	59	0	0	0	0	126	30	0	84	0
Future Volume (vph)	0	1036	59	0	0	0	0	126	30	0	84	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		65	0		0	100		0	0		0
Storage Lanes	0		1	0		0	1		0	0		0
Taper Length (ft)	25			25			70			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Frt			0.850					0.971				
Flt Protected												
Satd. Flow (prot)	0	3574	1442	0	0	0	0	3344	0	0	1881	0
Flt Permitted												
Satd. Flow (perm)	0	3574	1442	0	0	0	0	3344	0	0	1881	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			59					24				
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		161			222			1117			101	
Travel Time (s)		2.4			3.4			21.8			2.0	
Peak Hour Factor	0.95	0.95	0.95	0.92	0.92	0.92	0.72	0.72	0.72	0.83	0.83	0.83
Heavy Vehicles (%)	2%	1%	12%	2%	2%	2%	2%	6%	0%	2%	1%	2%
Adj. Flow (vph)	0	1091	62	0	0	0	0	175	42	0	101	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1091	62	0	0	0	0	217	0	0	101	0
Turn Type		NA	Perm					NA			NA	
Protected Phases		2						8			4	
Permitted Phases			2									
Minimum Split (s)		16.0	16.0					17.0			17.0	
Total Split (s)		79.0	79.0					41.0			41.0	
Total Split (%)		65.8%	65.8%					34.2%			34.2%	
Yellow Time (s)		3.5	3.5					3.5			3.5	
All-Red Time (s)		2.5	2.5					6.0			2.5	
Lost Time Adjust (s)		0.0	0.0					0.0			0.0	
Total Lost Time (s)		6.0	6.0					9.5			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		73.0	73.0					31.5			35.0	
Actuated g/C Ratio		0.61	0.61					0.26			0.29	
v/c Ratio		0.50	0.07					0.24			0.18	
Control Delay		4.4	0.2					31.7			0.7	
Queue Delay		0.0	0.0					0.0			0.0	
Total Delay		4.4	0.2					31.7			0.7	
LOS		A	A					C			A	
Approach Delay		4.2						31.7			0.7	
Approach LOS		A						C			A	
Queue Length 50th (ft)		45	1					61			0	
Queue Length 95th (ft)		52	0					73			0	
Internal Link Dist (ft)		81			142			1037			21	
Turn Bay Length (ft)			65									
Base Capacity (vph)		2174	900					895			548	

Lane Group	Ø6
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	6
Permitted Phases	
Minimum Split (s)	31.0
Total Split (s)	79.0
Total Split (%)	66%
Yellow Time (s)	3.5
All-Red Time (s)	2.5
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
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)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn		0	0					0			0	
Spillback Cap Reductn		0	0					18			0	
Storage Cap Reductn		0	0					0			0	
Reduced v/c Ratio		0.50	0.07					0.25			0.18	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 112 (93%), Referenced to phase 2:EBT and 6:, Start of Green	
Natural Cycle: 50	
Control Type: Pretimed	
Maximum v/c Ratio: 0.50	
Intersection Signal Delay: 8.0	Intersection LOS: A
Intersection Capacity Utilization 52.0%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 3093: M-227/West Drive & EB M-96 (Michigan Avenue)



Lane Group	Ø6
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

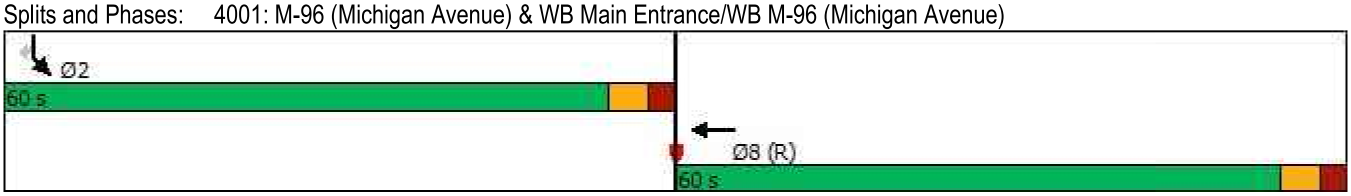
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations										
Traffic Volume (vph)	0	0	0	0	2494	2250	2114	169	0	0
Future Volume (vph)	0	0	0	0	2494	2250	2114	169	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	300		300	0	200	0	0
Storage Lanes	0		0	0		1	2	1	0	0
Taper Length (ft)	25			25			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.88	0.97	1.00	1.00	1.00
Frt						0.850		0.850		
Flt Protected							0.950			
Satd. Flow (prot)	0	0	0	0	3539	2787	3433	1583	0	0
Flt Permitted							0.950			
Satd. Flow (perm)	0	0	0	0	3539	2787	3433	1583	0	0
Right Turn on Red			Yes	Yes		Yes		Yes		
Satd. Flow (RTOR)						566		27		
Link Speed (mph)		45			45		55		45	
Link Distance (ft)		858			894		434		215	
Travel Time (s)		13.0			13.5		5.4		3.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	2711	2446	2298	184	0	0
Shared Lane Traffic (%)										
Lane Group Flow (vph)	0	0	0	0	2711	2446	2298	184	0	0
Turn Type					NA	Free	Prot	Perm		
Protected Phases					8		2			
Permitted Phases						Free		2		
Minimum Split (s)					16.0		16.0	16.0		
Total Split (s)					60.0		60.0	60.0		
Total Split (%)					50.0%		50.0%	50.0%		
Yellow Time (s)					3.5		3.5	3.5		
All-Red Time (s)					2.5		2.5	2.5		
Lost Time Adjust (s)					0.0		0.0	0.0		
Total Lost Time (s)					6.0		6.0	6.0		
Lead/Lag										
Lead-Lag Optimize?										
Act Effct Green (s)					54.0	120.0	54.0	54.0		
Actuated g/C Ratio					0.45	1.00	0.45	0.45		
v/c Ratio					1.70	0.88	1.49	0.25		
Control Delay					340.2	5.0	244.1	10.3		
Queue Delay					0.0	0.0	0.0	0.0		
Total Delay					340.2	5.0	244.1	10.3		
LOS					F	A	F	B		
Approach Delay					181.2		226.8			
Approach LOS					F		F			
Queue Length 50th (ft)					~1631	87	~1263	30		
Queue Length 95th (ft)					m#1140	m0	#1404	m69		
Internal Link Dist (ft)		778			814		354		135	
Turn Bay Length (ft)						300		200		
Base Capacity (vph)					1592	2787	1544	727		
Starvation Cap Reductn					0	0	0	0		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Spillback Cap Reductn					0	0	0	0		
Storage Cap Reductn					0	0	0	0		
Reduced v/c Ratio					1.70	0.88	1.49	0.25		

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 36 (30%), Referenced to phase 8:WBT, Start of Green	
Natural Cycle: 150	
Control Type: Pretimed	
Maximum v/c Ratio: 1.70	
Intersection Signal Delay: 196.0	Intersection LOS: F
Intersection Capacity Utilization 139.2%	ICU Level of Service H
Analysis Period (min) 15	
~ Volume exceeds capacity, queue is theoretically infinite. Queue shown is maximum after two cycles.	
# 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.	
m Volume for 95th percentile queue is metered by upstream signal.	

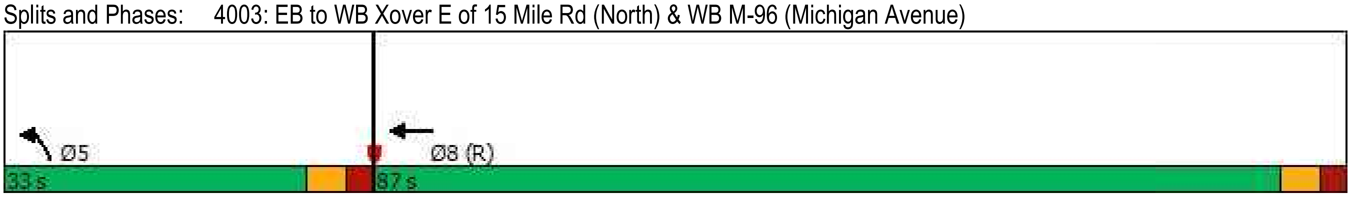
Splits and Phases: 4001: M-96 (Michigan Avenue) & WB Main Entrance/WB M-96 (Michigan Avenue)



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑↑	↰↰	
Traffic Volume (vph)	0	0	0	4061	771	0
Future Volume (vph)	0	0	0	4061	771	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	0.97	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	5085	3433	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	5085	3433	0
Right Turn on Red		Yes			Yes	Yes
Satd. Flow (RTOR)						
Link Speed (mph)	45			45	25	
Link Distance (ft)	660			254	113	
Travel Time (s)	10.0			3.8	3.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.70	0.92
Adj. Flow (vph)	0	0	0	4414	1101	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	4414	1101	0
Turn Type				NA	Prot	
Protected Phases				8	5	
Permitted Phases						
Minimum Split (s)				16.0	13.0	
Total Split (s)				87.0	33.0	
Total Split (%)				72.5%	27.5%	
Yellow Time (s)				3.5	3.5	
All-Red Time (s)				2.5	2.5	
Lost Time Adjust (s)				0.0	0.0	
Total Lost Time (s)				6.0	6.0	
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)				81.0	27.0	
Actuated g/C Ratio				0.68	0.22	
v/c Ratio				1.29	1.43	
Control Delay				149.6	235.7	
Queue Delay				0.2	0.0	
Total Delay				149.8	235.7	
LOS				F	F	
Approach Delay				149.8	235.7	
Approach LOS				F	F	
Queue Length 50th (ft)				~1591	~603	
Queue Length 95th (ft)				m#1317	m#434	
Internal Link Dist (ft)	580			174	33	
Turn Bay Length (ft)						
Base Capacity (vph)				3432	772	
Starvation Cap Reductn				0	0	
Spillback Cap Reductn				437	0	
Storage Cap Reductn				0	0	
Reduced v/c Ratio				1.47	1.43	

Intersection Summary		
Area Type:	Other	
Cycle Length: 120		
Actuated Cycle Length: 120		
Offset: 116 (97%), Referenced to phase 8:WBT, Start of Green		
Natural Cycle: 150		
Control Type: Pretimed		
Maximum v/c Ratio: 1.43		
Intersection Signal Delay: 167.0		Intersection LOS: F
Intersection Capacity Utilization 155.9%		ICU Level of Service H
Analysis Period (min) 15		
~ Volume exceeds capacity, queue is theoretically infinite.		
Queue shown is maximum after two cycles.		
# 95th percentile volume exceeds capacity, queue may be longer.		
Queue shown is maximum after two cycles.		
m Volume for 95th percentile queue is metered by upstream signal.		

Splits and Phases: 4003: EB to WB Xover E of 15 Mile Rd (North) & WB M-96 (Michigan Avenue)



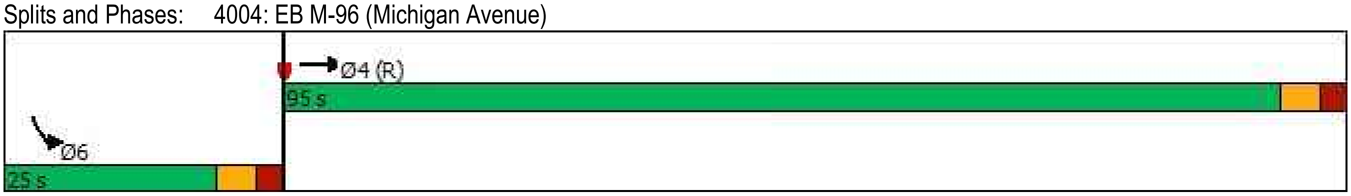
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	1863	0	0	461	0
Future Volume (vph)	0	1863	0	0	461	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	0.97	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	3433	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	3433	0
Right Turn on Red				Yes	Yes	Yes
Satd. Flow (RTOR)					52	
Link Speed (mph)		55	55		25	
Link Distance (ft)		2678	669		109	
Travel Time (s)		33.2	8.3		3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	2025	0	0	501	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	2025	0	0	501	0
Turn Type		NA			Prot	
Protected Phases		4			6	
Permitted Phases						
Detector Phase		4			6	
Switch Phase						
Minimum Initial (s)		10.0			7.0	
Minimum Split (s)		16.0			13.0	
Total Split (s)		95.0			25.0	
Total Split (%)		79.2%			20.8%	
Yellow Time (s)		3.5			3.5	
All-Red Time (s)		2.5			2.5	
Lost Time Adjust (s)		0.0			0.0	
Total Lost Time (s)		6.0			6.0	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode		C-Max			None	
Act Effct Green (s)		89.6			18.4	
Actuated g/C Ratio		0.75			0.15	
v/c Ratio		0.77			0.88	
Control Delay		3.7			51.7	
Queue Delay		0.2			0.0	
Total Delay		3.9			51.7	
LOS		A			D	
Approach Delay		3.9			51.7	
Approach LOS		A			D	
Queue Length 50th (ft)		24			173	
Queue Length 95th (ft)		136			m208	
Internal Link Dist (ft)		2598	589		29	
Turn Bay Length (ft)						
Base Capacity (vph)		2641			587	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Starvation Cap Reductn		0			0	
Spillback Cap Reductn		136			0	
Storage Cap Reductn		0			0	
Reduced v/c Ratio		0.81			0.85	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 20 (17%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.88	
Intersection Signal Delay: 13.4	Intersection LOS: B
Intersection Capacity Utilization 110.4%	ICU Level of Service H
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4004: EB M-96 (Michigan Avenue)



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	1121	0	0	822	0
Future Volume (vph)	0	1121	0	0	822	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	0.97	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	3433	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	3433	0
Right Turn on Red				Yes	Yes	Yes
Satd. Flow (RTOR)					136	
Link Speed (mph)		55	55		25	
Link Distance (ft)		1786	608		109	
Travel Time (s)		22.1	7.5		3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1218	0	0	893	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1218	0	0	893	0
Turn Type		NA			Prot	
Protected Phases		4			6	
Permitted Phases						
Detector Phase		4			6	
Switch Phase						
Minimum Initial (s)		10.0			7.0	
Minimum Split (s)		16.0			13.0	
Total Split (s)		77.0			43.0	
Total Split (%)		64.2%			35.8%	
Yellow Time (s)		3.5			3.5	
All-Red Time (s)		2.5			2.5	
Lost Time Adjust (s)		0.0			0.0	
Total Lost Time (s)		6.0			6.0	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode		C-Max			Max	
Act Effct Green (s)		71.0			37.0	
Actuated g/C Ratio		0.59			0.31	
v/c Ratio		0.58			0.78	
Control Delay		16.7			33.4	
Queue Delay		0.0			0.0	
Total Delay		16.7			33.4	
LOS		B			C	
Approach Delay		16.7			33.4	
Approach LOS		B			C	
Queue Length 50th (ft)		292			292	
Queue Length 95th (ft)		355			m343	
Internal Link Dist (ft)		1706	528		29	
Turn Bay Length (ft)						
Base Capacity (vph)		2093			1152	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Starvation Cap Reductn		0			0	
Spillback Cap Reductn		32			0	
Storage Cap Reductn		0			0	
Reduced v/c Ratio		0.59			0.78	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 112 (93%), Referenced to phase 4:EBT, Start of Green

Natural Cycle: 55

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.78

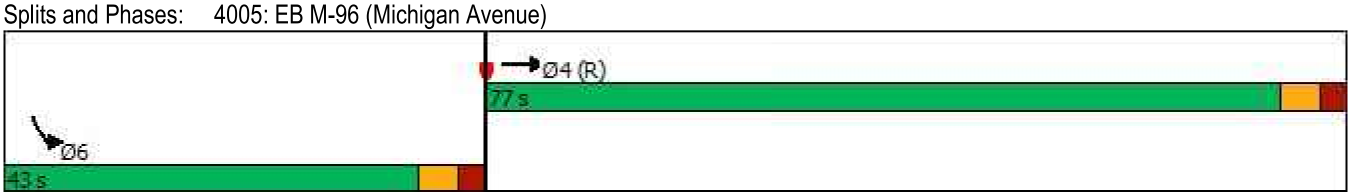
Intersection Signal Delay: 23.7 Intersection LOS: C

Intersection Capacity Utilization 69.4% ICU Level of Service C

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4005: EB M-96 (Michigan Avenue)

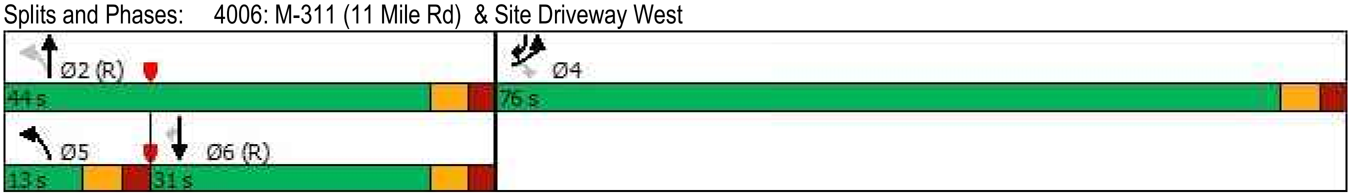


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	1152	61	61	162	189	1152
Future Volume (vph)	1152	61	61	162	189	1152
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	250	250			0
Storage Lanes	2	1	1			1
Taper Length (ft)	25		25			
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	1.00
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	3433	1583	1770	1863	1863	1583
Flt Permitted	0.950		0.440			
Satd. Flow (perm)	3433	1583	820	1863	1863	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		66				679
Link Speed (mph)	25			55	55	
Link Distance (ft)	1178			1461	940	
Travel Time (s)	32.1			18.1	11.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1252	66	66	176	205	1252
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1252	66	66	176	205	1252
Turn Type	Prot	Perm	pm+pt	NA	NA	pm+ov
Protected Phases	4		5	2	6	4
Permitted Phases		4	2			6
Detector Phase	4	4	5	2	6	4
Switch Phase						
Minimum Initial (s)	7.0	7.0	7.0	10.0	10.0	7.0
Minimum Split (s)	14.0	14.0	13.0	17.0	17.0	14.0
Total Split (s)	76.0	76.0	13.0	44.0	31.0	76.0
Total Split (%)	63.3%	63.3%	10.8%	36.7%	25.8%	63.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.5	2.5	2.5	2.5	2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None	None	Min	C-Max	C-Max	None
Act Effct Green (s)	63.3	63.3	44.7	44.7	31.7	101.0
Actuated g/C Ratio	0.53	0.53	0.37	0.37	0.26	0.84
v/c Ratio	0.69	0.08	0.18	0.25	0.42	0.87
Control Delay	22.9	2.8	29.2	29.7	53.3	21.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	22.9	2.8	29.2	29.7	53.3	21.0
LOS	C	A	C	C	D	C
Approach Delay	21.9			29.5	25.5	
Approach LOS	C			C	C	
Queue Length 50th (ft)	310	0	36	103	167	334
Queue Length 95th (ft)	379	19	71	164	246	1102

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Internal Link Dist (ft)	1098			1381	860	
Turn Bay Length (ft)		250	250			
Base Capacity (vph)	2002	950	361	693	491	1487
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	0.63	0.07	0.18	0.25	0.42	0.84

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 60 (50%), Referenced to phase 2:NBTL and 6:SBT, Start of Green	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.87	
Intersection Signal Delay: 24.2	Intersection LOS: C
Intersection Capacity Utilization 87.2%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 4006: M-311 (11 Mile Rd) & Site Driveway West



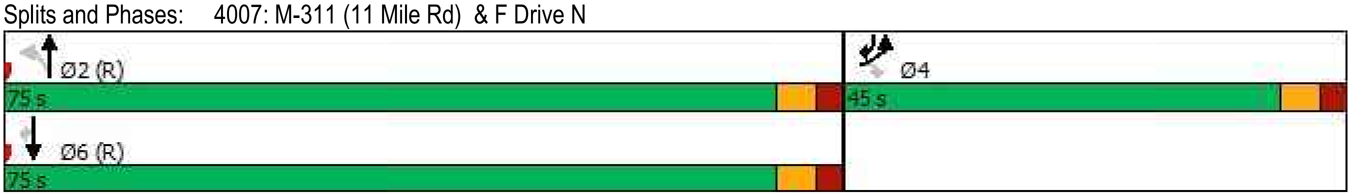
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	1030	30	30	1981	2008	1030
Future Volume (vph)	1030	30	30	1981	2008	1030
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	250	400			0
Storage Lanes	2	1	1			1
Taper Length (ft)	25		25			
Lane Util. Factor	0.97	1.00	1.00	0.95	0.95	1.00
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	3433	1583	1770	3539	3539	1583
Flt Permitted	0.950		0.058			
Satd. Flow (perm)	3433	1583	108	3539	3539	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		6				
Link Speed (mph)	45			55	55	
Link Distance (ft)	1846			974	1093	
Travel Time (s)	28.0			12.1	13.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1120	33	33	2153	2183	1120
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1120	33	33	2153	2183	1120
Turn Type	Prot	Perm	Perm	NA	NA	pm+ov
Protected Phases	4			2	6	4
Permitted Phases		4	2			6
Detector Phase	4	4	2	2	6	4
Switch Phase						
Minimum Initial (s)	7.0	7.0	10.0	10.0	10.0	7.0
Minimum Split (s)	13.0	13.0	16.0	16.0	16.0	13.0
Total Split (s)	45.0	45.0	75.0	75.0	75.0	45.0
Total Split (%)	37.5%	37.5%	62.5%	62.5%	62.5%	37.5%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.5	2.5	2.5	2.5	2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None	None	C-Max	C-Max	C-Max	None
Act Effct Green (s)	39.0	39.0	69.0	69.0	69.0	120.0
Actuated g/C Ratio	0.32	0.32	0.58	0.58	0.58	1.00
v/c Ratio	1.00	0.06	0.53	1.06	1.07	0.71
Control Delay	68.7	24.5	31.0	50.0	56.4	0.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	68.7	24.5	31.0	50.0	56.4	0.9
LOS	E	C	C	D	E	A
Approach Delay	67.4			49.8	37.6	
Approach LOS	E			D	D	
Queue Length 50th (ft)	~449	14	6	~957	~984	0
Queue Length 95th (ft)	#600	39	m13	m#976	m#1050	m0

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Internal Link Dist (ft)	1766			894	1013	
Turn Bay Length (ft)		250	400			
Base Capacity (vph)	1115	518	62	2034	2034	1583
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	1.00	0.06	0.53	1.06	1.07	0.71

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 20 (17%), Referenced to phase 2:NBTL and 6:SBT, Start of Green	
Natural Cycle: 140	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.07	
Intersection Signal Delay: 46.8	Intersection LOS: D
Intersection Capacity Utilization 94.9%	ICU Level of Service F
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4007: M-311 (11 Mile Rd) & F Drive N

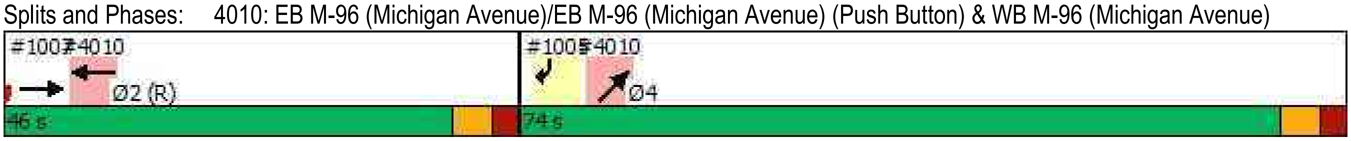


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	1654	0	0	3180	0	0	0	0
Future Volume (vph)	0	0	0	0	1654	0	0	3180	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.91	1.00	1.00	1.00	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	0	0	0	5085	0	0	5085	0	0	0	0
Flt Permitted												
Satd. Flow (perm)	0	0	0	0	5085	0	0	5085	0	0	0	0
Right Turn on Red			Yes			Yes	Yes		Yes			Yes
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		194			183			156			190	
Travel Time (s)		2.9			2.8			2.4			2.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.90	0.90	0.90	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	1798	0	0	3533	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1798	0	0	3533	0	0	0	0
Turn Type					NA			NA				
Protected Phases					2			4				
Permitted Phases												
Minimum Split (s)					17.0			17.0				
Total Split (s)					46.0			74.0				
Total Split (%)					38.3%			61.7%				
Yellow Time (s)					3.5			3.5				
All-Red Time (s)					2.5			2.5				
Lost Time Adjust (s)					0.0			0.0				
Total Lost Time (s)					6.0			6.0				
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)					40.0			68.0				
Actuated g/C Ratio					0.33			0.57				
v/c Ratio					1.06			1.23				
Control Delay					70.6			124.5				
Queue Delay					0.0			0.0				
Total Delay					70.6			124.5				
LOS					E			F				
Approach Delay					70.6			124.5				
Approach LOS					E			F				
Queue Length 50th (ft)					~572			~1234				
Queue Length 95th (ft)					#653			m#923				
Internal Link Dist (ft)		114			103			76			110	
Turn Bay Length (ft)												
Base Capacity (vph)					1695			2881				
Starvation Cap Reductn					0			0				
Spillback Cap Reductn					0			0				
Storage Cap Reductn					0			0				
Reduced v/c Ratio					1.06			1.23				

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 100 (83%), Referenced to phase 2:EBT, Start of Green	
Natural Cycle: 150	
Control Type: Pretimed	
Maximum v/c Ratio: 1.44	
Intersection Signal Delay: 106.3	Intersection LOS: F
Intersection Capacity Utilization 103.4%	ICU Level of Service G
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4010: EB M-96 (Michigan Avenue)/EB M-96 (Michigan Avenue) (Push Button) & WB M-96 (Michigan Avenue)



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	801	0	0	0	0	0	2549	462	0	0	0
Future Volume (vph)	0	801	0	0	0	0	0	2549	462	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		250	0		0
Storage Lanes	0		0	0		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	1.00	1.00
Frt									0.850			
Flt Protected												
Satd. Flow (prot)	0	3539	0	0	0	0	0	5085	1583	0	0	0
Flt Permitted												
Satd. Flow (perm)	0	3539	0	0	0	0	0	5085	1583	0	0	0
Right Turn on Red	Yes		Yes			Yes			Yes			Yes
Satd. Flow (RTOR)									48			
Link Speed (mph)		55			55			55			30	
Link Distance (ft)		167			316			655			182	
Travel Time (s)		2.1			3.9			8.1			4.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	871	0	0	0	0	0	2771	502	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	871	0	0	0	0	0	2771	502	0	0	0
Turn Type		NA						NA	Perm			
Protected Phases		7						2				
Permitted Phases									2			
Minimum Split (s)		16.0						19.5	19.5			
Total Split (s)		51.0						69.0	69.0			
Total Split (%)		42.5%						57.5%	57.5%			
Yellow Time (s)		3.5						3.5	3.5			
All-Red Time (s)		2.5						6.0	6.0			
Lost Time Adjust (s)		0.0						0.0	0.0			
Total Lost Time (s)		6.0						9.5	9.5			
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		45.0						59.5	59.5			
Actuated g/C Ratio		0.38						0.50	0.50			
v/c Ratio		0.66						1.10	0.62			
Control Delay		31.1						74.0	19.5			
Queue Delay		0.0						0.4	0.0			
Total Delay		31.1						74.4	19.5			
LOS		C						E	B			
Approach Delay		31.1						66.0				
Approach LOS		C						E				
Queue Length 50th (ft)		318						~893	269			
Queue Length 95th (ft)		m319						m#831	m251			
Internal Link Dist (ft)		87			236			575			102	
Turn Bay Length (ft)									250			
Base Capacity (vph)		1327						2521	809			
Starvation Cap Reductn		0						0	0			

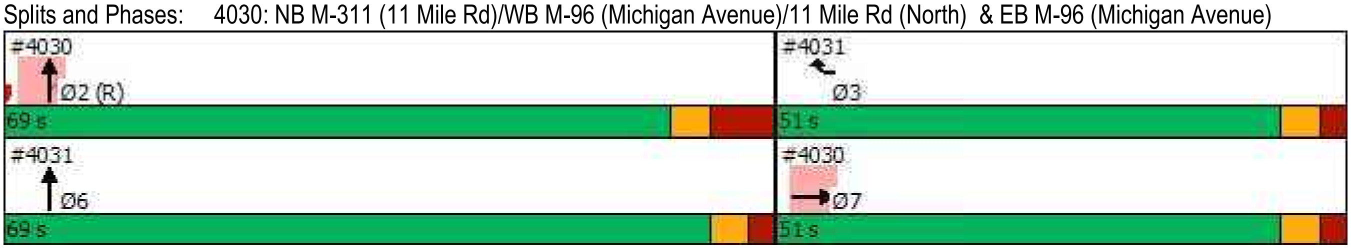
Lane Group	Ø3	Ø6
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Ideal Flow (vphpl)		
Storage Length (ft)		
Storage Lanes		
Taper Length (ft)		
Lane Util. Factor		
Frt		
Flt Protected		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Peak Hour Factor		
Adj. Flow (vph)		
Shared Lane Traffic (%)		
Lane Group Flow (vph)		
Turn Type		
Protected Phases	3	6
Permitted Phases		
Minimum Split (s)	16.0	16.0
Total Split (s)	51.0	69.0
Total Split (%)	43%	58%
Yellow Time (s)	3.5	3.5
All-Red Time (s)	2.5	2.5
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag		
Lead-Lag Optimize?		
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		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn		0						71	0			
Storage Cap Reductn		0						0	0			
Reduced v/c Ratio		0.66						1.13	0.62			

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 88 (73%), Referenced to phase 2:NBT, Start of Green
Natural Cycle: 120
Control Type: Pretimed
Maximum v/c Ratio: 1.13
Intersection Signal Delay: 58.6 Intersection LOS: E
Intersection Capacity Utilization 92.1% ICU Level of Service F
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4030: NB M-311 (11 Mile Rd)/WB M-96 (Michigan Avenue)/11 Mile Rd (North) & EB M-96 (Michigan Avenue)



Lane Group	Ø3	Ø6
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		

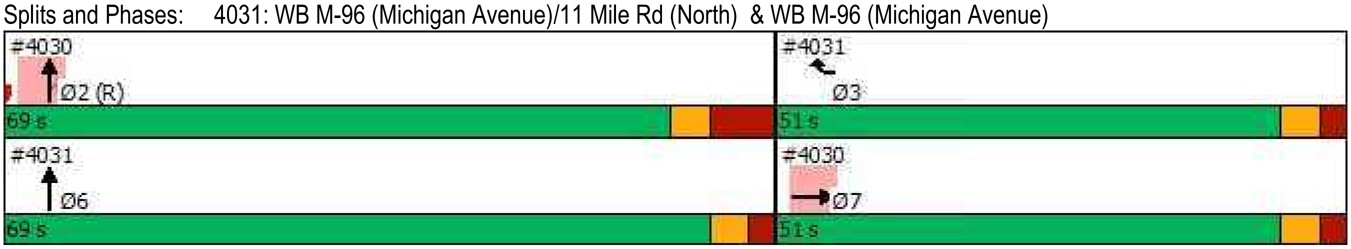
Intersection Summary

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø2	Ø7
Lane Configurations								
Traffic Volume (vph)	0	1407	2549	0	0	0		
Future Volume (vph)	0	1407	2549	0	0	0		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Lane Util. Factor	1.00	0.76	0.91	1.00	1.00	1.00		
Frt		0.850						
Flt Protected								
Satd. Flow (prot)	0	3610	5085	0	0	0		
Flt Permitted								
Satd. Flow (perm)	0	3610	5085	0	0	0		
Right Turn on Red		Yes		Yes				
Satd. Flow (RTOR)		1						
Link Speed (mph)	55		55			55		
Link Distance (ft)	405		182			493		
Travel Time (s)	5.0		2.3			6.1		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Adj. Flow (vph)	0	1529	2771	0	0	0		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	0	1529	2771	0	0	0		
Turn Type		Prot	NA					
Protected Phases		3	6				2	7
Permitted Phases								
Minimum Split (s)		16.0	16.0				19.5	16.0
Total Split (s)		51.0	69.0				69.0	51.0
Total Split (%)		42.5%	57.5%				58%	43%
Yellow Time (s)		3.5	3.5				3.5	3.5
All-Red Time (s)		2.5	2.5				6.0	2.5
Lost Time Adjust (s)		0.0	0.0					
Total Lost Time (s)		6.0	6.0					
Lead/Lag								
Lead-Lag Optimize?								
Act Effct Green (s)		45.0	63.0					
Actuated g/C Ratio		0.38	0.52					
v/c Ratio		1.13	1.04					
Control Delay		100.5	24.7					
Queue Delay		0.0	8.0					
Total Delay		100.5	32.7					
LOS		F	C					
Approach Delay	100.5		32.7					
Approach LOS	F		C					
Queue Length 50th (ft)		~603	~73					
Queue Length 95th (ft)		#722	m0					
Internal Link Dist (ft)	325		102			413		
Turn Bay Length (ft)								
Base Capacity (vph)		1354	2669					
Starvation Cap Reductn		0	51					
Spillback Cap Reductn		0	0					
Storage Cap Reductn		0	0					
Reduced v/c Ratio		1.13	1.06					

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 88 (73%), Referenced to phase 2:NBT, Start of Green	
Natural Cycle: 120	
Control Type: Pretimed	
Maximum v/c Ratio: 1.13	
Intersection Signal Delay: 56.8	Intersection LOS: E
Intersection Capacity Utilization 92.1%	ICU Level of Service F
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4031: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & WB M-96 (Michigan Avenue)

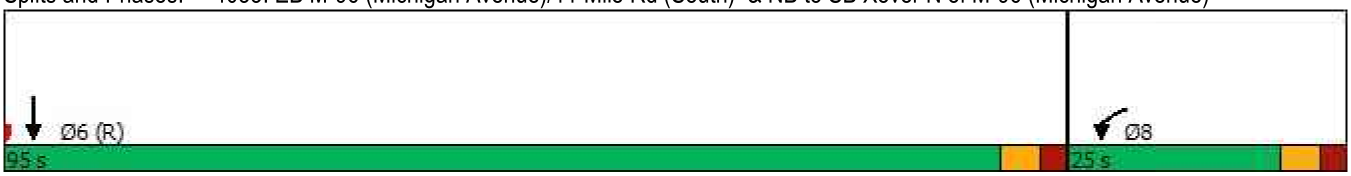


Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	491	0	0	0	0	3348
Future Volume (vph)	491	0	0	0	0	3348
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	0.91
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	3433	0	0	0	0	5085
Flt Permitted	0.950					
Satd. Flow (perm)	3433	0	0	0	0	5085
Right Turn on Red	Yes	Yes		Yes		
Satd. Flow (RTOR)	2					
Link Speed (mph)	25		55			30
Link Distance (ft)	105		587			495
Travel Time (s)	2.9		7.3			11.3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	534	0	0	0	0	3639
Shared Lane Traffic (%)						
Lane Group Flow (vph)	534	0	0	0	0	3639
Turn Type	Prot					NA
Protected Phases	8					6
Permitted Phases						
Minimum Split (s)	13.0					16.0
Total Split (s)	25.0					95.0
Total Split (%)	20.8%					79.2%
Yellow Time (s)	3.5					3.5
All-Red Time (s)	2.5					2.5
Lost Time Adjust (s)	0.0					0.0
Total Lost Time (s)	6.0					6.0
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)	19.0					89.0
Actuated g/C Ratio	0.16					0.74
v/c Ratio	0.98					0.96
Control Delay	35.0					13.4
Queue Delay	0.0					0.1
Total Delay	35.0					13.5
LOS	C					B
Approach Delay	35.0					13.5
Approach LOS	C					B
Queue Length 50th (ft)	172					178
Queue Length 95th (ft)	m141					220
Internal Link Dist (ft)	25		507			415
Turn Bay Length (ft)						
Base Capacity (vph)	545					3771
Starvation Cap Reductn	0					4
Spillback Cap Reductn	0					0
Storage Cap Reductn	0					0
Reduced v/c Ratio	0.98					0.97

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 89 (74%), Referenced to phase 6:SBT, Start of Green	
Natural Cycle: 90	
Control Type: Pretimed	
Maximum v/c Ratio: 0.98	
Intersection Signal Delay: 16.2	Intersection LOS: B
Intersection Capacity Utilization 140.0%	ICU Level of Service H
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

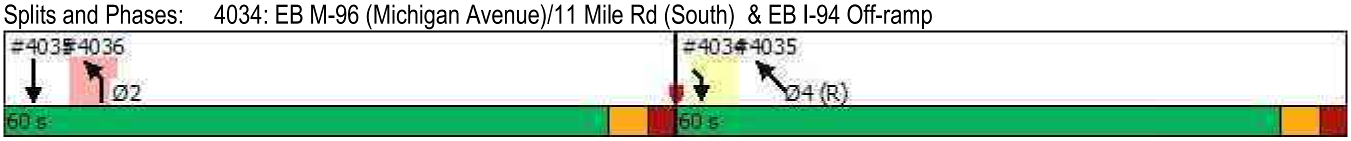
Splits and Phases: 4033: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & NB to SB Xover N of M-96 (Michigan Avenue)



Lane Group	NBL	NBT	SBT	SBR	SEL	SER	Ø2
Lane Configurations			↑↑↑			↱↱	
Traffic Volume (vph)	0	0	2360	0	0	988	
Future Volume (vph)	0	0	2360	0	0	988	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	0.91	1.00	1.00	0.88	
Frt						0.850	
Flt Protected							
Satd. Flow (prot)	0	0	5085	0	0	2787	
Flt Permitted							
Satd. Flow (perm)	0	0	5085	0	0	2787	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)						60	
Link Speed (mph)		30	30		30		
Link Distance (ft)		495	145		346		
Travel Time (s)		11.3	3.3		7.9		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	0	0	2565	0	0	1074	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	2565	0	0	1074	
Turn Type			NA			Prot	
Protected Phases			Free!			4!	2
Permitted Phases							
Minimum Split (s)						16.0	16.0
Total Split (s)						60.0	60.0
Total Split (%)						50.0%	50%
Yellow Time (s)						3.5	3.5
All-Red Time (s)						2.5	2.5
Lost Time Adjust (s)						0.0	
Total Lost Time (s)						6.0	
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)			120.0			54.0	
Actuated g/C Ratio			1.00			0.45	
v/c Ratio			0.50			0.83	
Control Delay			3.8			34.4	
Queue Delay			0.0			0.0	
Total Delay			3.8			34.4	
LOS			A			C	
Approach Delay			3.8		34.4		
Approach LOS			A		C		
Queue Length 50th (ft)			431			388	
Queue Length 95th (ft)			m0			494	
Internal Link Dist (ft)		415	65		266		
Turn Bay Length (ft)							
Base Capacity (vph)			5085			1287	
Starvation Cap Reductn			0			0	
Spillback Cap Reductn			111			0	
Storage Cap Reductn			0			0	
Reduced v/c Ratio			0.52			0.83	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 27 (23%), Referenced to phase 4:SER, Start of Green	
Natural Cycle: 150	
Control Type: Pretimed	
Maximum v/c Ratio: 1.12	
Intersection Signal Delay: 12.8	Intersection LOS: B
Intersection Capacity Utilization 101.3%	ICU Level of Service G
Analysis Period (min) 15	
m Volume for 95th percentile queue is metered by upstream signal.	
! Phase conflict between lane groups.	

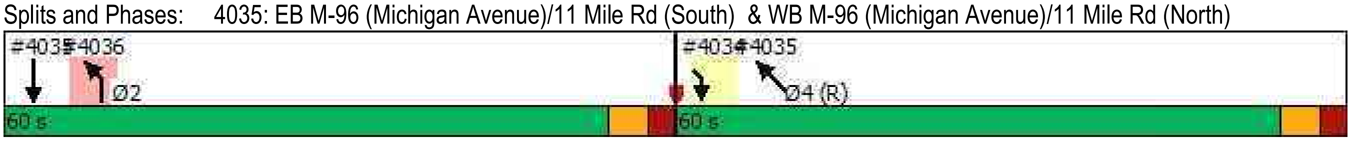
Splits and Phases: 4034: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & EB I-94 Off-ramp



Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	2360	0	0	0	0	0	2366	0
Future Volume (vph)	0	0	0	0	2360	0	0	0	0	0	2366	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.91	1.00	1.00	1.00	1.00	1.00	0.91	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	0	0	0	5085	0	0	0	0	0	5085	0
Flt Permitted												
Satd. Flow (perm)	0	0	0	0	5085	0	0	0	0	0	5085	0
Right Turn on Red			Yes			Yes			Yes	Yes		Yes
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		145			194			233			108	
Travel Time (s)		3.3			4.4			5.3			2.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	2565	0	0	0	0	0	2572	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	2565	0	0	0	0	0	2572	0
Turn Type					NA						NA	
Protected Phases					2						4	
Permitted Phases												
Minimum Split (s)					16.0						16.0	
Total Split (s)					60.0						60.0	
Total Split (%)					50.0%						50.0%	
Yellow Time (s)					3.5						3.5	
All-Red Time (s)					2.5						2.5	
Lost Time Adjust (s)					0.0						0.0	
Total Lost Time (s)					6.0						6.0	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)					54.0						54.0	
Actuated g/C Ratio					0.45						0.45	
v/c Ratio					1.12						1.12	
Control Delay					82.6						88.5	
Queue Delay					0.0						0.0	
Total Delay					82.6						88.5	
LOS					F						F	
Approach Delay					82.6						88.5	
Approach LOS					F						F	
Queue Length 50th (ft)					~838						~854	
Queue Length 95th (ft)					#932						m#765	
Internal Link Dist (ft)		65			114			153			28	
Turn Bay Length (ft)												
Base Capacity (vph)					2288						2288	
Starvation Cap Reductn					0						0	
Spillback Cap Reductn					0						0	
Storage Cap Reductn					0						0	
Reduced v/c Ratio					1.12						1.12	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 27 (23%), Referenced to phase 4:SER, Start of Green	
Natural Cycle: 150	
Control Type: Pretimed	
Maximum v/c Ratio: 1.12	
Intersection Signal Delay: 85.5	Intersection LOS: F
Intersection Capacity Utilization 111.8%	ICU Level of Service H
Analysis Period (min) 15	
~ Volume exceeds capacity, queue is theoretically infinite.	
Queue shown is maximum after two cycles.	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 4035: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & WB M-96 (Michigan Avenue)/11 Mile Rd (North)



Lane Group	NBL	NBR	SET	SER	NWL	NWT	Ø4
Lane Configurations							
Traffic Volume (vph)	104	0	0	0	0	2366	
Future Volume (vph)	104	0	0	0	0	2366	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.91	
Frt							
Flt Protected	0.950						
Satd. Flow (prot)	1719	0	0	0	0	5085	
Flt Permitted	0.950						
Satd. Flow (perm)	1719	0	0	0	0	5085	
Right Turn on Red	Yes	Yes		Yes			
Satd. Flow (RTOR)	34						
Link Speed (mph)	30		30			30	
Link Distance (ft)	271		337			233	
Travel Time (s)	6.2		7.7			5.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Heavy Vehicles (%)	5%	2%	2%	2%	2%	2%	
Adj. Flow (vph)	113	0	0	0	0	2572	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	113	0	0	0	0	2572	
Turn Type	Prot					NA	
Protected Phases	2!					Free!	4
Permitted Phases							
Minimum Split (s)	16.0						16.0
Total Split (s)	60.0						60.0
Total Split (%)	50.0%						50%
Yellow Time (s)	3.5						3.5
All-Red Time (s)	2.5						2.5
Lost Time Adjust (s)	0.0						
Total Lost Time (s)	6.0						
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)	54.0					120.0	
Actuated g/C Ratio	0.45					1.00	
v/c Ratio	0.14					0.51	
Control Delay	14.0					3.8	
Queue Delay	0.0					0.0	
Total Delay	14.0					3.8	
LOS	B					A	
Approach Delay	14.0					3.8	
Approach LOS	B					A	
Queue Length 50th (ft)	35					87	
Queue Length 95th (ft)	71					m0	
Internal Link Dist (ft)	191		257			153	
Turn Bay Length (ft)							
Base Capacity (vph)	792					5085	
Starvation Cap Reductn	0					0	
Spillback Cap Reductn	0					0	
Storage Cap Reductn	0					0	

Lane Group	NBL	NBR	SET	SER	NWL	NWT	Ø4
Reduced v/c Ratio	0.14					0.51	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 27 (23%), Referenced to phase 4:SER, Start of Green	
Natural Cycle: 150	
Control Type: Pretimed	
Maximum v/c Ratio: 1.12	
Intersection Signal Delay: 4.3	Intersection LOS: A
Intersection Capacity Utilization 80.2%	ICU Level of Service D
Analysis Period (min) 15	
m Volume for 95th percentile queue is metered by upstream signal.	
! Phase conflict between lane groups.	

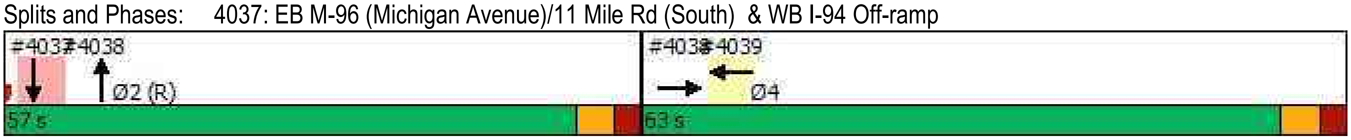
Splits and Phases: 4036: EB I-94 Off-ramp & WB M-96 (Michigan Avenue)/11 Mile Rd (North)

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø4
Lane Configurations							
Traffic Volume (vph)	0	1394	0	0	1039	0	
Future Volume (vph)	0	1394	0	0	1039	0	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	0.88	1.00	1.00	0.95	1.00	
Frt		0.850					
Flt Protected							
Satd. Flow (prot)	0	2707	0	0	3438	0	
Flt Permitted							
Satd. Flow (perm)	0	2707	0	0	3438	0	
Right Turn on Red		Yes				Yes	
Satd. Flow (RTOR)		1038					
Link Speed (mph)	30			30	30		
Link Distance (ft)	222			406	241		
Travel Time (s)	5.0			9.2	5.5		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Heavy Vehicles (%)	2%	5%	2%	2%	5%	2%	
Adj. Flow (vph)	0	1515	0	0	1129	0	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	1515	0	0	1129	0	
Turn Type		Free			NA		
Protected Phases					2		4
Permitted Phases		Free					
Minimum Split (s)					16.0		16.0
Total Split (s)					57.0		63.0
Total Split (%)					47.5%		53%
Yellow Time (s)					3.5		3.5
All-Red Time (s)					2.5		2.5
Lost Time Adjust (s)					0.0		
Total Lost Time (s)					6.0		
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)		120.0			51.0		
Actuated g/C Ratio		1.00			0.42		
v/c Ratio		0.56			0.77		
Control Delay		8.1			34.0		
Queue Delay		0.2			49.1		
Total Delay		8.2			83.1		
LOS		A			F		
Approach Delay	8.2				83.1		
Approach LOS	A				F		
Queue Length 50th (ft)		166			387		
Queue Length 95th (ft)		m165			475		
Internal Link Dist (ft)	142			326	161		
Turn Bay Length (ft)							
Base Capacity (vph)		2707			1461		
Starvation Cap Reductn		0			0		
Spillback Cap Reductn		366			464		
Storage Cap Reductn		0			0		

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø4
Reduced v/c Ratio		0.65			1.13		

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 96 (80%), Referenced to phase 2:SBT, Start of Green	
Natural Cycle: 75	
Control Type: Pretimed	
Maximum v/c Ratio: 0.93	
Intersection Signal Delay: 40.2	Intersection LOS: D
Intersection Capacity Utilization 33.7%	ICU Level of Service A
Analysis Period (min) 15	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 4037: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & WB I-94 Off-ramp



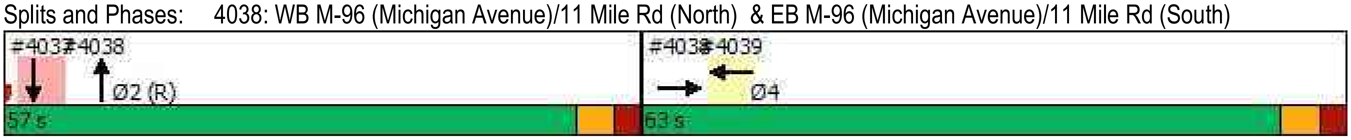
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑						↑↑↑				
Traffic Volume (vph)	0	1394	0	0	0	0	0	1513	0	0	0	0
Future Volume (vph)	0	1394	0	0	0	0	0	1513	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	1.00	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	3438	0	0	0	0	0	4940	0	0	0	0
Flt Permitted												
Satd. Flow (perm)	0	3438	0	0	0	0	0	4940	0	0	0	0
Right Turn on Red	Yes		Yes			Yes			Yes			Yes
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		190			222			207			131	
Travel Time (s)		4.3			5.0			4.7			3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	5%	2%	2%	2%	2%	2%	5%	2%	2%	2%	2%
Adj. Flow (vph)	0	1515	0	0	0	0	0	1645	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1515	0	0	0	0	0	1645	0	0	0	0
Turn Type		NA						NA				
Protected Phases		4						2				
Permitted Phases												
Minimum Split (s)		16.0						16.0				
Total Split (s)		63.0						57.0				
Total Split (%)		52.5%						47.5%				
Yellow Time (s)		3.5						3.5				
All-Red Time (s)		2.5						2.5				
Lost Time Adjust (s)		0.0						0.0				
Total Lost Time (s)		6.0						6.0				
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		57.0						51.0				
Actuated g/C Ratio		0.48						0.42				
v/c Ratio		0.93						0.78				
Control Delay		36.2						42.6				
Queue Delay		0.0						0.0				
Total Delay		36.2						42.6				
LOS		D						D				
Approach Delay		36.2						42.6				
Approach LOS		D						D				
Queue Length 50th (ft)		624						499				
Queue Length 95th (ft)		#748						549				
Internal Link Dist (ft)		110			142			127			51	
Turn Bay Length (ft)												
Base Capacity (vph)		1633						2099				
Starvation Cap Reductn		0						0				
Spillback Cap Reductn		0						0				
Storage Cap Reductn		0						0				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio		0.93						0.78				

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 96 (80%), Referenced to phase 2:SBT, Start of Green	
Natural Cycle: 75	
Control Type: Pretimed	
Maximum v/c Ratio: 0.93	
Intersection Signal Delay: 39.5	Intersection LOS: D
Intersection Capacity Utilization 77.8%	ICU Level of Service D
Analysis Period (min) 15	

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 4038: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & EB M-96 (Michigan Avenue)/11 Mile Rd (South)

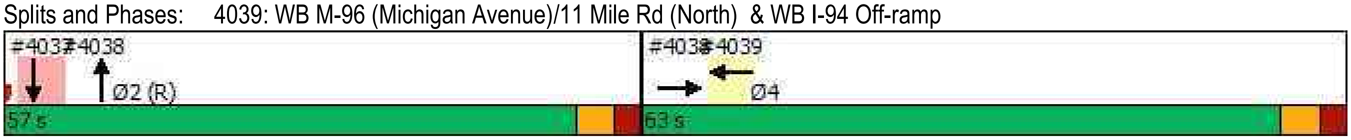


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø2
Lane Configurations							
Traffic Volume (vph)	0	0	0	151	1513	0	
Future Volume (vph)	0	0	0	151	1513	0	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.94	1.00	
Frt							
Flt Protected					0.950		
Satd. Flow (prot)	0	0	0	1810	4848	0	
Flt Permitted					0.950		
Satd. Flow (perm)	0	0	0	1810	4848	0	
Right Turn on Red		Yes			Yes	Yes	
Satd. Flow (RTOR)					2497		
Link Speed (mph)	30			30	30		
Link Distance (ft)	415			317	131		
Travel Time (s)	9.4			7.2	3.0		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Heavy Vehicles (%)	2%	2%	2%	5%	5%	2%	
Adj. Flow (vph)	0	0	0	164	1645	0	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	0	164	1645	0	
Turn Type				NA	Perm		
Protected Phases				4!			2
Permitted Phases					Free!		
Minimum Split (s)				16.0			16.0
Total Split (s)				63.0			57.0
Total Split (%)				52.5%			48%
Yellow Time (s)				3.5			3.5
All-Red Time (s)				2.5			2.5
Lost Time Adjust (s)				0.0			
Total Lost Time (s)				6.0			
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)				57.0	120.0		
Actuated g/C Ratio				0.48	1.00		
v/c Ratio				0.19	0.34		
Control Delay				18.9	0.5		
Queue Delay				0.0	0.0		
Total Delay				18.9	0.5		
LOS				B	A		
Approach Delay				18.9	0.5		
Approach LOS				B	A		
Queue Length 50th (ft)				71	2		
Queue Length 95th (ft)				116	0		
Internal Link Dist (ft)	335			237	51		
Turn Bay Length (ft)							
Base Capacity (vph)				859	4848		
Starvation Cap Reductn				0	0		
Spillback Cap Reductn				0	0		
Storage Cap Reductn				0	0		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø2
Reduced v/c Ratio				0.19	0.34		

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 96 (80%), Referenced to phase 2:SBT, Start of Green	
Natural Cycle: 75	
Control Type: Pretimed	
Maximum v/c Ratio: 0.93	
Intersection Signal Delay: 2.2	Intersection LOS: A
Intersection Capacity Utilization 107.5%	ICU Level of Service G
Analysis Period (min) 15	
! Phase conflict between lane groups.	

Splits and Phases: 4039: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & WB I-94 Off-ramp

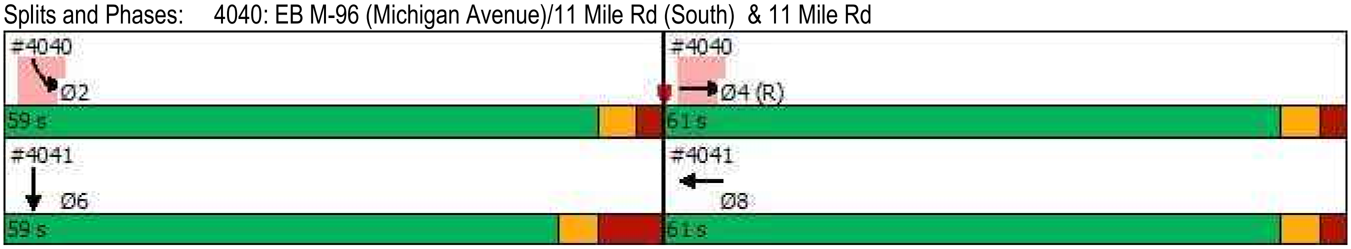


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø6	Ø8
Lane Configurations								
Traffic Volume (vph)	0	877	0	0	662	0		
Future Volume (vph)	0	877	0	0	662	0		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.97	1.00		
Frt								
Flt Protected					0.950			
Satd. Flow (prot)	0	3539	0	0	3335	0		
Flt Permitted					0.950			
Satd. Flow (perm)	0	3539	0	0	3335	0		
Right Turn on Red				Yes	Yes	Yes		
Satd. Flow (RTOR)					132			
Link Speed (mph)		55	55		45			
Link Distance (ft)		212	597		92			
Travel Time (s)		2.6	7.4		1.4			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Heavy Vehicles (%)	2%	2%	2%	2%	5%	2%		
Adj. Flow (vph)	0	953	0	0	720	0		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	0	953	0	0	720	0		
Turn Type		NA			Prot			
Protected Phases		4			2		6	8
Permitted Phases								
Minimum Split (s)		16.0			19.5		19.5	16.0
Total Split (s)		61.0			59.0		59.0	61.0
Total Split (%)		50.8%			49.2%		49%	51%
Yellow Time (s)		3.5			3.5		3.5	3.5
All-Red Time (s)		2.5			2.5		6.0	2.5
Lost Time Adjust (s)		0.0			0.0			
Total Lost Time (s)		6.0			6.0			
Lead/Lag								
Lead-Lag Optimize?								
Act Effct Green (s)		55.0			53.0			
Actuated g/C Ratio		0.46			0.44			
v/c Ratio		0.59			0.47			
Control Delay		25.9			0.9			
Queue Delay		0.0			0.0			
Total Delay		25.9			0.9			
LOS		C			A			
Approach Delay		25.9			0.9			
Approach LOS		C			A			
Queue Length 50th (ft)		281			0			
Queue Length 95th (ft)		347			0			
Internal Link Dist (ft)		132	517		12			
Turn Bay Length (ft)								
Base Capacity (vph)		1622			1546			
Starvation Cap Reductn		0			0			
Spillback Cap Reductn		0			0			
Storage Cap Reductn		0			0			

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø6	Ø8
Reduced v/c Ratio		0.59			0.47			

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 32 (27%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 55	
Control Type: Pretimed	
Maximum v/c Ratio: 0.62	
Intersection Signal Delay: 15.1	Intersection LOS: B
Intersection Capacity Utilization 58.7%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 4040: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & 11 Mile Rd



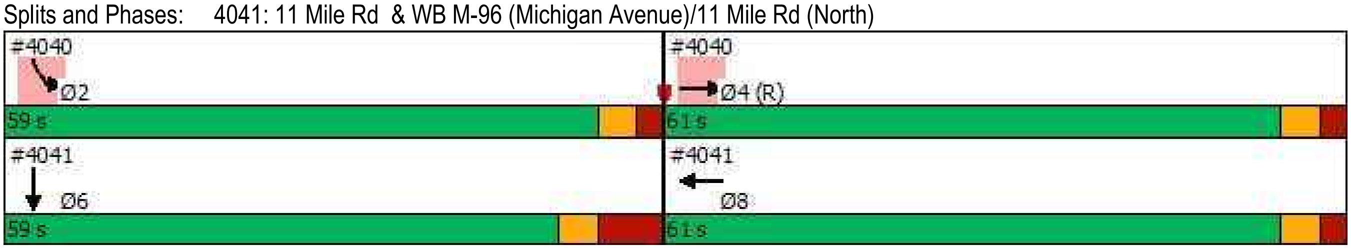
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	930	798	0	0	0	0	662	56
Future Volume (vph)	0	0	0	0	930	798	0	0	0	0	662	56
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		250	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Frt						0.850					0.988	
Flt Protected												
Satd. Flow (prot)	0	0	0	0	3539	1538	0	0	0	0	3404	0
Flt Permitted												
Satd. Flow (perm)	0	0	0	0	3539	1538	0	0	0	0	3404	0
Right Turn on Red			Yes	Yes		Yes			Yes			Yes
Satd. Flow (RTOR)						538					9	
Link Speed (mph)		55			55			45			55	
Link Distance (ft)		210			598			92			259	
Travel Time (s)		2.6			7.4			1.4			3.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	5%	2%	2%	2%	2%	5%	2%
Adj. Flow (vph)	0	0	0	0	1011	867	0	0	0	0	720	61
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1011	867	0	0	0	0	781	0
Turn Type					NA	custom					NA	
Protected Phases					8	Free					6	
Permitted Phases												
Minimum Split (s)					16.0						19.5	
Total Split (s)					61.0						59.0	
Total Split (%)					50.8%						49.2%	
Yellow Time (s)					3.5						3.5	
All-Red Time (s)					2.5						6.0	
Lost Time Adjust (s)					0.0						0.0	
Total Lost Time (s)					6.0						9.5	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)					55.0	120.0					49.5	
Actuated g/C Ratio					0.46	1.00					0.41	
v/c Ratio					0.62	0.56					0.55	
Control Delay					32.1	10.9					39.0	
Queue Delay					0.0	0.0					0.0	
Total Delay					32.1	10.9					39.0	
LOS					C	B					D	
Approach Delay					22.3						39.0	
Approach LOS					C						D	
Queue Length 50th (ft)					431	631					304	
Queue Length 95th (ft)					501	793					384	
Internal Link Dist (ft)		130			518			12			179	
Turn Bay Length (ft)						250						
Base Capacity (vph)					1622	1538					1409	

Lane Group	Ø2	Ø4
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Ideal Flow (vphpl)		
Storage Length (ft)		
Storage Lanes		
Taper Length (ft)		
Lane Util. Factor		
Frt		
Flt Protected		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Peak Hour Factor		
Heavy Vehicles (%)		
Adj. Flow (vph)		
Shared Lane Traffic (%)		
Lane Group Flow (vph)		
Turn Type		
Protected Phases	2	4
Permitted Phases		
Minimum Split (s)	19.5	16.0
Total Split (s)	59.0	61.0
Total Split (%)	49%	51%
Yellow Time (s)	3.5	3.5
All-Red Time (s)	2.5	2.5
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag		
Lead-Lag Optimize?		
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)		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn					0	0					0	
Spillback Cap Reductn					0	0					0	
Storage Cap Reductn					0	0					0	
Reduced v/c Ratio					0.62	0.56					0.55	

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 32 (27%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 55	
Control Type: Pretimed	
Maximum v/c Ratio: 0.62	
Intersection Signal Delay: 27.2	Intersection LOS: C
Intersection Capacity Utilization 58.7%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 4041: 11 Mile Rd & WB M-96 (Michigan Avenue)/11 Mile Rd (North)



Lane Group	Ø2	Ø4
Starvation Cap Reductn		
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		

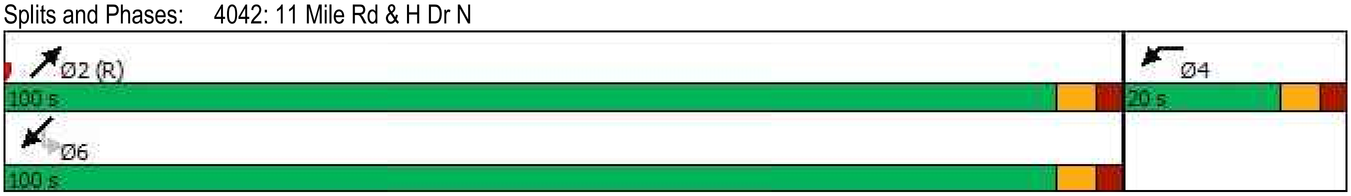
Intersection Summary

Lane Group	WBL	WBR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	0	0	798	0	0	718
Future Volume (vph)	0	0	798	0	0	718
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	1810	0	1863	0	0	1863
Flt Permitted						
Satd. Flow (perm)	1810	0	1863	0	0	1863
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)						
Link Speed (mph)	25		55			55
Link Distance (ft)	1262		1787			680
Travel Time (s)	34.4		22.2			8.4
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	2%	2%	5%	2%	2%
Adj. Flow (vph)	0	0	867	0	0	780
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	867	0	0	780
Turn Type	Prot		NA			NA
Protected Phases	4		2			6
Permitted Phases					6	
Minimum Split (s)	13.0		16.0		13.0	13.0
Total Split (s)	20.0		100.0		100.0	100.0
Total Split (%)	16.7%		83.3%		83.3%	83.3%
Yellow Time (s)	3.5		3.5		3.5	3.5
All-Red Time (s)	2.5		2.5		2.5	2.5
Lost Time Adjust (s)	0.0		0.0			0.0
Total Lost Time (s)	6.0		6.0			6.0
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)			94.0			94.0
Actuated g/C Ratio			0.78			0.78
v/c Ratio			0.59			0.53
Control Delay			2.5			6.4
Queue Delay			0.0			0.0
Total Delay			2.5			6.4
LOS			A			A
Approach Delay			2.5			6.4
Approach LOS			A			A
Queue Length 50th (ft)			16			187
Queue Length 95th (ft)			107			258
Internal Link Dist (ft)	1182		1707			600
Turn Bay Length (ft)						
Base Capacity (vph)			1459			1459
Starvation Cap Reductn			0			0
Spillback Cap Reductn			0			0
Storage Cap Reductn			0			0

Lane Group	WBL	WBR	NET	NER	SWL	SWT
Reduced v/c Ratio			0.59			0.53

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NET, Start of Green	
Natural Cycle: 50	
Control Type: Pretimed	
Maximum v/c Ratio: 0.59	
Intersection Signal Delay: 4.4	Intersection LOS: A
Intersection Capacity Utilization 47.0%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4042: 11 Mile Rd & H Dr N



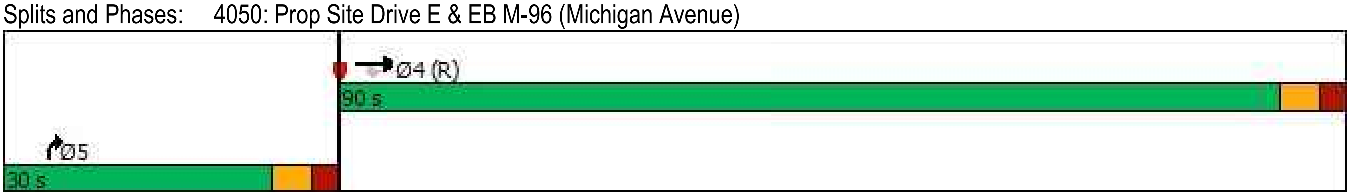
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↱↱				↱↱
Traffic Volume (vph)	1822	502	0	0	0	502
Future Volume (vph)	1822	502	0	0	0	502
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		500	600		0	0
Storage Lanes		2	0		0	2
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	0.88	1.00	1.00	1.00	0.88
Frt		0.850				0.850
Flt Protected						
Satd. Flow (prot)	3539	2787	0	0	0	2787
Flt Permitted						
Satd. Flow (perm)	3539	2787	0	0	0	2787
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		546				41
Link Speed (mph)	55			55	25	
Link Distance (ft)	669			659	1093	
Travel Time (s)	8.3			8.2	29.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1980	546	0	0	0	546
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1980	546	0	0	0	546
Turn Type	NA	Perm				Prot
Protected Phases	4					5
Permitted Phases		4				
Detector Phase	4	4				5
Switch Phase						
Minimum Initial (s)	10.0	10.0				10.0
Minimum Split (s)	16.0	16.0				16.0
Total Split (s)	90.0	90.0				30.0
Total Split (%)	75.0%	75.0%				25.0%
Yellow Time (s)	3.5	3.5				3.5
All-Red Time (s)	2.5	2.5				2.5
Lost Time Adjust (s)	0.0	0.0				0.0
Total Lost Time (s)	6.0	6.0				6.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max	C-Max				None
Act Effct Green (s)	84.4	84.4				23.6
Actuated g/C Ratio	0.70	0.70				0.20
v/c Ratio	0.80	0.26				0.94
Control Delay	13.9	7.3				69.0
Queue Delay	21.5	0.0				0.0
Total Delay	35.4	7.3				69.0
LOS	D	A				E
Approach Delay	29.4				69.0	
Approach LOS	C				E	
Queue Length 50th (ft)	392	63				221
Queue Length 95th (ft)	690	m133				#339

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Internal Link Dist (ft)	589			579	1013	
Turn Bay Length (ft)		500				
Base Capacity (vph)	2488	2121				590
Starvation Cap Reductn	578	0				0
Spillback Cap Reductn	0	0				0
Storage Cap Reductn	0	0				0
Reduced v/c Ratio	1.04	0.26				0.93

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 52 (43%), Referenced to phase 4:EBT, Start of Green
Natural Cycle: 70
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.94
Intersection Signal Delay: 36.4 Intersection LOS: D
Intersection Capacity Utilization 77.9% ICU Level of Service D
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4050: Prop Site Drive E & EB M-96 (Michigan Avenue)



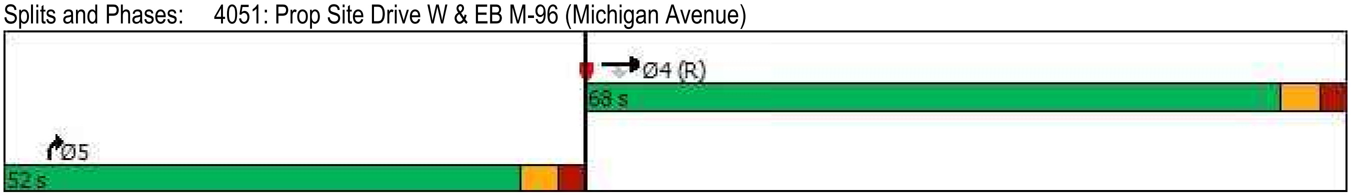
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1041	902	0	0	0	902
Future Volume (vph)	1041	902	0	0	0	902
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		500	600		0	0
Storage Lanes		2	0		0	2
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	0.88	1.00	1.00	1.00	0.88
Frt		0.850				0.850
Flt Protected						
Satd. Flow (prot)	3539	2787	0	0	0	2787
Flt Permitted						
Satd. Flow (perm)	3539	2787	0	0	0	2787
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		980				102
Link Speed (mph)	55			55	25	
Link Distance (ft)	608			627	1293	
Travel Time (s)	7.5			7.8	35.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1132	980	0	0	0	980
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1132	980	0	0	0	980
Turn Type	NA	Perm				Prot
Protected Phases	4					5
Permitted Phases		4				
Detector Phase	4	4				5
Switch Phase						
Minimum Initial (s)	10.0	10.0				10.0
Minimum Split (s)	16.0	16.0				16.0
Total Split (s)	68.0	68.0				52.0
Total Split (%)	56.7%	56.7%				43.3%
Yellow Time (s)	3.5	3.5				3.5
All-Red Time (s)	2.5	2.5				2.5
Lost Time Adjust (s)	0.0	0.0				0.0
Total Lost Time (s)	6.0	6.0				6.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max	C-Max				None
Act Effct Green (s)	64.8	64.8				43.2
Actuated g/C Ratio	0.54	0.54				0.36
v/c Ratio	0.59	0.50				0.92
Control Delay	23.8	11.4				46.3
Queue Delay	1.9	0.1				0.0
Total Delay	25.7	11.5				46.3
LOS	C	B				D
Approach Delay	19.1				46.3	
Approach LOS	B				D	
Queue Length 50th (ft)	420	161				363
Queue Length 95th (ft)	475	282				#468

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Internal Link Dist (ft)	528			547	1213	
Turn Bay Length (ft)		500				
Base Capacity (vph)	1909	1955				1131
Starvation Cap Reductn	582	154				0
Spillback Cap Reductn	0	0				0
Storage Cap Reductn	0	0				0
Reduced v/c Ratio	0.85	0.54				0.87

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 32 (27%), Referenced to phase 4:EBT, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.92
Intersection Signal Delay: 27.7 Intersection LOS: C
Intersection Capacity Utilization 70.3% ICU Level of Service C
Analysis Period (min) 15
\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 4051: Prop Site Drive W & EB M-96 (Michigan Avenue)

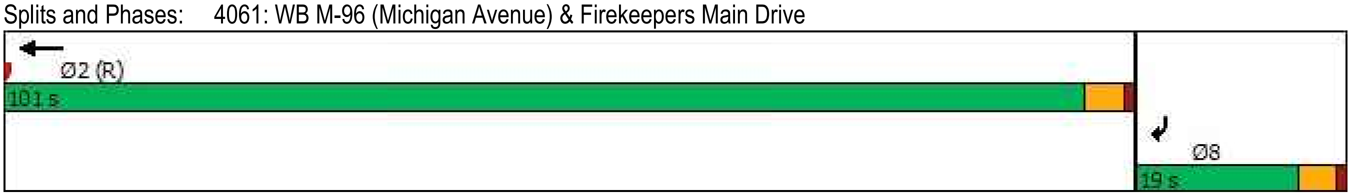


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	1396	168	0	134
Future Volume (vph)	0	0	1396	168	0	134
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			0	0	0
Storage Lanes	0			0	0	2
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	0.88
Frt			0.984			0.850
Flt Protected						
Satd. Flow (prot)	0	0	3490	0	0	2787
Flt Permitted						
Satd. Flow (perm)	0	0	3490	0	0	2787
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			38			157
Link Speed (mph)		55	55		25	
Link Distance (ft)		574	509		701	
Travel Time (s)		7.1	6.3		19.1	
Peak Hour Factor	0.92	0.92	0.92	0.95	0.67	0.92
Heavy Vehicles (%)	2%	2%	2%	0%	0%	2%
Adj. Flow (vph)	0	0	1517	177	0	146
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1694	0	0	146
Turn Type			NA			Prot
Protected Phases			2			8
Permitted Phases						
Detector Phase			2			8
Switch Phase						
Minimum Initial (s)			10.0			10.0
Minimum Split (s)			22.5			14.5
Total Split (s)			101.0			19.0
Total Split (%)			84.2%			15.8%
Yellow Time (s)			3.5			3.5
All-Red Time (s)			1.0			1.0
Lost Time Adjust (s)			0.0			0.0
Total Lost Time (s)			4.5			4.5
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode			C-Max			None
Act Effct Green (s)			101.0			10.0
Actuated g/C Ratio			0.84			0.08
v/c Ratio			0.58			0.39
Control Delay			3.7			9.9
Queue Delay			0.0			0.0
Total Delay			3.7			9.9
LOS			A			A
Approach Delay			3.7		9.9	
Approach LOS			A		A	
Queue Length 50th (ft)			152			0

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Queue Length 95th (ft)			183			30
Internal Link Dist (ft)		494	429		621	
Turn Bay Length (ft)						
Base Capacity (vph)			2943			474
Starvation Cap Reductn			0			0
Spillback Cap Reductn			0			0
Storage Cap Reductn			0			0
Reduced v/c Ratio			0.58			0.31

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:WBT, Start of Green	
Natural Cycle: 50	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.58	
Intersection Signal Delay: 4.2	Intersection LOS: A
Intersection Capacity Utilization 59.8%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 4061: WB M-96 (Michigan Avenue) & Firekeepers Main Drive



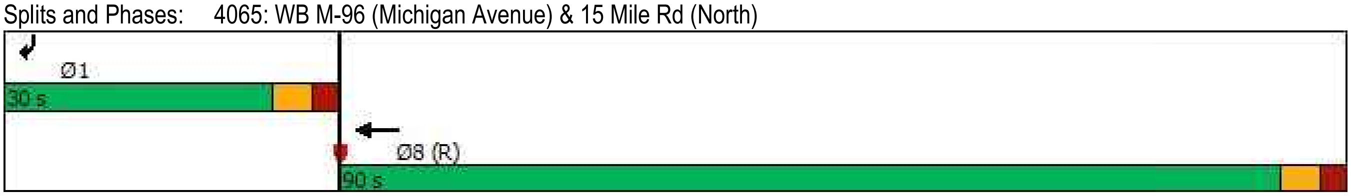
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations			↑↑↑	↱		↱↱
Traffic Volume (vph)	0	0	4138	694	0	659
Future Volume (vph)	0	0	4138	694	0	659
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			250	0	200
Storage Lanes	0			0	0	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.91	1.00	1.00	0.88
Frt				0.850		0.850
Flt Protected						
Satd. Flow (prot)	0	0	5085	1583	0	2787
Flt Permitted						
Satd. Flow (perm)	0	0	5085	1583	0	2787
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				151		
Link Speed (mph)		45	45		45	
Link Distance (ft)		534	660		516	
Travel Time (s)		8.1	10.0		7.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	4498	754	0	716
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	4498	754	0	716
Turn Type			NA	custom		Prot
Protected Phases			8	Free		1
Permitted Phases						
Minimum Split (s)			16.0			13.0
Total Split (s)			90.0			30.0
Total Split (%)			75.0%			25.0%
Yellow Time (s)			3.5			3.5
All-Red Time (s)			2.5			2.5
Lost Time Adjust (s)			0.0			0.0
Total Lost Time (s)			6.0			6.0
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)			84.0	120.0		24.0
Actuated g/C Ratio			0.70	1.00		0.20
v/c Ratio			1.26	0.48		1.29
Control Delay			131.7	15.1		181.1
Queue Delay			0.0	0.0		0.0
Total Delay			131.8	15.1		181.1
LOS			F	B		F
Approach Delay			115.0		181.1	
Approach LOS			F		F	
Queue Length 50th (ft)			~1613	337		~400
Queue Length 95th (ft)			m120	m141		#533
Internal Link Dist (ft)		454	580		436	
Turn Bay Length (ft)				250		200
Base Capacity (vph)			3559	1583		557
Starvation Cap Reductn			82	0		0

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Spillback Cap Reductn			0	0		0
Storage Cap Reductn			0	0		0
Reduced v/c Ratio			1.29	0.48		1.29

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 8:WBT, Start of Green	
Natural Cycle: 150	
Control Type: Pretimed	
Maximum v/c Ratio: 1.29	
Intersection Signal Delay: 122.9	Intersection LOS: F
Intersection Capacity Utilization 113.0%	ICU Level of Service H
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4065: WB M-96 (Michigan Avenue) & 15 Mile Rd (North)



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	4059	0	0	119	0
Future Volume (vph)	0	4059	0	0	119	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.91	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	5085	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	5085	0	0	1770	0
Right Turn on Red				Yes	Yes	Yes
Satd. Flow (RTOR)						
Link Speed (mph)		45	45		25	
Link Distance (ft)		262	1016		123	
Travel Time (s)		4.0	15.4		3.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.90	0.92
Adj. Flow (vph)	0	4412	0	0	132	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	4412	0	0	132	0
Turn Type		NA			Prot	
Protected Phases		4			1	
Permitted Phases						
Minimum Split (s)		16.0			16.0	
Total Split (s)		99.0			21.0	
Total Split (%)		82.5%			17.5%	
Yellow Time (s)		3.5			3.5	
All-Red Time (s)		2.5			2.5	
Lost Time Adjust (s)		0.0			0.0	
Total Lost Time (s)		6.0			6.0	
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)		93.0			15.0	
Actuated g/C Ratio		0.78			0.12	
v/c Ratio		1.12			0.60	
Control Delay		69.8			40.6	
Queue Delay		0.3			0.0	
Total Delay		70.1			40.6	
LOS		E			D	
Approach Delay		70.1			40.6	
Approach LOS		E			D	
Queue Length 50th (ft)		~1466			95	
Queue Length 95th (ft)		m1089			m88	
Internal Link Dist (ft)		182	936		43	
Turn Bay Length (ft)						
Base Capacity (vph)		3940			221	
Starvation Cap Reductn		0			0	
Spillback Cap Reductn		724			0	
Storage Cap Reductn		0			0	
Reduced v/c Ratio		1.37			0.60	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 116 (97%), Referenced to phase 4:EBT, Start of Green

Natural Cycle: 140

Control Type: Pretimed

Maximum v/c Ratio: 1.12

Intersection Signal Delay: 69.2 Intersection LOS: E

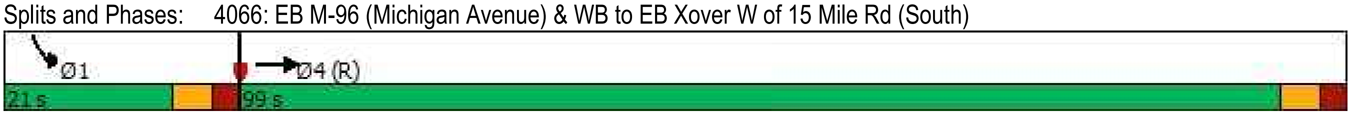
Intersection Capacity Utilization 165.2% ICU Level of Service H

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4066: EB M-96 (Michigan Avenue) & WB to EB Xover W of 15 Mile Rd (South)



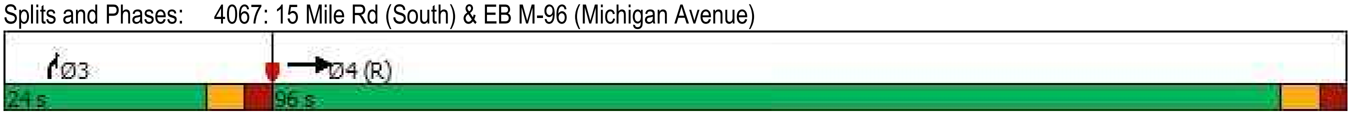
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	3865	313	0	0	0	315
Future Volume (vph)	3865	313	0	0	0	315
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		50	0		0	250
Storage Lanes		0	0		0	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	1.00	1.00	1.00	0.88
Frt	0.989					0.850
Flt Protected						
Satd. Flow (prot)	5029	0	0	0	0	2814
Flt Permitted						
Satd. Flow (perm)	5029	0	0	0	0	2814
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	31					1
Link Speed (mph)	45			45	45	
Link Distance (ft)	1016			704	1375	
Travel Time (s)	15.4			10.7	20.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.88	0.88
Heavy Vehicles (%)	2%	2%	2%	2%	1%	1%
Adj. Flow (vph)	4201	340	0	0	0	358
Shared Lane Traffic (%)						
Lane Group Flow (vph)	4541	0	0	0	0	358
Turn Type	NA					Prot
Protected Phases	4					3
Permitted Phases						
Minimum Split (s)	17.0					16.0
Total Split (s)	96.0					24.0
Total Split (%)	80.0%					20.0%
Yellow Time (s)	3.5					3.5
All-Red Time (s)	2.5					2.5
Lost Time Adjust (s)	0.0					0.0
Total Lost Time (s)	6.0					6.0
Lead/Lag	Lag					Lead
Lead-Lag Optimize?	Yes					Yes
Act Effct Green (s)	90.0					18.0
Actuated g/C Ratio	0.75					0.15
v/c Ratio	1.20					0.85
Control Delay	103.4					68.7
Queue Delay	0.0					0.0
Total Delay	103.4					68.7
LOS	F					E
Approach Delay	103.4				68.7	
Approach LOS	F				E	
Queue Length 50th (ft)	~1561					155
Queue Length 95th (ft)	m#241					#232
Internal Link Dist (ft)	936			624	1295	
Turn Bay Length (ft)						250
Base Capacity (vph)	3779					422

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Starvation Cap Reductn	1					0
Spillback Cap Reductn	0					0
Storage Cap Reductn	0					0
Reduced v/c Ratio	1.20					0.85

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 4 (3%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 150	
Control Type: Pretimed	
Maximum v/c Ratio: 1.20	
Intersection Signal Delay: 100.9	Intersection LOS: F
Intersection Capacity Utilization 102.7%	ICU Level of Service G
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

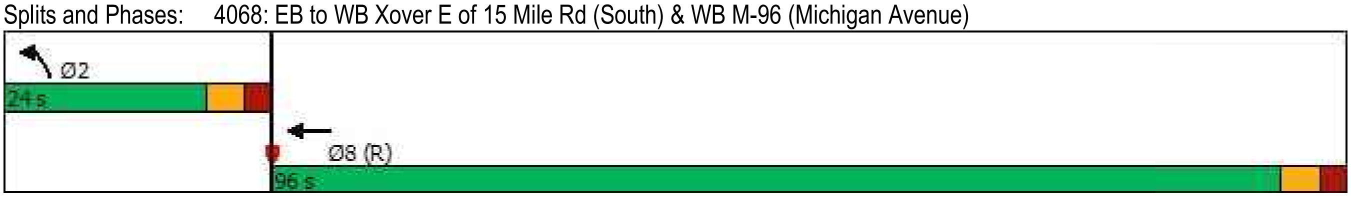
Splits and Phases: 4067: 15 Mile Rd (South) & EB M-96 (Michigan Avenue)



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	3976	204	0
Future Volume (vph)	0	0	0	3976	204	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	5085	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	5085	1770	0
Right Turn on Red		Yes			Yes	Yes
Satd. Flow (RTOR)						
Link Speed (mph)	45			45	25	
Link Distance (ft)	687			275	111	
Travel Time (s)	10.4			4.2	3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	4322	222	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	4322	222	0
Turn Type				NA	Prot	
Protected Phases				8	2	
Permitted Phases						
Minimum Split (s)				16.0	13.0	
Total Split (s)				96.0	24.0	
Total Split (%)				80.0%	20.0%	
Yellow Time (s)				3.5	3.5	
All-Red Time (s)				2.5	2.5	
Lost Time Adjust (s)				0.0	0.0	
Total Lost Time (s)				6.0	6.0	
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)				90.0	18.0	
Actuated g/C Ratio				0.75	0.15	
v/c Ratio				1.13	0.84	
Control Delay				76.3	44.2	
Queue Delay				0.1	0.0	
Total Delay				76.4	44.2	
LOS				E	D	
Approach Delay				76.4	44.2	
Approach LOS				E	D	
Queue Length 50th (ft)				~1429	165	
Queue Length 95th (ft)				m449	m138	
Internal Link Dist (ft)	607			195	31	
Turn Bay Length (ft)						
Base Capacity (vph)				3813	265	
Starvation Cap Reductn				342	0	
Spillback Cap Reductn				0	0	
Storage Cap Reductn				0	0	
Reduced v/c Ratio				1.25	0.84	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 112 (93%), Referenced to phase 8:WBT, Start of Green	
Natural Cycle: 150	
Control Type: Pretimed	
Maximum v/c Ratio: 1.13	
Intersection Signal Delay: 74.8	Intersection LOS: E
Intersection Capacity Utilization 124.8%	ICU Level of Service H
Analysis Period (min) 15	
~ Volume exceeds capacity, queue is theoretically infinite.	
Queue shown is maximum after two cycles.	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 4068: EB to WB Xover E of 15 Mile Rd (South) & WB M-96 (Michigan Avenue)

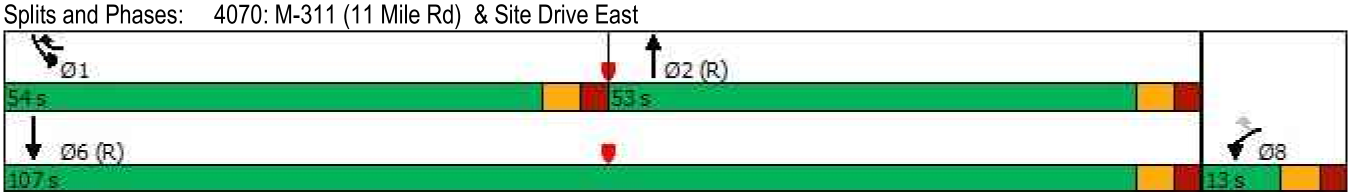


Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	30	727	1284	30	727	1311
Future Volume (vph)	30	727	1284	30	727	1311
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	500		0	400	
Storage Lanes	1	1		0	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.88	0.95	0.95	1.00	0.95
Frt		0.850	0.997			
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	2787	3529	0	1770	3539
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1770	2787	3529	0	1770	3539
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		14	2			
Link Speed (mph)	25		55			55
Link Distance (ft)	750		940			974
Travel Time (s)	20.5		11.7			12.1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	33	790	1396	33	790	1425
Shared Lane Traffic (%)						
Lane Group Flow (vph)	33	790	1429	0	790	1425
Turn Type	Prot	pm+ov	NA		Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8				
Detector Phase	8	1	2		1	6
Switch Phase						
Minimum Initial (s)	7.0	7.0	10.0		7.0	10.0
Minimum Split (s)	13.0	13.0	16.0		13.0	16.0
Total Split (s)	13.0	54.0	53.0		54.0	107.0
Total Split (%)	10.8%	45.0%	44.2%		45.0%	89.2%
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5
All-Red Time (s)	2.5	2.5	2.5		2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0		6.0	6.0
Lead/Lag		Lead	Lag		Lead	
Lead-Lag Optimize?						
Recall Mode	None	None	C-Max		None	C-Max
Act Effct Green (s)	7.0	61.0	47.0		53.2	108.6
Actuated g/C Ratio	0.06	0.51	0.39		0.44	0.90
v/c Ratio	0.32	0.56	1.03		1.01	0.45
Control Delay	62.9	21.7	59.8		41.8	5.8
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	62.9	21.7	59.8		41.8	5.8
LOS	E	C	E		D	A
Approach Delay	23.3		59.8			18.6
Approach LOS	C		E			B
Queue Length 50th (ft)	25	226	~97		~727	375
Queue Length 95th (ft)	60	291	#413		m#642	m307

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Internal Link Dist (ft)	670		860			894
Turn Bay Length (ft)		500			400	
Base Capacity (vph)	103	1423	1383		784	3202
Starvation Cap Reductn	0	0	0		0	0
Spillback Cap Reductn	0	0	0		0	138
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.32	0.56	1.03		1.01	0.47

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 8 (7%), Referenced to phase 2:NBT and 6:SBT, Start of Green	
Natural Cycle: 150	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.03	
Intersection Signal Delay: 32.7	Intersection LOS: C
Intersection Capacity Utilization 97.6%	ICU Level of Service F
Analysis Period (min) 15	
~ Volume exceeds capacity, queue is theoretically infinite. Queue shown is maximum after two cycles.	
# 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 4070: M-311 (11 Mile Rd) & Site Drive East

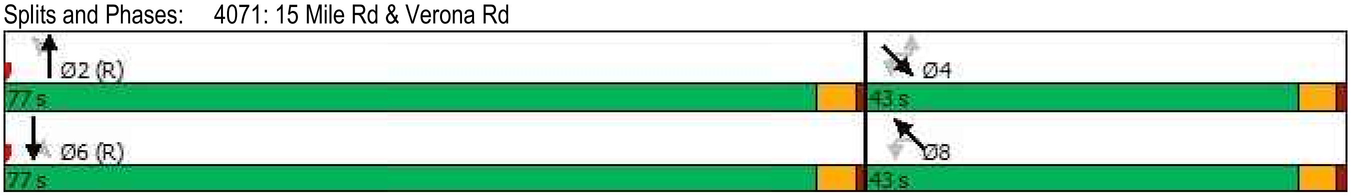


Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	652	13	13	5	9	4	0	87	632	6	118	14
Future Volume (vph)	652	13	13	5	9	4	0	87	632	6	118	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		70	0		0
Storage Lanes	0		0	0		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
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
Frt		0.997			0.968				0.850		0.986	
Flt Protected		0.954			0.987						0.998	
Satd. Flow (prot)	0	1789	0	0	1715	0	0	1845	1392	0	1851	0
Flt Permitted		0.712			0.861						0.991	
Satd. Flow (perm)	0	1335	0	0	1496	0	0	1845	1392	0	1838	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1			7				710		5	
Link Speed (mph)		45			55			55			55	
Link Distance (ft)		682			426			745			951	
Travel Time (s)		10.3			5.3			9.2			11.8	
Peak Hour Factor	0.80	0.80	0.80	0.60	0.60	0.60	0.89	0.89	0.89	0.86	0.86	0.86
Heavy Vehicles (%)	1%	1%	1%	0%	0%	25%	0%	3%	16%	1%	1%	1%
Adj. Flow (vph)	815	16	16	8	15	7	0	98	710	7	137	16
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	847	0	0	30	0	0	98	710	0	160	0
Turn Type	Perm	NA		Perm	NA			NA	Perm	Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4		4	8		
Minimum Split (s)	22.5	22.5		22.5	22.5		22.5	22.5	22.5	22.5	22.5	
Total Split (s)	77.0	77.0		77.0	77.0		43.0	43.0	43.0	43.0	43.0	
Total Split (%)	64.2%	64.2%		64.2%	64.2%		35.8%	35.8%	35.8%	35.8%	35.8%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0	0.0		0.0	
Total Lost Time (s)		4.5			4.5			4.5	4.5		4.5	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		72.5			72.5			38.5	38.5		38.5	
Actuated g/C Ratio		0.60			0.60			0.32	0.32		0.32	
v/c Ratio		1.05			0.03			0.17	0.77		0.27	
Control Delay		70.7			8.1			30.2	8.7		30.8	
Queue Delay		0.0			0.0			0.0	0.0		0.0	
Total Delay		70.7			8.1			30.2	8.7		30.8	
LOS		E			A			C	A		C	
Approach Delay		70.7			8.1			11.3			30.8	
Approach LOS		E			A			B			C	
Queue Length 50th (ft)		~716			7			54	0		89	
Queue Length 95th (ft)		#781			12			96	107		139	
Internal Link Dist (ft)		602			346			665			871	
Turn Bay Length (ft)									70			
Base Capacity (vph)		806			906			591	928		593	

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
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		1.05			0.03			0.17	0.77		0.27	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 90	
Control Type: Pretimed	
Maximum v/c Ratio: 1.05	
Intersection Signal Delay: 40.2	Intersection LOS: D
Intersection Capacity Utilization 67.0%	ICU Level of Service C
Analysis Period (min) 15	
~ Volume exceeds capacity, queue is theoretically infinite.	
Queue shown is maximum after two cycles.	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	

Splits and Phases: 4071: 15 Mile Rd & Verona Rd



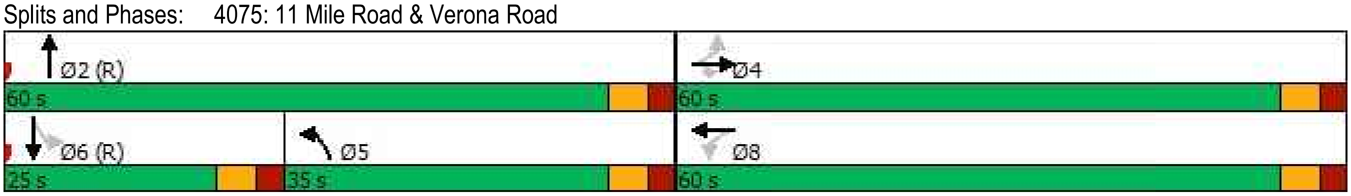
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	717	550	17	736	19	548	68	13	10	82	8
Future Volume (vph)	11	717	550	17	736	19	548	68	13	10	82	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	190		70	190		0	140		0	215		0
Storage Lanes	1		1	1		0	2		0	1		0
Taper Length (ft)	115			140			200			165		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.996			0.976			0.987	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	1900	1468	1805	1890	0	3072	1854	0	1687	1753	0
Flt Permitted	0.074			0.074			0.950			0.697		
Satd. Flow (perm)	141	1900	1468	141	1890	0	3072	1854	0	1238	1753	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			159		1			10			3	
Link Speed (mph)		55			55			45			55	
Link Distance (ft)		519			1585			1015			821	
Travel Time (s)		6.4			19.6			15.4			10.2	
Peak Hour Factor	0.79	0.79	0.79	0.87	0.87	0.87	0.87	0.87	0.87	0.66	0.66	0.66
Heavy Vehicles (%)	0%	0%	10%	0%	0%	5%	14%	0%	0%	7%	7%	7%
Adj. Flow (vph)	14	908	696	20	846	22	630	78	15	15	124	12
Shared Lane Traffic (%)												
Lane Group Flow (vph)	14	908	696	20	868	0	630	93	0	15	136	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Perm	NA	
Protected Phases		4			8		5	2			6	
Permitted Phases	4		4	8						6		
Minimum Split (s)	25.0	25.0	25.0	25.0	25.0		16.0	25.0		25.0	25.0	
Total Split (s)	60.0	60.0	60.0	60.0	60.0		35.0	60.0		25.0	25.0	
Total Split (%)	50.0%	50.0%	50.0%	50.0%	50.0%		29.2%	50.0%		20.8%	20.8%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	2.5	2.5	2.5	2.5	2.5		2.5	2.5		2.5	2.5	
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)	6.0	6.0	6.0	6.0	6.0		6.0	6.0		6.0	6.0	
Lead/Lag							Lag			Lead	Lead	
Lead-Lag Optimize?							Yes			Yes	Yes	
Act Effct Green (s)	54.0	54.0	54.0	54.0	54.0		29.0	54.0		19.0	19.0	
Actuated g/C Ratio	0.45	0.45	0.45	0.45	0.45		0.24	0.45		0.16	0.16	
v/c Ratio	0.22	1.06	0.93	0.32	1.02		0.85	0.11		0.08	0.49	
Control Delay	31.2	81.4	44.6	37.9	69.2		55.5	17.5		44.3	51.6	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	31.2	81.4	44.6	37.9	69.2		55.5	17.5		44.3	51.6	
LOS	C	F	D	D	E		E	B		D	D	
Approach Delay		65.1			68.5			50.6			50.9	
Approach LOS		E			E			D			D	
Queue Length 50th (ft)	6	~775	414	10	~713		241	36		10	95	
Queue Length 95th (ft)	22	#812	472	34	#907		#301	67		22	113	
Internal Link Dist (ft)		439			1505			935			741	
Turn Bay Length (ft)	190		70	190			140			215		
Base Capacity (vph)	63	855	748	63	851		742	839		196	280	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0	0	0	0		0	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	0.22	1.06	0.93	0.32	1.02		0.85	0.11		0.08	0.49	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green	
Natural Cycle: 110	
Control Type: Pretimed	
Maximum v/c Ratio: 1.06	
Intersection Signal Delay: 62.3	Intersection LOS: E
Intersection Capacity Utilization 72.2%	ICU Level of Service C
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 4075: 11 Mile Road & Verona Road



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	1333	143	0	231
Future Volume (vph)	0	0	1333	143	0	231
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200			300	245	245
Storage Lanes	0			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.985			0.865
Flt Protected						
Satd. Flow (prot)	0	0	3344	0	0	1644
Flt Permitted						
Satd. Flow (perm)	0	0	3344	0	0	1644
Link Speed (mph)		55	55		25	
Link Distance (ft)		509	395		760	
Travel Time (s)		6.3	4.9		20.7	
Peak Hour Factor	0.88	0.88	0.91	0.91	0.79	0.79
Heavy Vehicles (%)	1%	1%	7%	0%	0%	0%
Adj. Flow (vph)	0	0	1465	157	0	292
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1622	0	0	292
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 62.4% ICU Level of Service B

Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	1319	43	0	157
Future Volume (vph)	0	0	1319	43	0	157
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	175			50	0	0
Storage Lanes	0			0	0	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.995			0.865
Flt Protected						
Satd. Flow (prot)	0	0	3364	0	0	1565
Flt Permitted						
Satd. Flow (perm)	0	0	3364	0	0	1565
Link Speed (mph)		55	55		25	
Link Distance (ft)		395	586		185	
Travel Time (s)		4.9	7.3		5.0	
Peak Hour Factor	0.90	0.90	0.95	0.95	0.70	0.70
Heavy Vehicles (%)	1%	1%	7%	0%	5%	5%
Adj. Flow (vph)	0	0	1388	45	0	224
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1433	0	0	224
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 54.2% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	1355	12	0	7
Future Volume (vph)	0	0	1355	12	0	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150			600	0	0
Storage Lanes	0			0	0	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.999			0.865
Flt Protected						
Satd. Flow (prot)	0	0	3372	0	0	1644
Flt Permitted						
Satd. Flow (perm)	0	0	3372	0	0	1644
Link Speed (mph)		55	55		25	
Link Distance (ft)		586	607		1086	
Travel Time (s)		7.3	7.5		29.6	
Peak Hour Factor	0.83	0.83	0.92	0.92	0.60	0.60
Heavy Vehicles (%)	10%	1%	7%	0%	33%	0%
Adj. Flow (vph)	0	0	1473	13	0	12
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1486	0	0	12
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 47.8%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	1089	8	0	7
Future Volume (vph)	0	0	1089	8	0	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.999			0.865
Flt Protected						
Satd. Flow (prot)	0	0	3536	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	0	3536	0	0	1611
Link Speed (mph)		55	55		55	
Link Distance (ft)		538	1254		1399	
Travel Time (s)		6.7	15.5		17.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	1184	9	0	8
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1193	0	0	8
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 40.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	0	5	0	694	0	0	659	0
Future Volume (vph)	0	0	0	0	0	5	0	694	0	0	659	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
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
Frt					0.865							
Flt Protected												
Satd. Flow (prot)	0	1863	0	0	1611	0	0	1863	0	0	1863	0
Flt Permitted												
Satd. Flow (perm)	0	1863	0	0	1611	0	0	1863	0	0	1863	0
Link Speed (mph)		45			45			25			45	
Link Distance (ft)		957			1038			516			593	
Travel Time (s)		14.5			15.7			14.1			9.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	0	5	0	754	0	0	716	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	5	0	0	754	0	0	716	0
Sign Control		Stop			Stop			Free			Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 46.5% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBT	EBR	WBL	WBT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	0	0	119	1654	0	0
Future Volume (vph)	0	0	119	1654	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.91	0.91	1.00	1.00
Frt						
Flt Protected				0.997		
Satd. Flow (prot)	0	0	0	5070	0	0
Flt Permitted				0.997		
Satd. Flow (perm)	0	0	0	5070	0	0
Link Speed (mph)	45			45	25	
Link Distance (ft)	183			382	263	
Travel Time (s)	2.8			5.8	7.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	129	1798	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1927	0	0
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 62.2% ICU Level of Service B
Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	2326	966	0	0	0	0
Future Volume (vph)	2326	966	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950	0.973				
Satd. Flow (prot)	1610	3299	0	0	0	0
Flt Permitted	0.950	0.973				
Satd. Flow (perm)	1610	3299	0	0	0	0
Link Speed (mph)		45	45		25	
Link Distance (ft)		619	209		329	
Travel Time (s)		9.4	3.2		9.0	
Peak Hour Factor	0.86	0.86	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2705	1123	0	0	0	0
Shared Lane Traffic (%)	50%					
Lane Group Flow (vph)	1352	2476	0	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 81.2%	ICU Level of Service D
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	0	988	168	0	0
Future Volume (vph)	0	0	988	168	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	1.00
Frt				0.850		
Flt Protected						
Satd. Flow (prot)	0	0	3539	1583	0	0
Flt Permitted						
Satd. Flow (perm)	0	0	3539	1583	0	0
Link Speed (mph)		45	45		30	
Link Distance (ft)		213	315		137	
Travel Time (s)		3.2	4.8		3.1	
Peak Hour Factor	0.92	0.92	0.91	0.91	0.92	0.92
Adj. Flow (vph)	0	0	1086	185	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1086	185	0	0
Sign Control		Stop	Free		Free	

Intersection Summary		
Area Type:	Other	
Control Type: Unsignalized		
Intersection Capacity Utilization 62.3%		ICU Level of Service B
Analysis Period (min) 15		

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑			↰	
Traffic Volume (vph)	0	1088	0	0	159	0
Future Volume (vph)	0	1088	0	0	159	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3505	0	0	1787	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3505	0	0	1787	0
Link Speed (mph)		45	45		25	
Link Distance (ft)		309	168		108	
Travel Time (s)		4.7	2.5		2.9	
Peak Hour Factor	0.86	0.86	0.92	0.92	0.87	0.87
Heavy Vehicles (%)	3%	3%	2%	2%	1%	1%
Adj. Flow (vph)	0	1265	0	0	183	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1265	0	0	183	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 59.1%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑↑	↰	
Traffic Volume (vph)	0	0	0	1101	182	0
Future Volume (vph)	0	0	0	1101	182	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	5036	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	5036	1770	0
Link Speed (mph)	45			45	25	
Link Distance (ft)	134			152	111	
Travel Time (s)	2.0			2.3	3.0	
Peak Hour Factor	0.92	0.92	0.89	0.89	0.94	0.94
Heavy Vehicles (%)	2%	2%	3%	3%	2%	2%
Adj. Flow (vph)	0	0	0	1237	194	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1237	194	0
Sign Control	Free			Free	Stop	

Intersection Summary		
Area Type:	Other	
Control Type: Unsignalized		
Intersection Capacity Utilization 41.4%		ICU Level of Service A
Analysis Period (min) 15		

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	1066	0	0	80	0
Future Volume (vph)	0	1066	0	0	80	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3574	0	0	1787	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3574	0	0	1787	0
Link Speed (mph)		45	45		25	
Link Distance (ft)		222	290		102	
Travel Time (s)		3.4	4.4		2.8	
Peak Hour Factor	0.95	0.95	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	1%	1%	2%	2%	1%	1%
Adj. Flow (vph)	0	1122	0	0	87	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1122	0	0	87	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 74.3%	ICU Level of Service D
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑	↰	
Traffic Volume (vph)	0	0	0	1120	65	0
Future Volume (vph)	0	0	0	1120	65	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	30			45	25	
Link Distance (ft)	114			1105	101	
Travel Time (s)	2.6			16.7	2.8	
Peak Hour Factor	0.92	0.92	0.88	0.88	0.94	0.94
Adj. Flow (vph)	0	0	0	1273	69	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1273	69	0
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 70.1% ICU Level of Service C

Analysis Period (min) 15

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	174	318	31	4	253	12	14	37	3	13	81	156
Future Volume (vph)	174	318	31	4	253	12	14	37	3	13	81	156
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	80		0	80		0	110		0	115		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	180			180			140			175		
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
Frt		0.987			0.993			0.988			0.901	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	1875	0	1770	1850	0	1703	1771	0	1770	1678	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1805	1875	0	1770	1850	0	1703	1771	0	1770	1678	0
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		1365			1319			666			571	
Travel Time (s)		20.7			20.0			10.1			8.7	
Peak Hour Factor	0.94	0.94	0.94	0.88	0.88	0.88	0.78	0.78	0.78	0.91	0.91	0.91
Heavy Vehicles (%)	0%	0%	0%	2%	2%	2%	6%	6%	6%	2%	2%	2%
Adj. Flow (vph)	185	338	33	5	288	14	18	47	4	14	89	171
Shared Lane Traffic (%)												
Lane Group Flow (vph)	185	371	0	5	302	0	18	51	0	14	260	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 47.5% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBL2	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	SWL	SWR
Lane Configurations											
Traffic Volume (vph)	55	0	112	0	270	79	81	385	0	0	0
Future Volume (vph)	55	0	112	0	270	79	81	385	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	240	0		0	105		0	0	0
Storage Lanes		1	1	0		0	1		0	0	0
Taper Length (ft)		25		25			70			25	
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
Frt			0.850		0.969						
Flt Protected	0.950						0.950				
Satd. Flow (prot)	1687	0	1615	0	1805	0	1752	1845	0	0	0
Flt Permitted	0.950						0.950				
Satd. Flow (perm)	1687	0	1615	0	1805	0	1752	1845	0	0	0
Link Speed (mph)		25			45			45		25	
Link Distance (ft)		894			1167			685		897	
Travel Time (s)		24.4			17.7			10.4		24.5	
Peak Hour Factor	0.93	0.93	0.93	0.91	0.91	0.91	0.95	0.95	0.95	0.92	0.92
Heavy Vehicles (%)	7%	0%	0%	2%	2%	2%	3%	3%	3%	2%	2%
Adj. Flow (vph)	59	0	120	0	297	87	85	405	0	0	0
Shared Lane Traffic (%)											
Lane Group Flow (vph)	59	0	120	0	384	0	85	405	0	0	0
Sign Control		Stop			Free			Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 33.9% ICU Level of Service A

Analysis Period (min) 15

Lane Group	WBL2	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NER
Lane Configurations											
Traffic Volume (vph)	93	0	84	61	264	0	0	373	50	0	0
Future Volume (vph)	93	0	84	61	264	0	0	373	50	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	185	165		0	0		0	0	0
Storage Lanes		1	1	1		0	0		0	0	0
Taper Length (ft)		25		110			25			25	
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
Frt			0.850					0.984			
Flt Protected	0.950			0.950							
Satd. Flow (prot)	1805	0	1455	1752	1845	0	0	1815	0	0	0
Flt Permitted	0.950			0.950							
Satd. Flow (perm)	1805	0	1455	1752	1845	0	0	1815	0	0	0
Link Speed (mph)		25			45			45		25	
Link Distance (ft)		613			685			608		913	
Travel Time (s)		16.7			10.4			9.2		24.9	
Peak Hour Factor	0.81	0.81	0.81	0.87	0.87	0.87	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	11%	3%	3%	3%	3%	3%	3%	2%	2%
Adj. Flow (vph)	115	0	104	70	303	0	0	405	54	0	0
Shared Lane Traffic (%)											
Lane Group Flow (vph)	115	0	104	70	303	0	0	459	0	0	0
Sign Control		Stop			Free			Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 33.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	184	140	0	396	272	0
Future Volume (vph)	184	140	0	396	272	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.850				
Flt Protected	0.950					
Satd. Flow (prot)	1543	1553	0	3505	3374	0
Flt Permitted	0.950					
Satd. Flow (perm)	1543	1553	0	3505	3374	0
Link Speed (mph)	25			55	55	
Link Distance (ft)	119			105	620	
Travel Time (s)	3.2			1.3	7.7	
Peak Hour Factor	0.93	0.93	0.82	0.82	0.92	0.92
Heavy Vehicles (%)	17%	4%	0%	3%	7%	0%
Adj. Flow (vph)	198	151	0	483	296	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	198	151	0	483	296	0
Sign Control	Stop			Free	Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 27.8% ICU Level of Service A

Analysis Period (min) 15

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	396	61	35	377
Future Volume (vph)	0	0	396	61	35	377
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		340	0	
Storage Lanes	0	0		1	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	1.00	0.95	0.95
Frt				0.850		
Flt Protected						0.996
Satd. Flow (prot)	0	0	3505	1568	0	3383
Flt Permitted						0.996
Satd. Flow (perm)	0	0	3505	1568	0	3383
Link Speed (mph)	25		55			55
Link Distance (ft)	664		1109			105
Travel Time (s)	18.1		13.7			1.3
Peak Hour Factor	0.92	0.92	0.82	0.82	0.92	0.92
Heavy Vehicles (%)	2%	2%	3%	3%	20%	5%
Adj. Flow (vph)	0	0	483	74	38	410
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	483	74	0	448
Sign Control	Stop		Free			Free

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 29.1% ICU Level of Service A

Analysis Period (min) 15

Lane Group	WBL2	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NER
Lane Configurations											
Traffic Volume (vph)	52	0	60	0	352	0	0	220	86	0	0
Future Volume (vph)	52	0	60	0	352	0	0	220	86	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	205	0		0	0		135	0	0
Storage Lanes		1	1	0		0	0		1	0	0
Taper Length (ft)		25		25			25			25	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00
Frt			0.850						0.850		
Flt Protected	0.950										
Satd. Flow (prot)	1736	0	1380	0	3438	0	0	3343	1272	0	0
Flt Permitted	0.950										
Satd. Flow (perm)	1736	0	1380	0	3438	0	0	3343	1272	0	0
Link Speed (mph)		25			55			55		25	
Link Distance (ft)		296			230			1367		908	
Travel Time (s)		8.1			2.9			16.9		24.8	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.95	0.95	0.95	0.92	0.92
Heavy Vehicles (%)	4%	0%	17%	0%	5%	0%	0%	8%	27%	2%	2%
Adj. Flow (vph)	59	0	68	0	400	0	0	232	91	0	0
Shared Lane Traffic (%)											
Lane Group Flow (vph)	59	0	68	0	400	0	0	232	91	0	0
Sign Control		Stop			Free			Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 20.4% ICU Level of Service A

Analysis Period (min) 15

Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	33	80	0	270	154	0
Future Volume (vph)	33	80	0	270	154	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				
Flt Protected	0.950					
Satd. Flow (prot)	1752	1077	0	1624	1696	0
Flt Permitted	0.950					
Satd. Flow (perm)	1752	1077	0	1624	1696	0
Link Speed (mph)	25			45	45	
Link Distance (ft)	189			1063	114	
Travel Time (s)	5.2			16.1	1.7	
Peak Hour Factor	0.74	0.74	0.93	0.93	0.89	0.89
Heavy Vehicles (%)	3%	50%	17%	17%	12%	12%
Adj. Flow (vph)	45	108	0	290	173	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	45	108	0	290	173	0
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 24.2%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	0	0	182	121	3	154
Future Volume (vph)	0	0	182	121	3	154
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.850		
Flt Protected						0.999
Satd. Flow (prot)	0	0	1624	1380	0	1689
Flt Permitted						0.999
Satd. Flow (perm)	0	0	1624	1380	0	1689
Link Speed (mph)	25		45			45
Link Distance (ft)	105		114			727
Travel Time (s)	2.9		1.7			11.0
Peak Hour Factor	0.92	0.92	0.93	0.93	0.89	0.89
Heavy Vehicles (%)	2%	2%	17%	17%	33%	12%
Adj. Flow (vph)	0	0	196	130	3	173
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	196	130	0	176
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 22.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBR	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	6	97	58	124	60	11
Future Volume (vph)	6	97	58	124	60	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	195	0	0			90
Storage Lanes	1	1	0			1
Taper Length (ft)	135		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				0.850
Flt Protected	0.950			0.984		
Satd. Flow (prot)	1570	1404	0	1615	1776	1509
Flt Permitted	0.950			0.984		
Satd. Flow (perm)	1570	1404	0	1615	1776	1509
Link Speed (mph)	25			45	45	
Link Distance (ft)	597			727	1165	
Travel Time (s)	16.3			11.0	17.7	
Peak Hour Factor	0.83	0.83	0.91	0.91	0.78	0.78
Heavy Vehicles (%)	15%	15%	43%	3%	7%	7%
Adj. Flow (vph)	7	117	64	136	77	14
Shared Lane Traffic (%)						
Lane Group Flow (vph)	7	117	0	200	77	14
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 26.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	18	1755	18	0
Future Volume (vph)	0	0	18	1755	18	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.91	0.91	1.00	1.00
Frt						
Flt Protected				0.999	0.950	
Satd. Flow (prot)	0	0	0	5080	1770	0
Flt Permitted				0.999	0.950	
Satd. Flow (perm)	0	0	0	5080	1770	0
Link Speed (mph)	45			45	25	
Link Distance (ft)	382			217	236	
Travel Time (s)	5.8			3.3	6.4	
Peak Hour Factor	0.90	0.90	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	20	1908	20	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1928	20	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 44.3%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑					↱
Traffic Volume (vph)	1247	0	0	0	0	30
Future Volume (vph)	1247	0	0	0	0	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	1.00	1.00	1.00	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	3539	0	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	3539	0	0	0	0	1611
Link Speed (mph)	45			45	25	
Link Distance (ft)	168			432	770	
Travel Time (s)	2.5			6.5	21.0	
Peak Hour Factor	0.87	0.87	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1433	0	0	0	0	33
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1433	0	0	0	0	33
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 52.2%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations			↑↑↑			↱
Traffic Volume (vph)	0	0	1283	0	0	32
Future Volume (vph)	0	0	1283	0	0	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.91	1.00	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	0	0	5036	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	0	5036	0	0	1611
Link Speed (mph)		45	45		25	
Link Distance (ft)		494	134		230	
Travel Time (s)		7.5	2.0		6.3	
Peak Hour Factor	0.92	0.92	0.89	0.89	0.92	0.92
Heavy Vehicles (%)	2%	2%	3%	3%	2%	2%
Adj. Flow (vph)	0	0	1442	0	0	35
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1442	0	0	35
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 44.7%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	1135	50	0	0
Future Volume (vph)	0	0	1135	50	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.994			
Flt Protected						
Satd. Flow (prot)	0	0	3518	0	0	0
Flt Permitted						
Satd. Flow (perm)	0	0	3518	0	0	0
Link Speed (mph)		30	45		25	
Link Distance (ft)		176	114		201	
Travel Time (s)		4.0	1.7		5.5	
Peak Hour Factor	0.92	0.92	0.88	0.88	0.92	0.92
Adj. Flow (vph)	0	0	1290	57	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1347	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 41.5%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	NBT	NBR	SBL	SBT	SWL	SWR
Lane Configurations	↑↱			↑↑		
Traffic Volume (vph)	352	228	0	272	0	0
Future Volume (vph)	352	228	0	272	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	1.00	0.95	1.00	1.00
Frt	0.941					
Flt Protected						
Satd. Flow (prot)	3164	0	0	3343	0	0
Flt Permitted						
Satd. Flow (perm)	3164	0	0	3343	0	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	620			230	1088	
Travel Time (s)	7.7			2.9	29.7	
Peak Hour Factor	0.88	0.88	0.95	0.95	0.92	0.92
Heavy Vehicles (%)	5%	11%	8%	8%	2%	2%
Adj. Flow (vph)	400	259	0	286	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	659	0	0	286	0	0
Sign Control	Free			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 20.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	32	1103	0	0	0	0	0	48	29
Future Volume (vph)	0	0	0	32	1103	0	0	0	0	0	48	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	165		0	0		0	0		0
Storage Lanes	0		0	1		0	0		0	0		0
Taper Length (ft)	25			85			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt											0.949	
Flt Protected				0.950								
Satd. Flow (prot)	0	0	0	1770	3539	0	0	0	0	0	1785	0
Flt Permitted				0.950								
Satd. Flow (perm)	0	0	0	1770	3539	0	0	0	0	0	1785	0
Link Speed (mph)		30			45			30			30	
Link Distance (ft)		212			176			102			496	
Travel Time (s)		4.8			2.7			2.3			11.3	
Peak Hour Factor	0.92	0.92	0.92	0.86	0.86	0.86	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	1%	1%	1%
Adj. Flow (vph)	0	0	0	37	1283	0	0	0	0	0	52	32
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	37	1283	0	0	0	0	0	84	0
Sign Control		Free			Free			Yield			Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 41.5% ICU Level of Service A

Analysis Period (min) 15

Lane Group	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	2250	0	0	0	2283
Future Volume (vph)	0	2250	0	0	0	2283
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	0.88
Frt						0.850
Flt Protected						
Satd. Flow (prot)	0	3539	0	0	0	2787
Flt Permitted						
Satd. Flow (perm)	0	3539	0	0	0	2787
Link Speed (mph)		55	55		55	
Link Distance (ft)		434	1242		1194	
Travel Time (s)		5.4	15.4		14.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	2446	0	0	0	2482
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	2446	0	0	0	2482
Sign Control		Free	Free		Free	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 83.2% ICU Level of Service E
Analysis Period (min) 15

Lane Group	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	0	119	0	0	796
Future Volume (vph)	0	0	119	0	0	796
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	0	0	1863	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	0	1863	0	0	1611
Link Speed (mph)		25	25		30	
Link Distance (ft)		1199	263		174	
Travel Time (s)		32.7	7.2		4.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.90	0.90
Adj. Flow (vph)	0	0	129	0	0	884
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	129	0	0	884
Sign Control		Free	Yield		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 62.2%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	WBL	WBR	NBL	NBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	168	2326	0	0	0
Future Volume (vph)	0	168	2326	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.97	1.00	1.00	1.00
Frt		0.865				
Flt Protected			0.950			
Satd. Flow (prot)	0	1627	3303	0	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	1627	3303	0	0	0
Link Speed (mph)	45		45		45	
Link Distance (ft)	255		329		551	
Travel Time (s)	3.9		5.0		8.3	
Peak Hour Factor	0.91	0.91	0.93	0.93	0.92	0.92
Heavy Vehicles (%)	1%	1%	6%	6%	2%	2%
Adj. Flow (vph)	0	185	2501	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	185	2501	0	0	0
Sign Control	Yield		Free		Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 80.0% ICU Level of Service D

Analysis Period (min) 15

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	159	1156	0	0
Future Volume (vph)	0	0	159	1156	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	450		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			85		25	
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	5085	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	5085	0	0
Link Speed (mph)	45			45	30	
Link Distance (ft)	315			494	108	
Travel Time (s)	4.8			7.5	2.5	
Peak Hour Factor	0.92	0.92	0.87	0.87	0.92	0.92
Adj. Flow (vph)	0	0	183	1329	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	183	1329	0	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 45.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	182	1095	0	0	0	0
Future Volume (vph)	182	1095	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	275			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	110				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		45	45		30	
Link Distance (ft)		432	161		111	
Travel Time (s)		6.5	2.4		2.5	
Peak Hour Factor	0.94	0.94	0.92	0.92	0.92	0.92
Adj. Flow (vph)	194	1165	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	194	1165	0	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 58.2%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	3011	0	0	0	3038
Future Volume (vph)	0	3011	0	0	0	3038
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	0.76
Frt						0.850
Flt Protected						
Satd. Flow (prot)	0	3539	0	0	0	3610
Flt Permitted						
Satd. Flow (perm)	0	3539	0	0	0	3610
Link Speed (mph)		55	55		45	
Link Distance (ft)		1093	655		773	
Travel Time (s)		13.5	8.1		11.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	3273	0	0	0	3302
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	3273	0	0	0	3302
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 86.6%	ICU Level of Service E
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	65	1081	0	0	0	0
Future Volume (vph)	65	1081	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	180			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	75				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		45	45		30	
Link Distance (ft)		290	1089		101	
Travel Time (s)		4.4	16.5		2.3	
Peak Hour Factor	0.94	0.94	0.92	0.92	0.92	0.92
Adj. Flow (vph)	69	1150	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	69	1150	0	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 67.5%	ICU Level of Service C
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	3180	796	0	0	0	0
Future Volume (vph)	3180	796	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	1.00	1.00	1.00	1.00
Frt	0.970					
Flt Protected						
Satd. Flow (prot)	4933	0	0	0	0	0
Flt Permitted						
Satd. Flow (perm)	4933	0	0	0	0	0
Link Speed (mph)	45			45	30	
Link Distance (ft)	311			156	174	
Travel Time (s)	4.7			2.4	4.0	
Peak Hour Factor	0.90	0.90	0.92	0.92	0.92	0.92
Adj. Flow (vph)	3533	884	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	4417	0	0	0	0	0
Sign Control	Free			Stop	Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 103.4% ICU Level of Service G

Analysis Period (min) 15

Lane Group	NBT	NBR	SBL	SBT	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	0	0	112	2322	0	0
Future Volume (vph)	0	0	112	2322	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	500		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			100		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	3539	0	0
Link Speed (mph)	30			25	25	
Link Distance (ft)	266			1471	301	
Travel Time (s)	6.0			40.1	8.2	
Peak Hour Factor	0.92	0.92	0.75	0.75	0.92	0.92
Adj. Flow (vph)	0	0	149	3096	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	149	3096	0	0
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 67.5%	ICU Level of Service C
Analysis Period (min) 15	

Lane Group	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	785	122	0	0	0	0
Future Volume (vph)	785	122	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected		0.959				
Satd. Flow (prot)	0	1786	0	0	0	0
Flt Permitted		0.959				
Satd. Flow (perm)	0	1786	0	0	0	0
Link Speed (mph)		25	30		25	
Link Distance (ft)		1207	315		252	
Travel Time (s)		32.9	7.2		6.9	
Peak Hour Factor	0.75	0.75	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1047	163	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1210	0	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 64.7% ICU Level of Service C

Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	103	0	69	0	0
Future Volume (vph)	0	103	0	69	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.865		
Flt Protected						
Satd. Flow (prot)	0	1652	0	1191	0	0
Flt Permitted						
Satd. Flow (perm)	0	1652	0	1191	0	0
Link Speed (mph)		25	25		25	
Link Distance (ft)		995	597		1154	
Travel Time (s)		27.1	16.3		31.5	
Peak Hour Factor	0.83	0.83	0.89	0.89	0.92	0.92
Heavy Vehicles (%)	15%	15%	38%	38%	2%	2%
Adj. Flow (vph)	0	124	0	78	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	124	0	78	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 8.8%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	53	4744	0	0
Future Volume (vph)	0	0	53	4744	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	250		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	5085	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	5085	0	0
Link Speed (mph)	45			45	25	
Link Distance (ft)	894			534	137	
Travel Time (s)	13.5			8.1	3.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	58	5157	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	58	5157	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 86.1% ICU Level of Service E

Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		tttt			↰	
Traffic Volume (vph)	0	4777	0	0	53	0
Future Volume (vph)	0	4777	0	0	53	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.86	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	6408	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	6408	0	0	1770	0
Link Speed (mph)		45	45		25	
Link Distance (ft)		744	1191		137	
Travel Time (s)		11.3	18.0		3.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	5192	0	0	58	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	5192	0	0	58	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 167.6%	ICU Level of Service H
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	771	4059	0	0	0	0
Future Volume (vph)	771	4059	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	400			0	0	0
Storage Lanes	2			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	0.97	0.86	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	3433	6408	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	3433	6408	0	0	0	0
Link Speed (mph)		45	45		25	
Link Distance (ft)		1191	262		113	
Travel Time (s)		18.0	4.0		3.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	838	4412	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	838	4412	0	0	0	0
Sign Control		Free	Stop		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 145.6%	ICU Level of Service H
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	119	4061	0	0
Future Volume (vph)	0	0	119	4061	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	250		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	5085	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	5085	0	0
Link Speed (mph)	45			45	25	
Link Distance (ft)	254			1016	123	
Travel Time (s)	3.8			15.4	3.4	
Peak Hour Factor	0.92	0.92	0.90	0.87	0.92	0.92
Adj. Flow (vph)	0	0	132	4668	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	132	4668	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 167.8%	ICU Level of Service H
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	204	3976	0	0	0	0
Future Volume (vph)	204	3976	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.91	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	5085	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	5085	0	0	0	0
Link Speed (mph)		45	45		30	
Link Distance (ft)		704	311		111	
Travel Time (s)		10.7	4.7		2.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	222	4322	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	222	4322	0	0	0	0
Sign Control		Free	Stop		Stop	

Intersection Summary		
Area Type:	Other	
Control Type: Unsignalized		
Intersection Capacity Utilization 162.0%		ICU Level of Service H
Analysis Period (min) 15		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑	↰	
Traffic Volume (vph)	0	0	0	1530	27	0
Future Volume (vph)	0	0	0	1530	27	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	30	
Link Distance (ft)	583			574	107	
Travel Time (s)	7.2			7.1	2.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	1663	29	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1663	29	0
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 87.8% ICU Level of Service E
Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	27	1404	0	0	0	0
Future Volume (vph)	27	1404	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		30	
Link Distance (ft)		1122	576		107	
Travel Time (s)		13.9	7.1		2.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	29	1526	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	29	1526	0	0	0	0
Sign Control		Free	Stop		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 87.8%	ICU Level of Service E
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	1521	36	0	54
Future Volume (vph)	0	0	1521	36	0	54
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.997			0.865
Flt Protected						
Satd. Flow (prot)	0	0	3529	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	0	3529	0	0	1611
Link Speed (mph)		55	55		30	
Link Distance (ft)		590	583		121	
Travel Time (s)		7.3	7.2		2.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	1653	39	0	59
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1692	0	0	59
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 53.2%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	168	1407	0	0
Future Volume (vph)	0	0	168	1407	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	250		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	3539	0	0
Link Speed (mph)	55			55	30	
Link Distance (ft)	405			590	104	
Travel Time (s)	5.0			7.3	2.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	183	1529	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	183	1529	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 50.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	1263	0	0	168	0
Future Volume (vph)	0	1263	0	0	168	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	1770	0
Link Speed (mph)		55	55		30	
Link Distance (ft)		316	1122		104	
Travel Time (s)		3.9	13.9		2.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1373	0	0	183	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1373	0	0	183	0
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 80.5% ICU Level of Service D

Analysis Period (min) 15

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	491	3465	0	0
Future Volume (vph)	0	0	491	3465	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	250			0
Storage Lanes	0	0	2			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	0.97	0.91	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	3433	5085	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	3433	5085	0	0
Link Speed (mph)	45			55	30	
Link Distance (ft)	105			493	555	
Travel Time (s)	1.6			6.1	12.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	534	3766	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	534	3766	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 140.0% ICU Level of Service H

Analysis Period (min) 15

Lane Group	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	2366	1099	0	0	0	0
Future Volume (vph)	2366	1099	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.94	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	4990	1863	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	4990	1863	0	0	0	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		555	271		108	
Travel Time (s)		12.6	6.2		2.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2572	1195	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	2572	1195	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 111.8%	ICU Level of Service H
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	73	0	0	0	0	1099
Future Volume (vph)	73	0	0	0	0	1099
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	1863	0	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	1863	0	0	0	0	1611
Link Speed (mph)	25			30	25	
Link Distance (ft)	287			1072	271	
Travel Time (s)	7.8			24.4	7.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	79	0	0	0	0	1195
Shared Lane Traffic (%)						
Lane Group Flow (vph)	79	0	0	0	0	1195
Sign Control	Yield			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 78.6%	ICU Level of Service D
Analysis Period (min) 15	

Lane Group	NBT	NBR	SBL	SBT	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	0	0	73	2360	0	0
Future Volume (vph)	0	0	73	2360	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.91	0.91	1.00	1.00
Frt						
Flt Protected				0.999		
Satd. Flow (prot)	0	0	0	5076	0	0
Flt Permitted				0.999		
Satd. Flow (perm)	0	0	0	5076	0	0
Link Speed (mph)	45			45	45	
Link Distance (ft)	194			406	287	
Travel Time (s)	2.9			6.2	4.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	5%	2%	2%	2%
Adj. Flow (vph)	0	0	79	2565	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	2644	0	0
Sign Control	Free			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 78.6%	ICU Level of Service D
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	104	988	0	0	0	0
Future Volume (vph)	104	988	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1719	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1719	3539	0	0	0	0
Link Speed (mph)		25	25		25	
Link Distance (ft)		879	346		271	
Travel Time (s)		24.0	9.4		7.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	2%	2%	2%	2%	2%
Adj. Flow (vph)	113	1074	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	113	1074	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 79.7% ICU Level of Service D

Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	957	0	0	81
Future Volume (vph)	0	0	957	0	0	81
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	0	0	1863	0	0	1565
Flt Permitted						
Satd. Flow (perm)	0	0	1863	0	0	1565
Link Speed (mph)		30	45		45	
Link Distance (ft)		874	182		254	
Travel Time (s)		19.9	2.8		3.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	5%
Adj. Flow (vph)	0	0	1040	0	0	88
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1040	0	0	88
Sign Control		Free	Free		Yield	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 83.2%	ICU Level of Service E
Analysis Period (min) 15	

Lane Group	EBL	EBR	SBL	SBR	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	0	0	0	0	957	1513
Future Volume (vph)	0	0	0	0	957	1513
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.91
Frt					0.979	0.850
Flt Protected					0.959	
Satd. Flow (prot)	0	0	0	0	1742	2799
Flt Permitted					0.959	
Satd. Flow (perm)	0	0	0	0	1742	2799
Link Speed (mph)	30		30		30	
Link Distance (ft)	182		207		337	
Travel Time (s)	4.1		4.7		7.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	5%
Adj. Flow (vph)	0	0	0	0	1040	1645
Shared Lane Traffic (%)						10%
Lane Group Flow (vph)	0	0	0	0	1205	1480
Sign Control	Stop		Free		Free	

Intersection Summary		
Area Type:	Other	
Control Type: Unsignalized		
Intersection Capacity Utilization 83.2%		ICU Level of Service E
Analysis Period (min) 15		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↱					
Traffic Volume (vph)	1394	81	0	0	0	0
Future Volume (vph)	1394	81	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00
Frt	0.992					
Flt Protected						
Satd. Flow (prot)	3411	0	0	0	0	0
Flt Permitted						
Satd. Flow (perm)	3411	0	0	0	0	0
Link Speed (mph)	30			45	25	
Link Distance (ft)	306			190	254	
Travel Time (s)	7.0			2.9	6.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	5%	2%	2%	2%	2%
Adj. Flow (vph)	1515	88	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1603	0	0	0	0	0
Sign Control	Free			Free	Free	

Intersection Summary		
Area Type:	Other	
Control Type: Unsignalized		
Intersection Capacity Utilization 77.8%		ICU Level of Service D
Analysis Period (min) 15		

Lane Group	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations			↑↑	↱		
Traffic Volume (vph)	0	0	1039	151	0	0
Future Volume (vph)	0	0	1039	151	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			250	0	0
Storage Lanes	0			1	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	1.00
Frt				0.850		
Flt Protected						
Satd. Flow (prot)	0	0	3539	1538	0	0
Flt Permitted						
Satd. Flow (perm)	0	0	3539	1538	0	0
Link Speed (mph)		25	25		25	
Link Distance (ft)		241	1465		317	
Travel Time (s)		6.6	40.0		8.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	5%	2%	2%
Adj. Flow (vph)	0	0	1129	164	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1129	164	0	0
Sign Control		Free	Free		Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 33.7% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑↑	↰	
Traffic Volume (vph)	0	0	0	1664	64	0
Future Volume (vph)	0	0	0	1664	64	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	4940	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	4940	1770	0
Link Speed (mph)	55			30	25	
Link Distance (ft)	598			415	105	
Travel Time (s)	7.4			9.4	2.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	5%	2%	2%
Adj. Flow (vph)	0	0	0	1809	70	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1809	70	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 79.6%	ICU Level of Service D
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	64	1475	0	0	0	0
Future Volume (vph)	64	1475	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3438	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3438	0	0	0	0
Link Speed (mph)		55	30		25	
Link Distance (ft)		597	306		105	
Travel Time (s)		7.4	7.0		2.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	5%	2%	2%	2%	2%
Adj. Flow (vph)	70	1603	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	70	1603	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 79.6% ICU Level of Service D

Analysis Period (min) 15

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑	↰	
Traffic Volume (vph)	0	0	0	986	0	0
Future Volume (vph)	0	0	0	986	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	0	0	0	3539	1863	0
Flt Permitted						
Satd. Flow (perm)	0	0	0	3539	1863	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	586			210	99	
Travel Time (s)	7.3			2.6	2.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	1072	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1072	0	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 37.3%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	877	0	0	0	0
Future Volume (vph)	0	877	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	1863	3539	0	0	0	0
Flt Permitted						
Satd. Flow (perm)	1863	3539	0	0	0	0
Link Speed (mph)		55	55		25	
Link Distance (ft)		589	212		99	
Travel Time (s)		7.3	2.6		2.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	953	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	953	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 37.3%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	986	0	0
Future Volume (vph)	0	0	0	986	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	0	0	0	3539	0	0
Flt Permitted						
Satd. Flow (perm)	0	0	0	3539	0	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	723			586	81	
Travel Time (s)	9.0			7.3	2.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	1072	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1072	0	0
Sign Control	Free			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 37.3%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	877	0	0	0	0	0	0	0	0	0	0
Future Volume (vph)	0	877	0	0	0	0	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	3539	0	0	0	0	0	0	1863	0	1863	0
Flt Permitted												
Satd. Flow (perm)	0	3539	0	0	0	0	0	0	1863	0	1863	0
Link Speed (mph)		55			55			25			25	
Link Distance (ft)		719			589			84			81	
Travel Time (s)		8.9			7.3			2.3			2.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	953	0	0	0	0	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	953	0	0	0	0	0	0	0	0	0	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 34.2%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	0	877	0	986	0	0
Future Volume (vph)	0	877	0	986	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.88	1.00	0.95	1.00	1.00
Frt		0.850				
Flt Protected						
Satd. Flow (prot)	0	2787	0	3539	0	0
Flt Permitted						
Satd. Flow (perm)	0	2787	0	3539	0	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	997			723	719	
Travel Time (s)	12.4			9.0	19.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	953	0	1072	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	953	0	1072	0	0
Sign Control	Free			Free	Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 34.0% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	286	1118	0	0	0	0
Future Volume (vph)	286	1118	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		55	
Link Distance (ft)		2077	2379		116	
Travel Time (s)		25.7	29.5		1.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	311	1215	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	311	1215	0	0	0	0
Sign Control		Free	Stop		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 67.5%	ICU Level of Service C
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NEL	NER
Lane Configurations				↑↑	↰	
Traffic Volume (vph)	0	0	0	1081	286	0
Future Volume (vph)	0	0	0	1081	286	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	607			2382	116	
Travel Time (s)	7.5			29.5	3.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	1175	311	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1175	311	0
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 74.1% ICU Level of Service D

Analysis Period (min) 15

Lane Group	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	0	0	14	1081	0	0
Future Volume (vph)	0	0	14	1081	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	250		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	3539	0	0
Link Speed (mph)	55			55	55	
Link Distance (ft)	2382			560	108	
Travel Time (s)	29.5			6.9	1.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	15	1175	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	15	1175	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary		
Area Type:	Other	
Control Type: Unsignalized		
Intersection Capacity Utilization 83.0%		ICU Level of Service E
Analysis Period (min) 15		

Lane Group	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations		↑↑			↰	
Traffic Volume (vph)	0	1118	0	0	14	0
Future Volume (vph)	0	1118	0	0	14	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	1770	0
Link Speed (mph)		55	55		25	
Link Distance (ft)		2379	608		108	
Travel Time (s)		29.5	7.5		2.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1215	0	0	15	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1215	0	0	15	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 67.5%	ICU Level of Service C
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1093	39	0	0	0	32
Future Volume (vph)	1093	39	0	0	0	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		600	600		0	0
Storage Lanes		0	0		0	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00
Frt	0.995					0.865
Flt Protected						
Satd. Flow (prot)	3522	0	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	3522	0	0	0	0	1611
Link Speed (mph)	55			55	45	
Link Distance (ft)	608			628	1089	
Travel Time (s)	7.5			7.8	16.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1188	42	0	0	0	35
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1230	0	0	0	0	35
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 41.5%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑	↰	
Traffic Volume (vph)	0	0	0	1086	9	0
Future Volume (vph)	0	0	0	1086	9	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	645			3831	112	
Travel Time (s)	8.0			47.5	3.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	1180	10	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1180	10	0
Sign Control	Free			Free	Stop	

Intersection Summary		
Area Type:	Other	
Control Type: Unsignalized		
Intersection Capacity Utilization 58.2%		ICU Level of Service B
Analysis Period (min) 15		

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	9	1116	0	0	0	0
Future Volume (vph)	9	1116	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		55	
Link Distance (ft)		628	3825		112	
Travel Time (s)		7.8	47.4		1.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	10	1213	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	10	1213	0	0	0	0
Sign Control		Free	Stop		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 67.5%	ICU Level of Service C
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	10	1086	0	0
Future Volume (vph)	0	0	10	1086	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	250		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	3539	0	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	3831			538	97	
Travel Time (s)	47.5			6.7	2.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	11	1180	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	11	1180	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 45.3% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	1116	0	0	10	0
Future Volume (vph)	0	1116	0	0	10	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	1770	0
Link Speed (mph)		55	55		25	
Link Distance (ft)		3825	591		97	
Travel Time (s)		47.4	7.3		2.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1213	0	0	11	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1213	0	0	11	0
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 67.5% ICU Level of Service C

Analysis Period (min) 15

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1114	12	0	0	0	16
Future Volume (vph)	1114	12	0	0	0	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00
Frt	0.998					0.865
Flt Protected						
Satd. Flow (prot)	3532	0	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	3532	0	0	0	0	1611
Link Speed (mph)	55			55	45	
Link Distance (ft)	591			1206	1073	
Travel Time (s)	7.3			15.0	16.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1211	13	0	0	0	17
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1224	0	0	0	0	17
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 41.2%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑	↰	
Traffic Volume (vph)	0	0	0	1088	9	0
Future Volume (vph)	0	0	0	1088	9	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	1254			1793	105	
Travel Time (s)	15.5			22.2	2.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	1183	10	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1183	10	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 67.7%	ICU Level of Service C
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	9	1121	0	0	0	0
Future Volume (vph)	9	1121	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		55	
Link Distance (ft)		1206	1786		105	
Travel Time (s)		15.0	22.1		1.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	10	1218	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	10	1218	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 67.7% ICU Level of Service C

Analysis Period (min) 15

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	822	1088	0	0
Future Volume (vph)	0	0	822	1088	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	500		0	0
Storage Lanes		0	2		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	0.97	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	3433	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	3433	3539	0	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	1793			596	109	
Travel Time (s)	22.2			7.4	3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	893	1183	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	893	1183	0	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 104.6%	ICU Level of Service G
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑	↰	
Traffic Volume (vph)	0	0	0	1830	80	0
Future Volume (vph)	0	0	0	1830	80	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	631			2681	109	
Travel Time (s)	7.8			33.2	3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	1989	87	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1989	87	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 79.3%	ICU Level of Service D
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	80	1863	0	0	0	0
Future Volume (vph)	80	1863	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		55	
Link Distance (ft)		627	2678		109	
Travel Time (s)		7.8	33.2		1.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	87	2025	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	87	2025	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary		
Area Type:	Other	
Control Type: Unsignalized		
Intersection Capacity Utilization 108.8%		ICU Level of Service G
Analysis Period (min) 15		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	461	1830	0	0
Future Volume (vph)	0	0	461	1830	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	500		0	0
Storage Lanes		0	2		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	0.97	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	3433	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	3433	3539	0	0
Link Speed (mph)	55			55	55	
Link Distance (ft)	2681			671	109	
Travel Time (s)	33.2			8.3	1.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	501	1989	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	501	1989	0	0
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 120.2% ICU Level of Service H

Analysis Period (min) 15

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑	↰	
Traffic Volume (vph)	0	0	0	2250	41	0
Future Volume (vph)	0	0	0	2250	41	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	654			797	95	
Travel Time (s)	8.1			9.9	2.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	2446	45	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	2446	45	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 92.9%	ICU Level of Service F
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	41	2283	0	0	0	0
Future Volume (vph)	41	2283	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		55	
Link Distance (ft)		659	784		95	
Travel Time (s)		8.2	9.7		1.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	45	2482	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	45	2482	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 132.0%	ICU Level of Service H
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1386	18	0	0	0	18
Future Volume (vph)	1386	18	0	0	0	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00
Frt	0.998					0.865
Flt Protected						
Satd. Flow (prot)	3532	0	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	3532	0	0	0	0	1611
Link Speed (mph)	55			55	25	
Link Distance (ft)	576			2077	205	
Travel Time (s)	7.1			25.7	5.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1507	20	0	0	0	20
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1527	0	0	0	0	20
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 48.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	2663	0	0	2114	0
Future Volume (vph)	0	2663	0	0	2114	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	0.97	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	3433	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	3433	0
Link Speed (mph)		45	45		45	
Link Distance (ft)		1021	744		215	
Travel Time (s)		15.5	11.3		3.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	2895	0	0	2298	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	2895	0	0	2298	0
Sign Control		Free	Stop		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 140.6%	ICU Level of Service H
Analysis Period (min) 15	

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	0	0	801	3038
Future Volume (vph)	0	0	0	0	801	3038
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		0	250	
Storage Lanes	0	0		0	2	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.97	0.91
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	0	3433	5085
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	0	3433	5085
Link Speed (mph)	55		45			30
Link Distance (ft)	167		773			587
Travel Time (s)	2.1		11.7			13.3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	871	3302
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	0	871	3302
Sign Control	Stop		Stop			Free

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 88.7%	ICU Level of Service E
Analysis Period (min) 15	

1005: WB M-96 (Michigan Avenue) & SB I-69 Off-Ramp (Push Button) Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	12.3	74.7	43.1

1007: EB M-96 (Michigan Avenue) (Push Button) & SB I-69 Off-Ramp/EB M-96 (Michigan Avenue) Perfor

Approach	EB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	25.7	4.1	4.7

1008: WB M-96 (Michigan Avenue)/NB I-69 Off-Ramp & WB M-96 (Michigan Avenue) (Push Button) Perf

Approach	WB	SW	All
Denied Del/Veh (s)	0.0	0.1	0.1
Total Del/Veh (s)	77.6	16.8	40.2

1009: WB M-96 (Michigan Avenue) (Push Button)/WB M-96 (Michigan Avenue) & EB M-96 (Michigan Ave

Approach	EB	SW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	41.3	42.0	41.7

1010: NB I-69 Off-Ramp (Push Button) & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	4.0	20.8	6.0

3003: M-227/West Drive & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.2	0.0
Total Del/Veh (s)	10.3	5.9	18.7	11.0

3093: M-227/West Drive & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	0.0	2.0	0.0	0.3
Total Del/Veh (s)	4.4	29.5	2.9	7.9

4001: M-96 (Michigan Avenue) & WB Main Entrance/WB M-96 (Michigan Avenue) Performance by appro

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	77.8	89.0	81.0

4003: EB to WB Xover E of 15 Mile Rd (North) & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	4.7	182.3	40.5
Total Del/Veh (s)	37.2	42.0	38.1

4004: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	297.1	94.6	272.2

4005: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	77.6	33.3	64.3

4006: M-311 (11 Mile Rd) & Site Driveway West Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	198.8	1.2	0.0	90.5
Total Del/Veh (s)	206.4	32.8	21.9	98.3

4007: M-311 (11 Mile Rd) & F Drive N Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	0.3	0.0	0.0	0.1
Total Del/Veh (s)	155.2	115.6	25.4	77.6

4010: EB M-96 (Michigan Avenue)/EB M-96 (Michigan Avenue) (Push Button) & WB M-96 (Michigan Ave

Approach	WB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	35.4	21.0	26.1

4030: NB M-311 (11 Mile Rd)/WB M-96 (Michigan Avenue)/11 Mile Rd (North) & EB M-96 (Michigan Ave

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	22.3	60.7	52.2

4031: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & WB M-96 (Michigan Avenue) Performance by a

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	65.0	13.2	30.7

4033: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & NB to SB Xover N of M-96 (Michigan Avenue) P

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	54.5	9.8	14.3

4034: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & EB I-94 Off-ramp Performance by approach

Approach	SB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.8	35.4	13.0

4035: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & WB M-96 (Michigan Avenue)/11 Mile Rd (North)

Approach	SB	NW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	15.2	17.3	16.2

4036: EB I-94 Off-ramp & WB M-96 (Michigan Avenue)/11 Mile Rd (North) Performance by approach

Approach	NB	NW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	32.9	4.5	5.9

4037: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & WB I-94 Off-ramp Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	25.4	11.1
Total Del/Veh (s)	7.0	62.8	31.2

4038: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & EB M-96 (Michigan Avenue)/11 Mile Rd (South)

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	30.4	27.6	29.1

4039: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & WB I-94 Off-ramp Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	7.9	4.4	4.8

4040: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & 11 Mile Rd Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	54.4	3.8	31.5

4041: 11 Mile Rd & WB M-96 (Michigan Avenue)/11 Mile Rd (North) Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.2	0.1
Total Del/Veh (s)	13.9	26.2	18.1

4042: 11 Mile Rd & H Dr N Performance by approach

Approach	NE	SW	All
Denied Del/Veh (s)	0.0	0.6	0.3
Total Del/Veh (s)	6.5	5.4	6.0

4050: Prop Site Drive E & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	114.5	32.2
Total Del/Veh (s)	85.1	399.4	162.8

4051: Prop Site Drive W & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	19.6	8.3
Total Del/Veh (s)	46.1	129.2	80.2

4061: WB M-96 (Michigan Avenue) & Firekeepers Main Drive Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.2	0.1	0.2
Total Del/Veh (s)	8.2	50.9	12.7

4065: WB M-96 (Michigan Avenue) & 15 Mile Rd (North) Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.9	0.0	0.8
Total Del/Veh (s)	62.8	130.1	73.8

4066: EB M-96 (Michigan Avenue) & WB to EB Xover W of 15 Mile Rd (South) Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	25.8	33.4	26.0

4067: 15 Mile Rd (South) & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.7	0.1
Total Del/Veh (s)	83.9	51.5	80.8

4068: EB to WB Xover E of 15 Mile Rd (South) & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	4.2	0.0	4.0
Total Del/Veh (s)	29.1	44.9	29.9

4070: M-311 (11 Mile Rd) & Site Drive East Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	1.3	0.5	0.0	0.4
Total Del/Veh (s)	22.1	168.1	24.9	64.5

4071: 15 Mile Rd & Verona Rd Performance by approach

Approach	NB	SB	SE	NW	All
Denied Del/Veh (s)	0.7	0.1	3.3	0.2	1.9
Total Del/Veh (s)	22.9	12.1	16.9	76.3	24.7

4075: 11 Mile Road & Verona Road Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.8	617.1	0.5	145.8
Total Del/Veh (s)	35.9	82.3	264.6	46.7	91.1

9002: WB M-96 (Michigan Avenue) & Firekeepers Gas Station Driveway Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.2	0.0
Total Del/Veh (s)	3.2	15.6	5.5

9003: WB M-96 (Michigan Avenue) & Firekeepers E Drive Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.0	10.1	3.1

9004: WB M-96 (Michigan Avenue) & Ackerson Drive Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	1.5	7.5	1.5

9006: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	1.1	2.7	1.1

9008: 15 Mile Rd (North) & Old M-96 (Michigan Ave) Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.0	0.0	0.0
Total Del/Veh (s)	5.6	0.7	97.8	56.1

9013: SB I-69 On-Ramp & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.8	0.8
Total Del/Veh (s)	111.3	111.3

9016: EB M-96 (Michigan Avenue) & NB I-69 On-Ramp Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.2	0.2
Total Del/Veh (s)	39.7	39.7

9017: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	1.2	1.2
Total Del/Veh (s)	22.4	22.4

9018: EB M-96 (Michigan Avenue) & WB to EB Xover W of M-227/West Drive Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.4	9.3	2.8

9019: EB to WB Xover W of M-227/West Drive & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.5	18.7	4.3

9020: EB M-96 (Michigan Avenue) & WB to EB Xover E of M-227/West Drive Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.0	8.5	1.7

9021: EB to WB Xover E of M-227/West Drive & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.3	0.0	0.3
Total Del/Veh (s)	3.1	13.2	3.4

9023: M-311 (11 Mile Rd) & B Drive North Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	1.4	0.3	1.0	0.4	0.9
Total Del/Veh (s)	2.4	1.5	12.0	11.2	4.6

9025: M-294 (Beadle Lake Road) & EB I-94 Off-Ramp & EB I-94 On-Ramp Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	2.6	0.3	0.0	0.5
Total Del/Veh (s)	6.7	1.7	1.8	2.5

9026: WB I-94 On-Ramp & M-294 (Beadle Lake Road) & WB I-94 Off-Ramp Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	2.0	0.0	0.3	0.5
Total Del/Veh (s)	6.9	1.6	1.4	2.5

9027: Old US-27 & EB I-94 to Old US-27 Off Ramp Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0
Total Del/Veh (s)	6.5	0.2	1.1	2.5

9028: Old US-27 & NB Old US-27 to EB I-94 On Ramp Performance by approach

Approach	NB	SB	All
Denied Del/Veh (s)	0.6	0.0	0.3
Total Del/Veh (s)	0.8	0.5	0.6

9029: SB Old US-27 WB I-94 On Ramp & Old US-27 & WB I-94 to Old US-27 Off Ramp Performance by

Approach	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	1.1	0.4
Total Del/Veh (s)	5.1	0.2	0.7	1.1

9030: I-94BL/Partello Rd & EB I-94 to I-94BL/Partello Off Ramp Performance by approach

Approach	SE	NE	SW	All
Denied Del/Veh (s)	0.0	0.3	0.0	0.1
Total Del/Veh (s)	4.6	1.6	0.2	1.8

9031: I-94BL/Partello Rd & I-94/Partello Rd to EB I-94 On Ramp Performance by approach

Approach	NE	SW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.2	0.8	0.4

9032: I-94BL/Partello Rd & WB I-94 to I-94/Partello Rd Performance by approach

Approach	EB	NE	SW	All
Denied Del/Veh (s)	0.0	0.0	0.8	0.1
Total Del/Veh (s)	3.6	1.2	0.6	1.8

9034: Dummy Node & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	1.0	134.7	2.3
Total Del/Veh (s)	42.6	1541.9	54.2

9035: Dummy Node & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	0.6	8.0	0.9

9036: WB M-96 (Michigan Avenue) & Dummy Node Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	1.9	5.3	1.9

9037: WB M-96 (Michigan Avenue) & Dummy Node Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	1.0	1.0

9040: Old US-27 & NB Old US-27 to WB I-94 On Ramp Performance by approach

Approach	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.0	0.3	0.7

9041: WB to EB Xover E of M-227/West Drive/McDonald's Dr & WB M-96 (Michigan Avenue) Performanc

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.2	0.0
Total Del/Veh (s)	3.1	32.1	5.2

9128: M-96 (Michigan Avenue)/WB M-96 (Michigan Avenue) & EB M-96 (Michigan Avenue) Performance

Approach	NB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	6.5	234.3	116.2

9137: SB I-69 On-Ramp Performance by approach

Approach	SB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	14.2	1.4	3.1

9143: NB I-69 On-Ramp Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	12.2	3.4	4.2

9146: WB to EB Xover W of M-227/West Drive & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	11.0	11.0

9147: EB M-96 (Michigan Avenue) & EB to WB Xover W of M-227/West Drive Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.9	2.9

9150: M-311 (11 Mile Rd) /NB M-311 (11 Mile Rd) & SB M-311 (11 Mile Rd) Performance by approach

Approach	NB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	63.0	2.1	31.4

9151: EB M-96 (Michigan Avenue) & EB to WB Xover E of M-227/West Drive Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.5	0.5

9157: SB I-69 On-Ramp & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.4	0.4
Total Del/Veh (s)	32.7	32.7

9158: SB I-69 Off-Ramp (Push Button) & SB I-69 Off-Ramp Performance by approach

Approach	SB	All
Denied Del/Veh (s)	768.8	768.8
Total Del/Veh (s)	252.5	252.5

9159: NB I-69 Off-Ramp & NB I-69 Off-Ramp (Push Button) Performance by approach

Approach	NB	All
Denied Del/Veh (s)	470.7	470.7
Total Del/Veh (s)	180.7	180.7

9178: WB I-94 to BL-94/Partello Rd Off Ramp/WB I-94 to I-94/Partello Rd & BL-94/Partello Rd to WB I-94

Approach	EB	WB	All
Denied Del/Veh (s)	0.2	0.0	0.1
Total Del/Veh (s)	0.2	0.2	0.2

9304: WB to EB Xover W of 15 Mile Rd (North) & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	41.3	41.3

9305: EB M-96 (Michigan Avenue) & WB to EB Xover W of 15 Mile Rd (North) Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	44.2	323.3	47.1

9307: EB M-96 (Michigan Avenue) & EB to WB Xover E of 15 Mile Rd (North) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	118.9	118.9

9310: WB to EB Xover W of 15 Mile Rd (South) & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	41.1	41.1
Total Del/Veh (s)	150.0	150.0

9311: EB M-96 (Michigan Avenue) & EB to WB Xover E of 15 Mile Rd (South) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.1	0.1
Total Del/Veh (s)	54.9	54.9

9330: EB to WB Xover E of Old M-311 (11 Mile Rd) & WB M-96 (Michigan Avenue) Performance by appr

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	10.6	23.4	10.8

9331: EB M-96 (Michigan Avenue) & EB to WB Xover E of Old M-311 (11 Mile Rd) Performance by appro

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.0	2.0

9332: WB M-96 (Michigan Avenue) & Old M-311 (11 Mile Rd) Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	18.5	63.7	20.3

9336: WB to EB Xover W of Old M-311 (11 Mile Rd) & WB M-96 (Michigan Avenue) Performance by app

Approach	WB	All
Denied Del/Veh (s)	0.1	0.1
Total Del/Veh (s)	35.4	35.4

9337: EB M-96 (Michigan Avenue) & WB to EB Xover W of Old M-311 (11 Mile Rd) Performance by appr

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	3.2	9.1	3.8

9338: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & NB to SB Xover N of M-96 (Michigan Avenue) F

Approach	NB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	22.8	22.8

9339: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & EB I-94 On Ramp Performance by approach

Approach	NB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	44.3	44.3

9340: EB I-94 On Ramp Performance by approach

Approach	EB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	16.9	0.3	1.5

9342: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & EB I-94 On Ramp Performance by approach

Approach	SB	All
Denied Del/Veh (s)	0.6	0.6
Total Del/Veh (s)	36.8	36.8

9343: EB I-94 Off-ramp Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.6	0.6
Total Del/Veh (s)	4.0	4.0

9346: WB I-94 On Ramp Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.6	25.7	4.6

9347: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & WB I-94 On Ramp Performance by approach

Approach	NW	All
Denied Del/Veh (s)	0.3	0.3
Total Del/Veh (s)	21.9	21.9

9348: WB I-94 On Ramp & EB M-96 (Michigan Avenue)/11 Mile Rd (South) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.1	0.1
Total Del/Veh (s)	46.6	46.6

9349: WB I-94 Off-ramp Performance by approach

Approach	WB	All
Denied Del/Veh (s)	10.3	10.3
Total Del/Veh (s)	153.5	153.5

9351: SB to NB Xover E of 11 Mile Rd & WB M-96 (Michigan Avenue)/11 Mile Rd (North) Performance b

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.5	12.1	1.8

9352: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & SB to NB Xover E of 11 Mile Rd Performance b

Approach	EB	All
Denied Del/Veh (s)	5.6	5.6
Total Del/Veh (s)	62.2	62.2

9354: EB to WB Xover W of 11 Mile Rd & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	3.8	3.8

9355: EB M-96 (Michigan Avenue) & EB to WB Xover W of 11 Mile Rd Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	74.0	74.0

9356: WB to EB Xover W of 11 Mile Rd & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.9	2.9

9357: EB M-96 (Michigan Avenue) & WB to EB Xover W of 11 Mile Rd Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	39.0	39.0

9359: EB M-96 (Michigan Avenue) & M-96 (Michigan Avenue)/WB M-96 (Michigan Avenue) Performance

Approach	EB	WB	All
Denied Del/Veh (s)	0.2	0.0	0.1
Total Del/Veh (s)	8.7	0.9	4.9

9381: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.7	2.7

9382: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	3.0	5.5	3.7

9383: WB M-96 (Michigan Avenue) Performance by approach

Approach	NW	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.6	0.6

9384: EB M-96 (Michigan Avenue) Performance by approach

Approach	SE	SW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.0	6.5	2.0

9385: Ceresco Road/12 Mile Road & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	1.0	5.5	1.1

9386: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	3.4	3.8	3.4

9387: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.7	0.7

9388: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.4	0.4

9389: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	3.2	4.8	3.2

9390: 13 Mile Rd & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	0.7	4.6	0.7

9392: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.3	3.3	1.4

9393: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	1.8	1.8

9394: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	24.3	24.3

9396: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.1	9.2	2.5

9397: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	43.9	43.9

9398: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	56.8	56.8

9400: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	53.2	106.6	54.2

9401: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.2	0.2
Total Del/Veh (s)	85.0	85.0

9410: Retail Drive & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	0.7	8.8	0.8

9415: EB Main Entrance/EB M-96 (Michigan Avenue) & M-96 (Michigan Avenue) Performance by approa

Approach	EB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	46.1	11.0	35.7

9416: SB M-311 (11 Mile Rd)/EB M-96 (Michigan Avenue)/11 Mile Rd (South) & EB M-96 (Michigan Ave

Approach	SB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	4.1	4.1

Total Network Performance

Denied Del/Veh (s)	128.8
Total Del/Veh (s)	345.4

Scenario M4&S1

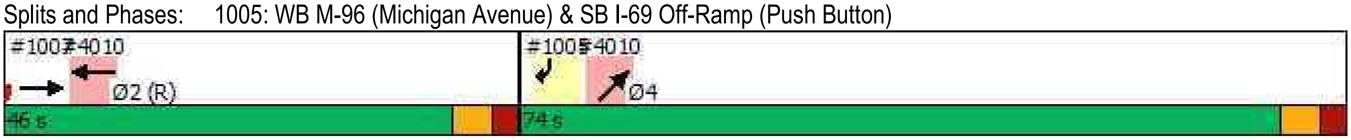
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø2
Lane Configurations							
Traffic Volume (vph)	0	0	1613	0	0	2894	
Future Volume (vph)	0	0	1613	0	0	2894	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	0.91	1.00	1.00	0.76	
Frt						0.850	
Flt Protected							
Satd. Flow (prot)	0	0	5085	0	0	3610	
Flt Permitted							
Satd. Flow (perm)	0	0	5085	0	0	3610	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)						244	
Link Speed (mph)		45	45		25		
Link Distance (ft)		275	194		266		
Travel Time (s)		4.2	2.9		7.3		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.84	0.75	
Heavy Vehicles (%)	2%	2%	2%	2%	3%	2%	
Adj. Flow (vph)	0	0	1753	0	0	3859	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	1753	0	0	3859	
Turn Type			NA			Prot	
Protected Phases			Free!			4!	2
Permitted Phases							
Minimum Split (s)						17.0	17.0
Total Split (s)						74.0	46.0
Total Split (%)						61.7%	38%
Yellow Time (s)						3.5	3.5
All-Red Time (s)						2.5	2.5
Lost Time Adjust (s)						0.0	
Total Lost Time (s)						6.0	
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)			120.0			68.0	
Actuated g/C Ratio			1.00			0.57	
v/c Ratio			0.34			1.79	
Control Delay			1.6			381.2	
Queue Delay			0.1			0.2	
Total Delay			1.7			381.4	
LOS			A			F	
Approach Delay			1.7		381.4		
Approach LOS			A		F		
Queue Length 50th (ft)			4			~1949	
Queue Length 95th (ft)			m0			#1557	
Internal Link Dist (ft)		195	114		186		
Turn Bay Length (ft)							
Base Capacity (vph)			5085			2151	
Starvation Cap Reductn			0			0	
Spillback Cap Reductn			1352			155	
Storage Cap Reductn			0			0	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø2
Reduced v/c Ratio			0.47			1.93	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 100 (83%), Referenced to phase 2:EBT, Start of Green	
Natural Cycle: 150	
Control Type: Pretimed	
Maximum v/c Ratio: 1.79	
Intersection Signal Delay: 262.8	Intersection LOS: F
Intersection Capacity Utilization 113.8%	ICU Level of Service H
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.
! Phase conflict between lane groups.

Splits and Phases: 1005: WB M-96 (Michigan Avenue) & SB I-69 Off-Ramp (Push Button)



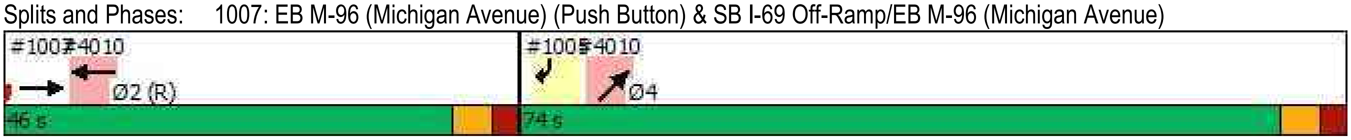
Lane Group	EBT	EBR	WBL	WBT	NEL	NER	Ø4
Lane Configurations							
Traffic Volume (vph)	112	0	0	0	0	3761	
Future Volume (vph)	112	0	0	0	0	3761	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Storage Length (ft)		260	285		0	0	
Storage Lanes		0	0		0	3	
Taper Length (ft)			240		25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.76	
Frt						0.850	
Flt Protected							
Satd. Flow (prot)	1863	0	0	0	0	3610	
Flt Permitted							
Satd. Flow (perm)	1863	0	0	0	0	3610	
Right Turn on Red		Yes				Yes	
Satd. Flow (RTOR)						2086	
Link Speed (mph)	25			45	45		
Link Distance (ft)	301			619	190		
Travel Time (s)	8.2			9.4	2.9		
Peak Hour Factor	0.75	0.84	0.92	0.92	0.90	0.90	
Heavy Vehicles (%)	2%	3%	2%	2%	2%	2%	
Adj. Flow (vph)	149	0	0	0	0	4179	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	149	0	0	0	0	4179	
Turn Type	NA					Free	
Protected Phases	2						4
Permitted Phases						Free	
Minimum Split (s)	17.0						17.0
Total Split (s)	46.0						74.0
Total Split (%)	38.3%						62%
Yellow Time (s)	3.5						3.5
All-Red Time (s)	2.5						2.5
Lost Time Adjust (s)	0.0						
Total Lost Time (s)	6.0						
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)	40.0					120.0	
Actuated g/C Ratio	0.33					1.00	
v/c Ratio	0.24					1.16	
Control Delay	30.3					97.7	
Queue Delay	0.0					0.0	
Total Delay	30.3					97.7	
LOS	C					F	
Approach Delay	30.3				97.7		
Approach LOS	C				F		
Queue Length 50th (ft)	83					~989	
Queue Length 95th (ft)	111					m305	
Internal Link Dist (ft)	221			539	110		
Turn Bay Length (ft)							
Base Capacity (vph)	621					3610	

Lane Group	EBT	EBR	WBL	WBT	NEL	NER	Ø4
Starvation Cap Reductn	0					0	
Spillback Cap Reductn	0					0	
Storage Cap Reductn	0					0	
Reduced v/c Ratio	0.24					1.16	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 100 (83%), Referenced to phase 2:EBT, Start of Green	
Natural Cycle: 150	
Control Type: Pretimed	
Maximum v/c Ratio: 1.79	
Intersection Signal Delay: 95.4	Intersection LOS: F
Intersection Capacity Utilization 83.3%	ICU Level of Service E
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1007: EB M-96 (Michigan Avenue) (Push Button) & SB I-69 Off-Ramp/EB M-96 (Michigan Avenue)

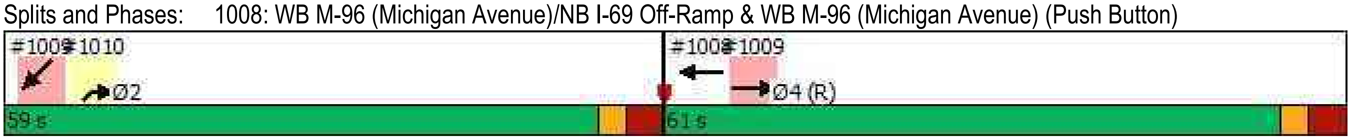


Lane Group	EBL	EBT	WBT	WBR	SWL	SWR	Ø2
Lane Configurations							
Traffic Volume (vph)	0	0	734	0	0	998	
Future Volume (vph)	0	0	734	0	0	998	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.88	
Frt						0.850	
Flt Protected							
Satd. Flow (prot)	0	0	3539	0	0	2787	
Flt Permitted							
Satd. Flow (perm)	0	0	3539	0	0	2787	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)						999	
Link Speed (mph)		45	25		45		
Link Distance (ft)		217	252		223		
Travel Time (s)		3.3	6.9		3.4		
Peak Hour Factor	0.92	0.92	0.75	0.93	0.92	0.92	
Heavy Vehicles (%)	2%	2%	2%	6%	2%	2%	
Adj. Flow (vph)	0	0	979	0	0	1085	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	979	0	0	1085	
Turn Type			NA			Free	
Protected Phases			4				2
Permitted Phases						Free	
Minimum Split (s)			16.0				16.0
Total Split (s)			61.0				59.0
Total Split (%)			50.8%				49%
Yellow Time (s)			2.5				2.5
All-Red Time (s)			3.5				3.5
Lost Time Adjust (s)			0.0				
Total Lost Time (s)			6.0				
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)			55.0			120.0	
Actuated g/C Ratio			0.46			1.00	
v/c Ratio			0.60			0.39	
Control Delay			26.3			4.3	
Queue Delay			0.0			0.0	
Total Delay			26.3			4.3	
LOS			C			A	
Approach Delay			26.3		4.3		
Approach LOS			C		A		
Queue Length 50th (ft)			291			100	
Queue Length 95th (ft)			278			100	
Internal Link Dist (ft)		137	172		143		
Turn Bay Length (ft)							
Base Capacity (vph)			1622			2787	
Starvation Cap Reductn			0			0	
Spillback Cap Reductn			0			0	
Storage Cap Reductn			0			0	

Lane Group	EBL	EBT	WBT	WBR	SWL	SWR	Ø2
Reduced v/c Ratio			0.60			0.39	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 92 (77%), Referenced to phase 4:WBT, Start of Green	
Natural Cycle: 55	
Control Type: Pretimed	
Maximum v/c Ratio: 0.70	
Intersection Signal Delay: 14.7	Intersection LOS: B
Intersection Capacity Utilization 61.9%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 1008: WB M-96 (Michigan Avenue)/NB I-69 Off-Ramp & WB M-96 (Michigan Avenue) (Push Button)



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↑↑									↑↑	
Traffic Volume (vph)	0	976	0	0	0	0	0	0	0	0	998	0
Future Volume (vph)	0	976	0	0	0	0	0	0	0	0	998	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	3539	0	0	0	0	0	0	0	0	3539	0
Flt Permitted												
Satd. Flow (perm)	0	3539	0	0	0	0	0	0	0	0	3539	0
Right Turn on Red			Yes			Yes			Yes	Yes		Yes
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		209			206			223			213	
Travel Time (s)		3.2			3.1			3.4			3.2	
Peak Hour Factor	0.86	0.86	0.86	0.92	0.92	0.92	0.92	0.92	0.92	0.91	0.91	0.91
Adj. Flow (vph)	0	1135	0	0	0	0	0	0	0	0	1097	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1135	0	0	0	0	0	0	0	0	1097	0
Turn Type		NA									NA	
Protected Phases		4									2	
Permitted Phases												
Minimum Split (s)		16.0									16.0	
Total Split (s)		61.0									59.0	
Total Split (%)		50.8%									49.2%	
Yellow Time (s)		2.5									2.5	
All-Red Time (s)		3.5									3.5	
Lost Time Adjust (s)		0.0									0.0	
Total Lost Time (s)		6.0									6.0	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		55.0									53.0	
Actuated g/C Ratio		0.46									0.44	
v/c Ratio		0.70									0.70	
Control Delay		25.5									26.4	
Queue Delay		0.0									0.0	
Total Delay		25.5									26.4	
LOS		C									C	
Approach Delay		25.5									26.4	
Approach LOS		C									C	
Queue Length 50th (ft)		343									372	
Queue Length 95th (ft)		m287									456	
Internal Link Dist (ft)		129			126			143			133	
Turn Bay Length (ft)												
Base Capacity (vph)		1622									1563	
Starvation Cap Reductn		0									0	
Spillback Cap Reductn		0									0	
Storage Cap Reductn		0									0	
Reduced v/c Ratio		0.70									0.70	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 92 (77%), Referenced to phase 4:WBT, Start of Green	
Natural Cycle: 55	
Control Type: Pretimed	
Maximum v/c Ratio: 0.70	
Intersection Signal Delay: 26.0	Intersection LOS: C
Intersection Capacity Utilization 64.6%	ICU Level of Service C
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

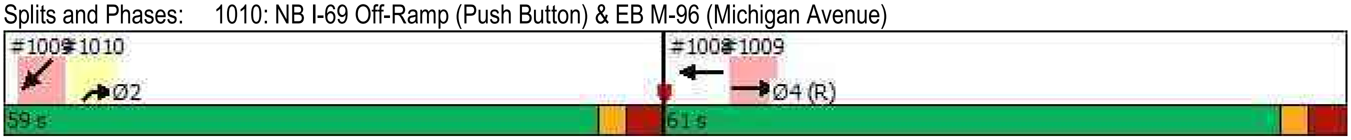
Splits and Phases: 1009: WB M-96 (Michigan Avenue) (Push Button)/WB M-96 (Michigan Avenue) & EB M-96 (Michigan Avenue)

Lane Group	EBT	EBR	WBL	WBT	NEL	NER	Ø4
Lane Configurations							
Traffic Volume (vph)	976	0	0	0	0	122	
Future Volume (vph)	976	0	0	0	0	122	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	0.95	1.00	1.00	1.00	1.00	1.00	
Frt						0.865	
Flt Protected							
Satd. Flow (prot)	3539	0	0	0	0	1611	
Flt Permitted							
Satd. Flow (perm)	3539	0	0	0	0	1611	
Right Turn on Red		Yes				Yes	
Satd. Flow (RTOR)						249	
Link Speed (mph)	45			45	25		
Link Distance (ft)	206			309	315		
Travel Time (s)	3.1			4.7	8.6		
Peak Hour Factor	0.86	0.86	0.92	0.92	0.93	0.75	
Heavy Vehicles (%)	2%	2%	2%	2%	6%	2%	
Adj. Flow (vph)	1135	0	0	0	0	163	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	1135	0	0	0	0	163	
Turn Type	NA					Prot	
Protected Phases	Free!					2!	4
Permitted Phases							
Minimum Split (s)						16.0	16.0
Total Split (s)						59.0	61.0
Total Split (%)						49.2%	51%
Yellow Time (s)						2.5	2.5
All-Red Time (s)						3.5	3.5
Lost Time Adjust (s)						0.0	
Total Lost Time (s)						6.0	
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)	120.0					53.0	
Actuated g/C Ratio	1.00					0.44	
v/c Ratio	0.32					0.19	
Control Delay	0.2					0.6	
Queue Delay	0.0					0.0	
Total Delay	0.2					0.6	
LOS	A					A	
Approach Delay	0.2				0.6		
Approach LOS	A				A		
Queue Length 50th (ft)	0					0	
Queue Length 95th (ft)	0					0	
Internal Link Dist (ft)	126			229	235		
Turn Bay Length (ft)							
Base Capacity (vph)	3539					850	
Starvation Cap Reductn	0					0	
Spillback Cap Reductn	0					0	
Storage Cap Reductn	0					0	

Lane Group	EBT	EBR	WBL	WBT	NEL	NER	Ø4
Reduced v/c Ratio	0.32					0.19	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 92 (77%), Referenced to phase 4:WBT, Start of Green	
Natural Cycle: 55	
Control Type: Pretimed	
Maximum v/c Ratio: 0.70	
Intersection Signal Delay: 0.2	Intersection LOS: A
Intersection Capacity Utilization 64.6%	ICU Level of Service C
Analysis Period (min) 15	
! Phase conflict between lane groups.	

Splits and Phases: 1010: NB I-69 Off-Ramp (Push Button) & EB M-96 (Michigan Avenue)



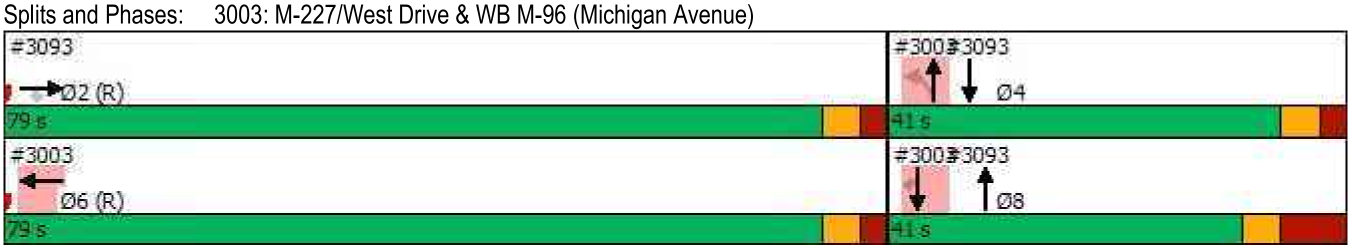
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	950	192	76	50	0	0	84	85
Future Volume (vph)	0	0	0	0	950	192	76	50	0	0	84	85
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		80	0		0	0		0
Storage Lanes	0		0	0		1	1		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.975							0.850
Flt Protected							0.950					
Satd. Flow (prot)	0	0	0	0	5007	0	1671	1863	0	0	1845	1568
Flt Permitted							0.687					
Satd. Flow (perm)	0	0	0	0	5007	0	1209	1863	0	0	1845	1568
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					65							101
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		152			212			101			1197	
Travel Time (s)		2.3			3.2			2.0			23.3	
Peak Hour Factor	0.92	0.92	0.92	0.87	0.87	0.87	0.67	0.67	0.67	0.77	0.77	0.77
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	8%	2%	2%	3%	3%	3%
Adj. Flow (vph)	0	0	0	0	1092	221	113	75	0	0	109	110
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1313	0	113	75	0	0	109	110
Turn Type					NA		Perm	NA			NA	Perm
Protected Phases					6			4			8	
Permitted Phases							4					8
Minimum Split (s)					31.0		17.0	17.0			17.0	17.0
Total Split (s)					79.0		41.0	41.0			41.0	41.0
Total Split (%)					65.8%		34.2%	34.2%			34.2%	34.2%
Yellow Time (s)					3.5		3.5	3.5			3.5	3.5
All-Red Time (s)					2.5		2.5	2.5			6.0	6.0
Lost Time Adjust (s)					0.0		0.0	0.0			0.0	0.0
Total Lost Time (s)					6.0		6.0	6.0			9.5	9.5
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)					73.0		35.0	35.0			31.5	31.5
Actuated g/C Ratio					0.61		0.29	0.29			0.26	0.26
v/c Ratio					0.43		0.32	0.14			0.23	0.23
Control Delay					12.2		8.6	5.5			36.2	9.2
Queue Delay					0.0		0.0	0.0			0.0	0.0
Total Delay					12.2		8.6	5.5			36.2	9.2
LOS					B		A	A			D	A
Approach Delay					12.2			7.4			22.7	
Approach LOS					B			A			C	
Queue Length 50th (ft)					175		11	7			66	5
Queue Length 95th (ft)					197		11	8			98	33
Internal Link Dist (ft)		72			132			21			1117	
Turn Bay Length (ft)												
Base Capacity (vph)					3071		352	543			484	486

Lane Group	Ø2
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	2
Permitted Phases	
Minimum Split (s)	16.0
Total Split (s)	79.0
Total Split (%)	66%
Yellow Time (s)	3.5
All-Red Time (s)	2.5
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
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)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
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					0.43		0.32	0.14			0.23	0.23

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 112 (93%), Referenced to phase 2:EBT and 6:, Start of Green	
Natural Cycle: 50	
Control Type: Pretimed	
Maximum v/c Ratio: 0.51	
Intersection Signal Delay: 13.0	Intersection LOS: B
Intersection Capacity Utilization 52.2%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 3003: M-227/West Drive & WB M-96 (Michigan Avenue)



Lane Group	Ø2
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

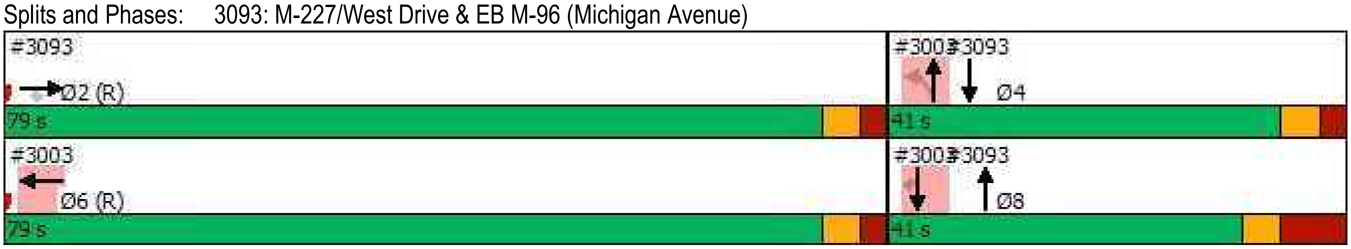
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1046	59	0	0	0	0	126	30	0	84	0
Future Volume (vph)	0	1046	59	0	0	0	0	126	30	0	84	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		65	0		0	100		0	0		0
Storage Lanes	0		1	0		0	1		0	0		0
Taper Length (ft)	25			25			70			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Frt			0.850					0.971				
Flt Protected												
Satd. Flow (prot)	0	3574	1442	0	0	0	0	3344	0	0	1881	0
Flt Permitted												
Satd. Flow (perm)	0	3574	1442	0	0	0	0	3344	0	0	1881	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			59					24				
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		161			222			1117			101	
Travel Time (s)		2.4			3.4			21.8			2.0	
Peak Hour Factor	0.95	0.95	0.95	0.92	0.92	0.92	0.72	0.72	0.72	0.83	0.83	0.83
Heavy Vehicles (%)	2%	1%	12%	2%	2%	2%	2%	6%	0%	2%	1%	2%
Adj. Flow (vph)	0	1101	62	0	0	0	0	175	42	0	101	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1101	62	0	0	0	0	217	0	0	101	0
Turn Type		NA	Perm					NA			NA	
Protected Phases		2						8			4	
Permitted Phases			2									
Minimum Split (s)		16.0	16.0					17.0			17.0	
Total Split (s)		79.0	79.0					41.0			41.0	
Total Split (%)		65.8%	65.8%					34.2%			34.2%	
Yellow Time (s)		3.5	3.5					3.5			3.5	
All-Red Time (s)		2.5	2.5					6.0			2.5	
Lost Time Adjust (s)		0.0	0.0					0.0			0.0	
Total Lost Time (s)		6.0	6.0					9.5			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		73.0	73.0					31.5			35.0	
Actuated g/C Ratio		0.61	0.61					0.26			0.29	
v/c Ratio		0.51	0.07					0.24			0.18	
Control Delay		4.4	0.2					31.7			0.7	
Queue Delay		0.0	0.0					0.0			0.0	
Total Delay		4.4	0.2					31.7			0.7	
LOS		A	A					C			A	
Approach Delay		4.2						31.7			0.7	
Approach LOS		A						C			A	
Queue Length 50th (ft)		45	1					61			0	
Queue Length 95th (ft)		52	0					73			0	
Internal Link Dist (ft)		81			142			1037			21	
Turn Bay Length (ft)			65									
Base Capacity (vph)		2174	900					895			548	

Lane Group	Ø6
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	6
Permitted Phases	
Minimum Split (s)	31.0
Total Split (s)	79.0
Total Split (%)	66%
Yellow Time (s)	3.5
All-Red Time (s)	2.5
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
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)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn		0	0					0			0	
Spillback Cap Reductn		0	0					18			0	
Storage Cap Reductn		0	0					0			0	
Reduced v/c Ratio		0.51	0.07					0.25			0.18	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 112 (93%), Referenced to phase 2:EBT and 6:, Start of Green	
Natural Cycle: 50	
Control Type: Pretimed	
Maximum v/c Ratio: 0.51	
Intersection Signal Delay: 8.0	Intersection LOS: A
Intersection Capacity Utilization 52.2%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 3093: M-227/West Drive & EB M-96 (Michigan Avenue)



Lane Group	Ø6
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

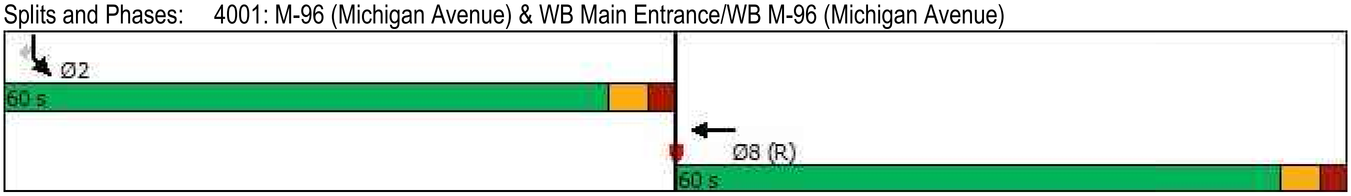
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations										
Traffic Volume (vph)	0	0	0	0	3106	2400	2223	210	0	0
Future Volume (vph)	0	0	0	0	3106	2400	2223	210	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	300		300	0	200	0	0
Storage Lanes	0		0	0		1	2	1	0	0
Taper Length (ft)	25			25			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.88	0.97	1.00	1.00	1.00
Frt						0.850		0.850		
Flt Protected							0.950			
Satd. Flow (prot)	0	0	0	0	3539	2787	3433	1583	0	0
Flt Permitted							0.950			
Satd. Flow (perm)	0	0	0	0	3539	2787	3433	1583	0	0
Right Turn on Red			Yes	Yes		Yes		Yes		
Satd. Flow (RTOR)						485		27		
Link Speed (mph)		45			45		55		45	
Link Distance (ft)		858			894		434		215	
Travel Time (s)		13.0			13.5		5.4		3.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	3376	2609	2416	228	0	0
Shared Lane Traffic (%)										
Lane Group Flow (vph)	0	0	0	0	3376	2609	2416	228	0	0
Turn Type					NA	Free	Prot	Perm		
Protected Phases					8		2			
Permitted Phases						Free		2		
Minimum Split (s)					16.0		16.0	16.0		
Total Split (s)					60.0		60.0	60.0		
Total Split (%)					50.0%		50.0%	50.0%		
Yellow Time (s)					3.5		3.5	3.5		
All-Red Time (s)					2.5		2.5	2.5		
Lost Time Adjust (s)					0.0		0.0	0.0		
Total Lost Time (s)					6.0		6.0	6.0		
Lead/Lag										
Lead-Lag Optimize?										
Act Effct Green (s)					54.0	120.0	54.0	54.0		
Actuated g/C Ratio					0.45	1.00	0.45	0.45		
v/c Ratio					2.12	0.94	1.56	0.31		
Control Delay					525.4	7.5	278.2	12.1		
Queue Delay					0.0	0.0	0.0	0.0		
Total Delay					525.4	7.5	278.2	12.1		
LOS					F	A	F	B		
Approach Delay					299.6		255.3			
Approach LOS					F		F			
Queue Length 50th (ft)					~2203	160	~1366	46		
Queue Length 95th (ft)					m#1279	m0	m#1400	m94		
Internal Link Dist (ft)		778			814		354		135	
Turn Bay Length (ft)						300		200		
Base Capacity (vph)					1592	2787	1544	727		
Starvation Cap Reductn					0	0	0	0		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Spillback Cap Reductn					0	0	0	0		
Storage Cap Reductn					0	0	0	0		
Reduced v/c Ratio					2.12	0.94	1.56	0.31		

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 36 (30%), Referenced to phase 8:WBT, Start of Green	
Natural Cycle: 150	
Control Type: Pretimed	
Maximum v/c Ratio: 2.12	
Intersection Signal Delay: 286.0	Intersection LOS: F
Intersection Capacity Utilization 159.3%	ICU Level of Service H
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4001: M-96 (Michigan Avenue) & WB Main Entrance/WB M-96 (Michigan Avenue)

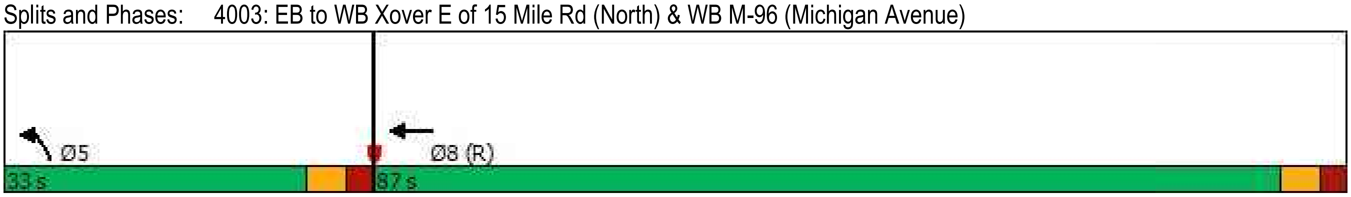


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	4632	962	0
Future Volume (vph)	0	0	0	4632	962	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	0.97	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	5085	3433	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	5085	3433	0
Right Turn on Red		Yes			Yes	Yes
Satd. Flow (RTOR)						
Link Speed (mph)	45			45	25	
Link Distance (ft)	660			254	113	
Travel Time (s)	10.0			3.8	3.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.70	0.92
Adj. Flow (vph)	0	0	0	5035	1374	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	5035	1374	0
Turn Type				NA	Prot	
Protected Phases				8	5	
Permitted Phases						
Minimum Split (s)				16.0	13.0	
Total Split (s)				87.0	33.0	
Total Split (%)				72.5%	27.5%	
Yellow Time (s)				3.5	3.5	
All-Red Time (s)				2.5	2.5	
Lost Time Adjust (s)				0.0	0.0	
Total Lost Time (s)				6.0	6.0	
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)				81.0	27.0	
Actuated g/C Ratio				0.68	0.22	
v/c Ratio				1.47	1.78	
Control Delay				231.2	386.1	
Queue Delay				0.3	0.0	
Total Delay				231.6	386.1	
LOS				F	F	
Approach Delay				231.6	386.1	
Approach LOS				F	F	
Queue Length 50th (ft)				~1963	~835	
Queue Length 95th (ft)				m#1367	m#602	
Internal Link Dist (ft)	580			174	33	
Turn Bay Length (ft)						
Base Capacity (vph)				3432	772	
Starvation Cap Reductn				0	0	
Spillback Cap Reductn				610	0	
Storage Cap Reductn				0	0	
Reduced v/c Ratio				1.78	1.78	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 116 (97%), Referenced to phase 8:WBT, Start of Green			
Natural Cycle: 150			
Control Type: Pretimed			
Maximum v/c Ratio: 1.78			
Intersection Signal Delay: 264.7		Intersection LOS: F	
Intersection Capacity Utilization 180.7%		ICU Level of Service H	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4003: EB to WB Xover E of 15 Mile Rd (North) & WB M-96 (Michigan Avenue)

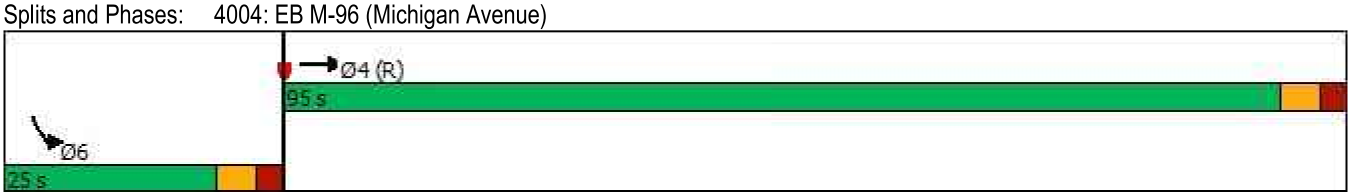


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	1907	0	0	576	0
Future Volume (vph)	0	1907	0	0	576	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	0.97	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	3433	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	3433	0
Right Turn on Red				Yes	Yes	Yes
Satd. Flow (RTOR)					48	
Link Speed (mph)		55	55		25	
Link Distance (ft)		2678	669		109	
Travel Time (s)		33.2	8.3		3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	2073	0	0	626	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	2073	0	0	626	0
Turn Type		NA			Prot	
Protected Phases		4			6	
Permitted Phases						
Detector Phase		4			6	
Switch Phase						
Minimum Initial (s)		10.0			7.0	
Minimum Split (s)		16.0			13.0	
Total Split (s)		95.0			25.0	
Total Split (%)		79.2%			20.8%	
Yellow Time (s)		3.5			3.5	
All-Red Time (s)		2.5			2.5	
Lost Time Adjust (s)		0.0			0.0	
Total Lost Time (s)		6.0			6.0	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode		C-Max			None	
Act Effct Green (s)		89.0			19.0	
Actuated g/C Ratio		0.74			0.16	
v/c Ratio		0.79			1.07	
Control Delay		2.5			88.0	
Queue Delay		0.8			0.0	
Total Delay		3.3			88.0	
LOS		A			F	
Approach Delay		3.3			88.0	
Approach LOS		A			F	
Queue Length 50th (ft)		24			~260	
Queue Length 95th (ft)		m33			m#297	
Internal Link Dist (ft)		2598	589		29	
Turn Bay Length (ft)						
Base Capacity (vph)		2624			583	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Starvation Cap Reductn		0			0	
Spillback Cap Reductn		253			0	
Storage Cap Reductn		0			0	
Reduced v/c Ratio		0.87			1.07	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 20 (17%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.07	
Intersection Signal Delay: 22.9	Intersection LOS: C
Intersection Capacity Utilization 112.9%	ICU Level of Service H
Analysis Period (min) 15	
~ Volume exceeds capacity, queue is theoretically infinite.	
Queue shown is maximum after two cycles.	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 4004: EB M-96 (Michigan Avenue)



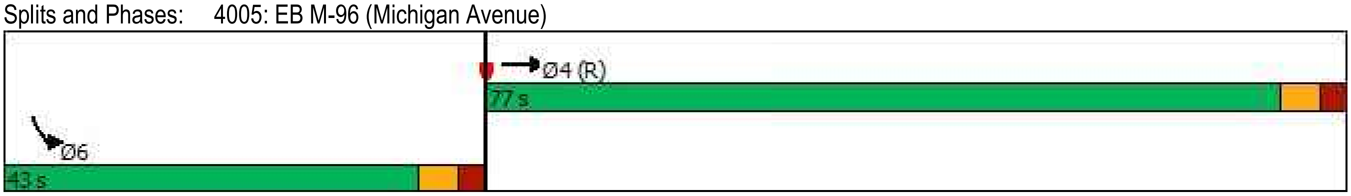
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	980	0	0	1028	0
Future Volume (vph)	0	980	0	0	1028	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	0.97	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	3433	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	3433	0
Right Turn on Red				Yes	Yes	Yes
Satd. Flow (RTOR)					194	
Link Speed (mph)		55	55		25	
Link Distance (ft)		1786	608		109	
Travel Time (s)		22.1	7.5		3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1065	0	0	1117	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1065	0	0	1117	0
Turn Type		NA			Prot	
Protected Phases		4			6	
Permitted Phases						
Detector Phase		4			6	
Switch Phase						
Minimum Initial (s)		10.0			7.0	
Minimum Split (s)		16.0			13.0	
Total Split (s)		77.0			43.0	
Total Split (%)		64.2%			35.8%	
Yellow Time (s)		3.5			3.5	
All-Red Time (s)		2.5			2.5	
Lost Time Adjust (s)		0.0			0.0	
Total Lost Time (s)		6.0			6.0	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode		C-Max			Max	
Act Effct Green (s)		71.0			37.0	
Actuated g/C Ratio		0.59			0.31	
v/c Ratio		0.51			0.94	
Control Delay		15.4			39.7	
Queue Delay		0.0			0.0	
Total Delay		15.4			39.7	
LOS		B			D	
Approach Delay		15.4			39.7	
Approach LOS		B			D	
Queue Length 50th (ft)		239			364	
Queue Length 95th (ft)		293			m414	
Internal Link Dist (ft)		1706	528		29	
Turn Bay Length (ft)						
Base Capacity (vph)		2093			1192	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Starvation Cap Reductn		0			0	
Spillback Cap Reductn		0			0	
Storage Cap Reductn		0			0	
Reduced v/c Ratio		0.51			0.94	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 112 (93%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.94	
Intersection Signal Delay: 27.8	Intersection LOS: C
Intersection Capacity Utilization 64.8%	ICU Level of Service C
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4005: EB M-96 (Michigan Avenue)

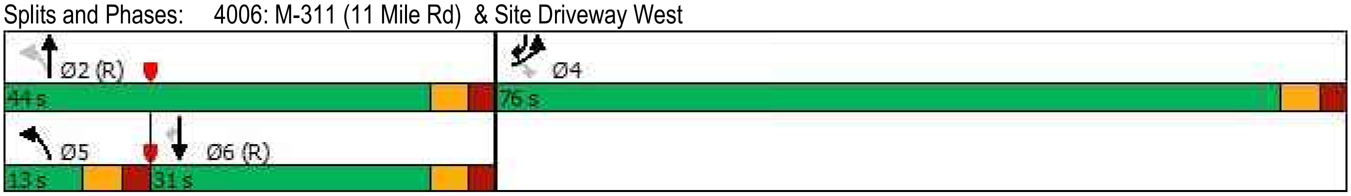


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	575	31	31	132	159	575
Future Volume (vph)	575	31	31	132	159	575
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	250	250			0
Storage Lanes	2	1	1			1
Taper Length (ft)	25		25			
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	1.00
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	3433	1583	1770	1863	1863	1583
Flt Permitted	0.950		0.592			
Satd. Flow (perm)	3433	1583	1103	1863	1863	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		34				625
Link Speed (mph)	25			55	55	
Link Distance (ft)	1178			1461	940	
Travel Time (s)	32.1			18.1	11.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	625	34	34	143	173	625
Shared Lane Traffic (%)						
Lane Group Flow (vph)	625	34	34	143	173	625
Turn Type	Prot	Perm	pm+pt	NA	NA	pm+ov
Protected Phases	4		5	2	6	4
Permitted Phases		4	2			6
Detector Phase	4	4	5	2	6	4
Switch Phase						
Minimum Initial (s)	7.0	7.0	7.0	10.0	10.0	7.0
Minimum Split (s)	14.0	14.0	13.0	17.0	17.0	14.0
Total Split (s)	76.0	76.0	13.0	44.0	31.0	76.0
Total Split (%)	63.3%	63.3%	10.8%	36.7%	25.8%	63.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.5	2.5	2.5	2.5	2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None	None	Min	C-Max	C-Max	None
Act Effct Green (s)	31.2	31.2	76.8	76.8	63.7	100.9
Actuated g/C Ratio	0.26	0.26	0.64	0.64	0.53	0.84
v/c Ratio	0.70	0.08	0.05	0.12	0.18	0.44
Control Delay	44.1	9.7	9.9	9.9	16.1	2.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	44.1	9.7	9.9	9.9	16.1	2.2
LOS	D	A	A	A	B	A
Approach Delay	42.3			9.9	5.2	
Approach LOS	D			A	A	
Queue Length 50th (ft)	226	0	9	40	39	26
Queue Length 95th (ft)	261	23	26	82	85	57

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Internal Link Dist (ft)	1098			1381	860	
Turn Bay Length (ft)		250	250			
Base Capacity (vph)	2002	937	745	1192	988	1583
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	0.31	0.04	0.05	0.12	0.18	0.39

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 60 (50%), Referenced to phase 2:NBTL and 6:SBT, Start of Green	
Natural Cycle: 45	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.70	
Intersection Signal Delay: 20.7	Intersection LOS: C
Intersection Capacity Utilization 51.4%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4006: M-311 (11 Mile Rd) & Site Driveway West



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	515	15	15	1041	1068	515
Future Volume (vph)	515	15	15	1041	1068	515
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	250	400			0
Storage Lanes	2	1	1			1
Taper Length (ft)	25		25			
Lane Util. Factor	0.97	1.00	1.00	0.95	0.95	1.00
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	3433	1583	1770	3539	3539	1583
Flt Permitted	0.950		0.203			
Satd. Flow (perm)	3433	1583	378	3539	3539	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		16				
Link Speed (mph)	45			55	55	
Link Distance (ft)	1846			974	1093	
Travel Time (s)	28.0			12.1	13.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	560	16	16	1132	1161	560
Shared Lane Traffic (%)						
Lane Group Flow (vph)	560	16	16	1132	1161	560
Turn Type	Prot	Perm	Perm	NA	NA	pm+ov
Protected Phases	4			2	6	4
Permitted Phases		4	2			6
Detector Phase	4	4	2	2	6	4
Switch Phase						
Minimum Initial (s)	7.0	7.0	10.0	10.0	10.0	7.0
Minimum Split (s)	13.0	13.0	16.0	16.0	16.0	13.0
Total Split (s)	45.0	45.0	75.0	75.0	75.0	45.0
Total Split (%)	37.5%	37.5%	62.5%	62.5%	62.5%	37.5%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.5	2.5	2.5	2.5	2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None	None	C-Max	C-Max	C-Max	None
Act Effct Green (s)	26.5	26.5	81.5	81.5	81.5	120.0
Actuated g/C Ratio	0.22	0.22	0.68	0.68	0.68	1.00
v/c Ratio	0.74	0.04	0.06	0.47	0.48	0.35
Control Delay	49.5	14.5	3.7	8.4	4.5	0.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	49.5	14.5	3.7	8.4	4.5	0.5
LOS	D	B	A	A	A	A
Approach Delay	48.5			8.4	3.2	
Approach LOS	D			A	A	
Queue Length 50th (ft)	208	0	4	333	62	0
Queue Length 95th (ft)	253	18	m4	67	130	0

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Internal Link Dist (ft)	1766			894	1013	
Turn Bay Length (ft)		250	400			
Base Capacity (vph)	1115	525	256	2404	2404	1583
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	0.50	0.03	0.06	0.47	0.48	0.35

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 20 (17%), Referenced to phase 2:NBTL and 6:SBT, Start of Green

Natural Cycle: 40

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.74

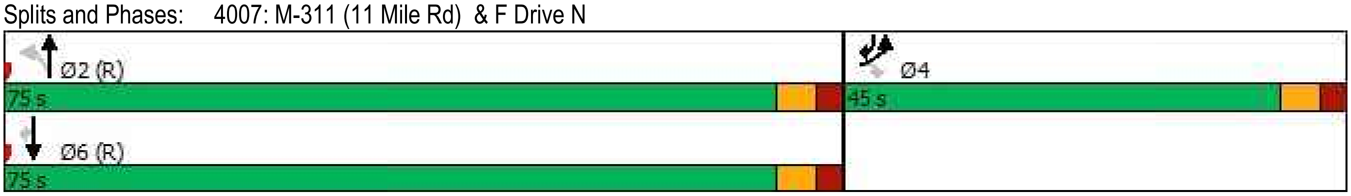
Intersection Signal Delay: 12.5 Intersection LOS: B

Intersection Capacity Utilization 54.2% ICU Level of Service A

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

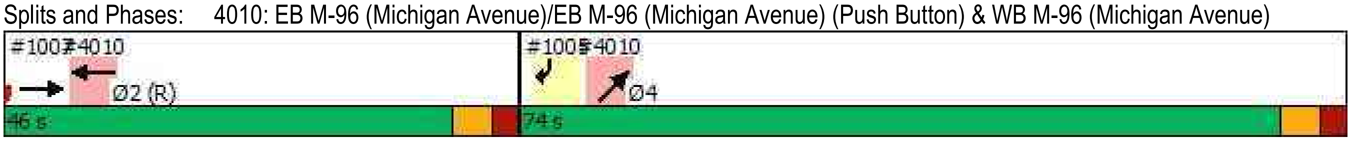
Splits and Phases: 4007: M-311 (11 Mile Rd) & F Drive N



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	1613	0	0	3761	0	0	0	0
Future Volume (vph)	0	0	0	0	1613	0	0	3761	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.91	1.00	1.00	1.00	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	0	0	0	5085	0	0	5085	0	0	0	0
Flt Permitted												
Satd. Flow (perm)	0	0	0	0	5085	0	0	5085	0	0	0	0
Right Turn on Red			Yes			Yes	Yes		Yes			Yes
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		194			183			156			190	
Travel Time (s)		2.9			2.8			2.4			2.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.90	0.90	0.90	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	1753	0	0	4179	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1753	0	0	4179	0	0	0	0
Turn Type					NA			NA				
Protected Phases					2			4				
Permitted Phases												
Minimum Split (s)					17.0			17.0				
Total Split (s)					46.0			74.0				
Total Split (%)					38.3%			61.7%				
Yellow Time (s)					3.5			3.5				
All-Red Time (s)					2.5			2.5				
Lost Time Adjust (s)					0.0			0.0				
Total Lost Time (s)					6.0			6.0				
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)					40.0			68.0				
Actuated g/C Ratio					0.33			0.57				
v/c Ratio					1.03			1.45				
Control Delay					62.7			225.3				
Queue Delay					0.0			0.0				
Total Delay					62.7			225.3				
LOS					E			F				
Approach Delay					62.7			225.3				
Approach LOS					E			F				
Queue Length 50th (ft)					~545			~1620				
Queue Length 95th (ft)					#639			m#1023				
Internal Link Dist (ft)		114			103			76			110	
Turn Bay Length (ft)												
Base Capacity (vph)					1695			2881				
Starvation Cap Reductn					0			0				
Spillback Cap Reductn					0			0				
Storage Cap Reductn					0			0				
Reduced v/c Ratio					1.03			1.45				

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 100 (83%), Referenced to phase 2:EBT, Start of Green	
Natural Cycle: 150	
Control Type: Pretimed	
Maximum v/c Ratio: 1.79	
Intersection Signal Delay: 177.3	Intersection LOS: F
Intersection Capacity Utilization 113.8%	ICU Level of Service H
Analysis Period (min) 15	
~ Volume exceeds capacity, queue is theoretically infinite.	
Queue shown is maximum after two cycles.	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 4010: EB M-96 (Michigan Avenue)/EB M-96 (Michigan Avenue) (Push Button) & WB M-96 (Michigan Avenue)



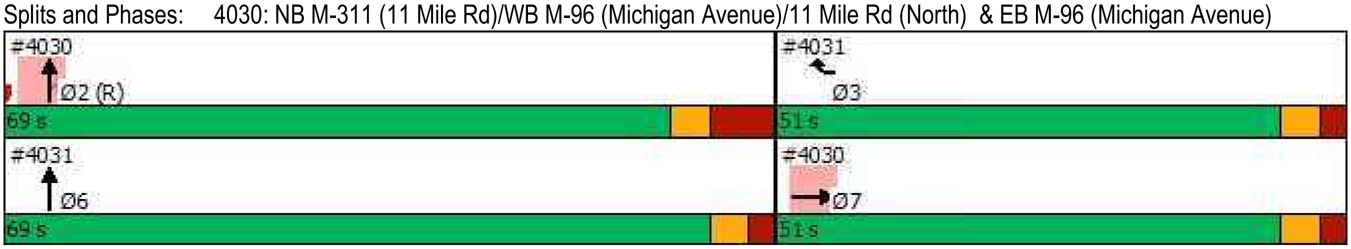
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	871	0	0	0	0	0	1305	251	0	0	0
Future Volume (vph)	0	871	0	0	0	0	0	1305	251	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		250	0		0
Storage Lanes	0		0	0		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	1.00	1.00
Frt									0.850			
Flt Protected												
Satd. Flow (prot)	0	3539	0	0	0	0	0	5085	1583	0	0	0
Flt Permitted												
Satd. Flow (perm)	0	3539	0	0	0	0	0	5085	1583	0	0	0
Right Turn on Red	Yes		Yes			Yes			Yes			Yes
Satd. Flow (RTOR)									36			
Link Speed (mph)		55			55			55			30	
Link Distance (ft)		167			316			655			182	
Travel Time (s)		2.1			3.9			8.1			4.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	947	0	0	0	0	0	1418	273	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	947	0	0	0	0	0	1418	273	0	0	0
Turn Type		NA						NA	Perm			
Protected Phases		7						2				
Permitted Phases									2			
Minimum Split (s)		16.0						19.5	19.5			
Total Split (s)		51.0						69.0	69.0			
Total Split (%)		42.5%						57.5%	57.5%			
Yellow Time (s)		3.5						3.5	3.5			
All-Red Time (s)		2.5						6.0	6.0			
Lost Time Adjust (s)		0.0						0.0	0.0			
Total Lost Time (s)		6.0						9.5	9.5			
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		45.0						59.5	59.5			
Actuated g/C Ratio		0.38						0.50	0.50			
v/c Ratio		0.71						0.56	0.34			
Control Delay		35.9						27.7	22.8			
Queue Delay		0.0						0.0	0.0			
Total Delay		35.9						27.7	22.8			
LOS		D						C	C			
Approach Delay		35.9						26.9				
Approach LOS		D						C				
Queue Length 50th (ft)		375						283	107			
Queue Length 95th (ft)		450						322	170			
Internal Link Dist (ft)		87			236			575			102	
Turn Bay Length (ft)									250			
Base Capacity (vph)		1327						2521	803			
Starvation Cap Reductn		0						0	0			

Lane Group	Ø3	Ø6
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Ideal Flow (vphpl)		
Storage Length (ft)		
Storage Lanes		
Taper Length (ft)		
Lane Util. Factor		
Frt		
Flt Protected		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Peak Hour Factor		
Adj. Flow (vph)		
Shared Lane Traffic (%)		
Lane Group Flow (vph)		
Turn Type		
Protected Phases	3	6
Permitted Phases		
Minimum Split (s)	16.0	16.0
Total Split (s)	51.0	69.0
Total Split (%)	43%	58%
Yellow Time (s)	3.5	3.5
All-Red Time (s)	2.5	2.5
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag		
Lead-Lag Optimize?		
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		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn		0						0	0			
Storage Cap Reductn		0						0	0			
Reduced v/c Ratio		0.71						0.56	0.34			

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 88 (73%), Referenced to phase 2:NBT, Start of Green	
Natural Cycle: 60	
Control Type: Pretimed	
Maximum v/c Ratio: 0.99	
Intersection Signal Delay: 30.1	Intersection LOS: C
Intersection Capacity Utilization 64.7%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 4030: NB M-311 (11 Mile Rd)/WB M-96 (Michigan Avenue)/11 Mile Rd (North) & EB M-96 (Michigan Avenue)



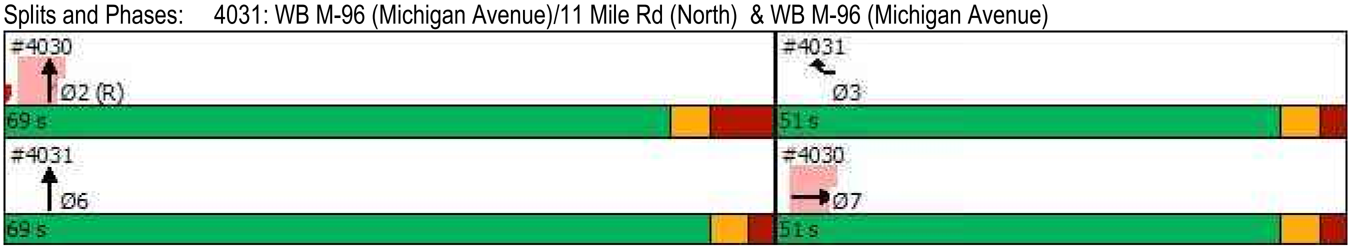
Lane Group	Ø3	Ø6
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		

Intersection Summary

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø2	Ø7
Lane Configurations								
Traffic Volume (vph)	0	1266	1305	0	0	0		
Future Volume (vph)	0	1266	1305	0	0	0		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Lane Util. Factor	1.00	0.76	0.91	1.00	1.00	1.00		
Frt		0.850						
Flt Protected								
Satd. Flow (prot)	0	3610	5085	0	0	0		
Flt Permitted								
Satd. Flow (perm)	0	3610	5085	0	0	0		
Right Turn on Red		Yes		Yes				
Satd. Flow (RTOR)		64						
Link Speed (mph)	55		55			55		
Link Distance (ft)	405		182			493		
Travel Time (s)	5.0		2.3			6.1		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Adj. Flow (vph)	0	1376	1418	0	0	0		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	0	1376	1418	0	0	0		
Turn Type		Prot	NA					
Protected Phases		3	6				2	7
Permitted Phases								
Minimum Split (s)		16.0	16.0				19.5	16.0
Total Split (s)		51.0	69.0				69.0	51.0
Total Split (%)		42.5%	57.5%				58%	43%
Yellow Time (s)		3.5	3.5				3.5	3.5
All-Red Time (s)		2.5	2.5				6.0	2.5
Lost Time Adjust (s)		0.0	0.0					
Total Lost Time (s)		6.0	6.0					
Lead/Lag								
Lead-Lag Optimize?								
Act Effct Green (s)		45.0	63.0					
Actuated g/C Ratio		0.38	0.52					
v/c Ratio		0.99	0.53					
Control Delay		53.8	0.7					
Queue Delay		0.0	0.0					
Total Delay		53.8	0.7					
LOS		D	A					
Approach Delay	53.8		0.7					
Approach LOS	D		A					
Queue Length 50th (ft)		443	0					
Queue Length 95th (ft)		#583	0					
Internal Link Dist (ft)	325		102			413		
Turn Bay Length (ft)								
Base Capacity (vph)		1393	2669					
Starvation Cap Reductn		0	51					
Spillback Cap Reductn		0	0					
Storage Cap Reductn		0	0					
Reduced v/c Ratio		0.99	0.54					

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 88 (73%), Referenced to phase 2:NBT, Start of Green	
Natural Cycle: 60	
Control Type: Pretimed	
Maximum v/c Ratio: 0.99	
Intersection Signal Delay: 26.8	Intersection LOS: C
Intersection Capacity Utilization 64.7%	ICU Level of Service C
Analysis Period (min) 15	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	

Splits and Phases: 4031: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & WB M-96 (Michigan Avenue)

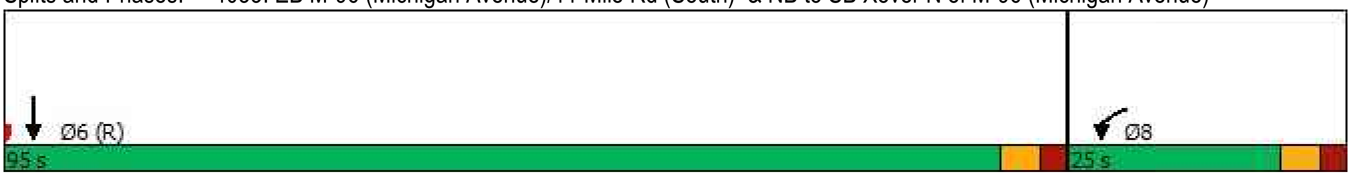


Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	280	0	0	0	0	2174
Future Volume (vph)	280	0	0	0	0	2174
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	0.91
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	3433	0	0	0	0	5085
Flt Permitted	0.950					
Satd. Flow (perm)	3433	0	0	0	0	5085
Right Turn on Red	Yes	Yes		Yes		
Satd. Flow (RTOR)	27					
Link Speed (mph)	25		55			30
Link Distance (ft)	105		587			495
Travel Time (s)	2.9		7.3			11.3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	304	0	0	0	0	2363
Shared Lane Traffic (%)						
Lane Group Flow (vph)	304	0	0	0	0	2363
Turn Type	Prot					NA
Protected Phases	8					6
Permitted Phases						
Minimum Split (s)	13.0					16.0
Total Split (s)	25.0					95.0
Total Split (%)	20.8%					79.2%
Yellow Time (s)	3.5					3.5
All-Red Time (s)	2.5					2.5
Lost Time Adjust (s)	0.0					0.0
Total Lost Time (s)	6.0					6.0
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)	19.0					89.0
Actuated g/C Ratio	0.16					0.74
v/c Ratio	0.54					0.63
Control Delay	18.6					2.4
Queue Delay	0.0					0.1
Total Delay	18.6					2.6
LOS	B					A
Approach Delay	18.6					2.6
Approach LOS	B					A
Queue Length 50th (ft)	63					43
Queue Length 95th (ft)	m65					46
Internal Link Dist (ft)	25		507			415
Turn Bay Length (ft)						
Base Capacity (vph)	566					3771
Starvation Cap Reductn	0					417
Spillback Cap Reductn	0					0
Storage Cap Reductn	0					0
Reduced v/c Ratio	0.54					0.70

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 89 (74%), Referenced to phase 6:SBT, Start of Green	
Natural Cycle: 45	
Control Type: Pretimed	
Maximum v/c Ratio: 0.63	
Intersection Signal Delay: 4.4	Intersection LOS: A
Intersection Capacity Utilization 94.6%	ICU Level of Service F
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4033: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & NB to SB Xover N of M-96 (Michigan Avenue)



Lane Group	NBL	NBT	SBT	SBR	SEL	SER	Ø2
Lane Configurations							
Traffic Volume (vph)	0	0	1625	0	0	549	
Future Volume (vph)	0	0	1625	0	0	549	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	0.91	1.00	1.00	0.88	
Frt						0.850	
Flt Protected							
Satd. Flow (prot)	0	0	5085	0	0	2787	
Flt Permitted							
Satd. Flow (perm)	0	0	5085	0	0	2787	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)						185	
Link Speed (mph)		30	30		30		
Link Distance (ft)		495	145		346		
Travel Time (s)		11.3	3.3		7.9		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	0	0	1766	0	0	597	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	1766	0	0	597	
Turn Type			NA			Prot	
Protected Phases			Free!			4!	2
Permitted Phases							
Minimum Split (s)						16.0	16.0
Total Split (s)						60.0	60.0
Total Split (%)						50.0%	50%
Yellow Time (s)						3.5	3.5
All-Red Time (s)						2.5	2.5
Lost Time Adjust (s)						0.0	
Total Lost Time (s)						6.0	
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)			120.0			54.0	
Actuated g/C Ratio			1.00			0.45	
v/c Ratio			0.35			0.44	
Control Delay			0.1			16.2	
Queue Delay			0.0			0.0	
Total Delay			0.1			16.2	
LOS			A			B	
Approach Delay			0.1		16.2		
Approach LOS			A		B		
Queue Length 50th (ft)			0			118	
Queue Length 95th (ft)			0			171	
Internal Link Dist (ft)		415	65		266		
Turn Bay Length (ft)							
Base Capacity (vph)			5085			1355	
Starvation Cap Reductn			0			0	
Spillback Cap Reductn			0			0	
Storage Cap Reductn			0			0	
Reduced v/c Ratio			0.35			0.44	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 27 (23%), Referenced to phase 4:SER, Start of Green	
Natural Cycle: 60	
Control Type: Pretimed	
Maximum v/c Ratio: 0.79	
Intersection Signal Delay: 4.2	Intersection LOS: A
Intersection Capacity Utilization 73.5%	ICU Level of Service D
Analysis Period (min) 15	

! Phase conflict between lane groups.

Splits and Phases: 4034: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & EB I-94 Off-ramp

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	1625	0	0	0	0	0	1663	0
Future Volume (vph)	0	0	0	0	1625	0	0	0	0	0	1663	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.91	1.00	1.00	1.00	1.00	1.00	0.91	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	0	0	0	5085	0	0	0	0	0	5085	0
Flt Permitted												
Satd. Flow (perm)	0	0	0	0	5085	0	0	0	0	0	5085	0
Right Turn on Red			Yes			Yes			Yes	Yes		Yes
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		145			194			233			108	
Travel Time (s)		3.3			4.4			5.3			2.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	1766	0	0	0	0	0	1808	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1766	0	0	0	0	0	1808	0
Turn Type					NA						NA	
Protected Phases					2						4	
Permitted Phases												
Minimum Split (s)					16.0						16.0	
Total Split (s)					60.0						60.0	
Total Split (%)					50.0%						50.0%	
Yellow Time (s)					3.5						3.5	
All-Red Time (s)					2.5						2.5	
Lost Time Adjust (s)					0.0						0.0	
Total Lost Time (s)					6.0						6.0	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)					54.0						54.0	
Actuated g/C Ratio					0.45						0.45	
v/c Ratio					0.77						0.79	
Control Delay					24.7						34.0	
Queue Delay					0.0						0.0	
Total Delay					24.7						34.0	
LOS					C						C	
Approach Delay					24.7						34.0	
Approach LOS					C						C	
Queue Length 50th (ft)					482						432	
Queue Length 95th (ft)					528						m459	
Internal Link Dist (ft)		65			114			153			28	
Turn Bay Length (ft)												
Base Capacity (vph)					2288						2288	
Starvation Cap Reductn					8						0	
Spillback Cap Reductn					0						0	
Storage Cap Reductn					0						0	
Reduced v/c Ratio					0.77						0.79	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 27 (23%), Referenced to phase 4:SER, Start of Green	
Natural Cycle: 60	
Control Type: Pretimed	
Maximum v/c Ratio: 0.79	
Intersection Signal Delay: 29.4	Intersection LOS: C
Intersection Capacity Utilization 72.8%	ICU Level of Service C
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4035: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & WB M-96 (Michigan Avenue)/11 Mile Rd (North)

Lane Group	NBL	NBR	SET	SER	NWL	NWT	Ø4
Lane Configurations							
Traffic Volume (vph)	104	0	0	0	0	1663	
Future Volume (vph)	104	0	0	0	0	1663	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.91	
Frt							
Flt Protected	0.950						
Satd. Flow (prot)	1719	0	0	0	0	5085	
Flt Permitted	0.950						
Satd. Flow (perm)	1719	0	0	0	0	5085	
Right Turn on Red	Yes	Yes		Yes			
Satd. Flow (RTOR)	99						
Link Speed (mph)	30		30			30	
Link Distance (ft)	271		337			233	
Travel Time (s)	6.2		7.7			5.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Heavy Vehicles (%)	5%	2%	2%	2%	2%	2%	
Adj. Flow (vph)	113	0	0	0	0	1808	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	113	0	0	0	0	1808	
Turn Type	Prot					NA	
Protected Phases	2!					Free!	4
Permitted Phases							
Minimum Split (s)	16.0						16.0
Total Split (s)	60.0						60.0
Total Split (%)	50.0%						50%
Yellow Time (s)	3.5						3.5
All-Red Time (s)	2.5						2.5
Lost Time Adjust (s)	0.0						
Total Lost Time (s)	6.0						
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)	54.0					120.0	
Actuated g/C Ratio	0.45					1.00	
v/c Ratio	0.14					0.36	
Control Delay	5.3					0.1	
Queue Delay	0.0					0.0	
Total Delay	5.3					0.1	
LOS	A					A	
Approach Delay	5.3					0.1	
Approach LOS	A					A	
Queue Length 50th (ft)	6					0	
Queue Length 95th (ft)	39					0	
Internal Link Dist (ft)	191		257			153	
Turn Bay Length (ft)							
Base Capacity (vph)	828					5085	
Starvation Cap Reductn	0					0	
Spillback Cap Reductn	0					0	
Storage Cap Reductn	0					0	

Lane Group	NBL	NBR	SET	SER	NWL	NWT	Ø4
Reduced v/c Ratio	0.14					0.36	

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 27 (23%), Referenced to phase 4:SER, Start of Green	
Natural Cycle: 60	
Control Type: Pretimed	
Maximum v/c Ratio: 0.79	
Intersection Signal Delay: 0.4	Intersection LOS: A
Intersection Capacity Utilization 54.5%	ICU Level of Service A
Analysis Period (min) 15	
! Phase conflict between lane groups.	

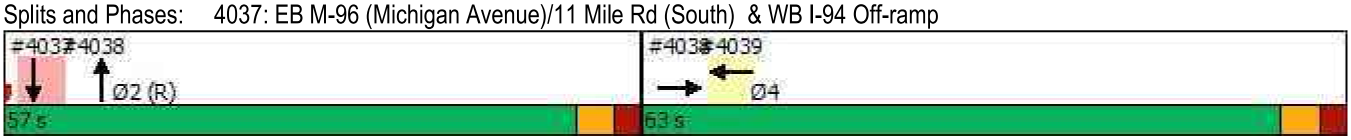
Splits and Phases: 4036: EB I-94 Off-ramp & WB M-96 (Michigan Avenue)/11 Mile Rd (North)

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø4
Lane Configurations							
Traffic Volume (vph)	0	1130	0	0	568	0	
Future Volume (vph)	0	1130	0	0	568	0	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	0.88	1.00	1.00	0.95	1.00	
Frt		0.850					
Flt Protected							
Satd. Flow (prot)	0	2707	0	0	3438	0	
Flt Permitted							
Satd. Flow (perm)	0	2707	0	0	3438	0	
Right Turn on Red		Yes				Yes	
Satd. Flow (RTOR)		1148					
Link Speed (mph)	30			30	30		
Link Distance (ft)	222			406	241		
Travel Time (s)	5.0			9.2	5.5		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Heavy Vehicles (%)	2%	5%	2%	2%	5%	2%	
Adj. Flow (vph)	0	1228	0	0	617	0	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	1228	0	0	617	0	
Turn Type		Free			NA		
Protected Phases					2		4
Permitted Phases		Free					
Minimum Split (s)					16.0		16.0
Total Split (s)					57.0		63.0
Total Split (%)					47.5%		53%
Yellow Time (s)					3.5		3.5
All-Red Time (s)					2.5		2.5
Lost Time Adjust (s)					0.0		
Total Lost Time (s)					6.0		
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)		120.0			51.0		
Actuated g/C Ratio		1.00			0.42		
v/c Ratio		0.45			0.42		
Control Delay		5.3			25.3		
Queue Delay		0.0			0.1		
Total Delay		5.3			25.4		
LOS		A			C		
Approach Delay	5.3				25.4		
Approach LOS	A				C		
Queue Length 50th (ft)		239			173		
Queue Length 95th (ft)		123			223		
Internal Link Dist (ft)	142			326	161		
Turn Bay Length (ft)							
Base Capacity (vph)		2707			1461		
Starvation Cap Reductn		0			0		
Spillback Cap Reductn		72			91		
Storage Cap Reductn		0			0		

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø4
Reduced v/c Ratio		0.47			0.45		

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 96 (80%), Referenced to phase 2:SBT, Start of Green	
Natural Cycle: 55	
Control Type: Pretimed	
Maximum v/c Ratio: 0.75	
Intersection Signal Delay: 12.0	Intersection LOS: B
Intersection Capacity Utilization 20.7%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4037: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & WB I-94 Off-ramp

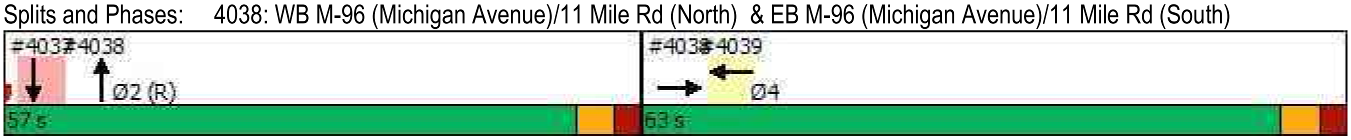


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1130	0	0	0	0	0	1249	0	0	0	0
Future Volume (vph)	0	1130	0	0	0	0	0	1249	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	1.00	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	3438	0	0	0	0	0	4940	0	0	0	0
Flt Permitted												
Satd. Flow (perm)	0	3438	0	0	0	0	0	4940	0	0	0	0
Right Turn on Red	Yes		Yes			Yes			Yes			Yes
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		190			222			207			131	
Travel Time (s)		4.3			5.0			4.7			3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	5%	2%	2%	2%	2%	2%	5%	2%	2%	2%	2%
Adj. Flow (vph)	0	1228	0	0	0	0	0	1358	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1228	0	0	0	0	0	1358	0	0	0	0
Turn Type		NA						NA				
Protected Phases		4						2				
Permitted Phases												
Minimum Split (s)		16.0						16.0				
Total Split (s)		63.0						57.0				
Total Split (%)		52.5%						47.5%				
Yellow Time (s)		3.5						3.5				
All-Red Time (s)		2.5						2.5				
Lost Time Adjust (s)		0.0						0.0				
Total Lost Time (s)		6.0						6.0				
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		57.0						51.0				
Actuated g/C Ratio		0.48						0.42				
v/c Ratio		0.75						0.65				
Control Delay		22.8						45.4				
Queue Delay		0.0						0.0				
Total Delay		22.8						45.4				
LOS		C						D				
Approach Delay		22.8						45.4				
Approach LOS		C						D				
Queue Length 50th (ft)		236						409				
Queue Length 95th (ft)		269						459				
Internal Link Dist (ft)		110			142			127			51	
Turn Bay Length (ft)												
Base Capacity (vph)		1633						2099				
Starvation Cap Reductn		0						0				
Spillback Cap Reductn		0						0				
Storage Cap Reductn		0						0				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio		0.75						0.65				

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 96 (80%), Referenced to phase 2:SBT, Start of Green	
Natural Cycle: 55	
Control Type: Pretimed	
Maximum v/c Ratio: 0.75	
Intersection Signal Delay: 34.7	Intersection LOS: C
Intersection Capacity Utilization 65.4%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 4038: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & EB M-96 (Michigan Avenue)/11 Mile Rd (South)

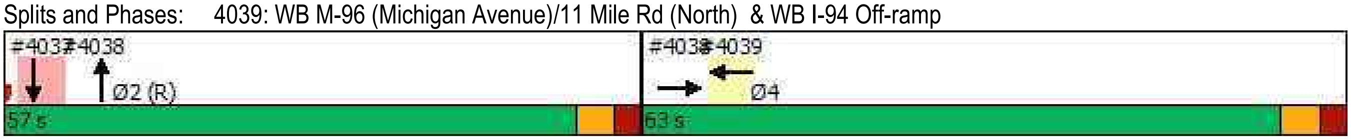


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø2
Lane Configurations							
Traffic Volume (vph)	0	0	0	151	1249	0	
Future Volume (vph)	0	0	0	151	1249	0	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.94	1.00	
Frt							
Flt Protected					0.950		
Satd. Flow (prot)	0	0	0	1810	4848	0	
Flt Permitted					0.950		
Satd. Flow (perm)	0	0	0	1810	4848	0	
Right Turn on Red		Yes			Yes	Yes	
Satd. Flow (RTOR)					2497		
Link Speed (mph)	30			30	30		
Link Distance (ft)	415			317	131		
Travel Time (s)	9.4			7.2	3.0		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Heavy Vehicles (%)	2%	2%	2%	5%	5%	2%	
Adj. Flow (vph)	0	0	0	164	1358	0	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	0	164	1358	0	
Turn Type				NA	Perm		
Protected Phases				4!			2
Permitted Phases					Free!		
Minimum Split (s)				16.0			16.0
Total Split (s)				63.0			57.0
Total Split (%)				52.5%			48%
Yellow Time (s)				3.5			3.5
All-Red Time (s)				2.5			2.5
Lost Time Adjust (s)				0.0			
Total Lost Time (s)				6.0			
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)				57.0	120.0		
Actuated g/C Ratio				0.48	1.00		
v/c Ratio				0.19	0.28		
Control Delay				18.9	0.4		
Queue Delay				0.0	0.0		
Total Delay				18.9	0.4		
LOS				B	A		
Approach Delay				18.9	0.4		
Approach LOS				B	A		
Queue Length 50th (ft)				71	2		
Queue Length 95th (ft)				116	0		
Internal Link Dist (ft)	335			237	51		
Turn Bay Length (ft)							
Base Capacity (vph)				859	4848		
Starvation Cap Reductn				0	0		
Spillback Cap Reductn				0	0		
Storage Cap Reductn				0	0		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø2
Reduced v/c Ratio				0.19	0.28		

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 96 (80%), Referenced to phase 2:SBT, Start of Green	
Natural Cycle: 55	
Control Type: Pretimed	
Maximum v/c Ratio: 0.75	
Intersection Signal Delay: 2.4	Intersection LOS: A
Intersection Capacity Utilization 90.1%	ICU Level of Service E
Analysis Period (min) 15	
! Phase conflict between lane groups.	

Splits and Phases: 4039: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & WB I-94 Off-ramp

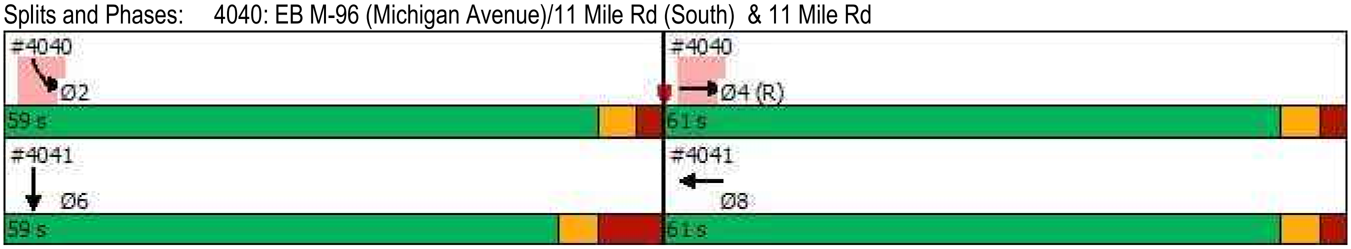


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø6	Ø8
Lane Configurations								
Traffic Volume (vph)	0	841	0	0	434	0		
Future Volume (vph)	0	841	0	0	434	0		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.97	1.00		
Frt								
Flt Protected					0.950			
Satd. Flow (prot)	0	3539	0	0	3335	0		
Flt Permitted					0.950			
Satd. Flow (perm)	0	3539	0	0	3335	0		
Right Turn on Red				Yes	Yes	Yes		
Satd. Flow (RTOR)					149			
Link Speed (mph)		55	55		45			
Link Distance (ft)		212	597		92			
Travel Time (s)		2.6	7.4		1.4			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Heavy Vehicles (%)	2%	2%	2%	2%	5%	2%		
Adj. Flow (vph)	0	914	0	0	472	0		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	0	914	0	0	472	0		
Turn Type		NA			Prot			
Protected Phases		4			2		6	8
Permitted Phases								
Minimum Split (s)		16.0			19.5		19.5	16.0
Total Split (s)		61.0			59.0		59.0	61.0
Total Split (%)		50.8%			49.2%		49%	51%
Yellow Time (s)		3.5			3.5		3.5	3.5
All-Red Time (s)		2.5			2.5		6.0	2.5
Lost Time Adjust (s)		0.0			0.0			
Total Lost Time (s)		6.0			6.0			
Lead/Lag								
Lead-Lag Optimize?								
Act Effct Green (s)		55.0			53.0			
Actuated g/C Ratio		0.46			0.44			
v/c Ratio		0.56			0.30			
Control Delay		25.4			0.5			
Queue Delay		0.0			0.0			
Total Delay		25.4			0.5			
LOS		C			A			
Approach Delay		25.4			0.5			
Approach LOS		C			A			
Queue Length 50th (ft)		265			0			
Queue Length 95th (ft)		329			0			
Internal Link Dist (ft)		132	517		12			
Turn Bay Length (ft)								
Base Capacity (vph)		1622			1556			
Starvation Cap Reductn		0			0			
Spillback Cap Reductn		0			0			
Storage Cap Reductn		0			0			

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø6	Ø8
Reduced v/c Ratio		0.56			0.30			

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 32 (27%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 45	
Control Type: Pretimed	
Maximum v/c Ratio: 0.60	
Intersection Signal Delay: 16.9	Intersection LOS: B
Intersection Capacity Utilization 51.4%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4040: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & 11 Mile Rd



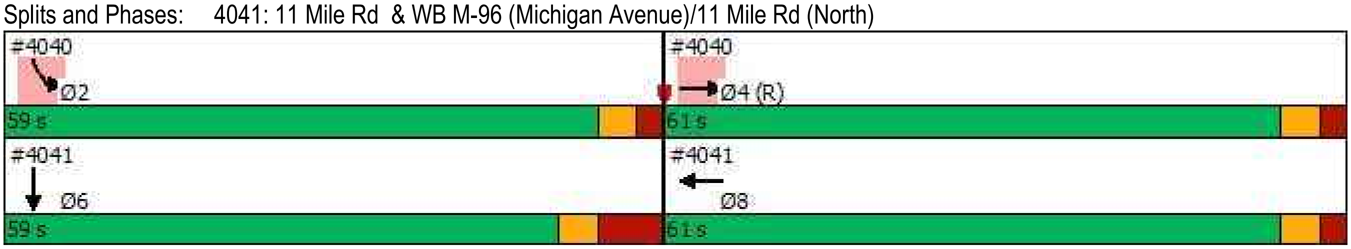
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	894	570	0	0	0	0	434	56
Future Volume (vph)	0	0	0	0	894	570	0	0	0	0	434	56
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		250	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Frt						0.850					0.983	
Flt Protected												
Satd. Flow (prot)	0	0	0	0	3539	1538	0	0	0	0	3391	0
Flt Permitted												
Satd. Flow (perm)	0	0	0	0	3539	1538	0	0	0	0	3391	0
Right Turn on Red			Yes	Yes		Yes			Yes			Yes
Satd. Flow (RTOR)						400					14	
Link Speed (mph)		55			55			45			55	
Link Distance (ft)		210			598			92			259	
Travel Time (s)		2.6			7.4			1.4			3.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	5%	2%	2%	2%	2%	5%	2%
Adj. Flow (vph)	0	0	0	0	972	620	0	0	0	0	472	61
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	972	620	0	0	0	0	533	0
Turn Type					NA	custom					NA	
Protected Phases					8	Free					6	
Permitted Phases												
Minimum Split (s)					16.0						19.5	
Total Split (s)					61.0						59.0	
Total Split (%)					50.8%						49.2%	
Yellow Time (s)					3.5						3.5	
All-Red Time (s)					2.5						6.0	
Lost Time Adjust (s)					0.0						0.0	
Total Lost Time (s)					6.0						9.5	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)					55.0	120.0					49.5	
Actuated g/C Ratio					0.46	1.00					0.41	
v/c Ratio					0.60	0.40					0.38	
Control Delay					33.9	4.7					35.3	
Queue Delay					0.0	0.0					0.0	
Total Delay					33.9	4.7					35.3	
LOS					C	A					D	
Approach Delay					22.5						35.3	
Approach LOS					C						D	
Queue Length 50th (ft)					411	426					187	
Queue Length 95th (ft)					480	530					247	
Internal Link Dist (ft)		130			518			12			179	
Turn Bay Length (ft)						250						
Base Capacity (vph)					1622	1538					1407	

Lane Group	Ø2	Ø4
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Ideal Flow (vphpl)		
Storage Length (ft)		
Storage Lanes		
Taper Length (ft)		
Lane Util. Factor		
Frt		
Flt Protected		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Peak Hour Factor		
Heavy Vehicles (%)		
Adj. Flow (vph)		
Shared Lane Traffic (%)		
Lane Group Flow (vph)		
Turn Type		
Protected Phases	2	4
Permitted Phases		
Minimum Split (s)	19.5	16.0
Total Split (s)	59.0	61.0
Total Split (%)	49%	51%
Yellow Time (s)	3.5	3.5
All-Red Time (s)	2.5	2.5
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag		
Lead-Lag Optimize?		
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)		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn					0	0					0	
Spillback Cap Reductn					0	0					0	
Storage Cap Reductn					0	0					0	
Reduced v/c Ratio					0.60	0.40					0.38	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 32 (27%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 45	
Control Type: Pretimed	
Maximum v/c Ratio: 0.60	
Intersection Signal Delay: 25.7	Intersection LOS: C
Intersection Capacity Utilization 51.4%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4041: 11 Mile Rd & WB M-96 (Michigan Avenue)/11 Mile Rd (North)



Lane Group	Ø2	Ø4
Starvation Cap Reductn		
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		

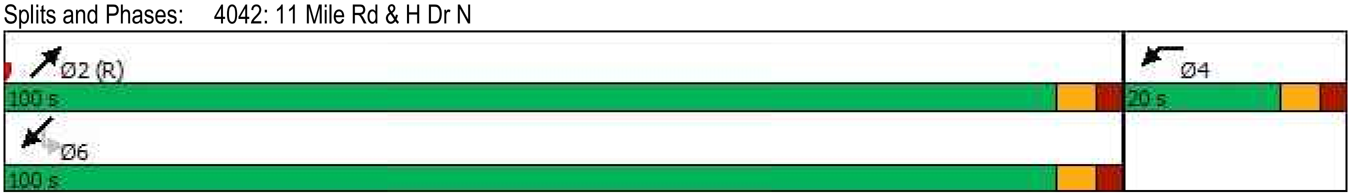
Intersection Summary

Lane Group	WBL	WBR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	0	0	570	0	0	490
Future Volume (vph)	0	0	570	0	0	490
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	1810	0	1863	0	0	1863
Flt Permitted						
Satd. Flow (perm)	1810	0	1863	0	0	1863
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)						
Link Speed (mph)	25		55			55
Link Distance (ft)	1262		1787			680
Travel Time (s)	34.4		22.2			8.4
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	2%	2%	5%	2%	2%
Adj. Flow (vph)	0	0	620	0	0	533
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	620	0	0	533
Turn Type	Prot		NA			NA
Protected Phases	4		2			6
Permitted Phases					6	
Minimum Split (s)	13.0		16.0		13.0	13.0
Total Split (s)	20.0		100.0		100.0	100.0
Total Split (%)	16.7%		83.3%		83.3%	83.3%
Yellow Time (s)	3.5		3.5		3.5	3.5
All-Red Time (s)	2.5		2.5		2.5	2.5
Lost Time Adjust (s)	0.0		0.0			0.0
Total Lost Time (s)	6.0		6.0			6.0
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)			94.0			94.0
Actuated g/C Ratio			0.78			0.78
v/c Ratio			0.42			0.37
Control Delay			1.3			4.7
Queue Delay			0.0			0.0
Total Delay			1.3			4.7
LOS			A			A
Approach Delay			1.3			4.7
Approach LOS			A			A
Queue Length 50th (ft)			13			104
Queue Length 95th (ft)			17			145
Internal Link Dist (ft)	1182		1707			600
Turn Bay Length (ft)						
Base Capacity (vph)			1459			1459
Starvation Cap Reductn			0			0
Spillback Cap Reductn			0			0
Storage Cap Reductn			0			0

Lane Group	WBL	WBR	NET	NER	SWL	SWT
Reduced v/c Ratio			0.42			0.37

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NET, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.42	
Intersection Signal Delay: 2.9	Intersection LOS: A
Intersection Capacity Utilization 35.0%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4042: 11 Mile Rd & H Dr N

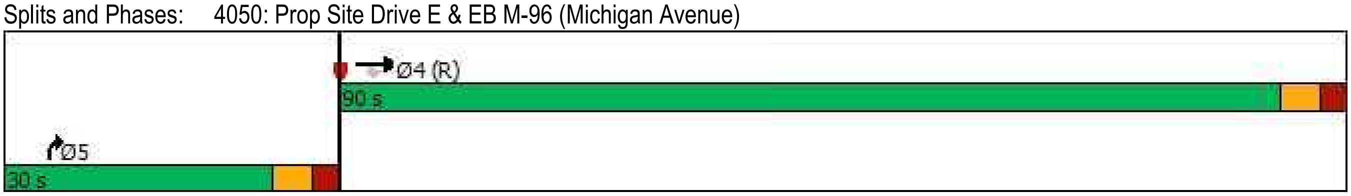


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1857	626	0	0	0	627
Future Volume (vph)	1857	626	0	0	0	627
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		500	600		0	0
Storage Lanes		2	0		0	2
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	0.88	1.00	1.00	1.00	0.88
Frt		0.850				0.850
Flt Protected						
Satd. Flow (prot)	3539	2787	0	0	0	2787
Flt Permitted						
Satd. Flow (perm)	3539	2787	0	0	0	2787
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		680				38
Link Speed (mph)	55			55	25	
Link Distance (ft)	669			659	1093	
Travel Time (s)	8.3			8.2	29.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2018	680	0	0	0	682
Shared Lane Traffic (%)						
Lane Group Flow (vph)	2018	680	0	0	0	682
Turn Type	NA	Perm				Prot
Protected Phases	4					5
Permitted Phases		4				
Detector Phase	4	4				5
Switch Phase						
Minimum Initial (s)	10.0	10.0				10.0
Minimum Split (s)	16.0	16.0				16.0
Total Split (s)	90.0	90.0				30.0
Total Split (%)	75.0%	75.0%				25.0%
Yellow Time (s)	3.5	3.5				3.5
All-Red Time (s)	2.5	2.5				2.5
Lost Time Adjust (s)	0.0	0.0				0.0
Total Lost Time (s)	6.0	6.0				6.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max	C-Max				None
Act Effct Green (s)	84.0	84.0				24.0
Actuated g/C Ratio	0.70	0.70				0.20
v/c Ratio	0.81	0.32				1.16
Control Delay	15.8	11.1				131.0
Queue Delay	32.4	0.0				0.0
Total Delay	48.2	11.1				131.0
LOS	D	B				F
Approach Delay	38.8				131.0	
Approach LOS	D				F	
Queue Length 50th (ft)	696	121				~342
Queue Length 95th (ft)	758	m139				#475

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Internal Link Dist (ft)	589			579	1013	
Turn Bay Length (ft)		500				
Base Capacity (vph)	2477	2154				587
Starvation Cap Reductn	582	0				0
Spillback Cap Reductn	0	0				0
Storage Cap Reductn	0	0				0
Reduced v/c Ratio	1.06	0.32				1.16

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 52 (43%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.16	
Intersection Signal Delay: 57.4	Intersection LOS: E
Intersection Capacity Utilization 83.3%	ICU Level of Service E
Analysis Period (min) 15	
~ Volume exceeds capacity, queue is theoretically infinite. Queue shown is maximum after two cycles.	
# 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 4050: Prop Site Drive E & EB M-96 (Michigan Avenue)



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↱↱				↱↱
Traffic Volume (vph)	880	1128	0	0	0	1127
Future Volume (vph)	880	1128	0	0	0	1127
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		500	600		0	0
Storage Lanes		2	0		0	2
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	0.88	1.00	1.00	1.00	0.88
Frt		0.850				0.850
Flt Protected						
Satd. Flow (prot)	3539	2787	0	0	0	2787
Flt Permitted						
Satd. Flow (perm)	3539	2787	0	0	0	2787
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		1226				164
Link Speed (mph)	55			55	25	
Link Distance (ft)	608			627	1293	
Travel Time (s)	7.5			7.8	35.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	957	1226	0	0	0	1225
Shared Lane Traffic (%)						
Lane Group Flow (vph)	957	1226	0	0	0	1225
Turn Type	NA	Perm				Prot
Protected Phases	4					5
Permitted Phases		4				
Detector Phase	4	4				5
Switch Phase						
Minimum Initial (s)	10.0	10.0				10.0
Minimum Split (s)	16.0	16.0				16.0
Total Split (s)	68.0	68.0				52.0
Total Split (%)	56.7%	56.7%				43.3%
Yellow Time (s)	3.5	3.5				3.5
All-Red Time (s)	2.5	2.5				2.5
Lost Time Adjust (s)	0.0	0.0				0.0
Total Lost Time (s)	6.0	6.0				6.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max	C-Max				None
Act Effct Green (s)	62.0	62.0				46.0
Actuated g/C Ratio	0.52	0.52				0.38
v/c Ratio	0.52	0.60				1.05
Control Delay	24.0	14.4				71.6
Queue Delay	0.0	0.2				0.0
Total Delay	24.0	14.5				71.6
LOS	C	B				E
Approach Delay	18.7				71.6	
Approach LOS	B				E	
Queue Length 50th (ft)	334	267				~539
Queue Length 95th (ft)	379	m338				#689

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Internal Link Dist (ft)	528			547	1213	
Turn Bay Length (ft)		500				
Base Capacity (vph)	1828	2032				1169
Starvation Cap Reductn	0	186				0
Spillback Cap Reductn	0	0				0
Storage Cap Reductn	0	0				0
Reduced v/c Ratio	0.52	0.66				1.05

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 32 (27%), Referenced to phase 4:EBT, Start of Green

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.05

Intersection Signal Delay: 37.7 Intersection LOS: D

Intersection Capacity Utilization 73.8% ICU Level of Service D

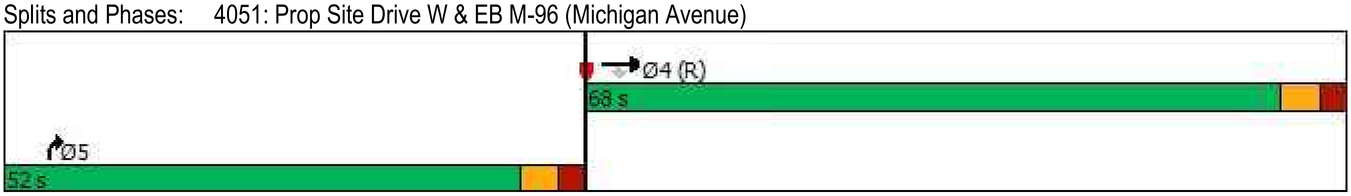
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4051: Prop Site Drive W & EB M-96 (Michigan Avenue)

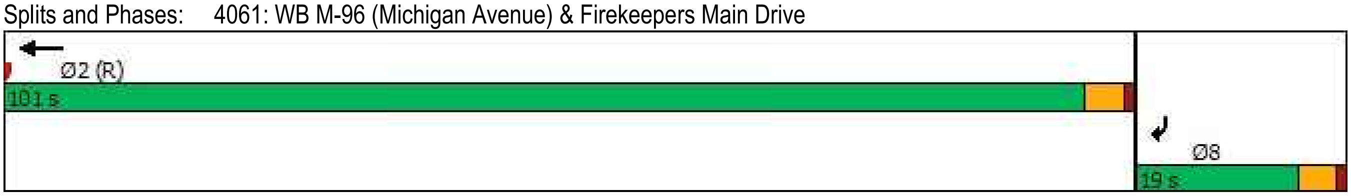


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	1255	168	0	134
Future Volume (vph)	0	0	1255	168	0	134
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			0	0	0
Storage Lanes	0			0	0	2
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	0.88
Frt			0.983			0.850
Flt Protected						
Satd. Flow (prot)	0	0	3487	0	0	2787
Flt Permitted						
Satd. Flow (perm)	0	0	3487	0	0	2787
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			43			204
Link Speed (mph)		55	55		25	
Link Distance (ft)		574	509		701	
Travel Time (s)		7.1	6.3		19.1	
Peak Hour Factor	0.92	0.92	0.92	0.95	0.67	0.92
Heavy Vehicles (%)	2%	2%	2%	0%	0%	2%
Adj. Flow (vph)	0	0	1364	177	0	146
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1541	0	0	146
Turn Type			NA			Prot
Protected Phases			2			8
Permitted Phases						
Detector Phase			2			8
Switch Phase						
Minimum Initial (s)			10.0			10.0
Minimum Split (s)			22.5			14.5
Total Split (s)			101.0			19.0
Total Split (%)			84.2%			15.8%
Yellow Time (s)			3.5			3.5
All-Red Time (s)			1.0			1.0
Lost Time Adjust (s)			0.0			0.0
Total Lost Time (s)			4.5			4.5
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode			C-Max			None
Act Effct Green (s)			101.0			10.0
Actuated g/C Ratio			0.84			0.08
v/c Ratio			0.52			0.35
Control Delay			3.3			4.2
Queue Delay			0.0			0.0
Total Delay			3.3			4.2
LOS			A			A
Approach Delay			3.3		4.2	
Approach LOS			A		A	
Queue Length 50th (ft)			126			0

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Queue Length 95th (ft)			153			10
Internal Link Dist (ft)		494	429		621	
Turn Bay Length (ft)						
Base Capacity (vph)			2941			516
Starvation Cap Reductn			0			0
Spillback Cap Reductn			0			0
Storage Cap Reductn			0			0
Reduced v/c Ratio			0.52			0.28

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:WBT, Start of Green	
Natural Cycle: 45	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.52	
Intersection Signal Delay: 3.4	Intersection LOS: A
Intersection Capacity Utilization 55.9%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 4061: WB M-96 (Michigan Avenue) & Firekeepers Main Drive

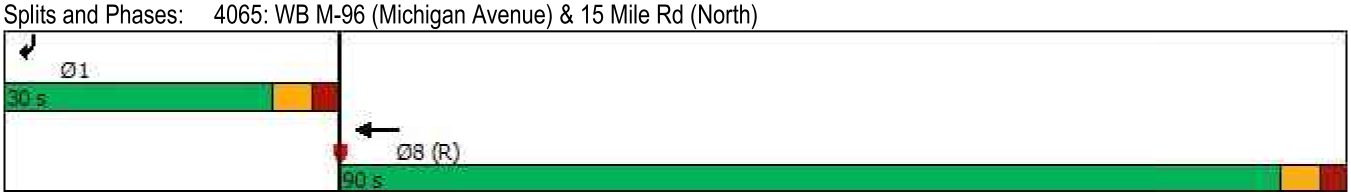


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations			↑↑↑	↱		↱↱
Traffic Volume (vph)	0	0	4749	845	0	810
Future Volume (vph)	0	0	4749	845	0	810
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			250	0	200
Storage Lanes	0			0	0	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.91	1.00	1.00	0.88
Frt				0.850		0.850
Flt Protected						
Satd. Flow (prot)	0	0	5085	1583	0	2787
Flt Permitted						
Satd. Flow (perm)	0	0	5085	1583	0	2787
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				160		
Link Speed (mph)		45	45		45	
Link Distance (ft)		534	660		516	
Travel Time (s)		8.1	10.0		7.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	5162	918	0	880
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	5162	918	0	880
Turn Type			NA	custom		Prot
Protected Phases			8	Free		1
Permitted Phases						
Minimum Split (s)			16.0			13.0
Total Split (s)			90.0			30.0
Total Split (%)			75.0%			25.0%
Yellow Time (s)			3.5			3.5
All-Red Time (s)			2.5			2.5
Lost Time Adjust (s)			0.0			0.0
Total Lost Time (s)			6.0			6.0
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)			84.0	120.0		24.0
Actuated g/C Ratio			0.70	1.00		0.20
v/c Ratio			1.45	0.58		1.58
Control Delay			218.1	21.2		302.6
Queue Delay			0.0	0.0		0.0
Total Delay			218.1	21.2		302.6
LOS			F	C		F
Approach Delay			188.4		302.6	
Approach LOS			F		F	
Queue Length 50th (ft)			~2010	473		~550
Queue Length 95th (ft)			m129	m135		#689
Internal Link Dist (ft)		454	580		436	
Turn Bay Length (ft)				250		200
Base Capacity (vph)			3559	1583		557
Starvation Cap Reductn			89	0		0

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Spillback Cap Reductn			0	0		0
Storage Cap Reductn			0	0		0
Reduced v/c Ratio			1.49	0.58		1.58

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 8:WBT, Start of Green	
Natural Cycle: 150	
Control Type: Pretimed	
Maximum v/c Ratio: 1.58	
Intersection Signal Delay: 202.8	Intersection LOS: F
Intersection Capacity Utilization 130.1%	ICU Level of Service H
Analysis Period (min) 15	
~ Volume exceeds capacity, queue is theoretically infinite.	
Queue shown is maximum after two cycles.	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	
m Volume for 95th percentile queue is metered by upstream signal.	

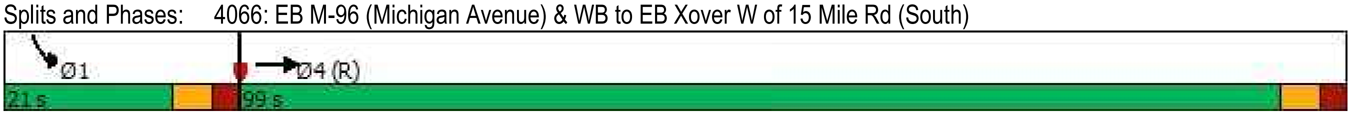
Splits and Phases: 4065: WB M-96 (Michigan Avenue) & 15 Mile Rd (North)



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	4629	0	0	119	0
Future Volume (vph)	0	4629	0	0	119	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.91	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	5085	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	5085	0	0	1770	0
Right Turn on Red				Yes	Yes	Yes
Satd. Flow (RTOR)						
Link Speed (mph)		45	45		25	
Link Distance (ft)		262	1016		123	
Travel Time (s)		4.0	15.4		3.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.90	0.92
Adj. Flow (vph)	0	5032	0	0	132	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	5032	0	0	132	0
Turn Type		NA			Prot	
Protected Phases		4			1	
Permitted Phases						
Minimum Split (s)		16.0			16.0	
Total Split (s)		99.0			21.0	
Total Split (%)		82.5%			17.5%	
Yellow Time (s)		3.5			3.5	
All-Red Time (s)		2.5			2.5	
Lost Time Adjust (s)		0.0			0.0	
Total Lost Time (s)		6.0			6.0	
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)		93.0			15.0	
Actuated g/C Ratio		0.78			0.12	
v/c Ratio		1.28			0.60	
Control Delay		142.2			40.7	
Queue Delay		0.5			0.0	
Total Delay		142.8			40.7	
LOS		F			D	
Approach Delay		142.8			40.7	
Approach LOS		F			D	
Queue Length 50th (ft)		~1839			95	
Queue Length 95th (ft)		m#1429			m77	
Internal Link Dist (ft)		182	936		43	
Turn Bay Length (ft)						
Base Capacity (vph)		3940			221	
Starvation Cap Reductn		0			0	
Spillback Cap Reductn		1060			0	
Storage Cap Reductn		0			0	
Reduced v/c Ratio		1.75			0.60	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 116 (97%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 150	
Control Type: Pretimed	
Maximum v/c Ratio: 1.28	
Intersection Signal Delay: 140.1	Intersection LOS: F
Intersection Capacity Utilization 187.3%	ICU Level of Service H
Analysis Period (min) 15	
~ Volume exceeds capacity, queue is theoretically infinite.	
Queue shown is maximum after two cycles.	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 4066: EB M-96 (Michigan Avenue) & WB to EB Xover W of 15 Mile Rd (South)



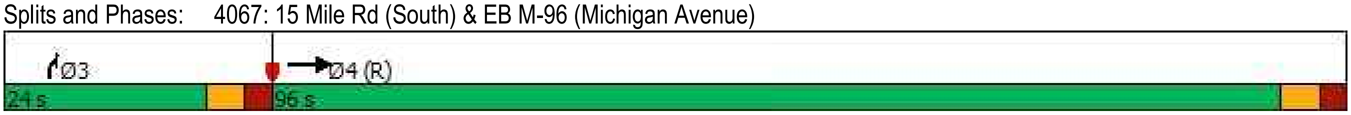
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	4395	354	0	0	0	355
Future Volume (vph)	4395	354	0	0	0	355
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		50	0		0	250
Storage Lanes		0	0		0	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	1.00	1.00	1.00	0.88
Frt	0.989					0.850
Flt Protected						
Satd. Flow (prot)	5029	0	0	0	0	2814
Flt Permitted						
Satd. Flow (perm)	5029	0	0	0	0	2814
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	31					
Link Speed (mph)	45			45	45	
Link Distance (ft)	1016			704	1375	
Travel Time (s)	15.4			10.7	20.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.88	0.88
Heavy Vehicles (%)	2%	2%	2%	2%	1%	1%
Adj. Flow (vph)	4777	385	0	0	0	403
Shared Lane Traffic (%)						
Lane Group Flow (vph)	5162	0	0	0	0	403
Turn Type	NA					Prot
Protected Phases	4					3
Permitted Phases						
Minimum Split (s)	17.0					16.0
Total Split (s)	96.0					24.0
Total Split (%)	80.0%					20.0%
Yellow Time (s)	3.5					3.5
All-Red Time (s)	2.5					2.5
Lost Time Adjust (s)	0.0					0.0
Total Lost Time (s)	6.0					6.0
Lead/Lag	Lag					Lead
Lead-Lag Optimize?	Yes					Yes
Act Effct Green (s)	90.0					18.0
Actuated g/C Ratio	0.75					0.15
v/c Ratio	1.37					0.95
Control Delay	179.7					84.8
Queue Delay	0.0					0.0
Total Delay	179.7					84.8
LOS	F					F
Approach Delay	179.7				84.8	
Approach LOS	F				F	
Queue Length 50th (ft)	~1932					178
Queue Length 95th (ft)	m#239					#277
Internal Link Dist (ft)	936			624	1295	
Turn Bay Length (ft)						250
Base Capacity (vph)	3779					422

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Starvation Cap Reductn	1					0
Spillback Cap Reductn	0					0
Storage Cap Reductn	0					0
Reduced v/c Ratio	1.37					0.95

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 4 (3%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 150	
Control Type: Pretimed	
Maximum v/c Ratio: 1.37	
Intersection Signal Delay: 172.8	Intersection LOS: F
Intersection Capacity Utilization 115.2%	ICU Level of Service H
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

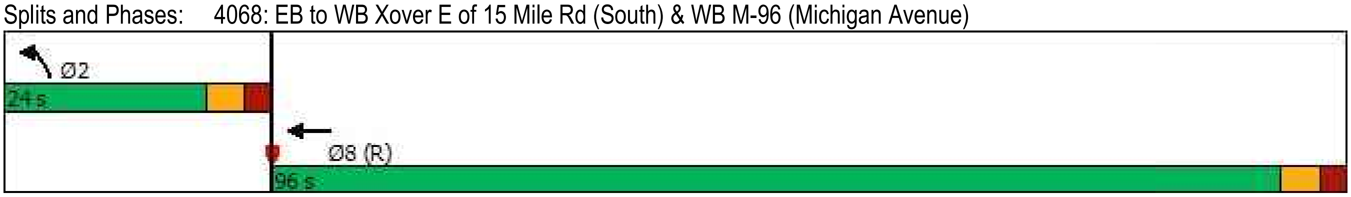
Splits and Phases: 4067: 15 Mile Rd (South) & EB M-96 (Michigan Avenue)



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑↑	↰	
Traffic Volume (vph)	0	0	0	4507	244	0
Future Volume (vph)	0	0	0	4507	244	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	5085	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	5085	1770	0
Right Turn on Red		Yes			Yes	Yes
Satd. Flow (RTOR)						
Link Speed (mph)	45			45	25	
Link Distance (ft)	687			275	111	
Travel Time (s)	10.4			4.2	3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	4899	265	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	4899	265	0
Turn Type				NA	Prot	
Protected Phases				8	2	
Permitted Phases						
Minimum Split (s)				16.0	13.0	
Total Split (s)				96.0	24.0	
Total Split (%)				80.0%	20.0%	
Yellow Time (s)				3.5	3.5	
All-Red Time (s)				2.5	2.5	
Lost Time Adjust (s)				0.0	0.0	
Total Lost Time (s)				6.0	6.0	
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)				90.0	18.0	
Actuated g/C Ratio				0.75	0.15	
v/c Ratio				1.28	1.00	
Control Delay				145.4	59.5	
Queue Delay				0.2	0.0	
Total Delay				145.6	59.5	
LOS				F	E	
Approach Delay				145.6	59.5	
Approach LOS				F	E	
Queue Length 50th (ft)				~1769	204	
Queue Length 95th (ft)				m380	m147	
Internal Link Dist (ft)	607			195	31	
Turn Bay Length (ft)						
Base Capacity (vph)				3813	265	
Starvation Cap Reductn				363	0	
Spillback Cap Reductn				0	0	
Storage Cap Reductn				0	0	
Reduced v/c Ratio				1.42	1.00	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 112 (93%), Referenced to phase 8:WBT, Start of Green	
Natural Cycle: 150	
Control Type: Pretimed	
Maximum v/c Ratio: 1.28	
Intersection Signal Delay: 141.2	Intersection LOS: F
Intersection Capacity Utilization 135.1%	ICU Level of Service H
Analysis Period (min) 15	
~ Volume exceeds capacity, queue is theoretically infinite.	
Queue shown is maximum after two cycles.	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 4068: EB to WB Xover E of 15 Mile Rd (South) & WB M-96 (Michigan Avenue)

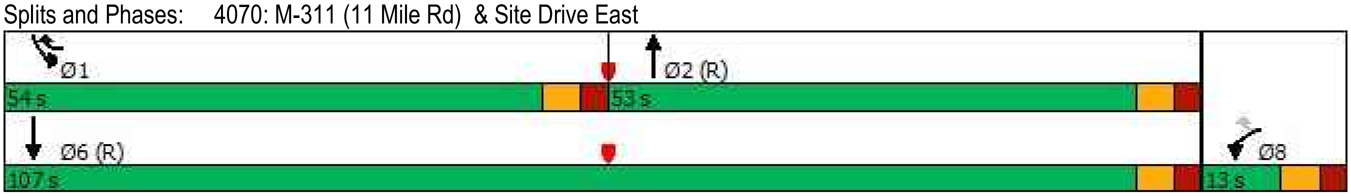


Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	15	364	692	15	364	719
Future Volume (vph)	15	364	692	15	364	719
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	500		0	400	
Storage Lanes	1	1		0	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.88	0.95	0.95	1.00	0.95
Frt		0.850	0.997			
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	2787	3529	0	1770	3539
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1770	2787	3529	0	1770	3539
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		150	2			
Link Speed (mph)	25		55			55
Link Distance (ft)	750		940			974
Travel Time (s)	20.5		11.7			12.1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	16	396	752	16	396	782
Shared Lane Traffic (%)						
Lane Group Flow (vph)	16	396	768	0	396	782
Turn Type	Prot	pm+ov	NA		Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8				
Detector Phase	8	1	2		1	6
Switch Phase						
Minimum Initial (s)	7.0	7.0	10.0		7.0	10.0
Minimum Split (s)	13.0	13.0	16.0		13.0	16.0
Total Split (s)	13.0	54.0	53.0		54.0	107.0
Total Split (%)	10.8%	45.0%	44.2%		45.0%	89.2%
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5
All-Red Time (s)	2.5	2.5	2.5		2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0		6.0	6.0
Lead/Lag		Lead	Lag		Lead	
Lead-Lag Optimize?						
Recall Mode	None	None	C-Max		None	C-Max
Act Effct Green (s)	7.0	38.5	69.5		33.3	112.4
Actuated g/C Ratio	0.06	0.32	0.58		0.28	0.94
v/c Ratio	0.16	0.40	0.38		0.81	0.24
Control Delay	57.3	18.5	9.8		45.5	2.1
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	57.3	18.5	9.8		45.5	2.1
LOS	E	B	A		D	A
Approach Delay	20.0		9.8			16.7
Approach LOS	B		A			B
Queue Length 50th (ft)	12	86	19		297	0
Queue Length 95th (ft)	36	98	352		429	130

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Internal Link Dist (ft)	670		860			894
Turn Bay Length (ft)		500			400	
Base Capacity (vph)	103	1318	2043		708	3315
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	0.16	0.30	0.38		0.56	0.24

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 8 (7%), Referenced to phase 2:NBT and 6:SBT, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.81	
Intersection Signal Delay: 15.0	Intersection LOS: B
Intersection Capacity Utilization 60.6%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 4070: M-311 (11 Mile Rd) & Site Drive East



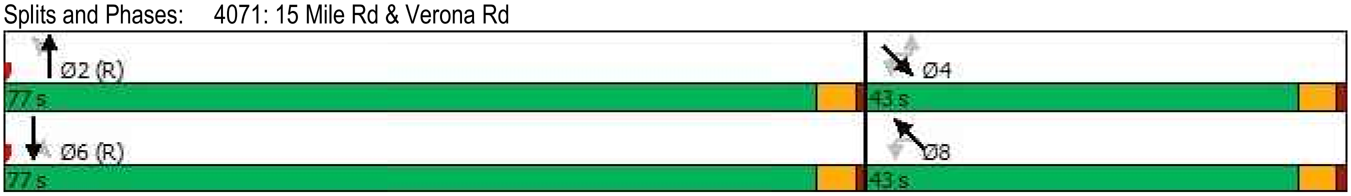
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	803	13	13	5	9	4	0	87	783	6	118	14
Future Volume (vph)	803	13	13	5	9	4	0	87	783	6	118	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		70	0		0
Storage Lanes	0		0	0		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
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
Frt		0.998			0.968				0.850		0.986	
Flt Protected		0.954			0.987						0.998	
Satd. Flow (prot)	0	1791	0	0	1715	0	0	1845	1392	0	1851	0
Flt Permitted		0.711			0.838						0.991	
Satd. Flow (perm)	0	1335	0	0	1456	0	0	1845	1392	0	1838	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1			7				880		5	
Link Speed (mph)		45			55			55			55	
Link Distance (ft)		682			426			745			951	
Travel Time (s)		10.3			5.3			9.2			11.8	
Peak Hour Factor	0.80	0.80	0.80	0.60	0.60	0.60	0.89	0.89	0.89	0.86	0.86	0.86
Heavy Vehicles (%)	1%	1%	1%	0%	0%	25%	0%	3%	16%	1%	1%	1%
Adj. Flow (vph)	1004	16	16	8	15	7	0	98	880	7	137	16
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1036	0	0	30	0	0	98	880	0	160	0
Turn Type	Perm	NA		Perm	NA			NA	Perm	Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4		4	8		
Minimum Split (s)	22.5	22.5		22.5	22.5		22.5	22.5	22.5	22.5	22.5	
Total Split (s)	77.0	77.0		77.0	77.0		43.0	43.0	43.0	43.0	43.0	
Total Split (%)	64.2%	64.2%		64.2%	64.2%		35.8%	35.8%	35.8%	35.8%	35.8%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0	0.0		0.0	
Total Lost Time (s)		4.5			4.5			4.5	4.5		4.5	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		72.5			72.5			38.5	38.5		38.5	
Actuated g/C Ratio		0.60			0.60			0.32	0.32		0.32	
v/c Ratio		1.29			0.03			0.17	0.84		0.27	
Control Delay		162.5			8.1			30.2	11.0		30.8	
Queue Delay		0.0			0.0			0.0	0.0		0.0	
Total Delay		162.5			8.1			30.2	11.0		30.8	
LOS		F			A			C	B		C	
Approach Delay		162.5			8.1			13.0			30.8	
Approach LOS		F			A			B			C	
Queue Length 50th (ft)		~1025			7			54	0		89	
Queue Length 95th (ft)		#1066			12			96	140		139	
Internal Link Dist (ft)		602			346			665			871	
Turn Bay Length (ft)									70			
Base Capacity (vph)		806			882			591	1044		593	

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
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		1.29			0.03			0.17	0.84		0.27	

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 110	
Control Type: Pretimed	
Maximum v/c Ratio: 1.29	
Intersection Signal Delay: 84.5	Intersection LOS: F
Intersection Capacity Utilization 76.4%	ICU Level of Service D
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 4071: 15 Mile Rd & Verona Rd



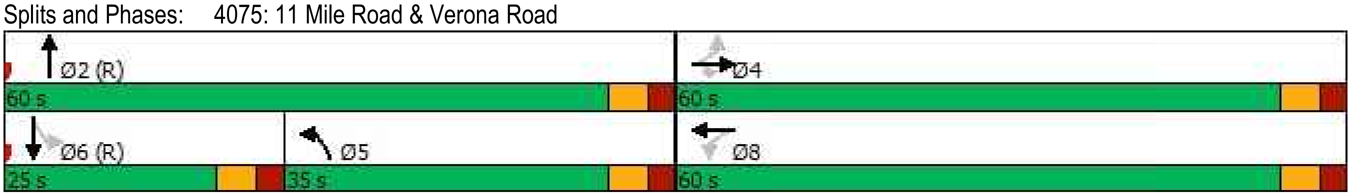
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	868	322	17	887	19	320	68	13	10	82	8
Future Volume (vph)	11	868	322	17	887	19	320	68	13	10	82	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	190		70	190		0	140		0	215		0
Storage Lanes	1		1	1		0	2		0	1		0
Taper Length (ft)	115			140			200			165		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.997			0.976			0.987	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	1900	1468	1805	1892	0	3072	1854	0	1687	1753	0
Flt Permitted	0.074			0.074			0.950			0.697		
Satd. Flow (perm)	141	1900	1468	141	1892	0	3072	1854	0	1238	1753	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			82		1			10			3	
Link Speed (mph)		55			55			45			55	
Link Distance (ft)		519			1585			1015			821	
Travel Time (s)		6.4			19.6			15.4			10.2	
Peak Hour Factor	0.79	0.79	0.79	0.87	0.87	0.87	0.87	0.87	0.87	0.66	0.66	0.66
Heavy Vehicles (%)	0%	0%	10%	0%	0%	5%	14%	0%	0%	7%	7%	7%
Adj. Flow (vph)	14	1099	408	20	1020	22	368	78	15	15	124	12
Shared Lane Traffic (%)												
Lane Group Flow (vph)	14	1099	408	20	1042	0	368	93	0	15	136	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Perm	NA	
Protected Phases		4			8		5	2			6	
Permitted Phases	4		4	8						6		
Minimum Split (s)	25.0	25.0	25.0	25.0	25.0		16.0	25.0		25.0	25.0	
Total Split (s)	60.0	60.0	60.0	60.0	60.0		35.0	60.0		25.0	25.0	
Total Split (%)	50.0%	50.0%	50.0%	50.0%	50.0%		29.2%	50.0%		20.8%	20.8%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	2.5	2.5	2.5	2.5	2.5		2.5	2.5		2.5	2.5	
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)	6.0	6.0	6.0	6.0	6.0		6.0	6.0		6.0	6.0	
Lead/Lag							Lag			Lead	Lead	
Lead-Lag Optimize?							Yes			Yes	Yes	
Act Effct Green (s)	54.0	54.0	54.0	54.0	54.0		29.0	54.0		19.0	19.0	
Actuated g/C Ratio	0.45	0.45	0.45	0.45	0.45		0.24	0.45		0.16	0.16	
v/c Ratio	0.22	1.29	0.58	0.32	1.22		0.50	0.11		0.08	0.49	
Control Delay	31.2	167.6	23.1	37.9	142.4		41.9	17.5		44.3	51.6	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	31.2	167.6	23.1	37.9	142.4		41.9	17.5		44.3	51.6	
LOS	C	F	C	D	F		D	B		D	D	
Approach Delay		127.6			140.4			37.0			50.9	
Approach LOS		F			F			D			D	
Queue Length 50th (ft)	6	~1082	183	10	~998		127	36		10	95	
Queue Length 95th (ft)	22	#1090	229	34	#1191		169	67		22	113	
Internal Link Dist (ft)		439			1505			935			741	
Turn Bay Length (ft)	190		70	190			140			215		
Base Capacity (vph)	63	855	705	63	851		742	839		196	280	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0	0	0	0		0	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	0.22	1.29	0.58	0.32	1.22		0.50	0.11		0.08	0.49	

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green
Natural Cycle: 110
Control Type: Pretimed
Maximum v/c Ratio: 1.29
Intersection Signal Delay: 115.2 Intersection LOS: F
Intersection Capacity Utilization 73.6% ICU Level of Service D
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 4075: 11 Mile Road & Verona Road



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	1192	143	0	231
Future Volume (vph)	0	0	1192	143	0	231
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200			300	245	245
Storage Lanes	0			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.984			0.865
Flt Protected						
Satd. Flow (prot)	0	0	3343	0	0	1644
Flt Permitted						
Satd. Flow (perm)	0	0	3343	0	0	1644
Link Speed (mph)		55	55		25	
Link Distance (ft)		509	395		760	
Travel Time (s)		6.3	4.9		20.7	
Peak Hour Factor	0.88	0.88	0.91	0.91	0.79	0.79
Heavy Vehicles (%)	1%	1%	7%	0%	0%	0%
Adj. Flow (vph)	0	0	1310	157	0	292
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1467	0	0	292
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 58.5%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	1178	43	0	157
Future Volume (vph)	0	0	1178	43	0	157
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	175			50	0	0
Storage Lanes	0			0	0	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.995			0.865
Flt Protected						
Satd. Flow (prot)	0	0	3365	0	0	1565
Flt Permitted						
Satd. Flow (perm)	0	0	3365	0	0	1565
Link Speed (mph)		55	55		25	
Link Distance (ft)		395	586		185	
Travel Time (s)		4.9	7.3		5.0	
Peak Hour Factor	0.90	0.90	0.95	0.95	0.70	0.70
Heavy Vehicles (%)	1%	1%	7%	0%	5%	5%
Adj. Flow (vph)	0	0	1240	45	0	224
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1285	0	0	224
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 50.3% ICU Level of Service A
Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	1214	12	0	7
Future Volume (vph)	0	0	1214	12	0	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150			600	0	0
Storage Lanes	0			0	0	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.999			0.865
Flt Protected						
Satd. Flow (prot)	0	0	3373	0	0	1644
Flt Permitted						
Satd. Flow (perm)	0	0	3373	0	0	1644
Link Speed (mph)		55	55		25	
Link Distance (ft)		586	607		1086	
Travel Time (s)		7.3	7.5		29.6	
Peak Hour Factor	0.83	0.83	0.92	0.92	0.60	0.60
Heavy Vehicles (%)	10%	1%	7%	0%	33%	0%
Adj. Flow (vph)	0	0	1320	13	0	12
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1333	0	0	12
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 43.9% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	948	8	0	7
Future Volume (vph)	0	0	948	8	0	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.999			0.865
Flt Protected						
Satd. Flow (prot)	0	0	3536	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	0	3536	0	0	1611
Link Speed (mph)		55	55		55	
Link Distance (ft)		538	1254		1399	
Travel Time (s)		6.7	15.5		17.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	1030	9	0	8
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1039	0	0	8
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 36.5%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	0	5	0	845	0	0	810	0
Future Volume (vph)	0	0	0	0	0	5	0	845	0	0	810	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
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
Frt					0.865							
Flt Protected												
Satd. Flow (prot)	0	1863	0	0	1611	0	0	1863	0	0	1863	0
Flt Permitted												
Satd. Flow (perm)	0	1863	0	0	1611	0	0	1863	0	0	1863	0
Link Speed (mph)		45			45			25			45	
Link Distance (ft)		957			1038			516			593	
Travel Time (s)		14.5			15.7			14.1			9.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	0	5	0	918	0	0	880	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	5	0	0	918	0	0	880	0
Sign Control		Stop			Stop			Free			Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 54.5% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBT	EBR	WBL	WBT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	0	0	119	1613	0	0
Future Volume (vph)	0	0	119	1613	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.91	0.91	1.00	1.00
Frt						
Flt Protected				0.997		
Satd. Flow (prot)	0	0	0	5070	0	0
Flt Permitted				0.997		
Satd. Flow (perm)	0	0	0	5070	0	0
Link Speed (mph)	45			45	25	
Link Distance (ft)	183			382	263	
Travel Time (s)	2.8			5.8	7.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	129	1753	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1882	0	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 59.1%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	2897	976	0	0	0	0
Future Volume (vph)	2897	976	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950	0.971				
Satd. Flow (prot)	1610	3292	0	0	0	0
Flt Permitted	0.950	0.971				
Satd. Flow (perm)	1610	3292	0	0	0	0
Link Speed (mph)		45	45		25	
Link Distance (ft)		619	209		329	
Travel Time (s)		9.4	3.2		9.0	
Peak Hour Factor	0.86	0.86	0.92	0.92	0.92	0.92
Adj. Flow (vph)	3369	1135	0	0	0	0
Shared Lane Traffic (%)	50%					
Lane Group Flow (vph)	1684	2820	0	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary		
Area Type:	Other	
Control Type: Unsignalized		
Intersection Capacity Utilization 92.5%		ICU Level of Service F
Analysis Period (min) 15		

Lane Group	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations			↑↑	↱		
Traffic Volume (vph)	0	0	998	168	0	0
Future Volume (vph)	0	0	998	168	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	1.00
Frt				0.850		
Flt Protected						
Satd. Flow (prot)	0	0	3539	1583	0	0
Flt Permitted						
Satd. Flow (perm)	0	0	3539	1583	0	0
Link Speed (mph)		45	45		30	
Link Distance (ft)		213	315		137	
Travel Time (s)		3.2	4.8		3.1	
Peak Hour Factor	0.92	0.92	0.91	0.91	0.92	0.92
Adj. Flow (vph)	0	0	1097	185	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1097	185	0	0
Sign Control		Stop	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 62.9%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	1098	0	0	159	0
Future Volume (vph)	0	1098	0	0	159	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3505	0	0	1787	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3505	0	0	1787	0
Link Speed (mph)		45	45		25	
Link Distance (ft)		309	168		108	
Travel Time (s)		4.7	2.5		2.9	
Peak Hour Factor	0.86	0.86	0.92	0.92	0.87	0.87
Heavy Vehicles (%)	3%	3%	2%	2%	1%	1%
Adj. Flow (vph)	0	1277	0	0	183	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1277	0	0	183	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 59.5%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	1111	182	0
Future Volume (vph)	0	0	0	1111	182	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	5036	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	5036	1770	0
Link Speed (mph)	45			45	25	
Link Distance (ft)	134			152	111	
Travel Time (s)	2.0			2.3	3.0	
Peak Hour Factor	0.92	0.92	0.89	0.89	0.94	0.94
Heavy Vehicles (%)	2%	2%	3%	3%	2%	2%
Adj. Flow (vph)	0	0	0	1248	194	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1248	194	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 41.5%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	1076	0	0	80	0
Future Volume (vph)	0	1076	0	0	80	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3574	0	0	1787	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3574	0	0	1787	0
Link Speed (mph)		45	45		25	
Link Distance (ft)		222	290		102	
Travel Time (s)		3.4	4.4		2.8	
Peak Hour Factor	0.95	0.95	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	1%	1%	2%	2%	1%	1%
Adj. Flow (vph)	0	1133	0	0	87	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1133	0	0	87	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 74.8%	ICU Level of Service D
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	1130	65	0
Future Volume (vph)	0	0	0	1130	65	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	30			45	25	
Link Distance (ft)	114			1105	101	
Travel Time (s)	2.6			16.7	2.8	
Peak Hour Factor	0.92	0.92	0.88	0.88	0.94	0.94
Adj. Flow (vph)	0	0	0	1284	69	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1284	69	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 70.7%	ICU Level of Service C
Analysis Period (min) 15	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	114	358	31	4	293	12	14	37	3	13	81	96
Future Volume (vph)	114	358	31	4	293	12	14	37	3	13	81	96
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	80		0	80		0	110		0	115		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	180			180			140			175		
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
Frt		0.988			0.994			0.988			0.919	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	1877	0	1770	1852	0	1703	1771	0	1770	1712	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1805	1877	0	1770	1852	0	1703	1771	0	1770	1712	0
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		1365			1319			666			571	
Travel Time (s)		20.7			20.0			10.1			8.7	
Peak Hour Factor	0.94	0.94	0.94	0.88	0.88	0.88	0.78	0.78	0.78	0.91	0.91	0.91
Heavy Vehicles (%)	0%	0%	0%	2%	2%	2%	6%	6%	6%	2%	2%	2%
Adj. Flow (vph)	121	381	33	5	333	14	18	47	4	14	89	105
Shared Lane Traffic (%)												
Lane Group Flow (vph)	121	414	0	5	347	0	18	51	0	14	194	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 45.7% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBL2	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	SWL	SWR
Lane Configurations											
Traffic Volume (vph)	55	0	112	0	270	79	81	385	0	0	0
Future Volume (vph)	55	0	112	0	270	79	81	385	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	240	0		0	105		0	0	0
Storage Lanes		1	1	0		0	1		0	0	0
Taper Length (ft)		25		25			70			25	
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
Frt			0.850		0.969						
Flt Protected	0.950						0.950				
Satd. Flow (prot)	1687	0	1615	0	1805	0	1752	1845	0	0	0
Flt Permitted	0.950						0.950				
Satd. Flow (perm)	1687	0	1615	0	1805	0	1752	1845	0	0	0
Link Speed (mph)		25			45			45		25	
Link Distance (ft)		894			1167			685		897	
Travel Time (s)		24.4			17.7			10.4		24.5	
Peak Hour Factor	0.93	0.93	0.93	0.91	0.91	0.91	0.95	0.95	0.95	0.92	0.92
Heavy Vehicles (%)	7%	0%	0%	2%	2%	2%	3%	3%	3%	2%	2%
Adj. Flow (vph)	59	0	120	0	297	87	85	405	0	0	0
Shared Lane Traffic (%)											
Lane Group Flow (vph)	59	0	120	0	384	0	85	405	0	0	0
Sign Control		Stop			Free			Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 33.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	WBL2	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NER
Lane Configurations											
Traffic Volume (vph)	93	0	84	61	264	0	0	373	50	0	0
Future Volume (vph)	93	0	84	61	264	0	0	373	50	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	185	165		0	0		0	0	0
Storage Lanes		1	1	1		0	0		0	0	0
Taper Length (ft)		25		110			25			25	
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
Frt			0.850					0.984			
Flt Protected	0.950			0.950							
Satd. Flow (prot)	1805	0	1455	1752	1845	0	0	1815	0	0	0
Flt Permitted	0.950			0.950							
Satd. Flow (perm)	1805	0	1455	1752	1845	0	0	1815	0	0	0
Link Speed (mph)		25			45			45		25	
Link Distance (ft)		613			685			608		913	
Travel Time (s)		16.7			10.4			9.2		24.9	
Peak Hour Factor	0.81	0.81	0.81	0.87	0.87	0.87	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	11%	3%	3%	3%	3%	3%	3%	2%	2%
Adj. Flow (vph)	115	0	104	70	303	0	0	405	54	0	0
Shared Lane Traffic (%)											
Lane Group Flow (vph)	115	0	104	70	303	0	0	459	0	0	0
Sign Control		Stop			Free			Free		Stop	

Intersection Summary		
Area Type:	Other	
Control Type: Unsignalized		
Intersection Capacity Utilization 33.9%		ICU Level of Service A
Analysis Period (min) 15		

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	184	140	0	396	272	0
Future Volume (vph)	184	140	0	396	272	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.850				
Flt Protected	0.950					
Satd. Flow (prot)	1543	1553	0	3505	3374	0
Flt Permitted	0.950					
Satd. Flow (perm)	1543	1553	0	3505	3374	0
Link Speed (mph)	25			55	55	
Link Distance (ft)	119			105	620	
Travel Time (s)	3.2			1.3	7.7	
Peak Hour Factor	0.93	0.93	0.82	0.82	0.92	0.92
Heavy Vehicles (%)	17%	4%	0%	3%	7%	0%
Adj. Flow (vph)	198	151	0	483	296	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	198	151	0	483	296	0
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 27.8%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	396	61	35	377
Future Volume (vph)	0	0	396	61	35	377
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		340	0	
Storage Lanes	0	0		1	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	1.00	0.95	0.95
Frt				0.850		
Flt Protected						0.996
Satd. Flow (prot)	0	0	3505	1568	0	3383
Flt Permitted						0.996
Satd. Flow (perm)	0	0	3505	1568	0	3383
Link Speed (mph)	25		55			55
Link Distance (ft)	664		1109			105
Travel Time (s)	18.1		13.7			1.3
Peak Hour Factor	0.92	0.92	0.82	0.82	0.92	0.92
Heavy Vehicles (%)	2%	2%	3%	3%	20%	5%
Adj. Flow (vph)	0	0	483	74	38	410
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	483	74	0	448
Sign Control	Stop		Free			Free

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 29.1% ICU Level of Service A

Analysis Period (min) 15

Lane Group	WBL2	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NER
Lane Configurations											
Traffic Volume (vph)	52	0	60	0	352	0	0	220	86	0	0
Future Volume (vph)	52	0	60	0	352	0	0	220	86	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	205	0		0	0		135	0	0
Storage Lanes		1	1	0		0	0		1	0	0
Taper Length (ft)		25		25			25			25	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00
Frt			0.850						0.850		
Flt Protected	0.950										
Satd. Flow (prot)	1736	0	1380	0	3438	0	0	3343	1272	0	0
Flt Permitted	0.950										
Satd. Flow (perm)	1736	0	1380	0	3438	0	0	3343	1272	0	0
Link Speed (mph)		25			55			55		25	
Link Distance (ft)		296			230			1367		908	
Travel Time (s)		8.1			2.9			16.9		24.8	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.95	0.95	0.95	0.92	0.92
Heavy Vehicles (%)	4%	0%	17%	0%	5%	0%	0%	8%	27%	2%	2%
Adj. Flow (vph)	59	0	68	0	400	0	0	232	91	0	0
Shared Lane Traffic (%)											
Lane Group Flow (vph)	59	0	68	0	400	0	0	232	91	0	0
Sign Control		Stop			Free			Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 20.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	33	80	0	270	154	0
Future Volume (vph)	33	80	0	270	154	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				
Flt Protected	0.950					
Satd. Flow (prot)	1752	1077	0	1624	1696	0
Flt Permitted	0.950					
Satd. Flow (perm)	1752	1077	0	1624	1696	0
Link Speed (mph)	25			45	45	
Link Distance (ft)	189			1063	114	
Travel Time (s)	5.2			16.1	1.7	
Peak Hour Factor	0.74	0.74	0.93	0.93	0.89	0.89
Heavy Vehicles (%)	3%	50%	17%	17%	12%	12%
Adj. Flow (vph)	45	108	0	290	173	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	45	108	0	290	173	0
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 24.2%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	0	0	182	121	3	154
Future Volume (vph)	0	0	182	121	3	154
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.850		
Flt Protected						0.999
Satd. Flow (prot)	0	0	1624	1380	0	1689
Flt Permitted						0.999
Satd. Flow (perm)	0	0	1624	1380	0	1689
Link Speed (mph)	25		45			45
Link Distance (ft)	105		114			727
Travel Time (s)	2.9		1.7			11.0
Peak Hour Factor	0.92	0.92	0.93	0.93	0.89	0.89
Heavy Vehicles (%)	2%	2%	17%	17%	33%	12%
Adj. Flow (vph)	0	0	196	130	3	173
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	196	130	0	176
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 22.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBR	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	6	97	58	124	60	11
Future Volume (vph)	6	97	58	124	60	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	195	0	0			90
Storage Lanes	1	1	0			1
Taper Length (ft)	135		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				0.850
Flt Protected	0.950			0.984		
Satd. Flow (prot)	1570	1404	0	1615	1776	1509
Flt Permitted	0.950			0.984		
Satd. Flow (perm)	1570	1404	0	1615	1776	1509
Link Speed (mph)	25			45	45	
Link Distance (ft)	597			727	1165	
Travel Time (s)	16.3			11.0	17.7	
Peak Hour Factor	0.83	0.83	0.91	0.91	0.78	0.78
Heavy Vehicles (%)	15%	15%	43%	3%	7%	7%
Adj. Flow (vph)	7	117	64	136	77	14
Shared Lane Traffic (%)						
Lane Group Flow (vph)	7	117	0	200	77	14
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 26.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	18	1714	18	0
Future Volume (vph)	0	0	18	1714	18	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.91	0.91	1.00	1.00
Frt						
Flt Protected				0.999	0.950	
Satd. Flow (prot)	0	0	0	5080	1770	0
Flt Permitted				0.999	0.950	
Satd. Flow (perm)	0	0	0	5080	1770	0
Link Speed (mph)	45			45	25	
Link Distance (ft)	382			217	236	
Travel Time (s)	5.8			3.3	6.4	
Peak Hour Factor	0.90	0.90	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	20	1863	20	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1883	20	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 43.5%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1257	0	0	0	0	30
Future Volume (vph)	1257	0	0	0	0	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	1.00	1.00	1.00	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	3539	0	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	3539	0	0	0	0	1611
Link Speed (mph)	45			45	25	
Link Distance (ft)	168			432	770	
Travel Time (s)	2.5			6.5	21.0	
Peak Hour Factor	0.87	0.87	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1445	0	0	0	0	33
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1445	0	0	0	0	33
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 52.5%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations			↑↑↑			↱
Traffic Volume (vph)	0	0	1293	0	0	32
Future Volume (vph)	0	0	1293	0	0	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.91	1.00	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	0	0	5036	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	0	5036	0	0	1611
Link Speed (mph)		45	45		25	
Link Distance (ft)		494	134		230	
Travel Time (s)		7.5	2.0		6.3	
Peak Hour Factor	0.92	0.92	0.89	0.89	0.92	0.92
Heavy Vehicles (%)	2%	2%	3%	3%	2%	2%
Adj. Flow (vph)	0	0	1453	0	0	35
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1453	0	0	35
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 44.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations			↑↱			
Traffic Volume (vph)	0	0	1145	50	0	0
Future Volume (vph)	0	0	1145	50	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.994			
Flt Protected						
Satd. Flow (prot)	0	0	3518	0	0	0
Flt Permitted						
Satd. Flow (perm)	0	0	3518	0	0	0
Link Speed (mph)		30	45		25	
Link Distance (ft)		176	114		201	
Travel Time (s)		4.0	1.7		5.5	
Peak Hour Factor	0.92	0.92	0.88	0.88	0.92	0.92
Adj. Flow (vph)	0	0	1301	57	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1358	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 41.7%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	NBT	NBR	SBL	SBT	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	352	228	0	272	0	0
Future Volume (vph)	352	228	0	272	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	1.00	0.95	1.00	1.00
Frt	0.941					
Flt Protected						
Satd. Flow (prot)	3164	0	0	3343	0	0
Flt Permitted						
Satd. Flow (perm)	3164	0	0	3343	0	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	620			230	1088	
Travel Time (s)	7.7			2.9	29.7	
Peak Hour Factor	0.88	0.88	0.95	0.95	0.92	0.92
Heavy Vehicles (%)	5%	11%	8%	8%	2%	2%
Adj. Flow (vph)	400	259	0	286	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	659	0	0	286	0	0
Sign Control	Free			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 20.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	32	1113	0	0	0	0	0	48	29
Future Volume (vph)	0	0	0	32	1113	0	0	0	0	0	48	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	165		0	0		0	0		0
Storage Lanes	0		0	1		0	0		0	0		0
Taper Length (ft)	25			85			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt											0.949	
Flt Protected				0.950								
Satd. Flow (prot)	0	0	0	1770	3539	0	0	0	0	0	1785	0
Flt Permitted				0.950								
Satd. Flow (perm)	0	0	0	1770	3539	0	0	0	0	0	1785	0
Link Speed (mph)		30			45			30			30	
Link Distance (ft)		212			176			102			496	
Travel Time (s)		4.8			2.7			2.3			11.3	
Peak Hour Factor	0.92	0.92	0.92	0.86	0.86	0.86	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	1%	1%	1%
Adj. Flow (vph)	0	0	0	37	1294	0	0	0	0	0	52	32
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	37	1294	0	0	0	0	0	84	0
Sign Control		Free			Free			Yield			Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 41.7% ICU Level of Service A

Analysis Period (min) 15

Lane Group	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	2400	0	0	0	2433
Future Volume (vph)	0	2400	0	0	0	2433
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	0.88
Frt						0.850
Flt Protected						
Satd. Flow (prot)	0	3539	0	0	0	2787
Flt Permitted						
Satd. Flow (perm)	0	3539	0	0	0	2787
Link Speed (mph)		55	55		55	
Link Distance (ft)		434	1242		1194	
Travel Time (s)		5.4	15.4		14.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	2609	0	0	0	2645
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	2609	0	0	0	2645
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 88.4%	ICU Level of Service E
Analysis Period (min) 15	

Lane Group	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	0	119	0	0	745
Future Volume (vph)	0	0	119	0	0	745
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	0	0	1863	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	0	1863	0	0	1611
Link Speed (mph)		25	25		30	
Link Distance (ft)		1199	263		174	
Travel Time (s)		32.7	7.2		4.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.90	0.90
Adj. Flow (vph)	0	0	129	0	0	828
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	129	0	0	828
Sign Control		Free	Yield		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 59.1%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	WBL	WBR	NBL	NBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	168	2897	0	0	0
Future Volume (vph)	0	168	2897	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.97	1.00	1.00	1.00
Frt		0.865				
Flt Protected			0.950			
Satd. Flow (prot)	0	1627	3303	0	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	1627	3303	0	0	0
Link Speed (mph)	45		45		45	
Link Distance (ft)	255		329		551	
Travel Time (s)	3.9		5.0		8.3	
Peak Hour Factor	0.91	0.91	0.93	0.93	0.92	0.92
Heavy Vehicles (%)	1%	1%	6%	6%	2%	2%
Adj. Flow (vph)	0	185	3115	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	185	3115	0	0	0
Sign Control	Yield		Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 91.2%	ICU Level of Service F
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	159	1166	0	0
Future Volume (vph)	0	0	159	1166	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	450		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			85		25	
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	5085	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	5085	0	0
Link Speed (mph)	45			45	30	
Link Distance (ft)	315			494	108	
Travel Time (s)	4.8			7.5	2.5	
Peak Hour Factor	0.92	0.92	0.87	0.87	0.92	0.92
Adj. Flow (vph)	0	0	183	1340	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	183	1340	0	0
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 46.2% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	182	1105	0	0	0	0
Future Volume (vph)	182	1105	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	275			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	110				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		45	45		30	
Link Distance (ft)		432	161		111	
Travel Time (s)		6.5	2.4		2.5	
Peak Hour Factor	0.94	0.94	0.92	0.92	0.92	0.92
Adj. Flow (vph)	194	1176	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	194	1176	0	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 58.7%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations		↑↑				↱↱↱
Traffic Volume (vph)	0	1556	0	0	0	1583
Future Volume (vph)	0	1556	0	0	0	1583
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	0.76
Frt						0.850
Flt Protected						
Satd. Flow (prot)	0	3539	0	0	0	3610
Flt Permitted						
Satd. Flow (perm)	0	3539	0	0	0	3610
Link Speed (mph)		55	55		45	
Link Distance (ft)		1093	655		773	
Travel Time (s)		13.5	8.1		11.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1691	0	0	0	1721
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1691	0	0	0	1721
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 46.3%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	65	1091	0	0	0	0
Future Volume (vph)	65	1091	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	180			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	75				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		45	45		30	
Link Distance (ft)		290	1089		101	
Travel Time (s)		4.4	16.5		2.3	
Peak Hour Factor	0.94	0.94	0.92	0.92	0.92	0.92
Adj. Flow (vph)	69	1161	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	69	1161	0	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 68.1%	ICU Level of Service C
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	3761	745	0	0	0	0
Future Volume (vph)	3761	745	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	1.00	1.00	1.00	1.00
Frt	0.975					
Flt Protected						
Satd. Flow (prot)	4958	0	0	0	0	0
Flt Permitted						
Satd. Flow (perm)	4958	0	0	0	0	0
Link Speed (mph)	45			45	30	
Link Distance (ft)	311			156	174	
Travel Time (s)	4.7			2.4	4.0	
Peak Hour Factor	0.90	0.90	0.92	0.92	0.92	0.92
Adj. Flow (vph)	4179	828	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	5007	0	0	0	0	0
Sign Control	Free			Stop	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 113.8%	ICU Level of Service H
Analysis Period (min) 15	

Lane Group	NBT	NBR	SBL	SBT	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	0	0	112	2894	0	0
Future Volume (vph)	0	0	112	2894	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	500		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			100		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	3539	0	0
Link Speed (mph)	30			25	25	
Link Distance (ft)	266			1471	301	
Travel Time (s)	6.0			40.1	8.2	
Peak Hour Factor	0.92	0.92	0.75	0.75	0.92	0.92
Adj. Flow (vph)	0	0	149	3859	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	149	3859	0	0
Sign Control	Stop			Free	Free	

Intersection Summary		
Area Type:	Other	
Control Type: Unsignalized		
Intersection Capacity Utilization 83.3%		ICU Level of Service E
Analysis Period (min) 15		

Lane Group	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	734	122	0	0	0	0
Future Volume (vph)	734	122	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected		0.959				
Satd. Flow (prot)	0	1786	0	0	0	0
Flt Permitted		0.959				
Satd. Flow (perm)	0	1786	0	0	0	0
Link Speed (mph)		25	30		25	
Link Distance (ft)		1207	315		252	
Travel Time (s)		32.9	7.2		6.9	
Peak Hour Factor	0.75	0.75	0.92	0.92	0.92	0.92
Adj. Flow (vph)	979	163	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1142	0	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 61.9%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	103	0	69	0	0
Future Volume (vph)	0	103	0	69	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.865		
Flt Protected						
Satd. Flow (prot)	0	1652	0	1191	0	0
Flt Permitted						
Satd. Flow (perm)	0	1652	0	1191	0	0
Link Speed (mph)		25	25		25	
Link Distance (ft)		995	597		1154	
Travel Time (s)		27.1	16.3		31.5	
Peak Hour Factor	0.83	0.83	0.89	0.89	0.92	0.92
Heavy Vehicles (%)	15%	15%	38%	38%	2%	2%
Adj. Flow (vph)	0	124	0	78	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	124	0	78	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 8.8%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	53	5506	0	0
Future Volume (vph)	0	0	53	5506	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	250		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	5085	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	5085	0	0
Link Speed (mph)	45			45	25	
Link Distance (ft)	894			534	137	
Travel Time (s)	13.5			8.1	3.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	58	5985	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	58	5985	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 97.1%	ICU Level of Service F
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	5538	0	0	53	0
Future Volume (vph)	0	5538	0	0	53	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.86	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	6408	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	6408	0	0	1770	0
Link Speed (mph)		45	45		25	
Link Distance (ft)		744	1191		137	
Travel Time (s)		11.3	18.0		3.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	6020	0	0	58	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	6020	0	0	58	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 193.3%	ICU Level of Service H
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	962	4629	0	0	0	0
Future Volume (vph)	962	4629	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	400			0	0	0
Storage Lanes	2			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	0.97	0.86	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	3433	6408	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	3433	6408	0	0	0	0
Link Speed (mph)		45	45		25	
Link Distance (ft)		1191	262		113	
Travel Time (s)		18.0	4.0		3.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1046	5032	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1046	5032	0	0	0	0
Sign Control		Free	Stop		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 164.9%	ICU Level of Service H
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	119	4632	0	0
Future Volume (vph)	0	0	119	4632	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	250		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	5085	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	5085	0	0
Link Speed (mph)	45			45	25	
Link Distance (ft)	254			1016	123	
Travel Time (s)	3.8			15.4	3.4	
Peak Hour Factor	0.92	0.92	0.90	0.87	0.92	0.92
Adj. Flow (vph)	0	0	132	5324	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	132	5324	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 178.1%	ICU Level of Service H
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	244	4506	0	0	0	0
Future Volume (vph)	244	4506	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.91	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	5085	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	5085	0	0	0	0
Link Speed (mph)		45	45		30	
Link Distance (ft)		704	311		111	
Travel Time (s)		10.7	4.7		2.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	265	4898	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	265	4898	0	0	0	0
Sign Control		Free	Stop		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 182.5%	ICU Level of Service H
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑	↰	
Traffic Volume (vph)	0	0	0	1389	27	0
Future Volume (vph)	0	0	0	1389	27	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	30	
Link Distance (ft)	583			574	107	
Travel Time (s)	7.2			7.1	2.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	1510	29	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1510	29	0
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 80.0% ICU Level of Service D

Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	27	1263	0	0	0	0
Future Volume (vph)	27	1263	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		30	
Link Distance (ft)		1122	576		107	
Travel Time (s)		13.9	7.1		2.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	29	1373	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	29	1373	0	0	0	0
Sign Control		Free	Stop		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 80.0%	ICU Level of Service D
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	1380	36	0	54
Future Volume (vph)	0	0	1380	36	0	54
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.996			0.865
Flt Protected						
Satd. Flow (prot)	0	0	3525	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	0	3525	0	0	1611
Link Speed (mph)		55	55		30	
Link Distance (ft)		590	583		121	
Travel Time (s)		7.3	7.2		2.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	1500	39	0	59
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1539	0	0	59
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 49.3% ICU Level of Service A
Analysis Period (min) 15

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	168	1266	0	0
Future Volume (vph)	0	0	168	1266	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	250		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	3539	0	0
Link Speed (mph)	55			55	30	
Link Distance (ft)	405			590	104	
Travel Time (s)	5.0			7.3	2.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	183	1376	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	183	1376	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 46.5%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑			↰	
Traffic Volume (vph)	0	1122	0	0	168	0
Future Volume (vph)	0	1122	0	0	168	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	1770	0
Link Speed (mph)		55	55		30	
Link Distance (ft)		316	1122		104	
Travel Time (s)		3.9	13.9		2.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1220	0	0	183	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1220	0	0	183	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 72.7%	ICU Level of Service C
Analysis Period (min) 15	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	280	2291	0	0
Future Volume (vph)	0	0	280	2291	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	250			0
Storage Lanes	0	0	2			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	0.97	0.91	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	3433	5085	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	3433	5085	0	0
Link Speed (mph)	45			55	30	
Link Distance (ft)	105			493	555	
Travel Time (s)	1.6			6.1	12.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	304	2490	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	304	2490	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 94.6%	ICU Level of Service F
Analysis Period (min) 15	

Lane Group	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	1663	628	0	0	0	0
Future Volume (vph)	1663	628	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.94	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	4990	1863	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	4990	1863	0	0	0	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		555	271		108	
Travel Time (s)		12.6	6.2		2.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1808	683	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1808	683	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 72.8%	ICU Level of Service C
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	73	0	0	0	0	628
Future Volume (vph)	73	0	0	0	0	628
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	1863	0	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	1863	0	0	0	0	1611
Link Speed (mph)	25			30	25	
Link Distance (ft)	287			1072	271	
Travel Time (s)	7.8			24.4	7.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	79	0	0	0	0	683
Shared Lane Traffic (%)						
Lane Group Flow (vph)	79	0	0	0	0	683
Sign Control	Yield			Free	Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 49.4% ICU Level of Service A

Analysis Period (min) 15

Lane Group	NBT	NBR	SBL	SBT	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	0	0	73	1625	0	0
Future Volume (vph)	0	0	73	1625	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.91	0.91	1.00	1.00
Frt						
Flt Protected				0.998		
Satd. Flow (prot)	0	0	0	5069	0	0
Flt Permitted				0.998		
Satd. Flow (perm)	0	0	0	5069	0	0
Link Speed (mph)	45			45	45	
Link Distance (ft)	194			406	287	
Travel Time (s)	2.9			6.2	4.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	5%	2%	2%	2%
Adj. Flow (vph)	0	0	79	1766	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1845	0	0
Sign Control	Free			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 49.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	104	549	0	0	0	0
Future Volume (vph)	104	549	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1719	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1719	3539	0	0	0	0
Link Speed (mph)		25	25		25	
Link Distance (ft)		879	346		271	
Travel Time (s)		24.0	9.4		7.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	2%	2%	2%	2%	2%
Adj. Flow (vph)	113	597	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	113	597	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 54.0%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	518	0	0	81
Future Volume (vph)	0	0	518	0	0	81
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	0	0	1863	0	0	1565
Flt Permitted						
Satd. Flow (perm)	0	0	1863	0	0	1565
Link Speed (mph)		30	45		45	
Link Distance (ft)		874	182		254	
Travel Time (s)		19.9	2.8		3.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	5%
Adj. Flow (vph)	0	0	563	0	0	88
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	563	0	0	88
Sign Control		Free	Free		Yield	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 55.6%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	EBL	EBR	SBL	SBR	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	0	0	0	0	518	1249
Future Volume (vph)	0	0	0	0	518	1249
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.91
Frt					0.971	0.850
Flt Protected					0.961	
Satd. Flow (prot)	0	0	0	0	1728	2799
Flt Permitted					0.961	
Satd. Flow (perm)	0	0	0	0	1728	2799
Link Speed (mph)	30		30		30	
Link Distance (ft)	182		207		337	
Travel Time (s)	4.1		4.7		7.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	5%
Adj. Flow (vph)	0	0	0	0	563	1358
Shared Lane Traffic (%)						10%
Lane Group Flow (vph)	0	0	0	0	699	1222
Sign Control	Stop		Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 55.6%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1130	81	0	0	0	0
Future Volume (vph)	1130	81	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00
Frt	0.990					
Flt Protected						
Satd. Flow (prot)	3404	0	0	0	0	0
Flt Permitted						
Satd. Flow (perm)	3404	0	0	0	0	0
Link Speed (mph)	30			45	25	
Link Distance (ft)	306			190	254	
Travel Time (s)	7.0			2.9	6.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	5%	2%	2%	2%	2%
Adj. Flow (vph)	1228	88	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1316	0	0	0	0	0
Sign Control	Free			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 65.4%	ICU Level of Service C
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations			↑↑	↱		
Traffic Volume (vph)	0	0	568	151	0	0
Future Volume (vph)	0	0	568	151	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			250	0	0
Storage Lanes	0			1	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	1.00
Frt				0.850		
Flt Protected						
Satd. Flow (prot)	0	0	3539	1538	0	0
Flt Permitted						
Satd. Flow (perm)	0	0	3539	1538	0	0
Link Speed (mph)		25	25		25	
Link Distance (ft)		241	1465		317	
Travel Time (s)		6.6	40.0		8.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	5%	2%	2%
Adj. Flow (vph)	0	0	617	164	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	617	164	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 20.7%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑↑	↰	
Traffic Volume (vph)	0	0	0	1400	64	0
Future Volume (vph)	0	0	0	1400	64	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	4940	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	4940	1770	0
Link Speed (mph)	55			30	25	
Link Distance (ft)	598			415	105	
Travel Time (s)	7.4			9.4	2.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	5%	2%	2%
Adj. Flow (vph)	0	0	0	1522	70	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1522	70	0
Sign Control	Free			Free	Stop	

Intersection Summary		
Area Type:	Other	
Control Type: Unsignalized		
Intersection Capacity Utilization 67.2%		ICU Level of Service C
Analysis Period (min) 15		

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	64	1211	0	0	0	0
Future Volume (vph)	64	1211	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3438	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3438	0	0	0	0
Link Speed (mph)		55	30		25	
Link Distance (ft)		597	306		105	
Travel Time (s)		7.4	7.0		2.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	5%	2%	2%	2%	2%
Adj. Flow (vph)	70	1316	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	70	1316	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 67.2% ICU Level of Service C

Analysis Period (min) 15

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	950	0	0
Future Volume (vph)	0	0	0	950	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	0	0	0	3539	1863	0
Flt Permitted						
Satd. Flow (perm)	0	0	0	3539	1863	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	586			210	99	
Travel Time (s)	7.3			2.6	2.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	1033	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1033	0	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 36.3%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	841	0	0	0	0
Future Volume (vph)	0	841	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	1863	3539	0	0	0	0
Flt Permitted						
Satd. Flow (perm)	1863	3539	0	0	0	0
Link Speed (mph)		55	55		25	
Link Distance (ft)		589	212		99	
Travel Time (s)		7.3	2.6		2.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	914	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	914	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 36.3%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	950	0	0
Future Volume (vph)	0	0	0	950	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	0	0	0	3539	0	0
Flt Permitted						
Satd. Flow (perm)	0	0	0	3539	0	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	723			586	81	
Travel Time (s)	9.0			7.3	2.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	1033	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1033	0	0
Sign Control	Free			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 36.3%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	841	0	0	0	0	0	0	0	0	0	0
Future Volume (vph)	0	841	0	0	0	0	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	3539	0	0	0	0	0	0	1863	0	1863	0
Flt Permitted												
Satd. Flow (perm)	0	3539	0	0	0	0	0	0	1863	0	1863	0
Link Speed (mph)		55			55			25			25	
Link Distance (ft)		719			589			84			81	
Travel Time (s)		8.9			7.3			2.3			2.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	914	0	0	0	0	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	914	0	0	0	0	0	0	0	0	0	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 33.2%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	0	841	0	950	0	0
Future Volume (vph)	0	841	0	950	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.88	1.00	0.95	1.00	1.00
Frt		0.850				
Flt Protected						
Satd. Flow (prot)	0	2787	0	3539	0	0
Flt Permitted						
Satd. Flow (perm)	0	2787	0	3539	0	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	997			723	719	
Travel Time (s)	12.4			9.0	19.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	914	0	1033	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	914	0	1033	0	0
Sign Control	Free			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 32.8%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	286	977	0	0	0	0
Future Volume (vph)	286	977	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		55	
Link Distance (ft)		2077	2379		116	
Travel Time (s)		25.7	29.5		1.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	311	1062	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	311	1062	0	0	0	0
Sign Control		Free	Stop		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 59.7%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NEL	NER
Lane Configurations				↑↑	↰	
Traffic Volume (vph)	0	0	0	940	286	0
Future Volume (vph)	0	0	0	940	286	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	607			2382	116	
Travel Time (s)	7.5			29.5	3.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	1022	311	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1022	311	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 66.3%	ICU Level of Service C
Analysis Period (min) 15	

Lane Group	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	0	0	14	940	0	0
Future Volume (vph)	0	0	14	940	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	250		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	3539	0	0
Link Speed (mph)	55			55	55	
Link Distance (ft)	2382			560	108	
Travel Time (s)	29.5			6.9	1.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	15	1022	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	15	1022	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary		
Area Type:	Other	
Control Type: Unsignalized		
Intersection Capacity Utilization 79.1%		ICU Level of Service D
Analysis Period (min) 15		

Lane Group	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	0	977	0	0	14	0
Future Volume (vph)	0	977	0	0	14	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	1770	0
Link Speed (mph)		55	55		25	
Link Distance (ft)		2379	608		108	
Travel Time (s)		29.5	7.5		2.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1062	0	0	15	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1062	0	0	15	0
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 59.7% ICU Level of Service B

Analysis Period (min) 15

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↱					↱
Traffic Volume (vph)	952	39	0	0	0	32
Future Volume (vph)	952	39	0	0	0	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		600	600		0	0
Storage Lanes		0	0		0	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00
Frt	0.994					0.865
Flt Protected						
Satd. Flow (prot)	3518	0	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	3518	0	0	0	0	1611
Link Speed (mph)	55			55	45	
Link Distance (ft)	608			628	1089	
Travel Time (s)	7.5			7.8	16.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1035	42	0	0	0	35
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1077	0	0	0	0	35
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 37.6%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	945	9	0
Future Volume (vph)	0	0	0	945	9	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	645			3831	112	
Travel Time (s)	8.0			47.5	3.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	1027	10	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1027	10	0
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 54.3% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	9	975	0	0	0	0
Future Volume (vph)	9	975	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		55	
Link Distance (ft)		628	3825		112	
Travel Time (s)		7.8	47.4		1.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	10	1060	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	10	1060	0	0	0	0
Sign Control		Free	Stop		Stop	

Intersection Summary		
Area Type:	Other	
Control Type: Unsignalized		
Intersection Capacity Utilization 59.7%		ICU Level of Service B
Analysis Period (min) 15		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	10	945	0	0
Future Volume (vph)	0	0	10	945	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	250		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	3539	0	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	3831			538	97	
Travel Time (s)	47.5			6.7	2.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	11	1027	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	11	1027	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 41.5%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	975	0	0	10	0
Future Volume (vph)	0	975	0	0	10	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	1770	0
Link Speed (mph)		55	55		25	
Link Distance (ft)		3825	591		97	
Travel Time (s)		47.4	7.3		2.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1060	0	0	11	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1060	0	0	11	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 59.7%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	973	12	0	0	0	16
Future Volume (vph)	973	12	0	0	0	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00
Frt	0.998					0.865
Flt Protected						
Satd. Flow (prot)	3532	0	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	3532	0	0	0	0	1611
Link Speed (mph)	55			55	45	
Link Distance (ft)	591			1206	1073	
Travel Time (s)	7.3			15.0	16.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1058	13	0	0	0	17
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1071	0	0	0	0	17
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 37.3%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑	↰	
Traffic Volume (vph)	0	0	0	947	9	0
Future Volume (vph)	0	0	0	947	9	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	1254			1793	105	
Travel Time (s)	15.5			22.2	2.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	1029	10	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1029	10	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 59.9%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	9	980	0	0	0	0
Future Volume (vph)	9	980	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		55	
Link Distance (ft)		1206	1786		105	
Travel Time (s)		15.0	22.1		1.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	10	1065	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	10	1065	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary		
Area Type:	Other	
Control Type: Unsignalized		
Intersection Capacity Utilization 59.9%		ICU Level of Service B
Analysis Period (min) 15		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations			११	↑↑		
Traffic Volume (vph)	0	0	1028	947	0	0
Future Volume (vph)	0	0	1028	947	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	500		0	0
Storage Lanes		0	2		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	0.97	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	3433	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	3433	3539	0	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	1793			596	109	
Travel Time (s)	22.2			7.4	3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	1117	1029	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1117	1029	0	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 105.8%	ICU Level of Service G
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑	↰	
Traffic Volume (vph)	0	0	0	1875	100	0
Future Volume (vph)	0	0	0	1875	100	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	631			2681	109	
Travel Time (s)	7.8			33.2	3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	2038	109	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	2038	109	0
Sign Control	Free			Free	Stop	

Intersection Summary		
Area Type:	Other	
Control Type: Unsignalized		
Intersection Capacity Utilization 80.5%		ICU Level of Service D
Analysis Period (min) 15		

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	100	1907	0	0	0	0
Future Volume (vph)	100	1907	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		55	
Link Distance (ft)		627	2678		109	
Travel Time (s)		7.8	33.2		1.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	109	2073	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	109	2073	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 111.2%	ICU Level of Service H
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	576	1875	0	0
Future Volume (vph)	0	0	576	1875	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	500		0	0
Storage Lanes		0	2		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	0.97	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	3433	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	3433	3539	0	0
Link Speed (mph)	55			55	55	
Link Distance (ft)	2681			671	109	
Travel Time (s)	33.2			8.3	1.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	626	2038	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	626	2038	0	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 124.3%	ICU Level of Service H
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	2400	51	0
Future Volume (vph)	0	0	0	2400	51	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	654			797	95	
Travel Time (s)	8.1			9.9	2.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	2609	55	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	2609	55	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 97.0%	ICU Level of Service F
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	51	2433	0	0	0	0
Future Volume (vph)	51	2433	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		55	
Link Distance (ft)		659	784		95	
Travel Time (s)		8.2	9.7		1.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	55	2645	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	55	2645	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 140.3%	ICU Level of Service H
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1245	18	0	0	0	18
Future Volume (vph)	1245	18	0	0	0	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00
Frt	0.998					0.865
Flt Protected						
Satd. Flow (prot)	3532	0	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	3532	0	0	0	0	1611
Link Speed (mph)	55			55	25	
Link Distance (ft)	576			2077	205	
Travel Time (s)	7.1			25.7	5.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1353	20	0	0	0	20
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1373	0	0	0	0	20
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 45.0%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	3315	0	0	2223	0
Future Volume (vph)	0	3315	0	0	2223	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	0.97	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	3433	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	3433	0
Link Speed (mph)		45	45		45	
Link Distance (ft)		1021	744		215	
Travel Time (s)		15.5	11.3		3.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	3603	0	0	2416	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	3603	0	0	2416	0
Sign Control		Free	Stop		Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 161.7% ICU Level of Service H

Analysis Period (min) 15

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	0	0	871	1583
Future Volume (vph)	0	0	0	0	871	1583
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		0	250	
Storage Lanes	0	0		0	2	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.97	0.91
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	0	3433	5085
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	0	3433	5085
Link Speed (mph)	55		45			30
Link Distance (ft)	167		773			587
Travel Time (s)	2.1		11.7			13.3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	947	1721
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	0	947	1721
Sign Control	Stop		Stop			Free

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 60.0% ICU Level of Service B

Analysis Period (min) 15

1005: WB M-96 (Michigan Avenue) & SB I-69 Off-Ramp (Push Button) Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	25.2	125.0	68.7

1007: EB M-96 (Michigan Avenue) (Push Button) & SB I-69 Off-Ramp/EB M-96 (Michigan Avenue) Perfor

Approach	EB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	42.4	4.8	5.3

1008: WB M-96 (Michigan Avenue)/NB I-69 Off-Ramp & WB M-96 (Michigan Avenue) (Push Button) Perf

Approach	WB	SW	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	93.6	21.0	47.6

1009: WB M-96 (Michigan Avenue) (Push Button)/WB M-96 (Michigan Avenue) & EB M-96 (Michigan Ave

Approach	EB	SW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	50.3	54.2	52.6

1010: NB I-69 Off-Ramp (Push Button) & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	4.2	24.5	6.5

3003: M-227/West Drive & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	0.4	0.0	0.1	0.4
Total Del/Veh (s)	16.3	12.9	35.1	18.5

3093: M-227/West Drive & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	0.0	2.0	0.0	0.3
Total Del/Veh (s)	4.3	34.8	3.3	9.5

4001: M-96 (Michigan Avenue) & WB Main Entrance/WB M-96 (Michigan Avenue) Performance by appro

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	105.6	149.1	116.8

4003: EB to WB Xover E of 15 Mile Rd (North) & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	18.9	290.5	83.5
Total Del/Veh (s)	54.6	47.4	53.0

4004: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	543.7	167.5	505.4

4005: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	280.4	46.2	212.3

4006: M-311 (11 Mile Rd) & Site Driveway West Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	0.3	0.9	0.0	0.2
Total Del/Veh (s)	39.2	8.9	8.4	21.3

4007: M-311 (11 Mile Rd) & F Drive N Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	0.2	0.0	0.0	0.0
Total Del/Veh (s)	42.2	8.6	4.7	12.3

4010: EB M-96 (Michigan Avenue)/EB M-96 (Michigan Avenue) (Push Button) & WB M-96 (Michigan Ave

Approach	WB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	44.4	23.2	30.3

4030: NB M-311 (11 Mile Rd)/WB M-96 (Michigan Avenue)/11 Mile Rd (North) & EB M-96 (Michigan Ave

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	20.0	23.5	22.2

4031: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & WB M-96 (Michigan Avenue) Performance by a

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	25.7	3.9	12.8

4033: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & NB to SB Xover N of M-96 (Michigan Avenue) P

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	28.4	5.1	7.1

4034: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & EB I-94 Off-ramp Performance by approach

Approach	SB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.1	22.5	7.3

4035: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & WB M-96 (Michigan Avenue)/11 Mile Rd (North)

Approach	SB	NW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	12.7	16.4	14.4

4036: EB I-94 Off-ramp & WB M-96 (Michigan Avenue)/11 Mile Rd (North) Performance by approach

Approach	NB	NW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	19.5	2.2	3.4

4037: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & WB I-94 Off-ramp Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	2.0	24.4	9.6

4038: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & EB M-96 (Michigan Avenue)/11 Mile Rd (South)

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	18.8	28.0	23.3

4039: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & WB I-94 Off-ramp Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	18.2	4.4	6.0

4040: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & 11 Mile Rd Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	19.0	2.6	13.5

4041: 11 Mile Rd & WB M-96 (Michigan Avenue)/11 Mile Rd (North) Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	16.1	25.9	18.8

4042: 11 Mile Rd & H Dr N Performance by approach

Approach	NE	SW	All
Denied Del/Veh (s)	0.0	0.4	0.2
Total Del/Veh (s)	3.8	4.5	4.2

4050: Prop Site Drive E & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	450.3	185.5
Total Del/Veh (s)	159.6	656.0	304.0

4051: Prop Site Drive W & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	290.8	163.0
Total Del/Veh (s)	104.5	308.9	198.9

4061: WB M-96 (Michigan Avenue) & Firekeepers Main Drive Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	3.4	49.4	9.0

4065: WB M-96 (Michigan Avenue) & 15 Mile Rd (North) Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	7.5	0.0	6.3
Total Del/Veh (s)	95.2	183.4	110.0

4066: EB M-96 (Michigan Avenue) & WB to EB Xover W of 15 Mile Rd (South) Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	34.5	55.1	34.8

4067: 15 Mile Rd (South) & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.2	17.8	2.5
Total Del/Veh (s)	115.8	107.1	114.7

4068: EB to WB Xover E of 15 Mile Rd (South) & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	36.7	0.0	34.6
Total Del/Veh (s)	44.4	55.4	45.0

4070: M-311 (11 Mile Rd) & Site Drive East Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	1.1	0.0	0.0	0.2
Total Del/Veh (s)	12.4	9.3	14.4	12.4

4071: 15 Mile Rd & Verona Rd Performance by approach

Approach	NB	SB	SE	NW	All
Denied Del/Veh (s)	6.6	0.1	22.3	165.1	25.9
Total Del/Veh (s)	35.1	9.1	50.9	524.5	76.5

4075: 11 Mile Road & Verona Road Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	163.1	3.0	0.5	60.1
Total Del/Veh (s)	52.5	208.3	49.9	48.4	106.6

9002: WB M-96 (Michigan Avenue) & Firekeepers Gas Station Driveway Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.2	0.1
Total Del/Veh (s)	1.7	8.8	3.3

9003: WB M-96 (Michigan Avenue) & Firekeepers E Drive Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.6	6.7	2.5

9004: WB M-96 (Michigan Avenue) & Ackerson Drive Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	1.2	4.3	1.3

9006: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	0.9	1.1	0.9

9008: 15 Mile Rd (North) & Old M-96 (Michigan Ave) Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.0	0.0	0.0
Total Del/Veh (s)	3.6	0.6	182.1	98.6

9013: SB I-69 On-Ramp & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.4	0.4
Total Del/Veh (s)	136.2	136.2

9016: EB M-96 (Michigan Avenue) & NB I-69 On-Ramp Performance by approach

Approach	EB	All
Denied Del/Veh (s)	1.5	1.5
Total Del/Veh (s)	42.1	42.1

9017: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	2.3	2.3
Total Del/Veh (s)	41.8	41.8

9018: EB M-96 (Michigan Avenue) & WB to EB Xover W of M-227/West Drive Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.4	7.3	3.3

9019: EB to WB Xover W of M-227/West Drive & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.7	0.0	0.6
Total Del/Veh (s)	6.7	24.5	8.4

9020: EB M-96 (Michigan Avenue) & WB to EB Xover E of M-227/West Drive Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.0	7.7	1.7

9021: EB to WB Xover E of M-227/West Drive & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	7.7	0.0	7.4
Total Del/Veh (s)	24.0	28.7	24.2

9023: M-311 (11 Mile Rd) & B Drive North Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	1.2	0.3	1.2	0.5	0.8
Total Del/Veh (s)	2.0	1.3	12.7	10.7	3.9

9025: M-294 (Beadle Lake Road) & EB I-94 Off-Ramp & EB I-94 On-Ramp Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	2.4	0.3	0.0	0.5
Total Del/Veh (s)	6.3	1.7	1.7	2.5

9026: WB I-94 On-Ramp & M-294 (Beadle Lake Road) & WB I-94 Off-Ramp Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	2.1	0.0	0.3	0.5
Total Del/Veh (s)	6.7	1.6	1.2	2.4

9027: Old US-27 & EB I-94 to Old US-27 Off Ramp Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0
Total Del/Veh (s)	7.1	0.2	1.0	2.6

9028: Old US-27 & NB Old US-27 to EB I-94 On Ramp Performance by approach

Approach	NB	SB	All
Denied Del/Veh (s)	0.6	0.0	0.3
Total Del/Veh (s)	0.8	0.5	0.6

9029: SB Old US-27 WB I-94 On Ramp & Old US-27 & WB I-94 to Old US-27 Off Ramp Performance by

Approach	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	1.0	0.4
Total Del/Veh (s)	5.1	0.2	0.7	1.2

9030: I-94BL/Partello Rd & EB I-94 to I-94BL/Partello Off Ramp Performance by approach

Approach	SE	NE	SW	All
Denied Del/Veh (s)	0.0	0.2	0.0	0.1
Total Del/Veh (s)	4.5	1.4	0.2	1.7

9031: I-94BL/Partello Rd & I-94/Partello Rd to EB I-94 On Ramp Performance by approach

Approach	NE	SW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.2	0.7	0.4

9032: I-94BL/Partello Rd & WB I-94 to I-94/Partello Rd Performance by approach

Approach	EB	NE	SW	All
Denied Del/Veh (s)	0.0	0.0	0.7	0.1
Total Del/Veh (s)	3.4	1.2	0.6	1.8

9034: Dummy Node & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	3.8	254.9	7.5
Total Del/Veh (s)	50.9	1633.3	67.9

9035: Dummy Node & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	1.1	11.5	1.4

9036: WB M-96 (Michigan Avenue) & Dummy Node Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.3	0.0
Total Del/Veh (s)	5.4	45.5	6.6

9037: WB M-96 (Michigan Avenue) & Dummy Node Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	3.2	3.2

9040: Old US-27 & NB Old US-27 to WB I-94 On Ramp Performance by approach

Approach	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.0	0.3	0.8

9041: WB to EB Xover E of M-227/West Drive/McDonald's Dr & WB M-96 (Michigan Avenue) Performanc

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.2	0.0
Total Del/Veh (s)	8.7	41.6	11.0

9128: M-96 (Michigan Avenue)/WB M-96 (Michigan Avenue) & EB M-96 (Michigan Avenue) Performance

Approach	NB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	48.7	388.4	213.8

9137: SB I-69 On-Ramp Performance by approach

Approach	SB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	11.4	1.1	2.7

9143: NB I-69 On-Ramp Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	17.5	3.5	4.6

9146: WB to EB Xover W of M-227/West Drive & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.2	0.2
Total Del/Veh (s)	28.9	28.9

9147: EB M-96 (Michigan Avenue) & EB to WB Xover W of M-227/West Drive Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	5.7	5.7

9150: M-311 (11 Mile Rd) /NB M-311 (11 Mile Rd) & SB M-311 (11 Mile Rd) Performance by approach

Approach	NB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	4.7	1.0	2.9

9151: EB M-96 (Michigan Avenue) & EB to WB Xover E of M-227/West Drive Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.5	0.5

9157: SB I-69 On-Ramp & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.3	0.3
Total Del/Veh (s)	37.7	37.7

9158: SB I-69 Off-Ramp (Push Button) & SB I-69 Off-Ramp Performance by approach

Approach	SB	All
Denied Del/Veh (s)	1224.4	1224.4
Total Del/Veh (s)	434.0	434.0

9159: NB I-69 Off-Ramp & NB I-69 Off-Ramp (Push Button) Performance by approach

Approach	NB	All
Denied Del/Veh (s)	504.6	504.6
Total Del/Veh (s)	223.3	223.3

9178: WB I-94 to BL-94/Partello Rd Off Ramp/WB I-94 to I-94/Partello Rd & BL-94/Partello Rd to WB I-94

Approach	EB	WB	All
Denied Del/Veh (s)	0.1	0.0	0.1
Total Del/Veh (s)	0.1	0.3	0.2

9304: WB to EB Xover W of 15 Mile Rd (North) & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	63.8	63.8

9305: EB M-96 (Michigan Avenue) & WB to EB Xover W of 15 Mile Rd (North) Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	53.0	654.4	57.9

9307: EB M-96 (Michigan Avenue) & EB to WB Xover E of 15 Mile Rd (North) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.2	0.2
Total Del/Veh (s)	139.6	139.6

9310: WB to EB Xover W of 15 Mile Rd (South) & WB M-96 (Michigan Avenue) Performance by approac

Approach	WB	All
Denied Del/Veh (s)	71.7	71.7
Total Del/Veh (s)	217.2	217.2

9311: EB M-96 (Michigan Avenue) & EB to WB Xover E of 15 Mile Rd (South) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.3	0.3
Total Del/Veh (s)	72.9	72.9

9330: EB to WB Xover E of Old M-311 (11 Mile Rd) & WB M-96 (Michigan Avenue) Performance by appr

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.7	6.1	1.8

9331: EB M-96 (Michigan Avenue) & EB to WB Xover E of Old M-311 (11 Mile Rd) Performance by appro

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.7	2.7

9332: WB M-96 (Michigan Avenue) & Old M-311 (11 Mile Rd) Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.0	6.0	1.2

9336: WB to EB Xover W of Old M-311 (11 Mile Rd) & WB M-96 (Michigan Avenue) Performance by app

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.6	2.6

9337: EB M-96 (Michigan Avenue) & WB to EB Xover W of Old M-311 (11 Mile Rd) Performance by appr

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	3.9	11.2	4.6

9338: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & NB to SB Xover N of M-96 (Michigan Avenue) P

Approach	NB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	3.9	3.9

9339: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & EB I-94 On Ramp Performance by approach

Approach	NB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	9.1	9.1

9340: EB I-94 On Ramp Performance by approach

Approach	EB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	7.7	0.2	1.1

9342: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & EB I-94 On Ramp Performance by approach

Approach	SB	All
Denied Del/Veh (s)	0.1	0.1
Total Del/Veh (s)	15.8	15.8

9343: EB I-94 Off-ramp Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.8	0.8
Total Del/Veh (s)	1.0	1.0

9346: WB I-94 On Ramp Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.6	11.4	3.9

9347: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & WB I-94 On Ramp Performance by approach

Approach	NW	All
Denied Del/Veh (s)	0.1	0.1
Total Del/Veh (s)	13.9	13.9

9348: WB I-94 On Ramp & EB M-96 (Michigan Avenue)/11 Mile Rd (South) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	5.6	5.6

9349: WB I-94 Off-ramp Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.6	0.6
Total Del/Veh (s)	1.5	1.5

9351: SB to NB Xover E of 11 Mile Rd & WB M-96 (Michigan Avenue)/11 Mile Rd (North) Performance b

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.3	3.5	1.4

9352: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & SB to NB Xover E of 11 Mile Rd Performance b

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	6.4	6.4

9354: EB to WB Xover W of 11 Mile Rd & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	3.8	3.8

9355: EB M-96 (Michigan Avenue) & EB to WB Xover W of 11 Mile Rd Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	3.8	3.8

9356: WB to EB Xover W of 11 Mile Rd & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.9	2.9

9357: EB M-96 (Michigan Avenue) & WB to EB Xover W of 11 Mile Rd Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.5	0.5

9359: EB M-96 (Michigan Avenue) & M-96 (Michigan Avenue)/WB M-96 (Michigan Avenue) Performance

Approach	EB	WB	All
Denied Del/Veh (s)	0.2	0.0	0.1
Total Del/Veh (s)	2.9	0.9	1.9

9381: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	3.1	3.1

9382: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.5	4.8	3.5

9383: WB M-96 (Michigan Avenue) Performance by approach

Approach	NW	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.5	0.5

9384: EB M-96 (Michigan Avenue) Performance by approach

Approach	SE	SW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.9	5.6	1.9

9385: Ceresco Road/12 Mile Road & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	1.0	5.5	1.2

9386: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.8	3.5	2.8

9387: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.7	0.7

9388: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.4	0.4

9389: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	14.6	4.8	14.6

9390: 13 Mile Rd & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	14.6	36.7	15.1

9392: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.0	3.2	1.1

9393: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	71.6	71.6

9394: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	52.4	52.4

9396: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.1	10.0	2.9

9397: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.9	0.9
Total Del/Veh (s)	89.5	89.5

9398: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	118.1	118.1

9400: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	148.5	292.5	152.1

9401: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	150.4	150.4

9410: Retail Drive & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	0.9	8.9	1.0

9415: EB Main Entrance/EB M-96 (Michigan Avenue) & M-96 (Michigan Avenue) Performance by approa

Approach	EB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	79.3	26.4	67.5

9416: SB M-311 (11 Mile Rd)/EB M-96 (Michigan Avenue)/11 Mile Rd (South) & EB M-96 (Michigan Ave

Approach	SB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.8	2.8

Total Network Performance

Denied Del/Veh (s)	278.0
Total Del/Veh (s)	387.8

CINCAR CONSULTING GROUP

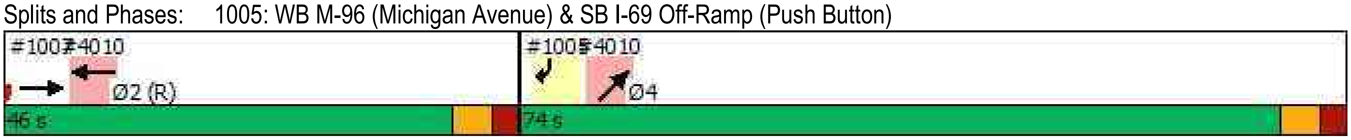
Scenario M4&S2

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø2
Lane Configurations							
Traffic Volume (vph)	0	0	1824	0	0	2894	
Future Volume (vph)	0	0	1824	0	0	2894	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	0.91	1.00	1.00	0.76	
Frt						0.850	
Flt Protected							
Satd. Flow (prot)	0	0	5085	0	0	3610	
Flt Permitted							
Satd. Flow (perm)	0	0	5085	0	0	3610	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)						177	
Link Speed (mph)		45	45		25		
Link Distance (ft)		275	194		266		
Travel Time (s)		4.2	2.9		7.3		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.84	0.75	
Heavy Vehicles (%)	2%	2%	2%	2%	3%	2%	
Adj. Flow (vph)	0	0	1983	0	0	3859	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	1983	0	0	3859	
Turn Type			NA			Prot	
Protected Phases			Free!			4!	2
Permitted Phases							
Minimum Split (s)						17.0	17.0
Total Split (s)						74.0	46.0
Total Split (%)						61.7%	38%
Yellow Time (s)						3.5	3.5
All-Red Time (s)						2.5	2.5
Lost Time Adjust (s)						0.0	
Total Lost Time (s)						6.0	
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)			120.0			68.0	
Actuated g/C Ratio			1.00			0.57	
v/c Ratio			0.39			1.82	
Control Delay			3.7			392.3	
Queue Delay			0.1			0.2	
Total Delay			3.8			392.5	
LOS			A			F	
Approach Delay			3.8		392.5		
Approach LOS			A		F		
Queue Length 50th (ft)			416			~1970	
Queue Length 95th (ft)			m0			#1578	
Internal Link Dist (ft)		195	114		186		
Turn Bay Length (ft)							
Base Capacity (vph)			5085			2122	
Starvation Cap Reductn			0			0	
Spillback Cap Reductn			1364			147	
Storage Cap Reductn			0			0	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø2
Reduced v/c Ratio			0.53			1.95	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 100 (83%), Referenced to phase 2:EBT, Start of Green	
Natural Cycle: 150	
Control Type: Pretimed	
Maximum v/c Ratio: 1.82	
Intersection Signal Delay: 260.6	Intersection LOS: F
Intersection Capacity Utilization 119.1%	ICU Level of Service H
Analysis Period (min) 15	
~ Volume exceeds capacity, queue is theoretically infinite. Queue shown is maximum after two cycles.	
# 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.	
m Volume for 95th percentile queue is metered by upstream signal.	
! Phase conflict between lane groups.	

Splits and Phases: 1005: WB M-96 (Michigan Avenue) & SB I-69 Off-Ramp (Push Button)



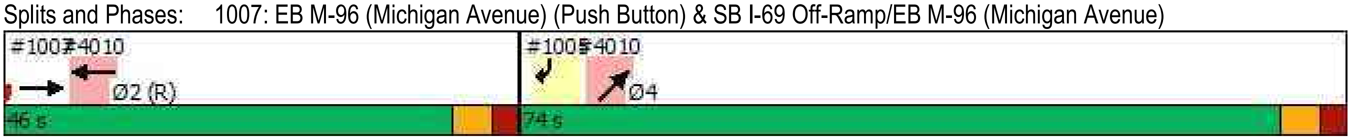
Lane Group	EBT	EBR	WBL	WBT	NEL	NER	Ø4
Lane Configurations							
Traffic Volume (vph)	112	0	0	0	0	3821	
Future Volume (vph)	112	0	0	0	0	3821	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Storage Length (ft)		260	285		0	0	
Storage Lanes		0	0		0	3	
Taper Length (ft)			240		25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.76	
Frt						0.850	
Flt Protected							
Satd. Flow (prot)	1863	0	0	0	0	3610	
Flt Permitted							
Satd. Flow (perm)	1863	0	0	0	0	3610	
Right Turn on Red		Yes				Yes	
Satd. Flow (RTOR)						2086	
Link Speed (mph)	25			45	45		
Link Distance (ft)	301			619	190		
Travel Time (s)	8.2			9.4	2.9		
Peak Hour Factor	0.75	0.84	0.92	0.92	0.90	0.90	
Heavy Vehicles (%)	2%	3%	2%	2%	2%	2%	
Adj. Flow (vph)	149	0	0	0	0	4246	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	149	0	0	0	0	4246	
Turn Type	NA					Free	
Protected Phases	2						4
Permitted Phases						Free	
Minimum Split (s)	17.0						17.0
Total Split (s)	46.0						74.0
Total Split (%)	38.3%						62%
Yellow Time (s)	3.5						3.5
All-Red Time (s)	2.5						2.5
Lost Time Adjust (s)	0.0						
Total Lost Time (s)	6.0						
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)	40.0					120.0	
Actuated g/C Ratio	0.33					1.00	
v/c Ratio	0.24					1.18	
Control Delay	30.3					106.0	
Queue Delay	0.0					0.0	
Total Delay	30.3					106.0	
LOS	C					F	
Approach Delay	30.3				106.0		
Approach LOS	C				F		
Queue Length 50th (ft)	83					~1038	
Queue Length 95th (ft)	111					m307	
Internal Link Dist (ft)	221			539	110		
Turn Bay Length (ft)							
Base Capacity (vph)	621					3610	

Lane Group	EBT	EBR	WBL	WBT	NEL	NER	Ø4
Starvation Cap Reductn	0					0	
Spillback Cap Reductn	0					0	
Storage Cap Reductn	0					0	
Reduced v/c Ratio	0.24					1.18	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 100 (83%), Referenced to phase 2:EBT, Start of Green	
Natural Cycle: 150	
Control Type: Pretimed	
Maximum v/c Ratio: 1.82	
Intersection Signal Delay: 103.5	Intersection LOS: F
Intersection Capacity Utilization 83.3%	ICU Level of Service E
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1007: EB M-96 (Michigan Avenue) (Push Button) & SB I-69 Off-Ramp/EB M-96 (Michigan Avenue)

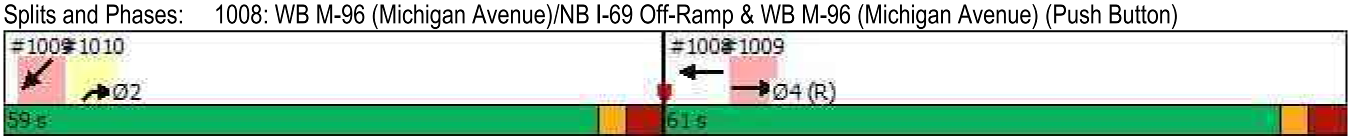


Lane Group	EBL	EBT	WBT	WBR	SWL	SWR	Ø2
Lane Configurations							
Traffic Volume (vph)	0	0	885	0	0	1058	
Future Volume (vph)	0	0	885	0	0	1058	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.88	
Frt						0.850	
Flt Protected							
Satd. Flow (prot)	0	0	3539	0	0	2787	
Flt Permitted							
Satd. Flow (perm)	0	0	3539	0	0	2787	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)						972	
Link Speed (mph)		45	25		45		
Link Distance (ft)		217	252		223		
Travel Time (s)		3.3	6.9		3.4		
Peak Hour Factor	0.92	0.92	0.75	0.93	0.92	0.92	
Heavy Vehicles (%)	2%	2%	2%	6%	2%	2%	
Adj. Flow (vph)	0	0	1180	0	0	1150	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	1180	0	0	1150	
Turn Type			NA			Free	
Protected Phases			4				2
Permitted Phases						Free	
Minimum Split (s)			16.0				16.0
Total Split (s)			61.0				59.0
Total Split (%)			50.8%				49%
Yellow Time (s)			2.5				2.5
All-Red Time (s)			3.5				3.5
Lost Time Adjust (s)			0.0				
Total Lost Time (s)			6.0				
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)			55.0			120.0	
Actuated g/C Ratio			0.46			1.00	
v/c Ratio			0.73			0.41	
Control Delay			29.7			4.7	
Queue Delay			0.0			0.0	
Total Delay			29.7			4.7	
LOS			C			A	
Approach Delay			29.7		4.7		
Approach LOS			C		A		
Queue Length 50th (ft)			382			113	
Queue Length 95th (ft)			352			112	
Internal Link Dist (ft)		137	172		143		
Turn Bay Length (ft)							
Base Capacity (vph)			1622			2787	
Starvation Cap Reductn			0			0	
Spillback Cap Reductn			0			0	
Storage Cap Reductn			0			0	

Lane Group	EBL	EBT	WBT	WBR	SWL	SWR	Ø2
Reduced v/c Ratio			0.73			0.41	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 92 (77%), Referenced to phase 4:WBT, Start of Green	
Natural Cycle: 60	
Control Type: Pretimed	
Maximum v/c Ratio: 0.74	
Intersection Signal Delay: 17.4	Intersection LOS: B
Intersection Capacity Utilization 70.3%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 1008: WB M-96 (Michigan Avenue)/NB I-69 Off-Ramp & WB M-96 (Michigan Avenue) (Push Button)



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↑↑									↑↑	
Traffic Volume (vph)	0	1036	0	0	0	0	0	0	0	0	1058	0
Future Volume (vph)	0	1036	0	0	0	0	0	0	0	0	1058	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	3539	0	0	0	0	0	0	0	0	3539	0
Flt Permitted												
Satd. Flow (perm)	0	3539	0	0	0	0	0	0	0	0	3539	0
Right Turn on Red			Yes			Yes			Yes	Yes		Yes
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		209			206			223			213	
Travel Time (s)		3.2			3.1			3.4			3.2	
Peak Hour Factor	0.86	0.86	0.86	0.92	0.92	0.92	0.92	0.92	0.92	0.91	0.91	0.91
Adj. Flow (vph)	0	1205	0	0	0	0	0	0	0	0	1163	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1205	0	0	0	0	0	0	0	0	1163	0
Turn Type		NA									NA	
Protected Phases		4									2	
Permitted Phases												
Minimum Split (s)		16.0									16.0	
Total Split (s)		61.0									59.0	
Total Split (%)		50.8%									49.2%	
Yellow Time (s)		2.5									2.5	
All-Red Time (s)		3.5									3.5	
Lost Time Adjust (s)		0.0									0.0	
Total Lost Time (s)		6.0									6.0	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		55.0									53.0	
Actuated g/C Ratio		0.46									0.44	
v/c Ratio		0.74									0.74	
Control Delay		26.4									27.5	
Queue Delay		0.0									0.0	
Total Delay		26.4									27.5	
LOS		C									C	
Approach Delay		26.4									27.5	
Approach LOS		C									C	
Queue Length 50th (ft)		384									405	
Queue Length 95th (ft)		m306									493	
Internal Link Dist (ft)		129			126			143			133	
Turn Bay Length (ft)												
Base Capacity (vph)		1622									1563	
Starvation Cap Reductn		0									0	
Spillback Cap Reductn		0									0	
Storage Cap Reductn		0									0	
Reduced v/c Ratio		0.74									0.74	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 92 (77%), Referenced to phase 4:WBT, Start of Green	
Natural Cycle: 60	
Control Type: Pretimed	
Maximum v/c Ratio: 0.74	
Intersection Signal Delay: 27.0	Intersection LOS: C
Intersection Capacity Utilization 67.9%	ICU Level of Service C
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

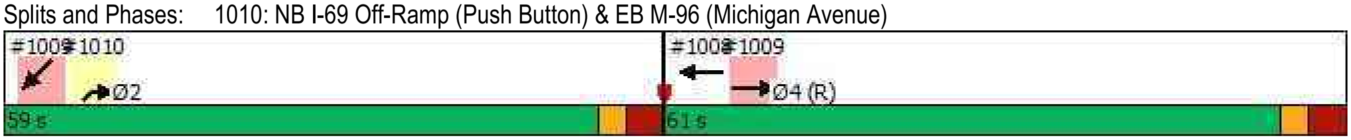
Splits and Phases: 1009: WB M-96 (Michigan Avenue) (Push Button)/WB M-96 (Michigan Avenue) & EB M-96 (Michigan Avenue)

Lane Group	EBT	EBR	WBL	WBT	NEL	NER	Ø4
Lane Configurations							
Traffic Volume (vph)	1036	0	0	0	0	122	
Future Volume (vph)	1036	0	0	0	0	122	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	0.95	1.00	1.00	1.00	1.00	1.00	
Frt						0.865	
Flt Protected							
Satd. Flow (prot)	3539	0	0	0	0	1611	
Flt Permitted							
Satd. Flow (perm)	3539	0	0	0	0	1611	
Right Turn on Red		Yes				Yes	
Satd. Flow (RTOR)						226	
Link Speed (mph)	45			45	25		
Link Distance (ft)	206			309	315		
Travel Time (s)	3.1			4.7	8.6		
Peak Hour Factor	0.86	0.86	0.92	0.92	0.93	0.75	
Heavy Vehicles (%)	2%	2%	2%	2%	6%	2%	
Adj. Flow (vph)	1205	0	0	0	0	163	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	1205	0	0	0	0	163	
Turn Type	NA					Prot	
Protected Phases	Free!					2!	4
Permitted Phases							
Minimum Split (s)						16.0	16.0
Total Split (s)						59.0	61.0
Total Split (%)						49.2%	51%
Yellow Time (s)						2.5	2.5
All-Red Time (s)						3.5	3.5
Lost Time Adjust (s)						0.0	
Total Lost Time (s)						6.0	
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)	120.0					53.0	
Actuated g/C Ratio	1.00					0.44	
v/c Ratio	0.34					0.19	
Control Delay	0.2					1.1	
Queue Delay	0.0					0.0	
Total Delay	0.2					1.1	
LOS	A					A	
Approach Delay	0.2				1.1		
Approach LOS	A				A		
Queue Length 50th (ft)	0					0	
Queue Length 95th (ft)	0					0	
Internal Link Dist (ft)	126			229	235		
Turn Bay Length (ft)							
Base Capacity (vph)	3539					837	
Starvation Cap Reductn	0					0	
Spillback Cap Reductn	0					0	
Storage Cap Reductn	0					0	

Lane Group	EBT	EBR	WBL	WBT	NEL	NER	Ø4
Reduced v/c Ratio	0.34					0.19	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 92 (77%), Referenced to phase 4:WBT, Start of Green	
Natural Cycle: 60	
Control Type: Pretimed	
Maximum v/c Ratio: 0.74	
Intersection Signal Delay: 0.3	Intersection LOS: A
Intersection Capacity Utilization 67.9%	ICU Level of Service C
Analysis Period (min) 15	
! Phase conflict between lane groups.	

Splits and Phases: 1010: NB I-69 Off-Ramp (Push Button) & EB M-96 (Michigan Avenue)



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	1010	192	76	50	0	0	84	85
Future Volume (vph)	0	0	0	0	1010	192	76	50	0	0	84	85
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		80	0		0	0		0
Storage Lanes	0		0	0		1	1		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.976							0.850
Flt Protected							0.950					
Satd. Flow (prot)	0	0	0	0	5012	0	1671	1863	0	0	1845	1568
Flt Permitted							0.687					
Satd. Flow (perm)	0	0	0	0	5012	0	1209	1863	0	0	1845	1568
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					59							86
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		152			212			101			1197	
Travel Time (s)		2.3			3.2			2.0			23.3	
Peak Hour Factor	0.92	0.92	0.92	0.87	0.87	0.87	0.67	0.67	0.67	0.77	0.77	0.77
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	8%	2%	2%	3%	3%	3%
Adj. Flow (vph)	0	0	0	0	1161	221	113	75	0	0	109	110
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1382	0	113	75	0	0	109	110
Turn Type					NA		Perm	NA			NA	Perm
Protected Phases					6			4			8	
Permitted Phases							4					8
Minimum Split (s)					31.0		17.0	17.0			17.0	17.0
Total Split (s)					79.0		41.0	41.0			41.0	41.0
Total Split (%)					65.8%		34.2%	34.2%			34.2%	34.2%
Yellow Time (s)					3.5		3.5	3.5			3.5	3.5
All-Red Time (s)					2.5		2.5	2.5			6.0	6.0
Lost Time Adjust (s)					0.0		0.0	0.0			0.0	0.0
Total Lost Time (s)					6.0		6.0	6.0			9.5	9.5
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)					73.0		35.0	35.0			31.5	31.5
Actuated g/C Ratio					0.61		0.29	0.29			0.26	0.26
v/c Ratio					0.45		0.32	0.14			0.23	0.23
Control Delay					12.6		8.6	5.5			36.2	12.1
Queue Delay					0.0		0.0	0.0			0.0	0.0
Total Delay					12.6		8.6	5.5			36.2	12.1
LOS					B		A	A			D	B
Approach Delay					12.6			7.4			24.1	
Approach LOS					B			A			C	
Queue Length 50th (ft)					189		11	7			66	14
Queue Length 95th (ft)					212		11	8			98	43
Internal Link Dist (ft)		72			132			21			1117	
Turn Bay Length (ft)												
Base Capacity (vph)					3072		352	543			484	475

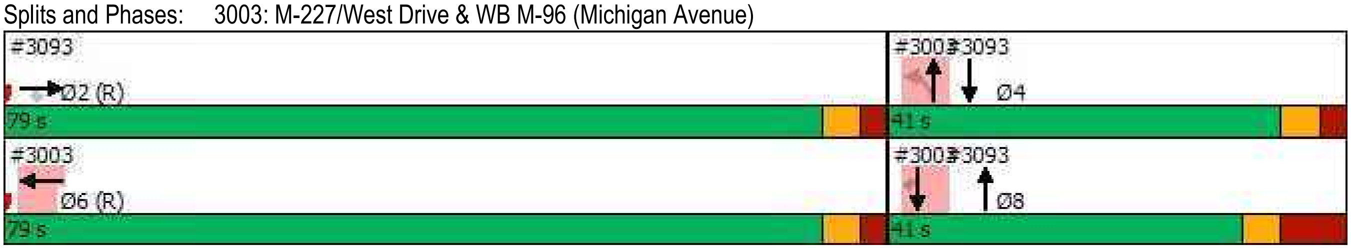
Lane Group	Ø2
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	2
Permitted Phases	
Minimum Split (s)	16.0
Total Split (s)	79.0
Total Split (%)	66%
Yellow Time (s)	3.5
All-Red Time (s)	2.5
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
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)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
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					0.45		0.32	0.14			0.23	0.23

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 112 (93%), Referenced to phase 2:EBT and 6:, Start of Green
Natural Cycle: 50
Control Type: Pretimed
Maximum v/c Ratio: 0.54
Intersection Signal Delay: 13.5 Intersection LOS: B
Intersection Capacity Utilization 53.4% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 3003: M-227/West Drive & WB M-96 (Michigan Avenue)



Lane Group	Ø2
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

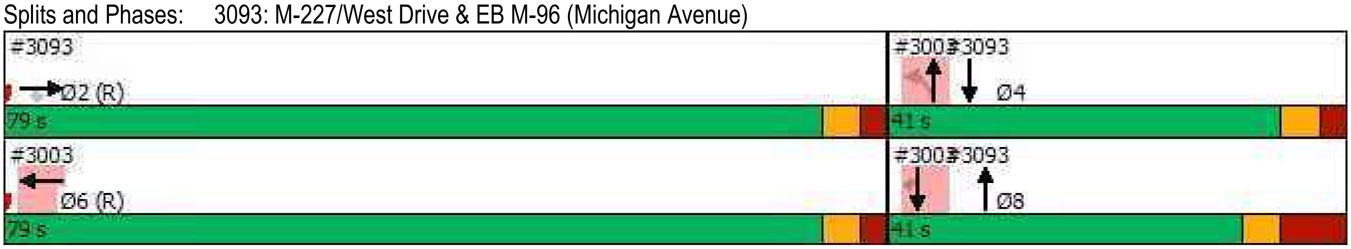
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1106	59	0	0	0	0	126	30	0	84	0
Future Volume (vph)	0	1106	59	0	0	0	0	126	30	0	84	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		65	0		0	100		0	0		0
Storage Lanes	0		1	0		0	1		0	0		0
Taper Length (ft)	25			25			70			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Frt			0.850					0.971				
Flt Protected												
Satd. Flow (prot)	0	3574	1442	0	0	0	0	3344	0	0	1881	0
Flt Permitted												
Satd. Flow (perm)	0	3574	1442	0	0	0	0	3344	0	0	1881	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			59					24				
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		161			222			1117			101	
Travel Time (s)		2.4			3.4			21.8			2.0	
Peak Hour Factor	0.95	0.95	0.95	0.92	0.92	0.92	0.72	0.72	0.72	0.83	0.83	0.83
Heavy Vehicles (%)	2%	1%	12%	2%	2%	2%	2%	6%	0%	2%	1%	2%
Adj. Flow (vph)	0	1164	62	0	0	0	0	175	42	0	101	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1164	62	0	0	0	0	217	0	0	101	0
Turn Type		NA	Perm					NA			NA	
Protected Phases		2						8			4	
Permitted Phases			2									
Minimum Split (s)		16.0	16.0					17.0			17.0	
Total Split (s)		79.0	79.0					41.0			41.0	
Total Split (%)		65.8%	65.8%					34.2%			34.2%	
Yellow Time (s)		3.5	3.5					3.5			3.5	
All-Red Time (s)		2.5	2.5					6.0			2.5	
Lost Time Adjust (s)		0.0	0.0					0.0			0.0	
Total Lost Time (s)		6.0	6.0					9.5			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		73.0	73.0					31.5			35.0	
Actuated g/C Ratio		0.61	0.61					0.26			0.29	
v/c Ratio		0.54	0.07					0.24			0.18	
Control Delay		4.4	0.2					31.7			0.7	
Queue Delay		0.0	0.0					0.0			0.0	
Total Delay		4.4	0.2					31.7			0.7	
LOS		A	A					C			A	
Approach Delay		4.2						31.7			0.7	
Approach LOS		A						C			A	
Queue Length 50th (ft)		45	1					61			0	
Queue Length 95th (ft)		52	0					73			0	
Internal Link Dist (ft)		81			142			1037			21	
Turn Bay Length (ft)			65									
Base Capacity (vph)		2174	900					895			548	

Lane Group	Ø6
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	6
Permitted Phases	
Minimum Split (s)	31.0
Total Split (s)	79.0
Total Split (%)	66%
Yellow Time (s)	3.5
All-Red Time (s)	2.5
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
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)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn		0	0					0			0	
Spillback Cap Reductn		0	0					18			0	
Storage Cap Reductn		0	0					0			0	
Reduced v/c Ratio		0.54	0.07					0.25			0.18	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 112 (93%), Referenced to phase 2:EBT and 6:, Start of Green	
Natural Cycle: 50	
Control Type: Pretimed	
Maximum v/c Ratio: 0.54	
Intersection Signal Delay: 7.8	Intersection LOS: A
Intersection Capacity Utilization 53.4%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 3093: M-227/West Drive & EB M-96 (Michigan Avenue)



Lane Group	Ø6
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

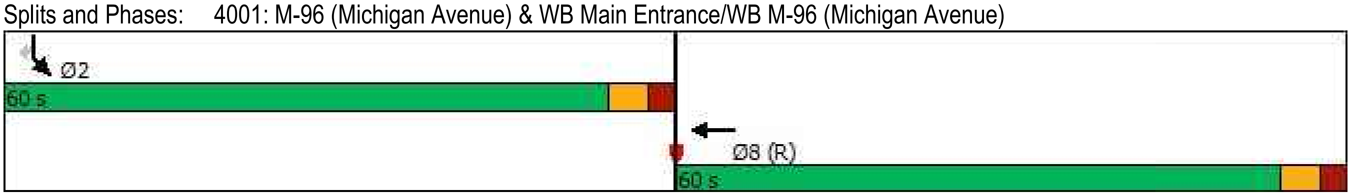
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations										
Traffic Volume (vph)	0	0	0	0	3106	2611	2434	210	0	0
Future Volume (vph)	0	0	0	0	3106	2611	2434	210	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	300		300	0	200	0	0
Storage Lanes	0		0	0		1	2	1	0	0
Taper Length (ft)	25			25			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.88	0.97	1.00	1.00	1.00
Frt						0.850		0.850		
Flt Protected							0.950			
Satd. Flow (prot)	0	0	0	0	3539	2787	3433	1583	0	0
Flt Permitted							0.950			
Satd. Flow (perm)	0	0	0	0	3539	2787	3433	1583	0	0
Right Turn on Red			Yes	Yes		Yes		Yes		
Satd. Flow (RTOR)						527		27		
Link Speed (mph)		45			45		55		45	
Link Distance (ft)		858			894		434		215	
Travel Time (s)		13.0			13.5		5.4		3.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	3376	2838	2646	228	0	0
Shared Lane Traffic (%)										
Lane Group Flow (vph)	0	0	0	0	3376	2838	2646	228	0	0
Turn Type					NA	Free	Prot	Perm		
Protected Phases					8		2			
Permitted Phases						Free		2		
Minimum Split (s)					16.0		16.0	16.0		
Total Split (s)					60.0		60.0	60.0		
Total Split (%)					50.0%		50.0%	50.0%		
Yellow Time (s)					3.5		3.5	3.5		
All-Red Time (s)					2.5		2.5	2.5		
Lost Time Adjust (s)					0.0		0.0	0.0		
Total Lost Time (s)					6.0		6.0	6.0		
Lead/Lag										
Lead-Lag Optimize?										
Act Effct Green (s)					54.0	120.0	54.0	54.0		
Actuated g/C Ratio					0.45	1.00	0.45	0.45		
v/c Ratio					2.12	1.02	1.71	0.31		
Control Delay					525.3	21.4	345.2	14.9		
Queue Delay					0.0	0.0	0.0	0.0		
Total Delay					525.3	21.4	345.2	14.9		
LOS					F	C	F	B		
Approach Delay					295.2		319.0			
Approach LOS					F		F			
Queue Length 50th (ft)					~2203	~445	~1563	72		
Queue Length 95th (ft)					m#1207	m0	m#1587	m92		
Internal Link Dist (ft)		778			814		354		135	
Turn Bay Length (ft)						300		200		
Base Capacity (vph)					1592	2787	1544	727		
Starvation Cap Reductn					0	0	0	0		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Spillback Cap Reductn					0	0	0	0		
Storage Cap Reductn					0	0	0	0		
Reduced v/c Ratio					2.12	1.02	1.71	0.31		

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 36 (30%), Referenced to phase 8:WBT, Start of Green
Natural Cycle: 150
Control Type: Pretimed
Maximum v/c Ratio: 2.12
Intersection Signal Delay: 302.7 Intersection LOS: F
Intersection Capacity Utilization 165.3% ICU Level of Service H
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

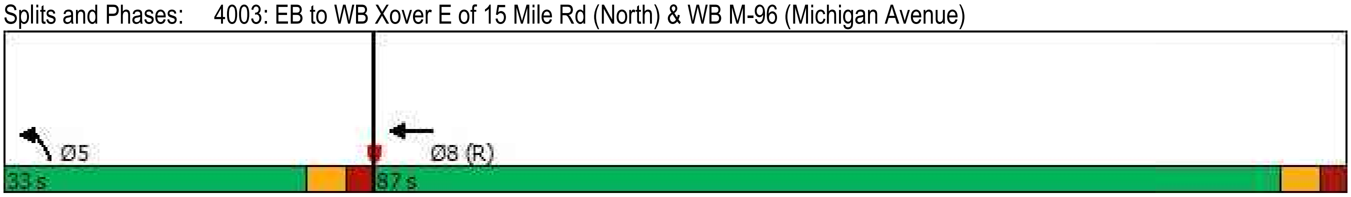
Splits and Phases: 4001: M-96 (Michigan Avenue) & WB Main Entrance/WB M-96 (Michigan Avenue)



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑↑	↰↰	
Traffic Volume (vph)	0	0	0	4843	962	0
Future Volume (vph)	0	0	0	4843	962	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	0.97	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	5085	3433	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	5085	3433	0
Right Turn on Red		Yes			Yes	Yes
Satd. Flow (RTOR)						
Link Speed (mph)	45			45	25	
Link Distance (ft)	660			254	113	
Travel Time (s)	10.0			3.8	3.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.70	0.92
Adj. Flow (vph)	0	0	0	5264	1374	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	5264	1374	0
Turn Type				NA	Prot	
Protected Phases				8	5	
Permitted Phases						
Minimum Split (s)				16.0	13.0	
Total Split (s)				87.0	33.0	
Total Split (%)				72.5%	27.5%	
Yellow Time (s)				3.5	3.5	
All-Red Time (s)				2.5	2.5	
Lost Time Adjust (s)				0.0	0.0	
Total Lost Time (s)				6.0	6.0	
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)				81.0	27.0	
Actuated g/C Ratio				0.68	0.22	
v/c Ratio				1.53	1.78	
Control Delay				261.1	385.9	
Queue Delay				0.4	0.0	
Total Delay				261.5	385.9	
LOS				F	F	
Approach Delay				261.5	385.9	
Approach LOS				F	F	
Queue Length 50th (ft)				~2100	~835	
Queue Length 95th (ft)				m#1377	m#577	
Internal Link Dist (ft)	580			174	33	
Turn Bay Length (ft)						
Base Capacity (vph)				3432	772	
Starvation Cap Reductn				0	0	
Spillback Cap Reductn				647	0	
Storage Cap Reductn				0	0	
Reduced v/c Ratio				1.89	1.78	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 116 (97%), Referenced to phase 8:WBT, Start of Green	
Natural Cycle: 150	
Control Type: Pretimed	
Maximum v/c Ratio: 1.78	
Intersection Signal Delay: 287.3	Intersection LOS: F
Intersection Capacity Utilization 187.8%	ICU Level of Service H
Analysis Period (min) 15	
~ Volume exceeds capacity, queue is theoretically infinite.	
Queue shown is maximum after two cycles.	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 4003: EB to WB Xover E of 15 Mile Rd (North) & WB M-96 (Michigan Avenue)



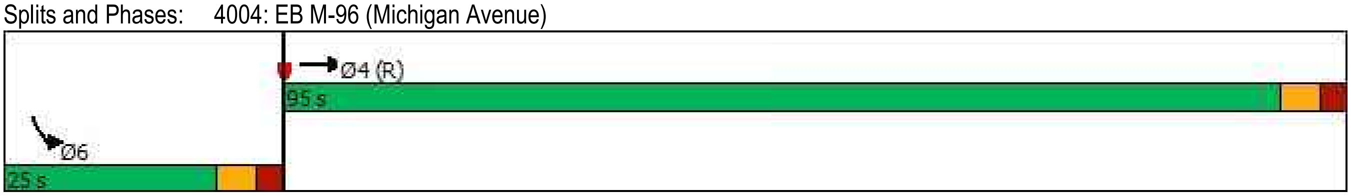
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	2118	0	0	576	0
Future Volume (vph)	0	2118	0	0	576	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	0.97	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	3433	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	3433	0
Right Turn on Red				Yes	Yes	Yes
Satd. Flow (RTOR)					30	
Link Speed (mph)		55	55		25	
Link Distance (ft)		2678	669		109	
Travel Time (s)		33.2	8.3		3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	2302	0	0	626	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	2302	0	0	626	0
Turn Type		NA			Prot	
Protected Phases		4			6	
Permitted Phases						
Detector Phase		4			6	
Switch Phase						
Minimum Initial (s)		10.0			7.0	
Minimum Split (s)		16.0			13.0	
Total Split (s)		95.0			25.0	
Total Split (%)		79.2%			20.8%	
Yellow Time (s)		3.5			3.5	
All-Red Time (s)		2.5			2.5	
Lost Time Adjust (s)		0.0			0.0	
Total Lost Time (s)		6.0			6.0	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode		C-Max			None	
Act Effct Green (s)		89.0			19.0	
Actuated g/C Ratio		0.74			0.16	
v/c Ratio		0.88			1.10	
Control Delay		5.6			93.1	
Queue Delay		21.6			0.0	
Total Delay		27.2			93.1	
LOS		C			F	
Approach Delay		27.2			93.1	
Approach LOS		C			F	
Queue Length 50th (ft)		52			~273	
Queue Length 95th (ft)		m231			m#264	
Internal Link Dist (ft)		2598	589		29	
Turn Bay Length (ft)						
Base Capacity (vph)		2624			568	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Starvation Cap Reductn		0			0	
Spillback Cap Reductn		411			0	
Storage Cap Reductn		0			0	
Reduced v/c Ratio		1.04			1.10	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 20 (17%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.10	
Intersection Signal Delay: 41.3	Intersection LOS: D
Intersection Capacity Utilization 124.5%	ICU Level of Service H
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4004: EB M-96 (Michigan Avenue)



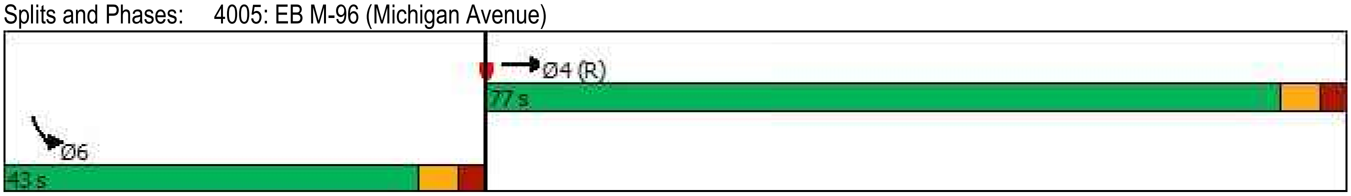
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	1191	0	0	1028	0
Future Volume (vph)	0	1191	0	0	1028	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	0.97	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	3433	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	3433	0
Right Turn on Red				Yes	Yes	Yes
Satd. Flow (RTOR)					113	
Link Speed (mph)		55	55		25	
Link Distance (ft)		1786	608		109	
Travel Time (s)		22.1	7.5		3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1295	0	0	1117	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1295	0	0	1117	0
Turn Type		NA			Prot	
Protected Phases		4			6	
Permitted Phases						
Detector Phase		4			6	
Switch Phase						
Minimum Initial (s)		10.0			7.0	
Minimum Split (s)		16.0			13.0	
Total Split (s)		77.0			43.0	
Total Split (%)		64.2%			35.8%	
Yellow Time (s)		3.5			3.5	
All-Red Time (s)		2.5			2.5	
Lost Time Adjust (s)		0.0			0.0	
Total Lost Time (s)		6.0			6.0	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode		C-Max			Max	
Act Effct Green (s)		71.0			37.0	
Actuated g/C Ratio		0.59			0.31	
v/c Ratio		0.62			0.98	
Control Delay		17.4			46.3	
Queue Delay		0.1			0.0	
Total Delay		17.5			46.3	
LOS		B			D	
Approach Delay		17.5			46.3	
Approach LOS		B			D	
Queue Length 50th (ft)		321			406	
Queue Length 95th (ft)		389			m397	
Internal Link Dist (ft)		1706	528		29	
Turn Bay Length (ft)						
Base Capacity (vph)		2093			1136	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Starvation Cap Reductn		0			0	
Spillback Cap Reductn		79			0	
Storage Cap Reductn		0			0	
Reduced v/c Ratio		0.64			0.98	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 112 (93%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.98	
Intersection Signal Delay: 30.8	Intersection LOS: C
Intersection Capacity Utilization 73.3%	ICU Level of Service D
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4005: EB M-96 (Michigan Avenue)

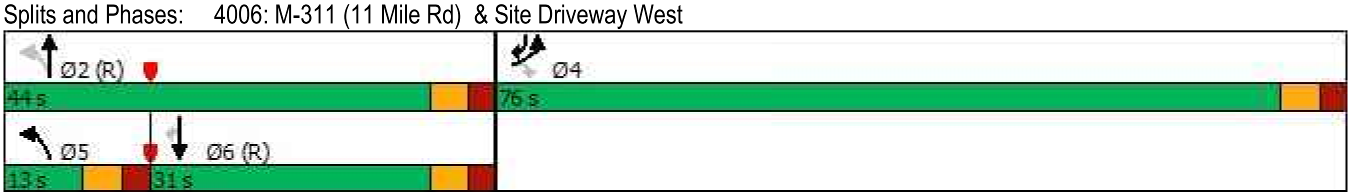


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	1152	61	61	162	189	1152
Future Volume (vph)	1152	61	61	162	189	1152
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	250	250			0
Storage Lanes	2	1	1			1
Taper Length (ft)	25		25			
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	1.00
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	3433	1583	1770	1863	1863	1583
Flt Permitted	0.950		0.440			
Satd. Flow (perm)	3433	1583	820	1863	1863	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		66				679
Link Speed (mph)	25			55	55	
Link Distance (ft)	1178			1461	940	
Travel Time (s)	32.1			18.1	11.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1252	66	66	176	205	1252
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1252	66	66	176	205	1252
Turn Type	Prot	Perm	pm+pt	NA	NA	pm+ov
Protected Phases	4		5	2	6	4
Permitted Phases		4	2			6
Detector Phase	4	4	5	2	6	4
Switch Phase						
Minimum Initial (s)	7.0	7.0	7.0	10.0	10.0	7.0
Minimum Split (s)	14.0	14.0	13.0	17.0	17.0	14.0
Total Split (s)	76.0	76.0	13.0	44.0	31.0	76.0
Total Split (%)	63.3%	63.3%	10.8%	36.7%	25.8%	63.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.5	2.5	2.5	2.5	2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None	None	Min	C-Max	C-Max	None
Act Effct Green (s)	63.3	63.3	44.7	44.7	31.7	101.0
Actuated g/C Ratio	0.53	0.53	0.37	0.37	0.26	0.84
v/c Ratio	0.69	0.08	0.18	0.25	0.42	0.87
Control Delay	22.9	2.8	29.2	29.7	53.3	21.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	22.9	2.8	29.2	29.7	53.3	21.0
LOS	C	A	C	C	D	C
Approach Delay	21.9			29.5	25.5	
Approach LOS	C			C	C	
Queue Length 50th (ft)	310	0	36	103	167	334
Queue Length 95th (ft)	379	19	71	164	246	1101

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Internal Link Dist (ft)	1098			1381	860	
Turn Bay Length (ft)		250	250			
Base Capacity (vph)	2002	950	361	693	491	1487
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	0.63	0.07	0.18	0.25	0.42	0.84

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 60 (50%), Referenced to phase 2:NBTL and 6:SBT, Start of Green	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.87	
Intersection Signal Delay: 24.2	Intersection LOS: C
Intersection Capacity Utilization 87.2%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 4006: M-311 (11 Mile Rd) & Site Driveway West

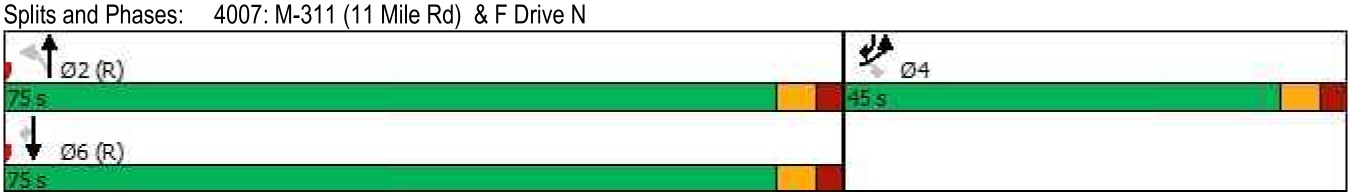


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	1030	30	30	1981	2008	1030
Future Volume (vph)	1030	30	30	1981	2008	1030
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	250	400			0
Storage Lanes	2	1	1			1
Taper Length (ft)	25		25			
Lane Util. Factor	0.97	1.00	1.00	0.95	0.95	1.00
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	3433	1583	1770	3539	3539	1583
Flt Permitted	0.950		0.058			
Satd. Flow (perm)	3433	1583	108	3539	3539	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		6				
Link Speed (mph)	45			55	55	
Link Distance (ft)	1846			974	1093	
Travel Time (s)	28.0			12.1	13.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1120	33	33	2153	2183	1120
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1120	33	33	2153	2183	1120
Turn Type	Prot	Perm	Perm	NA	NA	pm+ov
Protected Phases	4			2	6	4
Permitted Phases		4	2			6
Detector Phase	4	4	2	2	6	4
Switch Phase						
Minimum Initial (s)	7.0	7.0	10.0	10.0	10.0	7.0
Minimum Split (s)	13.0	13.0	16.0	16.0	16.0	13.0
Total Split (s)	45.0	45.0	75.0	75.0	75.0	45.0
Total Split (%)	37.5%	37.5%	62.5%	62.5%	62.5%	37.5%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.5	2.5	2.5	2.5	2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None	None	C-Max	C-Max	C-Max	None
Act Effct Green (s)	39.0	39.0	69.0	69.0	69.0	120.0
Actuated g/C Ratio	0.32	0.32	0.58	0.58	0.58	1.00
v/c Ratio	1.00	0.06	0.53	1.06	1.07	0.71
Control Delay	68.7	24.5	31.0	50.0	56.0	0.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	68.7	24.5	31.0	50.0	56.0	0.8
LOS	E	C	C	D	E	A
Approach Delay	67.4			49.8	37.3	
Approach LOS	E			D	D	
Queue Length 50th (ft)	~449	14	6	~957	~985	0
Queue Length 95th (ft)	#600	39	m13	m#976	m#1015	m0

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Internal Link Dist (ft)	1766			894	1013	
Turn Bay Length (ft)		250	400			
Base Capacity (vph)	1115	518	62	2034	2034	1583
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	1.00	0.06	0.53	1.06	1.07	0.71

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 20 (17%), Referenced to phase 2:NBTL and 6:SBT, Start of Green	
Natural Cycle: 140	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.07	
Intersection Signal Delay: 46.6	Intersection LOS: D
Intersection Capacity Utilization 94.9%	ICU Level of Service F
Analysis Period (min) 15	
~ Volume exceeds capacity, queue is theoretically infinite. Queue shown is maximum after two cycles.	
# 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.	
m Volume for 95th percentile queue is metered by upstream signal.	

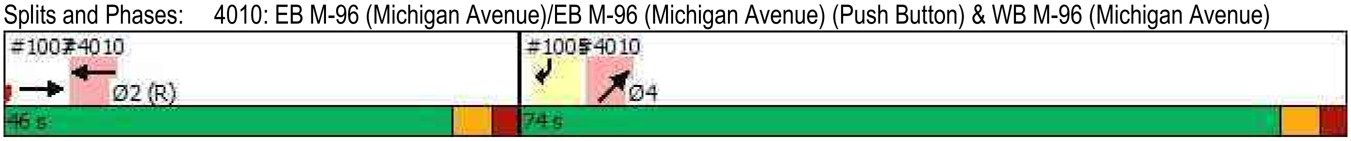
Splits and Phases: 4007: M-311 (11 Mile Rd) & F Drive N



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	1824	0	0	3821	0	0	0	0
Future Volume (vph)	0	0	0	0	1824	0	0	3821	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.91	1.00	1.00	1.00	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	0	0	0	5085	0	0	5085	0	0	0	0
Flt Permitted												
Satd. Flow (perm)	0	0	0	0	5085	0	0	5085	0	0	0	0
Right Turn on Red			Yes			Yes	Yes		Yes			Yes
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		194			183			156			190	
Travel Time (s)		2.9			2.8			2.4			2.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.90	0.90	0.90	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	1983	0	0	4246	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1983	0	0	4246	0	0	0	0
Turn Type					NA			NA				
Protected Phases					2			4				
Permitted Phases												
Minimum Split (s)					17.0			17.0				
Total Split (s)					46.0			74.0				
Total Split (%)					38.3%			61.7%				
Yellow Time (s)					3.5			3.5				
All-Red Time (s)					2.5			2.5				
Lost Time Adjust (s)					0.0			0.0				
Total Lost Time (s)					6.0			6.0				
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)					40.0			68.0				
Actuated g/C Ratio					0.33			0.57				
v/c Ratio					1.17			1.47				
Control Delay					112.4			235.6				
Queue Delay					0.0			0.0				
Total Delay					112.4			235.6				
LOS					F			F				
Approach Delay					112.4			235.6				
Approach LOS					F			F				
Queue Length 50th (ft)					~682			~1660				
Queue Length 95th (ft)					#765			m#979				
Internal Link Dist (ft)		114			103			76			110	
Turn Bay Length (ft)												
Base Capacity (vph)					1695			2881				
Starvation Cap Reductn					0			0				
Spillback Cap Reductn					0			0				
Storage Cap Reductn					0			0				
Reduced v/c Ratio					1.17			1.47				

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 100 (83%), Referenced to phase 2:EBT, Start of Green	
Natural Cycle: 150	
Control Type: Pretimed	
Maximum v/c Ratio: 1.82	
Intersection Signal Delay: 196.4	Intersection LOS: F
Intersection Capacity Utilization 119.1%	ICU Level of Service H
Analysis Period (min) 15	
~ Volume exceeds capacity, queue is theoretically infinite.	
Queue shown is maximum after two cycles.	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 4010: EB M-96 (Michigan Avenue)/EB M-96 (Michigan Avenue) (Push Button) & WB M-96 (Michigan Avenue)



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	871	0	0	0	0	0	2549	462	0	0	0
Future Volume (vph)	0	871	0	0	0	0	0	2549	462	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		250	0		0
Storage Lanes	0		0	0		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	1.00	1.00
Frt									0.850			
Flt Protected												
Satd. Flow (prot)	0	3539	0	0	0	0	0	5085	1583	0	0	0
Flt Permitted												
Satd. Flow (perm)	0	3539	0	0	0	0	0	5085	1583	0	0	0
Right Turn on Red	Yes		Yes			Yes			Yes			Yes
Satd. Flow (RTOR)									36			
Link Speed (mph)		55			55			55			30	
Link Distance (ft)		167			316			655			182	
Travel Time (s)		2.1			3.9			8.1			4.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	947	0	0	0	0	0	2771	502	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	947	0	0	0	0	0	2771	502	0	0	0
Turn Type		NA						NA	Perm			
Protected Phases		7						2				
Permitted Phases									2			
Minimum Split (s)		16.0						19.5	19.5			
Total Split (s)		51.0						69.0	69.0			
Total Split (%)		42.5%						57.5%	57.5%			
Yellow Time (s)		3.5						3.5	3.5			
All-Red Time (s)		2.5						6.0	6.0			
Lost Time Adjust (s)		0.0						0.0	0.0			
Total Lost Time (s)		6.0						9.5	9.5			
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		45.0						59.5	59.5			
Actuated g/C Ratio		0.38						0.50	0.50			
v/c Ratio		0.71						1.10	0.63			
Control Delay		31.9						74.0	20.2			
Queue Delay		0.0						0.4	0.0			
Total Delay		31.9						74.4	20.2			
LOS		C						E	C			
Approach Delay		31.9						66.1				
Approach LOS		C						E				
Queue Length 50th (ft)		350						~893	276			
Queue Length 95th (ft)		m351						m#831	m260			
Internal Link Dist (ft)		87			236			575			102	
Turn Bay Length (ft)									250			
Base Capacity (vph)		1327						2521	803			
Starvation Cap Reductn		0						0	0			

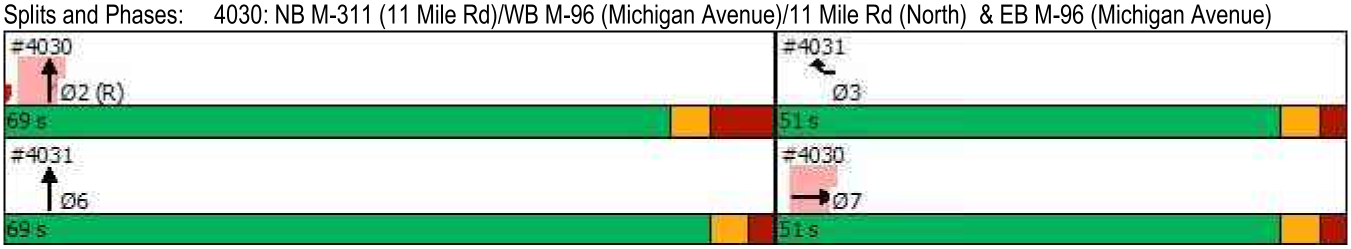
Lane Group	Ø3	Ø6
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Ideal Flow (vphpl)		
Storage Length (ft)		
Storage Lanes		
Taper Length (ft)		
Lane Util. Factor		
Frt		
Flt Protected		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Peak Hour Factor		
Adj. Flow (vph)		
Shared Lane Traffic (%)		
Lane Group Flow (vph)		
Turn Type		
Protected Phases	3	6
Permitted Phases		
Minimum Split (s)	16.0	16.0
Total Split (s)	51.0	69.0
Total Split (%)	43%	58%
Yellow Time (s)	3.5	3.5
All-Red Time (s)	2.5	2.5
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag		
Lead-Lag Optimize?		
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		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn		0						71	0			
Storage Cap Reductn		0						0	0			
Reduced v/c Ratio		0.71						1.13	0.63			

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 88 (73%), Referenced to phase 2:NBT, Start of Green
Natural Cycle: 140
Control Type: Pretimed
Maximum v/c Ratio: 1.19
Intersection Signal Delay: 58.4 Intersection LOS: E
Intersection Capacity Utilization 93.7% ICU Level of Service F
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4030: NB M-311 (11 Mile Rd)/WB M-96 (Michigan Avenue)/11 Mile Rd (North) & EB M-96 (Michigan Avenue)



Lane Group	Ø3	Ø6
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		

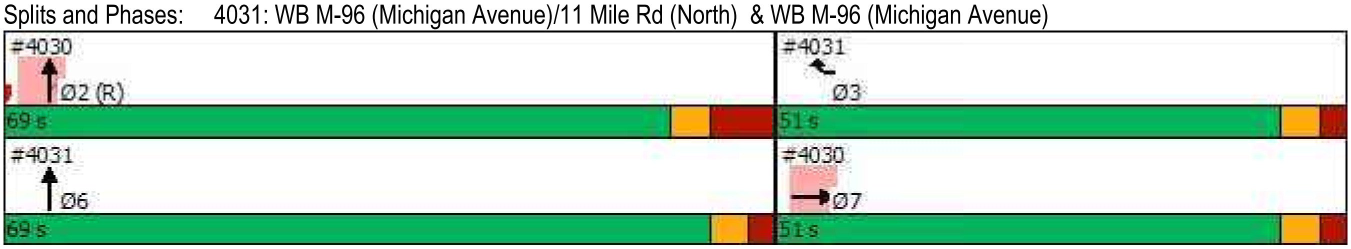
Intersection Summary

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø2	Ø7
Lane Configurations								
Traffic Volume (vph)	0	1477	2549	0	0	0		
Future Volume (vph)	0	1477	2549	0	0	0		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Lane Util. Factor	1.00	0.76	0.91	1.00	1.00	1.00		
Frt		0.850						
Flt Protected								
Satd. Flow (prot)	0	3610	5085	0	0	0		
Flt Permitted								
Satd. Flow (perm)	0	3610	5085	0	0	0		
Right Turn on Red		Yes		Yes				
Satd. Flow (RTOR)		1						
Link Speed (mph)	55		55			55		
Link Distance (ft)	405		182			493		
Travel Time (s)	5.0		2.3			6.1		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Adj. Flow (vph)	0	1605	2771	0	0	0		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	0	1605	2771	0	0	0		
Turn Type		Prot	NA					
Protected Phases		3	6				2	7
Permitted Phases								
Minimum Split (s)		16.0	16.0				19.5	16.0
Total Split (s)		51.0	69.0				69.0	51.0
Total Split (%)		42.5%	57.5%				58%	43%
Yellow Time (s)		3.5	3.5				3.5	3.5
All-Red Time (s)		2.5	2.5				6.0	2.5
Lost Time Adjust (s)		0.0	0.0					
Total Lost Time (s)		6.0	6.0					
Lead/Lag								
Lead-Lag Optimize?								
Act Effct Green (s)		45.0	63.0					
Actuated g/C Ratio		0.38	0.52					
v/c Ratio		1.19	1.04					
Control Delay		122.9	24.7					
Queue Delay		0.0	8.0					
Total Delay		122.9	32.7					
LOS		F	C					
Approach Delay	122.9		32.7					
Approach LOS	F		C					
Queue Length 50th (ft)		~658	~73					
Queue Length 95th (ft)		#778	m0					
Internal Link Dist (ft)	325		102			413		
Turn Bay Length (ft)								
Base Capacity (vph)		1354	2669					
Starvation Cap Reductn		0	51					
Spillback Cap Reductn		0	0					
Storage Cap Reductn		0	0					
Reduced v/c Ratio		1.19	1.06					

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 88 (73%), Referenced to phase 2:NBT, Start of Green	
Natural Cycle: 140	
Control Type: Pretimed	
Maximum v/c Ratio: 1.19	
Intersection Signal Delay: 65.8	Intersection LOS: E
Intersection Capacity Utilization 93.7%	ICU Level of Service F
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

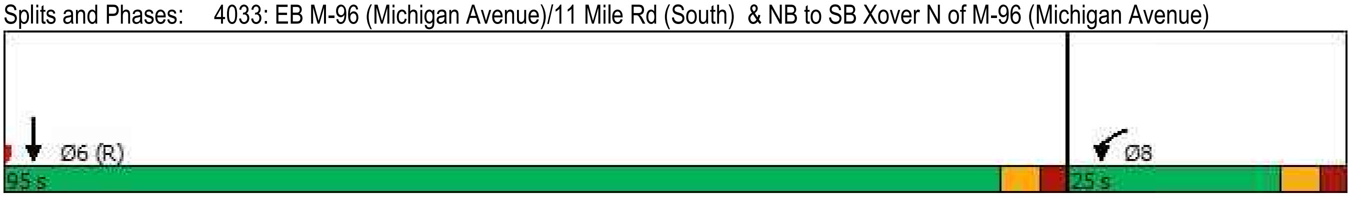
Splits and Phases: 4031: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & WB M-96 (Michigan Avenue)



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	491	0	0	0	0	3418
Future Volume (vph)	491	0	0	0	0	3418
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	0.91
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	3433	0	0	0	0	5085
Flt Permitted	0.950					
Satd. Flow (perm)	3433	0	0	0	0	5085
Right Turn on Red	Yes	Yes		Yes		
Satd. Flow (RTOR)	2					
Link Speed (mph)	25		55			30
Link Distance (ft)	105		587			495
Travel Time (s)	2.9		7.3			11.3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	534	0	0	0	0	3715
Shared Lane Traffic (%)						
Lane Group Flow (vph)	534	0	0	0	0	3715
Turn Type	Prot					NA
Protected Phases	8					6
Permitted Phases						
Minimum Split (s)	13.0					16.0
Total Split (s)	25.0					95.0
Total Split (%)	20.8%					79.2%
Yellow Time (s)	3.5					3.5
All-Red Time (s)	2.5					2.5
Lost Time Adjust (s)	0.0					0.0
Total Lost Time (s)	6.0					6.0
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)	19.0					89.0
Actuated g/C Ratio	0.16					0.74
v/c Ratio	0.98					0.99
Control Delay	35.6					16.7
Queue Delay	0.0					0.2
Total Delay	35.6					16.9
LOS	D					B
Approach Delay	35.6					16.9
Approach LOS	D					B
Queue Length 50th (ft)	172					179
Queue Length 95th (ft)	m130					#1168
Internal Link Dist (ft)	25		507			415
Turn Bay Length (ft)						
Base Capacity (vph)	545					3771
Starvation Cap Reductn	0					4
Spillback Cap Reductn	0					0
Storage Cap Reductn	0					0
Reduced v/c Ratio	0.98					0.99

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 89 (74%), Referenced to phase 6:SBT, Start of Green	
Natural Cycle: 100	
Control Type: Pretimed	
Maximum v/c Ratio: 0.99	
Intersection Signal Delay: 19.2	Intersection LOS: B
Intersection Capacity Utilization 142.7%	ICU Level of Service H
Analysis Period (min) 15	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	
m Volume for 95th percentile queue is metered by upstream signal.	

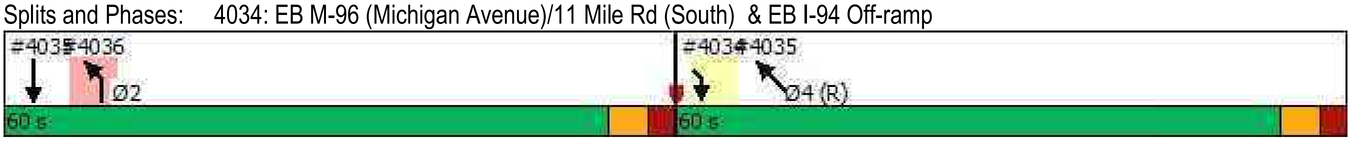
Splits and Phases: 4033: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & NB to SB Xover N of M-96 (Michigan Avenue)



Lane Group	NBL	NBT	SBT	SBR	SEL	SER	Ø2
Lane Configurations							
Traffic Volume (vph)	0	0	2430	0	0	988	
Future Volume (vph)	0	0	2430	0	0	988	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	0.91	1.00	1.00	0.88	
Frt						0.850	
Flt Protected							
Satd. Flow (prot)	0	0	5085	0	0	2787	
Flt Permitted							
Satd. Flow (perm)	0	0	5085	0	0	2787	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)						54	
Link Speed (mph)		30	30		30		
Link Distance (ft)		495	145		346		
Travel Time (s)		11.3	3.3		7.9		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	0	0	2641	0	0	1074	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	2641	0	0	1074	
Turn Type			NA			Prot	
Protected Phases			Free!			4!	2
Permitted Phases							
Minimum Split (s)						16.0	16.0
Total Split (s)						60.0	60.0
Total Split (%)						50.0%	50%
Yellow Time (s)						3.5	3.5
All-Red Time (s)						2.5	2.5
Lost Time Adjust (s)						0.0	
Total Lost Time (s)						6.0	
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)			120.0			54.0	
Actuated g/C Ratio			1.00			0.45	
v/c Ratio			0.52			0.84	
Control Delay			4.5			34.7	
Queue Delay			0.0			0.0	
Total Delay			4.5			34.7	
LOS			A			C	
Approach Delay			4.5		34.7		
Approach LOS			A		C		
Queue Length 50th (ft)			454			390	
Queue Length 95th (ft)			m0			497	
Internal Link Dist (ft)		415	65		266		
Turn Bay Length (ft)							
Base Capacity (vph)			5085			1283	
Starvation Cap Reductn			0			0	
Spillback Cap Reductn			113			0	
Storage Cap Reductn			0			0	
Reduced v/c Ratio			0.53			0.84	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 27 (23%), Referenced to phase 4:SER, Start of Green	
Natural Cycle: 150	
Control Type: Pretimed	
Maximum v/c Ratio: 1.16	
Intersection Signal Delay: 13.2	Intersection LOS: B
Intersection Capacity Utilization 104.0%	ICU Level of Service G
Analysis Period (min) 15	
m Volume for 95th percentile queue is metered by upstream signal.	
! Phase conflict between lane groups.	

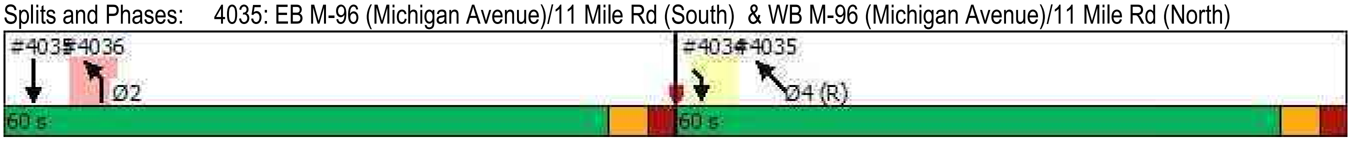
Splits and Phases: 4034: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & EB I-94 Off-ramp



Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations					↑↑↑						↑↑↑	
Traffic Volume (vph)	0	0	0	0	2430	0	0	0	0	0	2436	0
Future Volume (vph)	0	0	0	0	2430	0	0	0	0	0	2436	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.91	1.00	1.00	1.00	1.00	1.00	0.91	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	0	0	0	5085	0	0	0	0	0	5085	0
Flt Permitted												
Satd. Flow (perm)	0	0	0	0	5085	0	0	0	0	0	5085	0
Right Turn on Red			Yes			Yes			Yes	Yes		Yes
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		145			194			233			108	
Travel Time (s)		3.3			4.4			5.3			2.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	2641	0	0	0	0	0	2648	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	2641	0	0	0	0	0	2648	0
Turn Type					NA						NA	
Protected Phases					2						4	
Permitted Phases												
Minimum Split (s)					16.0						16.0	
Total Split (s)					60.0						60.0	
Total Split (%)					50.0%						50.0%	
Yellow Time (s)					3.5						3.5	
All-Red Time (s)					2.5						2.5	
Lost Time Adjust (s)					0.0						0.0	
Total Lost Time (s)					6.0						6.0	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)					54.0						54.0	
Actuated g/C Ratio					0.45						0.45	
v/c Ratio					1.15						1.16	
Control Delay					96.2						103.1	
Queue Delay					0.0						0.0	
Total Delay					96.2						103.1	
LOS					F						F	
Approach Delay					96.2						103.1	
Approach LOS					F						F	
Queue Length 50th (ft)					~884						~899	
Queue Length 95th (ft)					#978						m#788	
Internal Link Dist (ft)		65			114			153			28	
Turn Bay Length (ft)												
Base Capacity (vph)					2288						2288	
Starvation Cap Reductn					0						0	
Spillback Cap Reductn					0						0	
Storage Cap Reductn					0						0	
Reduced v/c Ratio					1.15						1.16	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 27 (23%), Referenced to phase 4:SER, Start of Green	
Natural Cycle: 150	
Control Type: Pretimed	
Maximum v/c Ratio: 1.16	
Intersection Signal Delay: 99.7	Intersection LOS: F
Intersection Capacity Utilization 113.1%	ICU Level of Service H
Analysis Period (min) 15	
~ Volume exceeds capacity, queue is theoretically infinite.	
Queue shown is maximum after two cycles.	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 4035: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & WB M-96 (Michigan Avenue)/11 Mile Rd (North)



Lane Group	NBL	NBR	SET	SER	NWL	NWT	Ø4
Lane Configurations							
Traffic Volume (vph)	104	0	0	0	0	2436	
Future Volume (vph)	104	0	0	0	0	2436	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.91	
Frt							
Flt Protected	0.950						
Satd. Flow (prot)	1719	0	0	0	0	5085	
Flt Permitted	0.950						
Satd. Flow (perm)	1719	0	0	0	0	5085	
Right Turn on Red	Yes	Yes		Yes			
Satd. Flow (RTOR)	30						
Link Speed (mph)	30		30			30	
Link Distance (ft)	271		337			233	
Travel Time (s)	6.2		7.7			5.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Heavy Vehicles (%)	5%	2%	2%	2%	2%	2%	
Adj. Flow (vph)	113	0	0	0	0	2648	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	113	0	0	0	0	2648	
Turn Type	Prot					NA	
Protected Phases	2!					Free!	4
Permitted Phases							
Minimum Split (s)	16.0						16.0
Total Split (s)	60.0						60.0
Total Split (%)	50.0%						50%
Yellow Time (s)	3.5						3.5
All-Red Time (s)	2.5						2.5
Lost Time Adjust (s)	0.0						
Total Lost Time (s)	6.0						
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)	54.0					120.0	
Actuated g/C Ratio	0.45					1.00	
v/c Ratio	0.14					0.52	
Control Delay	14.7					4.6	
Queue Delay	0.0					0.0	
Total Delay	14.7					4.6	
LOS	B					A	
Approach Delay	14.7					4.6	
Approach LOS	B					A	
Queue Length 50th (ft)	36					109	
Queue Length 95th (ft)	73					m0	
Internal Link Dist (ft)	191		257			153	
Turn Bay Length (ft)							
Base Capacity (vph)	790					5085	
Starvation Cap Reductn	0					0	
Spillback Cap Reductn	0					0	
Storage Cap Reductn	0					0	

Lane Group	NBL	NBR	SET	SER	NWL	NWT	Ø4
Reduced v/c Ratio	0.14					0.52	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 27 (23%), Referenced to phase 4:SER, Start of Green	
Natural Cycle: 150	
Control Type: Pretimed	
Maximum v/c Ratio: 1.16	
Intersection Signal Delay: 5.0	Intersection LOS: A
Intersection Capacity Utilization 81.5%	ICU Level of Service D
Analysis Period (min) 15	
m Volume for 95th percentile queue is metered by upstream signal.	
! Phase conflict between lane groups.	

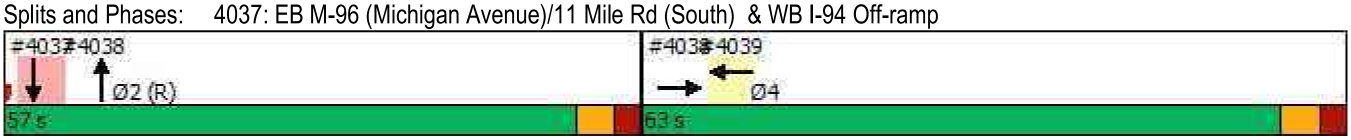
Splits and Phases: 4036: EB I-94 Off-ramp & WB M-96 (Michigan Avenue)/11 Mile Rd (North)

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø4
Lane Configurations							
Traffic Volume (vph)	0	1464	0	0	1039	0	
Future Volume (vph)	0	1464	0	0	1039	0	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	0.88	1.00	1.00	0.95	1.00	
Frt		0.850					
Flt Protected							
Satd. Flow (prot)	0	2707	0	0	3438	0	
Flt Permitted							
Satd. Flow (perm)	0	2707	0	0	3438	0	
Right Turn on Red		Yes				Yes	
Satd. Flow (RTOR)		1038					
Link Speed (mph)	30			30	30		
Link Distance (ft)	222			406	241		
Travel Time (s)	5.0			9.2	5.5		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Heavy Vehicles (%)	2%	5%	2%	2%	5%	2%	
Adj. Flow (vph)	0	1591	0	0	1129	0	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	1591	0	0	1129	0	
Turn Type		Free			NA		
Protected Phases					2		4
Permitted Phases		Free					
Minimum Split (s)					16.0		16.0
Total Split (s)					57.0		63.0
Total Split (%)					47.5%		53%
Yellow Time (s)					3.5		3.5
All-Red Time (s)					2.5		2.5
Lost Time Adjust (s)					0.0		
Total Lost Time (s)					6.0		
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)		120.0			51.0		
Actuated g/C Ratio		1.00			0.42		
v/c Ratio		0.59			0.77		
Control Delay		9.0			34.0		
Queue Delay		0.2			49.1		
Total Delay		9.2			83.1		
LOS		A			F		
Approach Delay	9.2				83.1		
Approach LOS	A				F		
Queue Length 50th (ft)		164			387		
Queue Length 95th (ft)		m164			475		
Internal Link Dist (ft)	142			326	161		
Turn Bay Length (ft)							
Base Capacity (vph)		2707			1461		
Starvation Cap Reductn		0			0		
Spillback Cap Reductn		366			464		
Storage Cap Reductn		0			0		

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø4
Reduced v/c Ratio		0.68			1.13		

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 96 (80%), Referenced to phase 2:SBT, Start of Green	
Natural Cycle: 80	
Control Type: Pretimed	
Maximum v/c Ratio: 0.97	
Intersection Signal Delay: 39.9	Intersection LOS: D
Intersection Capacity Utilization 33.7%	ICU Level of Service A
Analysis Period (min) 15	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 4037: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & WB I-94 Off-ramp



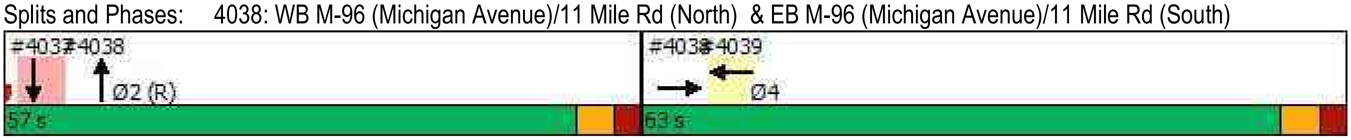
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1464	0	0	0	0	0	1583	0	0	0	0
Future Volume (vph)	0	1464	0	0	0	0	0	1583	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	1.00	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	3438	0	0	0	0	0	4940	0	0	0	0
Flt Permitted												
Satd. Flow (perm)	0	3438	0	0	0	0	0	4940	0	0	0	0
Right Turn on Red	Yes		Yes			Yes			Yes			Yes
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		190			222			207			131	
Travel Time (s)		4.3			5.0			4.7			3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	5%	2%	2%	2%	2%	2%	5%	2%	2%	2%	2%
Adj. Flow (vph)	0	1591	0	0	0	0	0	1721	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1591	0	0	0	0	0	1721	0	0	0	0
Turn Type		NA						NA				
Protected Phases		4						2				
Permitted Phases												
Minimum Split (s)		16.0						16.0				
Total Split (s)		63.0						57.0				
Total Split (%)		52.5%						47.5%				
Yellow Time (s)		3.5						3.5				
All-Red Time (s)		2.5						2.5				
Lost Time Adjust (s)		0.0						0.0				
Total Lost Time (s)		6.0						6.0				
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		57.0						51.0				
Actuated g/C Ratio		0.48						0.42				
v/c Ratio		0.97						0.82				
Control Delay		41.9						43.2				
Queue Delay		0.0						0.0				
Total Delay		41.9						43.2				
LOS		D						D				
Approach Delay		41.9						43.2				
Approach LOS		D						D				
Queue Length 50th (ft)		665						522				
Queue Length 95th (ft)		#812						573				
Internal Link Dist (ft)		110			142			127			51	
Turn Bay Length (ft)												
Base Capacity (vph)		1633						2099				
Starvation Cap Reductn		0						0				
Spillback Cap Reductn		0						0				
Storage Cap Reductn		0						0				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio		0.97						0.82				

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 96 (80%), Referenced to phase 2:SBT, Start of Green	
Natural Cycle: 80	
Control Type: Pretimed	
Maximum v/c Ratio: 0.97	
Intersection Signal Delay: 42.6	Intersection LOS: D
Intersection Capacity Utilization 81.1%	ICU Level of Service D
Analysis Period (min) 15	

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 4038: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & EB M-96 (Michigan Avenue)/11 Mile Rd (South)



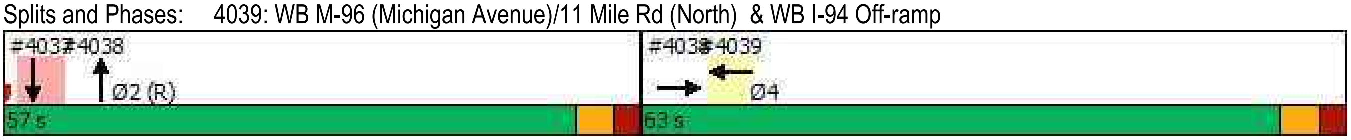
4039: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & WB I-94 Off-ramp

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø2
Lane Configurations							
Traffic Volume (vph)	0	0	0	151	1583	0	
Future Volume (vph)	0	0	0	151	1583	0	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.94	1.00	
Frt							
Flt Protected					0.950		
Satd. Flow (prot)	0	0	0	1810	4848	0	
Flt Permitted					0.950		
Satd. Flow (perm)	0	0	0	1810	4848	0	
Right Turn on Red		Yes			Yes	Yes	
Satd. Flow (RTOR)					2497		
Link Speed (mph)	30			30	30		
Link Distance (ft)	415			317	131		
Travel Time (s)	9.4			7.2	3.0		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Heavy Vehicles (%)	2%	2%	2%	5%	5%	2%	
Adj. Flow (vph)	0	0	0	164	1721	0	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	0	164	1721	0	
Turn Type				NA	Perm		
Protected Phases				4!			2
Permitted Phases					Free!		
Minimum Split (s)				16.0			16.0
Total Split (s)				63.0			57.0
Total Split (%)				52.5%			48%
Yellow Time (s)				3.5			3.5
All-Red Time (s)				2.5			2.5
Lost Time Adjust (s)				0.0			
Total Lost Time (s)				6.0			
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)				57.0	120.0		
Actuated g/C Ratio				0.48	1.00		
v/c Ratio				0.19	0.35		
Control Delay				18.9	0.5		
Queue Delay				0.0	0.0		
Total Delay				18.9	0.5		
LOS				B	A		
Approach Delay				18.9	0.5		
Approach LOS				B	A		
Queue Length 50th (ft)				71	3		
Queue Length 95th (ft)				116	0		
Internal Link Dist (ft)	335			237	51		
Turn Bay Length (ft)							
Base Capacity (vph)				859	4848		
Starvation Cap Reductn				0	0		
Spillback Cap Reductn				0	0		
Storage Cap Reductn				0	0		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø2
Reduced v/c Ratio				0.19	0.35		

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 96 (80%), Referenced to phase 2:SBT, Start of Green	
Natural Cycle: 80	
Control Type: Pretimed	
Maximum v/c Ratio: 0.97	
Intersection Signal Delay: 2.1	Intersection LOS: A
Intersection Capacity Utilization 112.2%	ICU Level of Service H
Analysis Period (min) 15	
! Phase conflict between lane groups.	

Splits and Phases: 4039: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & WB I-94 Off-ramp

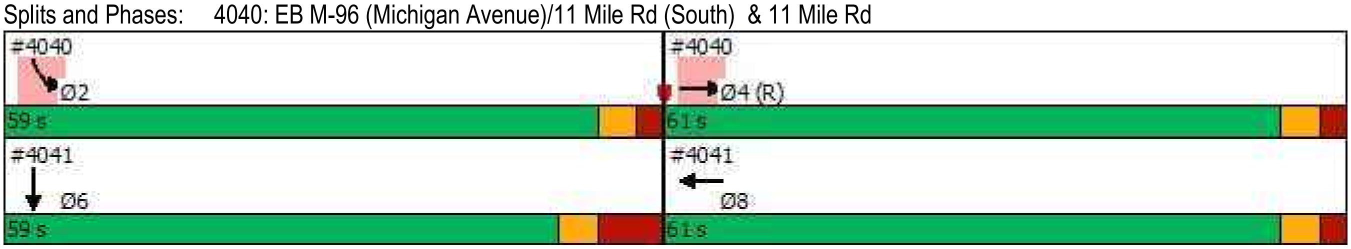


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø6	Ø8
Lane Configurations								
Traffic Volume (vph)	0	947	0	0	662	0		
Future Volume (vph)	0	947	0	0	662	0		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.97	1.00		
Frt								
Flt Protected					0.950			
Satd. Flow (prot)	0	3539	0	0	3335	0		
Flt Permitted					0.950			
Satd. Flow (perm)	0	3539	0	0	3335	0		
Right Turn on Red				Yes	Yes	Yes		
Satd. Flow (RTOR)					105			
Link Speed (mph)		55	55		45			
Link Distance (ft)		212	597		92			
Travel Time (s)		2.6	7.4		1.4			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Heavy Vehicles (%)	2%	2%	2%	2%	5%	2%		
Adj. Flow (vph)	0	1029	0	0	720	0		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	0	1029	0	0	720	0		
Turn Type		NA			Prot			
Protected Phases		4			2		6	8
Permitted Phases								
Minimum Split (s)		16.0			19.5		19.5	16.0
Total Split (s)		61.0			59.0		59.0	61.0
Total Split (%)		50.8%			49.2%		49%	51%
Yellow Time (s)		3.5			3.5		3.5	3.5
All-Red Time (s)		2.5			2.5		6.0	2.5
Lost Time Adjust (s)		0.0			0.0			
Total Lost Time (s)		6.0			6.0			
Lead/Lag								
Lead-Lag Optimize?								
Act Effct Green (s)		55.0			53.0			
Actuated g/C Ratio		0.46			0.44			
v/c Ratio		0.63			0.47			
Control Delay		27.0			0.9			
Queue Delay		0.0			0.0			
Total Delay		27.0			0.9			
LOS		C			A			
Approach Delay		27.0			0.9			
Approach LOS		C			A			
Queue Length 50th (ft)		313			0			
Queue Length 95th (ft)		384			0			
Internal Link Dist (ft)		132	517		12			
Turn Bay Length (ft)								
Base Capacity (vph)		1622			1531			
Starvation Cap Reductn		0			0			
Spillback Cap Reductn		0			0			
Storage Cap Reductn		0			0			

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø6	Ø8
Reduced v/c Ratio		0.63			0.47			

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 32 (27%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 55	
Control Type: Pretimed	
Maximum v/c Ratio: 0.67	
Intersection Signal Delay: 16.3	Intersection LOS: B
Intersection Capacity Utilization 60.6%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 4040: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & 11 Mile Rd



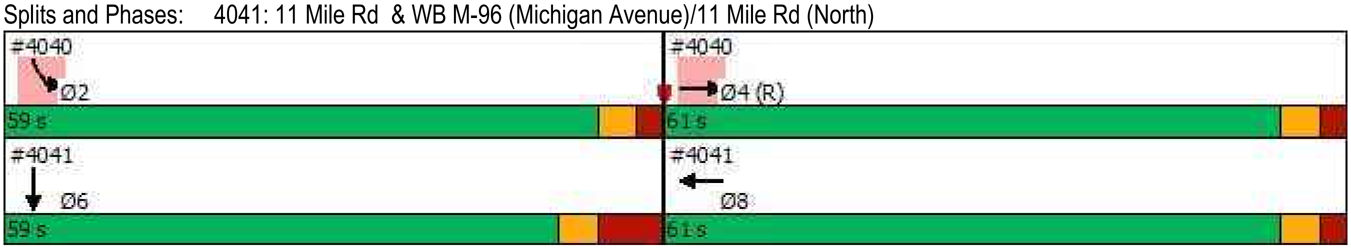
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	1000	798	0	0	0	0	662	56
Future Volume (vph)	0	0	0	0	1000	798	0	0	0	0	662	56
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		250	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Frt						0.850					0.988	
Flt Protected												
Satd. Flow (prot)	0	0	0	0	3539	1538	0	0	0	0	3404	0
Flt Permitted												
Satd. Flow (perm)	0	0	0	0	3539	1538	0	0	0	0	3404	0
Right Turn on Red			Yes	Yes		Yes			Yes			Yes
Satd. Flow (RTOR)						500					9	
Link Speed (mph)		55			55			45			55	
Link Distance (ft)		210			598			92			259	
Travel Time (s)		2.6			7.4			1.4			3.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	5%	2%	2%	2%	2%	5%	2%
Adj. Flow (vph)	0	0	0	0	1087	867	0	0	0	0	720	61
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1087	867	0	0	0	0	781	0
Turn Type					NA	custom					NA	
Protected Phases					8	Free					6	
Permitted Phases												
Minimum Split (s)					16.0						19.5	
Total Split (s)					61.0						59.0	
Total Split (%)					50.8%						49.2%	
Yellow Time (s)					3.5						3.5	
All-Red Time (s)					2.5						6.0	
Lost Time Adjust (s)					0.0						0.0	
Total Lost Time (s)					6.0						9.5	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)					55.0	120.0					49.5	
Actuated g/C Ratio					0.46	1.00					0.41	
v/c Ratio					0.67	0.56					0.55	
Control Delay					33.0	10.3					39.0	
Queue Delay					0.0	0.0					0.0	
Total Delay					33.0	10.3					39.0	
LOS					C	B					D	
Approach Delay					22.9						39.0	
Approach LOS					C						D	
Queue Length 50th (ft)					464	638					304	
Queue Length 95th (ft)					536	794					384	
Internal Link Dist (ft)		130			518			12			179	
Turn Bay Length (ft)						250						
Base Capacity (vph)					1622	1538					1409	

Lane Group	Ø2	Ø4
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Ideal Flow (vphpl)		
Storage Length (ft)		
Storage Lanes		
Taper Length (ft)		
Lane Util. Factor		
Frt		
Flt Protected		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Peak Hour Factor		
Heavy Vehicles (%)		
Adj. Flow (vph)		
Shared Lane Traffic (%)		
Lane Group Flow (vph)		
Turn Type		
Protected Phases	2	4
Permitted Phases		
Minimum Split (s)	19.5	16.0
Total Split (s)	59.0	61.0
Total Split (%)	49%	51%
Yellow Time (s)	3.5	3.5
All-Red Time (s)	2.5	2.5
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag		
Lead-Lag Optimize?		
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)		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn					0	0					0	
Spillback Cap Reductn					0	0					0	
Storage Cap Reductn					0	0					0	
Reduced v/c Ratio					0.67	0.56					0.55	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 32 (27%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 55	
Control Type: Pretimed	
Maximum v/c Ratio: 0.67	
Intersection Signal Delay: 27.5	Intersection LOS: C
Intersection Capacity Utilization 60.6%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 4041: 11 Mile Rd & WB M-96 (Michigan Avenue)/11 Mile Rd (North)



Lane Group	Ø2	Ø4
Starvation Cap Reductn		
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		

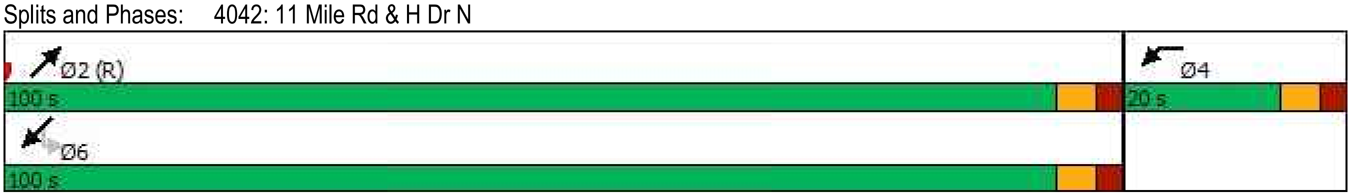
Intersection Summary

Lane Group	WBL	WBR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	0	0	798	0	0	718
Future Volume (vph)	0	0	798	0	0	718
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	1810	0	1863	0	0	1863
Flt Permitted						
Satd. Flow (perm)	1810	0	1863	0	0	1863
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)						
Link Speed (mph)	25		55			55
Link Distance (ft)	1262		1787			680
Travel Time (s)	34.4		22.2			8.4
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	2%	2%	5%	2%	2%
Adj. Flow (vph)	0	0	867	0	0	780
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	867	0	0	780
Turn Type	Prot		NA			NA
Protected Phases	4		2			6
Permitted Phases					6	
Minimum Split (s)	13.0		16.0		13.0	13.0
Total Split (s)	20.0		100.0		100.0	100.0
Total Split (%)	16.7%		83.3%		83.3%	83.3%
Yellow Time (s)	3.5		3.5		3.5	3.5
All-Red Time (s)	2.5		2.5		2.5	2.5
Lost Time Adjust (s)	0.0		0.0			0.0
Total Lost Time (s)	6.0		6.0			6.0
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)			94.0			94.0
Actuated g/C Ratio			0.78			0.78
v/c Ratio			0.59			0.53
Control Delay			2.5			6.4
Queue Delay			0.0			0.0
Total Delay			2.5			6.4
LOS			A			A
Approach Delay			2.5			6.4
Approach LOS			A			A
Queue Length 50th (ft)			16			187
Queue Length 95th (ft)			107			258
Internal Link Dist (ft)	1182		1707			600
Turn Bay Length (ft)						
Base Capacity (vph)			1459			1459
Starvation Cap Reductn			0			0
Spillback Cap Reductn			0			0
Storage Cap Reductn			0			0

Lane Group	WBL	WBR	NET	NER	SWL	SWT
Reduced v/c Ratio			0.59			0.53

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NET, Start of Green	
Natural Cycle: 50	
Control Type: Pretimed	
Maximum v/c Ratio: 0.59	
Intersection Signal Delay: 4.4	Intersection LOS: A
Intersection Capacity Utilization 47.0%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4042: 11 Mile Rd & H Dr N



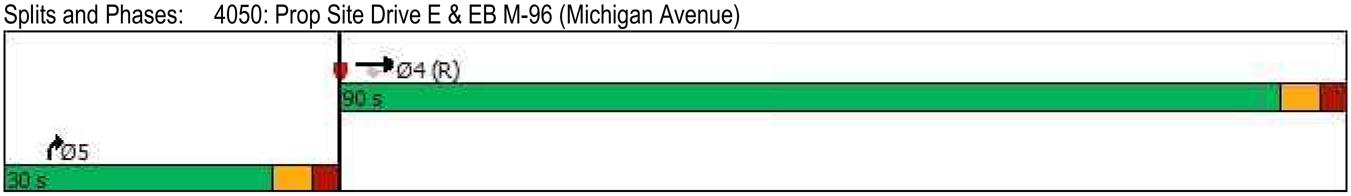
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	2068	626	0	0	0	627
Future Volume (vph)	2068	626	0	0	0	627
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		500	600		0	0
Storage Lanes		2	0		0	2
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	0.88	1.00	1.00	1.00	0.88
Frt		0.850				0.850
Flt Protected						
Satd. Flow (prot)	3539	2787	0	0	0	2787
Flt Permitted						
Satd. Flow (perm)	3539	2787	0	0	0	2787
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		680				24
Link Speed (mph)	55			55	25	
Link Distance (ft)	669			659	1093	
Travel Time (s)	8.3			8.2	29.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2248	680	0	0	0	682
Shared Lane Traffic (%)						
Lane Group Flow (vph)	2248	680	0	0	0	682
Turn Type	NA	Perm				Prot
Protected Phases	4					5
Permitted Phases		4				
Detector Phase	4	4				5
Switch Phase						
Minimum Initial (s)	10.0	10.0				10.0
Minimum Split (s)	16.0	16.0				16.0
Total Split (s)	90.0	90.0				30.0
Total Split (%)	75.0%	75.0%				25.0%
Yellow Time (s)	3.5	3.5				3.5
All-Red Time (s)	2.5	2.5				2.5
Lost Time Adjust (s)	0.0	0.0				0.0
Total Lost Time (s)	6.0	6.0				6.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max	C-Max				None
Act Effct Green (s)	84.0	84.0				24.0
Actuated g/C Ratio	0.70	0.70				0.20
v/c Ratio	0.91	0.32				1.18
Control Delay	19.5	11.9				140.2
Queue Delay	45.9	0.0				0.0
Total Delay	65.4	11.9				140.2
LOS	E	B				F
Approach Delay	52.9				140.2	
Approach LOS	D				F	
Queue Length 50th (ft)	957	127				~352
Queue Length 95th (ft)	995	m138				#486

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Internal Link Dist (ft)	589			579	1013	
Turn Bay Length (ft)		500				
Base Capacity (vph)	2477	2154				576
Starvation Cap Reductn	579	0				0
Spillback Cap Reductn	0	0				0
Storage Cap Reductn	0	0				0
Reduced v/c Ratio	1.18	0.32				1.18

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 52 (43%), Referenced to phase 4:EBT, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.18
Intersection Signal Delay: 69.4 Intersection LOS: E
Intersection Capacity Utilization 89.1% ICU Level of Service E
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4050: Prop Site Drive E & EB M-96 (Michigan Avenue)



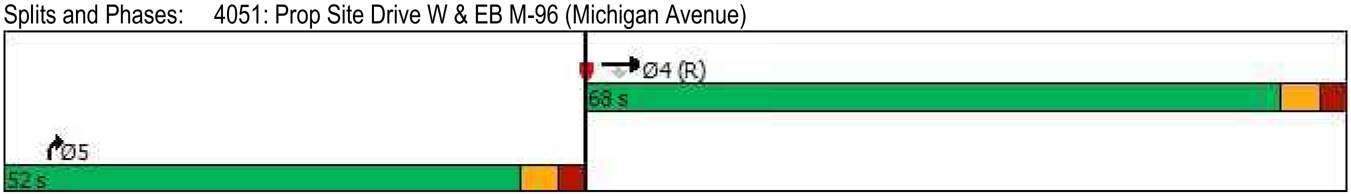
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1091	1128	0	0	0	1128
Future Volume (vph)	1091	1128	0	0	0	1128
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		500	600		0	0
Storage Lanes		2	0		0	2
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	0.88	1.00	1.00	1.00	0.88
Frt		0.850				0.850
Flt Protected						
Satd. Flow (prot)	3539	2787	0	0	0	2787
Flt Permitted						
Satd. Flow (perm)	3539	2787	0	0	0	2787
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		1226				88
Link Speed (mph)	55			55	25	
Link Distance (ft)	608			627	1293	
Travel Time (s)	7.5			7.8	35.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1186	1226	0	0	0	1226
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1186	1226	0	0	0	1226
Turn Type	NA	Perm				Prot
Protected Phases	4					5
Permitted Phases		4				
Detector Phase	4	4				5
Switch Phase						
Minimum Initial (s)	10.0	10.0				10.0
Minimum Split (s)	16.0	16.0				16.0
Total Split (s)	68.0	68.0				52.0
Total Split (%)	56.7%	56.7%				43.3%
Yellow Time (s)	3.5	3.5				3.5
All-Red Time (s)	2.5	2.5				2.5
Lost Time Adjust (s)	0.0	0.0				0.0
Total Lost Time (s)	6.0	6.0				6.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max	C-Max				None
Act Effct Green (s)	62.0	62.0				46.0
Actuated g/C Ratio	0.52	0.52				0.38
v/c Ratio	0.65	0.60				1.09
Control Delay	26.4	16.0				89.1
Queue Delay	5.2	0.2				0.0
Total Delay	31.6	16.2				89.1
LOS	C	B				F
Approach Delay	23.8				89.1	
Approach LOS	C				F	
Queue Length 50th (ft)	453	300				~584
Queue Length 95th (ft)	503	m346				#734

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Internal Link Dist (ft)	528			547	1213	
Turn Bay Length (ft)		500				
Base Capacity (vph)	1828	2032				1122
Starvation Cap Reductn	569	229				0
Spillback Cap Reductn	0	0				0
Storage Cap Reductn	0	0				0
Reduced v/c Ratio	0.94	0.68				1.09

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 32 (27%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.09	
Intersection Signal Delay: 45.8	Intersection LOS: D
Intersection Capacity Utilization 79.6%	ICU Level of Service D
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4051: Prop Site Drive W & EB M-96 (Michigan Avenue)

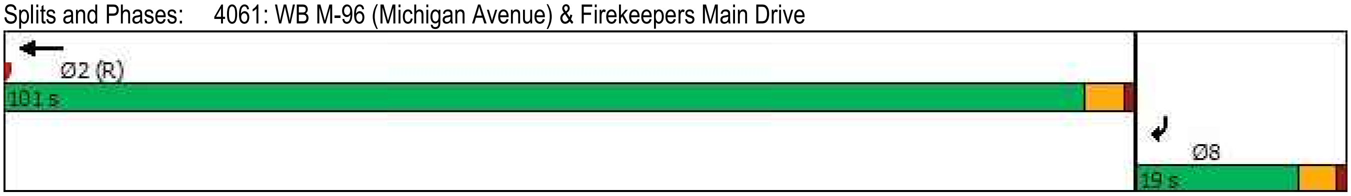


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	1466	168	0	134
Future Volume (vph)	0	0	1466	168	0	134
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			0	0	0
Storage Lanes	0			0	0	2
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	0.88
Frt			0.985			0.850
Flt Protected						
Satd. Flow (prot)	0	0	3493	0	0	2787
Flt Permitted						
Satd. Flow (perm)	0	0	3493	0	0	2787
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			36			137
Link Speed (mph)		55	55		25	
Link Distance (ft)		574	509		701	
Travel Time (s)		7.1	6.3		19.1	
Peak Hour Factor	0.92	0.92	0.92	0.95	0.67	0.92
Heavy Vehicles (%)	2%	2%	2%	0%	0%	2%
Adj. Flow (vph)	0	0	1593	177	0	146
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1770	0	0	146
Turn Type			NA			Prot
Protected Phases			2			8
Permitted Phases						
Detector Phase			2			8
Switch Phase						
Minimum Initial (s)			10.0			10.0
Minimum Split (s)			22.5			14.5
Total Split (s)			101.0			19.0
Total Split (%)			84.2%			15.8%
Yellow Time (s)			3.5			3.5
All-Red Time (s)			1.0			1.0
Lost Time Adjust (s)			0.0			0.0
Total Lost Time (s)			4.5			4.5
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode			C-Max			None
Act Effct Green (s)			101.0			10.0
Actuated g/C Ratio			0.84			0.08
v/c Ratio			0.60			0.41
Control Delay			4.0			13.9
Queue Delay			0.0			0.0
Total Delay			4.0			13.9
LOS			A			B
Approach Delay			4.0		13.9	
Approach LOS			A		B	
Queue Length 50th (ft)			166			3

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Queue Length 95th (ft)			200			39
Internal Link Dist (ft)		494	429		621	
Turn Bay Length (ft)						
Base Capacity (vph)			2945			457
Starvation Cap Reductn			0			0
Spillback Cap Reductn			0			0
Storage Cap Reductn			0			0
Reduced v/c Ratio			0.60			0.32

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:WBT, Start of Green	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.60	
Intersection Signal Delay: 4.7	Intersection LOS: A
Intersection Capacity Utilization 61.7%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 4061: WB M-96 (Michigan Avenue) & Firekeepers Main Drive



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	4960	845	0	810
Future Volume (vph)	0	0	4960	845	0	810
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			250	0	200
Storage Lanes	0			0	0	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.91	1.00	1.00	0.88
Frt				0.850		0.850
Flt Protected						
Satd. Flow (prot)	0	0	5085	1583	0	2787
Flt Permitted						
Satd. Flow (perm)	0	0	5085	1583	0	2787
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				153		
Link Speed (mph)		45	45		45	
Link Distance (ft)		534	660		516	
Travel Time (s)		8.1	10.0		7.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	5391	918	0	880
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	5391	918	0	880
Turn Type			NA	custom		Prot
Protected Phases			8	Free		1
Permitted Phases						
Minimum Split (s)			16.0			13.0
Total Split (s)			90.0			30.0
Total Split (%)			75.0%			25.0%
Yellow Time (s)			3.5			3.5
All-Red Time (s)			2.5			2.5
Lost Time Adjust (s)			0.0			0.0
Total Lost Time (s)			6.0			6.0
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)			84.0	120.0		24.0
Actuated g/C Ratio			0.70	1.00		0.20
v/c Ratio			1.51	0.58		1.58
Control Delay			247.4	21.2		302.6
Queue Delay			0.0	0.0		0.0
Total Delay			247.4	21.2		302.6
LOS			F	C		F
Approach Delay			214.5		302.6	
Approach LOS			F		F	
Queue Length 50th (ft)			~2146	473		~550
Queue Length 95th (ft)			m126	m135		#689
Internal Link Dist (ft)		454	580		436	
Turn Bay Length (ft)				250		200
Base Capacity (vph)			3559	1583		557
Starvation Cap Reductn			86	0		0

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Spillback Cap Reductn			0	0		0
Storage Cap Reductn			0	0		0
Reduced v/c Ratio			1.55	0.58		1.58

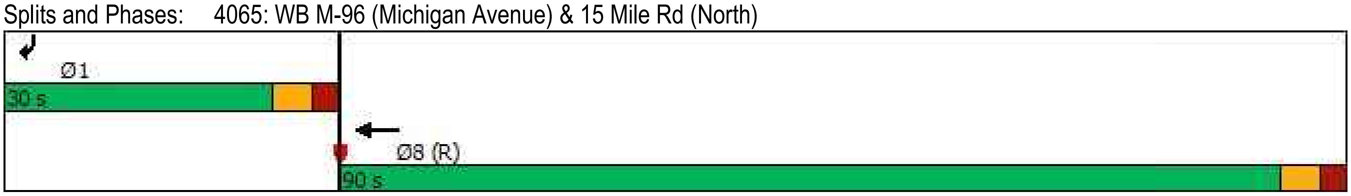
Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 8:WBT, Start of Green	
Natural Cycle: 150	
Control Type: Pretimed	
Maximum v/c Ratio: 1.58	
Intersection Signal Delay: 225.3	Intersection LOS: F
Intersection Capacity Utilization 134.2%	ICU Level of Service H
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

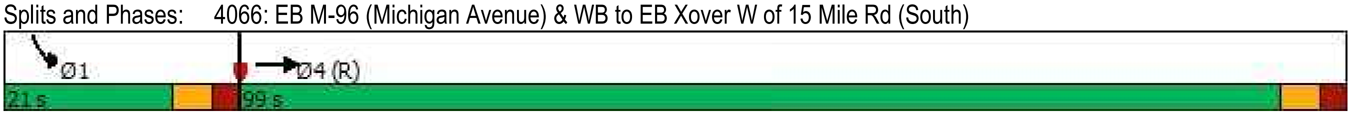
Splits and Phases: 4065: WB M-96 (Michigan Avenue) & 15 Mile Rd (North)



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	4840	0	0	119	0
Future Volume (vph)	0	4840	0	0	119	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.91	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	5085	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	5085	0	0	1770	0
Right Turn on Red				Yes	Yes	Yes
Satd. Flow (RTOR)						
Link Speed (mph)		45	45		25	
Link Distance (ft)		262	1016		123	
Travel Time (s)		4.0	15.4		3.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.90	0.92
Adj. Flow (vph)	0	5261	0	0	132	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	5261	0	0	132	0
Turn Type		NA			Prot	
Protected Phases		4			1	
Permitted Phases						
Minimum Split (s)		16.0			16.0	
Total Split (s)		99.0			21.0	
Total Split (%)		82.5%			17.5%	
Yellow Time (s)		3.5			3.5	
All-Red Time (s)		2.5			2.5	
Lost Time Adjust (s)		0.0			0.0	
Total Lost Time (s)		6.0			6.0	
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)		93.0			15.0	
Actuated g/C Ratio		0.78			0.12	
v/c Ratio		1.34			0.60	
Control Delay		168.5			40.6	
Queue Delay		0.6			0.0	
Total Delay		169.0			40.6	
LOS		F			D	
Approach Delay		169.0			40.6	
Approach LOS		F			D	
Queue Length 50th (ft)		~1978			94	
Queue Length 95th (ft)		m#1446			m74	
Internal Link Dist (ft)		182	936		43	
Turn Bay Length (ft)						
Base Capacity (vph)		3940			221	
Starvation Cap Reductn		0			0	
Spillback Cap Reductn		1166			0	
Storage Cap Reductn		0			0	
Reduced v/c Ratio		1.90			0.60	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 116 (97%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 150	
Control Type: Pretimed	
Maximum v/c Ratio: 1.34	
Intersection Signal Delay: 165.9	Intersection LOS: F
Intersection Capacity Utilization 195.4%	ICU Level of Service H
Analysis Period (min) 15	
~ Volume exceeds capacity, queue is theoretically infinite.	
Queue shown is maximum after two cycles.	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 4066: EB M-96 (Michigan Avenue) & WB to EB Xover W of 15 Mile Rd (South)



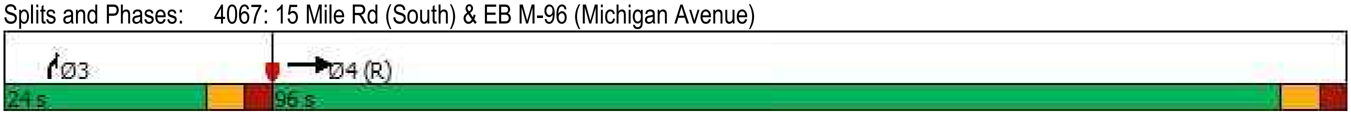
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	4606	353	0	0	0	355
Future Volume (vph)	4606	353	0	0	0	355
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		50	0		0	250
Storage Lanes		0	0		0	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	1.00	1.00	1.00	0.88
Frt	0.989					0.850
Flt Protected						
Satd. Flow (prot)	5029	0	0	0	0	2814
Flt Permitted						
Satd. Flow (perm)	5029	0	0	0	0	2814
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	29					
Link Speed (mph)	45			45	45	
Link Distance (ft)	1016			704	1375	
Travel Time (s)	15.4			10.7	20.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.88	0.88
Heavy Vehicles (%)	2%	2%	2%	2%	1%	1%
Adj. Flow (vph)	5007	384	0	0	0	403
Shared Lane Traffic (%)						
Lane Group Flow (vph)	5391	0	0	0	0	403
Turn Type	NA					Prot
Protected Phases	4					3
Permitted Phases						
Minimum Split (s)	17.0					16.0
Total Split (s)	96.0					24.0
Total Split (%)	80.0%					20.0%
Yellow Time (s)	3.5					3.5
All-Red Time (s)	2.5					2.5
Lost Time Adjust (s)	0.0					0.0
Total Lost Time (s)	6.0					6.0
Lead/Lag	Lag					Lead
Lead-Lag Optimize?	Yes					Yes
Act Effct Green (s)	90.0					18.0
Actuated g/C Ratio	0.75					0.15
v/c Ratio	1.43					0.95
Control Delay	207.4					84.8
Queue Delay	0.0					0.0
Total Delay	207.4					84.8
LOS	F					F
Approach Delay	207.4				84.8	
Approach LOS	F				F	
Queue Length 50th (ft)	~2069					178
Queue Length 95th (ft)	m#238					#277
Internal Link Dist (ft)	936			624	1295	
Turn Bay Length (ft)						250
Base Capacity (vph)	3779					422

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Starvation Cap Reductn	2					0
Spillback Cap Reductn	0					0
Storage Cap Reductn	0					0
Reduced v/c Ratio	1.43					0.95

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 4 (3%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 150	
Control Type: Pretimed	
Maximum v/c Ratio: 1.43	
Intersection Signal Delay: 198.9	Intersection LOS: F
Intersection Capacity Utilization 119.3%	ICU Level of Service H
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4067: 15 Mile Rd (South) & EB M-96 (Michigan Avenue)

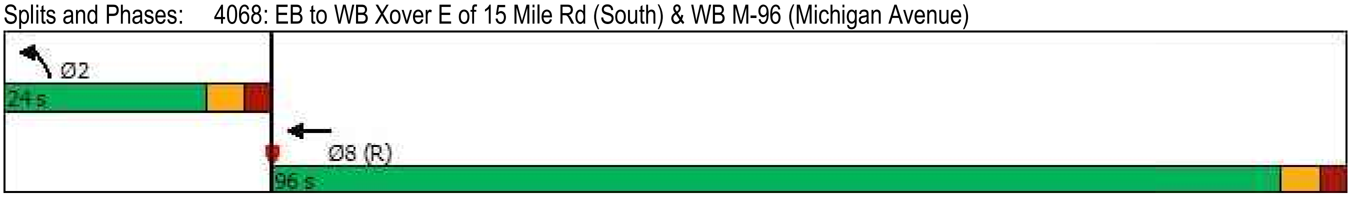


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑↑	↰	
Traffic Volume (vph)	0	0	0	4718	244	0
Future Volume (vph)	0	0	0	4718	244	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	5085	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	5085	1770	0
Right Turn on Red		Yes			Yes	Yes
Satd. Flow (RTOR)						
Link Speed (mph)	45			45	25	
Link Distance (ft)	687			275	111	
Travel Time (s)	10.4			4.2	3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	5128	265	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	5128	265	0
Turn Type				NA	Prot	
Protected Phases				8	2	
Permitted Phases						
Minimum Split (s)				16.0	13.0	
Total Split (s)				96.0	24.0	
Total Split (%)				80.0%	20.0%	
Yellow Time (s)				3.5	3.5	
All-Red Time (s)				2.5	2.5	
Lost Time Adjust (s)				0.0	0.0	
Total Lost Time (s)				6.0	6.0	
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)				90.0	18.0	
Actuated g/C Ratio				0.75	0.15	
v/c Ratio				1.34	1.00	
Control Delay				172.7	59.3	
Queue Delay				0.1	0.0	
Total Delay				172.8	59.3	
LOS				F	E	
Approach Delay				172.8	59.3	
Approach LOS				F	E	
Queue Length 50th (ft)				~1908	204	
Queue Length 95th (ft)				m387	m140	
Internal Link Dist (ft)	607			195	31	
Turn Bay Length (ft)						
Base Capacity (vph)				3813	265	
Starvation Cap Reductn				293	0	
Spillback Cap Reductn				0	0	
Storage Cap Reductn				0	0	
Reduced v/c Ratio				1.46	1.00	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 112 (93%), Referenced to phase 8:WBT, Start of Green	
Natural Cycle: 150	
Control Type: Pretimed	
Maximum v/c Ratio: 1.34	
Intersection Signal Delay: 167.2	Intersection LOS: F
Intersection Capacity Utilization 139.2%	ICU Level of Service H
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4068: EB to WB Xover E of 15 Mile Rd (South) & WB M-96 (Michigan Avenue)



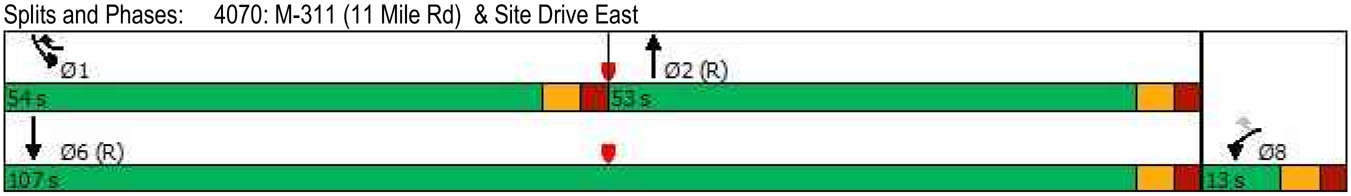
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	30	727	1284	30	727	1311
Future Volume (vph)	30	727	1284	30	727	1311
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	500		0	400	
Storage Lanes	1	1		0	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.88	0.95	0.95	1.00	0.95
Frt		0.850	0.997			
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	2787	3529	0	1770	3539
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1770	2787	3529	0	1770	3539
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		14	2			
Link Speed (mph)	25		55			55
Link Distance (ft)	750		940			974
Travel Time (s)	20.5		11.7			12.1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	33	790	1396	33	790	1425
Shared Lane Traffic (%)						
Lane Group Flow (vph)	33	790	1429	0	790	1425
Turn Type	Prot	pm+ov	NA		Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8				
Detector Phase	8	1	2		1	6
Switch Phase						
Minimum Initial (s)	7.0	7.0	10.0		7.0	10.0
Minimum Split (s)	13.0	13.0	16.0		13.0	16.0
Total Split (s)	13.0	54.0	53.0		54.0	107.0
Total Split (%)	10.8%	45.0%	44.2%		45.0%	89.2%
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5
All-Red Time (s)	2.5	2.5	2.5		2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0		6.0	6.0
Lead/Lag		Lead	Lag		Lead	
Lead-Lag Optimize?						
Recall Mode	None	None	C-Max		None	C-Max
Act Effct Green (s)	7.0	61.0	47.0		53.2	108.6
Actuated g/C Ratio	0.06	0.51	0.39		0.44	0.90
v/c Ratio	0.32	0.56	1.03		1.01	0.45
Control Delay	62.9	21.7	59.8		41.8	5.8
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	62.9	21.7	59.8		41.8	5.8
LOS	E	C	E		D	A
Approach Delay	23.3		59.8			18.6
Approach LOS	C		E			B
Queue Length 50th (ft)	25	226	~97		~727	375
Queue Length 95th (ft)	60	291	#413		m#642	m307

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Internal Link Dist (ft)	670		860			894
Turn Bay Length (ft)		500			400	
Base Capacity (vph)	103	1423	1383		784	3202
Starvation Cap Reductn	0	0	0		0	0
Spillback Cap Reductn	0	0	0		0	138
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.32	0.56	1.03		1.01	0.47

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 8 (7%), Referenced to phase 2:NBT and 6:SBT, Start of Green	
Natural Cycle: 150	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.03	
Intersection Signal Delay: 32.7	Intersection LOS: C
Intersection Capacity Utilization 97.6%	ICU Level of Service F
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4070: M-311 (11 Mile Rd) & Site Drive East



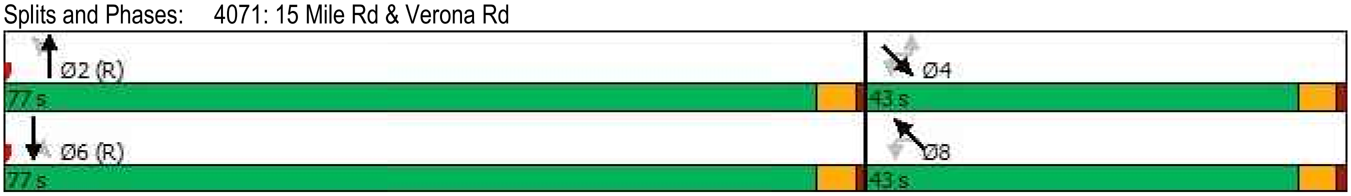
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	803	13	13	5	9	4	0	87	783	6	118	14
Future Volume (vph)	803	13	13	5	9	4	0	87	783	6	118	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		70	0		0
Storage Lanes	0		0	0		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
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
Frt		0.998			0.968				0.850		0.986	
Flt Protected		0.954			0.987						0.998	
Satd. Flow (prot)	0	1791	0	0	1715	0	0	1845	1392	0	1851	0
Flt Permitted		0.711			0.838						0.991	
Satd. Flow (perm)	0	1335	0	0	1456	0	0	1845	1392	0	1838	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1			7				880		5	
Link Speed (mph)		45			55			55			55	
Link Distance (ft)		682			426			745			951	
Travel Time (s)		10.3			5.3			9.2			11.8	
Peak Hour Factor	0.80	0.80	0.80	0.60	0.60	0.60	0.89	0.89	0.89	0.86	0.86	0.86
Heavy Vehicles (%)	1%	1%	1%	0%	0%	25%	0%	3%	16%	1%	1%	1%
Adj. Flow (vph)	1004	16	16	8	15	7	0	98	880	7	137	16
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1036	0	0	30	0	0	98	880	0	160	0
Turn Type	Perm	NA		Perm	NA			NA	Perm	Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4		4	8		
Minimum Split (s)	22.5	22.5		22.5	22.5		22.5	22.5	22.5	22.5	22.5	
Total Split (s)	77.0	77.0		77.0	77.0		43.0	43.0	43.0	43.0	43.0	
Total Split (%)	64.2%	64.2%		64.2%	64.2%		35.8%	35.8%	35.8%	35.8%	35.8%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0	0.0		0.0	
Total Lost Time (s)		4.5			4.5			4.5	4.5		4.5	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		72.5			72.5			38.5	38.5		38.5	
Actuated g/C Ratio		0.60			0.60			0.32	0.32		0.32	
v/c Ratio		1.29			0.03			0.17	0.84		0.27	
Control Delay		162.5			8.1			30.2	11.0		30.8	
Queue Delay		0.0			0.0			0.0	0.0		0.0	
Total Delay		162.5			8.1			30.2	11.0		30.8	
LOS		F			A			C	B		C	
Approach Delay		162.5			8.1			13.0			30.8	
Approach LOS		F			A			B			C	
Queue Length 50th (ft)		~1025			7			54	0		89	
Queue Length 95th (ft)		#1066			12			96	140		139	
Internal Link Dist (ft)		602			346			665			871	
Turn Bay Length (ft)									70			
Base Capacity (vph)		806			882			591	1044		593	

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
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		1.29			0.03			0.17	0.84		0.27	

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 110
Control Type: Pretimed
Maximum v/c Ratio: 1.29
Intersection Signal Delay: 84.5 Intersection LOS: F
Intersection Capacity Utilization 76.4% ICU Level of Service D
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 4071: 15 Mile Rd & Verona Rd



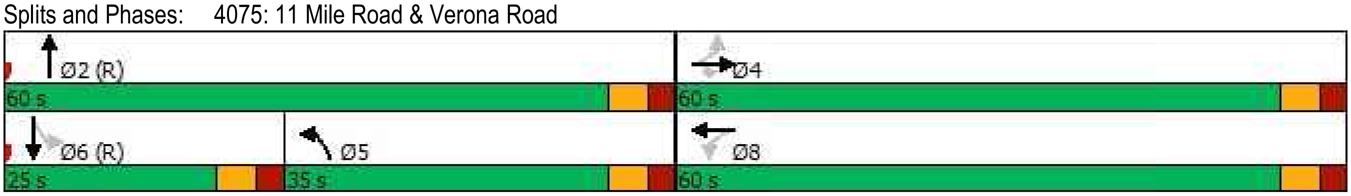
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	868	550	17	887	19	548	68	13	10	82	8
Future Volume (vph)	11	868	550	17	887	19	548	68	13	10	82	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	190		70	190		0	140		0	215		0
Storage Lanes	1		1	1		0	2		0	1		0
Taper Length (ft)	115			140			200			165		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.997			0.976			0.987	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	1900	1468	1805	1892	0	3072	1854	0	1687	1753	0
Flt Permitted	0.074			0.074			0.950			0.697		
Satd. Flow (perm)	141	1900	1468	141	1892	0	3072	1854	0	1238	1753	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			131		1			10			3	
Link Speed (mph)		55			55			45			55	
Link Distance (ft)		519			1585			1015			821	
Travel Time (s)		6.4			19.6			15.4			10.2	
Peak Hour Factor	0.79	0.79	0.79	0.87	0.87	0.87	0.87	0.87	0.87	0.66	0.66	0.66
Heavy Vehicles (%)	0%	0%	10%	0%	0%	5%	14%	0%	0%	7%	7%	7%
Adj. Flow (vph)	14	1099	696	20	1020	22	630	78	15	15	124	12
Shared Lane Traffic (%)												
Lane Group Flow (vph)	14	1099	696	20	1042	0	630	93	0	15	136	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Perm	NA	
Protected Phases		4			8		5	2			6	
Permitted Phases	4		4	8						6		
Minimum Split (s)	25.0	25.0	25.0	25.0	25.0		16.0	25.0		25.0	25.0	
Total Split (s)	60.0	60.0	60.0	60.0	60.0		35.0	60.0		25.0	25.0	
Total Split (%)	50.0%	50.0%	50.0%	50.0%	50.0%		29.2%	50.0%		20.8%	20.8%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	2.5	2.5	2.5	2.5	2.5		2.5	2.5		2.5	2.5	
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)	6.0	6.0	6.0	6.0	6.0		6.0	6.0		6.0	6.0	
Lead/Lag							Lag			Lead	Lead	
Lead-Lag Optimize?							Yes			Yes	Yes	
Act Effct Green (s)	54.0	54.0	54.0	54.0	54.0		29.0	54.0		19.0	19.0	
Actuated g/C Ratio	0.45	0.45	0.45	0.45	0.45		0.24	0.45		0.16	0.16	
v/c Ratio	0.22	1.29	0.95	0.32	1.22		0.85	0.11		0.08	0.49	
Control Delay	31.2	167.6	49.7	37.9	142.4		55.5	17.5		44.3	51.6	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	31.2	167.6	49.7	37.9	142.4		55.5	17.5		44.3	51.6	
LOS	C	F	D	D	F		E	B		D	D	
Approach Delay		121.2			140.4			50.6			50.9	
Approach LOS		F			F			D			D	
Queue Length 50th (ft)	6	~1082	438	10	~998		241	36		10	95	
Queue Length 95th (ft)	22	#1090	#507	34	#1191		#301	67		22	113	
Internal Link Dist (ft)		439			1505			935			741	
Turn Bay Length (ft)	190		70	190			140			215		
Base Capacity (vph)	63	855	732	63	851		742	839		196	280	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0	0	0	0		0	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	0.22	1.29	0.95	0.32	1.22		0.85	0.11		0.08	0.49	

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green
Natural Cycle: 150
Control Type: Pretimed
Maximum v/c Ratio: 1.29
Intersection Signal Delay: 110.2 Intersection LOS: F
Intersection Capacity Utilization 80.1% ICU Level of Service D
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 4075: 11 Mile Road & Verona Road



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	1403	143	0	231
Future Volume (vph)	0	0	1403	143	0	231
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200			300	245	245
Storage Lanes	0			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.986			0.865
Flt Protected						
Satd. Flow (prot)	0	0	3347	0	0	1644
Flt Permitted						
Satd. Flow (perm)	0	0	3347	0	0	1644
Link Speed (mph)		55	55		25	
Link Distance (ft)		509	395		760	
Travel Time (s)		6.3	4.9		20.7	
Peak Hour Factor	0.88	0.88	0.91	0.91	0.79	0.79
Heavy Vehicles (%)	1%	1%	7%	0%	0%	0%
Adj. Flow (vph)	0	0	1542	157	0	292
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1699	0	0	292
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 64.3% ICU Level of Service C

Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	1389	43	0	157
Future Volume (vph)	0	0	1389	43	0	157
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	175			50	0	0
Storage Lanes	0			0	0	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.996			0.865
Flt Protected						
Satd. Flow (prot)	0	0	3367	0	0	1565
Flt Permitted						
Satd. Flow (perm)	0	0	3367	0	0	1565
Link Speed (mph)		55	55		25	
Link Distance (ft)		395	586		185	
Travel Time (s)		4.9	7.3		5.0	
Peak Hour Factor	0.90	0.90	0.95	0.95	0.70	0.70
Heavy Vehicles (%)	1%	1%	7%	0%	5%	5%
Adj. Flow (vph)	0	0	1462	45	0	224
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1507	0	0	224
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 56.2% ICU Level of Service B

Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	1425	12	0	7
Future Volume (vph)	0	0	1425	12	0	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150			600	0	0
Storage Lanes	0			0	0	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.999			0.865
Flt Protected						
Satd. Flow (prot)	0	0	3372	0	0	1644
Flt Permitted						
Satd. Flow (perm)	0	0	3372	0	0	1644
Link Speed (mph)		55	55		25	
Link Distance (ft)		586	607		1086	
Travel Time (s)		7.3	7.5		29.6	
Peak Hour Factor	0.83	0.83	0.92	0.92	0.60	0.60
Heavy Vehicles (%)	10%	1%	7%	0%	33%	0%
Adj. Flow (vph)	0	0	1549	13	0	12
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1562	0	0	12
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 49.8% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	1159	8	0	7
Future Volume (vph)	0	0	1159	8	0	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.999			0.865
Flt Protected						
Satd. Flow (prot)	0	0	3536	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	0	3536	0	0	1611
Link Speed (mph)		55	55		55	
Link Distance (ft)		538	1254		1399	
Travel Time (s)		6.7	15.5		17.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	1260	9	0	8
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1269	0	0	8
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 42.3%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	0	5	0	845	0	0	810	0
Future Volume (vph)	0	0	0	0	0	5	0	845	0	0	810	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
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
Frt					0.865							
Flt Protected												
Satd. Flow (prot)	0	1863	0	0	1611	0	0	1863	0	0	1863	0
Flt Permitted												
Satd. Flow (perm)	0	1863	0	0	1611	0	0	1863	0	0	1863	0
Link Speed (mph)		45			45			25			45	
Link Distance (ft)		957			1038			516			593	
Travel Time (s)		14.5			15.7			14.1			9.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	0	5	0	918	0	0	880	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	5	0	0	918	0	0	880	0
Sign Control		Stop			Stop			Free			Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 54.5% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBT	EBR	WBL	WBT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	0	0	119	1824	0	0
Future Volume (vph)	0	0	119	1824	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.91	0.91	1.00	1.00
Frt						
Flt Protected				0.997		
Satd. Flow (prot)	0	0	0	5070	0	0
Flt Permitted				0.997		
Satd. Flow (perm)	0	0	0	5070	0	0
Link Speed (mph)	45			45	25	
Link Distance (ft)	183			382	263	
Travel Time (s)	2.8			5.8	7.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	129	1983	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	2112	0	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 68.4%	ICU Level of Service C
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	2897	1036	0	0	0	0
Future Volume (vph)	2897	1036	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950	0.972				
Satd. Flow (prot)	1610	3295	0	0	0	0
Flt Permitted	0.950	0.972				
Satd. Flow (perm)	1610	3295	0	0	0	0
Link Speed (mph)		45	45		25	
Link Distance (ft)		619	209		329	
Travel Time (s)		9.4	3.2		9.0	
Peak Hour Factor	0.86	0.86	0.92	0.92	0.92	0.92
Adj. Flow (vph)	3369	1205	0	0	0	0
Shared Lane Traffic (%)	50%					
Lane Group Flow (vph)	1684	2890	0	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 93.6%	ICU Level of Service F
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations			↑↑	↱		
Traffic Volume (vph)	0	0	1058	168	0	0
Future Volume (vph)	0	0	1058	168	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	1.00
Frt				0.850		
Flt Protected						
Satd. Flow (prot)	0	0	3539	1583	0	0
Flt Permitted						
Satd. Flow (perm)	0	0	3539	1583	0	0
Link Speed (mph)		45	45		30	
Link Distance (ft)		213	315		137	
Travel Time (s)		3.2	4.8		3.1	
Peak Hour Factor	0.92	0.92	0.91	0.91	0.92	0.92
Adj. Flow (vph)	0	0	1163	185	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1163	185	0	0
Sign Control		Stop	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 66.2%	ICU Level of Service C
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	1158	0	0	159	0
Future Volume (vph)	0	1158	0	0	159	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3505	0	0	1787	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3505	0	0	1787	0
Link Speed (mph)		45	45		25	
Link Distance (ft)		309	168		108	
Travel Time (s)		4.7	2.5		2.9	
Peak Hour Factor	0.86	0.86	0.92	0.92	0.87	0.87
Heavy Vehicles (%)	3%	3%	2%	2%	1%	1%
Adj. Flow (vph)	0	1347	0	0	183	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1347	0	0	183	0
Sign Control		Free	Free		Stop	

Intersection Summary		
Area Type:	Other	
Control Type: Unsignalized		
Intersection Capacity Utilization 62.4%		ICU Level of Service B
Analysis Period (min) 15		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	1171	182	0
Future Volume (vph)	0	0	0	1171	182	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	5036	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	5036	1770	0
Link Speed (mph)	45			45	25	
Link Distance (ft)	134			152	111	
Travel Time (s)	2.0			2.3	3.0	
Peak Hour Factor	0.92	0.92	0.89	0.89	0.94	0.94
Heavy Vehicles (%)	2%	2%	3%	3%	2%	2%
Adj. Flow (vph)	0	0	0	1316	194	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1316	194	0
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 42.7% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	1136	0	0	80	0
Future Volume (vph)	0	1136	0	0	80	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3574	0	0	1787	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3574	0	0	1787	0
Link Speed (mph)		45	45		25	
Link Distance (ft)		222	290		102	
Travel Time (s)		3.4	4.4		2.8	
Peak Hour Factor	0.95	0.95	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	1%	1%	2%	2%	1%	1%
Adj. Flow (vph)	0	1196	0	0	87	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1196	0	0	87	0
Sign Control		Free	Free		Stop	

Intersection Summary		
Area Type:	Other	
Control Type: Unsignalized		
Intersection Capacity Utilization 78.1%		ICU Level of Service D
Analysis Period (min) 15		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑	↰	
Traffic Volume (vph)	0	0	0	1190	65	0
Future Volume (vph)	0	0	0	1190	65	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	30			45	25	
Link Distance (ft)	114			1105	101	
Travel Time (s)	2.6			16.7	2.8	
Peak Hour Factor	0.92	0.92	0.88	0.88	0.94	0.94
Adj. Flow (vph)	0	0	0	1352	69	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1352	69	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 74.0%	ICU Level of Service D
Analysis Period (min) 15	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	174	358	31	4	293	12	14	37	3	13	81	156
Future Volume (vph)	174	358	31	4	293	12	14	37	3	13	81	156
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	80		0	80		0	110		0	115		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	180			180			140			175		
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
Frt		0.988			0.994			0.988			0.901	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	1877	0	1770	1852	0	1703	1771	0	1770	1678	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1805	1877	0	1770	1852	0	1703	1771	0	1770	1678	0
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		1365			1319			666			571	
Travel Time (s)		20.7			20.0			10.1			8.7	
Peak Hour Factor	0.94	0.94	0.94	0.88	0.88	0.88	0.78	0.78	0.78	0.91	0.91	0.91
Heavy Vehicles (%)	0%	0%	0%	2%	2%	2%	6%	6%	6%	2%	2%	2%
Adj. Flow (vph)	185	381	33	5	333	14	18	47	4	14	89	171
Shared Lane Traffic (%)												
Lane Group Flow (vph)	185	414	0	5	347	0	18	51	0	14	260	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 49.6%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL2	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	SWL	SWR
Lane Configurations											
Traffic Volume (vph)	55	0	112	0	270	79	81	385	0	0	0
Future Volume (vph)	55	0	112	0	270	79	81	385	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	240	0		0	105		0	0	0
Storage Lanes		1	1	0		0	1		0	0	0
Taper Length (ft)		25		25			70			25	
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
Frt			0.850		0.969						
Flt Protected	0.950						0.950				
Satd. Flow (prot)	1687	0	1615	0	1805	0	1752	1845	0	0	0
Flt Permitted	0.950						0.950				
Satd. Flow (perm)	1687	0	1615	0	1805	0	1752	1845	0	0	0
Link Speed (mph)		25			45			45		25	
Link Distance (ft)		894			1167			685		897	
Travel Time (s)		24.4			17.7			10.4		24.5	
Peak Hour Factor	0.93	0.93	0.93	0.91	0.91	0.91	0.95	0.95	0.95	0.92	0.92
Heavy Vehicles (%)	7%	0%	0%	2%	2%	2%	3%	3%	3%	2%	2%
Adj. Flow (vph)	59	0	120	0	297	87	85	405	0	0	0
Shared Lane Traffic (%)											
Lane Group Flow (vph)	59	0	120	0	384	0	85	405	0	0	0
Sign Control		Stop			Free			Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 33.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	WBL2	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NER
Lane Configurations											
Traffic Volume (vph)	93	0	84	61	264	0	0	373	50	0	0
Future Volume (vph)	93	0	84	61	264	0	0	373	50	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	185	165		0	0		0	0	0
Storage Lanes		1	1	1		0	0		0	0	0
Taper Length (ft)		25		110			25			25	
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
Frt			0.850					0.984			
Flt Protected	0.950			0.950							
Satd. Flow (prot)	1805	0	1455	1752	1845	0	0	1815	0	0	0
Flt Permitted	0.950			0.950							
Satd. Flow (perm)	1805	0	1455	1752	1845	0	0	1815	0	0	0
Link Speed (mph)		25			45			45		25	
Link Distance (ft)		613			685			608		913	
Travel Time (s)		16.7			10.4			9.2		24.9	
Peak Hour Factor	0.81	0.81	0.81	0.87	0.87	0.87	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	11%	3%	3%	3%	3%	3%	3%	2%	2%
Adj. Flow (vph)	115	0	104	70	303	0	0	405	54	0	0
Shared Lane Traffic (%)											
Lane Group Flow (vph)	115	0	104	70	303	0	0	459	0	0	0
Sign Control		Stop			Free			Free		Stop	

Intersection Summary		
Area Type:	Other	
Control Type: Unsignalized		
Intersection Capacity Utilization 33.9%		ICU Level of Service A
Analysis Period (min) 15		

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	184	140	0	396	272	0
Future Volume (vph)	184	140	0	396	272	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.850				
Flt Protected	0.950					
Satd. Flow (prot)	1543	1553	0	3505	3374	0
Flt Permitted	0.950					
Satd. Flow (perm)	1543	1553	0	3505	3374	0
Link Speed (mph)	25			55	55	
Link Distance (ft)	119			105	620	
Travel Time (s)	3.2			1.3	7.7	
Peak Hour Factor	0.93	0.93	0.82	0.82	0.92	0.92
Heavy Vehicles (%)	17%	4%	0%	3%	7%	0%
Adj. Flow (vph)	198	151	0	483	296	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	198	151	0	483	296	0
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 27.8%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	396	61	35	377
Future Volume (vph)	0	0	396	61	35	377
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		340	0	
Storage Lanes	0	0		1	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	1.00	0.95	0.95
Frt				0.850		
Flt Protected						0.996
Satd. Flow (prot)	0	0	3505	1568	0	3383
Flt Permitted						0.996
Satd. Flow (perm)	0	0	3505	1568	0	3383
Link Speed (mph)	25		55			55
Link Distance (ft)	664		1109			105
Travel Time (s)	18.1		13.7			1.3
Peak Hour Factor	0.92	0.92	0.82	0.82	0.92	0.92
Heavy Vehicles (%)	2%	2%	3%	3%	20%	5%
Adj. Flow (vph)	0	0	483	74	38	410
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	483	74	0	448
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 29.1%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	WBL2	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NER
Lane Configurations											
Traffic Volume (vph)	52	0	60	0	352	0	0	220	86	0	0
Future Volume (vph)	52	0	60	0	352	0	0	220	86	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	205	0		0	0		135	0	0
Storage Lanes		1	1	0		0	0		1	0	0
Taper Length (ft)		25		25			25			25	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00
Frt			0.850						0.850		
Flt Protected	0.950										
Satd. Flow (prot)	1736	0	1380	0	3438	0	0	3343	1272	0	0
Flt Permitted	0.950										
Satd. Flow (perm)	1736	0	1380	0	3438	0	0	3343	1272	0	0
Link Speed (mph)		25			55			55		25	
Link Distance (ft)		296			230			1367		908	
Travel Time (s)		8.1			2.9			16.9		24.8	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.95	0.95	0.95	0.92	0.92
Heavy Vehicles (%)	4%	0%	17%	0%	5%	0%	0%	8%	27%	2%	2%
Adj. Flow (vph)	59	0	68	0	400	0	0	232	91	0	0
Shared Lane Traffic (%)											
Lane Group Flow (vph)	59	0	68	0	400	0	0	232	91	0	0
Sign Control		Stop			Free			Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 20.4% ICU Level of Service A

Analysis Period (min) 15

Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	33	80	0	270	154	0
Future Volume (vph)	33	80	0	270	154	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				
Flt Protected	0.950					
Satd. Flow (prot)	1752	1077	0	1624	1696	0
Flt Permitted	0.950					
Satd. Flow (perm)	1752	1077	0	1624	1696	0
Link Speed (mph)	25			45	45	
Link Distance (ft)	189			1063	114	
Travel Time (s)	5.2			16.1	1.7	
Peak Hour Factor	0.74	0.74	0.93	0.93	0.89	0.89
Heavy Vehicles (%)	3%	50%	17%	17%	12%	12%
Adj. Flow (vph)	45	108	0	290	173	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	45	108	0	290	173	0
Sign Control	Stop			Free	Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 24.2% ICU Level of Service A

Analysis Period (min) 15

Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	0	0	182	121	3	154
Future Volume (vph)	0	0	182	121	3	154
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.850		
Flt Protected						0.999
Satd. Flow (prot)	0	0	1624	1380	0	1689
Flt Permitted						0.999
Satd. Flow (perm)	0	0	1624	1380	0	1689
Link Speed (mph)	25		45			45
Link Distance (ft)	105		114			727
Travel Time (s)	2.9		1.7			11.0
Peak Hour Factor	0.92	0.92	0.93	0.93	0.89	0.89
Heavy Vehicles (%)	2%	2%	17%	17%	33%	12%
Adj. Flow (vph)	0	0	196	130	3	173
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	196	130	0	176
Sign Control	Stop		Free			Free

Intersection Summary		
Area Type:	Other	
Control Type: Unsignalized		
Intersection Capacity Utilization 22.4%		ICU Level of Service A
Analysis Period (min) 15		

Lane Group	EBL	EBR	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	6	97	58	124	60	11
Future Volume (vph)	6	97	58	124	60	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	195	0	0			90
Storage Lanes	1	1	0			1
Taper Length (ft)	135		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				0.850
Flt Protected	0.950			0.984		
Satd. Flow (prot)	1570	1404	0	1615	1776	1509
Flt Permitted	0.950			0.984		
Satd. Flow (perm)	1570	1404	0	1615	1776	1509
Link Speed (mph)	25			45	45	
Link Distance (ft)	597			727	1165	
Travel Time (s)	16.3			11.0	17.7	
Peak Hour Factor	0.83	0.83	0.91	0.91	0.78	0.78
Heavy Vehicles (%)	15%	15%	43%	3%	7%	7%
Adj. Flow (vph)	7	117	64	136	77	14
Shared Lane Traffic (%)						
Lane Group Flow (vph)	7	117	0	200	77	14
Sign Control	Stop			Free	Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 26.4% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	18	1925	18	0
Future Volume (vph)	0	0	18	1925	18	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.91	0.91	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	5085	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	5085	1770	0
Link Speed (mph)	45			45	25	
Link Distance (ft)	382			217	236	
Travel Time (s)	5.8			3.3	6.4	
Peak Hour Factor	0.90	0.90	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	20	2092	20	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	2112	20	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 47.6%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1317	0	0	0	0	30
Future Volume (vph)	1317	0	0	0	0	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	1.00	1.00	1.00	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	3539	0	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	3539	0	0	0	0	1611
Link Speed (mph)	45			45	25	
Link Distance (ft)	168			432	770	
Travel Time (s)	2.5			6.5	21.0	
Peak Hour Factor	0.87	0.87	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1514	0	0	0	0	33
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1514	0	0	0	0	33
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 54.2%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations			↑↑↑			↱
Traffic Volume (vph)	0	0	1353	0	0	32
Future Volume (vph)	0	0	1353	0	0	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.91	1.00	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	0	0	5036	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	0	5036	0	0	1611
Link Speed (mph)		45	45		25	
Link Distance (ft)		494	134		230	
Travel Time (s)		7.5	2.0		6.3	
Peak Hour Factor	0.92	0.92	0.89	0.89	0.92	0.92
Heavy Vehicles (%)	2%	2%	3%	3%	2%	2%
Adj. Flow (vph)	0	0	1520	0	0	35
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1520	0	0	35
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 46.0%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations			↑↱			
Traffic Volume (vph)	0	0	1205	50	0	0
Future Volume (vph)	0	0	1205	50	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.994			
Flt Protected						
Satd. Flow (prot)	0	0	3518	0	0	0
Flt Permitted						
Satd. Flow (perm)	0	0	3518	0	0	0
Link Speed (mph)		30	45		25	
Link Distance (ft)		176	114		201	
Travel Time (s)		4.0	1.7		5.5	
Peak Hour Factor	0.92	0.92	0.88	0.88	0.92	0.92
Adj. Flow (vph)	0	0	1369	57	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1426	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 43.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	NBT	NBR	SBL	SBT	SWL	SWR
Lane Configurations	↑↱			↑↑		
Traffic Volume (vph)	352	228	0	272	0	0
Future Volume (vph)	352	228	0	272	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	1.00	0.95	1.00	1.00
Frt	0.941					
Flt Protected						
Satd. Flow (prot)	3164	0	0	3343	0	0
Flt Permitted						
Satd. Flow (perm)	3164	0	0	3343	0	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	620			230	1088	
Travel Time (s)	7.7			2.9	29.7	
Peak Hour Factor	0.88	0.88	0.95	0.95	0.92	0.92
Heavy Vehicles (%)	5%	11%	8%	8%	2%	2%
Adj. Flow (vph)	400	259	0	286	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	659	0	0	286	0	0
Sign Control	Free			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 20.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	32	1173	0	0	0	0	0	48	29
Future Volume (vph)	0	0	0	32	1173	0	0	0	0	0	48	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	165		0	0		0	0		0
Storage Lanes	0		0	1		0	0		0	0		0
Taper Length (ft)	25			85			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt											0.949	
Flt Protected				0.950								
Satd. Flow (prot)	0	0	0	1770	3539	0	0	0	0	0	1785	0
Flt Permitted				0.950								
Satd. Flow (perm)	0	0	0	1770	3539	0	0	0	0	0	1785	0
Link Speed (mph)		30			45			30			30	
Link Distance (ft)		212			176			102			496	
Travel Time (s)		4.8			2.7			2.3			11.3	
Peak Hour Factor	0.92	0.92	0.92	0.86	0.86	0.86	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	1%	1%	1%
Adj. Flow (vph)	0	0	0	37	1364	0	0	0	0	0	52	32
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	37	1364	0	0	0	0	0	84	0
Sign Control		Free			Free			Yield			Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 43.4% ICU Level of Service A

Analysis Period (min) 15

Lane Group	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	2611	0	0	0	2644
Future Volume (vph)	0	2611	0	0	0	2644
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	0.88
Frt						0.850
Flt Protected						
Satd. Flow (prot)	0	3539	0	0	0	2787
Flt Permitted						
Satd. Flow (perm)	0	3539	0	0	0	2787
Link Speed (mph)		55	55		55	
Link Distance (ft)		434	1242		1194	
Travel Time (s)		5.4	15.4		14.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	2838	0	0	0	2874
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	2838	0	0	0	2874
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 95.8%	ICU Level of Service F
Analysis Period (min) 15	

Lane Group	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	0	119	0	0	896
Future Volume (vph)	0	0	119	0	0	896
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	0	0	1863	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	0	1863	0	0	1611
Link Speed (mph)		25	25		30	
Link Distance (ft)		1199	263		174	
Travel Time (s)		32.7	7.2		4.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.90	0.90
Adj. Flow (vph)	0	0	129	0	0	996
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	129	0	0	996
Sign Control		Free	Yield		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 68.4%	ICU Level of Service C
Analysis Period (min) 15	

Lane Group	WBL	WBR	NBL	NBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	168	2897	0	0	0
Future Volume (vph)	0	168	2897	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.97	1.00	1.00	1.00
Frt		0.865				
Flt Protected			0.950			
Satd. Flow (prot)	0	1627	3303	0	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	1627	3303	0	0	0
Link Speed (mph)	45		45		45	
Link Distance (ft)	255		329		551	
Travel Time (s)	3.9		5.0		8.3	
Peak Hour Factor	0.91	0.91	0.93	0.93	0.92	0.92
Heavy Vehicles (%)	1%	1%	6%	6%	2%	2%
Adj. Flow (vph)	0	185	3115	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	185	3115	0	0	0
Sign Control	Yield		Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 92.3%	ICU Level of Service F
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	159	1226	0	0
Future Volume (vph)	0	0	159	1226	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	450		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			85		25	
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	5085	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	5085	0	0
Link Speed (mph)	45			45	30	
Link Distance (ft)	315			494	108	
Travel Time (s)	4.8			7.5	2.5	
Peak Hour Factor	0.92	0.92	0.87	0.87	0.92	0.92
Adj. Flow (vph)	0	0	183	1409	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	183	1409	0	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 47.8%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	182	1165	0	0	0	0
Future Volume (vph)	182	1165	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	275			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	110				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		45	45		30	
Link Distance (ft)		432	161		111	
Travel Time (s)		6.5	2.4		2.5	
Peak Hour Factor	0.94	0.94	0.92	0.92	0.92	0.92
Adj. Flow (vph)	194	1239	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	194	1239	0	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 61.5%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	3011	0	0	0	3038
Future Volume (vph)	0	3011	0	0	0	3038
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	0.76
Frt						0.850
Flt Protected						
Satd. Flow (prot)	0	3539	0	0	0	3610
Flt Permitted						
Satd. Flow (perm)	0	3539	0	0	0	3610
Link Speed (mph)		55	55		45	
Link Distance (ft)		1093	655		773	
Travel Time (s)		13.5	8.1		11.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	3273	0	0	0	3302
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	3273	0	0	0	3302
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 86.6%	ICU Level of Service E
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	65	1151	0	0	0	0
Future Volume (vph)	65	1151	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	180			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	75				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		45	45		30	
Link Distance (ft)		290	1089		101	
Travel Time (s)		4.4	16.5		2.3	
Peak Hour Factor	0.94	0.94	0.92	0.92	0.92	0.92
Adj. Flow (vph)	69	1224	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	69	1224	0	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 71.4%	ICU Level of Service C
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	3821	896	0	0	0	0
Future Volume (vph)	3821	896	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	1.00	1.00	1.00	1.00
Frt	0.971					
Flt Protected						
Satd. Flow (prot)	4938	0	0	0	0	0
Flt Permitted						
Satd. Flow (perm)	4938	0	0	0	0	0
Link Speed (mph)	45			45	30	
Link Distance (ft)	311			156	174	
Travel Time (s)	4.7			2.4	4.0	
Peak Hour Factor	0.90	0.90	0.92	0.92	0.92	0.92
Adj. Flow (vph)	4246	996	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	5242	0	0	0	0	0
Sign Control	Free			Stop	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 119.1%	ICU Level of Service H
Analysis Period (min) 15	

Lane Group	NBT	NBR	SBL	SBT	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	0	0	112	2894	0	0
Future Volume (vph)	0	0	112	2894	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	500		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			100		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	3539	0	0
Link Speed (mph)	30			25	25	
Link Distance (ft)	266			1471	301	
Travel Time (s)	6.0			40.1	8.2	
Peak Hour Factor	0.92	0.92	0.75	0.75	0.92	0.92
Adj. Flow (vph)	0	0	149	3859	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	149	3859	0	0
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 83.3%	ICU Level of Service E
Analysis Period (min) 15	

Lane Group	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	885	122	0	0	0	0
Future Volume (vph)	885	122	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected		0.958				
Satd. Flow (prot)	0	1785	0	0	0	0
Flt Permitted		0.958				
Satd. Flow (perm)	0	1785	0	0	0	0
Link Speed (mph)		25	30		25	
Link Distance (ft)		1207	315		252	
Travel Time (s)		32.9	7.2		6.9	
Peak Hour Factor	0.75	0.75	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1180	163	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1343	0	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 70.3%	ICU Level of Service C
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	103	0	69	0	0
Future Volume (vph)	0	103	0	69	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.865		
Flt Protected						
Satd. Flow (prot)	0	1652	0	1191	0	0
Flt Permitted						
Satd. Flow (perm)	0	1652	0	1191	0	0
Link Speed (mph)		25	25		25	
Link Distance (ft)		995	597		1154	
Travel Time (s)		27.1	16.3		31.5	
Peak Hour Factor	0.83	0.83	0.89	0.89	0.92	0.92
Heavy Vehicles (%)	15%	15%	38%	38%	2%	2%
Adj. Flow (vph)	0	124	0	78	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	124	0	78	0	0
Sign Control		Free	Free		Stop	

Intersection Summary		
Area Type:	Other	
Control Type: Unsignalized		
Intersection Capacity Utilization 8.8%		ICU Level of Service A
Analysis Period (min) 15		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	53	5717	0	0
Future Volume (vph)	0	0	53	5717	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	250		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	5085	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	5085	0	0
Link Speed (mph)	45			45	25	
Link Distance (ft)	894			534	137	
Travel Time (s)	13.5			8.1	3.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	58	6214	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	58	6214	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 100.1%	ICU Level of Service G
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	5749	0	0	53	0
Future Volume (vph)	0	5749	0	0	53	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.86	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	6408	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	6408	0	0	1770	0
Link Speed (mph)		45	45		25	
Link Distance (ft)		744	1191		137	
Travel Time (s)		11.3	18.0		3.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	6249	0	0	58	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	6249	0	0	58	0
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 200.4% ICU Level of Service H

Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	962	4840	0	0	0	0
Future Volume (vph)	962	4840	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	400			0	0	0
Storage Lanes	2			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	0.97	0.86	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	3433	6408	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	3433	6408	0	0	0	0
Link Speed (mph)		45	45		25	
Link Distance (ft)		1191	262		113	
Travel Time (s)		18.0	4.0		3.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1046	5261	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1046	5261	0	0	0	0
Sign Control		Free	Stop		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 172.0%	ICU Level of Service H
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	119	4843	0	0
Future Volume (vph)	0	0	119	4843	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	250		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	5085	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	5085	0	0
Link Speed (mph)	45			45	25	
Link Distance (ft)	254			1016	123	
Travel Time (s)	3.8			15.4	3.4	
Peak Hour Factor	0.92	0.92	0.90	0.87	0.92	0.92
Adj. Flow (vph)	0	0	132	5567	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	132	5567	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 182.2%	ICU Level of Service H
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	244	4717	0	0	0	0
Future Volume (vph)	244	4717	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.91	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	5085	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	5085	0	0	0	0
Link Speed (mph)		45	45		30	
Link Distance (ft)		704	311		111	
Travel Time (s)		10.7	4.7		2.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	265	5127	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	265	5127	0	0	0	0
Sign Control		Free	Stop		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 190.6% ICU Level of Service H

Analysis Period (min) 15

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	1600	27	0
Future Volume (vph)	0	0	0	1600	27	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	30	
Link Distance (ft)	583			574	107	
Travel Time (s)	7.2			7.1	2.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	1739	29	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1739	29	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 91.6%	ICU Level of Service F
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	27	1474	0	0	0	0
Future Volume (vph)	27	1474	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		30	
Link Distance (ft)		1122	576		107	
Travel Time (s)		13.9	7.1		2.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	29	1602	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	29	1602	0	0	0	0
Sign Control		Free	Stop		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 91.6%	ICU Level of Service F
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	1591	36	0	54
Future Volume (vph)	0	0	1591	36	0	54
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.997			0.865
Flt Protected						
Satd. Flow (prot)	0	0	3529	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	0	3529	0	0	1611
Link Speed (mph)		55	55		30	
Link Distance (ft)		590	583		121	
Travel Time (s)		7.3	7.2		2.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	1729	39	0	59
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1768	0	0	59
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 55.1%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	168	1477	0	0
Future Volume (vph)	0	0	168	1477	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	250		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	3539	0	0
Link Speed (mph)	55			55	30	
Link Distance (ft)	405			590	104	
Travel Time (s)	5.0			7.3	2.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	183	1605	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	183	1605	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 52.3%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	1333	0	0	168	0
Future Volume (vph)	0	1333	0	0	168	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	1770	0
Link Speed (mph)		55	55		30	
Link Distance (ft)		316	1122		104	
Travel Time (s)		3.9	13.9		2.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1449	0	0	183	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1449	0	0	183	0
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 84.3% ICU Level of Service E
Analysis Period (min) 15

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	491	3535	0	0
Future Volume (vph)	0	0	491	3535	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	250			0
Storage Lanes	0	0	2			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	0.97	0.91	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	3433	5085	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	3433	5085	0	0
Link Speed (mph)	45			55	30	
Link Distance (ft)	105			493	555	
Travel Time (s)	1.6			6.1	12.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	534	3842	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	534	3842	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 142.7%	ICU Level of Service H
Analysis Period (min) 15	

Lane Group	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	2436	1099	0	0	0	0
Future Volume (vph)	2436	1099	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.94	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	4990	1863	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	4990	1863	0	0	0	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		555	271		108	
Travel Time (s)		12.6	6.2		2.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2648	1195	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	2648	1195	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 113.1% ICU Level of Service H

Analysis Period (min) 15

Lane Group	EBT	EBR	WBL	WBT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	73	0	0	0	0	1099
Future Volume (vph)	73	0	0	0	0	1099
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	1863	0	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	1863	0	0	0	0	1611
Link Speed (mph)	25			30	25	
Link Distance (ft)	287			1072	271	
Travel Time (s)	7.8			24.4	7.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	79	0	0	0	0	1195
Shared Lane Traffic (%)						
Lane Group Flow (vph)	79	0	0	0	0	1195
Sign Control	Yield			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 78.6%	ICU Level of Service D
Analysis Period (min) 15	

Lane Group	NBT	NBR	SBL	SBT	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	0	0	73	2430	0	0
Future Volume (vph)	0	0	73	2430	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.91	0.91	1.00	1.00
Frt						
Flt Protected				0.999		
Satd. Flow (prot)	0	0	0	5076	0	0
Flt Permitted				0.999		
Satd. Flow (perm)	0	0	0	5076	0	0
Link Speed (mph)	45			45	45	
Link Distance (ft)	194			406	287	
Travel Time (s)	2.9			6.2	4.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	5%	2%	2%	2%
Adj. Flow (vph)	0	0	79	2641	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	2720	0	0
Sign Control	Free			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 78.6%	ICU Level of Service D
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	104	988	0	0	0	0
Future Volume (vph)	104	988	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1719	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1719	3539	0	0	0	0
Link Speed (mph)		25	25		25	
Link Distance (ft)		879	346		271	
Travel Time (s)		24.0	9.4		7.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	2%	2%	2%	2%	2%
Adj. Flow (vph)	113	1074	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	113	1074	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 81.0%	ICU Level of Service D
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations			↑			↱
Traffic Volume (vph)	0	0	957	0	0	81
Future Volume (vph)	0	0	957	0	0	81
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	0	0	1863	0	0	1565
Flt Permitted						
Satd. Flow (perm)	0	0	1863	0	0	1565
Link Speed (mph)		30	45		45	
Link Distance (ft)		874	182		254	
Travel Time (s)		19.9	2.8		3.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	5%
Adj. Flow (vph)	0	0	1040	0	0	88
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1040	0	0	88
Sign Control		Free	Free		Yield	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 84.0%	ICU Level of Service E
Analysis Period (min) 15	

Lane Group	EBL	EBR	SBL	SBR	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	0	0	0	0	957	1583
Future Volume (vph)	0	0	0	0	957	1583
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.91
Frt					0.979	0.850
Flt Protected					0.959	
Satd. Flow (prot)	0	0	0	0	1742	2799
Flt Permitted					0.959	
Satd. Flow (perm)	0	0	0	0	1742	2799
Link Speed (mph)	30		30		30	
Link Distance (ft)	182		207		337	
Travel Time (s)	4.1		4.7		7.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	5%
Adj. Flow (vph)	0	0	0	0	1040	1721
Shared Lane Traffic (%)						10%
Lane Group Flow (vph)	0	0	0	0	1212	1549
Sign Control	Stop		Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 84.0%	ICU Level of Service E
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↱					
Traffic Volume (vph)	1464	81	0	0	0	0
Future Volume (vph)	1464	81	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00
Frt	0.992					
Flt Protected						
Satd. Flow (prot)	3411	0	0	0	0	0
Flt Permitted						
Satd. Flow (perm)	3411	0	0	0	0	0
Link Speed (mph)	30			45	25	
Link Distance (ft)	306			190	254	
Travel Time (s)	7.0			2.9	6.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	5%	2%	2%	2%	2%
Adj. Flow (vph)	1591	88	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1679	0	0	0	0	0
Sign Control	Free			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 81.1%	ICU Level of Service D
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	0	1039	151	0	0
Future Volume (vph)	0	0	1039	151	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			250	0	0
Storage Lanes	0			1	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	1.00
Frt				0.850		
Flt Protected						
Satd. Flow (prot)	0	0	3539	1538	0	0
Flt Permitted						
Satd. Flow (perm)	0	0	3539	1538	0	0
Link Speed (mph)		25	25		25	
Link Distance (ft)		241	1465		317	
Travel Time (s)		6.6	40.0		8.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	5%	2%	2%
Adj. Flow (vph)	0	0	1129	164	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1129	164	0	0
Sign Control		Free	Free		Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 33.7% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑↑	↰	
Traffic Volume (vph)	0	0	0	1734	64	0
Future Volume (vph)	0	0	0	1734	64	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	4940	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	4940	1770	0
Link Speed (mph)	55			30	25	
Link Distance (ft)	598			415	105	
Travel Time (s)	7.4			9.4	2.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	5%	2%	2%
Adj. Flow (vph)	0	0	0	1885	70	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1885	70	0
Sign Control	Free			Free	Stop	

Intersection Summary		
Area Type:	Other	
Control Type: Unsignalized		
Intersection Capacity Utilization 82.9%		ICU Level of Service E
Analysis Period (min) 15		

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	64	1545	0	0	0	0
Future Volume (vph)	64	1545	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3438	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3438	0	0	0	0
Link Speed (mph)		55	30		25	
Link Distance (ft)		597	306		105	
Travel Time (s)		7.4	7.0		2.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	5%	2%	2%	2%	2%
Adj. Flow (vph)	70	1679	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	70	1679	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 82.9%	ICU Level of Service E
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑	↰	
Traffic Volume (vph)	0	0	0	1056	0	0
Future Volume (vph)	0	0	0	1056	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	0	0	0	3539	1863	0
Flt Permitted						
Satd. Flow (perm)	0	0	0	3539	1863	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	586			210	99	
Travel Time (s)	7.3			2.6	2.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	1148	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1148	0	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 39.2%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	947	0	0	0	0
Future Volume (vph)	0	947	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	1863	3539	0	0	0	0
Flt Permitted						
Satd. Flow (perm)	1863	3539	0	0	0	0
Link Speed (mph)		55	55		25	
Link Distance (ft)		589	212		99	
Travel Time (s)		7.3	2.6		2.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1029	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1029	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 39.2%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	1056	0	0
Future Volume (vph)	0	0	0	1056	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	0	0	0	3539	0	0
Flt Permitted						
Satd. Flow (perm)	0	0	0	3539	0	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	723			586	81	
Travel Time (s)	9.0			7.3	2.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	1148	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1148	0	0
Sign Control	Free			Free	Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 39.2% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	947	0	0	0	0	0	0	0	0	0	0
Future Volume (vph)	0	947	0	0	0	0	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	3539	0	0	0	0	0	0	1863	0	1863	0
Flt Permitted												
Satd. Flow (perm)	0	3539	0	0	0	0	0	0	1863	0	1863	0
Link Speed (mph)		55			55			25			25	
Link Distance (ft)		719			589			84			81	
Travel Time (s)		8.9			7.3			2.3			2.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1029	0	0	0	0	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1029	0	0	0	0	0	0	0	0	0	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 36.2%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	0	947	0	1056	0	0
Future Volume (vph)	0	947	0	1056	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.88	1.00	0.95	1.00	1.00
Frt		0.850				
Flt Protected						
Satd. Flow (prot)	0	2787	0	3539	0	0
Flt Permitted						
Satd. Flow (perm)	0	2787	0	3539	0	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	997			723	719	
Travel Time (s)	12.4			9.0	19.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1029	0	1148	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1029	0	1148	0	0
Sign Control	Free			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 36.5%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	286	1188	0	0	0	0
Future Volume (vph)	286	1188	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		55	
Link Distance (ft)		2077	2379		116	
Travel Time (s)		25.7	29.5		1.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	311	1291	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	311	1291	0	0	0	0
Sign Control		Free	Stop		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 71.3%	ICU Level of Service C
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	0	0	0	1151	286	0
Future Volume (vph)	0	0	0	1151	286	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	607			2382	116	
Travel Time (s)	7.5			29.5	3.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	1251	311	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1251	311	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 78.0%	ICU Level of Service D
Analysis Period (min) 15	

Lane Group	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	0	0	14	1151	0	0
Future Volume (vph)	0	0	14	1151	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	250		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	3539	0	0
Link Speed (mph)	55			55	55	
Link Distance (ft)	2382			560	108	
Travel Time (s)	29.5			6.9	1.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	15	1251	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	15	1251	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 85.0%	ICU Level of Service E
Analysis Period (min) 15	

Lane Group	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	0	1188	0	0	14	0
Future Volume (vph)	0	1188	0	0	14	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	1770	0
Link Speed (mph)		55	55		25	
Link Distance (ft)		2379	608		108	
Travel Time (s)		29.5	7.5		2.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1291	0	0	15	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1291	0	0	15	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 71.3%	ICU Level of Service C
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1163	39	0	0	0	32
Future Volume (vph)	1163	39	0	0	0	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		600	600		0	0
Storage Lanes		0	0		0	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00
Frt	0.995					0.865
Flt Protected						
Satd. Flow (prot)	3522	0	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	3522	0	0	0	0	1611
Link Speed (mph)	55			55	45	
Link Distance (ft)	608			628	1089	
Travel Time (s)	7.5			7.8	16.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1264	42	0	0	0	35
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1306	0	0	0	0	35
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 43.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	1156	9	0
Future Volume (vph)	0	0	0	1156	9	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	645			3831	112	
Travel Time (s)	8.0			47.5	3.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	1257	10	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1257	10	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 60.1%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	9	1186	0	0	0	0
Future Volume (vph)	9	1186	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		55	
Link Distance (ft)		628	3825		112	
Travel Time (s)		7.8	47.4		1.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	10	1289	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	10	1289	0	0	0	0
Sign Control		Free	Stop		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 71.4%	ICU Level of Service C
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	10	1156	0	0
Future Volume (vph)	0	0	10	1156	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	250		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	3539	0	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	3831			538	97	
Travel Time (s)	47.5			6.7	2.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	11	1257	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	11	1257	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 47.3%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑			↰	
Traffic Volume (vph)	0	1186	0	0	10	0
Future Volume (vph)	0	1186	0	0	10	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	1770	0
Link Speed (mph)		55	55		25	
Link Distance (ft)		3825	591		97	
Travel Time (s)		47.4	7.3		2.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1289	0	0	11	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1289	0	0	11	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 71.4%	ICU Level of Service C
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1184	12	0	0	0	16
Future Volume (vph)	1184	12	0	0	0	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00
Frt	0.998					0.865
Flt Protected						
Satd. Flow (prot)	3532	0	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	3532	0	0	0	0	1611
Link Speed (mph)	55			55	45	
Link Distance (ft)	591			1206	1073	
Travel Time (s)	7.3			15.0	16.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1287	13	0	0	0	17
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1300	0	0	0	0	17
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 43.1% ICU Level of Service A
Analysis Period (min) 15

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	1158	9	0
Future Volume (vph)	0	0	0	1158	9	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	1254			1793	105	
Travel Time (s)	15.5			22.2	2.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	1259	10	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1259	10	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 71.6%	ICU Level of Service C
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	9	1191	0	0	0	0
Future Volume (vph)	9	1191	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		55	
Link Distance (ft)		1206	1786		105	
Travel Time (s)		15.0	22.1		1.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	10	1295	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	10	1295	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 71.6%	ICU Level of Service C
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations			↰↰	↑↑		
Traffic Volume (vph)	0	0	1028	1158	0	0
Future Volume (vph)	0	0	1028	1158	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	500		0	0
Storage Lanes		0	2		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	0.97	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	3433	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	3433	3539	0	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	1793			596	109	
Travel Time (s)	22.2			7.4	3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	1117	1259	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1117	1259	0	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 111.7%	ICU Level of Service H
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	2086	100	0
Future Volume (vph)	0	0	0	2086	100	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	631			2681	109	
Travel Time (s)	7.8			33.2	3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	2267	109	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	2267	109	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 86.3%	ICU Level of Service E
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	100	2118	0	0	0	0
Future Volume (vph)	100	2118	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		55	
Link Distance (ft)		627	2678		109	
Travel Time (s)		7.8	33.2		1.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	109	2302	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	109	2302	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 122.9%	ICU Level of Service H
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	576	2086	0	0
Future Volume (vph)	0	0	576	2086	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	500		0	0
Storage Lanes		0	2		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	0.97	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	3433	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	3433	3539	0	0
Link Speed (mph)	55			55	55	
Link Distance (ft)	2681			671	109	
Travel Time (s)	33.2			8.3	1.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	626	2267	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	626	2267	0	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 130.2%	ICU Level of Service H
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑	↰	
Traffic Volume (vph)	0	0	0	2611	51	0
Future Volume (vph)	0	0	0	2611	51	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	654			797	95	
Travel Time (s)	8.1			9.9	2.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	2838	55	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	2838	55	0
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 102.8% ICU Level of Service G

Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	51	2644	0	0	0	0
Future Volume (vph)	51	2644	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		55	
Link Distance (ft)		659	784		95	
Travel Time (s)		8.2	9.7		1.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	55	2874	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	55	2874	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary		
Area Type:	Other	
Control Type: Unsignalized		
Intersection Capacity Utilization 151.9%		ICU Level of Service H
Analysis Period (min) 15		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1456	18	0	0	0	18
Future Volume (vph)	1456	18	0	0	0	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00
Frt	0.998					0.865
Flt Protected						
Satd. Flow (prot)	3532	0	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	3532	0	0	0	0	1611
Link Speed (mph)	55			55	25	
Link Distance (ft)	576			2077	205	
Travel Time (s)	7.1			25.7	5.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1583	20	0	0	0	20
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1603	0	0	0	0	20
Sign Control	Free			Free	Stop	

Intersection Summary		
Area Type:	Other	
Control Type: Unsignalized		
Intersection Capacity Utilization 50.8%		ICU Level of Service A
Analysis Period (min) 15		

Lane Group	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	3315	0	0	2434	0
Future Volume (vph)	0	3315	0	0	2434	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	0.97	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	3433	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	3433	0
Link Speed (mph)		45	45		45	
Link Distance (ft)		1021	744		215	
Travel Time (s)		15.5	11.3		3.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	3603	0	0	2646	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	3603	0	0	2646	0
Sign Control		Free	Stop		Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 167.7% ICU Level of Service H

Analysis Period (min) 15

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	0	0	871	3038
Future Volume (vph)	0	0	0	0	871	3038
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		0	250	
Storage Lanes	0	0		0	2	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.97	0.91
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	0	3433	5085
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	0	3433	5085
Link Speed (mph)	55		45			30
Link Distance (ft)	167		773			587
Travel Time (s)	2.1		11.7			13.3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	947	3302
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	0	947	3302
Sign Control	Stop		Stop			Free

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 90.0%	ICU Level of Service E
Analysis Period (min) 15	

1005: WB M-96 (Michigan Avenue) & SB I-69 Off-Ramp (Push Button) Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	14.8	104.4	53.9

1007: EB M-96 (Michigan Avenue) (Push Button) & SB I-69 Off-Ramp/EB M-96 (Michigan Avenue) Perfor

Approach	EB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	24.8	4.5	4.8

1008: WB M-96 (Michigan Avenue)/NB I-69 Off-Ramp & WB M-96 (Michigan Avenue) (Push Button) Perf

Approach	WB	SW	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	98.6	24.3	51.6

1009: WB M-96 (Michigan Avenue) (Push Button)/WB M-96 (Michigan Avenue) & EB M-96 (Michigan Ave

Approach	EB	SW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	59.3	66.5	63.6

1010: NB I-69 Off-Ramp (Push Button) & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	4.2	22.2	6.4

3003: M-227/West Drive & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	0.5	0.1	0.2	0.4
Total Del/Veh (s)	24.6	8.9	22.9	22.9

3093: M-227/West Drive & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	0.0	2.0	0.0	0.4
Total Del/Veh (s)	4.3	35.6	2.9	9.7

4001: M-96 (Michigan Avenue) & WB Main Entrance/WB M-96 (Michigan Avenue) Performance by appro

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	83.9	95.7	87.3

4003: EB to WB Xover E of 15 Mile Rd (North) & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	19.8	239.8	68.4
Total Del/Veh (s)	43.4	40.9	42.9

4004: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	390.1	94.0	353.2

4005: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	185.8	32.1	139.5

4006: M-311 (11 Mile Rd) & Site Driveway West Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	235.8	1.3	0.0	112.1
Total Del/Veh (s)	215.8	34.2	21.7	103.8

4007: M-311 (11 Mile Rd) & F Drive N Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	5.4	0.0	0.0	1.1
Total Del/Veh (s)	206.9	122.7	22.5	89.8

4010: EB M-96 (Michigan Avenue)/EB M-96 (Michigan Avenue) (Push Button) & WB M-96 (Michigan Ave

Approach	WB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	37.1	23.1	28.1

4030: NB M-311 (11 Mile Rd)/WB M-96 (Michigan Avenue)/11 Mile Rd (North) & EB M-96 (Michigan Ave

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	22.3	65.5	55.5

4031: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & WB M-96 (Michigan Avenue) Performance by a

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	54.2	13.9	27.2

4033: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & NB to SB Xover N of M-96 (Michigan Avenue) P

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	51.1	10.1	14.1

4034: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & EB I-94 Off-ramp Performance by approach

Approach	SB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	3.0	36.2	13.7

4035: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & WB M-96 (Michigan Avenue)/11 Mile Rd (North)

Approach	SB	NW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	16.4	18.8	17.6

4036: EB I-94 Off-ramp & WB M-96 (Michigan Avenue)/11 Mile Rd (North) Performance by approach

Approach	NB	NW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	49.1	6.7	8.9

4037: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & WB I-94 Off-ramp Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	38.9	16.8
Total Del/Veh (s)	8.5	68.4	34.2

4038: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & EB M-96 (Michigan Avenue)/11 Mile Rd (South)

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	32.3	28.6	30.4

4039: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & WB I-94 Off-ramp Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	7.7	4.3	4.7

4040: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & 11 Mile Rd Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	65.0	5.5	38.3

4041: 11 Mile Rd & WB M-96 (Michigan Avenue)/11 Mile Rd (North) Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.4	0.2
Total Del/Veh (s)	13.8	30.2	19.3

4042: 11 Mile Rd & H Dr N Performance by approach

Approach	NE	SW	All
Denied Del/Veh (s)	0.0	0.6	0.3
Total Del/Veh (s)	6.9	6.5	6.7

4050: Prop Site Drive E & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	470.5	155.4
Total Del/Veh (s)	101.5	598.3	218.6

4051: Prop Site Drive W & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	231.0	111.5
Total Del/Veh (s)	72.3	266.4	152.6

4061: WB M-96 (Michigan Avenue) & Firekeepers Main Drive Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	3.8	50.1	8.6

4065: WB M-96 (Michigan Avenue) & 15 Mile Rd (North) Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	4.2	0.0	3.5
Total Del/Veh (s)	72.6	140.3	84.3

4066: EB M-96 (Michigan Avenue) & WB to EB Xover W of 15 Mile Rd (South) Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	34.9	31.4	34.8

4067: 15 Mile Rd (South) & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.7	0.1
Total Del/Veh (s)	113.1	63.2	107.1

4068: EB to WB Xover E of 15 Mile Rd (South) & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	31.5	0.0	29.7
Total Del/Veh (s)	35.4	44.0	35.9

4070: M-311 (11 Mile Rd) & Site Drive East Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	2.7	0.0	0.0	0.6
Total Del/Veh (s)	27.0	176.5	22.1	66.5

4071: 15 Mile Rd & Verona Rd Performance by approach

Approach	NB	SB	SE	NW	All
Denied Del/Veh (s)	4.8	0.1	14.9	194.0	23.5
Total Del/Veh (s)	33.7	9.8	50.5	714.3	86.3

4075: 11 Mile Road & Verona Road Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	199.2	535.0	0.5	181.9
Total Del/Veh (s)	41.5	213.9	268.9	46.9	136.6

9002: WB M-96 (Michigan Avenue) & Firekeepers Gas Station Driveway Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.3	0.1
Total Del/Veh (s)	1.8	10.6	3.6

9003: WB M-96 (Michigan Avenue) & Firekeepers E Drive Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.7	8.8	2.9

9004: WB M-96 (Michigan Avenue) & Ackerson Drive Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	1.3	5.3	1.3

9006: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	1.0	3.0	1.1

9008: 15 Mile Rd (North) & Old M-96 (Michigan Ave) Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.0	0.0	0.0
Total Del/Veh (s)	6.1	0.7	139.7	79.3

9013: SB I-69 On-Ramp & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.5	0.5
Total Del/Veh (s)	123.4	123.4

9016: EB M-96 (Michigan Avenue) & NB I-69 On-Ramp Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.9	0.9
Total Del/Veh (s)	51.0	51.0

9017: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	7.2	7.2
Total Del/Veh (s)	70.8	70.8

9018: EB M-96 (Michigan Avenue) & WB to EB Xover W of M-227/West Drive Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.5	8.6	2.7

9019: EB to WB Xover W of M-227/West Drive & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.2	0.0	0.2
Total Del/Veh (s)	10.8	43.4	13.6

9020: EB M-96 (Michigan Avenue) & WB to EB Xover E of M-227/West Drive Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.8	8.7	2.3

9021: EB to WB Xover E of M-227/West Drive & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	9.4	0.0	9.1
Total Del/Veh (s)	41.6	135.7	44.0

9023: M-311 (11 Mile Rd) & B Drive North Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	1.4	0.3	1.1	0.4	0.9
Total Del/Veh (s)	2.5	1.6	13.0	12.7	5.0

9025: M-294 (Beadle Lake Road) & EB I-94 Off-Ramp & EB I-94 On-Ramp Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	2.4	0.3	0.0	0.5
Total Del/Veh (s)	7.4	1.6	1.7	2.6

9026: WB I-94 On-Ramp & M-294 (Beadle Lake Road) & WB I-94 Off-Ramp Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	2.0	0.0	0.3	0.5
Total Del/Veh (s)	7.7	1.6	1.4	2.6

9027: Old US-27 & EB I-94 to Old US-27 Off Ramp Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0
Total Del/Veh (s)	6.7	0.2	0.9	2.5

9028: Old US-27 & NB Old US-27 to EB I-94 On Ramp Performance by approach

Approach	NB	SB	All
Denied Del/Veh (s)	0.6	0.0	0.3
Total Del/Veh (s)	0.7	0.4	0.5

9029: SB Old US-27 WB I-94 On Ramp & Old US-27 & WB I-94 to Old US-27 Off Ramp Performance by

Approach	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	1.1	0.4
Total Del/Veh (s)	4.6	0.2	0.7	1.1

9030: I-94BL/Partello Rd & EB I-94 to I-94BL/Partello Off Ramp Performance by approach

Approach	SE	NE	SW	All
Denied Del/Veh (s)	0.0	0.2	0.0	0.1
Total Del/Veh (s)	4.5	1.5	0.2	1.8

9031: I-94BL/Partello Rd & I-94/Partello Rd to EB I-94 On Ramp Performance by approach

Approach	NE	SW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.2	0.7	0.4

9032: I-94BL/Partello Rd & WB I-94 to I-94/Partello Rd Performance by approach

Approach	EB	NE	SW	All
Denied Del/Veh (s)	0.0	0.0	0.8	0.2
Total Del/Veh (s)	3.4	1.1	0.4	1.6

9034: Dummy Node & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	1.5	288.9	4.7
Total Del/Veh (s)	51.1	2239.7	67.3

9035: Dummy Node & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.2	0.0
Total Del/Veh (s)	0.5	8.2	0.8

9036: WB M-96 (Michigan Avenue) & Dummy Node Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.1	0.1	0.1
Total Del/Veh (s)	11.4	59.2	12.8

9037: WB M-96 (Michigan Avenue) & Dummy Node Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	6.9	6.9

9040: Old US-27 & NB Old US-27 to WB I-94 On Ramp Performance by approach

Approach	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.0	0.2	0.8

9041: WB to EB Xover E of M-227/West Drive/McDonald's Dr & WB M-96 (Michigan Avenue) Performanc

Approach	WB	SB	All
Denied Del/Veh (s)	0.3	46.3	3.6
Total Del/Veh (s)	18.9	277.6	35.8

9128: M-96 (Michigan Avenue)/WB M-96 (Michigan Avenue) & EB M-96 (Michigan Avenue) Performance

Approach	NB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	9.4	265.8	136.6

9137: SB I-69 On-Ramp Performance by approach

Approach	SB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	12.7	1.6	3.2

9143: NB I-69 On-Ramp Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	13.0	3.4	4.2

9146: WB to EB Xover W of M-227/West Drive & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.8	0.8
Total Del/Veh (s)	73.2	73.2

9147: EB M-96 (Michigan Avenue) & EB to WB Xover W of M-227/West Drive Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	3.0	3.0

9150: M-311 (11 Mile Rd) /NB M-311 (11 Mile Rd) & SB M-311 (11 Mile Rd) Performance by approach

Approach	NB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	64.9	1.9	32.8

9151: EB M-96 (Michigan Avenue) & EB to WB Xover E of M-227/West Drive Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	6.2	6.2

9157: SB I-69 On-Ramp & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.7	0.7
Total Del/Veh (s)	36.7	36.7

9158: SB I-69 Off-Ramp (Push Button) & SB I-69 Off-Ramp Performance by approach

Approach	SB	All
Denied Del/Veh (s)	1214.4	1214.4
Total Del/Veh (s)	371.1	371.1

9159: NB I-69 Off-Ramp & NB I-69 Off-Ramp (Push Button) Performance by approach

Approach	NB	All
Denied Del/Veh (s)	704.3	704.3
Total Del/Veh (s)	243.6	243.6

9178: WB I-94 to BL-94/Partello Rd Off Ramp/WB I-94 to I-94/Partello Rd & BL-94/Partello Rd to WB I-94

Approach	EB	WB	All
Denied Del/Veh (s)	0.2	0.0	0.1
Total Del/Veh (s)	0.2	0.3	0.2

9304: WB to EB Xover W of 15 Mile Rd (North) & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	45.7	45.7

9305: EB M-96 (Michigan Avenue) & WB to EB Xover W of 15 Mile Rd (North) Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	76.3	282.0	78.3

9307: EB M-96 (Michigan Avenue) & EB to WB Xover E of 15 Mile Rd (North) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	162.2	162.2

9310: WB to EB Xover W of 15 Mile Rd (South) & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	73.2	73.2
Total Del/Veh (s)	173.4	173.4

9311: EB M-96 (Michigan Avenue) & EB to WB Xover E of 15 Mile Rd (South) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.2	0.2
Total Del/Veh (s)	66.8	66.8

9330: EB to WB Xover E of Old M-311 (11 Mile Rd) & WB M-96 (Michigan Avenue) Performance by appr

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.9	8.7	3.0

9331: EB M-96 (Michigan Avenue) & EB to WB Xover E of Old M-311 (11 Mile Rd) Performance by appro

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.2	2.2

9332: WB M-96 (Michigan Avenue) & Old M-311 (11 Mile Rd) Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	4.5	15.1	4.9

9336: WB to EB Xover W of Old M-311 (11 Mile Rd) & WB M-96 (Michigan Avenue) Performance by app

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	14.9	14.9

9337: EB M-96 (Michigan Avenue) & WB to EB Xover W of Old M-311 (11 Mile Rd) Performance by appr

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	3.3	10.8	4.0

9338: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & NB to SB Xover N of M-96 (Michigan Avenue) P

Approach	NB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	21.7	21.7

9339: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & EB I-94 On Ramp Performance by approach

Approach	NB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	44.4	44.4

9340: EB I-94 On Ramp Performance by approach

Approach	EB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	15.7	0.3	1.4

9342: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & EB I-94 On Ramp Performance by approach

Approach	SB	All
Denied Del/Veh (s)	1.2	1.2
Total Del/Veh (s)	40.3	40.3

9343: EB I-94 Off-ramp Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.7	0.7
Total Del/Veh (s)	4.3	4.3

9346: WB I-94 On Ramp Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.9	28.2	5.1

9347: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & WB I-94 On Ramp Performance by approach

Approach	NW	All
Denied Del/Veh (s)	0.5	0.5
Total Del/Veh (s)	26.7	26.7

9348: WB I-94 On Ramp & EB M-96 (Michigan Avenue)/11 Mile Rd (South) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.1	0.1
Total Del/Veh (s)	51.8	51.8

9349: WB I-94 Off-ramp Performance by approach

Approach	WB	All
Denied Del/Veh (s)	20.3	20.3
Total Del/Veh (s)	180.9	180.9

9351: SB to NB Xover E of 11 Mile Rd & WB M-96 (Michigan Avenue)/11 Mile Rd (North) Performance b

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.5	16.6	2.0

9352: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & SB to NB Xover E of 11 Mile Rd Performance b

Approach	EB	All
Denied Del/Veh (s)	6.1	6.1
Total Del/Veh (s)	74.5	74.5

9354: EB to WB Xover W of 11 Mile Rd & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	3.8	3.8

9355: EB M-96 (Michigan Avenue) & EB to WB Xover W of 11 Mile Rd Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	126.1	126.1

9356: WB to EB Xover W of 11 Mile Rd & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	3.0	3.0

9357: EB M-96 (Michigan Avenue) & WB to EB Xover W of 11 Mile Rd Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	118.9	118.9

9359: EB M-96 (Michigan Avenue) & M-96 (Michigan Avenue)/WB M-96 (Michigan Avenue) Performance

Approach	EB	WB	All
Denied Del/Veh (s)	16.4	0.0	8.7
Total Del/Veh (s)	57.0	1.0	30.2

9381: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.6	2.6

9382: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.7	5.1	3.5

9383: WB M-96 (Michigan Avenue) Performance by approach

Approach	NW	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.5	0.5

9384: EB M-96 (Michigan Avenue) Performance by approach

Approach	SE	SW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.0	4.8	2.0

9385: Ceresco Road/12 Mile Road & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	1.0	7.3	1.2

9386: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	3.2	3.6	3.2

9387: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.7	0.7

9388: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.4	0.4

9389: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	3.2	6.2	3.2

9390: 13 Mile Rd & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	1.2	8.6	1.4

9392: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.3	3.7	1.3

9393: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	21.9	21.9

9394: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	30.5	30.5

9396: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.3	9.5	2.8

9397: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	65.3	65.3

9398: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	68.3	68.3

9400: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	81.5	138.7	82.8

9401: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	105.2	105.2

9410: Retail Drive & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	0.7	8.4	0.8

9415: EB Main Entrance/EB M-96 (Michigan Avenue) & M-96 (Michigan Avenue) Performance by approa

Approach	EB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	84.7	12.6	62.7

9416: SB M-311 (11 Mile Rd)/EB M-96 (Michigan Avenue)/11 Mile Rd (South) & EB M-96 (Michigan Aver

Approach	SB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	4.1	4.1

Total Network Performance

Denied Del/Veh (s)	281.8
Total Del/Veh (s)	425.7

Appendix H.7: Synchro Model Output (Mitigated Build)

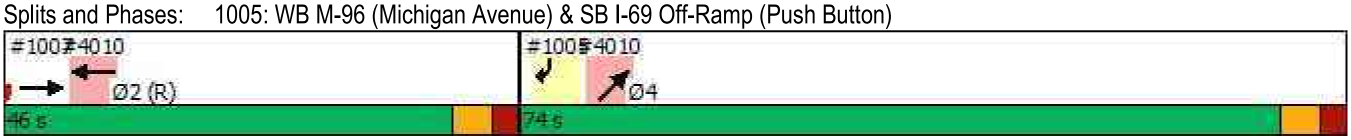
Scenario M2 (Inbound)

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø2
Lane Configurations							
Traffic Volume (vph)	0	0	1003	0	0	1563	
Future Volume (vph)	0	0	1003	0	0	1563	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	0.91	1.00	1.00	0.76	
Frt						0.850	
Flt Protected							
Satd. Flow (prot)	0	0	5085	0	0	3610	
Flt Permitted							
Satd. Flow (perm)	0	0	5085	0	0	3610	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)						602	
Link Speed (mph)		45	45		25		
Link Distance (ft)		275	194		266		
Travel Time (s)		4.2	2.9		7.3		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.84	0.75	
Heavy Vehicles (%)	2%	2%	2%	2%	3%	2%	
Adj. Flow (vph)	0	0	1090	0	0	2084	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	1090	0	0	2084	
Turn Type			NA			Prot	
Protected Phases			Free!			4!	2
Permitted Phases							
Minimum Split (s)						17.0	17.0
Total Split (s)						74.0	46.0
Total Split (%)						61.7%	38%
Yellow Time (s)						3.5	3.5
All-Red Time (s)						2.5	2.5
Lost Time Adjust (s)						0.0	
Total Lost Time (s)						6.0	
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)			120.0			68.0	
Actuated g/C Ratio			1.00			0.57	
v/c Ratio			0.21			0.90	
Control Delay			0.1			22.8	
Queue Delay			0.0			0.8	
Total Delay			0.1			23.6	
LOS			A			C	
Approach Delay			0.1		23.6		
Approach LOS			A		C		
Queue Length 50th (ft)			0			466	
Queue Length 95th (ft)			0			346	
Internal Link Dist (ft)		195	114		186		
Turn Bay Length (ft)							
Base Capacity (vph)			5085			2306	
Starvation Cap Reductn			0			0	
Spillback Cap Reductn			549			64	
Storage Cap Reductn			0			0	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø2
Reduced v/c Ratio			0.24			0.93	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 100 (83%), Referenced to phase 2:EBT, Start of Green	
Natural Cycle: 60	
Control Type: Pretimed	
Maximum v/c Ratio: 0.90	
Intersection Signal Delay: 15.5	Intersection LOS: B
Intersection Capacity Utilization 64.2%	ICU Level of Service C
Analysis Period (min) 15	
! Phase conflict between lane groups.	

Splits and Phases: 1005: WB M-96 (Michigan Avenue) & SB I-69 Off-Ramp (Push Button)

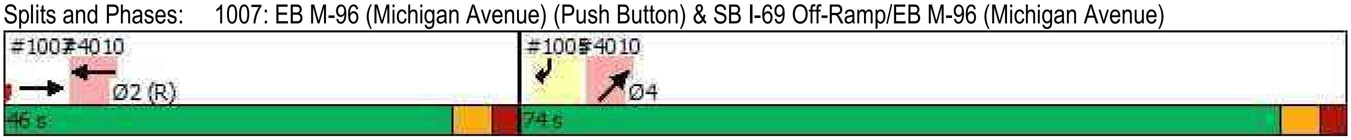


Lane Group	EBT	EBR	WBL	WBT	NEL	NER	Ø4
Lane Configurations							
Traffic Volume (vph)	112	0	0	0	0	492	
Future Volume (vph)	112	0	0	0	0	492	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Storage Length (ft)		260	285		0	0	
Storage Lanes		0	0		0	3	
Taper Length (ft)			240		25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.76	
Frt						0.850	
Flt Protected							
Satd. Flow (prot)	1863	0	0	0	0	3610	
Flt Permitted							
Satd. Flow (perm)	1863	0	0	0	0	3610	
Right Turn on Red		Yes				Yes	
Satd. Flow (RTOR)						2086	
Link Speed (mph)	25			45	45		
Link Distance (ft)	301			619	190		
Travel Time (s)	8.2			9.4	2.9		
Peak Hour Factor	0.75	0.84	0.92	0.92	0.90	0.90	
Heavy Vehicles (%)	2%	3%	2%	2%	2%	2%	
Adj. Flow (vph)	149	0	0	0	0	547	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	149	0	0	0	0	547	
Turn Type	NA					Free	
Protected Phases	2						4
Permitted Phases						Free	
Minimum Split (s)	17.0						17.0
Total Split (s)	46.0						74.0
Total Split (%)	38.3%						62%
Yellow Time (s)	3.5						3.5
All-Red Time (s)	2.5						2.5
Lost Time Adjust (s)	0.0						
Total Lost Time (s)	6.0						
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)	40.0					120.0	
Actuated g/C Ratio	0.33					1.00	
v/c Ratio	0.24					0.15	
Control Delay	30.3					0.3	
Queue Delay	0.0					0.0	
Total Delay	30.3					0.3	
LOS	C					A	
Approach Delay	30.3				0.3		
Approach LOS	C				A		
Queue Length 50th (ft)	83					0	
Queue Length 95th (ft)	111					0	
Internal Link Dist (ft)	221			539	110		
Turn Bay Length (ft)							
Base Capacity (vph)	621					3610	

Lane Group	EBT	EBR	WBL	WBT	NEL	NER	Ø4
Starvation Cap Reductn	0					0	
Spillback Cap Reductn	0					0	
Storage Cap Reductn	0					0	
Reduced v/c Ratio	0.24					0.15	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 100 (83%), Referenced to phase 2:EBT, Start of Green	
Natural Cycle: 60	
Control Type: Pretimed	
Maximum v/c Ratio: 0.90	
Intersection Signal Delay: 6.7	Intersection LOS: A
Intersection Capacity Utilization 46.5%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 1007: EB M-96 (Michigan Avenue) (Push Button) & SB I-69 Off-Ramp/EB M-96 (Michigan Avenue)

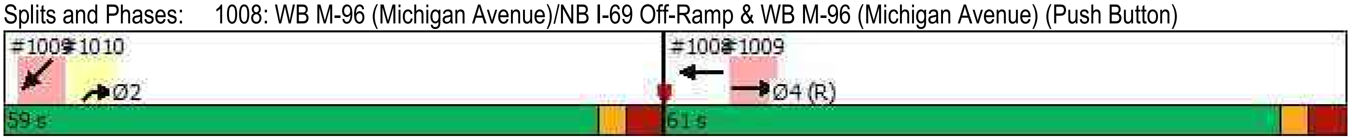


Lane Group	EBL	EBT	WBT	WBR	SWL	SWR	Ø2
Lane Configurations							
Traffic Volume (vph)	0	0	349	0	0	773	
Future Volume (vph)	0	0	349	0	0	773	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.88	
Frt						0.850	
Flt Protected							
Satd. Flow (prot)	0	0	3539	0	0	2787	
Flt Permitted							
Satd. Flow (perm)	0	0	3539	0	0	2787	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)						1204	
Link Speed (mph)		45	25		45		
Link Distance (ft)		217	252		223		
Travel Time (s)		3.3	6.9		3.4		
Peak Hour Factor	0.92	0.92	0.75	0.93	0.92	0.92	
Heavy Vehicles (%)	2%	2%	2%	6%	2%	2%	
Adj. Flow (vph)	0	0	465	0	0	840	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	465	0	0	840	
Turn Type			NA			Free	
Protected Phases			4				2
Permitted Phases						Free	
Minimum Split (s)			16.0				16.0
Total Split (s)			61.0				59.0
Total Split (%)			50.8%				49%
Yellow Time (s)			2.5				2.5
All-Red Time (s)			3.5				3.5
Lost Time Adjust (s)			0.0				
Total Lost Time (s)			6.0				
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)			55.0			120.0	
Actuated g/C Ratio			0.46			1.00	
v/c Ratio			0.29			0.30	
Control Delay			20.9			2.8	
Queue Delay			0.0			0.0	
Total Delay			20.9			2.8	
LOS			C			A	
Approach Delay			20.9		2.8		
Approach LOS			C		A		
Queue Length 50th (ft)			115			61	
Queue Length 95th (ft)			123			64	
Internal Link Dist (ft)		137	172		143		
Turn Bay Length (ft)							
Base Capacity (vph)			1622			2787	
Starvation Cap Reductn			0			0	
Spillback Cap Reductn			0			0	
Storage Cap Reductn			0			0	

Lane Group	EBL	EBT	WBT	WBR	SWL	SWR	Ø2
Reduced v/c Ratio			0.29			0.30	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 92 (77%), Referenced to phase 4:WBT, Start of Green			
Natural Cycle: 40			
Control Type: Pretimed			
Maximum v/c Ratio: 0.54			
Intersection Signal Delay: 9.2		Intersection LOS: A	
Intersection Capacity Utilization 40.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 1008: WB M-96 (Michigan Avenue)/NB I-69 Off-Ramp & WB M-96 (Michigan Avenue) (Push Button)



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	0	564	0	0	0	0	0	0	0	0	773	0
Future Volume (vph)	0	564	0	0	0	0	0	0	0	0	773	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	3539	0	0	0	0	0	0	0	0	3539	0
Flt Permitted												
Satd. Flow (perm)	0	3539	0	0	0	0	0	0	0	0	3539	0
Right Turn on Red			Yes			Yes			Yes	Yes		Yes
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		209			206			223			213	
Travel Time (s)		3.2			3.1			3.4			3.2	
Peak Hour Factor	0.86	0.86	0.86	0.92	0.92	0.92	0.92	0.92	0.92	0.91	0.91	0.91
Adj. Flow (vph)	0	656	0	0	0	0	0	0	0	0	849	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	656	0	0	0	0	0	0	0	0	849	0
Turn Type		NA									NA	
Protected Phases		4									2	
Permitted Phases												
Minimum Split (s)		16.0									16.0	
Total Split (s)		61.0									59.0	
Total Split (%)		50.8%									49.2%	
Yellow Time (s)		2.5									2.5	
All-Red Time (s)		3.5									3.5	
Lost Time Adjust (s)		0.0									0.0	
Total Lost Time (s)		6.0									6.0	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		55.0									53.0	
Actuated g/C Ratio		0.46									0.44	
v/c Ratio		0.40									0.54	
Control Delay		31.4									24.4	
Queue Delay		0.0									0.0	
Total Delay		31.4									24.4	
LOS		C									C	
Approach Delay		31.4									24.4	
Approach LOS		C									C	
Queue Length 50th (ft)		215									265	
Queue Length 95th (ft)		258									334	
Internal Link Dist (ft)		129			126			143			133	
Turn Bay Length (ft)												
Base Capacity (vph)		1622									1563	
Starvation Cap Reductn		0									0	
Spillback Cap Reductn		0									0	
Storage Cap Reductn		0									0	
Reduced v/c Ratio		0.40									0.54	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 92 (77%), Referenced to phase 4:WBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.54	
Intersection Signal Delay: 27.5	Intersection LOS: C
Intersection Capacity Utilization 47.0%	ICU Level of Service A
Analysis Period (min) 15	

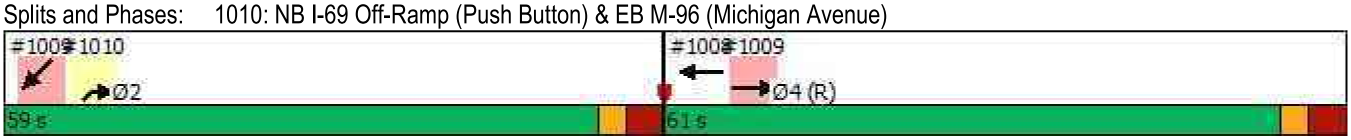
Splits and Phases: 1009: WB M-96 (Michigan Avenue) (Push Button)/WB M-96 (Michigan Avenue) & EB M-96 (Michigan Avenue)

Lane Group	EBT	EBR	WBL	WBT	NEL	NER	Ø4
Lane Configurations							
Traffic Volume (vph)	564	0	0	0	0	122	
Future Volume (vph)	564	0	0	0	0	122	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	0.95	1.00	1.00	1.00	1.00	1.00	
Frt						0.865	
Flt Protected							
Satd. Flow (prot)	3539	0	0	0	0	1611	
Flt Permitted							
Satd. Flow (perm)	3539	0	0	0	0	1611	
Right Turn on Red		Yes				Yes	
Satd. Flow (RTOR)						469	
Link Speed (mph)	45			45	25		
Link Distance (ft)	206			309	315		
Travel Time (s)	3.1			4.7	8.6		
Peak Hour Factor	0.86	0.86	0.92	0.92	0.93	0.75	
Heavy Vehicles (%)	2%	2%	2%	2%	6%	2%	
Adj. Flow (vph)	656	0	0	0	0	163	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	656	0	0	0	0	163	
Turn Type	NA					Prot	
Protected Phases	Free!					2!	4
Permitted Phases							
Minimum Split (s)						16.0	16.0
Total Split (s)						59.0	61.0
Total Split (%)						49.2%	51%
Yellow Time (s)						2.5	2.5
All-Red Time (s)						3.5	3.5
Lost Time Adjust (s)						0.0	
Total Lost Time (s)						6.0	
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)	120.0					53.0	
Actuated g/C Ratio	1.00					0.44	
v/c Ratio	0.19					0.17	
Control Delay	0.1					0.4	
Queue Delay	0.0					0.0	
Total Delay	0.1					0.4	
LOS	A					A	
Approach Delay	0.1				0.4		
Approach LOS	A				A		
Queue Length 50th (ft)	0					0	
Queue Length 95th (ft)	0					0	
Internal Link Dist (ft)	126			229	235		
Turn Bay Length (ft)							
Base Capacity (vph)	3539					973	
Starvation Cap Reductn	0					0	
Spillback Cap Reductn	0					0	
Storage Cap Reductn	0					0	

Lane Group	EBT	EBR	WBL	WBT	NEL	NER	Ø4
Reduced v/c Ratio	0.19					0.17	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 92 (77%), Referenced to phase 4:WBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.54	
Intersection Signal Delay: 0.2	Intersection LOS: A
Intersection Capacity Utilization 47.0%	ICU Level of Service A
Analysis Period (min) 15	
! Phase conflict between lane groups.	

Splits and Phases: 1010: NB I-69 Off-Ramp (Push Button) & EB M-96 (Michigan Avenue)



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	725	192	76	50	0	0	84	85
Future Volume (vph)	0	0	0	0	725	192	76	50	0	0	84	85
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		80	0		0	0		0
Storage Lanes	0		0	0		1	1		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.969							0.850
Flt Protected							0.950					
Satd. Flow (prot)	0	0	0	0	4976	0	1671	1863	0	0	1845	1568
Flt Permitted							0.687					
Satd. Flow (perm)	0	0	0	0	4976	0	1209	1863	0	0	1845	1568
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					102							110
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		152			212			101			1197	
Travel Time (s)		2.3			3.2			2.0			23.3	
Peak Hour Factor	0.92	0.92	0.92	0.87	0.87	0.87	0.67	0.67	0.67	0.77	0.77	0.77
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	8%	2%	2%	3%	3%	3%
Adj. Flow (vph)	0	0	0	0	833	221	113	75	0	0	109	110
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1054	0	113	75	0	0	109	110
Turn Type					NA		Perm	NA			NA	Perm
Protected Phases					6			4			8	
Permitted Phases							4					8
Minimum Split (s)					31.0		17.0	17.0			17.0	17.0
Total Split (s)					79.0		41.0	41.0			41.0	41.0
Total Split (%)					65.8%		34.2%	34.2%			34.2%	34.2%
Yellow Time (s)					3.5		3.5	3.5			3.5	3.5
All-Red Time (s)					2.5		2.5	2.5			6.0	6.0
Lost Time Adjust (s)					0.0		0.0	0.0			0.0	0.0
Total Lost Time (s)					6.0		6.0	6.0			9.5	9.5
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)					73.0		35.0	35.0			31.5	31.5
Actuated g/C Ratio					0.61		0.29	0.29			0.26	0.26
v/c Ratio					0.34		0.32	0.14			0.23	0.22
Control Delay					10.7		8.6	5.5			36.2	7.5
Queue Delay					0.0		0.0	0.0			0.0	0.0
Total Delay					10.7		8.6	5.5			36.2	7.5
LOS					B		A	A			D	A
Approach Delay					10.7			7.4			21.8	
Approach LOS					B			A			C	
Queue Length 50th (ft)					124		11	7			66	0
Queue Length 95th (ft)					144		11	8			98	28
Internal Link Dist (ft)		72			132			21			1117	
Turn Bay Length (ft)												
Base Capacity (vph)					3067		352	543			484	492

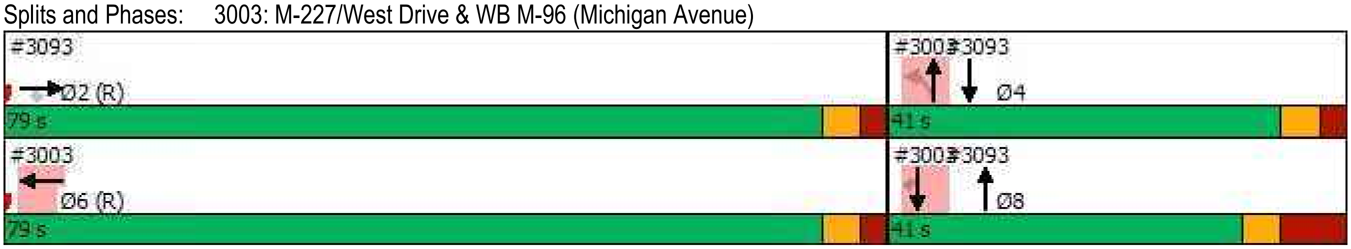
Lane Group	Ø2
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	2
Permitted Phases	
Minimum Split (s)	16.0
Total Split (s)	79.0
Total Split (%)	66%
Yellow Time (s)	3.5
All-Red Time (s)	2.5
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
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)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
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					0.34		0.32	0.14			0.23	0.22

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 112 (93%), Referenced to phase 2:EBT and 6:, Start of Green
Natural Cycle: 50
Control Type: Pretimed
Maximum v/c Ratio: 0.34
Intersection Signal Delay: 11.9 Intersection LOS: B
Intersection Capacity Utilization 47.9% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 3003: M-227/West Drive & WB M-96 (Michigan Avenue)



Lane Group	Ø2
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

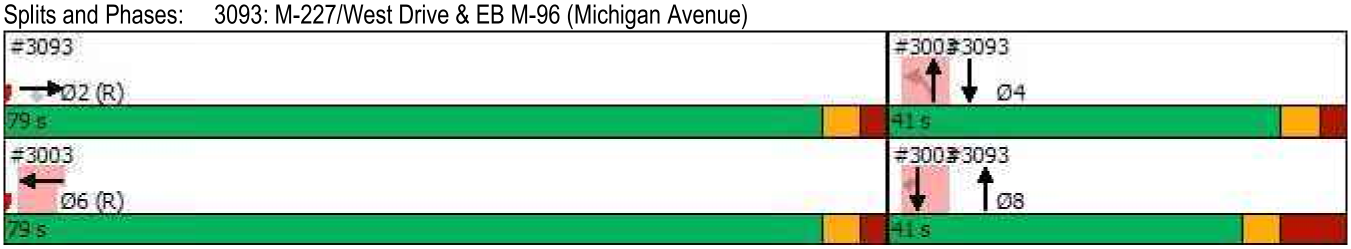
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	634	59	0	0	0	0	126	30	0	84	0
Future Volume (vph)	0	634	59	0	0	0	0	126	30	0	84	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		65	0		0	100		0	0		0
Storage Lanes	0		1	0		0	1		0	0		0
Taper Length (ft)	25			25			70			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Frt			0.850					0.971				
Flt Protected												
Satd. Flow (prot)	0	3574	1442	0	0	0	0	3344	0	0	1881	0
Flt Permitted												
Satd. Flow (perm)	0	3574	1442	0	0	0	0	3344	0	0	1881	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			59					24				
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		161			222			1117			101	
Travel Time (s)		2.4			3.4			21.8			2.0	
Peak Hour Factor	0.95	0.95	0.95	0.92	0.92	0.92	0.72	0.72	0.72	0.83	0.83	0.83
Heavy Vehicles (%)	2%	1%	12%	2%	2%	2%	2%	6%	0%	2%	1%	2%
Adj. Flow (vph)	0	667	62	0	0	0	0	175	42	0	101	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	667	62	0	0	0	0	217	0	0	101	0
Turn Type		NA	Perm					NA			NA	
Protected Phases		2						8			4	
Permitted Phases			2									
Minimum Split (s)		16.0	16.0					17.0			17.0	
Total Split (s)		79.0	79.0					41.0			41.0	
Total Split (%)		65.8%	65.8%					34.2%			34.2%	
Yellow Time (s)		3.5	3.5					3.5			3.5	
All-Red Time (s)		2.5	2.5					6.0			2.5	
Lost Time Adjust (s)		0.0	0.0					0.0			0.0	
Total Lost Time (s)		6.0	6.0					9.5			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		73.0	73.0					31.5			35.0	
Actuated g/C Ratio		0.61	0.61					0.26			0.29	
v/c Ratio		0.31	0.07					0.24			0.18	
Control Delay		4.9	0.2					31.7			0.7	
Queue Delay		0.0	0.0					0.0			0.0	
Total Delay		4.9	0.2					31.7			0.7	
LOS		A	A					C			A	
Approach Delay		4.5						31.7			0.7	
Approach LOS		A						C			A	
Queue Length 50th (ft)		39	0					61			0	
Queue Length 95th (ft)		49	0					73			0	
Internal Link Dist (ft)		81			142			1037			21	
Turn Bay Length (ft)			65									
Base Capacity (vph)		2174	900					895			548	

Lane Group	Ø6
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	6
Permitted Phases	
Minimum Split (s)	31.0
Total Split (s)	79.0
Total Split (%)	66%
Yellow Time (s)	3.5
All-Red Time (s)	2.5
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
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)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn		0	0					0			0	
Spillback Cap Reductn		0	0					18			0	
Storage Cap Reductn		0	0					0			0	
Reduced v/c Ratio		0.31	0.07					0.25			0.18	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 112 (93%), Referenced to phase 2:EBT and 6:, Start of Green	
Natural Cycle: 50	
Control Type: Pretimed	
Maximum v/c Ratio: 0.34	
Intersection Signal Delay: 9.8	Intersection LOS: A
Intersection Capacity Utilization 47.9%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 3093: M-227/West Drive & EB M-96 (Michigan Avenue)



Lane Group	Ø6
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

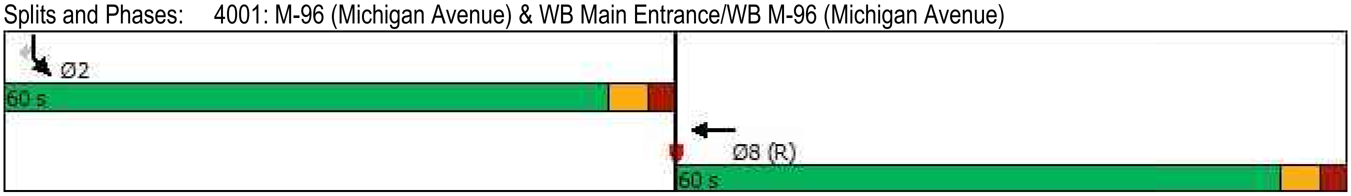
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations										
Traffic Volume (vph)	0	0	0	0	1681	1241	407	116	0	0
Future Volume (vph)	0	0	0	0	1681	1241	407	116	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	300		300	0	200	0	0
Storage Lanes	0		0	0		1	2	1	0	0
Taper Length (ft)	25			25			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.88	0.97	1.00	1.00	1.00
Frt						0.850		0.850		
Flt Protected							0.950			
Satd. Flow (prot)	0	0	0	0	3539	2787	3433	1583	0	0
Flt Permitted							0.950			
Satd. Flow (perm)	0	0	0	0	3539	2787	3433	1583	0	0
Right Turn on Red			Yes	Yes		Yes		Yes		
Satd. Flow (RTOR)						463		27		
Link Speed (mph)		45			45		55		45	
Link Distance (ft)		858			894		434		215	
Travel Time (s)		13.0			13.5		5.4		3.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	1827	1349	442	126	0	0
Shared Lane Traffic (%)										
Lane Group Flow (vph)	0	0	0	0	1827	1349	442	126	0	0
Turn Type					NA	Free	Prot	Perm		
Protected Phases					8		2			
Permitted Phases						Free		2		
Minimum Split (s)					16.0		16.0	16.0		
Total Split (s)					60.0		60.0	60.0		
Total Split (%)					50.0%		50.0%	50.0%		
Yellow Time (s)					3.5		3.5	3.5		
All-Red Time (s)					2.5		2.5	2.5		
Lost Time Adjust (s)					0.0		0.0	0.0		
Total Lost Time (s)					6.0		6.0	6.0		
Lead/Lag										
Lead-Lag Optimize?										
Act Effct Green (s)					54.0	120.0	54.0	54.0		
Actuated g/C Ratio					0.45	1.00	0.45	0.45		
v/c Ratio					1.15	0.48	0.29	0.17		
Control Delay					98.9	0.4	8.6	4.2		
Queue Delay					0.0	0.0	0.0	0.0		
Total Delay					98.9	0.4	8.6	4.2		
LOS					F	A	A	A		
Approach Delay					57.0		7.6			
Approach LOS					E		A			
Queue Length 50th (ft)					~893	0	108	24		
Queue Length 95th (ft)					#1026	0	144	40		
Internal Link Dist (ft)		778			814		354		135	
Turn Bay Length (ft)						300		200		
Base Capacity (vph)					1592	2787	1544	727		
Starvation Cap Reductn					0	0	0	0		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Spillback Cap Reductn					0	0	0	0		
Storage Cap Reductn					0	0	0	0		
Reduced v/c Ratio					1.15	0.48	0.29	0.17		

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 36 (30%), Referenced to phase 8:WBT, Start of Green	
Natural Cycle: 60	
Control Type: Pretimed	
Maximum v/c Ratio: 1.15	
Intersection Signal Delay: 49.5	Intersection LOS: D
Intersection Capacity Utilization 68.1%	ICU Level of Service C
Analysis Period (min) 15	
~ Volume exceeds capacity, queue is theoretically infinite.	
Queue shown is maximum after two cycles.	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	

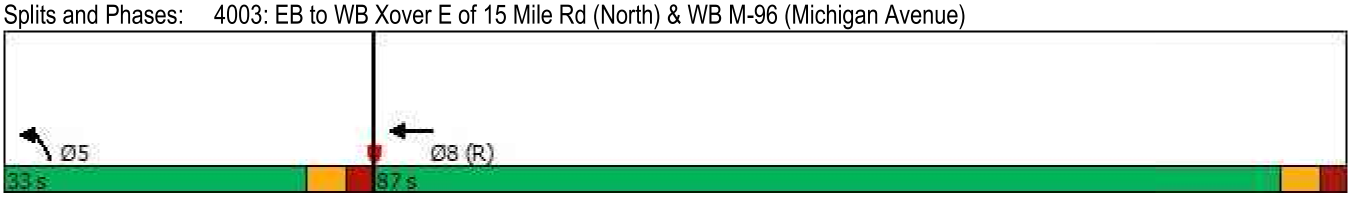
Splits and Phases: 4001: M-96 (Michigan Avenue) & WB Main Entrance/WB M-96 (Michigan Avenue)



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	2598	10	0
Future Volume (vph)	0	0	0	2598	10	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	0.97	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	5085	3433	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	5085	3433	0
Right Turn on Red		Yes			Yes	Yes
Satd. Flow (RTOR)					6	
Link Speed (mph)	45			45	25	
Link Distance (ft)	660			254	113	
Travel Time (s)	10.0			3.8	3.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.70	0.92
Adj. Flow (vph)	0	0	0	2824	14	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	2824	14	0
Turn Type				NA	Prot	
Protected Phases				8	5	
Permitted Phases						
Minimum Split (s)				16.0	13.0	
Total Split (s)				87.0	33.0	
Total Split (%)				72.5%	27.5%	
Yellow Time (s)				3.5	3.5	
All-Red Time (s)				2.5	2.5	
Lost Time Adjust (s)				0.0	0.0	
Total Lost Time (s)				6.0	6.0	
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)				81.0	27.0	
Actuated g/C Ratio				0.68	0.22	
v/c Ratio				0.82	0.02	
Control Delay				11.8	40.6	
Queue Delay				0.0	0.0	
Total Delay				11.8	40.6	
LOS				B	D	
Approach Delay				11.8	40.6	
Approach LOS				B	D	
Queue Length 50th (ft)				315	3	
Queue Length 95th (ft)				309	11	
Internal Link Dist (ft)	580			174	33	
Turn Bay Length (ft)						
Base Capacity (vph)				3432	777	
Starvation Cap Reductn				0	0	
Spillback Cap Reductn				0	0	
Storage Cap Reductn				0	0	
Reduced v/c Ratio				0.82	0.02	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 116 (97%), Referenced to phase 8:WBT, Start of Green	
Natural Cycle: 55	
Control Type: Pretimed	
Maximum v/c Ratio: 0.82	
Intersection Signal Delay: 12.0	Intersection LOS: B
Intersection Capacity Utilization 71.9%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 4003: EB to WB Xover E of 15 Mile Rd (North) & WB M-96 (Michigan Avenue)

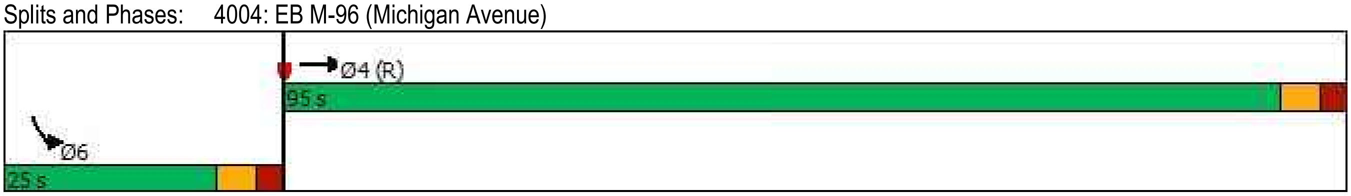


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	550	0	0	308	0
Future Volume (vph)	0	550	0	0	308	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	0.97	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	3433	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	3433	0
Right Turn on Red				Yes	Yes	Yes
Satd. Flow (RTOR)					746	
Link Speed (mph)		55	55		25	
Link Distance (ft)		2678	669		109	
Travel Time (s)		33.2	8.3		3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	598	0	0	335	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	598	0	0	335	0
Turn Type		NA			Prot	
Protected Phases		4			6	
Permitted Phases						
Detector Phase		4			6	
Switch Phase						
Minimum Initial (s)		10.0			7.0	
Minimum Split (s)		16.0			13.0	
Total Split (s)		95.0			25.0	
Total Split (%)		79.2%			20.8%	
Yellow Time (s)		3.5			3.5	
All-Red Time (s)		2.5			2.5	
Lost Time Adjust (s)		0.0			0.0	
Total Lost Time (s)		6.0			6.0	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode		C-Max			None	
Act Effct Green (s)		101.0			7.0	
Actuated g/C Ratio		0.84			0.06	
v/c Ratio		0.20			0.37	
Control Delay		0.5			1.0	
Queue Delay		0.0			0.0	
Total Delay		0.5			1.0	
LOS		A			A	
Approach Delay		0.5			1.0	
Approach LOS		A			A	
Queue Length 50th (ft)		5			0	
Queue Length 95th (ft)		6			0	
Internal Link Dist (ft)		2598	589		29	
Turn Bay Length (ft)						
Base Capacity (vph)		2978			1171	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Starvation Cap Reductn		0			0	
Spillback Cap Reductn		0			0	
Storage Cap Reductn		0			0	
Reduced v/c Ratio		0.20			0.29	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 20 (17%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 40	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.37	
Intersection Signal Delay: 0.7	Intersection LOS: A
Intersection Capacity Utilization 49.3%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4004: EB M-96 (Michigan Avenue)

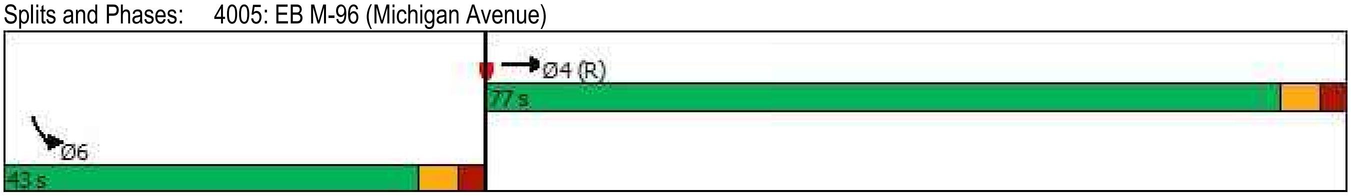


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	603	0	0	549	0
Future Volume (vph)	0	603	0	0	549	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	0.97	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	3433	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	3433	0
Right Turn on Red				Yes	Yes	Yes
Satd. Flow (RTOR)					500	
Link Speed (mph)		55	55		25	
Link Distance (ft)		1786	608		109	
Travel Time (s)		22.1	7.5		3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	655	0	0	597	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	655	0	0	597	0
Turn Type		NA			Prot	
Protected Phases		4			6	
Permitted Phases						
Detector Phase		4			6	
Switch Phase						
Minimum Initial (s)		10.0			7.0	
Minimum Split (s)		16.0			13.0	
Total Split (s)		77.0			43.0	
Total Split (%)		64.2%			35.8%	
Yellow Time (s)		3.5			3.5	
All-Red Time (s)		2.5			2.5	
Lost Time Adjust (s)		0.0			0.0	
Total Lost Time (s)		6.0			6.0	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode		C-Max			Max	
Act Effct Green (s)		71.0			37.0	
Actuated g/C Ratio		0.59			0.31	
v/c Ratio		0.31			0.43	
Control Delay		12.8			12.9	
Queue Delay		0.0			0.0	
Total Delay		12.8			12.9	
LOS		B			B	
Approach Delay		12.8			12.9	
Approach LOS		B			B	
Queue Length 50th (ft)		126			75	
Queue Length 95th (ft)		162			122	
Internal Link Dist (ft)		1706	528		29	
Turn Bay Length (ft)						
Base Capacity (vph)		2093			1404	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Starvation Cap Reductn		0			0	
Spillback Cap Reductn		0			0	
Storage Cap Reductn		0			0	
Reduced v/c Ratio		0.31			0.43	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 112 (93%), Referenced to phase 4:EBT, Start of Green			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.43			
Intersection Signal Delay: 12.9		Intersection LOS: B	
Intersection Capacity Utilization 40.7%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 4005: EB M-96 (Michigan Avenue)



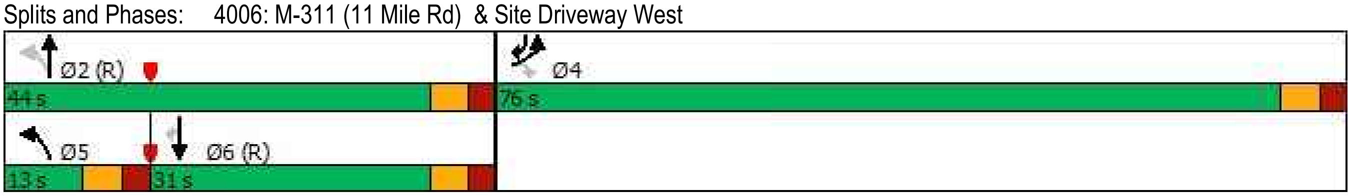
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	102	129	0
Future Volume (vph)	0	0	0	102	129	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	250	250			0
Storage Lanes	2	1	1			1
Taper Length (ft)	25		25			
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	3614	1863	1863	1863	1863	1863
Flt Permitted						
Satd. Flow (perm)	3614	1863	1863	1863	1863	1863
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)						
Link Speed (mph)	25			55	55	
Link Distance (ft)	1178			1461	940	
Travel Time (s)	32.1			18.1	11.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	111	140	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	111	140	0
Turn Type	Prot	Perm	pm+pt	NA	NA	pm+ov
Protected Phases	4		5	2	6	4
Permitted Phases		4	2			6
Detector Phase	4	4	5	2	6	4
Switch Phase						
Minimum Initial (s)	7.0	7.0	7.0	10.0	10.0	7.0
Minimum Split (s)	14.0	14.0	13.0	17.0	17.0	14.0
Total Split (s)	76.0	76.0	13.0	44.0	31.0	76.0
Total Split (%)	63.3%	63.3%	10.8%	36.7%	25.8%	63.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.5	2.5	2.5	2.5	2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None	None	Min	C-Max	C-Max	None
Act Effct Green (s)				120.0	101.0	
Actuated g/C Ratio				1.00	0.84	
v/c Ratio				0.06	0.09	
Control Delay				0.1	1.8	
Queue Delay				0.0	0.0	
Total Delay				0.1	1.8	
LOS				A	A	
Approach Delay				0.1	1.8	
Approach LOS				A	A	
Queue Length 50th (ft)				0	14	
Queue Length 95th (ft)				0	23	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Internal Link Dist (ft)	1098			1381	860	
Turn Bay Length (ft)						
Base Capacity (vph)				1863	1568	
Starvation Cap Reductn				0	0	
Spillback Cap Reductn				0	0	
Storage Cap Reductn				0	0	
Reduced v/c Ratio				0.06	0.09	

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 60 (50%), Referenced to phase 2:NBTL and 6:SBT, Start of Green
Natural Cycle: 45
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.09
Intersection Signal Delay: 1.0 Intersection LOS: A
Intersection Capacity Utilization 13.3% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 4006: M-311 (11 Mile Rd) & Site Driveway West



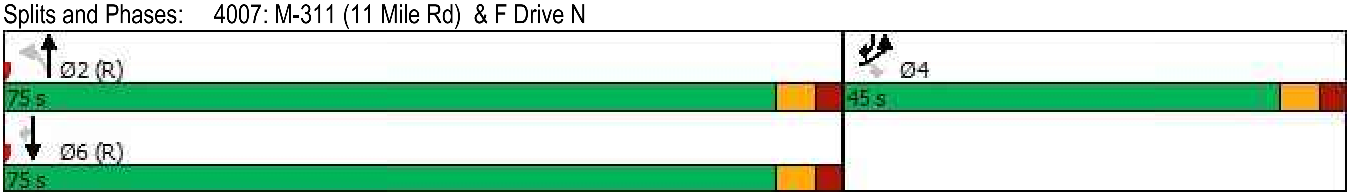
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	102	129	0
Future Volume (vph)	0	0	0	102	129	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	250	400			0
Storage Lanes	2	1	1			1
Taper Length (ft)	25		25			
Lane Util. Factor	0.97	1.00	1.00	0.95	0.95	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	3614	1863	1863	3539	3539	1863
Flt Permitted						
Satd. Flow (perm)	3614	1863	1863	3539	3539	1863
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)						
Link Speed (mph)	45			55	55	
Link Distance (ft)	1846			974	1093	
Travel Time (s)	28.0			12.1	13.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	111	140	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	111	140	0
Turn Type	Prot	Perm	Perm	NA	NA	pm+ov
Protected Phases	4			2	6	4
Permitted Phases		4	2			6
Detector Phase	4	4	2	2	6	4
Switch Phase						
Minimum Initial (s)	7.0	7.0	10.0	10.0	10.0	7.0
Minimum Split (s)	13.0	13.0	16.0	16.0	16.0	13.0
Total Split (s)	45.0	45.0	75.0	75.0	75.0	45.0
Total Split (%)	37.5%	37.5%	62.5%	62.5%	62.5%	37.5%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.5	2.5	2.5	2.5	2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None	None	C-Max	C-Max	C-Max	None
Act Effct Green (s)				120.0	120.0	
Actuated g/C Ratio				1.00	1.00	
v/c Ratio				0.03	0.04	
Control Delay				0.0	0.0	
Queue Delay				0.0	0.0	
Total Delay				0.0	0.0	
LOS				A	A	
Approach Delay						
Approach LOS						
Queue Length 50th (ft)				0	0	
Queue Length 95th (ft)				0	0	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Internal Link Dist (ft)	1766			894	1013	
Turn Bay Length (ft)						
Base Capacity (vph)				3539	3539	
Starvation Cap Reductn				0	0	
Spillback Cap Reductn				0	0	
Storage Cap Reductn				0	0	
Reduced v/c Ratio				0.03	0.04	

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 20 (17%), Referenced to phase 2:NBTL and 6:SBT, Start of Green
Natural Cycle: 40
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.04
Intersection Signal Delay: 0.0 Intersection LOS: A
Intersection Capacity Utilization 13.3% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 4007: M-311 (11 Mile Rd) & F Drive N



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations					↑↑↑			↑↑↑				
Traffic Volume (vph)	0	0	0	0	1003	0	0	492	0	0	0	0
Future Volume (vph)	0	0	0	0	1003	0	0	492	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.91	1.00	1.00	1.00	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	0	0	0	5085	0	0	5085	0	0	0	0
Flt Permitted												
Satd. Flow (perm)	0	0	0	0	5085	0	0	5085	0	0	0	0
Right Turn on Red			Yes			Yes	Yes		Yes			Yes
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		194			183			156			190	
Travel Time (s)		2.9			2.8			2.4			2.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.90	0.90	0.90	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	1090	0	0	547	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1090	0	0	547	0	0	0	0
Turn Type					NA			NA				
Protected Phases					2			4				
Permitted Phases												
Minimum Split (s)					17.0			17.0				
Total Split (s)					46.0			74.0				
Total Split (%)					38.3%			61.7%				
Yellow Time (s)					3.5			3.5				
All-Red Time (s)					2.5			2.5				
Lost Time Adjust (s)					0.0			0.0				
Total Lost Time (s)					6.0			6.0				
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)					40.0			68.0				
Actuated g/C Ratio					0.33			0.57				
v/c Ratio					0.64			0.19				
Control Delay					35.7			8.4				
Queue Delay					0.0			0.0				
Total Delay					35.7			8.4				
LOS					D			A				
Approach Delay					35.7			8.4				
Approach LOS					D			A				
Queue Length 50th (ft)					310			44				
Queue Length 95th (ft)					359			55				
Internal Link Dist (ft)		114			103			76			110	
Turn Bay Length (ft)												
Base Capacity (vph)					1695			2881				
Starvation Cap Reductn					0			0				
Spillback Cap Reductn					0			0				
Storage Cap Reductn					0			0				
Reduced v/c Ratio					0.64			0.19				

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 100 (83%), Referenced to phase 2:EBT, Start of Green	
Natural Cycle: 60	
Control Type: Pretimed	
Maximum v/c Ratio: 0.90	
Intersection Signal Delay: 26.5	Intersection LOS: C
Intersection Capacity Utilization 64.2%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 4010: EB M-96 (Michigan Avenue)/EB M-96 (Michigan Avenue) (Push Button) & WB M-96 (Michigan Avenue)

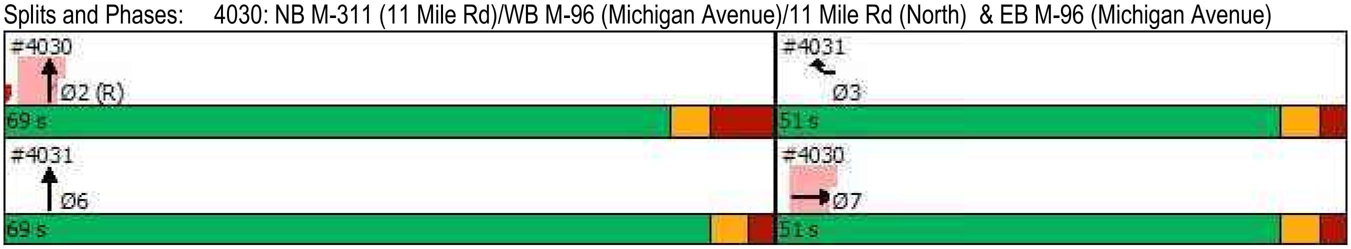
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	707	0	0	0	0	0	64	38	0	0	0
Future Volume (vph)	0	707	0	0	0	0	0	64	38	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		250	0		0
Storage Lanes	0		0	0		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	1.00	1.00
Frt									0.850			
Flt Protected												
Satd. Flow (prot)	0	3539	0	0	0	0	0	5085	1583	0	0	0
Flt Permitted												
Satd. Flow (perm)	0	3539	0	0	0	0	0	5085	1583	0	0	0
Right Turn on Red	Yes		Yes			Yes			Yes			Yes
Satd. Flow (RTOR)									41			
Link Speed (mph)		55			55			55			30	
Link Distance (ft)		167			316			655			182	
Travel Time (s)		2.1			3.9			8.1			4.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	768	0	0	0	0	0	70	41	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	768	0	0	0	0	0	70	41	0	0	0
Turn Type		NA						NA	Perm			
Protected Phases		7						2				
Permitted Phases									2			
Minimum Split (s)		16.0						19.5	19.5			
Total Split (s)		51.0						69.0	69.0			
Total Split (%)		42.5%						57.5%	57.5%			
Yellow Time (s)		3.5						3.5	3.5			
All-Red Time (s)		2.5						6.0	6.0			
Lost Time Adjust (s)		0.0						0.0	0.0			
Total Lost Time (s)		6.0						9.5	9.5			
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		45.0						59.5	59.5			
Actuated g/C Ratio		0.38						0.50	0.50			
v/c Ratio		0.58						0.03	0.05			
Control Delay		37.8						15.5	4.8			
Queue Delay		0.0						0.0	0.0			
Total Delay		37.8						15.5	4.8			
LOS		D						B	A			
Approach Delay		37.8						11.6				
Approach LOS		D						B				
Queue Length 50th (ft)		325						9	0			
Queue Length 95th (ft)		391						18	19			
Internal Link Dist (ft)		87			236			575			102	
Turn Bay Length (ft)									250			
Base Capacity (vph)		1327						2521	805			
Starvation Cap Reductn		0						0	0			

Lane Group	Ø3	Ø6
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Ideal Flow (vphpl)		
Storage Length (ft)		
Storage Lanes		
Taper Length (ft)		
Lane Util. Factor		
Frt		
Flt Protected		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Peak Hour Factor		
Adj. Flow (vph)		
Shared Lane Traffic (%)		
Lane Group Flow (vph)		
Turn Type		
Protected Phases	3	6
Permitted Phases		
Minimum Split (s)	16.0	16.0
Total Split (s)	51.0	69.0
Total Split (%)	43%	58%
Yellow Time (s)	3.5	3.5
All-Red Time (s)	2.5	2.5
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag		
Lead-Lag Optimize?		
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		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn		0						0	0			
Storage Cap Reductn		0						0	0			
Reduced v/c Ratio		0.58						0.03	0.05			

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 88 (73%), Referenced to phase 2:NBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.58	
Intersection Signal Delay: 34.5	Intersection LOS: C
Intersection Capacity Utilization 40.8%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4030: NB M-311 (11 Mile Rd)/WB M-96 (Michigan Avenue)/11 Mile Rd (North) & EB M-96 (Michigan Avenue)



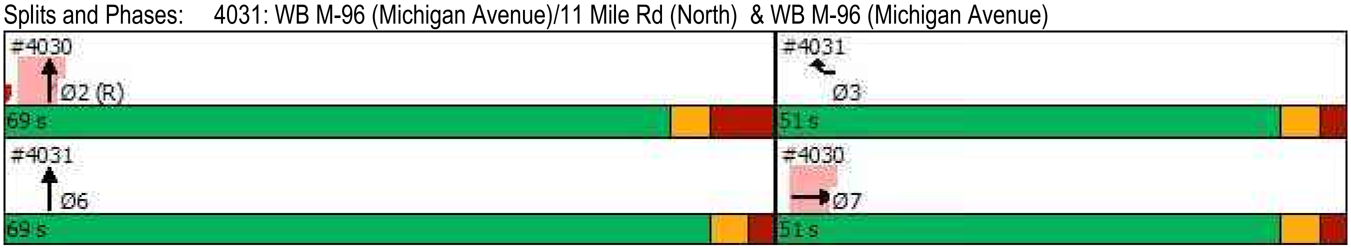
Lane Group	Ø3	Ø6
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		

Intersection Summary

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø2	Ø7
Lane Configurations								
Traffic Volume (vph)	0	702	64	0	0	0		
Future Volume (vph)	0	702	64	0	0	0		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Lane Util. Factor	1.00	0.76	0.91	1.00	1.00	1.00		
Frt		0.850						
Flt Protected								
Satd. Flow (prot)	0	3610	5085	0	0	0		
Flt Permitted								
Satd. Flow (perm)	0	3610	5085	0	0	0		
Right Turn on Red		Yes		Yes				
Satd. Flow (RTOR)		2101						
Link Speed (mph)	55		55			55		
Link Distance (ft)	405		182			493		
Travel Time (s)	5.0		2.3			6.1		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Adj. Flow (vph)	0	763	70	0	0	0		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	0	763	70	0	0	0		
Turn Type		Prot	NA					
Protected Phases		3	6				2	7
Permitted Phases								
Minimum Split (s)		16.0	16.0				19.5	16.0
Total Split (s)		51.0	69.0				69.0	51.0
Total Split (%)		42.5%	57.5%				58%	43%
Yellow Time (s)		3.5	3.5				3.5	3.5
All-Red Time (s)		2.5	2.5				6.0	2.5
Lost Time Adjust (s)		0.0	0.0					
Total Lost Time (s)		6.0	6.0					
Lead/Lag								
Lead-Lag Optimize?								
Act Effct Green (s)		45.0	63.0					
Actuated g/C Ratio		0.38	0.52					
v/c Ratio		0.29	0.03					
Control Delay		0.3	0.0					
Queue Delay		0.0	0.0					
Total Delay		0.3	0.0					
LOS		A	A					
Approach Delay	0.3							
Approach LOS	A							
Queue Length 50th (ft)		0	0					
Queue Length 95th (ft)		1	1					
Internal Link Dist (ft)	325		102			413		
Turn Bay Length (ft)								
Base Capacity (vph)		2666	2669					
Starvation Cap Reductn		0	0					
Spillback Cap Reductn		0	0					
Storage Cap Reductn		0	0					
Reduced v/c Ratio		0.29	0.03					

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 88 (73%), Referenced to phase 2:NBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.58	
Intersection Signal Delay: 0.3	Intersection LOS: A
Intersection Capacity Utilization 40.8%	ICU Level of Service A
Analysis Period (min) 15	

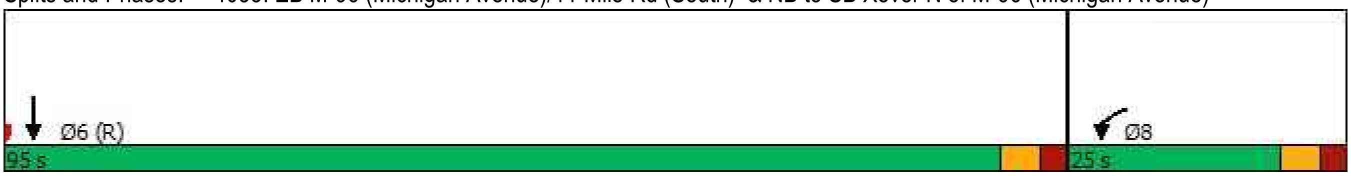
Splits and Phases: 4031: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & WB M-96 (Michigan Avenue)



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	67	0	0	0	0	769
Future Volume (vph)	67	0	0	0	0	769
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	0.91
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	3433	0	0	0	0	5085
Flt Permitted	0.950					
Satd. Flow (perm)	3433	0	0	0	0	5085
Right Turn on Red	Yes	Yes		Yes		
Satd. Flow (RTOR)	487					
Link Speed (mph)	25		55			30
Link Distance (ft)	105		587			495
Travel Time (s)	2.9		7.3			11.3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	73	0	0	0	0	836
Shared Lane Traffic (%)						
Lane Group Flow (vph)	73	0	0	0	0	836
Turn Type	Prot					NA
Protected Phases	8					6
Permitted Phases						
Minimum Split (s)	13.0					16.0
Total Split (s)	25.0					95.0
Total Split (%)	20.8%					79.2%
Yellow Time (s)	3.5					3.5
All-Red Time (s)	2.5					2.5
Lost Time Adjust (s)	0.0					0.0
Total Lost Time (s)	6.0					6.0
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)	19.0					89.0
Actuated g/C Ratio	0.16					0.74
v/c Ratio	0.08					0.22
Control Delay	0.1					0.9
Queue Delay	0.0					0.0
Total Delay	0.1					0.9
LOS	A					A
Approach Delay	0.1					0.9
Approach LOS	A					A
Queue Length 50th (ft)	0					7
Queue Length 95th (ft)	0					9
Internal Link Dist (ft)	25		507			415
Turn Bay Length (ft)						
Base Capacity (vph)	953					3771
Starvation Cap Reductn	0					0
Spillback Cap Reductn	0					0
Storage Cap Reductn	0					0
Reduced v/c Ratio	0.08					0.22

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 89 (74%), Referenced to phase 6:SBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.22	
Intersection Signal Delay: 0.8	Intersection LOS: A
Intersection Capacity Utilization 36.7%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4033: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & NB to SB Xover N of M-96 (Michigan Avenue)



Lane Group	NBL	NBT	SBT	SBR	SEL	SER	Ø2
Lane Configurations							
Traffic Volume (vph)	0	0	659	0	0	110	
Future Volume (vph)	0	0	659	0	0	110	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	0.91	1.00	1.00	0.88	
Frt						0.850	
Flt Protected							
Satd. Flow (prot)	0	0	5085	0	0	2787	
Flt Permitted							
Satd. Flow (perm)	0	0	5085	0	0	2787	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)						763	
Link Speed (mph)		30	30		30		
Link Distance (ft)		495	145		346		
Travel Time (s)		11.3	3.3		7.9		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	0	0	716	0	0	120	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	716	0	0	120	
Turn Type			NA			Prot	
Protected Phases			Free!			4!	2
Permitted Phases							
Minimum Split (s)						16.0	16.0
Total Split (s)						60.0	60.0
Total Split (%)						50.0%	50%
Yellow Time (s)						3.5	3.5
All-Red Time (s)						2.5	2.5
Lost Time Adjust (s)						0.0	
Total Lost Time (s)						6.0	
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)			120.0			54.0	
Actuated g/C Ratio			1.00			0.45	
v/c Ratio			0.14			0.07	
Control Delay			0.1			0.1	
Queue Delay			0.0			0.0	
Total Delay			0.1			0.1	
LOS			A			A	
Approach Delay			0.1		0.1		
Approach LOS			A		A		
Queue Length 50th (ft)			0			0	
Queue Length 95th (ft)			0			0	
Internal Link Dist (ft)		415	65		266		
Turn Bay Length (ft)							
Base Capacity (vph)			5085			1673	
Starvation Cap Reductn			0			0	
Spillback Cap Reductn			0			0	
Storage Cap Reductn			0			0	
Reduced v/c Ratio			0.14			0.07	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 27 (23%), Referenced to phase 4:SER, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.31	
Intersection Signal Delay: 0.1	Intersection LOS: A
Intersection Capacity Utilization 33.2%	ICU Level of Service A
Analysis Period (min) 15	

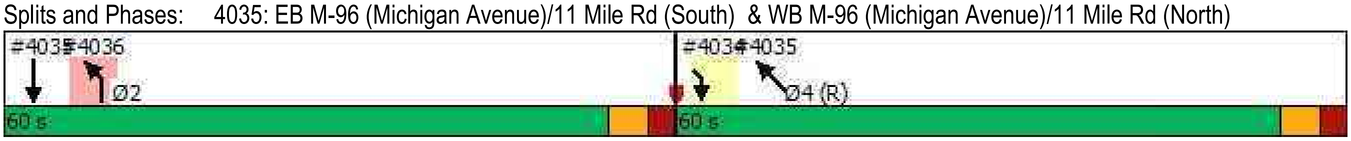
! Phase conflict between lane groups.

Splits and Phases: 4034: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & EB I-94 Off-ramp

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	659	0	0	0	0	0	540	0
Future Volume (vph)	0	0	0	0	659	0	0	0	0	0	540	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.91	1.00	1.00	1.00	1.00	1.00	0.91	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	0	0	0	5085	0	0	0	0	0	5085	0
Flt Permitted												
Satd. Flow (perm)	0	0	0	0	5085	0	0	0	0	0	5085	0
Right Turn on Red			Yes			Yes			Yes	Yes		Yes
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		145			194			233			108	
Travel Time (s)		3.3			4.4			5.3			2.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	716	0	0	0	0	0	587	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	716	0	0	0	0	0	587	0
Turn Type					NA						NA	
Protected Phases					2						4	
Permitted Phases												
Minimum Split (s)					16.0						16.0	
Total Split (s)					60.0						60.0	
Total Split (%)					50.0%						50.0%	
Yellow Time (s)					3.5						3.5	
All-Red Time (s)					2.5						2.5	
Lost Time Adjust (s)					0.0						0.0	
Total Lost Time (s)					6.0						6.0	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)					54.0						54.0	
Actuated g/C Ratio					0.45						0.45	
v/c Ratio					0.31						0.26	
Control Delay					23.2						21.0	
Queue Delay					0.0						0.0	
Total Delay					23.2						21.0	
LOS					C						C	
Approach Delay					23.2						21.0	
Approach LOS					C						C	
Queue Length 50th (ft)					180						100	
Queue Length 95th (ft)					221						124	
Internal Link Dist (ft)		65			114			153			28	
Turn Bay Length (ft)												
Base Capacity (vph)					2288						2288	
Starvation Cap Reductn					0						0	
Spillback Cap Reductn					0						0	
Storage Cap Reductn					0						0	
Reduced v/c Ratio					0.31						0.26	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 27 (23%), Referenced to phase 4:SER, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.31	
Intersection Signal Delay: 22.2	Intersection LOS: C
Intersection Capacity Utilization 31.3%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4035: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & WB M-96 (Michigan Avenue)/11 Mile Rd (North)



Lane Group	NBL	NBR	SET	SER	NWL	NWT	Ø4
Lane Configurations							
Traffic Volume (vph)	104	0	0	0	0	540	
Future Volume (vph)	104	0	0	0	0	540	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.91	
Frt							
Flt Protected	0.950						
Satd. Flow (prot)	1719	0	0	0	0	5085	
Flt Permitted	0.950						
Satd. Flow (perm)	1719	0	0	0	0	5085	
Right Turn on Red	Yes	Yes		Yes			
Satd. Flow (RTOR)	513						
Link Speed (mph)	30		30			30	
Link Distance (ft)	271		337			233	
Travel Time (s)	6.2		7.7			5.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Heavy Vehicles (%)	5%	2%	2%	2%	2%	2%	
Adj. Flow (vph)	113	0	0	0	0	587	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	113	0	0	0	0	587	
Turn Type	Prot					NA	
Protected Phases	2!					Free!	4
Permitted Phases							
Minimum Split (s)	16.0						16.0
Total Split (s)	60.0						60.0
Total Split (%)	50.0%						50%
Yellow Time (s)	3.5						3.5
All-Red Time (s)	2.5						2.5
Lost Time Adjust (s)	0.0						
Total Lost Time (s)	6.0						
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)	54.0					120.0	
Actuated g/C Ratio	0.45					1.00	
v/c Ratio	0.11					0.12	
Control Delay	0.2					0.1	
Queue Delay	0.0					0.0	
Total Delay	0.2					0.1	
LOS	A					A	
Approach Delay	0.2					0.1	
Approach LOS	A					A	
Queue Length 50th (ft)	0					0	
Queue Length 95th (ft)	0					0	
Internal Link Dist (ft)	191		257			153	
Turn Bay Length (ft)							
Base Capacity (vph)	1055					5085	
Starvation Cap Reductn	0					0	
Spillback Cap Reductn	0					0	
Storage Cap Reductn	0					0	

Lane Group	NBL	NBR	SET	SER	NWL	NWT	Ø4
Reduced v/c Ratio	0.11					0.12	

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 27 (23%), Referenced to phase 4:SER, Start of Green
Natural Cycle: 40
Control Type: Pretimed
Maximum v/c Ratio: 0.31
Intersection Signal Delay: 0.1 Intersection LOS: A
Intersection Capacity Utilization 27.1% ICU Level of Service A
Analysis Period (min) 15
! Phase conflict between lane groups.

Splits and Phases: 4036: EB I-94 Off-ramp & WB M-96 (Michigan Avenue)/11 Mile Rd (North)

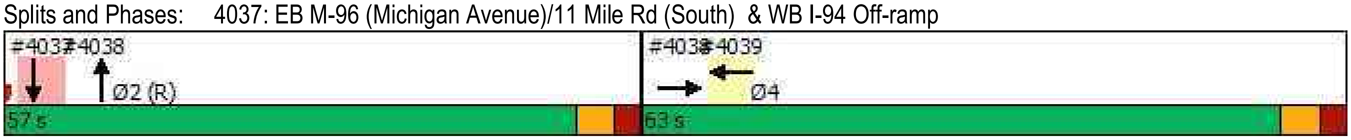
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø4
Lane Configurations							
Traffic Volume (vph)	0	633	0	0	99	0	
Future Volume (vph)	0	633	0	0	99	0	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	0.88	1.00	1.00	0.95	1.00	
Frt		0.850					
Flt Protected							
Satd. Flow (prot)	0	2707	0	0	3438	0	
Flt Permitted							
Satd. Flow (perm)	0	2707	0	0	3438	0	
Right Turn on Red		Yes				Yes	
Satd. Flow (RTOR)		1670					
Link Speed (mph)	30			30	30		
Link Distance (ft)	222			406	241		
Travel Time (s)	5.0			9.2	5.5		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Heavy Vehicles (%)	2%	5%	2%	2%	5%	2%	
Adj. Flow (vph)	0	688	0	0	108	0	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	688	0	0	108	0	
Turn Type		Free			NA		
Protected Phases					2		4
Permitted Phases		Free					
Minimum Split (s)					16.0		16.0
Total Split (s)					57.0		63.0
Total Split (%)					47.5%		53%
Yellow Time (s)					3.5		3.5
All-Red Time (s)					2.5		2.5
Lost Time Adjust (s)					0.0		
Total Lost Time (s)					6.0		
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)		120.0			51.0		
Actuated g/C Ratio		1.00			0.42		
v/c Ratio		0.25			0.07		
Control Delay		0.8			20.7		
Queue Delay		0.0			0.0		
Total Delay		0.8			20.7		
LOS		A			C		
Approach Delay	0.8				20.7		
Approach LOS	A				C		
Queue Length 50th (ft)		11			25		
Queue Length 95th (ft)		15			44		
Internal Link Dist (ft)	142			326	161		
Turn Bay Length (ft)							
Base Capacity (vph)		2707			1461		
Starvation Cap Reductn		0			0		
Spillback Cap Reductn		0			0		
Storage Cap Reductn		0			0		

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø4
Reduced v/c Ratio		0.25			0.07		

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 96 (80%), Referenced to phase 2:SBT, Start of Green
Natural Cycle: 40
Control Type: Pretimed
Maximum v/c Ratio: 0.42
Intersection Signal Delay: 3.5 Intersection LOS: A
Intersection Capacity Utilization 13.3% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 4037: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & WB I-94 Off-ramp

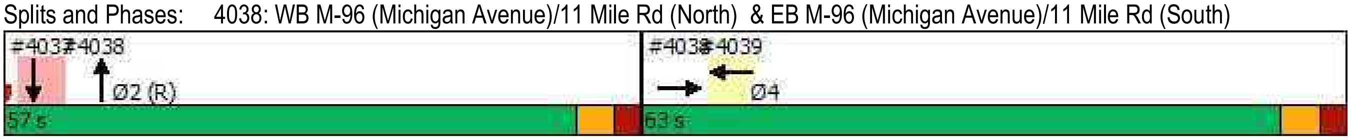


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑						↑↑↑				
Traffic Volume (vph)	0	633	0	0	0	0	0	565	0	0	0	0
Future Volume (vph)	0	633	0	0	0	0	0	565	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	1.00	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	3438	0	0	0	0	0	4940	0	0	0	0
Flt Permitted												
Satd. Flow (perm)	0	3438	0	0	0	0	0	4940	0	0	0	0
Right Turn on Red	Yes		Yes			Yes			Yes			Yes
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		190			222			207			131	
Travel Time (s)		4.3			5.0			4.7			3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	5%	2%	2%	2%	2%	2%	5%	2%	2%	2%	2%
Adj. Flow (vph)	0	688	0	0	0	0	0	614	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	688	0	0	0	0	0	614	0	0	0	0
Turn Type		NA						NA				
Protected Phases		4						2				
Permitted Phases												
Minimum Split (s)		16.0						16.0				
Total Split (s)		63.0						57.0				
Total Split (%)		52.5%						47.5%				
Yellow Time (s)		3.5						3.5				
All-Red Time (s)		2.5						2.5				
Lost Time Adjust (s)		0.0						0.0				
Total Lost Time (s)		6.0						6.0				
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		57.0						51.0				
Actuated g/C Ratio		0.48						0.42				
v/c Ratio		0.42						0.29				
Control Delay		16.8						40.8				
Queue Delay		0.0						0.0				
Total Delay		16.8						40.8				
LOS		B						D				
Approach Delay		16.8						40.8				
Approach LOS		B						D				
Queue Length 50th (ft)		112						176				
Queue Length 95th (ft)		137						217				
Internal Link Dist (ft)		110			142			127			51	
Turn Bay Length (ft)												
Base Capacity (vph)		1633						2099				
Starvation Cap Reductn		0						0				
Spillback Cap Reductn		0						0				
Storage Cap Reductn		0						0				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio		0.42						0.29				

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 96 (80%), Referenced to phase 2:SBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.42	
Intersection Signal Delay: 28.1	Intersection LOS: C
Intersection Capacity Utilization 38.4%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4038: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & EB M-96 (Michigan Avenue)/11 Mile Rd (South)

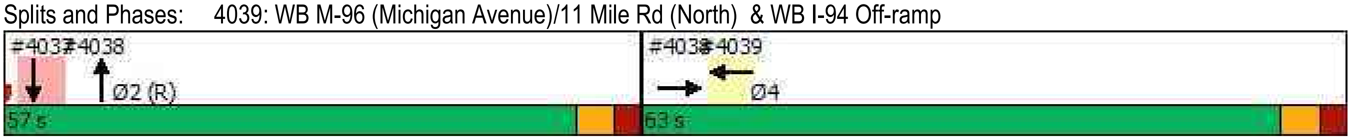


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø2
Lane Configurations							
Traffic Volume (vph)	0	0	0	151	565	0	
Future Volume (vph)	0	0	0	151	565	0	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.94	1.00	
Frt							
Flt Protected					0.950		
Satd. Flow (prot)	0	0	0	1810	4848	0	
Flt Permitted					0.950		
Satd. Flow (perm)	0	0	0	1810	4848	0	
Right Turn on Red		Yes			Yes	Yes	
Satd. Flow (RTOR)					2497		
Link Speed (mph)	30			30	30		
Link Distance (ft)	415			317	131		
Travel Time (s)	9.4			7.2	3.0		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Heavy Vehicles (%)	2%	2%	2%	5%	5%	2%	
Adj. Flow (vph)	0	0	0	164	614	0	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	0	164	614	0	
Turn Type				NA	Perm		
Protected Phases				4!			2
Permitted Phases					Free!		
Minimum Split (s)				16.0			16.0
Total Split (s)				63.0			57.0
Total Split (%)				52.5%			48%
Yellow Time (s)				3.5			3.5
All-Red Time (s)				2.5			2.5
Lost Time Adjust (s)				0.0			
Total Lost Time (s)				6.0			
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)				57.0	120.0		
Actuated g/C Ratio				0.48	1.00		
v/c Ratio				0.19	0.13		
Control Delay				18.9	0.2		
Queue Delay				0.0	0.0		
Total Delay				18.9	0.2		
LOS				B	A		
Approach Delay				18.9	0.2		
Approach LOS				B	A		
Queue Length 50th (ft)				71	2		
Queue Length 95th (ft)				116	0		
Internal Link Dist (ft)	335			237	51		
Turn Bay Length (ft)							
Base Capacity (vph)				859	4848		
Starvation Cap Reductn				0	0		
Spillback Cap Reductn				0	0		
Storage Cap Reductn				0	0		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø2
Reduced v/c Ratio				0.19	0.13		

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 96 (80%), Referenced to phase 2:SBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.42	
Intersection Signal Delay: 4.2	Intersection LOS: A
Intersection Capacity Utilization 51.7%	ICU Level of Service A
Analysis Period (min) 15	
! Phase conflict between lane groups.	

Splits and Phases: 4039: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & WB I-94 Off-ramp

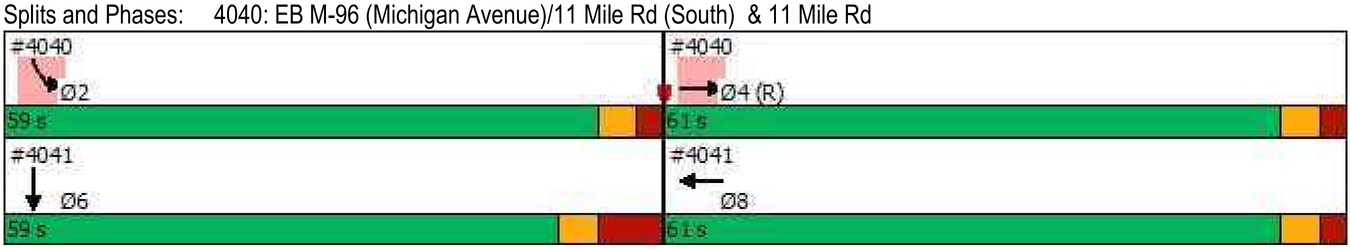


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø6	Ø8
Lane Configurations								
Traffic Volume (vph)	0	571	0	0	207	0		
Future Volume (vph)	0	571	0	0	207	0		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.97	1.00		
Frt								
Flt Protected					0.950			
Satd. Flow (prot)	0	3539	0	0	3335	0		
Flt Permitted					0.950			
Satd. Flow (perm)	0	3539	0	0	3335	0		
Right Turn on Red				Yes	Yes	Yes		
Satd. Flow (RTOR)					358			
Link Speed (mph)		55	55		45			
Link Distance (ft)		212	597		92			
Travel Time (s)		2.6	7.4		1.4			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Heavy Vehicles (%)	2%	2%	2%	2%	5%	2%		
Adj. Flow (vph)	0	621	0	0	225	0		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	0	621	0	0	225	0		
Turn Type		NA			Prot			
Protected Phases		4			2		6	8
Permitted Phases								
Minimum Split (s)		16.0			19.5		19.5	16.0
Total Split (s)		61.0			59.0		59.0	61.0
Total Split (%)		50.8%			49.2%		49%	51%
Yellow Time (s)		3.5			3.5		3.5	3.5
All-Red Time (s)		2.5			2.5		6.0	2.5
Lost Time Adjust (s)		0.0			0.0			
Total Lost Time (s)		6.0			6.0			
Lead/Lag								
Lead-Lag Optimize?								
Act Effct Green (s)		55.0			53.0			
Actuated g/C Ratio		0.46			0.44			
v/c Ratio		0.38			0.13			
Control Delay		22.2			0.2			
Queue Delay		0.0			0.0			
Total Delay		22.2			0.2			
LOS		C			A			
Approach Delay		22.2			0.2			
Approach LOS		C			A			
Queue Length 50th (ft)		162			0			
Queue Length 95th (ft)		209			0			
Internal Link Dist (ft)		132	517		12			
Turn Bay Length (ft)								
Base Capacity (vph)		1622			1672			
Starvation Cap Reductn		0			0			
Spillback Cap Reductn		0			0			
Storage Cap Reductn		0			0			

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø6	Ø8
Reduced v/c Ratio		0.38			0.13			

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 32 (27%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.38	
Intersection Signal Delay: 16.4	Intersection LOS: B
Intersection Capacity Utilization 34.1%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4040: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & 11 Mile Rd



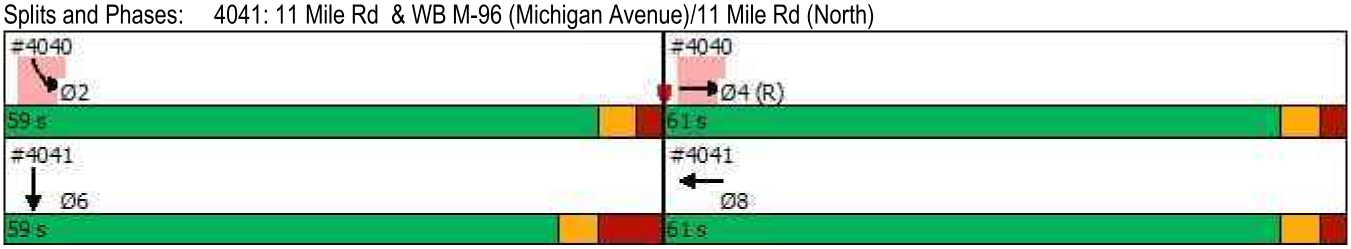
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	437	343	0	0	0	0	207	56
Future Volume (vph)	0	0	0	0	437	343	0	0	0	0	207	56
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		250	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Frt						0.850					0.968	
Flt Protected												
Satd. Flow (prot)	0	0	0	0	3539	1538	0	0	0	0	3348	0
Flt Permitted												
Satd. Flow (perm)	0	0	0	0	3539	1538	0	0	0	0	3348	0
Right Turn on Red			Yes	Yes		Yes			Yes			Yes
Satd. Flow (RTOR)						373					35	
Link Speed (mph)		55			55			45			55	
Link Distance (ft)		210			598			92			259	
Travel Time (s)		2.6			7.4			1.4			3.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	5%	2%	2%	2%	2%	5%	2%
Adj. Flow (vph)	0	0	0	0	475	373	0	0	0	0	225	61
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	475	373	0	0	0	0	286	0
Turn Type					NA	custom					NA	
Protected Phases					8	Free					6	
Permitted Phases												
Minimum Split (s)					16.0						19.5	
Total Split (s)					61.0						59.0	
Total Split (%)					50.8%						49.2%	
Yellow Time (s)					3.5						3.5	
All-Red Time (s)					2.5						6.0	
Lost Time Adjust (s)					0.0						0.0	
Total Lost Time (s)					6.0						9.5	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)					55.0	120.0					49.5	
Actuated g/C Ratio					0.46	1.00					0.41	
v/c Ratio					0.29	0.24					0.20	
Control Delay					29.0	2.7					30.6	
Queue Delay					0.0	0.0					0.0	
Total Delay					29.0	2.7					30.6	
LOS					C	A					C	
Approach Delay					17.4						30.6	
Approach LOS					B						C	
Queue Length 50th (ft)					166	0					85	
Queue Length 95th (ft)					213	273					126	
Internal Link Dist (ft)		130			518			12			179	
Turn Bay Length (ft)						250						
Base Capacity (vph)					1622	1538					1401	

Lane Group	Ø2	Ø4
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Ideal Flow (vphpl)		
Storage Length (ft)		
Storage Lanes		
Taper Length (ft)		
Lane Util. Factor		
Frt		
Flt Protected		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Peak Hour Factor		
Heavy Vehicles (%)		
Adj. Flow (vph)		
Shared Lane Traffic (%)		
Lane Group Flow (vph)		
Turn Type		
Protected Phases	2	4
Permitted Phases		
Minimum Split (s)	19.5	16.0
Total Split (s)	59.0	61.0
Total Split (%)	49%	51%
Yellow Time (s)	3.5	3.5
All-Red Time (s)	2.5	2.5
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag		
Lead-Lag Optimize?		
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)		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn					0	0					0	
Spillback Cap Reductn					0	0					0	
Storage Cap Reductn					0	0					0	
Reduced v/c Ratio					0.29	0.24					0.20	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 32 (27%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.38	
Intersection Signal Delay: 20.8	Intersection LOS: C
Intersection Capacity Utilization 34.1%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4041: 11 Mile Rd & WB M-96 (Michigan Avenue)/11 Mile Rd (North)



Lane Group	Ø2	Ø4
Starvation Cap Reductn		
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		

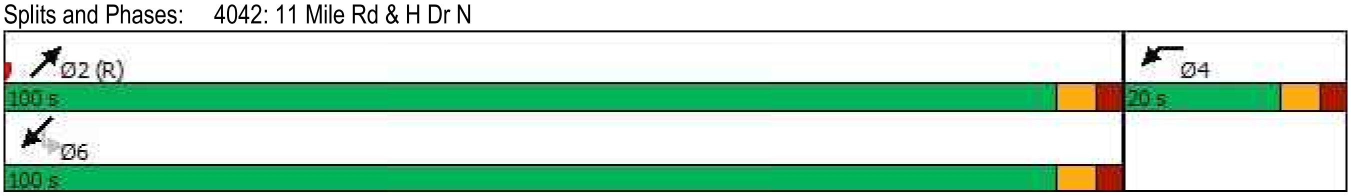
Intersection Summary

Lane Group	WBL	WBR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	0	0	343	0	0	263
Future Volume (vph)	0	0	343	0	0	263
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	1810	0	1863	0	0	1863
Flt Permitted						
Satd. Flow (perm)	1810	0	1863	0	0	1863
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)						
Link Speed (mph)	25		55			55
Link Distance (ft)	1262		1787			680
Travel Time (s)	34.4		22.2			8.4
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	2%	2%	5%	2%	2%
Adj. Flow (vph)	0	0	373	0	0	286
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	373	0	0	286
Turn Type	Prot		NA			NA
Protected Phases	4		2			6
Permitted Phases					6	
Minimum Split (s)	13.0		16.0		13.0	13.0
Total Split (s)	20.0		100.0		100.0	100.0
Total Split (%)	16.7%		83.3%		83.3%	83.3%
Yellow Time (s)	3.5		3.5		3.5	3.5
All-Red Time (s)	2.5		2.5		2.5	2.5
Lost Time Adjust (s)	0.0		0.0			0.0
Total Lost Time (s)	6.0		6.0			6.0
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)			94.0			94.0
Actuated g/C Ratio			0.78			0.78
v/c Ratio			0.26			0.20
Control Delay			1.2			3.7
Queue Delay			0.0			0.0
Total Delay			1.2			3.7
LOS			A			A
Approach Delay			1.2			3.7
Approach LOS			A			A
Queue Length 50th (ft)			15			47
Queue Length 95th (ft)			21			69
Internal Link Dist (ft)	1182		1707			600
Turn Bay Length (ft)						
Base Capacity (vph)			1459			1459
Starvation Cap Reductn			0			0
Spillback Cap Reductn			0			0
Storage Cap Reductn			0			0

Lane Group	WBL	WBR	NET	NER	SWL	SWT
Reduced v/c Ratio			0.26			0.20

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NET, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.26	
Intersection Signal Delay: 2.3	Intersection LOS: A
Intersection Capacity Utilization 23.1%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4042: 11 Mile Rd & H Dr N

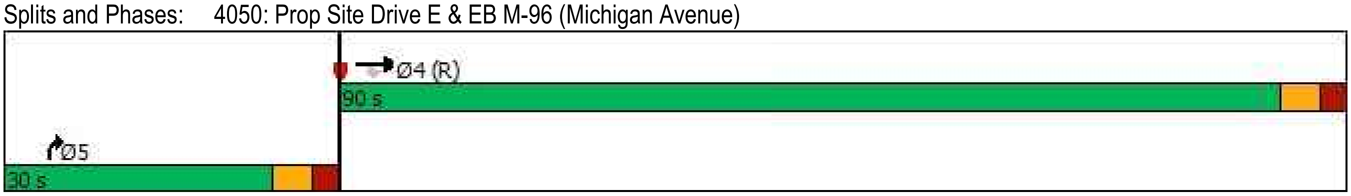


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	523	335	0	0	0	0
Future Volume (vph)	523	335	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		500	600		0	0
Storage Lanes		2	0		0	2
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	0.88	1.00	1.00	1.00	0.88
Frt		0.850				
Flt Protected						
Satd. Flow (prot)	3539	2787	0	0	0	3278
Flt Permitted						
Satd. Flow (perm)	3539	2787	0	0	0	3278
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		364				
Link Speed (mph)	55			55	25	
Link Distance (ft)	669			659	1093	
Travel Time (s)	8.3			8.2	29.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	568	364	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	568	364	0	0	0	0
Turn Type	NA	Perm				Prot
Protected Phases	4					5
Permitted Phases		4				
Detector Phase	4	4				5
Switch Phase						
Minimum Initial (s)	10.0	10.0				10.0
Minimum Split (s)	16.0	16.0				16.0
Total Split (s)	90.0	90.0				30.0
Total Split (%)	75.0%	75.0%				25.0%
Yellow Time (s)	3.5	3.5				3.5
All-Red Time (s)	2.5	2.5				2.5
Lost Time Adjust (s)	0.0	0.0				0.0
Total Lost Time (s)	6.0	6.0				6.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max	C-Max				None
Act Effct Green (s)	120.0	120.0				
Actuated g/C Ratio	1.00	1.00				
v/c Ratio	0.16	0.13				
Control Delay	0.1	0.1				
Queue Delay	0.0	0.0				
Total Delay	0.1	0.1				
LOS	A	A				
Approach Delay	0.1					
Approach LOS	A					
Queue Length 50th (ft)	0	0				
Queue Length 95th (ft)	0	0				

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Internal Link Dist (ft)	589			579	1013	
Turn Bay Length (ft)		500				
Base Capacity (vph)	3539	2787				
Starvation Cap Reductn	0	0				
Spillback Cap Reductn	0	0				
Storage Cap Reductn	0	0				
Reduced v/c Ratio	0.16	0.13				

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 52 (43%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 40	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.16	
Intersection Signal Delay: 0.1	Intersection LOS: A
Intersection Capacity Utilization 19.5%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4050: Prop Site Drive E & EB M-96 (Michigan Avenue)

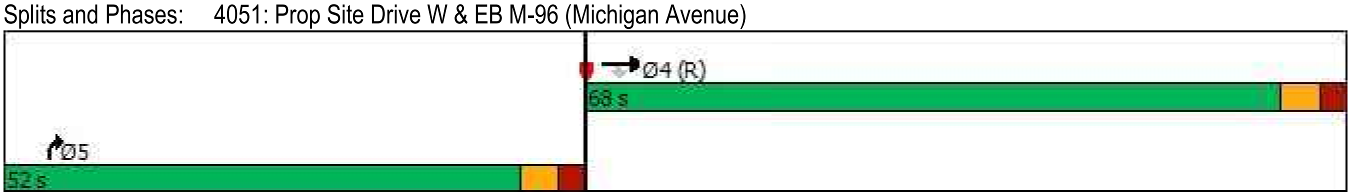


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	550	602	0	0	0	0
Future Volume (vph)	550	602	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		500	600		0	0
Storage Lanes		2	0		0	2
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	0.88	1.00	1.00	1.00	0.88
Frt		0.850				
Flt Protected						
Satd. Flow (prot)	3539	2787	0	0	0	3278
Flt Permitted						
Satd. Flow (perm)	3539	2787	0	0	0	3278
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		654				
Link Speed (mph)	55			55	25	
Link Distance (ft)	608			627	1293	
Travel Time (s)	7.5			7.8	35.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	598	654	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	598	654	0	0	0	0
Turn Type	NA	Perm				Prot
Protected Phases	4					5
Permitted Phases		4				
Detector Phase	4	4				5
Switch Phase						
Minimum Initial (s)	10.0	10.0				10.0
Minimum Split (s)	16.0	16.0				16.0
Total Split (s)	68.0	68.0				52.0
Total Split (%)	56.7%	56.7%				43.3%
Yellow Time (s)	3.5	3.5				3.5
All-Red Time (s)	2.5	2.5				2.5
Lost Time Adjust (s)	0.0	0.0				0.0
Total Lost Time (s)	6.0	6.0				6.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max	C-Max				None
Act Effct Green (s)	120.0	120.0				
Actuated g/C Ratio	1.00	1.00				
v/c Ratio	0.17	0.23				
Control Delay	0.1	0.5				
Queue Delay	0.0	0.0				
Total Delay	0.1	0.5				
LOS	A	A				
Approach Delay	0.3					
Approach LOS	A					
Queue Length 50th (ft)	0	3				
Queue Length 95th (ft)	0	22				

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Internal Link Dist (ft)	528			547	1213	
Turn Bay Length (ft)		500				
Base Capacity (vph)	3539	2787				
Starvation Cap Reductn	0	0				
Spillback Cap Reductn	0	0				
Storage Cap Reductn	0	0				
Reduced v/c Ratio	0.17	0.23				

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 32 (27%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 40	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.23	
Intersection Signal Delay: 0.3	Intersection LOS: A
Intersection Capacity Utilization 26.1%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4051: Prop Site Drive W & EB M-96 (Michigan Avenue)

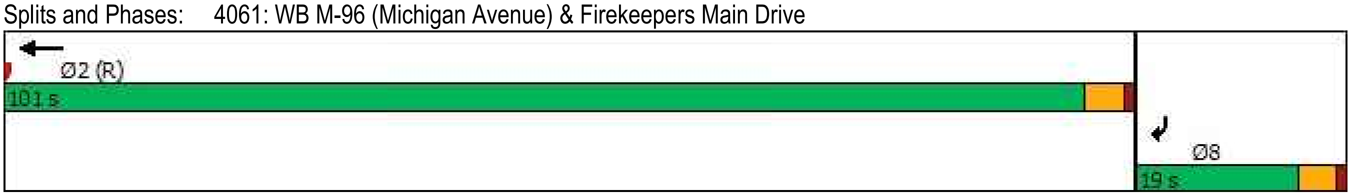


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	691	168	0	134
Future Volume (vph)	0	0	691	168	0	134
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			0	0	0
Storage Lanes	0			0	0	2
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	0.88
Frt			0.971			0.850
Flt Protected						
Satd. Flow (prot)	0	0	3449	0	0	2787
Flt Permitted						
Satd. Flow (perm)	0	0	3449	0	0	2787
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			87			572
Link Speed (mph)		55	55		25	
Link Distance (ft)		574	509		701	
Travel Time (s)		7.1	6.3		19.1	
Peak Hour Factor	0.92	0.92	0.92	0.95	0.67	0.92
Heavy Vehicles (%)	2%	2%	2%	0%	0%	2%
Adj. Flow (vph)	0	0	751	177	0	146
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	928	0	0	146
Turn Type			NA			Prot
Protected Phases			2			8
Permitted Phases						
Detector Phase			2			8
Switch Phase						
Minimum Initial (s)			10.0			10.0
Minimum Split (s)			22.5			14.5
Total Split (s)			101.0			19.0
Total Split (%)			84.2%			15.8%
Yellow Time (s)			3.5			3.5
All-Red Time (s)			1.0			1.0
Lost Time Adjust (s)			0.0			0.0
Total Lost Time (s)			4.5			4.5
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode			C-Max			None
Act Effct Green (s)			101.0			10.0
Actuated g/C Ratio			0.84			0.08
v/c Ratio			0.32			0.19
Control Delay			2.1			0.6
Queue Delay			0.0			0.0
Total Delay			2.1			0.6
LOS			A			A
Approach Delay			2.1		0.6	
Approach LOS			A		A	
Queue Length 50th (ft)			53			0

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Queue Length 95th (ft)			66			0
Internal Link Dist (ft)		494	429		621	
Turn Bay Length (ft)						
Base Capacity (vph)			2916			839
Starvation Cap Reductn			0			0
Spillback Cap Reductn			0			0
Storage Cap Reductn			0			0
Reduced v/c Ratio			0.32			0.17

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:WBT, Start of Green	
Natural Cycle: 40	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.32	
Intersection Signal Delay: 1.9	Intersection LOS: A
Intersection Capacity Utilization 40.3%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4061: WB M-96 (Michigan Avenue) & Firekeepers Main Drive

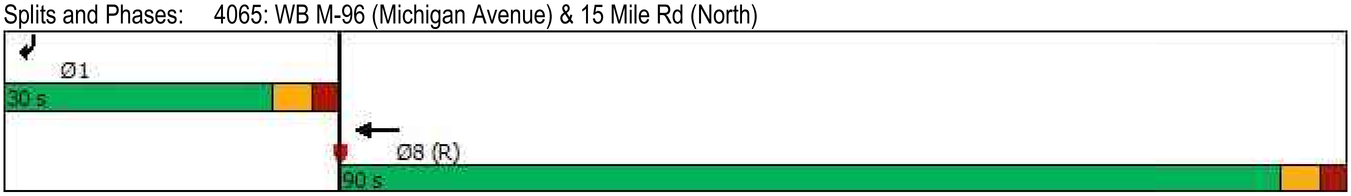


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	2515	93	0	460
Future Volume (vph)	0	0	2515	93	0	460
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			250	0	200
Storage Lanes	0			0	0	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.91	1.00	1.00	0.88
Frt				0.850		0.850
Flt Protected						
Satd. Flow (prot)	0	0	5085	1583	0	2787
Flt Permitted						
Satd. Flow (perm)	0	0	5085	1583	0	2787
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				33		8
Link Speed (mph)		45	45		45	
Link Distance (ft)		534	660		516	
Travel Time (s)		8.1	10.0		7.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	2734	101	0	500
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	2734	101	0	500
Turn Type			NA	custom		Prot
Protected Phases			8	Free		1
Permitted Phases						
Minimum Split (s)			16.0			13.0
Total Split (s)			90.0			30.0
Total Split (%)			75.0%			25.0%
Yellow Time (s)			3.5			3.5
All-Red Time (s)			2.5			2.5
Lost Time Adjust (s)			0.0			0.0
Total Lost Time (s)			6.0			6.0
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)			84.0	120.0		24.0
Actuated g/C Ratio			0.70	1.00		0.20
v/c Ratio			0.77	0.06		0.89
Control Delay			6.0	2.1		64.9
Queue Delay			0.4	0.0		0.0
Total Delay			6.4	2.1		64.9
LOS			A	A		E
Approach Delay			6.2		64.9	
Approach LOS			A		E	
Queue Length 50th (ft)			122	0		212
Queue Length 95th (ft)			200	103		#317
Internal Link Dist (ft)		454	580		436	
Turn Bay Length (ft)				250		200
Base Capacity (vph)			3559	1583		563
Starvation Cap Reductn			314	0		0

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Spillback Cap Reductn			0	0		0
Storage Cap Reductn			0	0		0
Reduced v/c Ratio			0.84	0.06		0.89

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 8:WBT, Start of Green	
Natural Cycle: 60	
Control Type: Pretimed	
Maximum v/c Ratio: 0.89	
Intersection Signal Delay: 15.0	Intersection LOS: B
Intersection Capacity Utilization 74.7%	ICU Level of Service D
Analysis Period (min) 15	
# 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.	

Splits and Phases: 4065: WB M-96 (Michigan Avenue) & 15 Mile Rd (North)

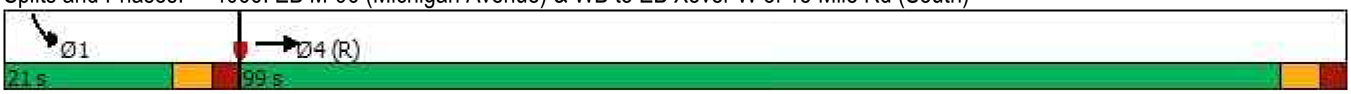


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	508	0	0	119	0
Future Volume (vph)	0	508	0	0	119	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.91	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	5085	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	5085	0	0	1770	0
Right Turn on Red				Yes	Yes	Yes
Satd. Flow (RTOR)					436	
Link Speed (mph)		45	45		25	
Link Distance (ft)		262	1016		123	
Travel Time (s)		4.0	15.4		3.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.90	0.92
Adj. Flow (vph)	0	552	0	0	132	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	552	0	0	132	0
Turn Type		NA			Prot	
Protected Phases		4			1	
Permitted Phases						
Minimum Split (s)		16.0			16.0	
Total Split (s)		99.0			21.0	
Total Split (%)		82.5%			17.5%	
Yellow Time (s)		3.5			3.5	
All-Red Time (s)		2.5			2.5	
Lost Time Adjust (s)		0.0			0.0	
Total Lost Time (s)		6.0			6.0	
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)		93.0			15.0	
Actuated g/C Ratio		0.78			0.12	
v/c Ratio		0.14			0.22	
Control Delay		0.7			0.6	
Queue Delay		0.0			0.0	
Total Delay		0.7			0.6	
LOS		A			A	
Approach Delay		0.7			0.6	
Approach LOS		A			A	
Queue Length 50th (ft)		6			0	
Queue Length 95th (ft)		8			m0	
Internal Link Dist (ft)		182	936		43	
Turn Bay Length (ft)						
Base Capacity (vph)		3940			602	
Starvation Cap Reductn		0			0	
Spillback Cap Reductn		0			0	
Storage Cap Reductn		0			0	
Reduced v/c Ratio		0.14			0.22	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 116 (97%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.22	
Intersection Signal Delay: 0.7	Intersection LOS: A
Intersection Capacity Utilization 68.3%	ICU Level of Service C
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4066: EB M-96 (Michigan Avenue) & WB to EB Xover W of 15 Mile Rd (South)

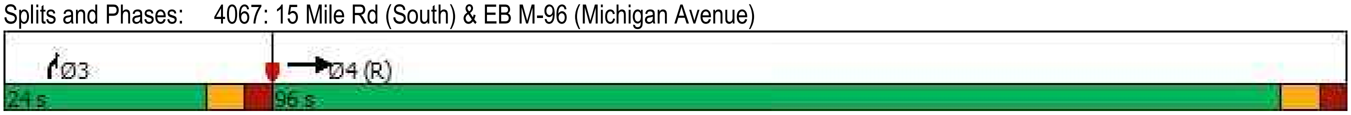


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	473	154	0	0	0	262
Future Volume (vph)	473	154	0	0	0	262
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		50	0		0	250
Storage Lanes		0	0		0	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	1.00	1.00	1.00	0.88
Frt	0.963					0.850
Flt Protected						
Satd. Flow (prot)	4897	0	0	0	0	2814
Flt Permitted						
Satd. Flow (perm)	4897	0	0	0	0	2814
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	167					795
Link Speed (mph)	45			45	45	
Link Distance (ft)	1016			704	1375	
Travel Time (s)	15.4			10.7	20.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.88	0.88
Heavy Vehicles (%)	2%	2%	2%	2%	1%	1%
Adj. Flow (vph)	514	167	0	0	0	298
Shared Lane Traffic (%)						
Lane Group Flow (vph)	681	0	0	0	0	298
Turn Type	NA					Prot
Protected Phases	4					3
Permitted Phases						
Minimum Split (s)	17.0					16.0
Total Split (s)	96.0					24.0
Total Split (%)	80.0%					20.0%
Yellow Time (s)	3.5					3.5
All-Red Time (s)	2.5					2.5
Lost Time Adjust (s)	0.0					0.0
Total Lost Time (s)	6.0					6.0
Lead/Lag	Lag					Lead
Lead-Lag Optimize?	Yes					Yes
Act Effct Green (s)	90.0					18.0
Actuated g/C Ratio	0.75					0.15
v/c Ratio	0.18					0.27
Control Delay	0.3					0.6
Queue Delay	0.0					0.0
Total Delay	0.3					0.6
LOS	A					A
Approach Delay	0.3				0.6	
Approach LOS	A				A	
Queue Length 50th (ft)	1					0
Queue Length 95th (ft)	1					0
Internal Link Dist (ft)	936			624	1295	
Turn Bay Length (ft)						250
Base Capacity (vph)	3714					1097

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Starvation Cap Reductn	0					0
Spillback Cap Reductn	0					0
Storage Cap Reductn	0					0
Reduced v/c Ratio	0.18					0.27

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 4 (3%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.27	
Intersection Signal Delay: 0.4	Intersection LOS: A
Intersection Capacity Utilization 31.7%	ICU Level of Service A
Analysis Period (min) 15	

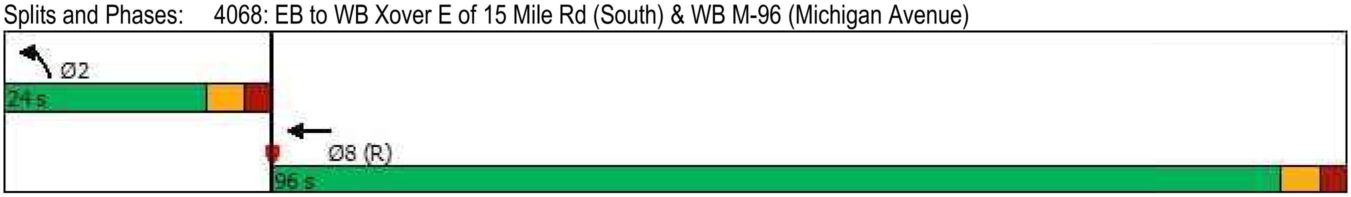
Splits and Phases: 4067: 15 Mile Rd (South) & EB M-96 (Michigan Avenue)



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑↑	↰	
Traffic Volume (vph)	0	0	0	2566	151	0
Future Volume (vph)	0	0	0	2566	151	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	5085	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	5085	1770	0
Right Turn on Red		Yes			Yes	Yes
Satd. Flow (RTOR)					6	
Link Speed (mph)	45			45	25	
Link Distance (ft)	687			275	111	
Travel Time (s)	10.4			4.2	3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	2789	164	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	2789	164	0
Turn Type				NA	Prot	
Protected Phases				8	2	
Permitted Phases						
Minimum Split (s)				16.0	13.0	
Total Split (s)				96.0	24.0	
Total Split (%)				80.0%	20.0%	
Yellow Time (s)				3.5	3.5	
All-Red Time (s)				2.5	2.5	
Lost Time Adjust (s)				0.0	0.0	
Total Lost Time (s)				6.0	6.0	
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)				90.0	18.0	
Actuated g/C Ratio				0.75	0.15	
v/c Ratio				0.73	0.61	
Control Delay				8.9	51.1	
Queue Delay				0.6	0.0	
Total Delay				9.4	51.1	
LOS				A	D	
Approach Delay				9.4	51.1	
Approach LOS				A	D	
Queue Length 50th (ft)				413	120	
Queue Length 95th (ft)				487	196	
Internal Link Dist (ft)	607			195	31	
Turn Bay Length (ft)						
Base Capacity (vph)				3813	270	
Starvation Cap Reductn				548	0	
Spillback Cap Reductn				0	0	
Storage Cap Reductn				0	0	
Reduced v/c Ratio				0.85	0.61	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 112 (93%), Referenced to phase 8:WBT, Start of Green	
Natural Cycle: 55	
Control Type: Pretimed	
Maximum v/c Ratio: 0.73	
Intersection Signal Delay: 11.8	Intersection LOS: B
Intersection Capacity Utilization 97.6%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 4068: EB to WB Xover E of 15 Mile Rd (South) & WB M-96 (Michigan Avenue)



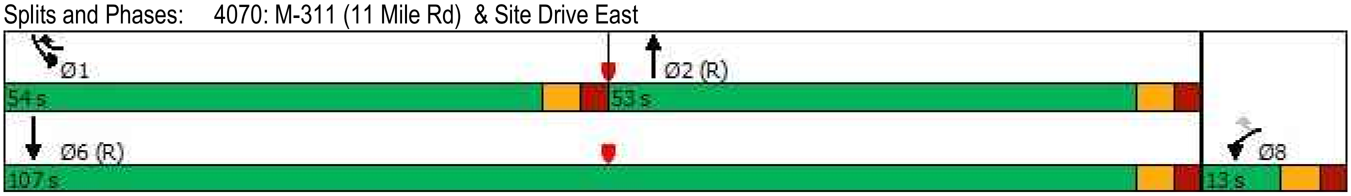
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	102	0	0	129
Future Volume (vph)	0	0	102	0	0	129
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	500		0	400	
Storage Lanes	1	1		0	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.88	0.95	0.95	1.00	0.95
Frt						
Flt Protected						
Satd. Flow (prot)	1863	3278	3539	0	1863	3539
Flt Permitted						
Satd. Flow (perm)	1863	3278	3539	0	1863	3539
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)						
Link Speed (mph)	25		55			55
Link Distance (ft)	750		940			974
Travel Time (s)	20.5		11.7			12.1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	111	0	0	140
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	111	0	0	140
Turn Type	Prot	pm+ov	NA		Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8				
Detector Phase	8	1	2		1	6
Switch Phase						
Minimum Initial (s)	7.0	7.0	10.0		7.0	10.0
Minimum Split (s)	13.0	13.0	16.0		13.0	16.0
Total Split (s)	13.0	54.0	53.0		54.0	107.0
Total Split (%)	10.8%	45.0%	44.2%		45.0%	89.2%
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5
All-Red Time (s)	2.5	2.5	2.5		2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0		6.0	6.0
Lead/Lag		Lead	Lag		Lead	
Lead-Lag Optimize?						
Recall Mode	None	None	C-Max		None	C-Max
Act Effct Green (s)			120.0			120.0
Actuated g/C Ratio			1.00			1.00
v/c Ratio			0.03			0.04
Control Delay			0.0			0.0
Queue Delay			0.0			0.0
Total Delay			0.0			0.0
LOS			A			A
Approach Delay						
Approach LOS						
Queue Length 50th (ft)			0			0
Queue Length 95th (ft)			0			0

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Internal Link Dist (ft)	670		860			894
Turn Bay Length (ft)						
Base Capacity (vph)			3539			3539
Starvation Cap Reductn			0			0
Spillback Cap Reductn			0			0
Storage Cap Reductn			0			0
Reduced v/c Ratio			0.03			0.04

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 8 (7%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 45
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.04
Intersection Signal Delay: 0.0 Intersection LOS: A
Intersection Capacity Utilization 13.3% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 4070: M-311 (11 Mile Rd) & Site Drive East

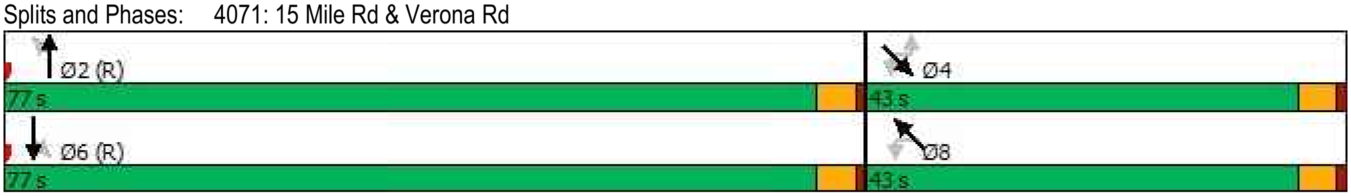


Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	51	13	13	5	9	4	0	87	433	6	118	14
Future Volume (vph)	51	13	13	5	9	4	0	87	433	6	118	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		70	0		0
Storage Lanes	0		0	0		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
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
Frt		0.977			0.968				0.850		0.986	
Flt Protected		0.968			0.987						0.998	
Satd. Flow (prot)	0	1779	0	0	1715	0	0	1845	1392	0	1851	0
Flt Permitted		0.822			0.954						0.991	
Satd. Flow (perm)	0	1511	0	0	1658	0	0	1845	1392	0	1838	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		15			7				487		5	
Link Speed (mph)		45			55			55			55	
Link Distance (ft)		682			426			745			951	
Travel Time (s)		10.3			5.3			9.2			11.8	
Peak Hour Factor	0.80	0.80	0.80	0.60	0.60	0.60	0.89	0.89	0.89	0.86	0.86	0.86
Heavy Vehicles (%)	1%	1%	1%	0%	0%	25%	0%	3%	16%	1%	1%	1%
Adj. Flow (vph)	64	16	16	8	15	7	0	98	487	7	137	16
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	96	0	0	30	0	0	98	487	0	160	0
Turn Type	Perm	NA		Perm	NA			NA	Perm	Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4		4	8		
Minimum Split (s)	22.5	22.5		22.5	22.5		22.5	22.5	22.5	22.5	22.5	
Total Split (s)	77.0	77.0		77.0	77.0		43.0	43.0	43.0	43.0	43.0	
Total Split (%)	64.2%	64.2%		64.2%	64.2%		35.8%	35.8%	35.8%	35.8%	35.8%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0	0.0		0.0	
Total Lost Time (s)		4.5			4.5			4.5	4.5		4.5	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		72.5			72.5			38.5	38.5		38.5	
Actuated g/C Ratio		0.60			0.60			0.32	0.32		0.32	
v/c Ratio		0.10			0.03			0.17	0.63		0.27	
Control Delay		8.8			8.0			30.2	6.7		30.8	
Queue Delay		0.0			0.0			0.0	0.0		0.0	
Total Delay		8.8			8.0			30.2	6.7		30.8	
LOS		A			A			C	A		C	
Approach Delay		8.8			8.0			10.6			30.8	
Approach LOS		A			A			B			C	
Queue Length 50th (ft)		25			7			54	0		89	
Queue Length 95th (ft)		42			12			96	80		139	
Internal Link Dist (ft)		602			346			665			871	
Turn Bay Length (ft)									70			
Base Capacity (vph)		918			1004			591	777		593	

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
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		0.10			0.03			0.17	0.63		0.27	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 45	
Control Type: Pretimed	
Maximum v/c Ratio: 0.63	
Intersection Signal Delay: 14.1	Intersection LOS: B
Intersection Capacity Utilization 54.7%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4071: 15 Mile Rd & Verona Rd

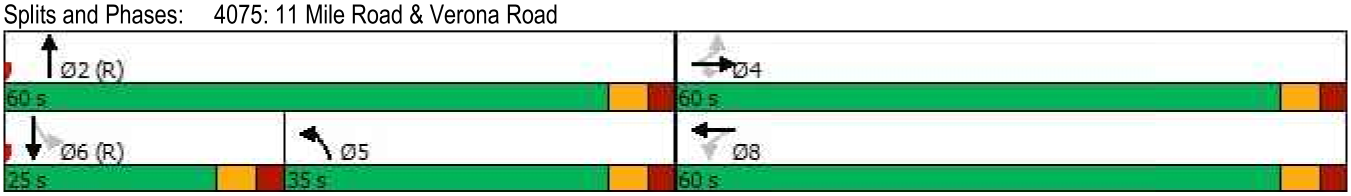


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	518	95	17	135	19	93	68	13	10	82	8
Future Volume (vph)	11	518	95	17	135	19	93	68	13	10	82	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	190		70	190		0	140		0	215		0
Storage Lanes	1		1	1		0	2		0	1		0
Taper Length (ft)	115			140			200			165		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.981			0.976			0.987	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	1900	1468	1805	1852	0	3072	1854	0	1687	1753	0
Flt Permitted	0.631			0.170			0.950			0.697		
Satd. Flow (perm)	1199	1900	1468	323	1852	0	3072	1854	0	1238	1753	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			82		8			10			3	
Link Speed (mph)		55			55			45			55	
Link Distance (ft)		519			1585			1015			821	
Travel Time (s)		6.4			19.6			15.4			10.2	
Peak Hour Factor	0.79	0.79	0.79	0.87	0.87	0.87	0.87	0.87	0.87	0.66	0.66	0.66
Heavy Vehicles (%)	0%	0%	10%	0%	0%	5%	14%	0%	0%	7%	7%	7%
Adj. Flow (vph)	14	656	120	20	155	22	107	78	15	15	124	12
Shared Lane Traffic (%)												
Lane Group Flow (vph)	14	656	120	20	177	0	107	93	0	15	136	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Perm	NA	
Protected Phases		4			8		5	2			6	
Permitted Phases	4		4	8						6		
Minimum Split (s)	25.0	25.0	25.0	25.0	25.0		16.0	25.0		25.0	25.0	
Total Split (s)	60.0	60.0	60.0	60.0	60.0		35.0	60.0		25.0	25.0	
Total Split (%)	50.0%	50.0%	50.0%	50.0%	50.0%		29.2%	50.0%		20.8%	20.8%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	2.5	2.5	2.5	2.5	2.5		2.5	2.5		2.5	2.5	
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)	6.0	6.0	6.0	6.0	6.0		6.0	6.0		6.0	6.0	
Lead/Lag							Lag			Lead	Lead	
Lead-Lag Optimize?							Yes			Yes	Yes	
Act Effct Green (s)	54.0	54.0	54.0	54.0	54.0		29.0	54.0		19.0	19.0	
Actuated g/C Ratio	0.45	0.45	0.45	0.45	0.45		0.24	0.45		0.16	0.16	
v/c Ratio	0.03	0.77	0.17	0.14	0.21		0.14	0.11		0.08	0.49	
Control Delay	18.7	35.0	7.9	22.5	19.9		36.4	17.5		44.3	51.6	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	18.7	35.0	7.9	22.5	19.9		36.4	17.5		44.3	51.6	
LOS	B	D	A	C	B		D	B		D	D	
Approach Delay		30.6			20.2			27.6			50.9	
Approach LOS		C			C			C			D	
Queue Length 50th (ft)	6	418	16	9	78		33	36		10	95	
Queue Length 95th (ft)	16	463	40	26	121		56	67		22	113	
Internal Link Dist (ft)		439			1505			935			741	
Turn Bay Length (ft)	190		70	190			140			215		
Base Capacity (vph)	539	855	705	145	837		742	839		196	280	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0	0	0	0		0	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	0.03	0.77	0.17	0.14	0.21		0.14	0.11		0.08	0.49	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green	
Natural Cycle: 75	
Control Type: Pretimed	
Maximum v/c Ratio: 0.77	
Intersection Signal Delay: 30.9	Intersection LOS: C
Intersection Capacity Utilization 46.6%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4075: 11 Mile Road & Verona Road



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	628	143	0	231
Future Volume (vph)	0	0	628	143	0	231
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200			300	245	245
Storage Lanes	0			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.972			0.865
Flt Protected						
Satd. Flow (prot)	0	0	3320	0	0	1644
Flt Permitted						
Satd. Flow (perm)	0	0	3320	0	0	1644
Link Speed (mph)		55	55		25	
Link Distance (ft)		509	395		760	
Travel Time (s)		6.3	4.9		20.7	
Peak Hour Factor	0.88	0.88	0.91	0.91	0.79	0.79
Heavy Vehicles (%)	1%	1%	7%	0%	0%	0%
Adj. Flow (vph)	0	0	690	157	0	292
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	847	0	0	292
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 42.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	614	43	0	157
Future Volume (vph)	0	0	614	43	0	157
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	175			50	0	0
Storage Lanes	0			0	0	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.990			0.865
Flt Protected						
Satd. Flow (prot)	0	0	3354	0	0	1565
Flt Permitted						
Satd. Flow (perm)	0	0	3354	0	0	1565
Link Speed (mph)		55	55		25	
Link Distance (ft)		395	586		185	
Travel Time (s)		4.9	7.3		5.0	
Peak Hour Factor	0.90	0.90	0.95	0.95	0.70	0.70
Heavy Vehicles (%)	1%	1%	7%	0%	5%	5%
Adj. Flow (vph)	0	0	646	45	0	224
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	691	0	0	224
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 34.7%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations			↑↱			↱
Traffic Volume (vph)	0	0	650	12	0	7
Future Volume (vph)	0	0	650	12	0	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150			600	0	0
Storage Lanes	0			0	0	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.997			0.865
Flt Protected						
Satd. Flow (prot)	0	0	3368	0	0	1644
Flt Permitted						
Satd. Flow (perm)	0	0	3368	0	0	1644
Link Speed (mph)		55	55		25	
Link Distance (ft)		586	607		1086	
Travel Time (s)		7.3	7.5		29.6	
Peak Hour Factor	0.83	0.83	0.92	0.92	0.60	0.60
Heavy Vehicles (%)	10%	1%	7%	0%	33%	0%
Adj. Flow (vph)	0	0	707	13	0	12
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	720	0	0	12
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 28.3%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	384	8	0	7
Future Volume (vph)	0	0	384	8	0	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.997			0.865
Flt Protected						
Satd. Flow (prot)	0	0	3529	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	0	3529	0	0	1611
Link Speed (mph)		55	55		55	
Link Distance (ft)		538	1254		1399	
Travel Time (s)		6.7	15.5		17.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	417	9	0	8
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	426	0	0	8
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 20.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	0	5	0	93	0	0	460	0
Future Volume (vph)	0	0	0	0	0	5	0	93	0	0	460	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
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
Frt					0.865							
Flt Protected												
Satd. Flow (prot)	0	1863	0	0	1611	0	0	1863	0	0	1863	0
Flt Permitted												
Satd. Flow (perm)	0	1863	0	0	1611	0	0	1863	0	0	1863	0
Link Speed (mph)		45			45			25			45	
Link Distance (ft)		957			1038			516			593	
Travel Time (s)		14.5			15.7			14.1			9.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	0	5	0	101	0	0	500	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	5	0	0	101	0	0	500	0
Sign Control		Stop			Stop			Free			Free	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 34.2% ICU Level of Service A
Analysis Period (min) 15

Lane Group	EBT	EBR	WBL	WBT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	0	0	119	1003	0	0
Future Volume (vph)	0	0	119	1003	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.91	0.91	1.00	1.00
Frt						
Flt Protected				0.995		
Satd. Flow (prot)	0	0	0	5060	0	0
Flt Permitted				0.995		
Satd. Flow (perm)	0	0	0	5060	0	0
Link Speed (mph)	45			45	25	
Link Distance (ft)	183			382	263	
Travel Time (s)	2.8			5.8	7.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	129	1090	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1219	0	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 25.1%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	40	564	0	0	0	0
Future Volume (vph)	40	564	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1610	3390	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1610	3390	0	0	0	0
Link Speed (mph)		45	45		25	
Link Distance (ft)		619	209		329	
Travel Time (s)		9.4	3.2		9.0	
Peak Hour Factor	0.86	0.86	0.92	0.92	0.92	0.92
Adj. Flow (vph)	47	656	0	0	0	0
Shared Lane Traffic (%)	10%					
Lane Group Flow (vph)	42	661	0	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 30.0%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	0	773	168	0	0
Future Volume (vph)	0	0	773	168	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	1.00
Frt				0.850		
Flt Protected						
Satd. Flow (prot)	0	0	3539	1583	0	0
Flt Permitted						
Satd. Flow (perm)	0	0	3539	1583	0	0
Link Speed (mph)		45	45		30	
Link Distance (ft)		213	315		137	
Travel Time (s)		3.2	4.8		3.1	
Peak Hour Factor	0.92	0.92	0.91	0.91	0.92	0.92
Adj. Flow (vph)	0	0	849	185	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	849	185	0	0
Sign Control		Stop	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 45.3%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	686	0	0	159	0
Future Volume (vph)	0	686	0	0	159	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3505	0	0	1787	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3505	0	0	1787	0
Link Speed (mph)		45	45		25	
Link Distance (ft)		309	168		108	
Travel Time (s)		4.7	2.5		2.9	
Peak Hour Factor	0.86	0.86	0.92	0.92	0.87	0.87
Heavy Vehicles (%)	3%	3%	2%	2%	1%	1%
Adj. Flow (vph)	0	798	0	0	183	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	798	0	0	183	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 43.8%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	886	182	0
Future Volume (vph)	0	0	0	886	182	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	5036	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	5036	1770	0
Link Speed (mph)	45			45	25	
Link Distance (ft)	134			152	111	
Travel Time (s)	2.0			2.3	3.0	
Peak Hour Factor	0.92	0.92	0.89	0.89	0.94	0.94
Heavy Vehicles (%)	2%	2%	3%	3%	2%	2%
Adj. Flow (vph)	0	0	0	996	194	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	996	194	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 37.2%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	664	0	0	80	0
Future Volume (vph)	0	664	0	0	80	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3574	0	0	1787	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3574	0	0	1787	0
Link Speed (mph)		45	45		25	
Link Distance (ft)		222	290		102	
Travel Time (s)		3.4	4.4		2.8	
Peak Hour Factor	0.95	0.95	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	1%	1%	2%	2%	1%	1%
Adj. Flow (vph)	0	699	0	0	87	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	699	0	0	87	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 57.2%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	905	65	0
Future Volume (vph)	0	0	0	905	65	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	30			45	25	
Link Distance (ft)	114			1105	101	
Travel Time (s)	2.6			16.7	2.8	
Peak Hour Factor	0.92	0.92	0.88	0.88	0.94	0.94
Adj. Flow (vph)	0	0	0	1028	69	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1028	69	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 53.1%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	53	265	31	4	93	12	14	37	3	13	81	35
Future Volume (vph)	53	265	31	4	93	12	14	37	3	13	81	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	80		0	80		0	110		0	115		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	180			180			140			175		
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
Frt		0.984			0.982			0.988			0.955	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	1870	0	1770	1829	0	1703	1771	0	1770	1779	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1805	1870	0	1770	1829	0	1703	1771	0	1770	1779	0
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		1365			1319			666			571	
Travel Time (s)		20.7			20.0			10.1			8.7	
Peak Hour Factor	0.94	0.94	0.94	0.88	0.88	0.88	0.78	0.78	0.78	0.91	0.91	0.91
Heavy Vehicles (%)	0%	0%	0%	2%	2%	2%	6%	6%	6%	2%	2%	2%
Adj. Flow (vph)	56	282	33	5	106	14	18	47	4	14	89	38
Shared Lane Traffic (%)												
Lane Group Flow (vph)	56	315	0	5	120	0	18	51	0	14	127	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 29.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL2	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	SWL	SWR
Lane Configurations											
Traffic Volume (vph)	55	0	112	0	270	79	81	385	0	0	0
Future Volume (vph)	55	0	112	0	270	79	81	385	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	240	0		0	105		0	0	0
Storage Lanes		1	1	0		0	1		0	0	0
Taper Length (ft)		25		25			70			25	
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
Frt			0.850		0.969						
Flt Protected	0.950						0.950				
Satd. Flow (prot)	1687	0	1615	0	1805	0	1752	1845	0	0	0
Flt Permitted	0.950						0.950				
Satd. Flow (perm)	1687	0	1615	0	1805	0	1752	1845	0	0	0
Link Speed (mph)		25			45			45		25	
Link Distance (ft)		894			1167			685		897	
Travel Time (s)		24.4			17.7			10.4		24.5	
Peak Hour Factor	0.93	0.93	0.93	0.91	0.91	0.91	0.95	0.95	0.95	0.92	0.92
Heavy Vehicles (%)	7%	0%	0%	2%	2%	2%	3%	3%	3%	2%	2%
Adj. Flow (vph)	59	0	120	0	297	87	85	405	0	0	0
Shared Lane Traffic (%)											
Lane Group Flow (vph)	59	0	120	0	384	0	85	405	0	0	0
Sign Control		Stop			Free			Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 33.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	WBL2	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NER
Lane Configurations											
Traffic Volume (vph)	93	0	84	61	264	0	0	373	50	0	0
Future Volume (vph)	93	0	84	61	264	0	0	373	50	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	185	165		0	0		0	0	0
Storage Lanes		1	1	1		0	0		0	0	0
Taper Length (ft)		25		110			25			25	
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
Frt			0.850					0.984			
Flt Protected	0.950			0.950							
Satd. Flow (prot)	1805	0	1455	1752	1845	0	0	1815	0	0	0
Flt Permitted	0.950			0.950							
Satd. Flow (perm)	1805	0	1455	1752	1845	0	0	1815	0	0	0
Link Speed (mph)		25			45			45		25	
Link Distance (ft)		613			685			608		913	
Travel Time (s)		16.7			10.4			9.2		24.9	
Peak Hour Factor	0.81	0.81	0.81	0.87	0.87	0.87	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	11%	3%	3%	3%	3%	3%	3%	2%	2%
Adj. Flow (vph)	115	0	104	70	303	0	0	405	54	0	0
Shared Lane Traffic (%)											
Lane Group Flow (vph)	115	0	104	70	303	0	0	459	0	0	0
Sign Control		Stop			Free			Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 33.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	184	140	0	396	272	0
Future Volume (vph)	184	140	0	396	272	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.850				
Flt Protected	0.950					
Satd. Flow (prot)	1543	1553	0	3505	3374	0
Flt Permitted	0.950					
Satd. Flow (perm)	1543	1553	0	3505	3374	0
Link Speed (mph)	25			55	55	
Link Distance (ft)	119			105	620	
Travel Time (s)	3.2			1.3	7.7	
Peak Hour Factor	0.93	0.93	0.82	0.82	0.92	0.92
Heavy Vehicles (%)	17%	4%	0%	3%	7%	0%
Adj. Flow (vph)	198	151	0	483	296	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	198	151	0	483	296	0
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 27.8%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	396	61	35	377
Future Volume (vph)	0	0	396	61	35	377
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		340	0	
Storage Lanes	0	0		1	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	1.00	0.95	0.95
Frt				0.850		
Flt Protected						0.996
Satd. Flow (prot)	0	0	3505	1568	0	3383
Flt Permitted						0.996
Satd. Flow (perm)	0	0	3505	1568	0	3383
Link Speed (mph)	25		55			55
Link Distance (ft)	664		1109			105
Travel Time (s)	18.1		13.7			1.3
Peak Hour Factor	0.92	0.92	0.82	0.82	0.92	0.92
Heavy Vehicles (%)	2%	2%	3%	3%	20%	5%
Adj. Flow (vph)	0	0	483	74	38	410
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	483	74	0	448
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 29.1%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	WBL2	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NER
Lane Configurations											
Traffic Volume (vph)	52	0	60	0	352	0	0	220	86	0	0
Future Volume (vph)	52	0	60	0	352	0	0	220	86	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	205	0		0	0		135	0	0
Storage Lanes		1	1	0		0	0		1	0	0
Taper Length (ft)		25		25			25			25	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00
Frt			0.850						0.850		
Flt Protected	0.950										
Satd. Flow (prot)	1736	0	1380	0	3438	0	0	3343	1272	0	0
Flt Permitted	0.950										
Satd. Flow (perm)	1736	0	1380	0	3438	0	0	3343	1272	0	0
Link Speed (mph)		25			55			55		25	
Link Distance (ft)		296			230			1367		908	
Travel Time (s)		8.1			2.9			16.9		24.8	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.95	0.95	0.95	0.92	0.92
Heavy Vehicles (%)	4%	0%	17%	0%	5%	0%	0%	8%	27%	2%	2%
Adj. Flow (vph)	59	0	68	0	400	0	0	232	91	0	0
Shared Lane Traffic (%)											
Lane Group Flow (vph)	59	0	68	0	400	0	0	232	91	0	0
Sign Control		Stop			Free			Free		Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 20.4% ICU Level of Service A
Analysis Period (min) 15

Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	33	80	0	270	154	0
Future Volume (vph)	33	80	0	270	154	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				
Flt Protected	0.950					
Satd. Flow (prot)	1752	1077	0	1624	1696	0
Flt Permitted	0.950					
Satd. Flow (perm)	1752	1077	0	1624	1696	0
Link Speed (mph)	25			45	45	
Link Distance (ft)	189			1063	114	
Travel Time (s)	5.2			16.1	1.7	
Peak Hour Factor	0.74	0.74	0.93	0.93	0.89	0.89
Heavy Vehicles (%)	3%	50%	17%	17%	12%	12%
Adj. Flow (vph)	45	108	0	290	173	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	45	108	0	290	173	0
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 24.2%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	0	0	182	121	3	154
Future Volume (vph)	0	0	182	121	3	154
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.850		
Flt Protected						0.999
Satd. Flow (prot)	0	0	1624	1380	0	1689
Flt Permitted						0.999
Satd. Flow (perm)	0	0	1624	1380	0	1689
Link Speed (mph)	25		45			45
Link Distance (ft)	105		114			727
Travel Time (s)	2.9		1.7			11.0
Peak Hour Factor	0.92	0.92	0.93	0.93	0.89	0.89
Heavy Vehicles (%)	2%	2%	17%	17%	33%	12%
Adj. Flow (vph)	0	0	196	130	3	173
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	196	130	0	176
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 22.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBR	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	6	97	58	124	60	11
Future Volume (vph)	6	97	58	124	60	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	195	0	0			90
Storage Lanes	1	1	0			1
Taper Length (ft)	135		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				0.850
Flt Protected	0.950			0.984		
Satd. Flow (prot)	1570	1404	0	1615	1776	1509
Flt Permitted	0.950			0.984		
Satd. Flow (perm)	1570	1404	0	1615	1776	1509
Link Speed (mph)	25			45	45	
Link Distance (ft)	597			727	1165	
Travel Time (s)	16.3			11.0	17.7	
Peak Hour Factor	0.83	0.83	0.91	0.91	0.78	0.78
Heavy Vehicles (%)	15%	15%	43%	3%	7%	7%
Adj. Flow (vph)	7	117	64	136	77	14
Shared Lane Traffic (%)						
Lane Group Flow (vph)	7	117	0	200	77	14
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 26.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	18	1104	18	0
Future Volume (vph)	0	0	18	1104	18	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.91	0.91	1.00	1.00
Frt						
Flt Protected				0.999	0.950	
Satd. Flow (prot)	0	0	0	5080	1770	0
Flt Permitted				0.999	0.950	
Satd. Flow (perm)	0	0	0	5080	1770	0
Link Speed (mph)	45			45	25	
Link Distance (ft)	382			217	236	
Travel Time (s)	5.8			3.3	6.4	
Peak Hour Factor	0.90	0.90	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	20	1200	20	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1220	20	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 31.7%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	845	0	0	0	0	30
Future Volume (vph)	845	0	0	0	0	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	1.00	1.00	1.00	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	3539	0	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	3539	0	0	0	0	1611
Link Speed (mph)	45			45	25	
Link Distance (ft)	168			432	770	
Travel Time (s)	2.5			6.5	21.0	
Peak Hour Factor	0.87	0.87	0.92	0.92	0.92	0.92
Adj. Flow (vph)	971	0	0	0	0	33
Shared Lane Traffic (%)						
Lane Group Flow (vph)	971	0	0	0	0	33
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 41.1%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations			↑↑↑			↱
Traffic Volume (vph)	0	0	1068	0	0	32
Future Volume (vph)	0	0	1068	0	0	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.91	1.00	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	0	0	5036	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	0	5036	0	0	1611
Link Speed (mph)		45	45		25	
Link Distance (ft)		494	134		230	
Travel Time (s)		7.5	2.0		6.3	
Peak Hour Factor	0.92	0.92	0.89	0.89	0.92	0.92
Heavy Vehicles (%)	2%	2%	3%	3%	2%	2%
Adj. Flow (vph)	0	0	1200	0	0	35
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1200	0	0	35
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 40.5% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations			↑↱			
Traffic Volume (vph)	0	0	920	50	0	0
Future Volume (vph)	0	0	920	50	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.992			
Flt Protected						
Satd. Flow (prot)	0	0	3511	0	0	0
Flt Permitted						
Satd. Flow (perm)	0	0	3511	0	0	0
Link Speed (mph)		30	45		25	
Link Distance (ft)		176	114		201	
Travel Time (s)		4.0	1.7		5.5	
Peak Hour Factor	0.92	0.92	0.88	0.88	0.92	0.92
Adj. Flow (vph)	0	0	1045	57	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1102	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 35.5%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	NBT	NBR	SBL	SBT	SWL	SWR
Lane Configurations	↑↱			↑↑		
Traffic Volume (vph)	352	228	0	272	0	0
Future Volume (vph)	352	228	0	272	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	1.00	0.95	1.00	1.00
Frt	0.941					
Flt Protected						
Satd. Flow (prot)	3164	0	0	3343	0	0
Flt Permitted						
Satd. Flow (perm)	3164	0	0	3343	0	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	620			230	1088	
Travel Time (s)	7.7			2.9	29.7	
Peak Hour Factor	0.88	0.88	0.95	0.95	0.92	0.92
Heavy Vehicles (%)	5%	11%	8%	8%	2%	2%
Adj. Flow (vph)	400	259	0	286	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	659	0	0	286	0	0
Sign Control	Free			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 20.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	32	888	0	0	0	0	0	48	29
Future Volume (vph)	0	0	0	32	888	0	0	0	0	0	48	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	165		0	0		0	0		0
Storage Lanes	0		0	1		0	0		0	0		0
Taper Length (ft)	25			85			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt											0.949	
Flt Protected				0.950								
Satd. Flow (prot)	0	0	0	1770	3539	0	0	0	0	0	1785	0
Flt Permitted				0.950								
Satd. Flow (perm)	0	0	0	1770	3539	0	0	0	0	0	1785	0
Link Speed (mph)		30			45			30			30	
Link Distance (ft)		212			176			102			496	
Travel Time (s)		4.8			2.7			2.3			11.3	
Peak Hour Factor	0.92	0.92	0.92	0.86	0.86	0.86	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	1%	1%	1%
Adj. Flow (vph)	0	0	0	37	1033	0	0	0	0	0	52	32
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	37	1033	0	0	0	0	0	84	0
Sign Control		Free			Free			Yield			Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 35.5% ICU Level of Service A

Analysis Period (min) 15

Lane Group	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	1240	0	0	0	523
Future Volume (vph)	0	1240	0	0	0	523
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	0.88
Frt						0.850
Flt Protected						
Satd. Flow (prot)	0	3539	0	0	0	2787
Flt Permitted						
Satd. Flow (perm)	0	3539	0	0	0	2787
Link Speed (mph)		55	55		55	
Link Distance (ft)		434	1242		1194	
Travel Time (s)		5.4	15.4		14.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1348	0	0	0	568
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1348	0	0	0	568
Sign Control		Free	Free		Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 37.6% ICU Level of Service A

Analysis Period (min) 15

Lane Group	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	0	119	0	0	92
Future Volume (vph)	0	0	119	0	0	92
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	0	0	1863	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	0	1863	0	0	1611
Link Speed (mph)		25	25		30	
Link Distance (ft)		1199	263		174	
Travel Time (s)		32.7	7.2		4.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.90	0.90
Adj. Flow (vph)	0	0	129	0	0	102
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	129	0	0	102
Sign Control		Free	Yield		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 25.1%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	WBL	WBR	NBL	NBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	168	40	0	0	0
Future Volume (vph)	0	168	40	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.97	1.00	1.00	1.00
Frt		0.865				
Flt Protected			0.950			
Satd. Flow (prot)	0	1627	3303	0	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	1627	3303	0	0	0
Link Speed (mph)	45		45		45	
Link Distance (ft)	255		329		551	
Travel Time (s)	3.9		5.0		8.3	
Peak Hour Factor	0.91	0.91	0.93	0.93	0.92	0.92
Heavy Vehicles (%)	1%	1%	6%	6%	2%	2%
Adj. Flow (vph)	0	185	43	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	185	43	0	0	0
Sign Control	Yield		Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 28.2%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	159	941	0	0
Future Volume (vph)	0	0	159	941	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	450		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			85		25	
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	5085	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	5085	0	0
Link Speed (mph)	45			45	30	
Link Distance (ft)	315			494	108	
Travel Time (s)	4.8			7.5	2.5	
Peak Hour Factor	0.92	0.92	0.87	0.87	0.92	0.92
Adj. Flow (vph)	0	0	183	1082	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	183	1082	0	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 34.8%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	182	693	0	0	0	0
Future Volume (vph)	182	693	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	275			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	110				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		45	45		30	
Link Distance (ft)		432	161		111	
Travel Time (s)		6.5	2.4		2.5	
Peak Hour Factor	0.94	0.94	0.92	0.92	0.92	0.92
Adj. Flow (vph)	194	737	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	194	737	0	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 42.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	102	0	0	0	129
Future Volume (vph)	0	102	0	0	0	129
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	0.76
Frt						0.850
Flt Protected						
Satd. Flow (prot)	0	3539	0	0	0	3610
Flt Permitted						
Satd. Flow (perm)	0	3539	0	0	0	3610
Link Speed (mph)		55	55		45	
Link Distance (ft)		1093	655		773	
Travel Time (s)		13.5	8.1		11.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	111	0	0	0	140
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	111	0	0	0	140
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 6.7%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	65	679	0	0	0	0
Future Volume (vph)	65	679	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	180			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	75				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		45	45		30	
Link Distance (ft)		290	1089		101	
Travel Time (s)		4.4	16.5		2.3	
Peak Hour Factor	0.94	0.94	0.92	0.92	0.92	0.92
Adj. Flow (vph)	69	722	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	69	722	0	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 50.5%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	492	92	0	0	0	0
Future Volume (vph)	492	92	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	1.00	1.00	1.00	1.00
Frt	0.976					
Flt Protected						
Satd. Flow (prot)	4963	0	0	0	0	0
Flt Permitted						
Satd. Flow (perm)	4963	0	0	0	0	0
Link Speed (mph)	45			45	30	
Link Distance (ft)	311			156	174	
Travel Time (s)	4.7			2.4	4.0	
Peak Hour Factor	0.90	0.90	0.92	0.92	0.92	0.92
Adj. Flow (vph)	547	102	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	649	0	0	0	0	0
Sign Control	Free			Stop	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 38.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	NBT	NBR	SBL	SBT	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	0	0	112	1563	0	0
Future Volume (vph)	0	0	112	1563	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	500		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			100		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	3539	0	0
Link Speed (mph)	30			25	25	
Link Distance (ft)	266			1471	301	
Travel Time (s)	6.0			40.1	8.2	
Peak Hour Factor	0.92	0.92	0.75	0.75	0.92	0.92
Adj. Flow (vph)	0	0	149	2084	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	149	2084	0	0
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 46.5%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	349	122	0	0	0	0
Future Volume (vph)	349	122	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected		0.964				
Satd. Flow (prot)	0	1796	0	0	0	0
Flt Permitted		0.964				
Satd. Flow (perm)	0	1796	0	0	0	0
Link Speed (mph)		25	30		25	
Link Distance (ft)		1207	315		252	
Travel Time (s)		32.9	7.2		6.9	
Peak Hour Factor	0.75	0.75	0.92	0.92	0.92	0.92
Adj. Flow (vph)	465	163	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	628	0	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 40.6%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	103	0	69	0	0
Future Volume (vph)	0	103	0	69	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.865		
Flt Protected						
Satd. Flow (prot)	0	1652	0	1191	0	0
Flt Permitted						
Satd. Flow (perm)	0	1652	0	1191	0	0
Link Speed (mph)		25	25		25	
Link Distance (ft)		995	597		1154	
Travel Time (s)		27.1	16.3		31.5	
Peak Hour Factor	0.83	0.83	0.89	0.89	0.92	0.92
Heavy Vehicles (%)	15%	15%	38%	38%	2%	2%
Adj. Flow (vph)	0	124	0	78	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	124	0	78	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 8.8%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	53	2922	0	0
Future Volume (vph)	0	0	53	2922	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	250		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	5085	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	5085	0	0
Link Speed (mph)	45			45	25	
Link Distance (ft)	894			534	137	
Travel Time (s)	13.5			8.1	3.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	58	3176	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	58	3176	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 27.0%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	465	0	0	53	0
Future Volume (vph)	0	465	0	0	53	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.86	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	6408	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	6408	0	0	1770	0
Link Speed (mph)		45	45		25	
Link Distance (ft)		744	1191		137	
Travel Time (s)		11.3	18.0		3.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	505	0	0	58	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	505	0	0	58	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 69.9%	ICU Level of Service C
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	10	508	0	0	0	0
Future Volume (vph)	10	508	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	400			0	0	0
Storage Lanes	2			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	0.97	0.86	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	3433	6408	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	3433	6408	0	0	0	0
Link Speed (mph)		45	45		25	
Link Distance (ft)		1191	262		113	
Travel Time (s)		18.0	4.0		3.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	11	552	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	11	552	0	0	0	0
Sign Control		Free	Stop		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 65.9%	ICU Level of Service C
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	119	2598	0	0
Future Volume (vph)	0	0	119	2598	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	250		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	5085	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	5085	0	0
Link Speed (mph)	45			45	25	
Link Distance (ft)	254			1016	123	
Travel Time (s)	3.8			15.4	3.4	
Peak Hour Factor	0.92	0.92	0.90	0.87	0.92	0.92
Adj. Flow (vph)	0	0	132	2986	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	132	2986	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary		
Area Type:	Other	
Control Type: Unsignalized		
Intersection Capacity Utilization 140.6%		ICU Level of Service H
Analysis Period (min) 15		

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	151	584	0	0	0	0
Future Volume (vph)	151	584	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.91	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	5085	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	5085	0	0	0	0
Link Speed (mph)		45	45		30	
Link Distance (ft)		704	311		111	
Travel Time (s)		10.7	4.7		2.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	164	635	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	164	635	0	0	0	0
Sign Control		Free	Stop		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 69.2%	ICU Level of Service C
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	825	27	0
Future Volume (vph)	0	0	0	825	27	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	30	
Link Distance (ft)	583			574	107	
Travel Time (s)	7.2			7.1	2.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	897	29	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	897	29	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 54.0%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	27	886	0	0	0	0
Future Volume (vph)	27	886	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		30	
Link Distance (ft)		1122	576		107	
Travel Time (s)		13.9	7.1		2.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	29	963	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	29	963	0	0	0	0
Sign Control		Free	Stop		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 54.0%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	816	36	0	54
Future Volume (vph)	0	0	816	36	0	54
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.994			0.865
Flt Protected						
Satd. Flow (prot)	0	0	3518	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	0	3518	0	0	1611
Link Speed (mph)		55	55		30	
Link Distance (ft)		590	583		121	
Travel Time (s)		7.3	7.2		2.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	887	39	0	59
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	926	0	0	59
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 33.7% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	168	702	0	0
Future Volume (vph)	0	0	168	702	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	250		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	3539	0	0
Link Speed (mph)	55			55	30	
Link Distance (ft)	405			590	104	
Travel Time (s)	5.0			7.3	2.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	183	763	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	183	763	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 36.1%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑			↰	
Traffic Volume (vph)	0	745	0	0	168	0
Future Volume (vph)	0	745	0	0	168	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	1770	0
Link Speed (mph)		55	55		30	
Link Distance (ft)		316	1122		104	
Travel Time (s)		3.9	13.9		2.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	810	0	0	183	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	810	0	0	183	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 46.7%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	67	699	0	0
Future Volume (vph)	0	0	67	699	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	250			0
Storage Lanes	0	0	2			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	0.97	0.91	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	3433	5085	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	3433	5085	0	0
Link Speed (mph)	45			55	30	
Link Distance (ft)	105			493	555	
Travel Time (s)	1.6			6.1	12.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	73	760	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	73	760	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 36.7%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	540	159	0	0	0	0
Future Volume (vph)	540	159	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.94	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	4990	1863	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	4990	1863	0	0	0	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		555	271		108	
Travel Time (s)		12.6	6.2		2.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	587	173	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	587	173	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 31.3%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NEL	NER
Lane Configurations	↑					↱
Traffic Volume (vph)	73	0	0	0	0	159
Future Volume (vph)	73	0	0	0	0	159
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	1863	0	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	1863	0	0	0	0	1611
Link Speed (mph)	25			30	25	
Link Distance (ft)	287			1072	271	
Travel Time (s)	7.8			24.4	7.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	79	0	0	0	0	173
Shared Lane Traffic (%)						
Lane Group Flow (vph)	79	0	0	0	0	173
Sign Control	Yield			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 20.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	NBT	NBR	SBL	SBT	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	0	0	73	659	0	0
Future Volume (vph)	0	0	73	659	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.91	0.91	1.00	1.00
Frt						
Flt Protected				0.995		
Satd. Flow (prot)	0	0	0	5045	0	0
Flt Permitted				0.995		
Satd. Flow (perm)	0	0	0	5045	0	0
Link Speed (mph)	45			45	45	
Link Distance (ft)	194			406	287	
Travel Time (s)	2.9			6.2	4.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	5%	2%	2%	2%
Adj. Flow (vph)	0	0	79	716	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	795	0	0
Sign Control	Free			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 20.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	104	110	0	0	0	0
Future Volume (vph)	104	110	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1719	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1719	3539	0	0	0	0
Link Speed (mph)		25	25		25	
Link Distance (ft)		879	346		271	
Travel Time (s)		24.0	9.4		7.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	2%	2%	2%	2%	2%
Adj. Flow (vph)	113	120	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	113	120	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 26.1% ICU Level of Service A
Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	79	0	0	81
Future Volume (vph)	0	0	79	0	0	81
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	0	0	1863	0	0	1565
Flt Permitted						
Satd. Flow (perm)	0	0	1863	0	0	1565
Link Speed (mph)		30	45		45	
Link Distance (ft)		874	182		254	
Travel Time (s)		19.9	2.8		3.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	5%
Adj. Flow (vph)	0	0	86	0	0	88
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	86	0	0	88
Sign Control		Free	Free		Yield	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 27.5%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBR	SBL	SBR	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	0	0	0	0	79	565
Future Volume (vph)	0	0	0	0	79	565
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.91
Frt					0.904	0.850
Flt Protected					0.982	
Satd. Flow (prot)	0	0	0	0	1623	2799
Flt Permitted					0.982	
Satd. Flow (perm)	0	0	0	0	1623	2799
Link Speed (mph)	30		30		30	
Link Distance (ft)	182		207		337	
Travel Time (s)	4.1		4.7		7.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	5%
Adj. Flow (vph)	0	0	0	0	86	614
Shared Lane Traffic (%)						25%
Lane Group Flow (vph)	0	0	0	0	240	460
Sign Control	Stop		Free		Free	

Intersection Summary		
Area Type:	Other	
Control Type: Unsignalized		
Intersection Capacity Utilization 27.5%		ICU Level of Service A
Analysis Period (min) 15		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	633	81	0	0	0	0
Future Volume (vph)	633	81	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00
Frt	0.983					
Flt Protected						
Satd. Flow (prot)	3380	0	0	0	0	0
Flt Permitted						
Satd. Flow (perm)	3380	0	0	0	0	0
Link Speed (mph)	30			45	25	
Link Distance (ft)	306			190	254	
Travel Time (s)	7.0			2.9	6.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	5%	2%	2%	2%	2%
Adj. Flow (vph)	688	88	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	776	0	0	0	0	0
Sign Control	Free			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 38.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	0	99	151	0	0
Future Volume (vph)	0	0	99	151	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			250	0	0
Storage Lanes	0			1	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	1.00
Frt				0.850		
Flt Protected						
Satd. Flow (prot)	0	0	3539	1538	0	0
Flt Permitted						
Satd. Flow (perm)	0	0	3539	1538	0	0
Link Speed (mph)		25	25		25	
Link Distance (ft)		241	1465		317	
Travel Time (s)		6.6	40.0		8.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	5%	2%	2%
Adj. Flow (vph)	0	0	108	164	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	108	164	0	0
Sign Control		Free	Free		Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 13.3% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑↑	↰	
Traffic Volume (vph)	0	0	0	716	64	0
Future Volume (vph)	0	0	0	716	64	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	4940	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	4940	1770	0
Link Speed (mph)	55			30	25	
Link Distance (ft)	598			415	105	
Travel Time (s)	7.4			9.4	2.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	5%	2%	2%
Adj. Flow (vph)	0	0	0	778	70	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	778	70	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 40.2%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	64	714	0	0	0	0
Future Volume (vph)	64	714	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3438	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3438	0	0	0	0
Link Speed (mph)		55	30		25	
Link Distance (ft)		597	306		105	
Travel Time (s)		7.4	7.0		2.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	5%	2%	2%	2%	2%
Adj. Flow (vph)	70	776	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	70	776	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 40.2%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	493	0	0
Future Volume (vph)	0	0	0	493	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	0	0	0	3539	1863	0
Flt Permitted						
Satd. Flow (perm)	0	0	0	3539	1863	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	586			210	99	
Travel Time (s)	7.3			2.6	2.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	536	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	536	0	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 23.6%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	571	0	0	0	0
Future Volume (vph)	0	571	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	1863	3539	0	0	0	0
Flt Permitted						
Satd. Flow (perm)	1863	3539	0	0	0	0
Link Speed (mph)		55	55		25	
Link Distance (ft)		589	212		99	
Travel Time (s)		7.3	2.6		2.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	621	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	621	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 23.6%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	493	0	0
Future Volume (vph)	0	0	0	493	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	0	0	0	3539	0	0
Flt Permitted						
Satd. Flow (perm)	0	0	0	3539	0	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	723			586	81	
Travel Time (s)	9.0			7.3	2.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	536	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	536	0	0
Sign Control	Free			Free	Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 23.6% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	571	0	0	0	0	0	0	0	0	0	0
Future Volume (vph)	0	571	0	0	0	0	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	3539	0	0	0	0	0	0	1863	0	1863	0
Flt Permitted												
Satd. Flow (perm)	0	3539	0	0	0	0	0	0	1863	0	1863	0
Link Speed (mph)		55			55			25			25	
Link Distance (ft)		719			589			84			81	
Travel Time (s)		8.9			7.3			2.3			2.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	621	0	0	0	0	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	621	0	0	0	0	0	0	0	0	0	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 25.8% ICU Level of Service A
Analysis Period (min) 15

Lane Group	EBT	EBR	WBL	WBT	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	0	571	0	493	0	0
Future Volume (vph)	0	571	0	493	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.88	1.00	0.95	1.00	1.00
Frt		0.850				
Flt Protected						
Satd. Flow (prot)	0	2787	0	3539	0	0
Flt Permitted						
Satd. Flow (perm)	0	2787	0	3539	0	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	997			723	719	
Travel Time (s)	12.4			9.0	19.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	621	0	536	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	621	0	536	0	0
Sign Control	Free			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 23.3%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	286	600	0	0	0	0
Future Volume (vph)	286	600	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		55	
Link Distance (ft)		2077	2379		116	
Travel Time (s)		25.7	29.5		1.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	311	652	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	311	652	0	0	0	0
Sign Control		Free	Stop		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 33.6%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NEL	NER
Lane Configurations				↑↑	↰	
Traffic Volume (vph)	0	0	0	376	286	0
Future Volume (vph)	0	0	0	376	286	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	607			2382	116	
Travel Time (s)	7.5			29.5	3.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	409	311	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	409	311	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 40.3%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	0	0	14	376	0	0
Future Volume (vph)	0	0	14	376	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	250		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	3539	0	0
Link Speed (mph)	55			55	55	
Link Distance (ft)	2382			560	108	
Travel Time (s)	29.5			6.9	1.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	15	409	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	15	409	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 20.5% ICU Level of Service A

Analysis Period (min) 15

Lane Group	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	0	600	0	0	14	0
Future Volume (vph)	0	600	0	0	14	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	1770	0
Link Speed (mph)		55	55		25	
Link Distance (ft)		2379	608		108	
Travel Time (s)		29.5	7.5		2.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	652	0	0	15	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	652	0	0	15	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 33.6%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	575	39	0	0	0	32
Future Volume (vph)	575	39	0	0	0	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		600	600		0	0
Storage Lanes		0	0		0	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00
Frt	0.991					0.865
Flt Protected						
Satd. Flow (prot)	3507	0	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	3507	0	0	0	0	1611
Link Speed (mph)	55			55	45	
Link Distance (ft)	608			628	1089	
Travel Time (s)	7.5			7.8	16.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	625	42	0	0	0	35
Shared Lane Traffic (%)						
Lane Group Flow (vph)	667	0	0	0	0	35
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 27.1%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑	↰	
Traffic Volume (vph)	0	0	0	381	9	0
Future Volume (vph)	0	0	0	381	9	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	645			3831	112	
Travel Time (s)	8.0			47.5	3.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	414	10	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	414	10	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 38.7%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	9	598	0	0	0	0
Future Volume (vph)	9	598	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		55	
Link Distance (ft)		628	3825		112	
Travel Time (s)		7.8	47.4		1.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	10	650	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	10	650	0	0	0	0
Sign Control		Free	Stop		Stop	

Intersection Summary		
Area Type:	Other	
Control Type: Unsignalized		
Intersection Capacity Utilization 33.7%		ICU Level of Service A
Analysis Period (min) 15		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	10	381	0	0
Future Volume (vph)	0	0	10	381	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	250		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	3539	0	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	3831			538	97	
Travel Time (s)	47.5			6.7	2.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	11	414	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	11	414	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 26.5% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	598	0	0	10	0
Future Volume (vph)	0	598	0	0	10	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	1770	0
Link Speed (mph)		55	55		25	
Link Distance (ft)		3825	591		97	
Travel Time (s)		47.4	7.3		2.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	650	0	0	11	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	650	0	0	11	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 33.7%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↱					↱
Traffic Volume (vph)	596	12	0	0	0	16
Future Volume (vph)	596	12	0	0	0	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00
Frt	0.997					0.865
Flt Protected						
Satd. Flow (prot)	3529	0	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	3529	0	0	0	0	1611
Link Speed (mph)	55			55	45	
Link Distance (ft)	591			1206	1073	
Travel Time (s)	7.3			15.0	16.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	648	13	0	0	0	17
Shared Lane Traffic (%)						
Lane Group Flow (vph)	661	0	0	0	0	17
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 26.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑	↰	
Traffic Volume (vph)	0	0	0	383	9	0
Future Volume (vph)	0	0	0	383	9	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	1254			1793	105	
Travel Time (s)	15.5			22.2	2.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	416	10	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	416	10	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 39.8%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	9	603	0	0	0	0
Future Volume (vph)	9	603	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		55	
Link Distance (ft)		1206	1786		105	
Travel Time (s)		15.0	22.1		1.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	10	655	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	10	655	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 33.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	549	383	0	0
Future Volume (vph)	0	0	549	383	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	500		0	0
Storage Lanes		0	2		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	0.97	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	3433	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	3433	3539	0	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	1793			596	109	
Travel Time (s)	22.2			7.4	3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	597	416	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	597	416	0	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 79.8%	ICU Level of Service D
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	932	0	0
Future Volume (vph)	0	0	0	932	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	0	0	0	3539	1863	0
Flt Permitted						
Satd. Flow (perm)	0	0	0	3539	1863	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	631			2681	109	
Travel Time (s)	7.8			33.2	3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	1013	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1013	0	0
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 54.4% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	550	0	0	0	0
Future Volume (vph)	0	550	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	1863	3539	0	0	0	0
Flt Permitted						
Satd. Flow (perm)	1863	3539	0	0	0	0
Link Speed (mph)		55	55		55	
Link Distance (ft)		627	2678		109	
Travel Time (s)		7.8	33.2		1.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	598	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	598	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary		
Area Type:	Other	
Control Type: Unsignalized		
Intersection Capacity Utilization 35.8%		ICU Level of Service A
Analysis Period (min) 15		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	308	932	0	0
Future Volume (vph)	0	0	308	932	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	500		0	0
Storage Lanes		0	2		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	0.97	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	3433	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	3433	3539	0	0
Link Speed (mph)	55			55	55	
Link Distance (ft)	2681			671	109	
Travel Time (s)	33.2			8.3	1.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	335	1013	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	335	1013	0	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 92.3%	ICU Level of Service F
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	1240	0	0
Future Volume (vph)	0	0	0	1240	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	0	0	0	3539	1863	0
Flt Permitted						
Satd. Flow (perm)	0	0	0	3539	1863	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	654			797	95	
Travel Time (s)	8.1			9.9	2.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	1348	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1348	0	0
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 64.9% ICU Level of Service C

Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	523	0	0	0	0
Future Volume (vph)	0	523	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	1863	3539	0	0	0	0
Flt Permitted						
Satd. Flow (perm)	1863	3539	0	0	0	0
Link Speed (mph)		55	55		55	
Link Distance (ft)		659	784		95	
Travel Time (s)		8.2	9.7		1.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	568	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	568	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 44.3%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	868	18	0	0	0	18
Future Volume (vph)	868	18	0	0	0	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00
Frt	0.997					0.865
Flt Protected						
Satd. Flow (prot)	3529	0	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	3529	0	0	0	0	1611
Link Speed (mph)	55			55	25	
Link Distance (ft)	576			2077	205	
Travel Time (s)	7.1			25.7	5.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	943	20	0	0	0	20
Shared Lane Traffic (%)						
Lane Group Flow (vph)	963	0	0	0	0	20
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 34.6%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	58	0	0	407	0
Future Volume (vph)	0	58	0	0	407	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	0.97	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	3433	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	3433	0
Link Speed (mph)		45	45		45	
Link Distance (ft)		1021	744		215	
Travel Time (s)		15.5	11.3		3.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	63	0	0	442	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	63	0	0	442	0
Sign Control		Free	Stop		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 21.6%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	0	0	707	129
Future Volume (vph)	0	0	0	0	707	129
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		0	250	
Storage Lanes	0	0		0	2	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.97	0.91
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	0	3433	5085
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	0	3433	5085
Link Speed (mph)	55		45			30
Link Distance (ft)	167		773			587
Travel Time (s)	2.1		11.7			13.3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	768	140
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	0	768	140
Sign Control	Stop		Stop			Free

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 30.7%	ICU Level of Service A
Analysis Period (min) 15	

1005: WB M-96 (Michigan Avenue) & SB I-69 Off-Ramp (Push Button) Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	5.7	18.1	13.1

1007: EB M-96 (Michigan Avenue) (Push Button) & SB I-69 Off-Ramp/EB M-96 (Michigan Avenue) Perfor

Approach	EB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	28.7	1.9	7.3

1008: WB M-96 (Michigan Avenue)/NB I-69 Off-Ramp & WB M-96 (Michigan Avenue) (Push Button) Perf

Approach	WB	SW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	18.3	2.2	7.2

1009: WB M-96 (Michigan Avenue) (Push Button)/WB M-96 (Michigan Avenue) & EB M-96 (Michigan Ave

Approach	EB	SW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	24.5	13.6	18.1

1010: NB I-69 Off-Ramp (Push Button) & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	3.2	21.1	6.5

3003: M-227/West Drive & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.1	0.0
Total Del/Veh (s)	8.5	5.9	19.1	9.7

3093: M-227/West Drive & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	0.0	2.0	0.0	0.3
Total Del/Veh (s)	4.0	30.8	2.5	8.6

4001: M-96 (Michigan Avenue) & WB Main Entrance/WB M-96 (Michigan Avenue) Performance by appro

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	77.6	12.9	68.4

4003: EB to WB Xover E of 15 Mile Rd (North) & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	3.7	0.4	3.7
Total Del/Veh (s)	27.7	31.6	27.7

4004: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	3.1	56.3	22.0

4005: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	6.1	26.8	15.6

4006: M-311 (11 Mile Rd) & Site Driveway West Performance by approach

Approach	NB	SB	All
Denied Del/Veh (s)	0.1	0.0	0.1
Total Del/Veh (s)	0.2	0.6	0.4

4007: M-311 (11 Mile Rd) & F Drive N Performance by approach

Approach	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.1	0.1	0.1

4010: EB M-96 (Michigan Avenue)/EB M-96 (Michigan Avenue) (Push Button) & WB M-96 (Michigan Ave

Approach	WB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	20.2	9.6	16.9

4030: NB M-311 (11 Mile Rd)/WB M-96 (Michigan Avenue)/11 Mile Rd (North) & EB M-96 (Michigan Ave

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	21.7	10.4	20.2

4031: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & WB M-96 (Michigan Avenue) Performance by a

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	23.2	2.2	21.4

4033: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & NB to SB Xover N of M-96 (Michigan Avenue) P

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	20.7	2.9	4.3

4034: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & EB I-94 Off-ramp Performance by approach

Approach	SB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.1	17.7	4.3

4035: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & WB M-96 (Michigan Avenue)/11 Mile Rd (North)

Approach	SB	NW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	13.7	28.7	20.4

4036: EB I-94 Off-ramp & WB M-96 (Michigan Avenue)/11 Mile Rd (North) Performance by approach

Approach	NB	NW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	18.1	1.4	4.3

4037: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & WB I-94 Off-ramp Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.3	18.0	3.5

4038: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & EB M-96 (Michigan Avenue)/11 Mile Rd (South)

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	16.3	27.1	21.5

4039: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & WB I-94 Off-ramp Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	18.8	4.2	7.2

4040: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & 11 Mile Rd Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	17.1	2.6	13.3

4041: 11 Mile Rd & WB M-96 (Michigan Avenue)/11 Mile Rd (North) Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	14.6	22.7	16.7

4042: 11 Mile Rd & H Dr N Performance by approach

Approach	NE	SW	All
Denied Del/Veh (s)	0.0	0.3	0.1
Total Del/Veh (s)	2.7	3.2	2.9

4050: Prop Site Drive E & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	1.3	1.3

4051: Prop Site Drive W & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.1	2.1

4061: WB M-96 (Michigan Avenue) & Firekeepers Main Drive Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	3.2	49.5	9.5

4065: WB M-96 (Michigan Avenue) & 15 Mile Rd (North) Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	56.5	52.5	55.9

4066: EB M-96 (Michigan Avenue) & WB to EB Xover W of 15 Mile Rd (South) Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.5	38.1	8.1

4067: 15 Mile Rd (South) & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.5	0.2
Total Del/Veh (s)	2.5	48.6	17.5

4068: EB to WB Xover E of 15 Mile Rd (South) & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.5	0.0	0.5
Total Del/Veh (s)	7.9	48.6	10.0

4070: M-311 (11 Mile Rd) & Site Drive East Performance by approach

Approach	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.1	0.2	0.1

4071: 15 Mile Rd & Verona Rd Performance by approach

Approach	NB	SB	SE	NW	All
Denied Del/Veh (s)	0.1	0.1	3.1	0.2	2.2
Total Del/Veh (s)	8.8	8.9	9.9	28.8	13.3

4075: 11 Mile Road & Verona Road Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.7	2.2	0.5	0.5
Total Del/Veh (s)	22.0	22.0	25.6	41.7	24.4

9002: WB M-96 (Michigan Avenue) & Firekeepers Gas Station Driveway Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.3	0.1
Total Del/Veh (s)	1.8	7.0	2.9

9003: WB M-96 (Michigan Avenue) & Firekeepers E Drive Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.6	6.5	2.6

9004: WB M-96 (Michigan Avenue) & Ackerson Drive Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	1.2	5.2	1.3

9006: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	0.9	1.7	0.9

9008: 15 Mile Rd (North) & Old M-96 (Michigan Ave) Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.0	0.0	0.0
Total Del/Veh (s)	0.8	0.2	1.2	1.2

9013: SB I-69 On-Ramp & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	13.6	13.6

9016: EB M-96 (Michigan Avenue) & NB I-69 On-Ramp Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	6.0	6.0

9017: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	1.7	1.7

9018: EB M-96 (Michigan Avenue) & WB to EB Xover W of M-227/West Drive Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.9	6.2	1.9

9019: EB to WB Xover W of M-227/West Drive & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.5	13.1	3.5

9020: EB M-96 (Michigan Avenue) & WB to EB Xover E of M-227/West Drive Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	1.0	6.6	1.6

9021: EB to WB Xover E of M-227/West Drive & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.2	0.0	0.2
Total Del/Veh (s)	1.2	10.6	1.9

9023: M-311 (11 Mile Rd) & B Drive North Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.8	0.3	1.1	0.5	0.7
Total Del/Veh (s)	1.2	0.6	8.1	8.0	3.0

9025: M-294 (Beadle Lake Road) & EB I-94 Off-Ramp & EB I-94 On-Ramp Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	2.5	0.3	0.0	0.5
Total Del/Veh (s)	6.8	1.6	1.7	2.5

9026: WB I-94 On-Ramp & M-294 (Beadle Lake Road) & WB I-94 Off-Ramp Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	2.0	0.0	0.3	0.5
Total Del/Veh (s)	7.0	1.6	1.3	2.5

9027: Old US-27 & EB I-94 to Old US-27 Off Ramp Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0
Total Del/Veh (s)	6.7	0.2	1.0	2.5

9028: Old US-27 & NB Old US-27 to EB I-94 On Ramp Performance by approach

Approach	NB	SB	All
Denied Del/Veh (s)	0.6	0.0	0.3
Total Del/Veh (s)	0.8	0.5	0.7

9029: SB Old US-27 WB I-94 On Ramp & Old US-27 & WB I-94 to Old US-27 Off Ramp Performance by

Approach	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	1.2	0.5
Total Del/Veh (s)	4.8	0.2	0.8	1.1

9030: I-94BL/Partello Rd & EB I-94 to I-94BL/Partello Off Ramp Performance by approach

Approach	SE	NE	SW	All
Denied Del/Veh (s)	0.0	0.2	0.0	0.1
Total Del/Veh (s)	4.4	1.6	0.2	1.8

9031: I-94BL/Partello Rd & I-94/Partello Rd to EB I-94 On Ramp Performance by approach

Approach	NE	SW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.2	0.6	0.4

9032: I-94BL/Partello Rd & WB I-94 to I-94/Partello Rd Performance by approach

Approach	EB	NE	SW	All
Denied Del/Veh (s)	0.0	0.0	0.7	0.1
Total Del/Veh (s)	3.4	1.1	0.5	1.6

9034: Dummy Node & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	1.6	4.9	1.6

9035: Dummy Node & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	0.4	6.3	0.6

9036: WB M-96 (Michigan Avenue) & Dummy Node Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	0.6	4.1	0.7

9037: WB M-96 (Michigan Avenue) & Dummy Node Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.5	0.5

9040: Old US-27 & NB Old US-27 to WB I-94 On Ramp Performance by approach

Approach	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.0	0.2	0.8

9041: WB to EB Xover E of M-227/West Drive/McDonald's Dr & WB M-96 (Michigan Avenue) Performanc

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	1.4	16.1	2.6

9128: M-96 (Michigan Avenue)/WB M-96 (Michigan Avenue) & EB M-96 (Michigan Avenue) Performance

Approach	NB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.1	1.4	1.2

9137: SB I-69 On-Ramp Performance by approach

Approach	SB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	6.3	0.1	3.5

9143: NB I-69 On-Ramp Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	3.6	2.5	3.5

9146: WB to EB Xover W of M-227/West Drive & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.9	0.9

9147: EB M-96 (Michigan Avenue) & EB to WB Xover W of M-227/West Drive Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	1.7	1.7

9150: M-311 (11 Mile Rd) /NB M-311 (11 Mile Rd) & SB M-311 (11 Mile Rd) Performance by approach

Approach	NB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.1	0.2	0.2

9151: EB M-96 (Michigan Avenue) & EB to WB Xover E of M-227/West Drive Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.5	0.5

9157: SB I-69 On-Ramp & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	1.4	1.4

9158: SB I-69 Off-Ramp (Push Button) & SB I-69 Off-Ramp Performance by approach

Approach	SB	All
Denied Del/Veh (s)	0.5	0.5
Total Del/Veh (s)	10.0	10.0

9159: NB I-69 Off-Ramp & NB I-69 Off-Ramp (Push Button) Performance by approach

Approach	NB	All
Denied Del/Veh (s)	0.4	0.4
Total Del/Veh (s)	3.1	3.1

9178: WB I-94 to BL-94/Partello Rd Off Ramp/WB I-94 to I-94/Partello Rd & BL-94/Partello Rd to WB I-94

Approach	EB	WB	All
Denied Del/Veh (s)	0.1	0.0	0.1
Total Del/Veh (s)	0.2	0.3	0.2

9304: WB to EB Xover W of 15 Mile Rd (North) & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	35.0	35.0

9305: EB M-96 (Michigan Avenue) & WB to EB Xover W of 15 Mile Rd (North) Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.5	6.0	1.1

9307: EB M-96 (Michigan Avenue) & EB to WB Xover E of 15 Mile Rd (North) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.6	0.6

9310: WB to EB Xover W of 15 Mile Rd (South) & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	2.3	2.3
Total Del/Veh (s)	76.6	76.6

9311: EB M-96 (Michigan Avenue) & EB to WB Xover E of 15 Mile Rd (South) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.6	2.6

9330: EB to WB Xover E of Old M-311 (11 Mile Rd) & WB M-96 (Michigan Avenue) Performance by appr

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.5	4.7	1.6

9331: EB M-96 (Michigan Avenue) & EB to WB Xover E of Old M-311 (11 Mile Rd) Performance by appro

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.8	2.8

9332: WB M-96 (Michigan Avenue) & Old M-311 (11 Mile Rd) Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.8	4.5	1.0

9336: WB to EB Xover W of Old M-311 (11 Mile Rd) & WB M-96 (Michigan Avenue) Performance by app

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	1.7	1.7

9337: EB M-96 (Michigan Avenue) & WB to EB Xover W of Old M-311 (11 Mile Rd) Performance by appr

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	4.9	8.6	5.5

9338: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & NB to SB Xover N of M-96 (Michigan Avenue) P

Approach	NB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	1.8	1.8

9339: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & EB I-94 On Ramp Performance by approach

Approach	NB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	3.6	3.6

9340: EB I-94 On Ramp Performance by approach

Approach	EB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	4.7	0.1	1.6

9342: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & EB I-94 On Ramp Performance by approach

Approach	SB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	12.3	12.3

9343: EB I-94 Off-ramp Performance by approach

Approach	EB	All
Denied Del/Veh (s)	1.9	1.9
Total Del/Veh (s)	1.1	1.1

9346: WB I-94 On Ramp Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.7	3.5	2.1

9347: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & WB I-94 On Ramp Performance by approach

Approach	NW	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.4	2.4

9348: WB I-94 On Ramp & EB M-96 (Michigan Avenue)/11 Mile Rd (South) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	1.8	1.8

9349: WB I-94 Off-ramp Performance by approach

Approach	WB	All
Denied Del/Veh (s)	1.2	1.2
Total Del/Veh (s)	0.6	0.6

9351: SB to NB Xover E of 11 Mile Rd & WB M-96 (Michigan Avenue)/11 Mile Rd (North) Performance b

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.1	3.5	1.3

9352: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & SB to NB Xover E of 11 Mile Rd Performance b

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	5.6	5.6

9354: EB to WB Xover W of 11 Mile Rd & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	3.2	3.2

9355: EB M-96 (Michigan Avenue) & EB to WB Xover W of 11 Mile Rd Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.4	2.4

9356: WB to EB Xover W of 11 Mile Rd & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	1.8	1.8

9357: EB M-96 (Michigan Avenue) & WB to EB Xover W of 11 Mile Rd Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.3	0.3

9359: EB M-96 (Michigan Avenue) & M-96 (Michigan Avenue)/WB M-96 (Michigan Avenue) Performance

Approach	EB	WB	All
Denied Del/Veh (s)	0.2	0.0	0.1
Total Del/Veh (s)	1.9	0.6	1.3

9381: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	3.0	3.0

9382: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.4	5.3	3.7

9383: WB M-96 (Michigan Avenue) Performance by approach

Approach	NW	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.4	0.4

9384: EB M-96 (Michigan Avenue) Performance by approach

Approach	SE	SW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.7	3.8	1.7

9385: Ceresco Road/12 Mile Road & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	0.9	4.6	1.1

9386: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.7	3.2	2.7

9387: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.6	0.6

9388: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.4	0.4

9389: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.4	3.7	2.4

9390: 13 Mile Rd & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	0.6	2.4	0.6

9392: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.1	3.2	1.1

9393: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.9	0.9

9394: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	31.8	31.8

9396: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	1.8	1.8

9397: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.5	0.5

9398: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	34.1	34.1

9400: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	1.0	1.0

9401: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.5	0.5

9410: Retail Drive & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	0.8	7.8	0.9

9415: EB Main Entrance/EB M-96 (Michigan Avenue) & M-96 (Michigan Avenue) Performance by approa

Approach	EB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.1	0.7	0.6

9416: SB M-311 (11 Mile Rd)/EB M-96 (Michigan Avenue)/11 Mile Rd (South) & EB M-96 (Michigan Ave

Approach	SB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	3.6	3.6

Total Network Performance

Denied Del/Veh (s)	2.0
Total Del/Veh (s)	113.1

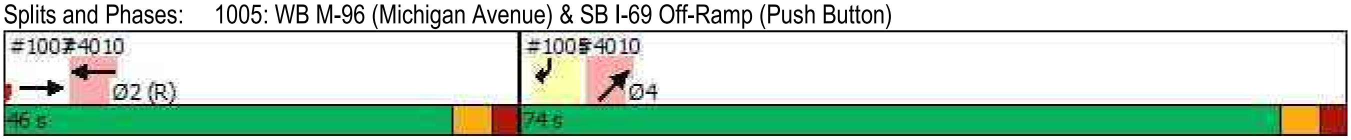
Scenario M2 (Outbound)

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø2
Lane Configurations			↑↑↑			↱↱↱	
Traffic Volume (vph)	0	0	548	0	0	36	
Future Volume (vph)	0	0	548	0	0	36	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	0.91	1.00	1.00	0.76	
Frt						0.850	
Flt Protected							
Satd. Flow (prot)	0	0	5085	0	0	3610	
Flt Permitted							
Satd. Flow (perm)	0	0	5085	0	0	3610	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)						1157	
Link Speed (mph)		45	45		25		
Link Distance (ft)		275	194		266		
Travel Time (s)		4.2	2.9		7.3		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.84	0.75	
Heavy Vehicles (%)	2%	2%	2%	2%	3%	2%	
Adj. Flow (vph)	0	0	596	0	0	48	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	596	0	0	48	
Turn Type			NA			Prot	
Protected Phases			Free!			4!	2
Permitted Phases							
Minimum Split (s)						17.0	17.0
Total Split (s)						74.0	46.0
Total Split (%)						61.7%	38%
Yellow Time (s)						3.5	3.5
All-Red Time (s)						2.5	2.5
Lost Time Adjust (s)						0.0	
Total Lost Time (s)						6.0	
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)			120.0			68.0	
Actuated g/C Ratio			1.00			0.57	
v/c Ratio			0.12			0.02	
Control Delay			0.1			0.0	
Queue Delay			0.0			0.0	
Total Delay			0.1			0.0	
LOS			A			A	
Approach Delay			0.1				
Approach LOS			A				
Queue Length 50th (ft)			0			0	
Queue Length 95th (ft)			0			0	
Internal Link Dist (ft)		195	114		186		
Turn Bay Length (ft)							
Base Capacity (vph)			5085			2547	
Starvation Cap Reductn			0			0	
Spillback Cap Reductn			33			7	
Storage Cap Reductn			0			0	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø2
Reduced v/c Ratio			0.12			0.02	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 100 (83%), Referenced to phase 2:EBT, Start of Green	
Natural Cycle: 55	
Control Type: Pretimed	
Maximum v/c Ratio: 0.85	
Intersection Signal Delay: 0.1	Intersection LOS: A
Intersection Capacity Utilization 63.2%	ICU Level of Service B
Analysis Period (min) 15	
! Phase conflict between lane groups.	

Splits and Phases: 1005: WB M-96 (Michigan Avenue) & SB I-69 Off-Ramp (Push Button)

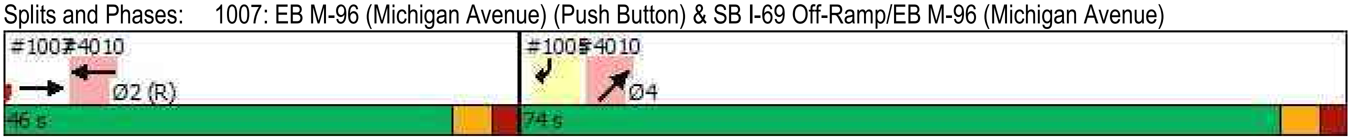


Lane Group	EBT	EBR	WBL	WBT	NEL	NER	Ø4
Lane Configurations							
Traffic Volume (vph)	112	0	0	0	0	2205	
Future Volume (vph)	112	0	0	0	0	2205	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Storage Length (ft)		260	285		0	0	
Storage Lanes		0	0		0	3	
Taper Length (ft)			240		25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.76	
Frt						0.850	
Flt Protected							
Satd. Flow (prot)	1863	0	0	0	0	3610	
Flt Permitted							
Satd. Flow (perm)	1863	0	0	0	0	3610	
Right Turn on Red		Yes				Yes	
Satd. Flow (RTOR)						2086	
Link Speed (mph)	25			45	45		
Link Distance (ft)	301			619	190		
Travel Time (s)	8.2			9.4	2.9		
Peak Hour Factor	0.75	0.84	0.92	0.92	0.90	0.90	
Heavy Vehicles (%)	2%	3%	2%	2%	2%	2%	
Adj. Flow (vph)	149	0	0	0	0	2450	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	149	0	0	0	0	2450	
Turn Type	NA					Free	
Protected Phases	2						4
Permitted Phases						Free	
Minimum Split (s)	17.0						17.0
Total Split (s)	46.0						74.0
Total Split (%)	38.3%						62%
Yellow Time (s)	3.5						3.5
All-Red Time (s)	2.5						2.5
Lost Time Adjust (s)	0.0						
Total Lost Time (s)	6.0						
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)	40.0					120.0	
Actuated g/C Ratio	0.33					1.00	
v/c Ratio	0.24					0.68	
Control Delay	30.3					11.0	
Queue Delay	0.0					0.0	
Total Delay	30.3					11.0	
LOS	C					B	
Approach Delay	30.3				11.0		
Approach LOS	C				B		
Queue Length 50th (ft)	83					475	
Queue Length 95th (ft)	111					285	
Internal Link Dist (ft)	221			539	110		
Turn Bay Length (ft)							
Base Capacity (vph)	621					3610	

Lane Group	EBT	EBR	WBL	WBT	NEL	NER	Ø4
Starvation Cap Reductn	0					0	
Spillback Cap Reductn	0					0	
Storage Cap Reductn	0					0	
Reduced v/c Ratio	0.24					0.68	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 100 (83%), Referenced to phase 2:EBT, Start of Green	
Natural Cycle: 55	
Control Type: Pretimed	
Maximum v/c Ratio: 0.85	
Intersection Signal Delay: 12.1	Intersection LOS: B
Intersection Capacity Utilization 13.3%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 1007: EB M-96 (Michigan Avenue) (Push Button) & SB I-69 Off-Ramp/EB M-96 (Michigan Avenue)

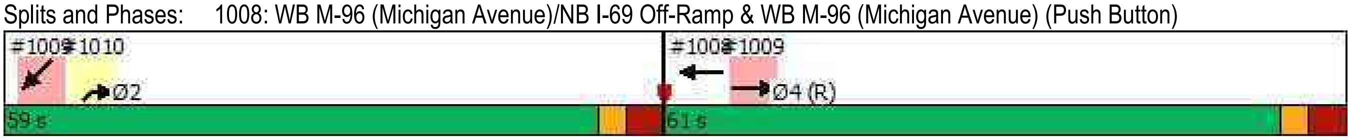


Lane Group	EBL	EBT	WBT	WBR	SWL	SWR	Ø2
Lane Configurations							
Traffic Volume (vph)	0	0	81	0	0	586	
Future Volume (vph)	0	0	81	0	0	586	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.88	
Frt						0.850	
Flt Protected							
Satd. Flow (prot)	0	0	3539	0	0	2787	
Flt Permitted							
Satd. Flow (perm)	0	0	3539	0	0	2787	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)						1666	
Link Speed (mph)		45	25		45		
Link Distance (ft)		217	252		223		
Travel Time (s)		3.3	6.9		3.4		
Peak Hour Factor	0.92	0.92	0.75	0.93	0.92	0.92	
Heavy Vehicles (%)	2%	2%	2%	6%	2%	2%	
Adj. Flow (vph)	0	0	108	0	0	637	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	108	0	0	637	
Turn Type			NA			Free	
Protected Phases			4				2
Permitted Phases						Free	
Minimum Split (s)			16.0				16.0
Total Split (s)			61.0				59.0
Total Split (%)			50.8%				49%
Yellow Time (s)			2.5				2.5
All-Red Time (s)			3.5				3.5
Lost Time Adjust (s)			0.0				
Total Lost Time (s)			6.0				
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)			55.0			120.0	
Actuated g/C Ratio			0.46			1.00	
v/c Ratio			0.07			0.23	
Control Delay			18.4			1.9	
Queue Delay			0.0			0.0	
Total Delay			18.4			1.9	
LOS			B			A	
Approach Delay			18.4		1.9		
Approach LOS			B		A		
Queue Length 50th (ft)			24			37	
Queue Length 95th (ft)			34			44	
Internal Link Dist (ft)		137	172		143		
Turn Bay Length (ft)							
Base Capacity (vph)			1622			2787	
Starvation Cap Reductn			0			0	
Spillback Cap Reductn			0			0	
Storage Cap Reductn			0			0	

Lane Group	EBL	EBT	WBT	WBR	SWL	SWR	Ø2
Reduced v/c Ratio			0.07			0.23	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 92 (77%), Referenced to phase 4:WBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.54	
Intersection Signal Delay: 4.3	Intersection LOS: A
Intersection Capacity Utilization 14.2%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 1008: WB M-96 (Michigan Avenue)/NB I-69 Off-Ramp & WB M-96 (Michigan Avenue) (Push Button)



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↑↑									↑↑	
Traffic Volume (vph)	0	751	0	0	0	0	0	0	0	0	586	0
Future Volume (vph)	0	751	0	0	0	0	0	0	0	0	586	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	3539	0	0	0	0	0	0	0	0	3539	0
Flt Permitted												
Satd. Flow (perm)	0	3539	0	0	0	0	0	0	0	0	3539	0
Right Turn on Red			Yes			Yes			Yes	Yes		Yes
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		209			206			223			213	
Travel Time (s)		3.2			3.1			3.4			3.2	
Peak Hour Factor	0.86	0.86	0.86	0.92	0.92	0.92	0.92	0.92	0.92	0.91	0.91	0.91
Adj. Flow (vph)	0	873	0	0	0	0	0	0	0	0	644	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	873	0	0	0	0	0	0	0	0	644	0
Turn Type		NA									NA	
Protected Phases		4									2	
Permitted Phases												
Minimum Split (s)		16.0									16.0	
Total Split (s)		61.0									59.0	
Total Split (%)		50.8%									49.2%	
Yellow Time (s)		2.5									2.5	
All-Red Time (s)		3.5									3.5	
Lost Time Adjust (s)		0.0									0.0	
Total Lost Time (s)		6.0									6.0	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		55.0									53.0	
Actuated g/C Ratio		0.46									0.44	
v/c Ratio		0.54									0.41	
Control Delay		23.7									24.0	
Queue Delay		0.0									0.0	
Total Delay		23.7									24.0	
LOS		C									C	
Approach Delay		23.7									24.0	
Approach LOS		C									C	
Queue Length 50th (ft)		300									190	
Queue Length 95th (ft)		294									247	
Internal Link Dist (ft)		129			126			143			133	
Turn Bay Length (ft)												
Base Capacity (vph)		1622									1563	
Starvation Cap Reductn		0									0	
Spillback Cap Reductn		0									0	
Storage Cap Reductn		0									0	
Reduced v/c Ratio		0.54									0.41	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 92 (77%), Referenced to phase 4:WBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.54	
Intersection Signal Delay: 23.9	Intersection LOS: C
Intersection Capacity Utilization 47.0%	ICU Level of Service A
Analysis Period (min) 15	

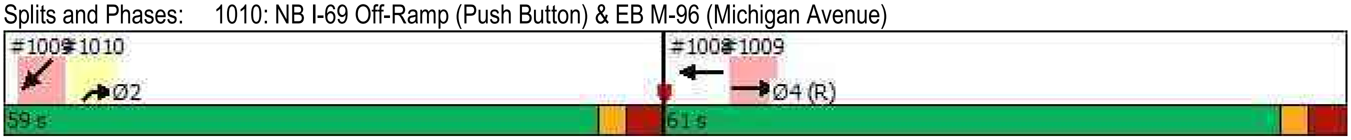
Splits and Phases: 1009: WB M-96 (Michigan Avenue) (Push Button)/WB M-96 (Michigan Avenue) & EB M-96 (Michigan Avenue)

Lane Group	EBT	EBR	WBL	WBT	NEL	NER	Ø4
Lane Configurations							
Traffic Volume (vph)	751	0	0	0	0	122	
Future Volume (vph)	751	0	0	0	0	122	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	0.95	1.00	1.00	1.00	1.00	1.00	
Frt						0.865	
Flt Protected							
Satd. Flow (prot)	3539	0	0	0	0	1611	
Flt Permitted							
Satd. Flow (perm)	3539	0	0	0	0	1611	
Right Turn on Red		Yes				Yes	
Satd. Flow (RTOR)						352	
Link Speed (mph)	45			45	25		
Link Distance (ft)	206			309	315		
Travel Time (s)	3.1			4.7	8.6		
Peak Hour Factor	0.86	0.86	0.92	0.92	0.93	0.75	
Heavy Vehicles (%)	2%	2%	2%	2%	6%	2%	
Adj. Flow (vph)	873	0	0	0	0	163	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	873	0	0	0	0	163	
Turn Type	NA					Prot	
Protected Phases	Free!					2!	4
Permitted Phases							
Minimum Split (s)						16.0	16.0
Total Split (s)						59.0	61.0
Total Split (%)						49.2%	51%
Yellow Time (s)						2.5	2.5
All-Red Time (s)						3.5	3.5
Lost Time Adjust (s)						0.0	
Total Lost Time (s)						6.0	
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)	120.0					53.0	
Actuated g/C Ratio	1.00					0.44	
v/c Ratio	0.25					0.18	
Control Delay	0.2					0.4	
Queue Delay	0.0					0.0	
Total Delay	0.2					0.4	
LOS	A					A	
Approach Delay	0.2				0.4		
Approach LOS	A				A		
Queue Length 50th (ft)	0					0	
Queue Length 95th (ft)	0					0	
Internal Link Dist (ft)	126			229	235		
Turn Bay Length (ft)							
Base Capacity (vph)	3539					908	
Starvation Cap Reductn	0					0	
Spillback Cap Reductn	0					0	
Storage Cap Reductn	0					0	

Lane Group	EBT	EBR	WBL	WBT	NEL	NER	Ø4
Reduced v/c Ratio	0.25					0.18	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 92 (77%), Referenced to phase 4:WBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.54	
Intersection Signal Delay: 0.2	Intersection LOS: A
Intersection Capacity Utilization 47.0%	ICU Level of Service A
Analysis Period (min) 15	
! Phase conflict between lane groups.	

Splits and Phases: 1010: NB I-69 Off-Ramp (Push Button) & EB M-96 (Michigan Avenue)



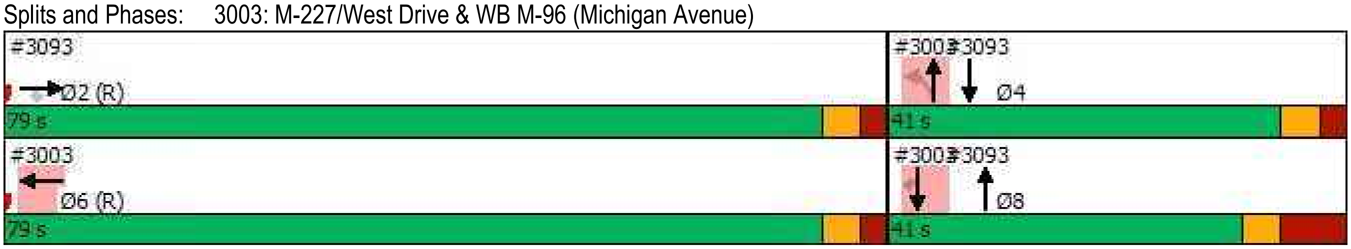
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	538	192	76	50	0	0	84	85
Future Volume (vph)	0	0	0	0	538	192	76	50	0	0	84	85
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		80	0		0	0		0
Storage Lanes	0		0	0		1	1		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.960							0.850
Flt Protected							0.950					
Satd. Flow (prot)	0	0	0	0	4930	0	1671	1863	0	0	1845	1568
Flt Permitted							0.687					
Satd. Flow (perm)	0	0	0	0	4930	0	1209	1863	0	0	1845	1568
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					138							110
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		152			212			101			1197	
Travel Time (s)		2.3			3.2			2.0			23.3	
Peak Hour Factor	0.92	0.92	0.92	0.87	0.87	0.87	0.67	0.67	0.67	0.77	0.77	0.77
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	8%	2%	2%	3%	3%	3%
Adj. Flow (vph)	0	0	0	0	618	221	113	75	0	0	109	110
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	839	0	113	75	0	0	109	110
Turn Type					NA		Perm	NA			NA	Perm
Protected Phases					6			4			8	
Permitted Phases							4					8
Minimum Split (s)					31.0		17.0	17.0			17.0	17.0
Total Split (s)					79.0		41.0	41.0			41.0	41.0
Total Split (%)					65.8%		34.2%	34.2%			34.2%	34.2%
Yellow Time (s)					3.5		3.5	3.5			3.5	3.5
All-Red Time (s)					2.5		2.5	2.5			6.0	6.0
Lost Time Adjust (s)					0.0		0.0	0.0			0.0	0.0
Total Lost Time (s)					6.0		6.0	6.0			9.5	9.5
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)					73.0		35.0	35.0			31.5	31.5
Actuated g/C Ratio					0.61		0.29	0.29			0.26	0.26
v/c Ratio					0.27		0.32	0.14			0.23	0.22
Control Delay					9.3		8.6	5.5			36.2	7.5
Queue Delay					0.0		0.0	0.0			0.0	0.0
Total Delay					9.3		8.6	5.5			36.2	7.5
LOS					A		A	A			D	A
Approach Delay					9.3			7.4			21.8	
Approach LOS					A			A			C	
Queue Length 50th (ft)					85		11	7			66	0
Queue Length 95th (ft)					103		11	8			98	28
Internal Link Dist (ft)		72			132			21			1117	
Turn Bay Length (ft)												
Base Capacity (vph)					3053		352	543			484	492

Lane Group	Ø2
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	2
Permitted Phases	
Minimum Split (s)	16.0
Total Split (s)	79.0
Total Split (%)	66%
Yellow Time (s)	3.5
All-Red Time (s)	2.5
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
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)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
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		0.32	0.14			0.23	0.22

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 112 (93%), Referenced to phase 2:EBT and 6:, Start of Green	
Natural Cycle: 50	
Control Type: Pretimed	
Maximum v/c Ratio: 0.40	
Intersection Signal Delay: 11.2	Intersection LOS: B
Intersection Capacity Utilization 44.3%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 3003: M-227/West Drive & WB M-96 (Michigan Avenue)



Lane Group	Ø2
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

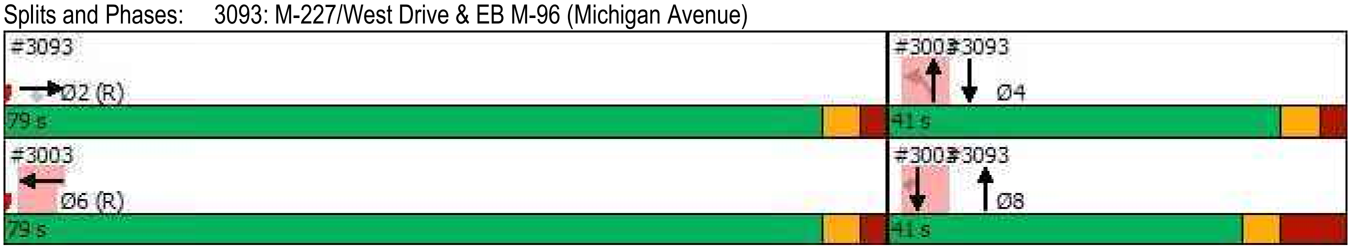
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	821	59	0	0	0	0	126	30	0	84	0
Future Volume (vph)	0	821	59	0	0	0	0	126	30	0	84	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		65	0		0	100		0	0		0
Storage Lanes	0		1	0		0	1		0	0		0
Taper Length (ft)	25			25			70			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Frt			0.850					0.971				
Flt Protected												
Satd. Flow (prot)	0	3574	1442	0	0	0	0	3344	0	0	1881	0
Flt Permitted												
Satd. Flow (perm)	0	3574	1442	0	0	0	0	3344	0	0	1881	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			59					24				
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		161			222			1117			101	
Travel Time (s)		2.4			3.4			21.8			2.0	
Peak Hour Factor	0.95	0.95	0.95	0.92	0.92	0.92	0.72	0.72	0.72	0.83	0.83	0.83
Heavy Vehicles (%)	2%	1%	12%	2%	2%	2%	2%	6%	0%	2%	1%	2%
Adj. Flow (vph)	0	864	62	0	0	0	0	175	42	0	101	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	864	62	0	0	0	0	217	0	0	101	0
Turn Type		NA	Perm					NA			NA	
Protected Phases		2						8			4	
Permitted Phases			2									
Minimum Split (s)		16.0	16.0					17.0			17.0	
Total Split (s)		79.0	79.0					41.0			41.0	
Total Split (%)		65.8%	65.8%					34.2%			34.2%	
Yellow Time (s)		3.5	3.5					3.5			3.5	
All-Red Time (s)		2.5	2.5					6.0			2.5	
Lost Time Adjust (s)		0.0	0.0					0.0			0.0	
Total Lost Time (s)		6.0	6.0					9.5			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		73.0	73.0					31.5			35.0	
Actuated g/C Ratio		0.61	0.61					0.26			0.29	
v/c Ratio		0.40	0.07					0.24			0.18	
Control Delay		4.5	0.2					31.7			0.7	
Queue Delay		0.0	0.0					0.0			0.0	
Total Delay		4.5	0.2					31.7			0.7	
LOS		A	A					C			A	
Approach Delay		4.2						31.7			0.7	
Approach LOS		A						C			A	
Queue Length 50th (ft)		42	1					61			0	
Queue Length 95th (ft)		51	0					73			0	
Internal Link Dist (ft)		81			142			1037			21	
Turn Bay Length (ft)			65									
Base Capacity (vph)		2174	900					895			548	

Lane Group	Ø6
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	6
Permitted Phases	
Minimum Split (s)	31.0
Total Split (s)	79.0
Total Split (%)	66%
Yellow Time (s)	3.5
All-Red Time (s)	2.5
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
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)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn		0	0					0			0	
Spillback Cap Reductn		0	0					18			0	
Storage Cap Reductn		0	0					0			0	
Reduced v/c Ratio		0.40	0.07					0.25			0.18	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 112 (93%), Referenced to phase 2:EBT and 6:, Start of Green	
Natural Cycle: 50	
Control Type: Pretimed	
Maximum v/c Ratio: 0.40	
Intersection Signal Delay: 8.7	Intersection LOS: A
Intersection Capacity Utilization 44.3%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 3093: M-227/West Drive & EB M-96 (Michigan Avenue)



Lane Group	Ø6
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

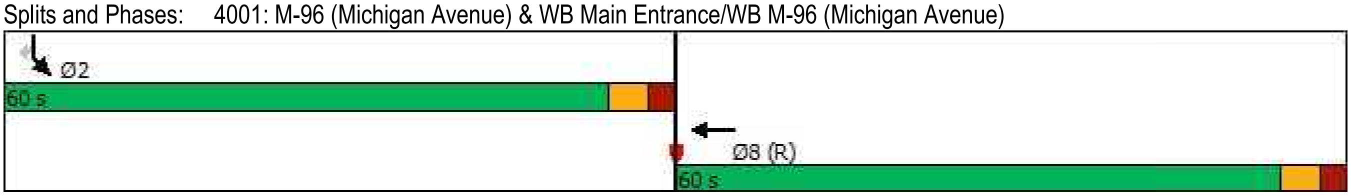
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations										
Traffic Volume (vph)	0	0	0	0	48	490	1264	9	0	0
Future Volume (vph)	0	0	0	0	48	490	1264	9	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	300		300	0	200	0	0
Storage Lanes	0		0	0		1	2	1	0	0
Taper Length (ft)	25			25			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.88	0.97	1.00	1.00	1.00
Frt						0.850		0.850		
Flt Protected							0.950			
Satd. Flow (prot)	0	0	0	0	3539	2787	3433	1583	0	0
Flt Permitted							0.950			
Satd. Flow (perm)	0	0	0	0	3539	2787	3433	1583	0	0
Right Turn on Red			Yes	Yes		Yes		Yes		
Satd. Flow (RTOR)						533		27		
Link Speed (mph)		45			45		55		45	
Link Distance (ft)		858			894		434		215	
Travel Time (s)		13.0			13.5		5.4		3.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	52	533	1374	10	0	0
Shared Lane Traffic (%)										
Lane Group Flow (vph)	0	0	0	0	52	533	1374	10	0	0
Turn Type					NA	Free	Prot	Perm		
Protected Phases					8		2			
Permitted Phases						Free		2		
Minimum Split (s)					16.0		16.0	16.0		
Total Split (s)					60.0		60.0	60.0		
Total Split (%)					50.0%		50.0%	50.0%		
Yellow Time (s)					3.5		3.5	3.5		
All-Red Time (s)					2.5		2.5	2.5		
Lost Time Adjust (s)					0.0		0.0	0.0		
Total Lost Time (s)					6.0		6.0	6.0		
Lead/Lag										
Lead-Lag Optimize?										
Act Effct Green (s)					54.0	120.0	54.0	54.0		
Actuated g/C Ratio					0.45	1.00	0.45	0.45		
v/c Ratio					0.03	0.19	0.89	0.01		
Control Delay					11.6	0.5	35.3	1.3		
Queue Delay					0.0	0.0	0.0	0.0		
Total Delay					11.6	0.5	35.3	1.3		
LOS					B	A	D	A		
Approach Delay					1.5		35.0			
Approach LOS					A		D			
Queue Length 50th (ft)					9	0	506	0		
Queue Length 95th (ft)					19	0	620	m2		
Internal Link Dist (ft)		778			814		354		135	
Turn Bay Length (ft)						300		200		
Base Capacity (vph)					1592	2787	1544	727		
Starvation Cap Reductn					0	0	0	0		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Spillback Cap Reductn					0	0	0	0		
Storage Cap Reductn					0	0	0	0		
Reduced v/c Ratio					0.03	0.19	0.89	0.01		

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 36 (30%), Referenced to phase 8:WBT, Start of Green	
Natural Cycle: 45	
Control Type: Pretimed	
Maximum v/c Ratio: 0.89	
Intersection Signal Delay: 25.0	Intersection LOS: C
Intersection Capacity Utilization 54.4%	ICU Level of Service A
Analysis Period (min) 15	
m Volume for 95th percentile queue is metered by upstream signal.	

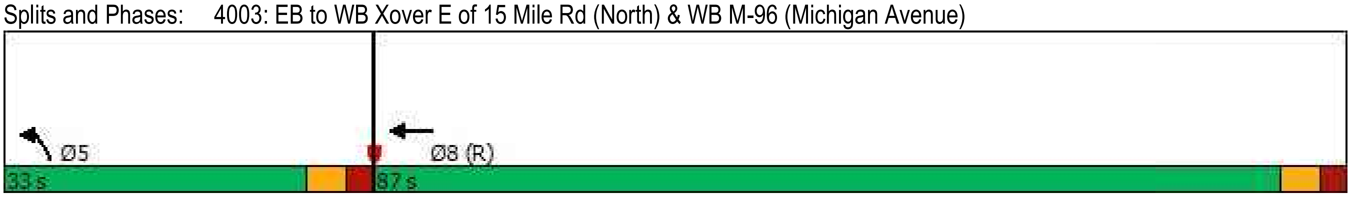
Splits and Phases: 4001: M-96 (Michigan Avenue) & WB Main Entrance/WB M-96 (Michigan Avenue)



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	509	519	0
Future Volume (vph)	0	0	0	509	519	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	0.97	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	5085	3433	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	5085	3433	0
Right Turn on Red		Yes			Yes	Yes
Satd. Flow (RTOR)					734	
Link Speed (mph)	45			45	25	
Link Distance (ft)	660			254	113	
Travel Time (s)	10.0			3.8	3.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.70	0.92
Adj. Flow (vph)	0	0	0	553	741	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	553	741	0
Turn Type				NA	Prot	
Protected Phases				8	5	
Permitted Phases						
Minimum Split (s)				16.0	13.0	
Total Split (s)				87.0	33.0	
Total Split (%)				72.5%	27.5%	
Yellow Time (s)				3.5	3.5	
All-Red Time (s)				2.5	2.5	
Lost Time Adjust (s)				0.0	0.0	
Total Lost Time (s)				6.0	6.0	
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)				81.0	27.0	
Actuated g/C Ratio				0.68	0.22	
v/c Ratio				0.16	0.55	
Control Delay				1.4	10.3	
Queue Delay				0.0	0.0	
Total Delay				1.4	10.3	
LOS				A	B	
Approach Delay				1.4	10.3	
Approach LOS				A	B	
Queue Length 50th (ft)				9	54	
Queue Length 95th (ft)				12	39	
Internal Link Dist (ft)	580			174	33	
Turn Bay Length (ft)						
Base Capacity (vph)				3432	1341	
Starvation Cap Reductn				0	0	
Spillback Cap Reductn				0	0	
Storage Cap Reductn				0	0	
Reduced v/c Ratio				0.16	0.55	

Intersection Summary		
Area Type:	Other	
Cycle Length: 120		
Actuated Cycle Length: 120		
Offset: 116 (97%), Referenced to phase 8:WBT, Start of Green		
Natural Cycle: 40		
Control Type: Pretimed		
Maximum v/c Ratio: 0.55		
Intersection Signal Delay: 6.5		Intersection LOS: A
Intersection Capacity Utilization 58.9%		ICU Level of Service B
Analysis Period (min) 15		

Splits and Phases: 4003: EB to WB Xover E of 15 Mile Rd (North) & WB M-96 (Michigan Avenue)

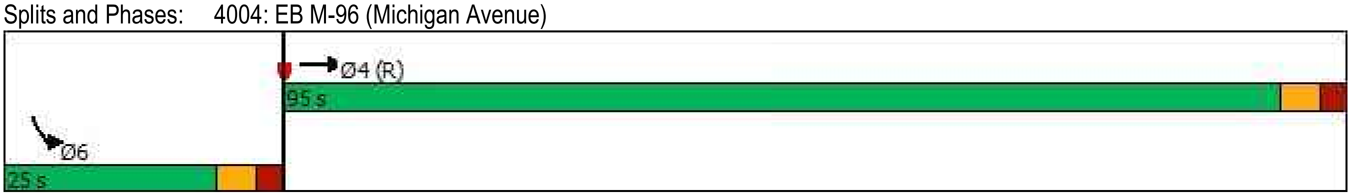


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	965	0	0	0	0
Future Volume (vph)	0	965	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	0.97	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	0	3539	0	0	3614	0
Flt Permitted						
Satd. Flow (perm)	0	3539	0	0	3614	0
Right Turn on Red				Yes	Yes	Yes
Satd. Flow (RTOR)						
Link Speed (mph)		55	55		25	
Link Distance (ft)		2678	669		109	
Travel Time (s)		33.2	8.3		3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1049	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1049	0	0	0	0
Turn Type		NA			Prot	
Protected Phases		4			6	
Permitted Phases						
Detector Phase		4			6	
Switch Phase						
Minimum Initial (s)		10.0			7.0	
Minimum Split (s)		16.0			13.0	
Total Split (s)		95.0			25.0	
Total Split (%)		79.2%			20.8%	
Yellow Time (s)		3.5			3.5	
All-Red Time (s)		2.5			2.5	
Lost Time Adjust (s)		0.0			0.0	
Total Lost Time (s)		6.0			6.0	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode		C-Max			None	
Act Effct Green (s)		120.0				
Actuated g/C Ratio		1.00				
v/c Ratio		0.30				
Control Delay		0.3				
Queue Delay		0.0				
Total Delay		0.3				
LOS		A				
Approach Delay		0.3				
Approach LOS		A				
Queue Length 50th (ft)		2				
Queue Length 95th (ft)		0				
Internal Link Dist (ft)		2598	589		29	
Turn Bay Length (ft)						
Base Capacity (vph)		3539				

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Starvation Cap Reductn		0				
Spillback Cap Reductn		0				
Storage Cap Reductn		0				
Reduced v/c Ratio		0.30				

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 20 (17%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 40	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.30	
Intersection Signal Delay: 0.3	Intersection LOS: A
Intersection Capacity Utilization 42.5%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4004: EB M-96 (Michigan Avenue)

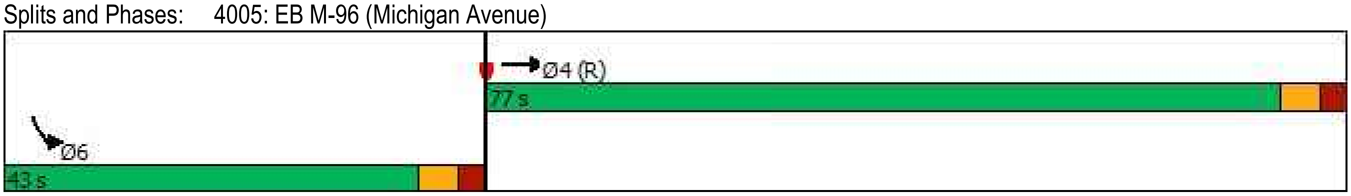


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	416	0	0	0	0
Future Volume (vph)	0	416	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	0.97	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	0	3539	0	0	3614	0
Flt Permitted						
Satd. Flow (perm)	0	3539	0	0	3614	0
Right Turn on Red				Yes	Yes	Yes
Satd. Flow (RTOR)						
Link Speed (mph)		55	55		25	
Link Distance (ft)		1786	608		109	
Travel Time (s)		22.1	7.5		3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	452	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	452	0	0	0	0
Turn Type		NA			Prot	
Protected Phases		4			6	
Permitted Phases						
Detector Phase		4			6	
Switch Phase						
Minimum Initial (s)		10.0			7.0	
Minimum Split (s)		16.0			13.0	
Total Split (s)		77.0			43.0	
Total Split (%)		64.2%			35.8%	
Yellow Time (s)		3.5			3.5	
All-Red Time (s)		2.5			2.5	
Lost Time Adjust (s)		0.0			0.0	
Total Lost Time (s)		6.0			6.0	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode		C-Max			Max	
Act Effct Green (s)		71.0				
Actuated g/C Ratio		0.59				
v/c Ratio		0.22				
Control Delay		11.8				
Queue Delay		0.0				
Total Delay		11.8				
LOS		B				
Approach Delay		11.8				
Approach LOS		B				
Queue Length 50th (ft)		81				
Queue Length 95th (ft)		108				
Internal Link Dist (ft)		1706	528		29	
Turn Bay Length (ft)						
Base Capacity (vph)		2093				

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Starvation Cap Reductn		0				
Spillback Cap Reductn		0				
Storage Cap Reductn		0				
Reduced v/c Ratio		0.22				

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 112 (93%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 40	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.22	
Intersection Signal Delay: 11.8	Intersection LOS: B
Intersection Capacity Utilization 27.3%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4005: EB M-96 (Michigan Avenue)

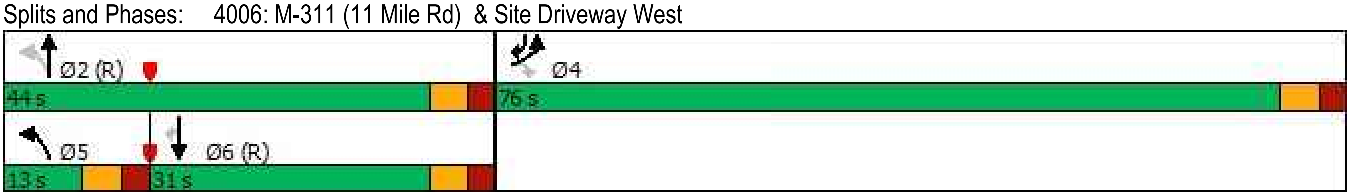


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	102	129	0
Future Volume (vph)	0	0	0	102	129	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	250	250			0
Storage Lanes	2	1	1			1
Taper Length (ft)	25		25			
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	3614	1863	1863	1863	1863	1863
Flt Permitted						
Satd. Flow (perm)	3614	1863	1863	1863	1863	1863
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)						
Link Speed (mph)	25			55	55	
Link Distance (ft)	1178			1461	940	
Travel Time (s)	32.1			18.1	11.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	111	140	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	111	140	0
Turn Type	Prot	Perm	pm+pt	NA	NA	pm+ov
Protected Phases	4		5	2	6	4
Permitted Phases		4	2			6
Detector Phase	4	4	5	2	6	4
Switch Phase						
Minimum Initial (s)	7.0	7.0	7.0	10.0	10.0	7.0
Minimum Split (s)	14.0	14.0	13.0	17.0	17.0	14.0
Total Split (s)	76.0	76.0	13.0	44.0	31.0	76.0
Total Split (%)	63.3%	63.3%	10.8%	36.7%	25.8%	63.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.5	2.5	2.5	2.5	2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None	None	Min	C-Max	C-Max	None
Act Effct Green (s)				120.0	101.0	
Actuated g/C Ratio				1.00	0.84	
v/c Ratio				0.06	0.09	
Control Delay				0.1	1.8	
Queue Delay				0.0	0.0	
Total Delay				0.1	1.8	
LOS				A	A	
Approach Delay				0.1	1.8	
Approach LOS				A	A	
Queue Length 50th (ft)				0	14	
Queue Length 95th (ft)				0	23	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Internal Link Dist (ft)	1098			1381	860	
Turn Bay Length (ft)						
Base Capacity (vph)				1863	1568	
Starvation Cap Reductn				0	0	
Spillback Cap Reductn				0	0	
Storage Cap Reductn				0	0	
Reduced v/c Ratio				0.06	0.09	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 60 (50%), Referenced to phase 2:NBTL and 6:SBT, Start of Green	
Natural Cycle: 45	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.09	
Intersection Signal Delay: 1.0	Intersection LOS: A
Intersection Capacity Utilization 13.3%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4006: M-311 (11 Mile Rd) & Site Driveway West

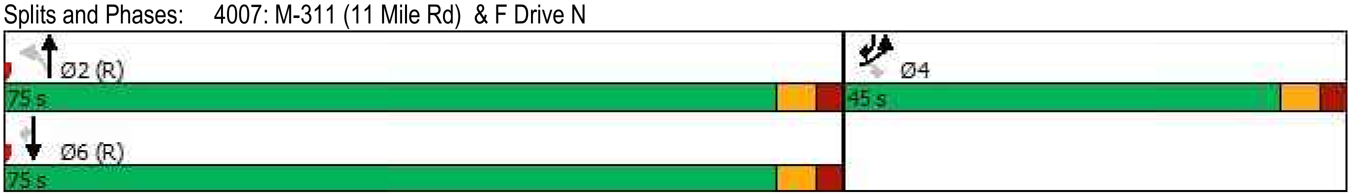


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	102	129	0
Future Volume (vph)	0	0	0	102	129	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	250	400			0
Storage Lanes	2	1	1			1
Taper Length (ft)	25		25			
Lane Util. Factor	0.97	1.00	1.00	0.95	0.95	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	3614	1863	1863	3539	3539	1863
Flt Permitted						
Satd. Flow (perm)	3614	1863	1863	3539	3539	1863
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)						
Link Speed (mph)	45			55	55	
Link Distance (ft)	1846			974	1093	
Travel Time (s)	28.0			12.1	13.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	111	140	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	111	140	0
Turn Type	Prot	Perm	Perm	NA	NA	pm+ov
Protected Phases	4			2	6	4
Permitted Phases		4	2			6
Detector Phase	4	4	2	2	6	4
Switch Phase						
Minimum Initial (s)	7.0	7.0	10.0	10.0	10.0	7.0
Minimum Split (s)	13.0	13.0	16.0	16.0	16.0	13.0
Total Split (s)	45.0	45.0	75.0	75.0	75.0	45.0
Total Split (%)	37.5%	37.5%	62.5%	62.5%	62.5%	37.5%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.5	2.5	2.5	2.5	2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None	None	C-Max	C-Max	C-Max	None
Act Effct Green (s)				120.0	120.0	
Actuated g/C Ratio				1.00	1.00	
v/c Ratio				0.03	0.04	
Control Delay				0.0	0.0	
Queue Delay				0.0	0.0	
Total Delay				0.0	0.0	
LOS				A	A	
Approach Delay						
Approach LOS						
Queue Length 50th (ft)				0	0	
Queue Length 95th (ft)				0	0	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Internal Link Dist (ft)	1766			894	1013	
Turn Bay Length (ft)						
Base Capacity (vph)				3539	3539	
Starvation Cap Reductn				0	0	
Spillback Cap Reductn				0	0	
Storage Cap Reductn				0	0	
Reduced v/c Ratio				0.03	0.04	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 20 (17%), Referenced to phase 2:NBTL and 6:SBT, Start of Green	
Natural Cycle: 40	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.04	
Intersection Signal Delay: 0.0	Intersection LOS: A
Intersection Capacity Utilization 13.3%	ICU Level of Service A
Analysis Period (min) 15	

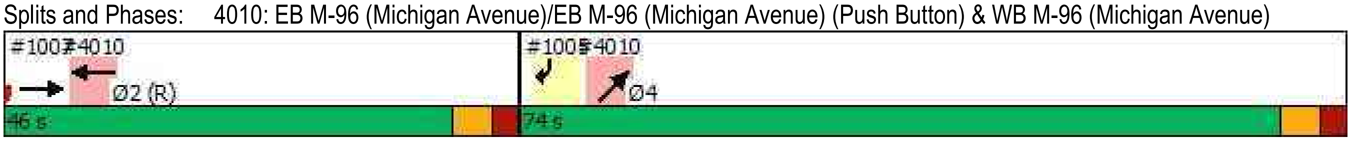
Splits and Phases: 4007: M-311 (11 Mile Rd) & F Drive N



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations					↑↑↑			↑↑↑				
Traffic Volume (vph)	0	0	0	0	548	0	0	2205	0	0	0	0
Future Volume (vph)	0	0	0	0	548	0	0	2205	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.91	1.00	1.00	1.00	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	0	0	0	5085	0	0	5085	0	0	0	0
Flt Permitted												
Satd. Flow (perm)	0	0	0	0	5085	0	0	5085	0	0	0	0
Right Turn on Red			Yes			Yes	Yes		Yes			Yes
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		194			183			156			190	
Travel Time (s)		2.9			2.8			2.4			2.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.90	0.90	0.90	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	596	0	0	2450	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	596	0	0	2450	0	0	0	0
Turn Type					NA			NA				
Protected Phases					2			4				
Permitted Phases												
Minimum Split (s)					17.0			17.0				
Total Split (s)					46.0			74.0				
Total Split (%)					38.3%			61.7%				
Yellow Time (s)					3.5			3.5				
All-Red Time (s)					2.5			2.5				
Lost Time Adjust (s)					0.0			0.0				
Total Lost Time (s)					6.0			6.0				
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)					40.0			68.0				
Actuated g/C Ratio					0.33			0.57				
v/c Ratio					0.35			0.85				
Control Delay					38.0			13.3				
Queue Delay					0.0			0.0				
Total Delay					38.0			13.3				
LOS					D			B				
Approach Delay					38.0			13.3				
Approach LOS					D			B				
Queue Length 50th (ft)					173			326				
Queue Length 95th (ft)					214			443				
Internal Link Dist (ft)		114			103			76			110	
Turn Bay Length (ft)												
Base Capacity (vph)					1695			2881				
Starvation Cap Reductn					0			0				
Spillback Cap Reductn					0			0				
Storage Cap Reductn					0			0				
Reduced v/c Ratio					0.35			0.85				

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 100 (83%), Referenced to phase 2:EBT, Start of Green	
Natural Cycle: 55	
Control Type: Pretimed	
Maximum v/c Ratio: 0.85	
Intersection Signal Delay: 18.1	Intersection LOS: B
Intersection Capacity Utilization 63.2%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 4010: EB M-96 (Michigan Avenue)/EB M-96 (Michigan Avenue) (Push Button) & WB M-96 (Michigan Avenue)



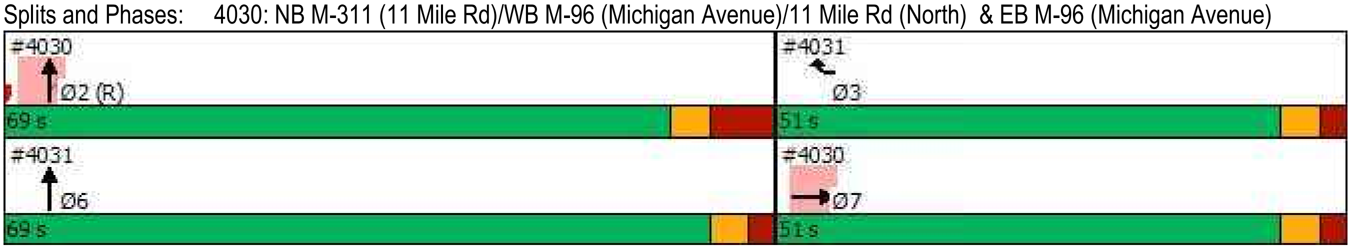
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	520	0	0	0	0	0	64	38	0	0	0
Future Volume (vph)	0	520	0	0	0	0	0	64	38	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		250	0		0
Storage Lanes	0		0	0		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	1.00	1.00
Frt									0.850			
Flt Protected												
Satd. Flow (prot)	0	3539	0	0	0	0	0	5085	1583	0	0	0
Flt Permitted												
Satd. Flow (perm)	0	3539	0	0	0	0	0	5085	1583	0	0	0
Right Turn on Red	Yes		Yes			Yes			Yes			Yes
Satd. Flow (RTOR)									41			
Link Speed (mph)		55			55			55			30	
Link Distance (ft)		167			316			655			182	
Travel Time (s)		2.1			3.9			8.1			4.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	565	0	0	0	0	0	70	41	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	565	0	0	0	0	0	70	41	0	0	0
Turn Type		NA						NA	Perm			
Protected Phases		7						2				
Permitted Phases									2			
Minimum Split (s)		16.0						19.5	19.5			
Total Split (s)		51.0						69.0	69.0			
Total Split (%)		42.5%						57.5%	57.5%			
Yellow Time (s)		3.5						3.5	3.5			
All-Red Time (s)		2.5						6.0	6.0			
Lost Time Adjust (s)		0.0						0.0	0.0			
Total Lost Time (s)		6.0						9.5	9.5			
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		45.0						59.5	59.5			
Actuated g/C Ratio		0.38						0.50	0.50			
v/c Ratio		0.43						0.03	0.05			
Control Delay		33.7						15.5	4.8			
Queue Delay		0.0						0.0	0.0			
Total Delay		33.7						15.5	4.8			
LOS		C						B	A			
Approach Delay		33.7						11.6				
Approach LOS		C						B				
Queue Length 50th (ft)		225						9	0			
Queue Length 95th (ft)		288						18	19			
Internal Link Dist (ft)		87			236			575			102	
Turn Bay Length (ft)									250			
Base Capacity (vph)		1327						2521	805			
Starvation Cap Reductn		0						0	0			

Lane Group	Ø3	Ø6
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Ideal Flow (vphpl)		
Storage Length (ft)		
Storage Lanes		
Taper Length (ft)		
Lane Util. Factor		
Frt		
Flt Protected		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Peak Hour Factor		
Adj. Flow (vph)		
Shared Lane Traffic (%)		
Lane Group Flow (vph)		
Turn Type		
Protected Phases	3	6
Permitted Phases		
Minimum Split (s)	16.0	16.0
Total Split (s)	51.0	69.0
Total Split (%)	43%	58%
Yellow Time (s)	3.5	3.5
All-Red Time (s)	2.5	2.5
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag		
Lead-Lag Optimize?		
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		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn		0						0	0			
Storage Cap Reductn		0						0	0			
Reduced v/c Ratio		0.43						0.03	0.05			

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 88 (73%), Referenced to phase 2:NBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.43	
Intersection Signal Delay: 30.1	Intersection LOS: C
Intersection Capacity Utilization 39.1%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4030: NB M-311 (11 Mile Rd)/WB M-96 (Michigan Avenue)/11 Mile Rd (North) & EB M-96 (Michigan Avenue)



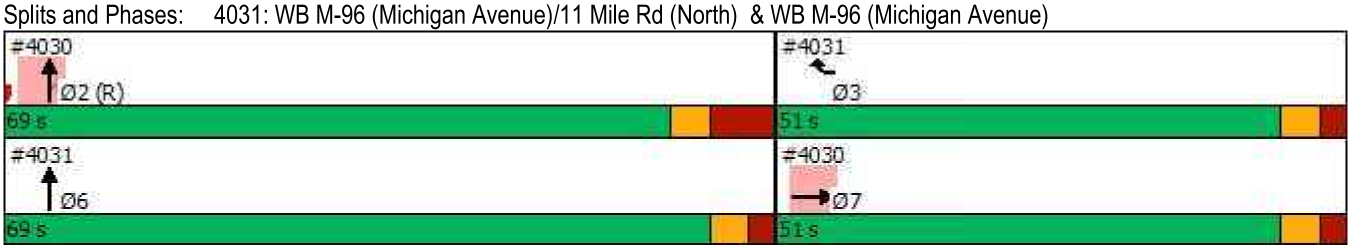
Lane Group	Ø3	Ø6
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		

Intersection Summary

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø2	Ø7
Lane Configurations								
Traffic Volume (vph)	0	889	64	0	0	0		
Future Volume (vph)	0	889	64	0	0	0		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Lane Util. Factor	1.00	0.76	0.91	1.00	1.00	1.00		
Frt		0.850						
Flt Protected								
Satd. Flow (prot)	0	3610	5085	0	0	0		
Flt Permitted								
Satd. Flow (perm)	0	3610	5085	0	0	0		
Right Turn on Red		Yes		Yes				
Satd. Flow (RTOR)		2101						
Link Speed (mph)	55		55			55		
Link Distance (ft)	405		182			493		
Travel Time (s)	5.0		2.3			6.1		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Adj. Flow (vph)	0	966	70	0	0	0		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	0	966	70	0	0	0		
Turn Type		Prot	NA					
Protected Phases		3	6				2	7
Permitted Phases								
Minimum Split (s)		16.0	16.0				19.5	16.0
Total Split (s)		51.0	69.0				69.0	51.0
Total Split (%)		42.5%	57.5%				58%	43%
Yellow Time (s)		3.5	3.5				3.5	3.5
All-Red Time (s)		2.5	2.5				6.0	2.5
Lost Time Adjust (s)		0.0	0.0					
Total Lost Time (s)		6.0	6.0					
Lead/Lag								
Lead-Lag Optimize?								
Act Effct Green (s)		45.0	63.0					
Actuated g/C Ratio		0.38	0.52					
v/c Ratio		0.36	0.03					
Control Delay		0.6	0.0					
Queue Delay		0.0	0.0					
Total Delay		0.6	0.0					
LOS		A	A					
Approach Delay	0.6							
Approach LOS	A							
Queue Length 50th (ft)		4	0					
Queue Length 95th (ft)		7	1					
Internal Link Dist (ft)	325		102			413		
Turn Bay Length (ft)								
Base Capacity (vph)		2666	2669					
Starvation Cap Reductn		0	0					
Spillback Cap Reductn		0	0					
Storage Cap Reductn		0	0					
Reduced v/c Ratio		0.36	0.03					

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 88 (73%), Referenced to phase 2:NBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.43	
Intersection Signal Delay: 0.6	Intersection LOS: A
Intersection Capacity Utilization 39.1%	ICU Level of Service A
Analysis Period (min) 15	

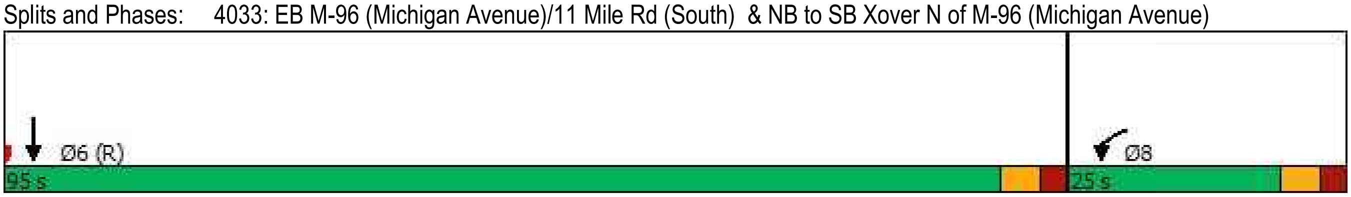
Splits and Phases: 4031: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & WB M-96 (Michigan Avenue)



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	67	0	0	0	0	582
Future Volume (vph)	67	0	0	0	0	582
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	0.91
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	3433	0	0	0	0	5085
Flt Permitted	0.950					
Satd. Flow (perm)	3433	0	0	0	0	5085
Right Turn on Red	Yes	Yes		Yes		
Satd. Flow (RTOR)	701					
Link Speed (mph)	25		55			30
Link Distance (ft)	105		587			495
Travel Time (s)	2.9		7.3			11.3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	73	0	0	0	0	633
Shared Lane Traffic (%)						
Lane Group Flow (vph)	73	0	0	0	0	633
Turn Type	Prot					NA
Protected Phases	8					6
Permitted Phases						
Minimum Split (s)	13.0					16.0
Total Split (s)	25.0					95.0
Total Split (%)	20.8%					79.2%
Yellow Time (s)	3.5					3.5
All-Red Time (s)	2.5					2.5
Lost Time Adjust (s)	0.0					0.0
Total Lost Time (s)	6.0					6.0
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)	19.0					89.0
Actuated g/C Ratio	0.16					0.74
v/c Ratio	0.06					0.17
Control Delay	0.1					1.0
Queue Delay	0.0					0.0
Total Delay	0.1					1.0
LOS	A					A
Approach Delay	0.1					1.0
Approach LOS	A					A
Queue Length 50th (ft)	0					7
Queue Length 95th (ft)	0					9
Internal Link Dist (ft)	25		507			415
Turn Bay Length (ft)						
Base Capacity (vph)	1133					3771
Starvation Cap Reductn	0					0
Spillback Cap Reductn	0					0
Storage Cap Reductn	0					0
Reduced v/c Ratio	0.06					0.17

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 89 (74%), Referenced to phase 6:SBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.17	
Intersection Signal Delay: 0.9	Intersection LOS: A
Intersection Capacity Utilization 36.7%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4033: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & NB to SB Xover N of M-96 (Michigan Avenue)



Lane Group	NBL	NBT	SBT	SBR	SEL	SER	Ø2
Lane Configurations							
Traffic Volume (vph)	0	0	472	0	0	110	
Future Volume (vph)	0	0	472	0	0	110	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	0.91	1.00	1.00	0.88	
Frt						0.850	
Flt Protected							
Satd. Flow (prot)	0	0	5085	0	0	2787	
Flt Permitted							
Satd. Flow (perm)	0	0	5085	0	0	2787	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)						995	
Link Speed (mph)		30	30		30		
Link Distance (ft)		495	145		346		
Travel Time (s)		11.3	3.3		7.9		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	0	0	513	0	0	120	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	513	0	0	120	
Turn Type			NA			Prot	
Protected Phases			Free!			4!	2
Permitted Phases							
Minimum Split (s)						16.0	16.0
Total Split (s)						60.0	60.0
Total Split (%)						50.0%	50%
Yellow Time (s)						3.5	3.5
All-Red Time (s)						2.5	2.5
Lost Time Adjust (s)						0.0	
Total Lost Time (s)						6.0	
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)			120.0			54.0	
Actuated g/C Ratio			1.00			0.45	
v/c Ratio			0.10			0.07	
Control Delay			0.1			0.1	
Queue Delay			0.0			0.0	
Total Delay			0.1			0.1	
LOS			A			A	
Approach Delay			0.1		0.1		
Approach LOS			A		A		
Queue Length 50th (ft)			0			0	
Queue Length 95th (ft)			0			0	
Internal Link Dist (ft)		415	65		266		
Turn Bay Length (ft)							
Base Capacity (vph)			5085			1801	
Starvation Cap Reductn			0			0	
Spillback Cap Reductn			0			0	
Storage Cap Reductn			0			0	
Reduced v/c Ratio			0.10			0.07	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 27 (23%), Referenced to phase 4:SER, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.35	
Intersection Signal Delay: 0.1	Intersection LOS: A
Intersection Capacity Utilization 33.2%	ICU Level of Service A
Analysis Period (min) 15	

! Phase conflict between lane groups.

Splits and Phases: 4034: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & EB I-94 Off-ramp

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	472	0	0	0	0	0	727	0
Future Volume (vph)	0	0	0	0	472	0	0	0	0	0	727	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.91	1.00	1.00	1.00	1.00	1.00	0.91	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	0	0	0	5085	0	0	0	0	0	5085	0
Flt Permitted												
Satd. Flow (perm)	0	0	0	0	5085	0	0	0	0	0	5085	0
Right Turn on Red			Yes			Yes			Yes	Yes		Yes
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		145			194			233			108	
Travel Time (s)		3.3			4.4			5.3			2.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	513	0	0	0	0	0	790	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	513	0	0	0	0	0	790	0
Turn Type					NA						NA	
Protected Phases					2						4	
Permitted Phases												
Minimum Split (s)					16.0						16.0	
Total Split (s)					60.0						60.0	
Total Split (%)					50.0%						50.0%	
Yellow Time (s)					3.5						3.5	
All-Red Time (s)					2.5						2.5	
Lost Time Adjust (s)					0.0						0.0	
Total Lost Time (s)					6.0						6.0	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)					54.0						54.0	
Actuated g/C Ratio					0.45						0.45	
v/c Ratio					0.22						0.35	
Control Delay					23.2						21.9	
Queue Delay					0.0						0.0	
Total Delay					23.2						21.9	
LOS					C						C	
Approach Delay					23.2						21.9	
Approach LOS					C						C	
Queue Length 50th (ft)					121						136	
Queue Length 95th (ft)					155						163	
Internal Link Dist (ft)		65			114			153			28	
Turn Bay Length (ft)												
Base Capacity (vph)					2288						2288	
Starvation Cap Reductn					0						0	
Spillback Cap Reductn					0						0	
Storage Cap Reductn					0						0	
Reduced v/c Ratio					0.22						0.35	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 27 (23%), Referenced to phase 4:SER, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.35	
Intersection Signal Delay: 22.4	Intersection LOS: C
Intersection Capacity Utilization 31.3%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4035: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & WB M-96 (Michigan Avenue)/11 Mile Rd (North)

Lane Group	NBL	NBR	SET	SER	NWL	NWT	Ø4
Lane Configurations							
Traffic Volume (vph)	104	0	0	0	0	727	
Future Volume (vph)	104	0	0	0	0	727	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.91	
Frt							
Flt Protected	0.950						
Satd. Flow (prot)	1719	0	0	0	0	5085	
Flt Permitted	0.950						
Satd. Flow (perm)	1719	0	0	0	0	5085	
Right Turn on Red	Yes	Yes		Yes			
Satd. Flow (RTOR)	393						
Link Speed (mph)	30		30			30	
Link Distance (ft)	271		337			233	
Travel Time (s)	6.2		7.7			5.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Heavy Vehicles (%)	5%	2%	2%	2%	2%	2%	
Adj. Flow (vph)	113	0	0	0	0	790	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	113	0	0	0	0	790	
Turn Type	Prot					NA	
Protected Phases	2!					Free!	4
Permitted Phases							
Minimum Split (s)	16.0						16.0
Total Split (s)	60.0						60.0
Total Split (%)	50.0%						50%
Yellow Time (s)	3.5						3.5
All-Red Time (s)	2.5						2.5
Lost Time Adjust (s)	0.0						
Total Lost Time (s)	6.0						
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)	54.0					120.0	
Actuated g/C Ratio	0.45					1.00	
v/c Ratio	0.11					0.16	
Control Delay	0.2					0.1	
Queue Delay	0.0					0.0	
Total Delay	0.2					0.1	
LOS	A					A	
Approach Delay	0.2					0.1	
Approach LOS	A					A	
Queue Length 50th (ft)	0					0	
Queue Length 95th (ft)	0					0	
Internal Link Dist (ft)	191		257			153	
Turn Bay Length (ft)							
Base Capacity (vph)	989					5085	
Starvation Cap Reductn	0					0	
Spillback Cap Reductn	0					0	
Storage Cap Reductn	0					0	

Lane Group	NBL	NBR	SET	SER	NWL	NWT	Ø4
Reduced v/c Ratio	0.11					0.16	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 27 (23%), Referenced to phase 4:SER, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.35	
Intersection Signal Delay: 0.1	Intersection LOS: A
Intersection Capacity Utilization 30.7%	ICU Level of Service A
Analysis Period (min) 15	
! Phase conflict between lane groups.	

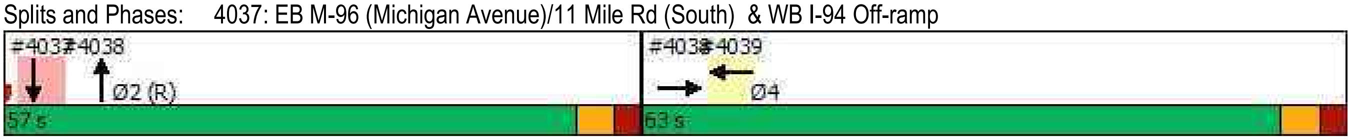
Splits and Phases: 4036: EB I-94 Off-ramp & WB M-96 (Michigan Avenue)/11 Mile Rd (North)

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø4
Lane Configurations							
Traffic Volume (vph)	0	446	0	0	99	0	
Future Volume (vph)	0	446	0	0	99	0	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	0.88	1.00	1.00	0.95	1.00	
Frt		0.850					
Flt Protected							
Satd. Flow (prot)	0	2707	0	0	3438	0	
Flt Permitted							
Satd. Flow (perm)	0	2707	0	0	3438	0	
Right Turn on Red		Yes				Yes	
Satd. Flow (RTOR)		1670					
Link Speed (mph)	30			30	30		
Link Distance (ft)	222			406	241		
Travel Time (s)	5.0			9.2	5.5		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Heavy Vehicles (%)	2%	5%	2%	2%	5%	2%	
Adj. Flow (vph)	0	485	0	0	108	0	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	485	0	0	108	0	
Turn Type		Free			NA		
Protected Phases					2		4
Permitted Phases		Free					
Minimum Split (s)					16.0		16.0
Total Split (s)					57.0		63.0
Total Split (%)					47.5%		53%
Yellow Time (s)					3.5		3.5
All-Red Time (s)					2.5		2.5
Lost Time Adjust (s)					0.0		
Total Lost Time (s)					6.0		
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)		120.0			51.0		
Actuated g/C Ratio		1.00			0.42		
v/c Ratio		0.18			0.07		
Control Delay		0.6			20.7		
Queue Delay		0.0			0.0		
Total Delay		0.6			20.7		
LOS		A			C		
Approach Delay	0.6				20.7		
Approach LOS	A				C		
Queue Length 50th (ft)		6			25		
Queue Length 95th (ft)		13			44		
Internal Link Dist (ft)	142			326	161		
Turn Bay Length (ft)							
Base Capacity (vph)		2707			1461		
Starvation Cap Reductn		0			0		
Spillback Cap Reductn		0			0		
Storage Cap Reductn		0			0		

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø4
Reduced v/c Ratio		0.18			0.07		

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 96 (80%), Referenced to phase 2:SBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.39	
Intersection Signal Delay: 4.3	Intersection LOS: A
Intersection Capacity Utilization 13.3%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4037: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & WB I-94 Off-ramp

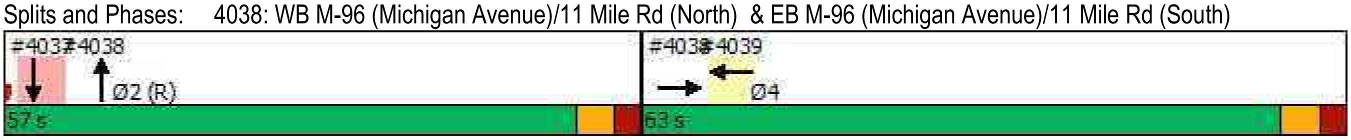


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑						↑↑↑				
Traffic Volume (vph)	0	446	0	0	0	0	0	752	0	0	0	0
Future Volume (vph)	0	446	0	0	0	0	0	752	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	1.00	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	3438	0	0	0	0	0	4940	0	0	0	0
Flt Permitted												
Satd. Flow (perm)	0	3438	0	0	0	0	0	4940	0	0	0	0
Right Turn on Red	Yes		Yes			Yes			Yes			Yes
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		190			222			207			131	
Travel Time (s)		4.3			5.0			4.7			3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	5%	2%	2%	2%	2%	2%	5%	2%	2%	2%	2%
Adj. Flow (vph)	0	485	0	0	0	0	0	817	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	485	0	0	0	0	0	817	0	0	0	0
Turn Type		NA						NA				
Protected Phases		4						2				
Permitted Phases												
Minimum Split (s)		16.0						16.0				
Total Split (s)		63.0						57.0				
Total Split (%)		52.5%						47.5%				
Yellow Time (s)		3.5						3.5				
All-Red Time (s)		2.5						2.5				
Lost Time Adjust (s)		0.0						0.0				
Total Lost Time (s)		6.0						6.0				
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		57.0						51.0				
Actuated g/C Ratio		0.48						0.42				
v/c Ratio		0.30						0.39				
Control Delay		19.1						43.0				
Queue Delay		0.0						0.0				
Total Delay		19.1						43.0				
LOS		B						D				
Approach Delay		19.1						43.0				
Approach LOS		B						D				
Queue Length 50th (ft)		96						239				
Queue Length 95th (ft)		123						284				
Internal Link Dist (ft)		110			142			127			51	
Turn Bay Length (ft)												
Base Capacity (vph)		1633						2099				
Starvation Cap Reductn		0						0				
Spillback Cap Reductn		0						0				
Storage Cap Reductn		0						0				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio		0.30						0.39				

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 96 (80%), Referenced to phase 2:SBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.39	
Intersection Signal Delay: 34.1	Intersection LOS: C
Intersection Capacity Utilization 36.9%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4038: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & EB M-96 (Michigan Avenue)/11 Mile Rd (South)



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø2
Lane Configurations							
Traffic Volume (vph)	0	0	0	151	752	0	
Future Volume (vph)	0	0	0	151	752	0	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.94	1.00	
Frt							
Flt Protected					0.950		
Satd. Flow (prot)	0	0	0	1810	4848	0	
Flt Permitted					0.950		
Satd. Flow (perm)	0	0	0	1810	4848	0	
Right Turn on Red		Yes			Yes	Yes	
Satd. Flow (RTOR)					2497		
Link Speed (mph)	30			30	30		
Link Distance (ft)	415			317	131		
Travel Time (s)	9.4			7.2	3.0		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Heavy Vehicles (%)	2%	2%	2%	5%	5%	2%	
Adj. Flow (vph)	0	0	0	164	817	0	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	0	164	817	0	
Turn Type				NA	Perm		
Protected Phases				4!			2
Permitted Phases					Free!		
Minimum Split (s)				16.0			16.0
Total Split (s)				63.0			57.0
Total Split (%)				52.5%			48%
Yellow Time (s)				3.5			3.5
All-Red Time (s)				2.5			2.5
Lost Time Adjust (s)				0.0			
Total Lost Time (s)				6.0			
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)				57.0	120.0		
Actuated g/C Ratio				0.48	1.00		
v/c Ratio				0.19	0.17		
Control Delay				18.9	0.3		
Queue Delay				0.0	0.0		
Total Delay				18.9	0.3		
LOS				B	A		
Approach Delay				18.9	0.3		
Approach LOS				B	A		
Queue Length 50th (ft)				71	2		
Queue Length 95th (ft)				116	0		
Internal Link Dist (ft)	335			237	51		
Turn Bay Length (ft)							
Base Capacity (vph)				859	4848		
Starvation Cap Reductn				0	0		
Spillback Cap Reductn				0	0		
Storage Cap Reductn				0	0		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø2
Reduced v/c Ratio				0.19	0.17		

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 96 (80%), Referenced to phase 2:SBT, Start of Green

Natural Cycle: 40

Control Type: Pretimed

Maximum v/c Ratio: 0.39

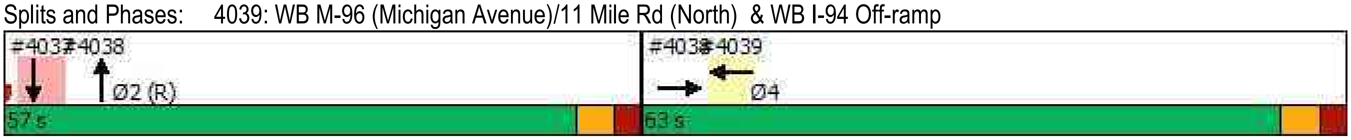
Intersection Signal Delay: 3.4 — Intersection LOS: A

Intersection Capacity Utilization 52.2% — ICU Level of Service A

Analysis Period (min) 15

! Phase conflict between lane groups.

Splits and Phases: 4039: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & WB I-94 Off-ramp

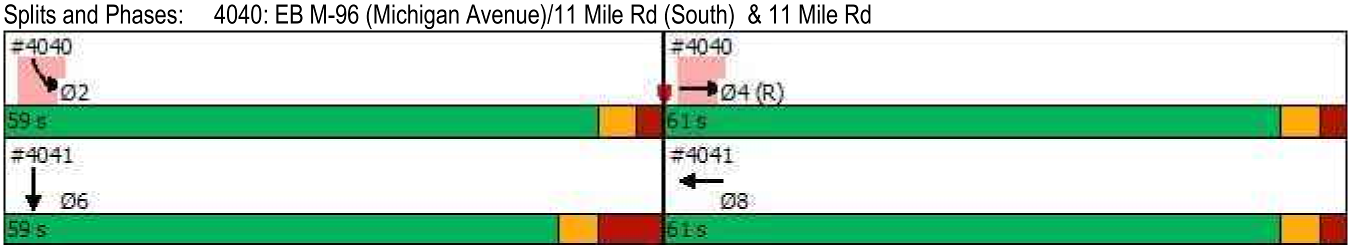


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø6	Ø8
Lane Configurations								
Traffic Volume (vph)	0	384	0	0	207	0		
Future Volume (vph)	0	384	0	0	207	0		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.97	1.00		
Frt								
Flt Protected					0.950			
Satd. Flow (prot)	0	3539	0	0	3335	0		
Flt Permitted					0.950			
Satd. Flow (perm)	0	3539	0	0	3335	0		
Right Turn on Red				Yes	Yes	Yes		
Satd. Flow (RTOR)					651			
Link Speed (mph)		55	55		45			
Link Distance (ft)		212	597		92			
Travel Time (s)		2.6	7.4		1.4			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Heavy Vehicles (%)	2%	2%	2%	2%	5%	2%		
Adj. Flow (vph)	0	417	0	0	225	0		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	0	417	0	0	225	0		
Turn Type		NA			Prot			
Protected Phases		4			2		6	8
Permitted Phases								
Minimum Split (s)		16.0			19.5		19.5	16.0
Total Split (s)		61.0			59.0		59.0	61.0
Total Split (%)		50.8%			49.2%		49%	51%
Yellow Time (s)		3.5			3.5		3.5	3.5
All-Red Time (s)		2.5			2.5		6.0	2.5
Lost Time Adjust (s)		0.0			0.0			
Total Lost Time (s)		6.0			6.0			
Lead/Lag								
Lead-Lag Optimize?								
Act Effct Green (s)		55.0			53.0			
Actuated g/C Ratio		0.46			0.44			
v/c Ratio		0.26			0.12			
Control Delay		20.5			0.1			
Queue Delay		0.0			0.0			
Total Delay		20.5			0.1			
LOS		C			A			
Approach Delay		20.5			0.1			
Approach LOS		C			A			
Queue Length 50th (ft)		102			0			
Queue Length 95th (ft)		137			0			
Internal Link Dist (ft)		132	517		12			
Turn Bay Length (ft)								
Base Capacity (vph)		1622			1836			
Starvation Cap Reductn		0			0			
Spillback Cap Reductn		0			0			
Storage Cap Reductn		0			0			

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø6	Ø8
Reduced v/c Ratio		0.26			0.12			

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 32 (27%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.42	
Intersection Signal Delay: 13.4	Intersection LOS: B
Intersection Capacity Utilization 38.5%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4040: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & 11 Mile Rd



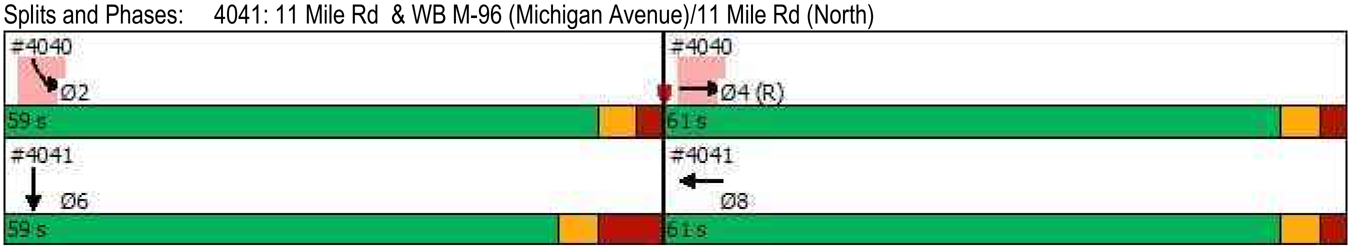
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	624	343	0	0	0	0	207	56
Future Volume (vph)	0	0	0	0	624	343	0	0	0	0	207	56
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		250	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Frt						0.850					0.968	
Flt Protected												
Satd. Flow (prot)	0	0	0	0	3539	1538	0	0	0	0	3348	0
Flt Permitted												
Satd. Flow (perm)	0	0	0	0	3539	1538	0	0	0	0	3348	0
Right Turn on Red			Yes	Yes		Yes			Yes			Yes
Satd. Flow (RTOR)						345					35	
Link Speed (mph)		55			55			45			55	
Link Distance (ft)		210			598			92			259	
Travel Time (s)		2.6			7.4			1.4			3.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	5%	2%	2%	2%	2%	5%	2%
Adj. Flow (vph)	0	0	0	0	678	373	0	0	0	0	225	61
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	678	373	0	0	0	0	286	0
Turn Type					NA	custom					NA	
Protected Phases					8	Free					6	
Permitted Phases												
Minimum Split (s)					16.0						19.5	
Total Split (s)					61.0						59.0	
Total Split (%)					50.8%						49.2%	
Yellow Time (s)					3.5						3.5	
All-Red Time (s)					2.5						6.0	
Lost Time Adjust (s)					0.0						0.0	
Total Lost Time (s)					6.0						9.5	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)					55.0	120.0					49.5	
Actuated g/C Ratio					0.46	1.00					0.41	
v/c Ratio					0.42	0.24					0.20	
Control Delay					31.7	1.7					30.6	
Queue Delay					0.0	0.0					0.0	
Total Delay					31.7	1.7					30.6	
LOS					C	A					C	
Approach Delay					21.0						30.6	
Approach LOS					C						C	
Queue Length 50th (ft)					251	0					85	
Queue Length 95th (ft)					305	0					126	
Internal Link Dist (ft)		130			518			12			179	
Turn Bay Length (ft)						250						
Base Capacity (vph)					1622	1538					1401	

Lane Group	Ø2	Ø4
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Ideal Flow (vphpl)		
Storage Length (ft)		
Storage Lanes		
Taper Length (ft)		
Lane Util. Factor		
Frt		
Flt Protected		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Peak Hour Factor		
Heavy Vehicles (%)		
Adj. Flow (vph)		
Shared Lane Traffic (%)		
Lane Group Flow (vph)		
Turn Type		
Protected Phases	2	4
Permitted Phases		
Minimum Split (s)	19.5	16.0
Total Split (s)	59.0	61.0
Total Split (%)	49%	51%
Yellow Time (s)	3.5	3.5
All-Red Time (s)	2.5	2.5
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag		
Lead-Lag Optimize?		
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)		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn					0	0					0	
Spillback Cap Reductn					0	0					0	
Storage Cap Reductn					0	0					0	
Reduced v/c Ratio					0.42	0.24					0.20	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 32 (27%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.42	
Intersection Signal Delay: 23.1	Intersection LOS: C
Intersection Capacity Utilization 38.5%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4041: 11 Mile Rd & WB M-96 (Michigan Avenue)/11 Mile Rd (North)



Lane Group	Ø2	Ø4
Starvation Cap Reductn		
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		

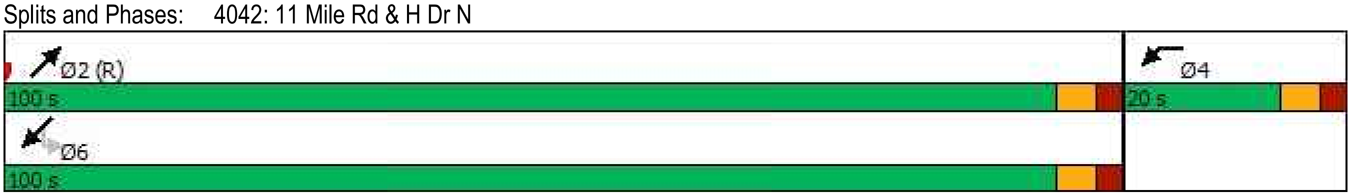
Intersection Summary

Lane Group	WBL	WBR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	0	0	343	0	0	263
Future Volume (vph)	0	0	343	0	0	263
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	1810	0	1863	0	0	1863
Flt Permitted						
Satd. Flow (perm)	1810	0	1863	0	0	1863
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)						
Link Speed (mph)	25		55			55
Link Distance (ft)	1262		1787			680
Travel Time (s)	34.4		22.2			8.4
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	2%	2%	5%	2%	2%
Adj. Flow (vph)	0	0	373	0	0	286
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	373	0	0	286
Turn Type	Prot		NA			NA
Protected Phases	4		2			6
Permitted Phases					6	
Minimum Split (s)	13.0		16.0		13.0	13.0
Total Split (s)	20.0		100.0		100.0	100.0
Total Split (%)	16.7%		83.3%		83.3%	83.3%
Yellow Time (s)	3.5		3.5		3.5	3.5
All-Red Time (s)	2.5		2.5		2.5	2.5
Lost Time Adjust (s)	0.0		0.0			0.0
Total Lost Time (s)	6.0		6.0			6.0
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)			94.0			94.0
Actuated g/C Ratio			0.78			0.78
v/c Ratio			0.26			0.20
Control Delay			1.1			3.7
Queue Delay			0.0			0.0
Total Delay			1.1			3.7
LOS			A			A
Approach Delay			1.1			3.7
Approach LOS			A			A
Queue Length 50th (ft)			12			47
Queue Length 95th (ft)			16			69
Internal Link Dist (ft)	1182		1707			600
Turn Bay Length (ft)						
Base Capacity (vph)			1459			1459
Starvation Cap Reductn			0			0
Spillback Cap Reductn			0			0
Storage Cap Reductn			0			0

Lane Group	WBL	WBR	NET	NER	SWL	SWT
Reduced v/c Ratio			0.26			0.20

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NET, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.26	
Intersection Signal Delay: 2.2	Intersection LOS: A
Intersection Capacity Utilization 23.1%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4042: 11 Mile Rd & H Dr N

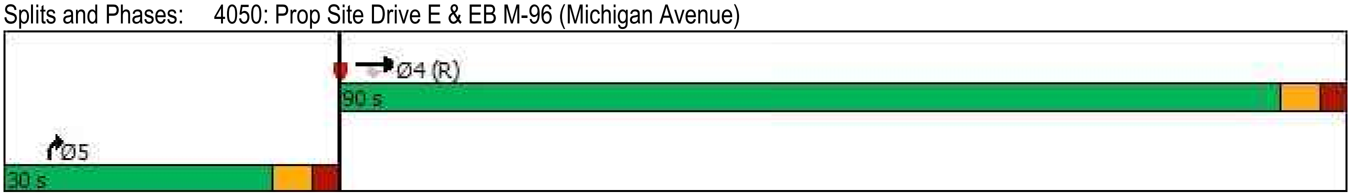


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	965	0	0	0	0	335
Future Volume (vph)	965	0	0	0	0	335
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		500	600		0	0
Storage Lanes		2	0		0	2
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	0.88	1.00	1.00	1.00	0.88
Frt						0.850
Flt Protected						
Satd. Flow (prot)	3539	3278	0	0	0	2787
Flt Permitted						
Satd. Flow (perm)	3539	3278	0	0	0	2787
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)						267
Link Speed (mph)	55			55	25	
Link Distance (ft)	669			659	1093	
Travel Time (s)	8.3			8.2	29.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1049	0	0	0	0	364
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1049	0	0	0	0	364
Turn Type	NA	Perm				Prot
Protected Phases	4					5
Permitted Phases		4				
Detector Phase	4	4				5
Switch Phase						
Minimum Initial (s)	10.0	10.0				10.0
Minimum Split (s)	16.0	16.0				16.0
Total Split (s)	90.0	90.0				30.0
Total Split (%)	75.0%	75.0%				25.0%
Yellow Time (s)	3.5	3.5				3.5
All-Red Time (s)	2.5	2.5				2.5
Lost Time Adjust (s)	0.0	0.0				0.0
Total Lost Time (s)	6.0	6.0				6.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max	C-Max				None
Act Effct Green (s)	96.2					11.8
Actuated g/C Ratio	0.80					0.10
v/c Ratio	0.37					0.71
Control Delay	3.1					22.5
Queue Delay	0.0					0.0
Total Delay	3.1					22.5
LOS	A					C
Approach Delay	3.1				22.5	
Approach LOS	A				C	
Queue Length 50th (ft)	58					41
Queue Length 95th (ft)	145					92

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Internal Link Dist (ft)	589			579	1013	
Turn Bay Length (ft)						
Base Capacity (vph)	2837					771
Starvation Cap Reductn	0					0
Spillback Cap Reductn	0					0
Storage Cap Reductn	0					0
Reduced v/c Ratio	0.37					0.47

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 52 (43%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 40	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.71	
Intersection Signal Delay: 8.1	Intersection LOS: A
Intersection Capacity Utilization 48.4%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4050: Prop Site Drive E & EB M-96 (Michigan Avenue)

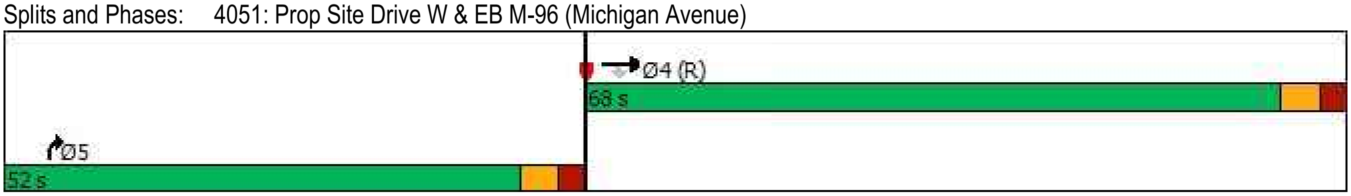


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	416	0	0	0	0	602
Future Volume (vph)	416	0	0	0	0	602
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		500	600		0	0
Storage Lanes		2	0		0	2
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	0.88	1.00	1.00	1.00	0.88
Frt						0.850
Flt Protected						
Satd. Flow (prot)	3539	3278	0	0	0	2787
Flt Permitted						
Satd. Flow (perm)	3539	3278	0	0	0	2787
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)						619
Link Speed (mph)	55			55	25	
Link Distance (ft)	608			627	1293	
Travel Time (s)	7.5			7.8	35.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	452	0	0	0	0	654
Shared Lane Traffic (%)						
Lane Group Flow (vph)	452	0	0	0	0	654
Turn Type	NA	Perm				Prot
Protected Phases	4					5
Permitted Phases		4				
Detector Phase	4	4				5
Switch Phase						
Minimum Initial (s)	10.0	10.0				10.0
Minimum Split (s)	16.0	16.0				16.0
Total Split (s)	68.0	68.0				52.0
Total Split (%)	56.7%	56.7%				43.3%
Yellow Time (s)	3.5	3.5				3.5
All-Red Time (s)	2.5	2.5				2.5
Lost Time Adjust (s)	0.0	0.0				0.0
Total Lost Time (s)	6.0	6.0				6.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max	C-Max				None
Act Effct Green (s)	95.9					12.1
Actuated g/C Ratio	0.80					0.10
v/c Ratio	0.16					0.78
Control Delay	0.8					12.5
Queue Delay	0.0					0.0
Total Delay	0.8					12.5
LOS	A					B
Approach Delay	0.8				12.5	
Approach LOS	A				B	
Queue Length 50th (ft)	0					14
Queue Length 95th (ft)	0					73

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Internal Link Dist (ft)	528			547	1213	
Turn Bay Length (ft)						
Base Capacity (vph)	2827					1450
Starvation Cap Reductn	0					0
Spillback Cap Reductn	0					0
Storage Cap Reductn	0					0
Reduced v/c Ratio	0.16					0.45

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 32 (27%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 40	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.78	
Intersection Signal Delay: 7.7	Intersection LOS: A
Intersection Capacity Utilization 42.6%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4051: Prop Site Drive W & EB M-96 (Michigan Avenue)

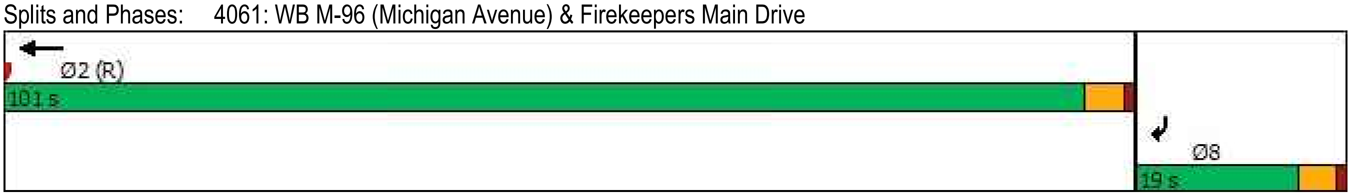


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	878	168	0	134
Future Volume (vph)	0	0	878	168	0	134
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			0	0	0
Storage Lanes	0			0	0	2
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	0.88
Frt			0.977			0.850
Flt Protected						
Satd. Flow (prot)	0	0	3468	0	0	2787
Flt Permitted						
Satd. Flow (perm)	0	0	3468	0	0	2787
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			65			408
Link Speed (mph)		55	55		25	
Link Distance (ft)		574	509		701	
Travel Time (s)		7.1	6.3		19.1	
Peak Hour Factor	0.92	0.92	0.92	0.95	0.67	0.92
Heavy Vehicles (%)	2%	2%	2%	0%	0%	2%
Adj. Flow (vph)	0	0	954	177	0	146
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1131	0	0	146
Turn Type			NA			Prot
Protected Phases			2			8
Permitted Phases						
Detector Phase			2			8
Switch Phase						
Minimum Initial (s)			10.0			10.0
Minimum Split (s)			22.5			14.5
Total Split (s)			101.0			19.0
Total Split (%)			84.2%			15.8%
Yellow Time (s)			3.5			3.5
All-Red Time (s)			1.0			1.0
Lost Time Adjust (s)			0.0			0.0
Total Lost Time (s)			4.5			4.5
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode			C-Max			None
Act Effct Green (s)			101.0			10.0
Actuated g/C Ratio			0.84			0.08
v/c Ratio			0.39			0.24
Control Delay			2.5			0.9
Queue Delay			0.0			0.0
Total Delay			2.5			0.9
LOS			A			A
Approach Delay			2.5		0.9	
Approach LOS			A		A	
Queue Length 50th (ft)			73			0

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Queue Length 95th (ft)			91			0
Internal Link Dist (ft)		494	429		621	
Turn Bay Length (ft)						
Base Capacity (vph)			2929			695
Starvation Cap Reductn			0			0
Spillback Cap Reductn			0			0
Storage Cap Reductn			0			0
Reduced v/c Ratio			0.39			0.21

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:WBT, Start of Green	
Natural Cycle: 40	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.39	
Intersection Signal Delay: 2.3	Intersection LOS: A
Intersection Capacity Utilization 45.5%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4061: WB M-96 (Michigan Avenue) & Firekeepers Main Drive

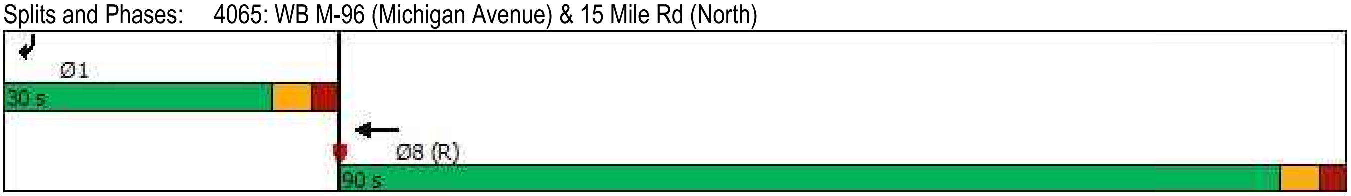


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	533	495	0	58
Future Volume (vph)	0	0	533	495	0	58
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			250	0	200
Storage Lanes	0			0	0	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.91	1.00	1.00	0.88
Frt				0.850		0.850
Flt Protected						
Satd. Flow (prot)	0	0	5085	1583	0	2787
Flt Permitted						
Satd. Flow (perm)	0	0	5085	1583	0	2787
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				538		659
Link Speed (mph)		45	45		45	
Link Distance (ft)		534	660		516	
Travel Time (s)		8.1	10.0		7.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	579	538	0	63
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	579	538	0	63
Turn Type			NA	custom		Prot
Protected Phases			8	Free		1
Permitted Phases						
Minimum Split (s)			16.0			13.0
Total Split (s)			90.0			30.0
Total Split (%)			75.0%			25.0%
Yellow Time (s)			3.5			3.5
All-Red Time (s)			2.5			2.5
Lost Time Adjust (s)			0.0			0.0
Total Lost Time (s)			6.0			6.0
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)			84.0	120.0		24.0
Actuated g/C Ratio			0.70	1.00		0.20
v/c Ratio			0.16	0.34		0.06
Control Delay			0.8	0.9		0.1
Queue Delay			0.0	0.0		0.0
Total Delay			0.8	0.9		0.1
LOS			A	A		A
Approach Delay			0.9		0.1	
Approach LOS			A		A	
Queue Length 50th (ft)			5	0		0
Queue Length 95th (ft)			8	34		0
Internal Link Dist (ft)		454	580		436	
Turn Bay Length (ft)				250		200
Base Capacity (vph)			3559	1583		1084
Starvation Cap Reductn			0	0		0

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Spillback Cap Reductn			0	0		0
Storage Cap Reductn			0	0		0
Reduced v/c Ratio			0.16	0.34		0.06

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 8:WBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.34	
Intersection Signal Delay: 0.8	Intersection LOS: A
Intersection Capacity Utilization 26.1%	ICU Level of Service A
Analysis Period (min) 15	

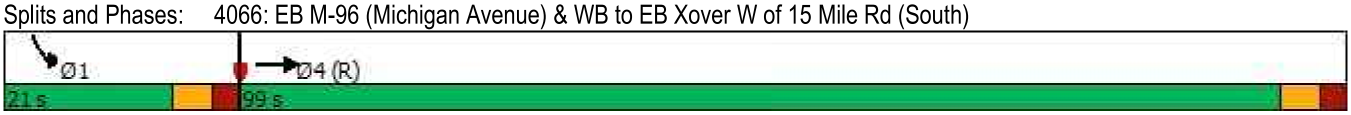
Splits and Phases: 4065: WB M-96 (Michigan Avenue) & 15 Mile Rd (North)



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	2596	0	0	119	0
Future Volume (vph)	0	2596	0	0	119	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.91	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	5085	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	5085	0	0	1770	0
Right Turn on Red				Yes	Yes	Yes
Satd. Flow (RTOR)					7	
Link Speed (mph)		45	45		25	
Link Distance (ft)		262	1016		123	
Travel Time (s)		4.0	15.4		3.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.90	0.92
Adj. Flow (vph)	0	2822	0	0	132	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	2822	0	0	132	0
Turn Type		NA			Prot	
Protected Phases		4			1	
Permitted Phases						
Minimum Split (s)		16.0			16.0	
Total Split (s)		99.0			21.0	
Total Split (%)		82.5%			17.5%	
Yellow Time (s)		3.5			3.5	
All-Red Time (s)		2.5			2.5	
Lost Time Adjust (s)		0.0			0.0	
Total Lost Time (s)		6.0			6.0	
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)		93.0			15.0	
Actuated g/C Ratio		0.78			0.12	
v/c Ratio		0.72			0.58	
Control Delay		3.8			72.8	
Queue Delay		0.0			0.0	
Total Delay		3.8			72.8	
LOS		A			E	
Approach Delay		3.8			72.8	
Approach LOS		A			E	
Queue Length 50th (ft)		133			103	
Queue Length 95th (ft)		144			170	
Internal Link Dist (ft)		182	936		43	
Turn Bay Length (ft)						
Base Capacity (vph)		3940			227	
Starvation Cap Reductn		0			0	
Spillback Cap Reductn		0			0	
Storage Cap Reductn		0			0	
Reduced v/c Ratio		0.72			0.58	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 116 (97%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 60	
Control Type: Pretimed	
Maximum v/c Ratio: 0.72	
Intersection Signal Delay: 6.9	Intersection LOS: A
Intersection Capacity Utilization 68.3%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 4066: EB M-96 (Michigan Avenue) & WB to EB Xover W of 15 Mile Rd (South)

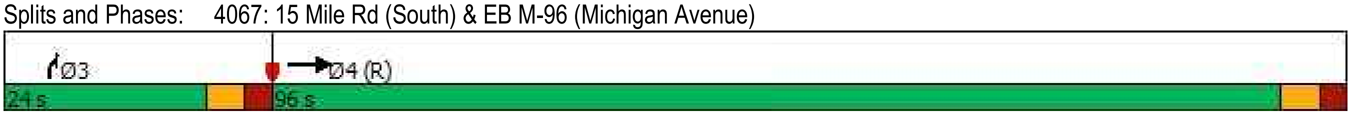


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	2454	261	0	0	0	155
Future Volume (vph)	2454	261	0	0	0	155
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		50	0		0	250
Storage Lanes		0	0		0	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	1.00	1.00	1.00	0.88
Frt	0.986					0.850
Flt Protected						
Satd. Flow (prot)	5014	0	0	0	0	2814
Flt Permitted						
Satd. Flow (perm)	5014	0	0	0	0	2814
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	43					14
Link Speed (mph)	45			45	45	
Link Distance (ft)	1016			704	1375	
Travel Time (s)	15.4			10.7	20.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.88	0.88
Heavy Vehicles (%)	2%	2%	2%	2%	1%	1%
Adj. Flow (vph)	2667	284	0	0	0	176
Shared Lane Traffic (%)						
Lane Group Flow (vph)	2951	0	0	0	0	176
Turn Type	NA					Prot
Protected Phases	4					3
Permitted Phases						
Minimum Split (s)	17.0					16.0
Total Split (s)	96.0					24.0
Total Split (%)	80.0%					20.0%
Yellow Time (s)	3.5					3.5
All-Red Time (s)	2.5					2.5
Lost Time Adjust (s)	0.0					0.0
Total Lost Time (s)	6.0					6.0
Lead/Lag	Lag					Lead
Lead-Lag Optimize?	Yes					Yes
Act Effct Green (s)	90.0					18.0
Actuated g/C Ratio	0.75					0.15
v/c Ratio	0.78					0.41
Control Delay	3.0					45.6
Queue Delay	0.0					0.0
Total Delay	3.0					45.6
LOS	A					D
Approach Delay	3.0				45.6	
Approach LOS	A				D	
Queue Length 50th (ft)	79					65
Queue Length 95th (ft)	84					102
Internal Link Dist (ft)	936			624	1295	
Turn Bay Length (ft)						250
Base Capacity (vph)	3771					434

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Starvation Cap Reductn	2					0
Spillback Cap Reductn	0					0
Storage Cap Reductn	0					0
Reduced v/c Ratio	0.78					0.41

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 4 (3%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 60	
Control Type: Pretimed	
Maximum v/c Ratio: 0.78	
Intersection Signal Delay: 5.4	Intersection LOS: A
Intersection Capacity Utilization 71.6%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 4067: 15 Mile Rd (South) & EB M-96 (Michigan Avenue)

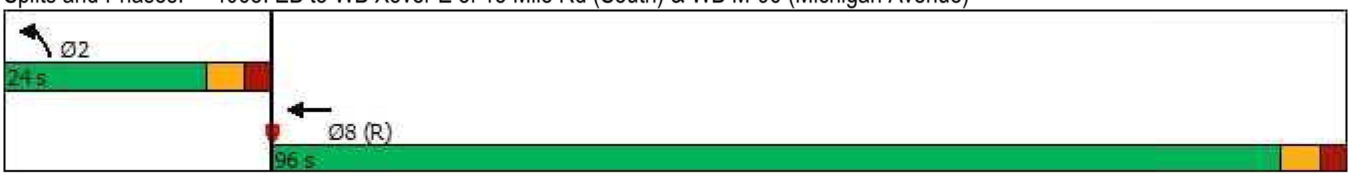


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑↑	↰	
Traffic Volume (vph)	0	0	0	584	44	0
Future Volume (vph)	0	0	0	584	44	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	5085	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	5085	1770	0
Right Turn on Red		Yes			Yes	Yes
Satd. Flow (RTOR)					365	
Link Speed (mph)	45			45	25	
Link Distance (ft)	687			275	111	
Travel Time (s)	10.4			4.2	3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	635	48	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	635	48	0
Turn Type				NA	Prot	
Protected Phases				8	2	
Permitted Phases						
Minimum Split (s)				16.0	13.0	
Total Split (s)				96.0	24.0	
Total Split (%)				80.0%	20.0%	
Yellow Time (s)				3.5	3.5	
All-Red Time (s)				2.5	2.5	
Lost Time Adjust (s)				0.0	0.0	
Total Lost Time (s)				6.0	6.0	
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)				90.0	18.0	
Actuated g/C Ratio				0.75	0.15	
v/c Ratio				0.17	0.08	
Control Delay				5.0	0.2	
Queue Delay				0.3	0.0	
Total Delay				5.3	0.2	
LOS				A	A	
Approach Delay				5.3	0.2	
Approach LOS				A	A	
Queue Length 50th (ft)				2	0	
Queue Length 95th (ft)				3	m0	
Internal Link Dist (ft)	607			195	31	
Turn Bay Length (ft)						
Base Capacity (vph)				3813	575	
Starvation Cap Reductn				2390	0	
Spillback Cap Reductn				0	0	
Storage Cap Reductn				0	0	
Reduced v/c Ratio				0.45	0.08	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 112 (93%), Referenced to phase 8:WBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.17	
Intersection Signal Delay: 4.9	Intersection LOS: A
Intersection Capacity Utilization 69.7%	ICU Level of Service C
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4068: EB to WB Xover E of 15 Mile Rd (South) & WB M-96 (Michigan Avenue)

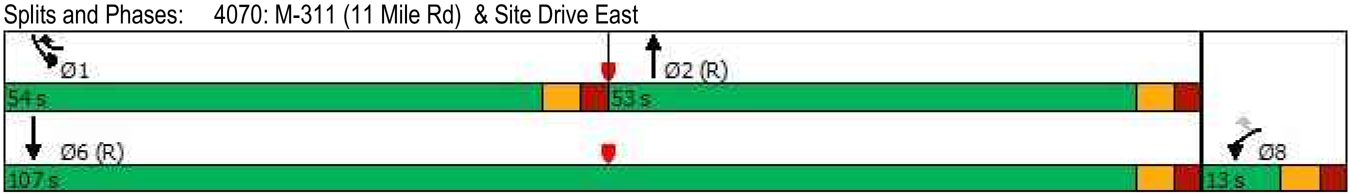


Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	102	0	0	129
Future Volume (vph)	0	0	102	0	0	129
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	500		0	400	
Storage Lanes	1	1		0	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.88	0.95	0.95	1.00	0.95
Frt						
Flt Protected						
Satd. Flow (prot)	1863	3278	3539	0	1863	3539
Flt Permitted						
Satd. Flow (perm)	1863	3278	3539	0	1863	3539
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)						
Link Speed (mph)	25		55			55
Link Distance (ft)	750		940			974
Travel Time (s)	20.5		11.7			12.1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	111	0	0	140
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	111	0	0	140
Turn Type	Prot	pm+ov	NA		Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8				
Detector Phase	8	1	2		1	6
Switch Phase						
Minimum Initial (s)	7.0	7.0	10.0		7.0	10.0
Minimum Split (s)	13.0	13.0	16.0		13.0	16.0
Total Split (s)	13.0	54.0	53.0		54.0	107.0
Total Split (%)	10.8%	45.0%	44.2%		45.0%	89.2%
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5
All-Red Time (s)	2.5	2.5	2.5		2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0		6.0	6.0
Lead/Lag		Lead	Lag		Lead	
Lead-Lag Optimize?						
Recall Mode	None	None	C-Max		None	C-Max
Act Effct Green (s)			120.0			120.0
Actuated g/C Ratio			1.00			1.00
v/c Ratio			0.03			0.04
Control Delay			0.0			0.0
Queue Delay			0.0			0.0
Total Delay			0.0			0.0
LOS			A			A
Approach Delay						
Approach LOS						
Queue Length 50th (ft)			0			0
Queue Length 95th (ft)			0			0

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Internal Link Dist (ft)	670		860			894
Turn Bay Length (ft)						
Base Capacity (vph)			3539			3539
Starvation Cap Reductn			0			0
Spillback Cap Reductn			0			0
Storage Cap Reductn			0			0
Reduced v/c Ratio			0.03			0.04

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 8 (7%), Referenced to phase 2:NBT and 6:SBT, Start of Green	
Natural Cycle: 45	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.04	
Intersection Signal Delay: 0.0	Intersection LOS: A
Intersection Capacity Utilization 13.3%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4070: M-311 (11 Mile Rd) & Site Drive East

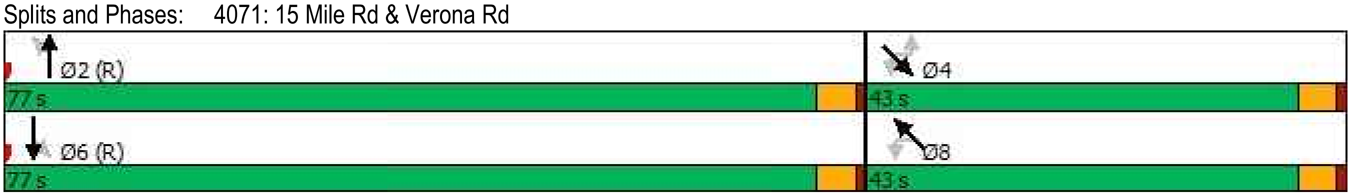


Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	453	13	13	5	9	4	0	87	31	6	118	14
Future Volume (vph)	453	13	13	5	9	4	0	87	31	6	118	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		70	0		0
Storage Lanes	0		0	0		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
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
Frt		0.996			0.968				0.850		0.986	
Flt Protected		0.955			0.987						0.998	
Satd. Flow (prot)	0	1789	0	0	1715	0	0	1845	1392	0	1851	0
Flt Permitted		0.716			0.891						0.991	
Satd. Flow (perm)	0	1342	0	0	1548	0	0	1845	1392	0	1838	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2			7				35		5	
Link Speed (mph)		45			55			55			55	
Link Distance (ft)		682			426			745			951	
Travel Time (s)		10.3			5.3			9.2			11.8	
Peak Hour Factor	0.80	0.80	0.80	0.60	0.60	0.60	0.89	0.89	0.89	0.86	0.86	0.86
Heavy Vehicles (%)	1%	1%	1%	0%	0%	25%	0%	3%	16%	1%	1%	1%
Adj. Flow (vph)	566	16	16	8	15	7	0	98	35	7	137	16
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	598	0	0	30	0	0	98	35	0	160	0
Turn Type	Perm	NA		Perm	NA			NA	Perm	Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4		4	8		
Minimum Split (s)	22.5	22.5		22.5	22.5		22.5	22.5	22.5	22.5	22.5	
Total Split (s)	77.0	77.0		77.0	77.0		43.0	43.0	43.0	43.0	43.0	
Total Split (%)	64.2%	64.2%		64.2%	64.2%		35.8%	35.8%	35.8%	35.8%	35.8%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0	0.0		0.0	
Total Lost Time (s)		4.5			4.5			4.5	4.5		4.5	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		72.5			72.5			38.5	38.5		38.5	
Actuated g/C Ratio		0.60			0.60			0.32	0.32		0.32	
v/c Ratio		0.74			0.03			0.17	0.07		0.27	
Control Delay		23.8			8.0			30.2	9.5		30.8	
Queue Delay		0.0			0.0			0.0	0.0		0.0	
Total Delay		23.8			8.0			30.2	9.5		30.8	
LOS		C			A			C	A		C	
Approach Delay		23.8			8.0			24.8			30.8	
Approach LOS		C			A			C			C	
Queue Length 50th (ft)		310			7			54	0		89	
Queue Length 95th (ft)		367			12			96	23		139	
Internal Link Dist (ft)		602			346			665			871	
Turn Bay Length (ft)									70			
Base Capacity (vph)		811			938			591	470		593	

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
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		0.74			0.03			0.17	0.07		0.27	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 60	
Control Type: Pretimed	
Maximum v/c Ratio: 0.74	
Intersection Signal Delay: 24.6	Intersection LOS: C
Intersection Capacity Utilization 52.7%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4071: 15 Mile Rd & Verona Rd



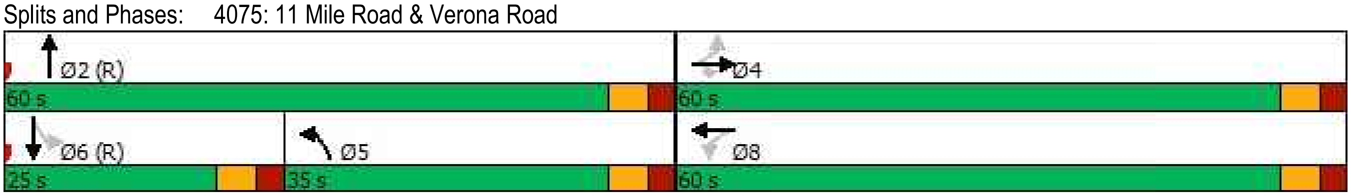
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	116	95	17	537	19	93	68	13	10	82	8
Future Volume (vph)	11	116	95	17	537	19	93	68	13	10	82	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	190		70	190		0	140		0	215		0
Storage Lanes	1		1	1		0	2		0	1		0
Taper Length (ft)	115			140			200			165		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.995			0.976			0.987	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	1900	1468	1805	1887	0	3072	1854	0	1687	1753	0
Flt Permitted	0.185			0.663			0.950			0.697		
Satd. Flow (perm)	352	1900	1468	1260	1887	0	3072	1854	0	1238	1753	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			120		2			10			3	
Link Speed (mph)		55			55			45			55	
Link Distance (ft)		519			1585			1015			821	
Travel Time (s)		6.4			19.6			15.4			10.2	
Peak Hour Factor	0.79	0.79	0.79	0.87	0.87	0.87	0.87	0.87	0.87	0.66	0.66	0.66
Heavy Vehicles (%)	0%	0%	10%	0%	0%	5%	14%	0%	0%	7%	7%	7%
Adj. Flow (vph)	14	147	120	20	617	22	107	78	15	15	124	12
Shared Lane Traffic (%)												
Lane Group Flow (vph)	14	147	120	20	639	0	107	93	0	15	136	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Perm	NA	
Protected Phases		4			8		5	2			6	
Permitted Phases	4		4	8						6		
Minimum Split (s)	25.0	25.0	25.0	25.0	25.0		16.0	25.0		25.0	25.0	
Total Split (s)	60.0	60.0	60.0	60.0	60.0		35.0	60.0		25.0	25.0	
Total Split (%)	50.0%	50.0%	50.0%	50.0%	50.0%		29.2%	50.0%		20.8%	20.8%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	2.5	2.5	2.5	2.5	2.5		2.5	2.5		2.5	2.5	
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)	6.0	6.0	6.0	6.0	6.0		6.0	6.0		6.0	6.0	
Lead/Lag							Lag			Lead	Lead	
Lead-Lag Optimize?							Yes			Yes	Yes	
Act Effct Green (s)	54.0	54.0	54.0	54.0	54.0		29.0	54.0		19.0	19.0	
Actuated g/C Ratio	0.45	0.45	0.45	0.45	0.45		0.24	0.45		0.16	0.16	
v/c Ratio	0.09	0.17	0.17	0.04	0.75		0.14	0.11		0.08	0.49	
Control Delay	20.9	20.4	3.9	18.8	34.2		36.4	17.5		44.3	51.6	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	20.9	20.4	3.9	18.8	34.2		36.4	17.5		44.3	51.6	
LOS	C	C	A	B	C		D	B		D	D	
Approach Delay		13.4			33.7			27.6			50.9	
Approach LOS		B			C			C			D	
Queue Length 50th (ft)	6	66	0	8	401		33	36		10	95	
Queue Length 95th (ft)	18	94	23	23	522		56	67		22	113	
Internal Link Dist (ft)		439			1505			935			741	
Turn Bay Length (ft)	190		70	190			140			215		
Base Capacity (vph)	158	855	726	567	850		742	839		196	280	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0	0	0	0		0	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	0.17	0.17	0.04	0.75		0.14	0.11		0.08	0.49	

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green
Natural Cycle: 75
Control Type: Pretimed
Maximum v/c Ratio: 0.75
Intersection Signal Delay: 30.3 Intersection LOS: C
Intersection Capacity Utilization 48.7% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 4075: 11 Mile Road & Verona Road



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	815	143	0	231
Future Volume (vph)	0	0	815	143	0	231
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200			300	245	245
Storage Lanes	0			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.978			0.865
Flt Protected						
Satd. Flow (prot)	0	0	3332	0	0	1644
Flt Permitted						
Satd. Flow (perm)	0	0	3332	0	0	1644
Link Speed (mph)		55	55		25	
Link Distance (ft)		509	395		760	
Travel Time (s)		6.3	4.9		20.7	
Peak Hour Factor	0.88	0.88	0.91	0.91	0.79	0.79
Heavy Vehicles (%)	1%	1%	7%	0%	0%	0%
Adj. Flow (vph)	0	0	896	157	0	292
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1053	0	0	292
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 48.1% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	801	43	0	157
Future Volume (vph)	0	0	801	43	0	157
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	175			50	0	0
Storage Lanes	0			0	0	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.992			0.865
Flt Protected						
Satd. Flow (prot)	0	0	3358	0	0	1565
Flt Permitted						
Satd. Flow (perm)	0	0	3358	0	0	1565
Link Speed (mph)		55	55		25	
Link Distance (ft)		395	586		185	
Travel Time (s)		4.9	7.3		5.0	
Peak Hour Factor	0.90	0.90	0.95	0.95	0.70	0.70
Heavy Vehicles (%)	1%	1%	7%	0%	5%	5%
Adj. Flow (vph)	0	0	843	45	0	224
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	888	0	0	224
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 39.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	837	12	0	7
Future Volume (vph)	0	0	837	12	0	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150			600	0	0
Storage Lanes	0			0	0	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.998			0.865
Flt Protected						
Satd. Flow (prot)	0	0	3370	0	0	1644
Flt Permitted						
Satd. Flow (perm)	0	0	3370	0	0	1644
Link Speed (mph)		55	55		25	
Link Distance (ft)		586	607		1086	
Travel Time (s)		7.3	7.5		29.6	
Peak Hour Factor	0.83	0.83	0.92	0.92	0.60	0.60
Heavy Vehicles (%)	10%	1%	7%	0%	33%	0%
Adj. Flow (vph)	0	0	910	13	0	12
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	923	0	0	12
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 33.5% ICU Level of Service A
Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	571	8	0	7
Future Volume (vph)	0	0	571	8	0	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.998			0.865
Flt Protected						
Satd. Flow (prot)	0	0	3532	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	0	3532	0	0	1611
Link Speed (mph)		55	55		55	
Link Distance (ft)		538	1254		1399	
Travel Time (s)		6.7	15.5		17.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	621	9	0	8
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	630	0	0	8
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 26.0% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	0	5	0	495	0	0	58	0
Future Volume (vph)	0	0	0	0	0	5	0	495	0	0	58	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
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
Frt					0.865							
Flt Protected												
Satd. Flow (prot)	0	1863	0	0	1611	0	0	1863	0	0	1863	0
Flt Permitted												
Satd. Flow (perm)	0	1863	0	0	1611	0	0	1863	0	0	1863	0
Link Speed (mph)		45			45			25			45	
Link Distance (ft)		957			1038			516			593	
Travel Time (s)		14.5			15.7			14.1			9.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	0	5	0	538	0	0	63	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	5	0	0	538	0	0	63	0
Sign Control		Stop			Stop			Free			Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 36.1% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBT	EBR	WBL	WBT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	0	0	119	548	0	0
Future Volume (vph)	0	0	119	548	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.91	0.91	1.00	1.00
Frt						
Flt Protected				0.991		
Satd. Flow (prot)	0	0	0	5040	0	0
Flt Permitted				0.991		
Satd. Flow (perm)	0	0	0	5040	0	0
Link Speed (mph)	45			45	25	
Link Distance (ft)	183			382	263	
Travel Time (s)	2.8			5.8	7.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	129	596	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	725	0	0
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 35.2% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	1566	751	0	0	0	0
Future Volume (vph)	1566	751	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950	0.975				
Satd. Flow (prot)	1610	3305	0	0	0	0
Flt Permitted	0.950	0.975				
Satd. Flow (perm)	1610	3305	0	0	0	0
Link Speed (mph)		45	45		25	
Link Distance (ft)		619	209		329	
Travel Time (s)		9.4	3.2		9.0	
Peak Hour Factor	0.86	0.86	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1821	873	0	0	0	0
Shared Lane Traffic (%)	50%					
Lane Group Flow (vph)	910	1784	0	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary		
Area Type:	Other	
Control Type: Unsignalized		
Intersection Capacity Utilization 62.5%		ICU Level of Service B
Analysis Period (min) 15		

Lane Group	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations			↑↑	↱		
Traffic Volume (vph)	0	0	586	168	0	0
Future Volume (vph)	0	0	586	168	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	1.00
Frt				0.850		
Flt Protected						
Satd. Flow (prot)	0	0	3539	1583	0	0
Flt Permitted						
Satd. Flow (perm)	0	0	3539	1583	0	0
Link Speed (mph)		45	45		30	
Link Distance (ft)		213	315		137	
Travel Time (s)		3.2	4.8		3.1	
Peak Hour Factor	0.92	0.92	0.91	0.91	0.92	0.92
Adj. Flow (vph)	0	0	644	185	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	644	185	0	0
Sign Control		Stop	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 45.3%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	873	0	0	159	0
Future Volume (vph)	0	873	0	0	159	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3505	0	0	1787	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3505	0	0	1787	0
Link Speed (mph)		45	45		25	
Link Distance (ft)		309	168		108	
Travel Time (s)		4.7	2.5		2.9	
Peak Hour Factor	0.86	0.86	0.92	0.92	0.87	0.87
Heavy Vehicles (%)	3%	3%	2%	2%	1%	1%
Adj. Flow (vph)	0	1015	0	0	183	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1015	0	0	183	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 45.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	699	182	0
Future Volume (vph)	0	0	0	699	182	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	5036	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	5036	1770	0
Link Speed (mph)	45			45	25	
Link Distance (ft)	134			152	111	
Travel Time (s)	2.0			2.3	3.0	
Peak Hour Factor	0.92	0.92	0.89	0.89	0.94	0.94
Heavy Vehicles (%)	2%	2%	3%	3%	2%	2%
Adj. Flow (vph)	0	0	0	785	194	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	785	194	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 33.6%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	851	0	0	80	0
Future Volume (vph)	0	851	0	0	80	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3574	0	0	1787	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3574	0	0	1787	0
Link Speed (mph)		45	45		25	
Link Distance (ft)		222	290		102	
Travel Time (s)		3.4	4.4		2.8	
Peak Hour Factor	0.95	0.95	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	1%	1%	2%	2%	1%	1%
Adj. Flow (vph)	0	896	0	0	87	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	896	0	0	87	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 57.2%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	718	65	0
Future Volume (vph)	0	0	0	718	65	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	30			45	25	
Link Distance (ft)	114			1105	101	
Travel Time (s)	2.6			16.7	2.8	
Peak Hour Factor	0.92	0.92	0.88	0.88	0.94	0.94
Adj. Flow (vph)	0	0	0	816	69	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	816	69	0
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 53.1% ICU Level of Service A
Analysis Period (min) 15

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	53	265	31	4	200	12	14	37	3	13	81	35
Future Volume (vph)	53	265	31	4	200	12	14	37	3	13	81	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	80		0	80		0	110		0	115		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	180			180			140			175		
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
Frt		0.984			0.991			0.988			0.955	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	1870	0	1770	1846	0	1703	1771	0	1770	1779	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1805	1870	0	1770	1846	0	1703	1771	0	1770	1779	0
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		1365			1319			666			571	
Travel Time (s)		20.7			20.0			10.1			8.7	
Peak Hour Factor	0.94	0.94	0.94	0.88	0.88	0.88	0.78	0.78	0.78	0.91	0.91	0.91
Heavy Vehicles (%)	0%	0%	0%	2%	2%	2%	6%	6%	6%	2%	2%	2%
Adj. Flow (vph)	56	282	33	5	227	14	18	47	4	14	89	38
Shared Lane Traffic (%)												
Lane Group Flow (vph)	56	315	0	5	241	0	18	51	0	14	127	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 36.6% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBL2	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	SWL	SWR
Lane Configurations											
Traffic Volume (vph)	55	0	112	0	270	79	81	385	0	0	0
Future Volume (vph)	55	0	112	0	270	79	81	385	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	240	0		0	105		0	0	0
Storage Lanes		1	1	0		0	1		0	0	0
Taper Length (ft)		25		25			70			25	
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
Frt			0.850		0.969						
Flt Protected	0.950						0.950				
Satd. Flow (prot)	1687	0	1615	0	1805	0	1752	1845	0	0	0
Flt Permitted	0.950						0.950				
Satd. Flow (perm)	1687	0	1615	0	1805	0	1752	1845	0	0	0
Link Speed (mph)		25			45			45		25	
Link Distance (ft)		894			1167			685		897	
Travel Time (s)		24.4			17.7			10.4		24.5	
Peak Hour Factor	0.93	0.93	0.93	0.91	0.91	0.91	0.95	0.95	0.95	0.92	0.92
Heavy Vehicles (%)	7%	0%	0%	2%	2%	2%	3%	3%	3%	2%	2%
Adj. Flow (vph)	59	0	120	0	297	87	85	405	0	0	0
Shared Lane Traffic (%)											
Lane Group Flow (vph)	59	0	120	0	384	0	85	405	0	0	0
Sign Control		Stop			Free			Free		Stop	

Intersection Summary		
Area Type:	Other	
Control Type: Unsignalized		
Intersection Capacity Utilization 33.9%		ICU Level of Service A
Analysis Period (min) 15		

Lane Group	WBL2	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NER
Lane Configurations											
Traffic Volume (vph)	93	0	84	61	264	0	0	373	50	0	0
Future Volume (vph)	93	0	84	61	264	0	0	373	50	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	185	165		0	0		0	0	0
Storage Lanes		1	1	1		0	0		0	0	0
Taper Length (ft)		25		110			25			25	
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
Frt			0.850					0.984			
Flt Protected	0.950			0.950							
Satd. Flow (prot)	1805	0	1455	1752	1845	0	0	1815	0	0	0
Flt Permitted	0.950			0.950							
Satd. Flow (perm)	1805	0	1455	1752	1845	0	0	1815	0	0	0
Link Speed (mph)		25			45			45		25	
Link Distance (ft)		613			685			608		913	
Travel Time (s)		16.7			10.4			9.2		24.9	
Peak Hour Factor	0.81	0.81	0.81	0.87	0.87	0.87	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	11%	3%	3%	3%	3%	3%	3%	2%	2%
Adj. Flow (vph)	115	0	104	70	303	0	0	405	54	0	0
Shared Lane Traffic (%)											
Lane Group Flow (vph)	115	0	104	70	303	0	0	459	0	0	0
Sign Control		Stop			Free			Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 33.9% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	184	140	0	396	272	0
Future Volume (vph)	184	140	0	396	272	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.850				
Flt Protected	0.950					
Satd. Flow (prot)	1543	1553	0	3505	3374	0
Flt Permitted	0.950					
Satd. Flow (perm)	1543	1553	0	3505	3374	0
Link Speed (mph)	25			55	55	
Link Distance (ft)	119			105	620	
Travel Time (s)	3.2			1.3	7.7	
Peak Hour Factor	0.93	0.93	0.82	0.82	0.92	0.92
Heavy Vehicles (%)	17%	4%	0%	3%	7%	0%
Adj. Flow (vph)	198	151	0	483	296	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	198	151	0	483	296	0
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 27.8%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	396	61	35	377
Future Volume (vph)	0	0	396	61	35	377
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		340	0	
Storage Lanes	0	0		1	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	1.00	0.95	0.95
Frt				0.850		
Flt Protected						0.996
Satd. Flow (prot)	0	0	3505	1568	0	3383
Flt Permitted						0.996
Satd. Flow (perm)	0	0	3505	1568	0	3383
Link Speed (mph)	25		55			55
Link Distance (ft)	664		1109			105
Travel Time (s)	18.1		13.7			1.3
Peak Hour Factor	0.92	0.92	0.82	0.82	0.92	0.92
Heavy Vehicles (%)	2%	2%	3%	3%	20%	5%
Adj. Flow (vph)	0	0	483	74	38	410
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	483	74	0	448
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 29.1%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	WBL2	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NER
Lane Configurations											
Traffic Volume (vph)	52	0	60	0	352	0	0	220	86	0	0
Future Volume (vph)	52	0	60	0	352	0	0	220	86	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	205	0		0	0		135	0	0
Storage Lanes		1	1	0		0	0		1	0	0
Taper Length (ft)		25		25			25			25	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00
Frt			0.850						0.850		
Flt Protected	0.950										
Satd. Flow (prot)	1736	0	1380	0	3438	0	0	3343	1272	0	0
Flt Permitted	0.950										
Satd. Flow (perm)	1736	0	1380	0	3438	0	0	3343	1272	0	0
Link Speed (mph)		25			55			55		25	
Link Distance (ft)		296			230			1367		908	
Travel Time (s)		8.1			2.9			16.9		24.8	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.95	0.95	0.95	0.92	0.92
Heavy Vehicles (%)	4%	0%	17%	0%	5%	0%	0%	8%	27%	2%	2%
Adj. Flow (vph)	59	0	68	0	400	0	0	232	91	0	0
Shared Lane Traffic (%)											
Lane Group Flow (vph)	59	0	68	0	400	0	0	232	91	0	0
Sign Control		Stop			Free			Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 20.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	33	80	0	270	154	0
Future Volume (vph)	33	80	0	270	154	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				
Flt Protected	0.950					
Satd. Flow (prot)	1752	1077	0	1624	1696	0
Flt Permitted	0.950					
Satd. Flow (perm)	1752	1077	0	1624	1696	0
Link Speed (mph)	25			45	45	
Link Distance (ft)	189			1063	114	
Travel Time (s)	5.2			16.1	1.7	
Peak Hour Factor	0.74	0.74	0.93	0.93	0.89	0.89
Heavy Vehicles (%)	3%	50%	17%	17%	12%	12%
Adj. Flow (vph)	45	108	0	290	173	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	45	108	0	290	173	0
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 24.2%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	0	0	182	121	3	154
Future Volume (vph)	0	0	182	121	3	154
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.850		
Flt Protected						0.999
Satd. Flow (prot)	0	0	1624	1380	0	1689
Flt Permitted						0.999
Satd. Flow (perm)	0	0	1624	1380	0	1689
Link Speed (mph)	25		45			45
Link Distance (ft)	105		114			727
Travel Time (s)	2.9		1.7			11.0
Peak Hour Factor	0.92	0.92	0.93	0.93	0.89	0.89
Heavy Vehicles (%)	2%	2%	17%	17%	33%	12%
Adj. Flow (vph)	0	0	196	130	3	173
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	196	130	0	176
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 22.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBR	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	6	97	58	124	60	11
Future Volume (vph)	6	97	58	124	60	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	195	0	0			90
Storage Lanes	1	1	0			1
Taper Length (ft)	135		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				0.850
Flt Protected	0.950			0.984		
Satd. Flow (prot)	1570	1404	0	1615	1776	1509
Flt Permitted	0.950			0.984		
Satd. Flow (perm)	1570	1404	0	1615	1776	1509
Link Speed (mph)	25			45	45	
Link Distance (ft)	597			727	1165	
Travel Time (s)	16.3			11.0	17.7	
Peak Hour Factor	0.83	0.83	0.91	0.91	0.78	0.78
Heavy Vehicles (%)	15%	15%	43%	3%	7%	7%
Adj. Flow (vph)	7	117	64	136	77	14
Shared Lane Traffic (%)						
Lane Group Flow (vph)	7	117	0	200	77	14
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 26.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	18	649	18	0
Future Volume (vph)	0	0	18	649	18	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.91	0.91	1.00	1.00
Frt						
Flt Protected				0.999	0.950	
Satd. Flow (prot)	0	0	0	5080	1770	0
Flt Permitted				0.999	0.950	
Satd. Flow (perm)	0	0	0	5080	1770	0
Link Speed (mph)	45			45	25	
Link Distance (ft)	382			217	236	
Travel Time (s)	5.8			3.3	6.4	
Peak Hour Factor	0.90	0.90	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	20	705	20	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	725	20	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 22.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1032	0	0	0	0	30
Future Volume (vph)	1032	0	0	0	0	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	1.00	1.00	1.00	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	3539	0	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	3539	0	0	0	0	1611
Link Speed (mph)	45			45	25	
Link Distance (ft)	168			432	770	
Travel Time (s)	2.5			6.5	21.0	
Peak Hour Factor	0.87	0.87	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1186	0	0	0	0	33
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1186	0	0	0	0	33
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 46.3%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations			↑↑↑			↱
Traffic Volume (vph)	0	0	881	0	0	32
Future Volume (vph)	0	0	881	0	0	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.91	1.00	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	0	0	5036	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	0	5036	0	0	1611
Link Speed (mph)		45	45		25	
Link Distance (ft)		494	134		230	
Travel Time (s)		7.5	2.0		6.3	
Peak Hour Factor	0.92	0.92	0.89	0.89	0.92	0.92
Heavy Vehicles (%)	2%	2%	3%	3%	2%	2%
Adj. Flow (vph)	0	0	990	0	0	35
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	990	0	0	35
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 36.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations			↑↱			
Traffic Volume (vph)	0	0	733	50	0	0
Future Volume (vph)	0	0	733	50	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.990			
Flt Protected						
Satd. Flow (prot)	0	0	3504	0	0	0
Flt Permitted						
Satd. Flow (perm)	0	0	3504	0	0	0
Link Speed (mph)		30	45		25	
Link Distance (ft)		176	114		201	
Travel Time (s)		4.0	1.7		5.5	
Peak Hour Factor	0.92	0.92	0.88	0.88	0.92	0.92
Adj. Flow (vph)	0	0	833	57	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	890	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 30.3%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	NBT	NBR	SBL	SBT	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	352	228	0	272	0	0
Future Volume (vph)	352	228	0	272	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	1.00	0.95	1.00	1.00
Frt	0.941					
Flt Protected						
Satd. Flow (prot)	3164	0	0	3343	0	0
Flt Permitted						
Satd. Flow (perm)	3164	0	0	3343	0	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	620			230	1088	
Travel Time (s)	7.7			2.9	29.7	
Peak Hour Factor	0.88	0.88	0.95	0.95	0.92	0.92
Heavy Vehicles (%)	5%	11%	8%	8%	2%	2%
Adj. Flow (vph)	400	259	0	286	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	659	0	0	286	0	0
Sign Control	Free			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 20.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	32	701	0	0	0	0	0	48	29
Future Volume (vph)	0	0	0	32	701	0	0	0	0	0	48	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	165		0	0		0	0		0
Storage Lanes	0		0	1		0	0		0	0		0
Taper Length (ft)	25			85			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt											0.949	
Flt Protected				0.950								
Satd. Flow (prot)	0	0	0	1770	3539	0	0	0	0	0	1785	0
Flt Permitted				0.950								
Satd. Flow (perm)	0	0	0	1770	3539	0	0	0	0	0	1785	0
Link Speed (mph)		30			45			30			30	
Link Distance (ft)		212			176			102			496	
Travel Time (s)		4.8			2.7			2.3			11.3	
Peak Hour Factor	0.92	0.92	0.92	0.86	0.86	0.86	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	1%	1%	1%
Adj. Flow (vph)	0	0	0	37	815	0	0	0	0	0	52	32
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	37	815	0	0	0	0	0	84	0
Sign Control		Free			Free			Yield			Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 30.3% ICU Level of Service A

Analysis Period (min) 15

Lane Group	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	490	0	0	0	1273
Future Volume (vph)	0	490	0	0	0	1273
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	0.88
Frt						0.850
Flt Protected						
Satd. Flow (prot)	0	3539	0	0	0	2787
Flt Permitted						
Satd. Flow (perm)	0	3539	0	0	0	2787
Link Speed (mph)		55	55		55	
Link Distance (ft)		434	1242		1194	
Travel Time (s)		5.4	15.4		14.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	533	0	0	0	1384
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	533	0	0	0	1384
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 47.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	0	119	0	0	360
Future Volume (vph)	0	0	119	0	0	360
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	0	0	1863	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	0	1863	0	0	1611
Link Speed (mph)		25	25		30	
Link Distance (ft)		1199	263		174	
Travel Time (s)		32.7	7.2		4.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.90	0.90
Adj. Flow (vph)	0	0	129	0	0	400
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	129	0	0	400
Sign Control		Free	Yield		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 35.2%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	WBL	WBR	NBL	NBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	168	1566	0	0	0
Future Volume (vph)	0	168	1566	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.97	1.00	1.00	1.00
Frt		0.865				
Flt Protected			0.950			
Satd. Flow (prot)	0	1627	3303	0	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	1627	3303	0	0	0
Link Speed (mph)	45		45		45	
Link Distance (ft)	255		329		551	
Travel Time (s)	3.9		5.0		8.3	
Peak Hour Factor	0.91	0.91	0.93	0.93	0.92	0.92
Heavy Vehicles (%)	1%	1%	6%	6%	2%	2%
Adj. Flow (vph)	0	185	1684	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	185	1684	0	0	0
Sign Control	Yield		Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 61.3%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	159	754	0	0
Future Volume (vph)	0	0	159	754	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	450		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			85		25	
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	5085	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	5085	0	0
Link Speed (mph)	45			45	30	
Link Distance (ft)	315			494	108	
Travel Time (s)	4.8			7.5	2.5	
Peak Hour Factor	0.92	0.92	0.87	0.87	0.92	0.92
Adj. Flow (vph)	0	0	183	867	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	183	867	0	0
Sign Control	Free			Free	Stop	

Intersection Summary		
Area Type:	Other	
Control Type: Unsignalized		
Intersection Capacity Utilization 40.0%		ICU Level of Service A
Analysis Period (min) 15		

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	182	880	0	0	0	0
Future Volume (vph)	182	880	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	275			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	110				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		45	45		30	
Link Distance (ft)		432	161		111	
Travel Time (s)		6.5	2.4		2.5	
Peak Hour Factor	0.94	0.94	0.92	0.92	0.92	0.92
Adj. Flow (vph)	194	936	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	194	936	0	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 44.5%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	102	0	0	0	129
Future Volume (vph)	0	102	0	0	0	129
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	0.76
Frt						0.850
Flt Protected						
Satd. Flow (prot)	0	3539	0	0	0	3610
Flt Permitted						
Satd. Flow (perm)	0	3539	0	0	0	3610
Link Speed (mph)		55	55		45	
Link Distance (ft)		1093	655		773	
Travel Time (s)		13.5	8.1		11.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	111	0	0	0	140
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	111	0	0	0	140
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 6.7%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	65	866	0	0	0	0
Future Volume (vph)	65	866	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	180			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	75				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		45	45		30	
Link Distance (ft)		290	1089		101	
Travel Time (s)		4.4	16.5		2.3	
Peak Hour Factor	0.94	0.94	0.92	0.92	0.92	0.92
Adj. Flow (vph)	69	921	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	69	921	0	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 50.5%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	2205	360	0	0	0	0
Future Volume (vph)	2205	360	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	1.00	1.00	1.00	1.00
Frt	0.979					
Flt Protected						
Satd. Flow (prot)	4979	0	0	0	0	0
Flt Permitted						
Satd. Flow (perm)	4979	0	0	0	0	0
Link Speed (mph)	45			45	30	
Link Distance (ft)	311			156	174	
Travel Time (s)	4.7			2.4	4.0	
Peak Hour Factor	0.90	0.90	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2450	400	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	2850	0	0	0	0	0
Sign Control	Free			Stop	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 63.2%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	NBT	NBR	SBL	SBT	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	0	0	112	36	0	0
Future Volume (vph)	0	0	112	36	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	500		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			100		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	3539	0	0
Link Speed (mph)	30			25	25	
Link Distance (ft)	266			1471	301	
Travel Time (s)	6.0			40.1	8.2	
Peak Hour Factor	0.92	0.92	0.75	0.75	0.92	0.92
Adj. Flow (vph)	0	0	149	48	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	149	48	0	0
Sign Control	Stop			Free	Free	

Intersection Summary		
Area Type:	Other	
Control Type: Unsignalized		
Intersection Capacity Utilization 13.3%		ICU Level of Service A
Analysis Period (min) 15		

Lane Group	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	81	122	0	0	0	0
Future Volume (vph)	81	122	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected		0.980				
Satd. Flow (prot)	0	1825	0	0	0	0
Flt Permitted		0.980				
Satd. Flow (perm)	0	1825	0	0	0	0
Link Speed (mph)		25	30		25	
Link Distance (ft)		1207	315		252	
Travel Time (s)		32.9	7.2		6.9	
Peak Hour Factor	0.75	0.75	0.92	0.92	0.92	0.92
Adj. Flow (vph)	108	163	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	271	0	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 14.2% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	103	0	69	0	0
Future Volume (vph)	0	103	0	69	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.865		
Flt Protected						
Satd. Flow (prot)	0	1652	0	1191	0	0
Flt Permitted						
Satd. Flow (perm)	0	1652	0	1191	0	0
Link Speed (mph)		25	25		25	
Link Distance (ft)		995	597		1154	
Travel Time (s)		27.1	16.3		31.5	
Peak Hour Factor	0.83	0.83	0.89	0.89	0.92	0.92
Heavy Vehicles (%)	15%	15%	38%	38%	2%	2%
Adj. Flow (vph)	0	124	0	78	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	124	0	78	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 8.8%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	53	538	0	0
Future Volume (vph)	0	0	53	538	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	250		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	5085	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	5085	0	0
Link Speed (mph)	45			45	25	
Link Distance (ft)	894			534	137	
Travel Time (s)	13.5			8.1	3.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	58	585	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	58	585	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 54.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	3062	0	0	53	0
Future Volume (vph)	0	3062	0	0	53	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.86	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	6408	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	6408	0	0	1770	0
Link Speed (mph)		45	45		25	
Link Distance (ft)		744	1191		137	
Travel Time (s)		11.3	18.0		3.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	3328	0	0	58	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	3328	0	0	58	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 61.4%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	519	2596	0	0	0	0
Future Volume (vph)	519	2596	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	400			0	0	0
Storage Lanes	2			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	0.97	0.86	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	3433	6408	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	3433	6408	0	0	0	0
Link Speed (mph)		45	45		25	
Link Distance (ft)		1191	262		113	
Travel Time (s)		18.0	4.0		3.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	564	2822	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	564	2822	0	0	0	0
Sign Control		Free	Stop		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 55.8%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	119	509	0	0
Future Volume (vph)	0	0	119	509	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	250		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	5085	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	5085	0	0
Link Speed (mph)	45			45	25	
Link Distance (ft)	254			1016	123	
Travel Time (s)	3.8			15.4	3.4	
Peak Hour Factor	0.92	0.92	0.90	0.87	0.92	0.92
Adj. Flow (vph)	0	0	132	585	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	132	585	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 102.3%	ICU Level of Service G
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	44	2565	0	0	0	0
Future Volume (vph)	44	2565	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.91	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	5085	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	5085	0	0	0	0
Link Speed (mph)		45	45		30	
Link Distance (ft)		704	311		111	
Travel Time (s)		10.7	4.7		2.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	48	2788	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	48	2788	0	0	0	0
Sign Control		Free	Stop		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 69.2%	ICU Level of Service C
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑	↰	
Traffic Volume (vph)	0	0	0	1012	27	0
Future Volume (vph)	0	0	0	1012	27	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	30	
Link Distance (ft)	583			574	107	
Travel Time (s)	7.2			7.1	2.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	1100	29	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1100	29	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 54.0%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	27	699	0	0	0	0
Future Volume (vph)	27	699	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		30	
Link Distance (ft)		1122	576		107	
Travel Time (s)		13.9	7.1		2.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	29	760	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	29	760	0	0	0	0
Sign Control		Free	Stop		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 54.0%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations			↑↱			↱
Traffic Volume (vph)	0	0	1003	36	0	54
Future Volume (vph)	0	0	1003	36	0	54
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.995			0.865
Flt Protected						
Satd. Flow (prot)	0	0	3522	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	0	3522	0	0	1611
Link Speed (mph)		55	55		30	
Link Distance (ft)		590	583		121	
Travel Time (s)		7.3	7.2		2.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	1090	39	0	59
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1129	0	0	59
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 38.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	168	889	0	0
Future Volume (vph)	0	0	168	889	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	250		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	3539	0	0
Link Speed (mph)	55			55	30	
Link Distance (ft)	405			590	104	
Travel Time (s)	5.0			7.3	2.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	183	966	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	183	966	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 30.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	558	0	0	168	0
Future Volume (vph)	0	558	0	0	168	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	1770	0
Link Speed (mph)		55	55		30	
Link Distance (ft)		316	1122		104	
Travel Time (s)		3.9	13.9		2.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	607	0	0	183	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	607	0	0	183	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 46.7%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	67	886	0	0
Future Volume (vph)	0	0	67	886	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	250			0
Storage Lanes	0	0	2			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	0.97	0.91	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	3433	5085	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	3433	5085	0	0
Link Speed (mph)	45			55	30	
Link Distance (ft)	105			493	555	
Travel Time (s)	1.6			6.1	12.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	73	963	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	73	963	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 36.7%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	727	159	0	0	0	0
Future Volume (vph)	727	159	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.94	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	4990	1863	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	4990	1863	0	0	0	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		555	271		108	
Travel Time (s)		12.6	6.2		2.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	790	173	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	790	173	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 31.3% ICU Level of Service A
Analysis Period (min) 15

Lane Group	EBT	EBR	WBL	WBT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	73	0	0	0	0	159
Future Volume (vph)	73	0	0	0	0	159
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	1863	0	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	1863	0	0	0	0	1611
Link Speed (mph)	25			30	25	
Link Distance (ft)	287			1072	271	
Travel Time (s)	7.8			24.4	7.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	79	0	0	0	0	173
Shared Lane Traffic (%)						
Lane Group Flow (vph)	79	0	0	0	0	173
Sign Control	Yield			Free	Free	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 20.4% ICU Level of Service A
Analysis Period (min) 15

Lane Group	NBT	NBR	SBL	SBT	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	0	0	73	472	0	0
Future Volume (vph)	0	0	73	472	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.91	0.91	1.00	1.00
Frt						
Flt Protected				0.993		
Satd. Flow (prot)	0	0	0	5030	0	0
Flt Permitted				0.993		
Satd. Flow (perm)	0	0	0	5030	0	0
Link Speed (mph)	45			45	45	
Link Distance (ft)	194			406	287	
Travel Time (s)	2.9			6.2	4.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	5%	2%	2%	2%
Adj. Flow (vph)	0	0	79	513	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	592	0	0
Sign Control	Free			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 20.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	104	110	0	0	0	0
Future Volume (vph)	104	110	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1719	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1719	3539	0	0	0	0
Link Speed (mph)		25	25		25	
Link Distance (ft)		879	346		271	
Travel Time (s)		24.0	9.4		7.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	2%	2%	2%	2%	2%
Adj. Flow (vph)	113	120	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	113	120	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 29.7%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	79	0	0	81
Future Volume (vph)	0	0	79	0	0	81
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	0	0	1863	0	0	1565
Flt Permitted						
Satd. Flow (perm)	0	0	1863	0	0	1565
Link Speed (mph)		30	45		45	
Link Distance (ft)		874	182		254	
Travel Time (s)		19.9	2.8		3.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	5%
Adj. Flow (vph)	0	0	86	0	0	88
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	86	0	0	88
Sign Control		Free	Free		Yield	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 32.7%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBR	SBL	SBR	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	0	0	0	0	79	752
Future Volume (vph)	0	0	0	0	79	752
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.91
Frt					0.892	0.850
Flt Protected					0.986	
Satd. Flow (prot)	0	0	0	0	1604	2799
Flt Permitted					0.986	
Satd. Flow (perm)	0	0	0	0	1604	2799
Link Speed (mph)	30		30		30	
Link Distance (ft)	182		207		337	
Travel Time (s)	4.1		4.7		7.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	5%
Adj. Flow (vph)	0	0	0	0	86	817
Shared Lane Traffic (%)						27%
Lane Group Flow (vph)	0	0	0	0	307	596
Sign Control	Stop		Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 32.7%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↱					
Traffic Volume (vph)	446	81	0	0	0	0
Future Volume (vph)	446	81	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00
Frt	0.977					
Flt Protected						
Satd. Flow (prot)	3359	0	0	0	0	0
Flt Permitted						
Satd. Flow (perm)	3359	0	0	0	0	0
Link Speed (mph)	30			45	25	
Link Distance (ft)	306			190	254	
Travel Time (s)	7.0			2.9	6.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	5%	2%	2%	2%	2%
Adj. Flow (vph)	485	88	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	573	0	0	0	0	0
Sign Control	Free			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 36.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	0	99	151	0	0
Future Volume (vph)	0	0	99	151	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			250	0	0
Storage Lanes	0			1	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	1.00
Frt				0.850		
Flt Protected						
Satd. Flow (prot)	0	0	3539	1538	0	0
Flt Permitted						
Satd. Flow (perm)	0	0	3539	1538	0	0
Link Speed (mph)		25	25		25	
Link Distance (ft)		241	1465		317	
Travel Time (s)		6.6	40.0		8.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	5%	2%	2%
Adj. Flow (vph)	0	0	108	164	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	108	164	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 13.3%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑↑	↰	
Traffic Volume (vph)	0	0	0	903	64	0
Future Volume (vph)	0	0	0	903	64	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	4940	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	4940	1770	0
Link Speed (mph)	55			30	25	
Link Distance (ft)	598			415	105	
Travel Time (s)	7.4			9.4	2.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	5%	2%	2%
Adj. Flow (vph)	0	0	0	982	70	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	982	70	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 38.7%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	64	527	0	0	0	0
Future Volume (vph)	64	527	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3438	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3438	0	0	0	0
Link Speed (mph)		55	30		25	
Link Distance (ft)		597	306		105	
Travel Time (s)		7.4	7.0		2.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	5%	2%	2%	2%	2%
Adj. Flow (vph)	70	573	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	70	573	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 38.7% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑	↰	
Traffic Volume (vph)	0	0	0	680	0	0
Future Volume (vph)	0	0	0	680	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	0	0	0	3539	1863	0
Flt Permitted						
Satd. Flow (perm)	0	0	0	3539	1863	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	586			210	99	
Travel Time (s)	7.3			2.6	2.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	739	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	739	0	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 28.8%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	384	0	0	0	0
Future Volume (vph)	0	384	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	1863	3539	0	0	0	0
Flt Permitted						
Satd. Flow (perm)	1863	3539	0	0	0	0
Link Speed (mph)		55	55		25	
Link Distance (ft)		589	212		99	
Travel Time (s)		7.3	2.6		2.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	417	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	417	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 28.8%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	680	0	0
Future Volume (vph)	0	0	0	680	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	0	0	0	3539	0	0
Flt Permitted						
Satd. Flow (perm)	0	0	0	3539	0	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	723			586	81	
Travel Time (s)	9.0			7.3	2.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	739	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	739	0	0
Sign Control	Free			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 28.8%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	384	0	0	0	0	0	0	0	0	0	0
Future Volume (vph)	0	384	0	0	0	0	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	3539	0	0	0	0	0	0	1863	0	1863	0
Flt Permitted												
Satd. Flow (perm)	0	3539	0	0	0	0	0	0	1863	0	1863	0
Link Speed (mph)		55			55			25			25	
Link Distance (ft)		719			589			84			81	
Travel Time (s)		8.9			7.3			2.3			2.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	417	0	0	0	0	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	417	0	0	0	0	0	0	0	0	0	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 22.1%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	0	384	0	680	0	0
Future Volume (vph)	0	384	0	680	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.88	1.00	0.95	1.00	1.00
Frt		0.850				
Flt Protected						
Satd. Flow (prot)	0	2787	0	3539	0	0
Flt Permitted						
Satd. Flow (perm)	0	2787	0	3539	0	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	997			723	719	
Travel Time (s)	12.4			9.0	19.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	417	0	739	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	417	0	739	0	0
Sign Control	Free			Free	Free	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 22.1% ICU Level of Service A
Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	286	413	0	0	0	0
Future Volume (vph)	286	413	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		55	
Link Distance (ft)		2077	2379		116	
Travel Time (s)		25.7	29.5		1.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	311	449	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	311	449	0	0	0	0
Sign Control		Free	Stop		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 38.1%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	0	0	0	563	286	0
Future Volume (vph)	0	0	0	563	286	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	607			2382	116	
Travel Time (s)	7.5			29.5	3.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	612	311	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	612	311	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 44.8%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	0	0	14	563	0	0
Future Volume (vph)	0	0	14	563	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	250		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	3539	0	0
Link Speed (mph)	55			55	55	
Link Distance (ft)	2382			560	108	
Travel Time (s)	29.5			6.9	1.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	15	612	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	15	612	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 25.7% ICU Level of Service A

Analysis Period (min) 15

Lane Group	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	0	413	0	0	14	0
Future Volume (vph)	0	413	0	0	14	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	1770	0
Link Speed (mph)		55	55		25	
Link Distance (ft)		2379	608		108	
Travel Time (s)		29.5	7.5		2.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	449	0	0	15	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	449	0	0	15	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 33.6%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	388	39	0	0	0	32
Future Volume (vph)	388	39	0	0	0	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		600	600		0	0
Storage Lanes		0	0		0	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00
Frt	0.986					0.865
Flt Protected						
Satd. Flow (prot)	3490	0	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	3490	0	0	0	0	1611
Link Speed (mph)	55			55	45	
Link Distance (ft)	608			628	1089	
Travel Time (s)	7.5			7.8	16.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	422	42	0	0	0	35
Shared Lane Traffic (%)						
Lane Group Flow (vph)	464	0	0	0	0	35
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 22.0%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑	↰	
Traffic Volume (vph)	0	0	0	568	9	0
Future Volume (vph)	0	0	0	568	9	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	645			3831	112	
Travel Time (s)	8.0			47.5	3.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	617	10	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	617	10	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 43.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	9	411	0	0	0	0
Future Volume (vph)	9	411	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		55	
Link Distance (ft)		628	3825		112	
Travel Time (s)		7.8	47.4		1.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	10	447	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	10	447	0	0	0	0
Sign Control		Free	Stop		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 33.7%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	10	568	0	0
Future Volume (vph)	0	0	10	568	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	250		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	3539	0	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	3831			538	97	
Travel Time (s)	47.5			6.7	2.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	11	617	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	11	617	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 21.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	411	0	0	10	0
Future Volume (vph)	0	411	0	0	10	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	1770	0
Link Speed (mph)		55	55		25	
Link Distance (ft)		3825	591		97	
Travel Time (s)		47.4	7.3		2.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	447	0	0	11	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	447	0	0	11	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 33.7%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↱					↱
Traffic Volume (vph)	409	12	0	0	0	16
Future Volume (vph)	409	12	0	0	0	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00
Frt	0.996					0.865
Flt Protected						
Satd. Flow (prot)	3525	0	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	3525	0	0	0	0	1611
Link Speed (mph)	55			55	45	
Link Distance (ft)	591			1206	1073	
Travel Time (s)	7.3			15.0	16.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	445	13	0	0	0	17
Shared Lane Traffic (%)						
Lane Group Flow (vph)	458	0	0	0	0	17
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 21.7%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑	↰	
Traffic Volume (vph)	0	0	0	570	9	0
Future Volume (vph)	0	0	0	570	9	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	1254			1793	105	
Travel Time (s)	15.5			22.2	2.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	620	10	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	620	10	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 44.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	9	416	0	0	0	0
Future Volume (vph)	9	416	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		55	
Link Distance (ft)		1206	1786		105	
Travel Time (s)		15.0	22.1		1.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	10	452	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	10	452	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary		
Area Type:	Other	
Control Type: Unsignalized		
Intersection Capacity Utilization 33.9%		ICU Level of Service A
Analysis Period (min) 15		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	570	0	0
Future Volume (vph)	0	0	0	570	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	500		0	0
Storage Lanes		0	2		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	0.97	0.95	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	0	0	3614	3539	0	0
Flt Permitted						
Satd. Flow (perm)	0	0	3614	3539	0	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	1793			596	109	
Travel Time (s)	22.2			7.4	3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	620	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	620	0	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 24.3%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑	↰	
Traffic Volume (vph)	0	0	0	517	53	0
Future Volume (vph)	0	0	0	517	53	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	631			2681	109	
Travel Time (s)	7.8			33.2	3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	562	58	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	562	58	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 24.3%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	53	965	0	0	0	0
Future Volume (vph)	53	965	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		55	
Link Distance (ft)		627	2678		109	
Travel Time (s)		7.8	33.2		1.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	58	1049	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	58	1049	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary		
Area Type:	Other	
Control Type: Unsignalized		
Intersection Capacity Utilization 47.6%		ICU Level of Service A
Analysis Period (min) 15		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	517	0	0
Future Volume (vph)	0	0	0	517	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	500		0	0
Storage Lanes		0	2		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	0.97	0.95	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	0	0	3614	3539	0	0
Flt Permitted						
Satd. Flow (perm)	0	0	3614	3539	0	0
Link Speed (mph)	55			55	55	
Link Distance (ft)	2681			671	109	
Travel Time (s)	33.2			8.3	1.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	562	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	562	0	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 23.5%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑	↰	
Traffic Volume (vph)	0	0	0	490	27	0
Future Volume (vph)	0	0	0	490	27	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	654			797	95	
Travel Time (s)	8.1			9.9	2.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	533	29	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	533	29	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 23.5%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	27	1273	0	0	0	0
Future Volume (vph)	27	1273	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		55	
Link Distance (ft)		659	784		95	
Travel Time (s)		8.2	9.7		1.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	29	1384	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	29	1384	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 55.4%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↱					↱
Traffic Volume (vph)	681	18	0	0	0	18
Future Volume (vph)	681	18	0	0	0	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00
Frt	0.996					0.865
Flt Protected						
Satd. Flow (prot)	3525	0	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	3525	0	0	0	0	1611
Link Speed (mph)	55			55	25	
Link Distance (ft)	576			2077	205	
Travel Time (s)	7.1			25.7	5.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	740	20	0	0	0	20
Shared Lane Traffic (%)						
Lane Group Flow (vph)	760	0	0	0	0	20
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 29.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	1798	0	0	1264	0
Future Volume (vph)	0	1798	0	0	1264	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	0.97	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	3433	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	3433	0
Link Speed (mph)		45	45		45	
Link Distance (ft)		1021	744		215	
Travel Time (s)		15.5	11.3		3.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1954	0	0	1374	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1954	0	0	1374	0
Sign Control		Free	Stop		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 92.4%	ICU Level of Service F
Analysis Period (min) 15	

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	0	0	520	129
Future Volume (vph)	0	0	0	0	520	129
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		0	250	
Storage Lanes	0	0		0	2	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.97	0.91
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	0	3433	5085
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	0	3433	5085
Link Speed (mph)	55		45			30
Link Distance (ft)	167		773			587
Travel Time (s)	2.1		11.7			13.3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	565	140
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	0	565	140
Sign Control	Stop		Stop			Free

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 27.1% ICU Level of Service A

Analysis Period (min) 15

1005: WB M-96 (Michigan Avenue) & SB I-69 Off-Ramp (Push Button) Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	4.2	11.0	4.6

1007: EB M-96 (Michigan Avenue) (Push Button) & SB I-69 Off-Ramp/EB M-96 (Michigan Avenue) Perfo

Approach	EB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	29.0	2.8	4.1

1008: WB M-96 (Michigan Avenue)/NB I-69 Off-Ramp & WB M-96 (Michigan Avenue) (Push Button) Perf

Approach	WB	SW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	17.9	2.0	4.1

1009: WB M-96 (Michigan Avenue) (Push Button)/WB M-96 (Michigan Avenue) & EB M-96 (Michigan Ave

Approach	EB	SW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	16.9	13.7	15.5

1010: NB I-69 Off-Ramp (Push Button) & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	3.6	20.6	6.1

3003: M-227/West Drive & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.1	0.0
Total Del/Veh (s)	7.7	5.9	18.7	9.4

3093: M-227/West Drive & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	0.0	2.0	0.0	0.3
Total Del/Veh (s)	3.8	30.8	2.9	7.4

4001: M-96 (Michigan Avenue) & WB Main Entrance/WB M-96 (Michigan Avenue) Performance by appro

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.1	19.5	14.0

4003: EB to WB Xover E of 15 Mile Rd (North) & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	146.4	74.4
Total Del/Veh (s)	0.8	39.8	20.2

4004: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	3.1	3.1

4005: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	6.0	6.0

4006: M-311 (11 Mile Rd) & Site Driveway West Performance by approach

Approach	NB	SB	All
Denied Del/Veh (s)	0.1	0.0	0.1
Total Del/Veh (s)	0.2	0.5	0.3

4007: M-311 (11 Mile Rd) & F Drive N Performance by approach

Approach	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.1	0.2	0.1

4010: EB M-96 (Michigan Avenue)/EB M-96 (Michigan Avenue) (Push Button) & WB M-96 (Michigan Ave

Approach	WB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	27.1	13.7	16.4

4030: NB M-311 (11 Mile Rd)/WB M-96 (Michigan Avenue)/11 Mile Rd (North) & EB M-96 (Michigan Ave

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	25.9	8.3	22.9

4031: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & WB M-96 (Michigan Avenue) Performance by a

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	24.2	1.9	22.7

4033: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & NB to SB Xover N of M-96 (Michigan Avenue) P

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	24.4	1.9	4.3

4034: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & EB I-94 Off-ramp Performance by approach

Approach	SB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.9	19.5	5.2

4035: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & WB M-96 (Michigan Avenue)/11 Mile Rd (North)

Approach	SB	NW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	16.3	31.6	25.6

4036: EB I-94 Off-ramp & WB M-96 (Michigan Avenue)/11 Mile Rd (North) Performance by approach

Approach	NB	NW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	17.2	1.6	3.4

4037: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & WB I-94 Off-ramp Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.2	18.2	4.6

4038: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & EB M-96 (Michigan Avenue)/11 Mile Rd (South)

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	16.9	30.9	25.8

4039: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & WB I-94 Off-ramp Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	16.4	4.3	6.4

4040: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & 11 Mile Rd Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	16.9	2.5	11.9

4041: 11 Mile Rd & WB M-96 (Michigan Avenue)/11 Mile Rd (North) Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	16.0	23.8	17.7

4042: 11 Mile Rd & H Dr N Performance by approach

Approach	NE	SW	All
Denied Del/Veh (s)	0.0	0.2	0.1
Total Del/Veh (s)	2.6	3.5	3.0

4050: Prop Site Drive E & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	4.3	43.5	14.6

4051: Prop Site Drive W & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.1
Total Del/Veh (s)	7.9	37.6	25.7

4061: WB M-96 (Michigan Avenue) & Firekeepers Main Drive Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	3.8	48.7	8.8

4065: WB M-96 (Michigan Avenue) & 15 Mile Rd (North) Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	4.5	36.8	6.1

4066: EB M-96 (Michigan Avenue) & WB to EB Xover W of 15 Mile Rd (South) Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	7.1	58.1	9.4

4067: 15 Mile Rd (South) & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.4	0.0
Total Del/Veh (s)	12.2	45.5	14.2

4068: EB to WB Xover E of 15 Mile Rd (South) & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.1	33.5	4.4

4070: M-311 (11 Mile Rd) & Site Drive East Performance by approach

Approach	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.1	0.1	0.1

4071: 15 Mile Rd & Verona Rd Performance by approach

Approach	NB	SB	SE	NW	All
Denied Del/Veh (s)	0.5	0.1	1.3	0.2	0.5
Total Del/Veh (s)	16.3	9.1	21.0	27.2	18.9

4075: 11 Mile Road & Verona Road Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.6	2.2	0.4	0.8
Total Del/Veh (s)	13.8	29.0	26.7	45.1	27.0

9002: WB M-96 (Michigan Avenue) & Firekeepers Gas Station Driveway Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.3	0.0
Total Del/Veh (s)	2.0	8.8	3.2

9003: WB M-96 (Michigan Avenue) & Firekeepers E Drive Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.9	8.4	2.9

9004: WB M-96 (Michigan Avenue) & Ackerson Drive Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	1.3	6.6	1.4

9006: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	1.0	2.7	1.0

9008: 15 Mile Rd (North) & Old M-96 (Michigan Ave) Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.0	0.0	0.0
Total Del/Veh (s)	3.5	0.7	0.1	0.6

9013: SB I-69 On-Ramp & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	8.4	8.4

9016: EB M-96 (Michigan Avenue) & NB I-69 On-Ramp Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	15.2	15.2

9017: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	1.2	1.2

9018: EB M-96 (Michigan Avenue) & WB to EB Xover W of M-227/West Drive Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	1.1	9.4	2.4

9019: EB to WB Xover W of M-227/West Drive & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.4	8.6	2.9

9020: EB M-96 (Michigan Avenue) & WB to EB Xover E of M-227/West Drive Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.0	8.8	1.6

9021: EB to WB Xover E of M-227/West Drive & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.2	0.0	0.2
Total Del/Veh (s)	1.0	7.3	1.6

9023: M-311 (11 Mile Rd) & B Drive North Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.8	0.3	1.3	0.6	0.6
Total Del/Veh (s)	1.2	0.9	8.5	8.9	2.9

9025: M-294 (Beadle Lake Road) & EB I-94 Off-Ramp & EB I-94 On-Ramp Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	2.5	0.3	0.0	0.5
Total Del/Veh (s)	6.6	1.5	1.9	2.6

9026: WB I-94 On-Ramp & M-294 (Beadle Lake Road) & WB I-94 Off-Ramp Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	2.2	0.0	0.3	0.6
Total Del/Veh (s)	7.1	1.6	1.4	2.6

9027: Old US-27 & EB I-94 to Old US-27 Off Ramp Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0
Total Del/Veh (s)	6.8	0.2	0.9	2.5

9028: Old US-27 & NB Old US-27 to EB I-94 On Ramp Performance by approach

Approach	NB	SB	All
Denied Del/Veh (s)	0.6	0.0	0.3
Total Del/Veh (s)	0.8	0.4	0.6

9029: SB Old US-27 WB I-94 On Ramp & Old US-27 & WB I-94 to Old US-27 Off Ramp Performance by

Approach	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	1.1	0.5
Total Del/Veh (s)	4.8	0.2	0.7	1.1

9030: I-94BL/Partello Rd & EB I-94 to I-94BL/Partello Off Ramp Performance by approach

Approach	SE	NE	SW	All
Denied Del/Veh (s)	0.0	0.2	0.0	0.1
Total Del/Veh (s)	4.7	1.5	0.2	1.7

9031: I-94BL/Partello Rd & I-94/Partello Rd to EB I-94 On Ramp Performance by approach

Approach	NE	SW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.2	0.7	0.4

9032: I-94BL/Partello Rd & WB I-94 to I-94/Partello Rd Performance by approach

Approach	EB	NE	SW	All
Denied Del/Veh (s)	0.0	0.0	1.0	0.2
Total Del/Veh (s)	3.5	1.3	0.5	1.8

9034: Dummy Node & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	1.3	5.0	1.3

9035: Dummy Node & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	0.5	9.3	0.8

9036: WB M-96 (Michigan Avenue) & Dummy Node Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	0.6	4.3	0.7

9037: WB M-96 (Michigan Avenue) & Dummy Node Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.4	0.4

9040: Old US-27 & NB Old US-27 to WB I-94 On Ramp Performance by approach

Approach	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.0	0.2	0.8

9041: WB to EB Xover E of M-227/West Drive/McDonald's Dr & WB M-96 (Michigan Avenue) Performanc

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	1.2	9.5	1.9

9128: M-96 (Michigan Avenue)/WB M-96 (Michigan Avenue) & EB M-96 (Michigan Avenue) Performance

Approach	NB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.1	7.0	5.3

9137: SB I-69 On-Ramp Performance by approach

Approach	SB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	6.2	0.4	1.8

9143: NB I-69 On-Ramp Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	14.5	3.1	4.2

9146: WB to EB Xover W of M-227/West Drive & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.7	0.7

9147: EB M-96 (Michigan Avenue) & EB to WB Xover W of M-227/West Drive Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	1.8	1.8

9150: M-311 (11 Mile Rd) /NB M-311 (11 Mile Rd) & SB M-311 (11 Mile Rd) Performance by approach

Approach	NB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.1	0.1	0.1

9151: EB M-96 (Michigan Avenue) & EB to WB Xover E of M-227/West Drive Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.5	0.5

9157: SB I-69 On-Ramp & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	6.6	6.6

9158: SB I-69 Off-Ramp (Push Button) & SB I-69 Off-Ramp Performance by approach

Approach	SB	All
Denied Del/Veh (s)	1.2	1.2
Total Del/Veh (s)	0.4	0.4

9159: NB I-69 Off-Ramp & NB I-69 Off-Ramp (Push Button) Performance by approach

Approach	NB	All
Denied Del/Veh (s)	0.2	0.2
Total Del/Veh (s)	1.5	1.5

9178: WB I-94 to BL-94/Partello Rd Off Ramp/WB I-94 to I-94/Partello Rd & BL-94/Partello Rd to WB I-94

Approach	EB	WB	All
Denied Del/Veh (s)	0.1	0.0	0.1
Total Del/Veh (s)	0.2	0.4	0.3

9304: WB to EB Xover W of 15 Mile Rd (North) & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	1.4	1.4

9305: EB M-96 (Michigan Avenue) & WB to EB Xover W of 15 Mile Rd (North) Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	5.7	69.3	6.6

9307: EB M-96 (Michigan Avenue) & EB to WB Xover E of 15 Mile Rd (North) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	28.4	28.4

9310: WB to EB Xover W of 15 Mile Rd (South) & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	1.8	1.8

9311: EB M-96 (Michigan Avenue) & EB to WB Xover E of 15 Mile Rd (South) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	5.5	5.5

9330: EB to WB Xover E of Old M-311 (11 Mile Rd) & WB M-96 (Michigan Avenue) Performance by appr

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.8	7.0	1.9

9331: EB M-96 (Michigan Avenue) & EB to WB Xover E of Old M-311 (11 Mile Rd) Performance by appro

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.2	2.2

9332: WB M-96 (Michigan Avenue) & Old M-311 (11 Mile Rd) Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.0	6.6	1.3

9336: WB to EB Xover W of Old M-311 (11 Mile Rd) & WB M-96 (Michigan Avenue) Performance by app

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.4	2.4

9337: EB M-96 (Michigan Avenue) & WB to EB Xover W of Old M-311 (11 Mile Rd) Performance by appr

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	4.6	6.9	5.2

9338: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & NB to SB Xover N of M-96 (Michigan Avenue) F

Approach	NB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	1.8	1.8

9339: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & EB I-94 On Ramp Performance by approach

Approach	NB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	6.4	6.4

9340: EB I-94 On Ramp Performance by approach

Approach	EB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	4.6	0.1	1.6

9342: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & EB I-94 On Ramp Performance by approach

Approach	SB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	7.5	7.5

9343: EB I-94 Off-ramp Performance by approach

Approach	EB	All
Denied Del/Veh (s)	1.8	1.8
Total Del/Veh (s)	0.9	0.9

9346: WB I-94 On Ramp Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.7	3.5	2.6

9347: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & WB I-94 On Ramp Performance by approach

Approach	NW	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	4.3	4.3

9348: WB I-94 On Ramp & EB M-96 (Michigan Avenue)/11 Mile Rd (South) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.7	0.7

9349: WB I-94 Off-ramp Performance by approach

Approach	WB	All
Denied Del/Veh (s)	1.3	1.3
Total Del/Veh (s)	0.6	0.6

9351: SB to NB Xover E of 11 Mile Rd & WB M-96 (Michigan Avenue)/11 Mile Rd (North) Performance b

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.2	3.8	1.3

9352: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & SB to NB Xover E of 11 Mile Rd Performance b

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	4.7	4.7

9354: EB to WB Xover W of 11 Mile Rd & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	3.5	3.5

9355: EB M-96 (Michigan Avenue) & EB to WB Xover W of 11 Mile Rd Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	1.8	1.8

9356: WB to EB Xover W of 11 Mile Rd & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.3	2.3

9357: EB M-96 (Michigan Avenue) & WB to EB Xover W of 11 Mile Rd Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.2	0.2

9359: EB M-96 (Michigan Avenue) & M-96 (Michigan Avenue)/WB M-96 (Michigan Avenue) Performance

Approach	EB	WB	All
Denied Del/Veh (s)	0.1	0.0	0.1
Total Del/Veh (s)	1.2	0.7	0.9

9381: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.8	2.8

9382: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.4	6.5	3.8

9383: WB M-96 (Michigan Avenue) Performance by approach

Approach	NW	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.5	0.5

9384: EB M-96 (Michigan Avenue) Performance by approach

Approach	SE	SW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.4	3.3	1.4

9385: Ceresco Road/12 Mile Road & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	0.8	2.7	0.9

9386: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.8	4.4	2.8

9387: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.5	0.5

9388: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.4	0.4

9389: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.8	4.5	1.9

9390: 13 Mile Rd & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	0.5	2.1	0.5

9392: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.1	4.4	1.2

9393: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.7	0.7

9394: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.3	0.3

9396: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.5	5.0	1.8

9397: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.3	2.3

9398: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.3	0.3

9400: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.3	5.0	0.5

9401: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.4	2.4

9410: Retail Drive & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	0.8	5.1	0.9

9415: EB Main Entrance/EB M-96 (Michigan Avenue) & M-96 (Michigan Avenue) Performance by approa

Approach	EB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.2	2.5	2.3

9416: SB M-311 (11 Mile Rd)/EB M-96 (Michigan Avenue)/11 Mile Rd (South) & EB M-96 (Michigan Aver

Approach	SB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.0	2.0

Total Network Performance

Denied Del/Veh (s)	6.9
Total Del/Veh (s)	62.3

Scenario M2&S2 (Inbound)

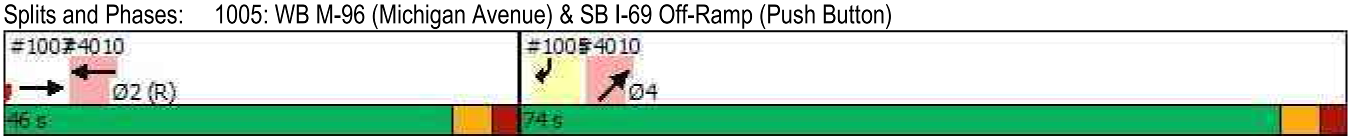
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø2
Lane Configurations							
Traffic Volume (vph)	0	0	1427	0	0	1563	
Future Volume (vph)	0	0	1427	0	0	1563	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	0.91	1.00	1.00	0.76	
Frt						0.850	
Flt Protected							
Satd. Flow (prot)	0	0	5085	0	0	3610	
Flt Permitted							
Satd. Flow (perm)	0	0	5085	0	0	3610	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)						322	
Link Speed (mph)		45	45		25		
Link Distance (ft)		275	194		266		
Travel Time (s)		4.2	2.9		7.3		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.84	0.75	
Heavy Vehicles (%)	2%	2%	2%	2%	3%	2%	
Adj. Flow (vph)	0	0	1551	0	0	2084	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	1551	0	0	2084	
Turn Type			NA			Prot	
Protected Phases			Free!			4!	2
Permitted Phases							
Minimum Split (s)						17.0	17.0
Total Split (s)						74.0	46.0
Total Split (%)						61.7%	38%
Yellow Time (s)						3.5	3.5
All-Red Time (s)						2.5	2.5
Lost Time Adjust (s)						0.0	
Total Lost Time (s)						6.0	
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)			120.0			68.0	
Actuated g/C Ratio			1.00			0.57	
v/c Ratio			0.31			0.95	
Control Delay			0.4			32.2	
Queue Delay			0.0			1.5	
Total Delay			0.5			33.7	
LOS			A			C	
Approach Delay			0.5		33.7		
Approach LOS			A		C		
Queue Length 50th (ft)			0			570	
Queue Length 95th (ft)			m0			439	
Internal Link Dist (ft)		195	114		186		
Turn Bay Length (ft)							
Base Capacity (vph)			5085			2185	
Starvation Cap Reductn			0			0	
Spillback Cap Reductn			604			37	
Storage Cap Reductn			0			0	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø2
Reduced v/c Ratio			0.35			0.97	

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 100 (83%), Referenced to phase 2:EBT, Start of Green
Natural Cycle: 90
Control Type: Pretimed
Maximum v/c Ratio: 0.95
Intersection Signal Delay: 19.5 Intersection LOS: B
Intersection Capacity Utilization 72.4% ICU Level of Service C
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.
! Phase conflict between lane groups.

Splits and Phases: 1005: WB M-96 (Michigan Avenue) & SB I-69 Off-Ramp (Push Button)

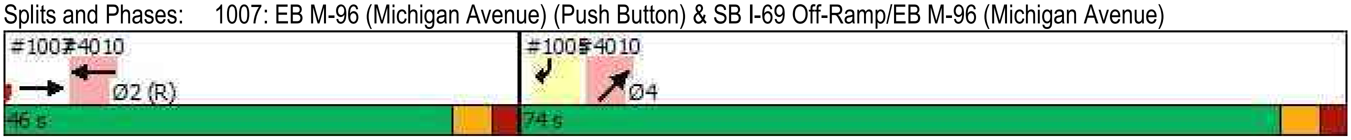


Lane Group	EBT	EBR	WBL	WBT	NEL	NER	Ø4
Lane Configurations							
Traffic Volume (vph)	112	0	0	0	0	492	
Future Volume (vph)	112	0	0	0	0	492	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Storage Length (ft)		260	285		0	0	
Storage Lanes		0	0		0	3	
Taper Length (ft)			240		25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.76	
Frt						0.850	
Flt Protected							
Satd. Flow (prot)	1863	0	0	0	0	3610	
Flt Permitted							
Satd. Flow (perm)	1863	0	0	0	0	3610	
Right Turn on Red		Yes				Yes	
Satd. Flow (RTOR)						2086	
Link Speed (mph)	25			45	45		
Link Distance (ft)	301			619	190		
Travel Time (s)	8.2			9.4	2.9		
Peak Hour Factor	0.75	0.84	0.92	0.92	0.90	0.90	
Heavy Vehicles (%)	2%	3%	2%	2%	2%	2%	
Adj. Flow (vph)	149	0	0	0	0	547	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	149	0	0	0	0	547	
Turn Type	NA					Free	
Protected Phases	2						4
Permitted Phases						Free	
Minimum Split (s)	17.0						17.0
Total Split (s)	46.0						74.0
Total Split (%)	38.3%						62%
Yellow Time (s)	3.5						3.5
All-Red Time (s)	2.5						2.5
Lost Time Adjust (s)	0.0						
Total Lost Time (s)	6.0						
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)	40.0					120.0	
Actuated g/C Ratio	0.33					1.00	
v/c Ratio	0.24					0.15	
Control Delay	30.3					0.3	
Queue Delay	0.0					0.0	
Total Delay	30.3					0.3	
LOS	C					A	
Approach Delay	30.3				0.3		
Approach LOS	C				A		
Queue Length 50th (ft)	83					0	
Queue Length 95th (ft)	111					0	
Internal Link Dist (ft)	221			539	110		
Turn Bay Length (ft)							
Base Capacity (vph)	621					3610	

Lane Group	EBT	EBR	WBL	WBT	NEL	NER	Ø4
Starvation Cap Reductn	0					0	
Spillback Cap Reductn	0					0	
Storage Cap Reductn	0					0	
Reduced v/c Ratio	0.24					0.15	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 100 (83%), Referenced to phase 2:EBT, Start of Green	
Natural Cycle: 90	
Control Type: Pretimed	
Maximum v/c Ratio: 0.95	
Intersection Signal Delay: 6.8	Intersection LOS: A
Intersection Capacity Utilization 46.5%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 1007: EB M-96 (Michigan Avenue) (Push Button) & SB I-69 Off-Ramp/EB M-96 (Michigan Avenue)

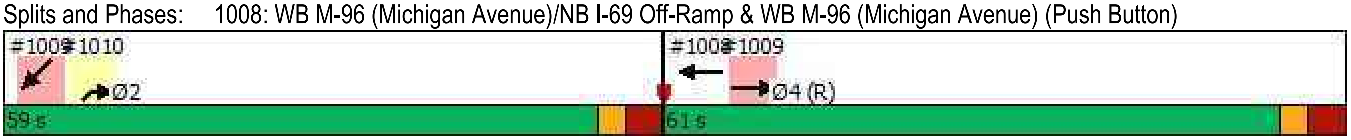


Lane Group	EBL	EBT	WBT	WBR	SWL	SWR	Ø2
Lane Configurations							
Traffic Volume (vph)	0	0	652	0	0	894	
Future Volume (vph)	0	0	652	0	0	894	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.88	
Frt						0.850	
Flt Protected							
Satd. Flow (prot)	0	0	3539	0	0	2787	
Flt Permitted							
Satd. Flow (perm)	0	0	3539	0	0	2787	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)						1021	
Link Speed (mph)		45	25		45		
Link Distance (ft)		217	252		223		
Travel Time (s)		3.3	6.9		3.4		
Peak Hour Factor	0.92	0.92	0.75	0.93	0.92	0.92	
Heavy Vehicles (%)	2%	2%	2%	6%	2%	2%	
Adj. Flow (vph)	0	0	869	0	0	972	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	869	0	0	972	
Turn Type			NA			Free	
Protected Phases			4				2
Permitted Phases						Free	
Minimum Split (s)			16.0				16.0
Total Split (s)			61.0				59.0
Total Split (%)			50.8%				49%
Yellow Time (s)			2.5				2.5
All-Red Time (s)			3.5				3.5
Lost Time Adjust (s)			0.0				
Total Lost Time (s)			6.0				
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)			55.0			120.0	
Actuated g/C Ratio			0.46			1.00	
v/c Ratio			0.54			0.35	
Control Delay			24.9			3.6	
Queue Delay			0.0			0.0	
Total Delay			24.9			3.6	
LOS			C			A	
Approach Delay			24.9		3.6		
Approach LOS			C		A		
Queue Length 50th (ft)			248			81	
Queue Length 95th (ft)			241			80	
Internal Link Dist (ft)		137	172		143		
Turn Bay Length (ft)							
Base Capacity (vph)			1622			2787	
Starvation Cap Reductn			0			0	
Spillback Cap Reductn			0			0	
Storage Cap Reductn			0			0	

Lane Group	EBL	EBT	WBT	WBR	SWL	SWR	Ø2
Reduced v/c Ratio			0.54			0.35	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 92 (77%), Referenced to phase 4:WBT, Start of Green	
Natural Cycle: 45	
Control Type: Pretimed	
Maximum v/c Ratio: 0.63	
Intersection Signal Delay: 13.6	Intersection LOS: B
Intersection Capacity Utilization 57.4%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 1008: WB M-96 (Michigan Avenue)/NB I-69 Off-Ramp & WB M-96 (Michigan Avenue) (Push Button)



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	0	564	0	0	0	0	0	0	0	0	894	0
Future Volume (vph)	0	564	0	0	0	0	0	0	0	0	894	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	3539	0	0	0	0	0	0	0	0	3539	0
Flt Permitted												
Satd. Flow (perm)	0	3539	0	0	0	0	0	0	0	0	3539	0
Right Turn on Red			Yes			Yes			Yes	Yes		Yes
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		209			206			223			213	
Travel Time (s)		3.2			3.1			3.4			3.2	
Peak Hour Factor	0.86	0.86	0.86	0.92	0.92	0.92	0.92	0.92	0.92	0.91	0.91	0.91
Adj. Flow (vph)	0	656	0	0	0	0	0	0	0	0	982	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	656	0	0	0	0	0	0	0	0	982	0
Turn Type		NA									NA	
Protected Phases		4									2	
Permitted Phases												
Minimum Split (s)		16.0									16.0	
Total Split (s)		61.0									59.0	
Total Split (%)		50.8%									49.2%	
Yellow Time (s)		2.5									2.5	
All-Red Time (s)		3.5									3.5	
Lost Time Adjust (s)		0.0									0.0	
Total Lost Time (s)		6.0									6.0	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		55.0									53.0	
Actuated g/C Ratio		0.46									0.44	
v/c Ratio		0.40									0.63	
Control Delay		31.4									25.2	
Queue Delay		0.0									0.0	
Total Delay		31.4									25.2	
LOS		C									C	
Approach Delay		31.4									25.2	
Approach LOS		C									C	
Queue Length 50th (ft)		215									320	
Queue Length 95th (ft)		258									397	
Internal Link Dist (ft)		129			126			143			133	
Turn Bay Length (ft)												
Base Capacity (vph)		1622									1563	
Starvation Cap Reductn		0									0	
Spillback Cap Reductn		0									0	
Storage Cap Reductn		0									0	
Reduced v/c Ratio		0.40									0.63	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 92 (77%), Referenced to phase 4:WBT, Start of Green	
Natural Cycle: 45	
Control Type: Pretimed	
Maximum v/c Ratio: 0.63	
Intersection Signal Delay: 27.7	Intersection LOS: C
Intersection Capacity Utilization 50.3%	ICU Level of Service A
Analysis Period (min) 15	

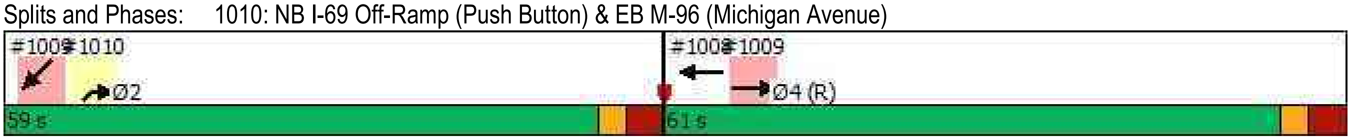
Splits and Phases: 1009: WB M-96 (Michigan Avenue) (Push Button)/WB M-96 (Michigan Avenue) & EB M-96 (Michigan Avenue)

Lane Group	EBT	EBR	WBL	WBT	NEL	NER	Ø4
Lane Configurations							
Traffic Volume (vph)	564	0	0	0	0	122	
Future Volume (vph)	564	0	0	0	0	122	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	0.95	1.00	1.00	1.00	1.00	1.00	
Frt						0.865	
Flt Protected							
Satd. Flow (prot)	3539	0	0	0	0	1611	
Flt Permitted							
Satd. Flow (perm)	3539	0	0	0	0	1611	
Right Turn on Red		Yes				Yes	
Satd. Flow (RTOR)						469	
Link Speed (mph)	45			45	25		
Link Distance (ft)	206			309	315		
Travel Time (s)	3.1			4.7	8.6		
Peak Hour Factor	0.86	0.86	0.92	0.92	0.93	0.75	
Heavy Vehicles (%)	2%	2%	2%	2%	6%	2%	
Adj. Flow (vph)	656	0	0	0	0	163	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	656	0	0	0	0	163	
Turn Type	NA					Prot	
Protected Phases	Free!					2!	4
Permitted Phases							
Minimum Split (s)						16.0	16.0
Total Split (s)						59.0	61.0
Total Split (%)						49.2%	51%
Yellow Time (s)						2.5	2.5
All-Red Time (s)						3.5	3.5
Lost Time Adjust (s)						0.0	
Total Lost Time (s)						6.0	
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)	120.0					53.0	
Actuated g/C Ratio	1.00					0.44	
v/c Ratio	0.19					0.17	
Control Delay	0.1					0.4	
Queue Delay	0.0					0.0	
Total Delay	0.1					0.4	
LOS	A					A	
Approach Delay	0.1				0.4		
Approach LOS	A				A		
Queue Length 50th (ft)	0					0	
Queue Length 95th (ft)	0					0	
Internal Link Dist (ft)	126			229	235		
Turn Bay Length (ft)							
Base Capacity (vph)	3539					973	
Starvation Cap Reductn	0					0	
Spillback Cap Reductn	0					0	
Storage Cap Reductn	0					0	

Lane Group	EBT	EBR	WBL	WBT	NEL	NER	Ø4
Reduced v/c Ratio	0.19					0.17	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 92 (77%), Referenced to phase 4:WBT, Start of Green	
Natural Cycle: 45	
Control Type: Pretimed	
Maximum v/c Ratio: 0.63	
Intersection Signal Delay: 0.2	Intersection LOS: A
Intersection Capacity Utilization 50.3%	ICU Level of Service A
Analysis Period (min) 15	
! Phase conflict between lane groups.	

Splits and Phases: 1010: NB I-69 Off-Ramp (Push Button) & EB M-96 (Michigan Avenue)



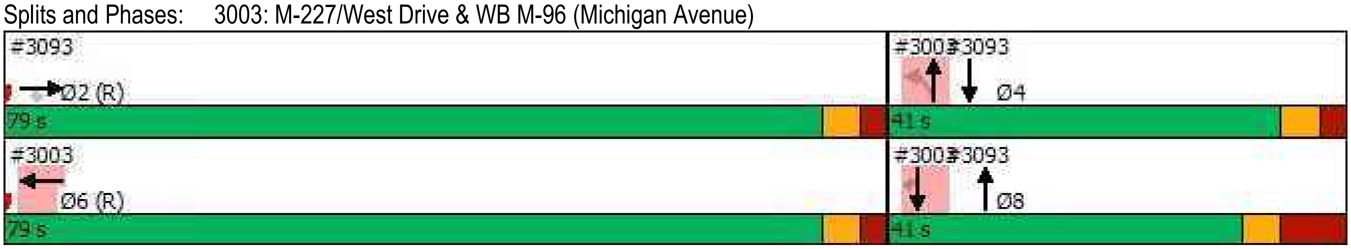
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	846	192	76	50	0	0	84	85
Future Volume (vph)	0	0	0	0	846	192	76	50	0	0	84	85
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		80	0		0	0		0
Storage Lanes	0		0	0		1	1		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.972							0.850
Flt Protected							0.950					
Satd. Flow (prot)	0	0	0	0	4992	0	1671	1863	0	0	1845	1568
Flt Permitted							0.687					
Satd. Flow (perm)	0	0	0	0	4992	0	1209	1863	0	0	1845	1568
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					78							110
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		152			212			101			1197	
Travel Time (s)		2.3			3.2			2.0			23.3	
Peak Hour Factor	0.92	0.92	0.92	0.87	0.87	0.87	0.67	0.67	0.67	0.77	0.77	0.77
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	8%	2%	2%	3%	3%	3%
Adj. Flow (vph)	0	0	0	0	972	221	113	75	0	0	109	110
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1193	0	113	75	0	0	109	110
Turn Type					NA		Perm	NA			NA	Perm
Protected Phases					6			4			8	
Permitted Phases							4					8
Minimum Split (s)					31.0		17.0	17.0			17.0	17.0
Total Split (s)					79.0		41.0	41.0			41.0	41.0
Total Split (%)					65.8%		34.2%	34.2%			34.2%	34.2%
Yellow Time (s)					3.5		3.5	3.5			3.5	3.5
All-Red Time (s)					2.5		2.5	2.5			6.0	6.0
Lost Time Adjust (s)					0.0		0.0	0.0			0.0	0.0
Total Lost Time (s)					6.0		6.0	6.0			9.5	9.5
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)					73.0		35.0	35.0			31.5	31.5
Actuated g/C Ratio					0.61		0.29	0.29			0.26	0.26
v/c Ratio					0.39		0.32	0.14			0.23	0.22
Control Delay					11.6		8.6	5.5			36.2	7.5
Queue Delay					0.0		0.0	0.0			0.0	0.0
Total Delay					11.6		8.6	5.5			36.2	7.5
LOS					B		A	A			D	A
Approach Delay					11.6			7.4			21.8	
Approach LOS					B			A			C	
Queue Length 50th (ft)					151		11	7			66	0
Queue Length 95th (ft)					172		11	8			98	28
Internal Link Dist (ft)		72			132			21			1117	
Turn Bay Length (ft)												
Base Capacity (vph)					3067		352	543			484	492

Lane Group	Ø2
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	2
Permitted Phases	
Minimum Split (s)	16.0
Total Split (s)	79.0
Total Split (%)	66%
Yellow Time (s)	3.5
All-Red Time (s)	2.5
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
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)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
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					0.39		0.32	0.14			0.23	0.22

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 112 (93%), Referenced to phase 2:EBT and 6:, Start of Green	
Natural Cycle: 50	
Control Type: Pretimed	
Maximum v/c Ratio: 0.39	
Intersection Signal Delay: 12.5	Intersection LOS: B
Intersection Capacity Utilization 50.2%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 3003: M-227/West Drive & WB M-96 (Michigan Avenue)



Lane Group	Ø2
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

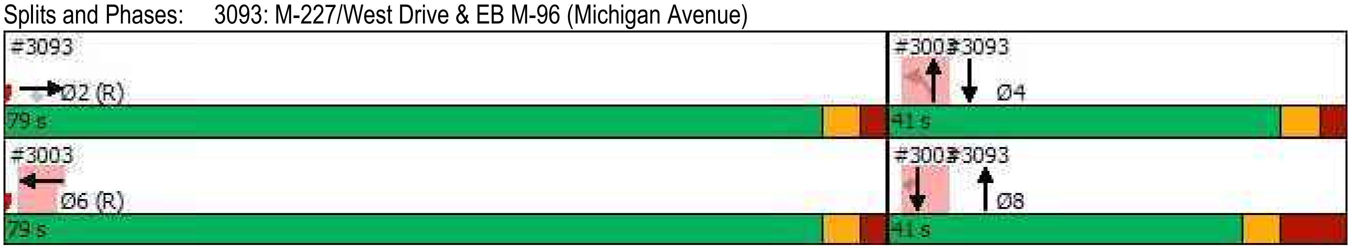
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	634	59	0	0	0	0	126	30	0	84	0
Future Volume (vph)	0	634	59	0	0	0	0	126	30	0	84	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		65	0		0	100		0	0		0
Storage Lanes	0		1	0		0	1		0	0		0
Taper Length (ft)	25			25			70			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Frt			0.850					0.971				
Flt Protected												
Satd. Flow (prot)	0	3574	1442	0	0	0	0	3344	0	0	1881	0
Flt Permitted												
Satd. Flow (perm)	0	3574	1442	0	0	0	0	3344	0	0	1881	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			59					24				
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		161			222			1117			101	
Travel Time (s)		2.4			3.4			21.8			2.0	
Peak Hour Factor	0.95	0.95	0.95	0.92	0.92	0.92	0.72	0.72	0.72	0.83	0.83	0.83
Heavy Vehicles (%)	2%	1%	12%	2%	2%	2%	2%	6%	0%	2%	1%	2%
Adj. Flow (vph)	0	667	62	0	0	0	0	175	42	0	101	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	667	62	0	0	0	0	217	0	0	101	0
Turn Type		NA	Perm					NA			NA	
Protected Phases		2						8			4	
Permitted Phases			2									
Minimum Split (s)		16.0	16.0					17.0			17.0	
Total Split (s)		79.0	79.0					41.0			41.0	
Total Split (%)		65.8%	65.8%					34.2%			34.2%	
Yellow Time (s)		3.5	3.5					3.5			3.5	
All-Red Time (s)		2.5	2.5					6.0			2.5	
Lost Time Adjust (s)		0.0	0.0					0.0			0.0	
Total Lost Time (s)		6.0	6.0					9.5			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		73.0	73.0					31.5			35.0	
Actuated g/C Ratio		0.61	0.61					0.26			0.29	
v/c Ratio		0.31	0.07					0.24			0.18	
Control Delay		4.9	0.2					31.7			0.7	
Queue Delay		0.0	0.0					0.0			0.0	
Total Delay		4.9	0.2					31.7			0.7	
LOS		A	A					C			A	
Approach Delay		4.5						31.7			0.7	
Approach LOS		A						C			A	
Queue Length 50th (ft)		39	0					61			0	
Queue Length 95th (ft)		49	0					73			0	
Internal Link Dist (ft)		81			142			1037			21	
Turn Bay Length (ft)			65									
Base Capacity (vph)		2174	900					895			548	

Lane Group	Ø6
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	6
Permitted Phases	
Minimum Split (s)	31.0
Total Split (s)	79.0
Total Split (%)	66%
Yellow Time (s)	3.5
All-Red Time (s)	2.5
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
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)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn		0	0					0			0	
Spillback Cap Reductn		0	0					18			0	
Storage Cap Reductn		0	0					0			0	
Reduced v/c Ratio		0.31	0.07					0.25			0.18	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 112 (93%), Referenced to phase 2:EBT and 6:, Start of Green	
Natural Cycle: 50	
Control Type: Pretimed	
Maximum v/c Ratio: 0.39	
Intersection Signal Delay: 9.8	Intersection LOS: A
Intersection Capacity Utilization 50.2%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 3093: M-227/West Drive & EB M-96 (Michigan Avenue)



Lane Group	Ø6
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations										
Traffic Volume (vph)	0	0	0	0	1681	1665	407	116	0	0
Future Volume (vph)	0	0	0	0	1681	1665	407	116	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	300		300	0	200	0	0
Storage Lanes	0		0	0		1	2	1	0	0
Taper Length (ft)	25			25			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.88	0.97	1.00	1.00	1.00
Frt						0.850		0.850		
Flt Protected							0.950			
Satd. Flow (prot)	0	0	0	0	3539	2787	3433	1583	0	0
Flt Permitted							0.950			
Satd. Flow (perm)	0	0	0	0	3539	2787	3433	1583	0	0
Right Turn on Red			Yes	Yes		Yes		Yes		
Satd. Flow (RTOR)						621		27		
Link Speed (mph)		45			45		55		45	
Link Distance (ft)		858			894		434		215	
Travel Time (s)		13.0			13.5		5.4		3.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	1827	1810	442	126	0	0
Shared Lane Traffic (%)										
Lane Group Flow (vph)	0	0	0	0	1827	1810	442	126	0	0
Turn Type					NA	Free	Prot	Perm		
Protected Phases					8		2			
Permitted Phases						Free		2		
Minimum Split (s)					16.0		16.0	16.0		
Total Split (s)					60.0		60.0	60.0		
Total Split (%)					50.0%		50.0%	50.0%		
Yellow Time (s)					3.5		3.5	3.5		
All-Red Time (s)					2.5		2.5	2.5		
Lost Time Adjust (s)					0.0		0.0	0.0		
Total Lost Time (s)					6.0		6.0	6.0		
Lead/Lag										
Lead-Lag Optimize?										
Act Effct Green (s)					54.0	120.0	54.0	54.0		
Actuated g/C Ratio					0.45	1.00	0.45	0.45		
v/c Ratio					1.15	0.65	0.29	0.17		
Control Delay					96.5	0.5	8.6	4.2		
Queue Delay					0.0	0.0	0.0	0.0		
Total Delay					96.5	0.5	8.6	4.2		
LOS					F	A	A	A		
Approach Delay					48.7		7.6			
Approach LOS					D		A			
Queue Length 50th (ft)					~870	0	108	24		
Queue Length 95th (ft)					#1012	0	144	40		
Internal Link Dist (ft)		778			814		354		135	
Turn Bay Length (ft)						300		200		
Base Capacity (vph)					1592	2787	1544	727		
Starvation Cap Reductn					0	0	0	0		

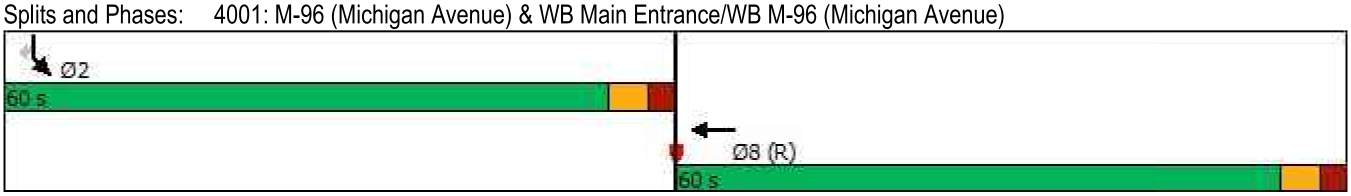
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Spillback Cap Reductn					0	0	0	0		
Storage Cap Reductn					0	0	0	0		
Reduced v/c Ratio					1.15	0.65	0.29	0.17		

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 36 (30%), Referenced to phase 8:WBT, Start of Green	
Natural Cycle: 60	
Control Type: Pretimed	
Maximum v/c Ratio: 1.15	
Intersection Signal Delay: 43.2	Intersection LOS: D
Intersection Capacity Utilization 68.1%	ICU Level of Service C
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

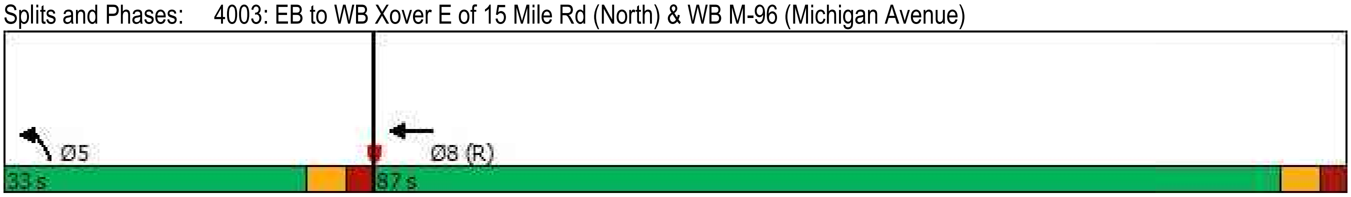
Splits and Phases: 4001: M-96 (Michigan Avenue) & WB Main Entrance/WB M-96 (Michigan Avenue)



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑↑	↰↰	
Traffic Volume (vph)	0	0	0	3022	10	0
Future Volume (vph)	0	0	0	3022	10	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	0.97	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	5085	3433	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	5085	3433	0
Right Turn on Red		Yes			Yes	Yes
Satd. Flow (RTOR)					2	
Link Speed (mph)	45			45	25	
Link Distance (ft)	660			254	113	
Travel Time (s)	10.0			3.8	3.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.70	0.92
Adj. Flow (vph)	0	0	0	3285	14	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	3285	14	0
Turn Type				NA	Prot	
Protected Phases				8	5	
Permitted Phases						
Minimum Split (s)				16.0	13.0	
Total Split (s)				87.0	33.0	
Total Split (%)				72.5%	27.5%	
Yellow Time (s)				3.5	3.5	
All-Red Time (s)				2.5	2.5	
Lost Time Adjust (s)				0.0	0.0	
Total Lost Time (s)				6.0	6.0	
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)				81.0	27.0	
Actuated g/C Ratio				0.68	0.22	
v/c Ratio				0.96	0.02	
Control Delay				17.8	46.9	
Queue Delay				0.0	0.0	
Total Delay				17.8	46.9	
LOS				B	D	
Approach Delay				17.8	46.9	
Approach LOS				B	D	
Queue Length 50th (ft)				330	4	
Queue Length 95th (ft)				452	12	
Internal Link Dist (ft)	580			174	33	
Turn Bay Length (ft)						
Base Capacity (vph)				3432	773	
Starvation Cap Reductn				0	0	
Spillback Cap Reductn				0	0	
Storage Cap Reductn				0	0	
Reduced v/c Ratio				0.96	0.02	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 116 (97%), Referenced to phase 8:WBT, Start of Green	
Natural Cycle: 60	
Control Type: Pretimed	
Maximum v/c Ratio: 0.96	
Intersection Signal Delay: 17.9	Intersection LOS: B
Intersection Capacity Utilization 80.1%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 4003: EB to WB Xover E of 15 Mile Rd (North) & WB M-96 (Michigan Avenue)

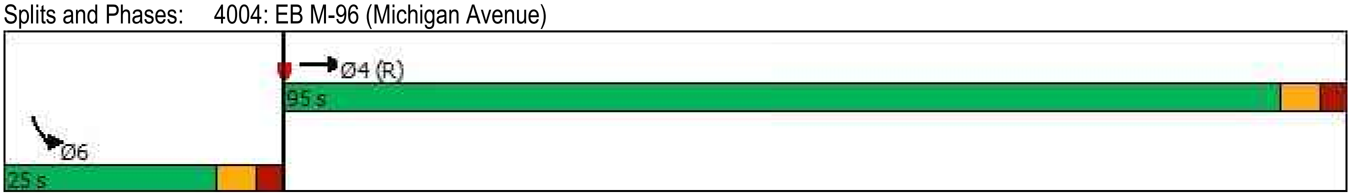


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	550	0	0	308	0
Future Volume (vph)	0	550	0	0	308	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	0.97	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	3433	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	3433	0
Right Turn on Red				Yes	Yes	Yes
Satd. Flow (RTOR)					746	
Link Speed (mph)		55	55		25	
Link Distance (ft)		2678	669		109	
Travel Time (s)		33.2	8.3		3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	598	0	0	335	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	598	0	0	335	0
Turn Type		NA			Prot	
Protected Phases		4			6	
Permitted Phases						
Detector Phase		4			6	
Switch Phase						
Minimum Initial (s)		10.0			7.0	
Minimum Split (s)		16.0			13.0	
Total Split (s)		95.0			25.0	
Total Split (%)		79.2%			20.8%	
Yellow Time (s)		3.5			3.5	
All-Red Time (s)		2.5			2.5	
Lost Time Adjust (s)		0.0			0.0	
Total Lost Time (s)		6.0			6.0	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode		C-Max			None	
Act Effct Green (s)		101.0			7.0	
Actuated g/C Ratio		0.84			0.06	
v/c Ratio		0.20			0.37	
Control Delay		0.5			0.9	
Queue Delay		0.0			0.0	
Total Delay		0.5			0.9	
LOS		A			A	
Approach Delay		0.5			0.9	
Approach LOS		A			A	
Queue Length 50th (ft)		5			0	
Queue Length 95th (ft)		6			0	
Internal Link Dist (ft)		2598	589		29	
Turn Bay Length (ft)						
Base Capacity (vph)		2978			1171	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Starvation Cap Reductn		0			0	
Spillback Cap Reductn		0			0	
Storage Cap Reductn		0			0	
Reduced v/c Ratio		0.20			0.29	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 20 (17%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 40	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.37	
Intersection Signal Delay: 0.7	Intersection LOS: A
Intersection Capacity Utilization 61.0%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 4004: EB M-96 (Michigan Avenue)

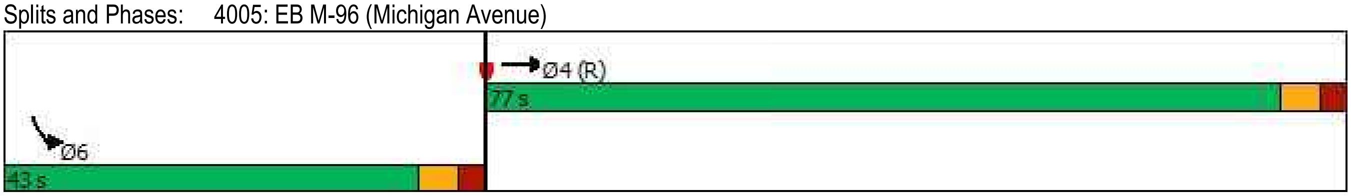


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	603	0	0	549	0
Future Volume (vph)	0	603	0	0	549	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	0.97	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	3433	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	3433	0
Right Turn on Red				Yes	Yes	Yes
Satd. Flow (RTOR)					500	
Link Speed (mph)		55	55		25	
Link Distance (ft)		1786	608		109	
Travel Time (s)		22.1	7.5		3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	655	0	0	597	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	655	0	0	597	0
Turn Type		NA			Prot	
Protected Phases		4			6	
Permitted Phases						
Detector Phase		4			6	
Switch Phase						
Minimum Initial (s)		10.0			7.0	
Minimum Split (s)		16.0			13.0	
Total Split (s)		77.0			43.0	
Total Split (%)		64.2%			35.8%	
Yellow Time (s)		3.5			3.5	
All-Red Time (s)		2.5			2.5	
Lost Time Adjust (s)		0.0			0.0	
Total Lost Time (s)		6.0			6.0	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode		C-Max			Max	
Act Effct Green (s)		71.0			37.0	
Actuated g/C Ratio		0.59			0.31	
v/c Ratio		0.31			0.43	
Control Delay		12.8			10.5	
Queue Delay		0.0			0.0	
Total Delay		12.8			10.5	
LOS		B			B	
Approach Delay		12.8			10.5	
Approach LOS		B			B	
Queue Length 50th (ft)		126			64	
Queue Length 95th (ft)		162			115	
Internal Link Dist (ft)		1706	528		29	
Turn Bay Length (ft)						
Base Capacity (vph)		2093			1404	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Starvation Cap Reductn		0			0	
Spillback Cap Reductn		0			0	
Storage Cap Reductn		0			0	
Reduced v/c Ratio		0.31			0.43	

Intersection Summary		
Area Type:	Other	
Cycle Length: 120		
Actuated Cycle Length: 120		
Offset: 112 (93%), Referenced to phase 4:EBT, Start of Green		
Natural Cycle: 40		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.43		
Intersection Signal Delay: 11.7		Intersection LOS: B
Intersection Capacity Utilization 47.3%		ICU Level of Service A
Analysis Period (min) 15		

Splits and Phases: 4005: EB M-96 (Michigan Avenue)

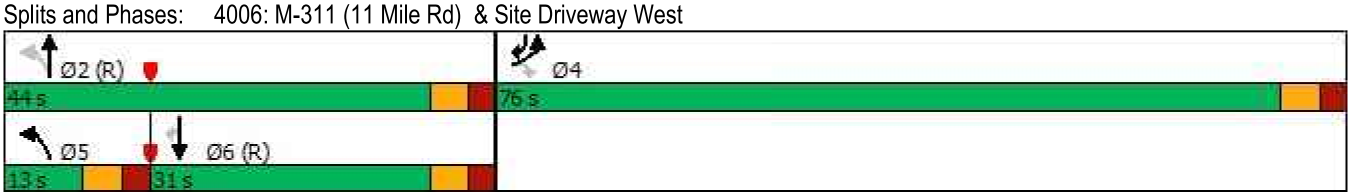


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	61	162	129	1152
Future Volume (vph)	0	0	61	162	129	1152
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	250	250			0
Storage Lanes	2	1	1			1
Taper Length (ft)	25		25			
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	1.00
Frt						0.850
Flt Protected			0.950			
Satd. Flow (prot)	3614	1863	1770	1863	1863	1583
Flt Permitted			0.544			
Satd. Flow (perm)	3614	1863	1013	1863	1863	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)						724
Link Speed (mph)	25			55	55	
Link Distance (ft)	1178			1461	940	
Travel Time (s)	32.1			18.1	11.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	66	176	140	1252
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	66	176	140	1252
Turn Type	Prot	Perm	pm+pt	NA	NA	pm+ov
Protected Phases	4		5	2	6	4
Permitted Phases		4	2			6
Detector Phase	4	4	5	2	6	4
Switch Phase						
Minimum Initial (s)	7.0	7.0	7.0	10.0	10.0	7.0
Minimum Split (s)	14.0	14.0	13.0	17.0	17.0	14.0
Total Split (s)	76.0	76.0	13.0	44.0	31.0	76.0
Total Split (%)	63.3%	63.3%	10.8%	36.7%	25.8%	63.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.5	2.5	2.5	2.5	2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None	None	Min	C-Max	C-Max	None
Act Effct Green (s)			46.6	46.6	33.5	100.9
Actuated g/C Ratio			0.39	0.39	0.28	0.84
v/c Ratio			0.15	0.24	0.27	0.87
Control Delay			29.5	30.0	32.9	24.2
Queue Delay			0.0	0.0	0.0	0.0
Total Delay			29.5	30.0	32.9	24.2
LOS			C	C	C	C
Approach Delay				29.8	25.1	
Approach LOS				C	C	
Queue Length 50th (ft)			36	103	82	781
Queue Length 95th (ft)			71	164	128	1097

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Internal Link Dist (ft)	1098			1381	860	
Turn Bay Length (ft)			250			
Base Capacity (vph)			437	722	519	1475
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			0.15	0.24	0.27	0.85

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 60 (50%), Referenced to phase 2:NBTL and 6:SBT, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.87	
Intersection Signal Delay: 25.8	Intersection LOS: C
Intersection Capacity Utilization 87.2%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 4006: M-311 (11 Mile Rd) & Site Driveway West

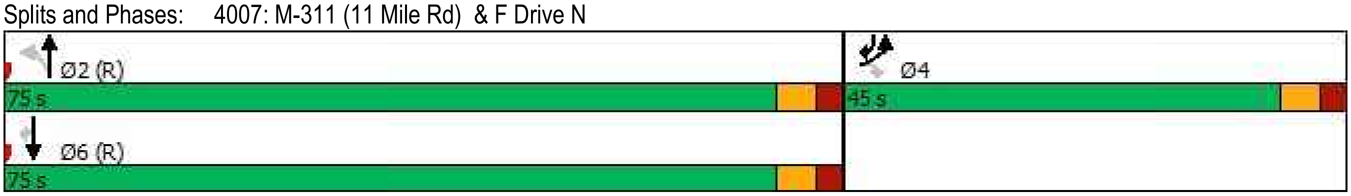


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	30	102	2008	1030
Future Volume (vph)	0	0	30	102	2008	1030
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	250	400			0
Storage Lanes	2	1	1			1
Taper Length (ft)	25		25			
Lane Util. Factor	0.97	1.00	1.00	0.95	0.95	1.00
Frt						0.850
Flt Protected			0.950			
Satd. Flow (prot)	3614	1863	1770	3539	3539	1583
Flt Permitted			0.048			
Satd. Flow (perm)	3614	1863	89	3539	3539	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)						
Link Speed (mph)	45			55	55	
Link Distance (ft)	1846			974	1093	
Travel Time (s)	28.0			12.1	13.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	33	111	2183	1120
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	33	111	2183	1120
Turn Type	Prot	Perm	Perm	NA	NA	pm+ov
Protected Phases	4			2	6	4
Permitted Phases		4	2			6
Detector Phase	4	4	2	2	6	4
Switch Phase						
Minimum Initial (s)	7.0	7.0	10.0	10.0	10.0	7.0
Minimum Split (s)	13.0	13.0	16.0	16.0	16.0	13.0
Total Split (s)	45.0	45.0	75.0	75.0	75.0	45.0
Total Split (%)	37.5%	37.5%	62.5%	62.5%	62.5%	37.5%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.5	2.5	2.5	2.5	2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None	None	C-Max	C-Max	C-Max	None
Act Effct Green (s)			84.2	84.2	84.2	120.0
Actuated g/C Ratio			0.70	0.70	0.70	1.00
v/c Ratio			0.53	0.04	0.88	0.71
Control Delay			57.8	1.0	12.5	0.9
Queue Delay			0.0	0.0	0.0	0.0
Total Delay			57.8	1.0	12.5	0.9
LOS			E	A	B	A
Approach Delay				14.0	8.6	
Approach LOS				B	A	
Queue Length 50th (ft)			21	1	229	0
Queue Length 95th (ft)			#87	3	m#1101	m0

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Internal Link Dist (ft)	1766			894	1013	
Turn Bay Length (ft)			400			
Base Capacity (vph)			62	2484	2484	1583
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			0.53	0.04	0.88	0.71

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 20 (17%), Referenced to phase 2:NBTL and 6:SBT, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.88	
Intersection Signal Delay: 8.8	Intersection LOS: A
Intersection Capacity Utilization 82.1%	ICU Level of Service E
Analysis Period (min) 15	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	
m Volume for 95th percentile queue is metered by upstream signal.	

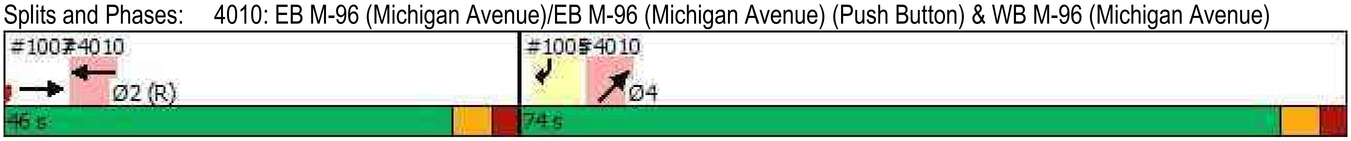
Splits and Phases: 4007: M-311 (11 Mile Rd) & F Drive N



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations					↑↑↑			↑↑↑				
Traffic Volume (vph)	0	0	0	0	1427	0	0	492	0	0	0	0
Future Volume (vph)	0	0	0	0	1427	0	0	492	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.91	1.00	1.00	1.00	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	0	0	0	5085	0	0	5085	0	0	0	0
Flt Permitted												
Satd. Flow (perm)	0	0	0	0	5085	0	0	5085	0	0	0	0
Right Turn on Red			Yes			Yes	Yes		Yes			Yes
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		194			183			156			190	
Travel Time (s)		2.9			2.8			2.4			2.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.90	0.90	0.90	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	1551	0	0	547	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1551	0	0	547	0	0	0	0
Turn Type					NA			NA				
Protected Phases					2			4				
Permitted Phases												
Minimum Split (s)					17.0			17.0				
Total Split (s)					46.0			74.0				
Total Split (%)					38.3%			61.7%				
Yellow Time (s)					3.5			3.5				
All-Red Time (s)					2.5			2.5				
Lost Time Adjust (s)					0.0			0.0				
Total Lost Time (s)					6.0			6.0				
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)					40.0			68.0				
Actuated g/C Ratio					0.33			0.57				
v/c Ratio					0.92			0.19				
Control Delay					41.4			8.3				
Queue Delay					0.0			0.0				
Total Delay					41.4			8.3				
LOS					D			A				
Approach Delay					41.4			8.3				
Approach LOS					D			A				
Queue Length 50th (ft)					452			44				
Queue Length 95th (ft)					#521			55				
Internal Link Dist (ft)		114			103			76			110	
Turn Bay Length (ft)												
Base Capacity (vph)					1695			2881				
Starvation Cap Reductn					0			0				
Spillback Cap Reductn					0			0				
Storage Cap Reductn					0			0				
Reduced v/c Ratio					0.92			0.19				

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 100 (83%), Referenced to phase 2:EBT, Start of Green			
Natural Cycle: 90			
Control Type: Pretimed			
Maximum v/c Ratio: 0.95			
Intersection Signal Delay: 32.8		Intersection LOS: C	
Intersection Capacity Utilization 72.4%		ICU Level of Service C	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 4010: EB M-96 (Michigan Avenue)/EB M-96 (Michigan Avenue) (Push Button) & WB M-96 (Michigan Avenue)



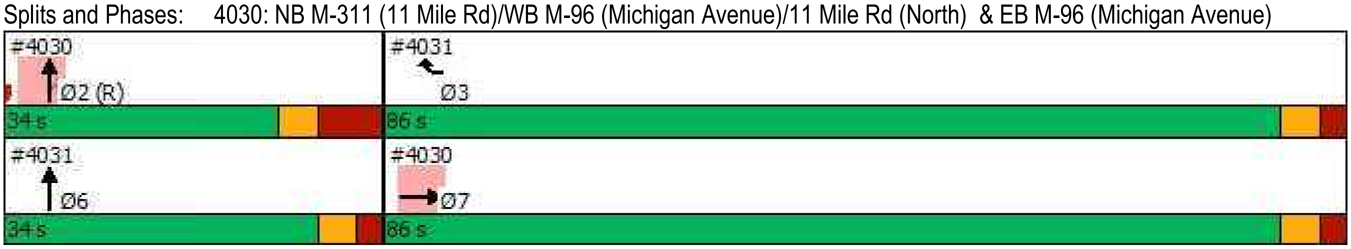
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑						↑↑↑	↱			
Traffic Volume (vph)	0	707	0	0	0	0	0	64	38	0	0	0
Future Volume (vph)	0	707	0	0	0	0	0	64	38	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		250	0		0
Storage Lanes	0		0	0		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	1.00	1.00
Frt									0.850			
Flt Protected												
Satd. Flow (prot)	0	3539	0	0	0	0	0	5085	1583	0	0	0
Flt Permitted												
Satd. Flow (perm)	0	3539	0	0	0	0	0	5085	1583	0	0	0
Right Turn on Red	Yes		Yes			Yes			Yes			Yes
Satd. Flow (RTOR)									41			
Link Speed (mph)		55			55			55			30	
Link Distance (ft)		167			316			655			182	
Travel Time (s)		2.1			3.9			8.1			4.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	768	0	0	0	0	0	70	41	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	768	0	0	0	0	0	70	41	0	0	0
Turn Type		NA						NA	Perm			
Protected Phases		7						2				
Permitted Phases									2			
Minimum Split (s)		16.0						19.5	19.5			
Total Split (s)		86.0						34.0	34.0			
Total Split (%)		71.7%						28.3%	28.3%			
Yellow Time (s)		3.5						3.5	3.5			
All-Red Time (s)		2.5						6.0	6.0			
Lost Time Adjust (s)		0.0						0.0	0.0			
Total Lost Time (s)		6.0						9.5	9.5			
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		80.0						24.5	24.5			
Actuated g/C Ratio		0.67						0.20	0.20			
v/c Ratio		0.33						0.07	0.12			
Control Delay		6.9						43.6	35.6			
Queue Delay		0.0						0.0	0.0			
Total Delay		6.9						43.6	35.6			
LOS		A						D	D			
Approach Delay		6.9						40.6				
Approach LOS		A						D				
Queue Length 50th (ft)		107						20	1			
Queue Length 95th (ft)		m110						39	71			
Internal Link Dist (ft)		87			236			575			102	
Turn Bay Length (ft)									250			
Base Capacity (vph)		2359						1038	355			
Starvation Cap Reductn		0						0	0			

Lane Group	Ø3	Ø6
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Ideal Flow (vphpl)		
Storage Length (ft)		
Storage Lanes		
Taper Length (ft)		
Lane Util. Factor		
Frt		
Flt Protected		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Peak Hour Factor		
Adj. Flow (vph)		
Shared Lane Traffic (%)		
Lane Group Flow (vph)		
Turn Type		
Protected Phases	3	6
Permitted Phases		
Minimum Split (s)	16.0	16.0
Total Split (s)	86.0	34.0
Total Split (%)	72%	28%
Yellow Time (s)	3.5	3.5
All-Red Time (s)	2.5	2.5
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag		
Lead-Lag Optimize?		
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		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn		0						0	0			
Storage Cap Reductn		0						0	0			
Reduced v/c Ratio		0.33						0.07	0.12			

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 88 (73%), Referenced to phase 2:NBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.41	
Intersection Signal Delay: 11.2	Intersection LOS: B
Intersection Capacity Utilization 44.6%	ICU Level of Service A
Analysis Period (min) 15	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 4030: NB M-311 (11 Mile Rd)/WB M-96 (Michigan Avenue)/11 Mile Rd (North) & EB M-96 (Michigan Avenue)



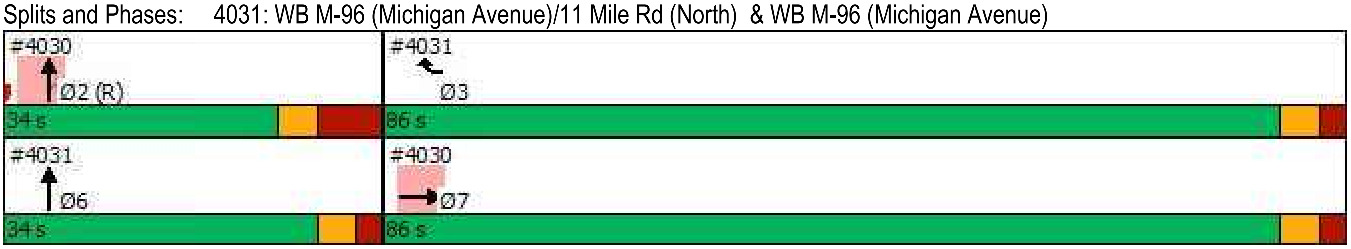
Lane Group	Ø3	Ø6
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		

Intersection Summary

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø2	Ø7
Lane Configurations								
Traffic Volume (vph)	0	1126	64	0	0	0		
Future Volume (vph)	0	1126	64	0	0	0		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Lane Util. Factor	1.00	0.76	0.91	1.00	1.00	1.00		
Frt		0.850						
Flt Protected								
Satd. Flow (prot)	0	3610	5085	0	0	0		
Flt Permitted								
Satd. Flow (perm)	0	3610	5085	0	0	0		
Right Turn on Red		Yes		Yes				
Satd. Flow (RTOR)		1697						
Link Speed (mph)	55		55			55		
Link Distance (ft)	405		182			493		
Travel Time (s)	5.0		2.3			6.1		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Adj. Flow (vph)	0	1224	70	0	0	0		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	0	1224	70	0	0	0		
Turn Type		Prot	NA					
Protected Phases		3	6				2	7
Permitted Phases								
Minimum Split (s)		16.0	16.0				19.5	16.0
Total Split (s)		86.0	34.0				34.0	86.0
Total Split (%)		71.7%	28.3%				28%	72%
Yellow Time (s)		3.5	3.5				3.5	3.5
All-Red Time (s)		2.5	2.5				6.0	2.5
Lost Time Adjust (s)		0.0	0.0					
Total Lost Time (s)		6.0	6.0					
Lead/Lag								
Lead-Lag Optimize?								
Act Effct Green (s)		80.0	28.0					
Actuated g/C Ratio		0.67	0.23					
v/c Ratio		0.41	0.06					
Control Delay		0.4	0.1					
Queue Delay		0.0	0.0					
Total Delay		0.4	0.1					
LOS		A	A					
Approach Delay	0.4		0.1					
Approach LOS	A		A					
Queue Length 50th (ft)		0	0					
Queue Length 95th (ft)		0	0					
Internal Link Dist (ft)	325		102			413		
Turn Bay Length (ft)								
Base Capacity (vph)		2972	1186					
Starvation Cap Reductn		0	0					
Spillback Cap Reductn		0	0					
Storage Cap Reductn		0	0					
Reduced v/c Ratio		0.41	0.06					

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 88 (73%), Referenced to phase 2:NBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.41	
Intersection Signal Delay: 0.4	Intersection LOS: A
Intersection Capacity Utilization 44.6%	ICU Level of Service A
Analysis Period (min) 15	

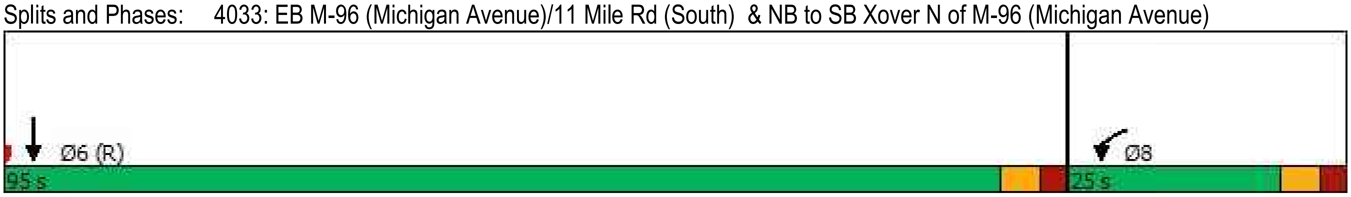
Splits and Phases: 4031: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & WB M-96 (Michigan Avenue)



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	491	0	0	0	0	3254
Future Volume (vph)	491	0	0	0	0	3254
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	0.91
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	3433	0	0	0	0	5085
Flt Permitted	0.950					
Satd. Flow (perm)	3433	0	0	0	0	5085
Right Turn on Red	Yes	Yes		Yes		
Satd. Flow (RTOR)	3					
Link Speed (mph)	25		55			30
Link Distance (ft)	105		587			495
Travel Time (s)	2.9		7.3			11.3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	534	0	0	0	0	3537
Shared Lane Traffic (%)						
Lane Group Flow (vph)	534	0	0	0	0	3537
Turn Type	Prot					NA
Protected Phases	8					6
Permitted Phases						
Minimum Split (s)	13.0					16.0
Total Split (s)	25.0					95.0
Total Split (%)	20.8%					79.2%
Yellow Time (s)	3.5					3.5
All-Red Time (s)	2.5					2.5
Lost Time Adjust (s)	0.0					0.0
Total Lost Time (s)	6.0					6.0
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)	19.0					89.0
Actuated g/C Ratio	0.16					0.74
v/c Ratio	0.98					0.94
Control Delay	80.5					14.8
Queue Delay	0.0					0.3
Total Delay	80.5					15.1
LOS	F					B
Approach Delay	80.5					15.1
Approach LOS	F					B
Queue Length 50th (ft)	213					939
Queue Length 95th (ft)	#328					693
Internal Link Dist (ft)	25		507			415
Turn Bay Length (ft)						
Base Capacity (vph)	546					3771
Starvation Cap Reductn	0					36
Spillback Cap Reductn	0					0
Storage Cap Reductn	0					0
Reduced v/c Ratio	0.98					0.95

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 89 (74%), Referenced to phase 6:SBT, Start of Green	
Natural Cycle: 90	
Control Type: Pretimed	
Maximum v/c Ratio: 0.98	
Intersection Signal Delay: 23.7	Intersection LOS: C
Intersection Capacity Utilization 85.2%	ICU Level of Service E
Analysis Period (min) 15	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	

Splits and Phases: 4033: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & NB to SB Xover N of M-96 (Michigan Avenue)



Lane Group	NBL	NBT	SBT	SBR	SEL	SER	Ø2
Lane Configurations							
Traffic Volume (vph)	0	0	2266	0	0	988	
Future Volume (vph)	0	0	2266	0	0	988	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	0.91	1.00	1.00	0.88	
Frt						0.850	
Flt Protected							
Satd. Flow (prot)	0	0	5085	0	0	2787	
Flt Permitted							
Satd. Flow (perm)	0	0	5085	0	0	2787	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)						70	
Link Speed (mph)		30	30		30		
Link Distance (ft)		495	145		346		
Travel Time (s)		11.3	3.3		7.9		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	0	0	2463	0	0	1074	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	2463	0	0	1074	
Turn Type			NA			Prot	
Protected Phases			Free!			4!	2
Permitted Phases							
Minimum Split (s)						16.0	16.0
Total Split (s)						53.0	67.0
Total Split (%)						44.2%	56%
Yellow Time (s)						3.5	3.5
All-Red Time (s)						2.5	2.5
Lost Time Adjust (s)						0.0	
Total Lost Time (s)						6.0	
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)			120.0			47.0	
Actuated g/C Ratio			1.00			0.39	
v/c Ratio			0.48			0.95	
Control Delay			0.8			50.1	
Queue Delay			0.0			0.3	
Total Delay			0.8			50.5	
LOS			A			D	
Approach Delay			0.8		50.5		
Approach LOS			A		D		
Queue Length 50th (ft)			0			428	
Queue Length 95th (ft)			m0			#590	
Internal Link Dist (ft)		415	65		266		
Turn Bay Length (ft)							
Base Capacity (vph)			5085			1134	
Starvation Cap Reductn			0			0	
Spillback Cap Reductn			382			4	
Storage Cap Reductn			0			0	
Reduced v/c Ratio			0.52			0.95	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 27 (23%), Referenced to phase 4:SER, Start of Green	
Natural Cycle: 90	
Control Type: Pretimed	
Maximum v/c Ratio: 0.95	
Intersection Signal Delay: 15.9	Intersection LOS: B
Intersection Capacity Utilization 86.7%	ICU Level of Service E
Analysis Period (min) 15	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	
m Volume for 95th percentile queue is metered by upstream signal.	
! Phase conflict between lane groups.	

Splits and Phases: 4034: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & EB I-94 Off-ramp

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	2266	0	0	0	0	0	540	0
Future Volume (vph)	0	0	0	0	2266	0	0	0	0	0	540	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.91	1.00	1.00	1.00	1.00	1.00	0.91	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	0	0	0	5085	0	0	0	0	0	5085	0
Flt Permitted												
Satd. Flow (perm)	0	0	0	0	5085	0	0	0	0	0	5085	0
Right Turn on Red			Yes			Yes			Yes	Yes		Yes
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		145			194			233			108	
Travel Time (s)		3.3			4.4			5.3			2.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	2463	0	0	0	0	0	587	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	2463	0	0	0	0	0	587	0
Turn Type					NA						NA	
Protected Phases					2						4	
Permitted Phases												
Minimum Split (s)					16.0						16.0	
Total Split (s)					67.0						53.0	
Total Split (%)					55.8%						44.2%	
Yellow Time (s)					3.5						3.5	
All-Red Time (s)					2.5						2.5	
Lost Time Adjust (s)					0.0						0.0	
Total Lost Time (s)					6.0						6.0	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)					61.0						47.0	
Actuated g/C Ratio					0.51						0.39	
v/c Ratio					0.95						0.29	
Control Delay					26.7						26.6	
Queue Delay					0.0						0.0	
Total Delay					26.7						26.6	
LOS					C						C	
Approach Delay					26.7						26.6	
Approach LOS					C						C	
Queue Length 50th (ft)					536						113	
Queue Length 95th (ft)					#734						140	
Internal Link Dist (ft)		65			114			153			28	
Turn Bay Length (ft)												
Base Capacity (vph)					2584						1991	
Starvation Cap Reductn					0						0	
Spillback Cap Reductn					0						0	
Storage Cap Reductn					0						0	
Reduced v/c Ratio					0.95						0.29	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 27 (23%), Referenced to phase 4:SER, Start of Green	
Natural Cycle: 90	
Control Type: Pretimed	
Maximum v/c Ratio: 0.95	
Intersection Signal Delay: 26.7	Intersection LOS: C
Intersection Capacity Utilization 62.4%	ICU Level of Service B
Analysis Period (min) 15	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	

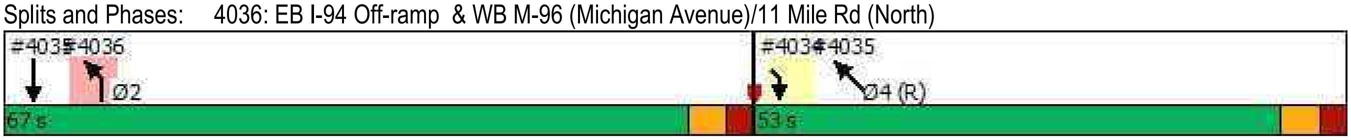
Splits and Phases: 4035: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & WB M-96 (Michigan Avenue)/11 Mile Rd (North)

Lane Group	NBL	NBR	SET	SER	NWL	NWT	Ø4
Lane Configurations							
Traffic Volume (vph)	104	0	0	0	0	540	
Future Volume (vph)	104	0	0	0	0	540	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.91	
Frt							
Flt Protected	0.950						
Satd. Flow (prot)	1719	0	0	0	0	5085	
Flt Permitted	0.950						
Satd. Flow (perm)	1719	0	0	0	0	5085	
Right Turn on Red	Yes	Yes		Yes			
Satd. Flow (RTOR)	513						
Link Speed (mph)	30		30			30	
Link Distance (ft)	271		337			233	
Travel Time (s)	6.2		7.7			5.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Heavy Vehicles (%)	5%	2%	2%	2%	2%	2%	
Adj. Flow (vph)	113	0	0	0	0	587	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	113	0	0	0	0	587	
Turn Type	Prot					NA	
Protected Phases	2!					Free!	4
Permitted Phases							
Minimum Split (s)	16.0						16.0
Total Split (s)	67.0						53.0
Total Split (%)	55.8%						44%
Yellow Time (s)	3.5						3.5
All-Red Time (s)	2.5						2.5
Lost Time Adjust (s)	0.0						
Total Lost Time (s)	6.0						
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)	61.0					120.0	
Actuated g/C Ratio	0.51					1.00	
v/c Ratio	0.10					0.12	
Control Delay	0.2					0.1	
Queue Delay	0.0					0.0	
Total Delay	0.2					0.1	
LOS	A					A	
Approach Delay	0.2					0.1	
Approach LOS	A					A	
Queue Length 50th (ft)	0					0	
Queue Length 95th (ft)	0					0	
Internal Link Dist (ft)	191		257			153	
Turn Bay Length (ft)							
Base Capacity (vph)	1126					5085	
Starvation Cap Reductn	0					0	
Spillback Cap Reductn	0					0	
Storage Cap Reductn	0					0	

Lane Group	NBL	NBR	SET	SER	NWL	NWT	Ø4
Reduced v/c Ratio	0.10					0.12	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 27 (23%), Referenced to phase 4:SER, Start of Green	
Natural Cycle: 90	
Control Type: Pretimed	
Maximum v/c Ratio: 0.95	
Intersection Signal Delay: 0.1	Intersection LOS: A
Intersection Capacity Utilization 44.9%	ICU Level of Service A
Analysis Period (min) 15	
! Phase conflict between lane groups.	

Splits and Phases: 4036: EB I-94 Off-ramp & WB M-96 (Michigan Avenue)/11 Mile Rd (North)

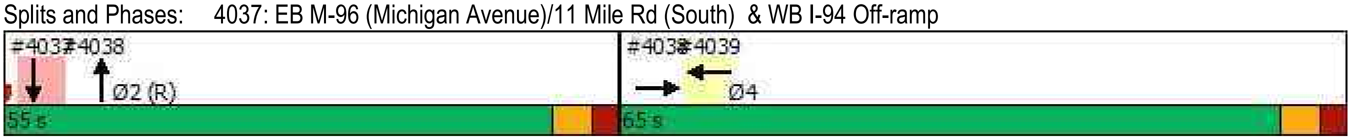


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø4
Lane Configurations							
Traffic Volume (vph)	0	1300	0	0	1039	0	
Future Volume (vph)	0	1300	0	0	1039	0	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	0.88	1.00	1.00	0.95	1.00	
Frt		0.850					
Flt Protected							
Satd. Flow (prot)	0	2707	0	0	3438	0	
Flt Permitted							
Satd. Flow (perm)	0	2707	0	0	3438	0	
Right Turn on Red		Yes				Yes	
Satd. Flow (RTOR)		1069					
Link Speed (mph)	30			30	30		
Link Distance (ft)	222			406	241		
Travel Time (s)	5.0			9.2	5.5		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Heavy Vehicles (%)	2%	5%	2%	2%	5%	2%	
Adj. Flow (vph)	0	1413	0	0	1129	0	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	1413	0	0	1129	0	
Turn Type		Free			NA		
Protected Phases					2		4
Permitted Phases		Free					
Minimum Split (s)					16.0		16.0
Total Split (s)					55.0		65.0
Total Split (%)					45.8%		54%
Yellow Time (s)					3.5		3.5
All-Red Time (s)					2.5		2.5
Lost Time Adjust (s)					0.0		
Total Lost Time (s)					6.0		
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)		120.0			49.0		
Actuated g/C Ratio		1.00			0.41		
v/c Ratio		0.52			0.80		
Control Delay		6.9			36.7		
Queue Delay		0.0			5.1		
Total Delay		6.9			41.9		
LOS		A			D		
Approach Delay	6.9				41.9		
Approach LOS	A				D		
Queue Length 50th (ft)		161			399		
Queue Length 95th (ft)		123			490		
Internal Link Dist (ft)	142			326	161		
Turn Bay Length (ft)							
Base Capacity (vph)		2707			1403		
Starvation Cap Reductn		0			0		
Spillback Cap Reductn		169			215		
Storage Cap Reductn		0			0		

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø4
Reduced v/c Ratio		0.56			0.95		

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 96 (80%), Referenced to phase 2:SBT, Start of Green	
Natural Cycle: 65	
Control Type: Pretimed	
Maximum v/c Ratio: 0.84	
Intersection Signal Delay: 22.4	Intersection LOS: C
Intersection Capacity Utilization 33.7%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4037: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & WB I-94 Off-ramp



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1300	0	0	0	0	0	565	0	0	0	0
Future Volume (vph)	0	1300	0	0	0	0	0	565	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	1.00	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	3438	0	0	0	0	0	4940	0	0	0	0
Flt Permitted												
Satd. Flow (perm)	0	3438	0	0	0	0	0	4940	0	0	0	0
Right Turn on Red	Yes		Yes			Yes			Yes			Yes
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		190			222			207			131	
Travel Time (s)		4.3			5.0			4.7			3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	5%	2%	2%	2%	2%	2%	5%	2%	2%	2%	2%
Adj. Flow (vph)	0	1413	0	0	0	0	0	614	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1413	0	0	0	0	0	614	0	0	0	0
Turn Type		NA						NA				
Protected Phases		4						2				
Permitted Phases												
Minimum Split (s)		16.0						16.0				
Total Split (s)		65.0						55.0				
Total Split (%)		54.2%						45.8%				
Yellow Time (s)		3.5						3.5				
All-Red Time (s)		2.5						2.5				
Lost Time Adjust (s)		0.0						0.0				
Total Lost Time (s)		6.0						6.0				
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		59.0						49.0				
Actuated g/C Ratio		0.49						0.41				
v/c Ratio		0.84						0.30				
Control Delay		29.6						42.7				
Queue Delay		0.0						0.0				
Total Delay		29.6						42.7				
LOS		C						D				
Approach Delay		29.6						42.7				
Approach LOS		C						D				
Queue Length 50th (ft)		473						177				
Queue Length 95th (ft)		605						218				
Internal Link Dist (ft)		110			142			127			51	
Turn Bay Length (ft)												
Base Capacity (vph)		1690						2017				
Starvation Cap Reductn		0						0				
Spillback Cap Reductn		0						0				
Storage Cap Reductn		0						0				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio		0.84						0.30				

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 96 (80%), Referenced to phase 2:SBT, Start of Green	
Natural Cycle: 65	
Control Type: Pretimed	
Maximum v/c Ratio: 0.84	
Intersection Signal Delay: 33.6	Intersection LOS: C
Intersection Capacity Utilization 56.9%	ICU Level of Service B
Analysis Period (min) 15	

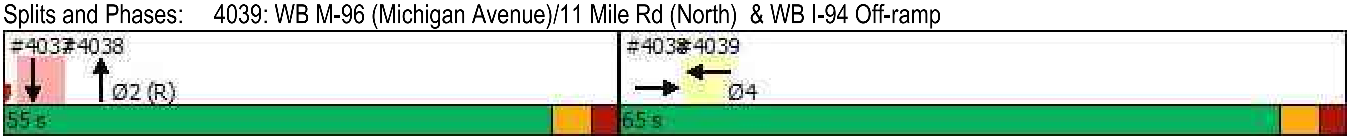
Splits and Phases: 4038: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & EB M-96 (Michigan Avenue)/11 Mile Rd (South)

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø2
Lane Configurations							
Traffic Volume (vph)	0	0	0	151	565	0	
Future Volume (vph)	0	0	0	151	565	0	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.94	1.00	
Frt							
Flt Protected					0.950		
Satd. Flow (prot)	0	0	0	1810	4848	0	
Flt Permitted					0.950		
Satd. Flow (perm)	0	0	0	1810	4848	0	
Right Turn on Red		Yes			Yes	Yes	
Satd. Flow (RTOR)					2493		
Link Speed (mph)	30			30	30		
Link Distance (ft)	415			317	131		
Travel Time (s)	9.4			7.2	3.0		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Heavy Vehicles (%)	2%	2%	2%	5%	5%	2%	
Adj. Flow (vph)	0	0	0	164	614	0	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	0	164	614	0	
Turn Type				NA	Perm		
Protected Phases				4!			2
Permitted Phases					Free!		
Minimum Split (s)				16.0			16.0
Total Split (s)				65.0			55.0
Total Split (%)				54.2%			46%
Yellow Time (s)				3.5			3.5
All-Red Time (s)				2.5			2.5
Lost Time Adjust (s)				0.0			
Total Lost Time (s)				6.0			
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)				59.0	120.0		
Actuated g/C Ratio				0.49	1.00		
v/c Ratio				0.18	0.13		
Control Delay				17.8	0.2		
Queue Delay				0.0	0.0		
Total Delay				17.8	0.2		
LOS				B	A		
Approach Delay				17.8	0.2		
Approach LOS				B	A		
Queue Length 50th (ft)				69	2		
Queue Length 95th (ft)				112	0		
Internal Link Dist (ft)	335			237	51		
Turn Bay Length (ft)							
Base Capacity (vph)				889	4848		
Starvation Cap Reductn				0	0		
Spillback Cap Reductn				0	0		
Storage Cap Reductn				0	0		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø2
Reduced v/c Ratio				0.18	0.13		

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 96 (80%), Referenced to phase 2:SBT, Start of Green	
Natural Cycle: 65	
Control Type: Pretimed	
Maximum v/c Ratio: 0.84	
Intersection Signal Delay: 3.9	Intersection LOS: A
Intersection Capacity Utilization 70.2%	ICU Level of Service C
Analysis Period (min) 15	
! Phase conflict between lane groups.	

Splits and Phases: 4039: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & WB I-94 Off-ramp

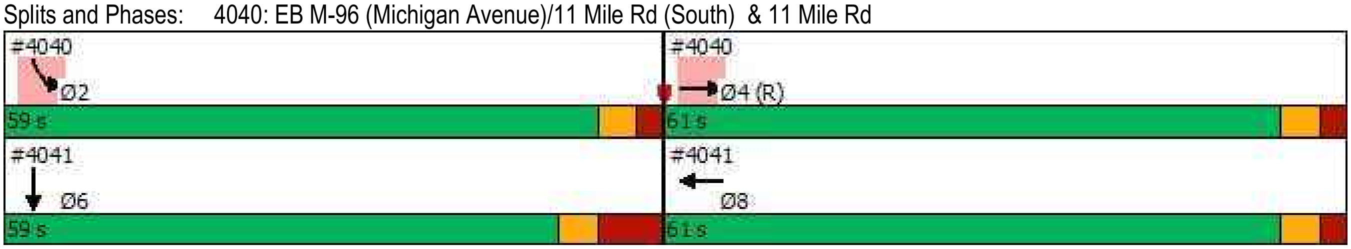


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø6	Ø8
Lane Configurations								
Traffic Volume (vph)	0	783	0	0	662	0		
Future Volume (vph)	0	783	0	0	662	0		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.97	1.00		
Frt								
Flt Protected					0.950			
Satd. Flow (prot)	0	3539	0	0	3335	0		
Flt Permitted					0.950			
Satd. Flow (perm)	0	3539	0	0	3335	0		
Right Turn on Red				Yes	Yes	Yes		
Satd. Flow (RTOR)					180			
Link Speed (mph)		55	55		45			
Link Distance (ft)		212	597		92			
Travel Time (s)		2.6	7.4		1.4			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Heavy Vehicles (%)	2%	2%	2%	2%	5%	2%		
Adj. Flow (vph)	0	851	0	0	720	0		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	0	851	0	0	720	0		
Turn Type		NA			Prot			
Protected Phases		4			2		6	8
Permitted Phases								
Minimum Split (s)		16.0			19.5		19.5	16.0
Total Split (s)		61.0			59.0		59.0	61.0
Total Split (%)		50.8%			49.2%		49%	51%
Yellow Time (s)		3.5			3.5		3.5	3.5
All-Red Time (s)		2.5			2.5		6.0	2.5
Lost Time Adjust (s)		0.0			0.0			
Total Lost Time (s)		6.0			6.0			
Lead/Lag								
Lead-Lag Optimize?								
Act Effct Green (s)		55.0			53.0			
Actuated g/C Ratio		0.46			0.44			
v/c Ratio		0.52			0.46			
Control Delay		24.6			0.8			
Queue Delay		0.0			0.0			
Total Delay		24.6			0.8			
LOS		C			A			
Approach Delay		24.6			0.8			
Approach LOS		C			A			
Queue Length 50th (ft)		241			0			
Queue Length 95th (ft)		302			0			
Internal Link Dist (ft)		132	517		12			
Turn Bay Length (ft)								
Base Capacity (vph)		1622			1573			
Starvation Cap Reductn		0			0			
Spillback Cap Reductn		0			0			
Storage Cap Reductn		0			0			

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø6	Ø8
Reduced v/c Ratio		0.52			0.46			

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 32 (27%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 50	
Control Type: Pretimed	
Maximum v/c Ratio: 0.55	
Intersection Signal Delay: 13.7	Intersection LOS: B
Intersection Capacity Utilization 50.5%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4040: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & 11 Mile Rd



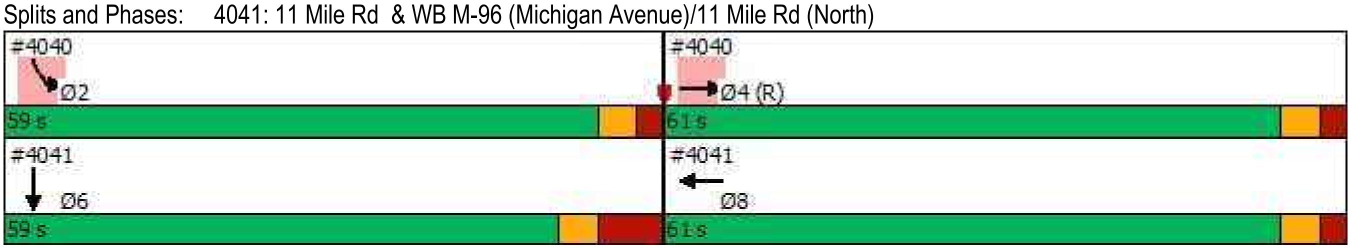
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	437	343	0	0	0	0	662	56
Future Volume (vph)	0	0	0	0	437	343	0	0	0	0	662	56
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		250	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Frt						0.850					0.988	
Flt Protected												
Satd. Flow (prot)	0	0	0	0	3539	1538	0	0	0	0	3404	0
Flt Permitted												
Satd. Flow (perm)	0	0	0	0	3539	1538	0	0	0	0	3404	0
Right Turn on Red			Yes	Yes		Yes			Yes			Yes
Satd. Flow (RTOR)						373					9	
Link Speed (mph)		55			55			45			55	
Link Distance (ft)		210			598			92			259	
Travel Time (s)		2.6			7.4			1.4			3.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	5%	2%	2%	2%	2%	5%	2%
Adj. Flow (vph)	0	0	0	0	475	373	0	0	0	0	720	61
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	475	373	0	0	0	0	781	0
Turn Type					NA	custom					NA	
Protected Phases					8	Free					6	
Permitted Phases												
Minimum Split (s)					16.0						19.5	
Total Split (s)					61.0						59.0	
Total Split (%)					50.8%						49.2%	
Yellow Time (s)					3.5						3.5	
All-Red Time (s)					2.5						6.0	
Lost Time Adjust (s)					0.0						0.0	
Total Lost Time (s)					6.0						9.5	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)					55.0	120.0					49.5	
Actuated g/C Ratio					0.46	1.00					0.41	
v/c Ratio					0.29	0.24					0.55	
Control Delay					29.1	2.7					39.0	
Queue Delay					0.0	0.0					0.0	
Total Delay					29.1	2.7					39.0	
LOS					C	A					D	
Approach Delay					17.5						39.0	
Approach LOS					B						D	
Queue Length 50th (ft)					166	0					304	
Queue Length 95th (ft)					213	274					384	
Internal Link Dist (ft)		130			518			12			179	
Turn Bay Length (ft)						250						
Base Capacity (vph)					1622	1538					1409	

Lane Group	Ø2	Ø4
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Ideal Flow (vphpl)		
Storage Length (ft)		
Storage Lanes		
Taper Length (ft)		
Lane Util. Factor		
Frt		
Flt Protected		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Peak Hour Factor		
Heavy Vehicles (%)		
Adj. Flow (vph)		
Shared Lane Traffic (%)		
Lane Group Flow (vph)		
Turn Type		
Protected Phases	2	4
Permitted Phases		
Minimum Split (s)	19.5	16.0
Total Split (s)	59.0	61.0
Total Split (%)	49%	51%
Yellow Time (s)	3.5	3.5
All-Red Time (s)	2.5	2.5
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag		
Lead-Lag Optimize?		
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)		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn					0	0					0	
Spillback Cap Reductn					0	0					0	
Storage Cap Reductn					0	0					0	
Reduced v/c Ratio					0.29	0.24					0.55	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 32 (27%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 50	
Control Type: Pretimed	
Maximum v/c Ratio: 0.55	
Intersection Signal Delay: 27.8	Intersection LOS: C
Intersection Capacity Utilization 50.5%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4041: 11 Mile Rd & WB M-96 (Michigan Avenue)/11 Mile Rd (North)



Lane Group	Ø2	Ø4
Starvation Cap Reductn		
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		

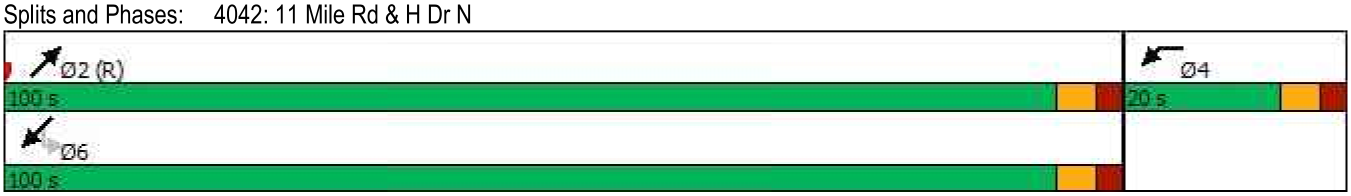
Intersection Summary

Lane Group	WBL	WBR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	0	0	343	0	0	718
Future Volume (vph)	0	0	343	0	0	718
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	1810	0	1863	0	0	1863
Flt Permitted						
Satd. Flow (perm)	1810	0	1863	0	0	1863
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)						
Link Speed (mph)	25		55			55
Link Distance (ft)	1262		1787			680
Travel Time (s)	34.4		22.2			8.4
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	2%	2%	5%	2%	2%
Adj. Flow (vph)	0	0	373	0	0	780
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	373	0	0	780
Turn Type	Prot		NA			NA
Protected Phases	4		2			6
Permitted Phases					6	
Minimum Split (s)	13.0		16.0		13.0	13.0
Total Split (s)	20.0		100.0		100.0	100.0
Total Split (%)	16.7%		83.3%		83.3%	83.3%
Yellow Time (s)	3.5		3.5		3.5	3.5
All-Red Time (s)	2.5		2.5		2.5	2.5
Lost Time Adjust (s)	0.0		0.0			0.0
Total Lost Time (s)	6.0		6.0			6.0
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)			94.0			94.0
Actuated g/C Ratio			0.78			0.78
v/c Ratio			0.26			0.53
Control Delay			1.2			6.4
Queue Delay			0.0			0.0
Total Delay			1.2			6.4
LOS			A			A
Approach Delay			1.2			6.4
Approach LOS			A			A
Queue Length 50th (ft)			15			187
Queue Length 95th (ft)			21			258
Internal Link Dist (ft)	1182		1707			600
Turn Bay Length (ft)						
Base Capacity (vph)			1459			1459
Starvation Cap Reductn			0			0
Spillback Cap Reductn			0			0
Storage Cap Reductn			0			0

Lane Group	WBL	WBR	NET	NER	SWL	SWT
Reduced v/c Ratio			0.26			0.53

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NET, Start of Green	
Natural Cycle: 45	
Control Type: Pretimed	
Maximum v/c Ratio: 0.53	
Intersection Signal Delay: 4.8	Intersection LOS: A
Intersection Capacity Utilization 42.8%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4042: 11 Mile Rd & H Dr N

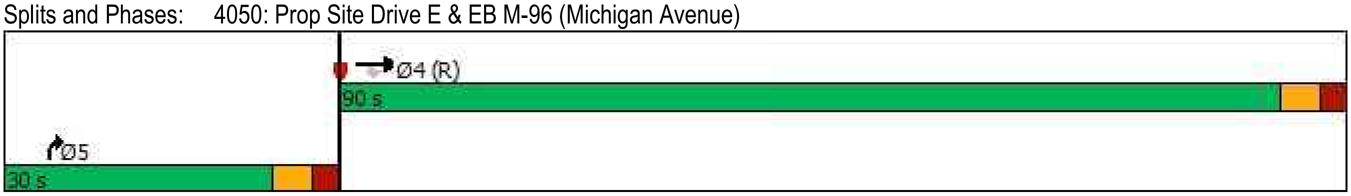


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↱↱				↱↱
Traffic Volume (vph)	523	335	0	0	0	0
Future Volume (vph)	523	335	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		500	600		0	0
Storage Lanes		2	0		0	2
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	0.88	1.00	1.00	1.00	0.88
Frt		0.850				
Flt Protected						
Satd. Flow (prot)	3539	2787	0	0	0	3278
Flt Permitted						
Satd. Flow (perm)	3539	2787	0	0	0	3278
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		364				
Link Speed (mph)	55			55	25	
Link Distance (ft)	669			659	1093	
Travel Time (s)	8.3			8.2	29.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	568	364	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	568	364	0	0	0	0
Turn Type	NA	Perm				Prot
Protected Phases	4					5
Permitted Phases		4				
Detector Phase	4	4				5
Switch Phase						
Minimum Initial (s)	10.0	10.0				10.0
Minimum Split (s)	16.0	16.0				16.0
Total Split (s)	90.0	90.0				30.0
Total Split (%)	75.0%	75.0%				25.0%
Yellow Time (s)	3.5	3.5				3.5
All-Red Time (s)	2.5	2.5				2.5
Lost Time Adjust (s)	0.0	0.0				0.0
Total Lost Time (s)	6.0	6.0				6.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max	C-Max				None
Act Effct Green (s)	120.0	120.0				
Actuated g/C Ratio	1.00	1.00				
v/c Ratio	0.16	0.13				
Control Delay	0.1	0.1				
Queue Delay	0.0	0.0				
Total Delay	0.1	0.1				
LOS	A	A				
Approach Delay	0.1					
Approach LOS	A					
Queue Length 50th (ft)	0	0				
Queue Length 95th (ft)	0	0				

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Internal Link Dist (ft)	589			579	1013	
Turn Bay Length (ft)		500				
Base Capacity (vph)	3539	2787				
Starvation Cap Reductn	0	0				
Spillback Cap Reductn	0	0				
Storage Cap Reductn	0	0				
Reduced v/c Ratio	0.16	0.13				

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 52 (43%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 40	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.16	
Intersection Signal Delay: 0.1	Intersection LOS: A
Intersection Capacity Utilization 19.5%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4050: Prop Site Drive E & EB M-96 (Michigan Avenue)

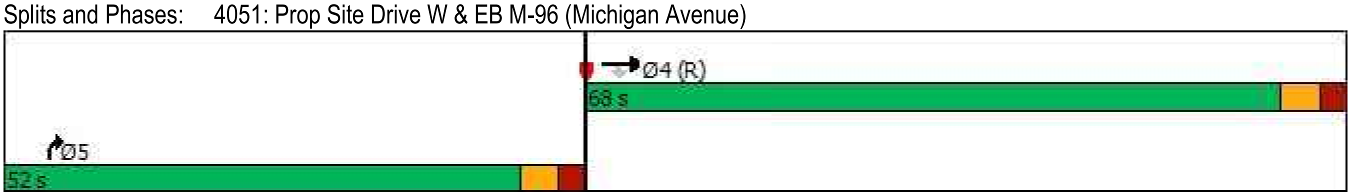


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	550	602	0	0	0	0
Future Volume (vph)	550	602	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		500	600		0	0
Storage Lanes		2	0		0	2
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	0.88	1.00	1.00	1.00	0.88
Frt		0.850				
Flt Protected						
Satd. Flow (prot)	3539	2787	0	0	0	3278
Flt Permitted						
Satd. Flow (perm)	3539	2787	0	0	0	3278
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		654				
Link Speed (mph)	55			55	25	
Link Distance (ft)	608			627	1293	
Travel Time (s)	7.5			7.8	35.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	598	654	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	598	654	0	0	0	0
Turn Type	NA	Perm				Prot
Protected Phases	4					5
Permitted Phases		4				
Detector Phase	4	4				5
Switch Phase						
Minimum Initial (s)	10.0	10.0				10.0
Minimum Split (s)	16.0	16.0				16.0
Total Split (s)	68.0	68.0				52.0
Total Split (%)	56.7%	56.7%				43.3%
Yellow Time (s)	3.5	3.5				3.5
All-Red Time (s)	2.5	2.5				2.5
Lost Time Adjust (s)	0.0	0.0				0.0
Total Lost Time (s)	6.0	6.0				6.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max	C-Max				None
Act Effct Green (s)	120.0	120.0				
Actuated g/C Ratio	1.00	1.00				
v/c Ratio	0.17	0.23				
Control Delay	0.1	0.5				
Queue Delay	0.0	0.0				
Total Delay	0.1	0.5				
LOS	A	A				
Approach Delay	0.3					
Approach LOS	A					
Queue Length 50th (ft)	0	5				
Queue Length 95th (ft)	0	22				

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Internal Link Dist (ft)	528			547	1213	
Turn Bay Length (ft)		500				
Base Capacity (vph)	3539	2787				
Starvation Cap Reductn	0	0				
Spillback Cap Reductn	0	0				
Storage Cap Reductn	0	0				
Reduced v/c Ratio	0.17	0.23				

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 32 (27%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 40	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.23	
Intersection Signal Delay: 0.3	Intersection LOS: A
Intersection Capacity Utilization 26.1%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4051: Prop Site Drive W & EB M-96 (Michigan Avenue)

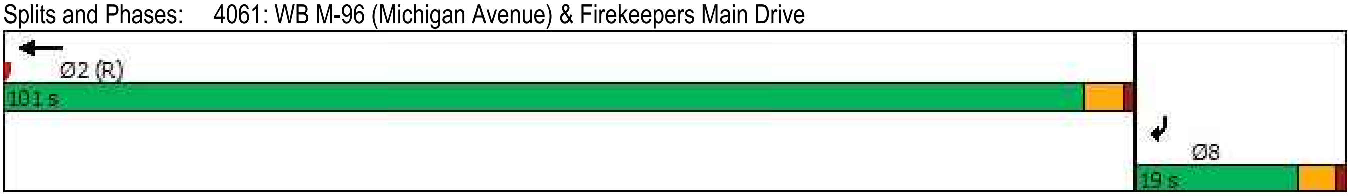


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	1115	168	0	134
Future Volume (vph)	0	0	1115	168	0	134
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			0	0	0
Storage Lanes	0			0	0	2
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	0.88
Frt			0.981			0.850
Flt Protected						
Satd. Flow (prot)	0	0	3481	0	0	2787
Flt Permitted						
Satd. Flow (perm)	0	0	3481	0	0	2787
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			49			264
Link Speed (mph)		55	55		25	
Link Distance (ft)		574	509		701	
Travel Time (s)		7.1	6.3		19.1	
Peak Hour Factor	0.92	0.92	0.92	0.95	0.67	0.92
Heavy Vehicles (%)	2%	2%	2%	0%	0%	2%
Adj. Flow (vph)	0	0	1212	177	0	146
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1389	0	0	146
Turn Type			NA			Prot
Protected Phases			2			8
Permitted Phases						
Detector Phase			2			8
Switch Phase						
Minimum Initial (s)			10.0			10.0
Minimum Split (s)			22.5			14.5
Total Split (s)			101.0			19.0
Total Split (%)			84.2%			15.8%
Yellow Time (s)			3.5			3.5
All-Red Time (s)			1.0			1.0
Lost Time Adjust (s)			0.0			0.0
Total Lost Time (s)			4.5			4.5
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode			C-Max			None
Act Effct Green (s)			101.0			10.0
Actuated g/C Ratio			0.84			0.08
v/c Ratio			0.47			0.31
Control Delay			3.0			1.7
Queue Delay			0.0			0.0
Total Delay			3.0			1.7
LOS			A			A
Approach Delay			3.0		1.7	
Approach LOS			A		A	
Queue Length 50th (ft)			104			0

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Queue Length 95th (ft)			127			0
Internal Link Dist (ft)		494	429		621	
Turn Bay Length (ft)						
Base Capacity (vph)			2937			568
Starvation Cap Reductn			0			0
Spillback Cap Reductn			0			0
Storage Cap Reductn			0			0
Reduced v/c Ratio			0.47			0.26

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:WBT, Start of Green	
Natural Cycle: 40	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.47	
Intersection Signal Delay: 2.8	Intersection LOS: A
Intersection Capacity Utilization 52.0%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4061: WB M-96 (Michigan Avenue) & Firekeepers Main Drive



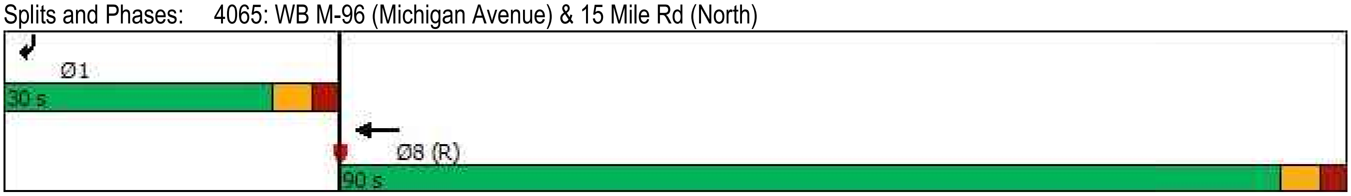
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations			↑↑↑	↱		↱↱
Traffic Volume (vph)	0	0	2939	93	0	460
Future Volume (vph)	0	0	2939	93	0	460
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			250	0	200
Storage Lanes	0			0	0	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.91	1.00	1.00	0.88
Frt				0.850		0.850
Flt Protected						
Satd. Flow (prot)	0	0	5085	1583	0	2787
Flt Permitted						
Satd. Flow (perm)	0	0	5085	1583	0	2787
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				28		3
Link Speed (mph)		45	45		45	
Link Distance (ft)		534	660		516	
Travel Time (s)		8.1	10.0		7.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	3195	101	0	500
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	3195	101	0	500
Turn Type			NA	custom		Prot
Protected Phases			8	Free		1
Permitted Phases						
Minimum Split (s)			16.0			13.0
Total Split (s)			90.0			30.0
Total Split (%)			75.0%			25.0%
Yellow Time (s)			3.5			3.5
All-Red Time (s)			2.5			2.5
Lost Time Adjust (s)			0.0			0.0
Total Lost Time (s)			6.0			6.0
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)			84.0	120.0		24.0
Actuated g/C Ratio			0.70	1.00		0.20
v/c Ratio			0.90	0.06		0.89
Control Delay			3.4	0.2		66.3
Queue Delay			0.0	0.0		0.0
Total Delay			3.4	0.2		66.3
LOS			A	A		E
Approach Delay			3.3		66.3	
Approach LOS			A		E	
Queue Length 50th (ft)			28	0		214
Queue Length 95th (ft)			65	0		#321
Internal Link Dist (ft)		454	580		436	
Turn Bay Length (ft)				250		200
Base Capacity (vph)			3559	1583		559
Starvation Cap Reductn			0	0		0

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Spillback Cap Reductn			0	0		0
Storage Cap Reductn			0	0		0
Reduced v/c Ratio			0.90	0.06		0.89

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 8:WBT, Start of Green	
Natural Cycle: 90	
Control Type: Pretimed	
Maximum v/c Ratio: 0.90	
Intersection Signal Delay: 11.6	Intersection LOS: B
Intersection Capacity Utilization 82.9%	ICU Level of Service E
Analysis Period (min) 15	

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 4065: WB M-96 (Michigan Avenue) & 15 Mile Rd (North)

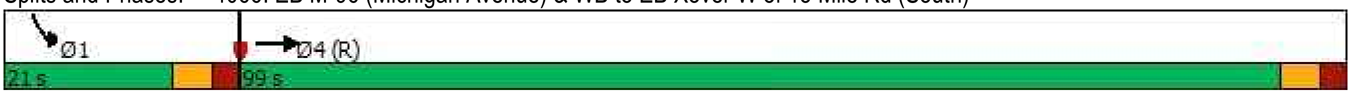


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	508	0	0	119	0
Future Volume (vph)	0	508	0	0	119	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.91	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	5085	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	5085	0	0	1770	0
Right Turn on Red				Yes	Yes	Yes
Satd. Flow (RTOR)					436	
Link Speed (mph)		45	45		25	
Link Distance (ft)		262	1016		123	
Travel Time (s)		4.0	15.4		3.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.90	0.92
Adj. Flow (vph)	0	552	0	0	132	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	552	0	0	132	0
Turn Type		NA			Prot	
Protected Phases		4			1	
Permitted Phases						
Minimum Split (s)		16.0			16.0	
Total Split (s)		99.0			21.0	
Total Split (%)		82.5%			17.5%	
Yellow Time (s)		3.5			3.5	
All-Red Time (s)		2.5			2.5	
Lost Time Adjust (s)		0.0			0.0	
Total Lost Time (s)		6.0			6.0	
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)		93.0			15.0	
Actuated g/C Ratio		0.78			0.12	
v/c Ratio		0.14			0.22	
Control Delay		0.7			0.5	
Queue Delay		0.0			0.0	
Total Delay		0.7			0.5	
LOS		A			A	
Approach Delay		0.7			0.5	
Approach LOS		A			A	
Queue Length 50th (ft)		6			0	
Queue Length 95th (ft)		8			m0	
Internal Link Dist (ft)		182	936		43	
Turn Bay Length (ft)						
Base Capacity (vph)		3940			602	
Starvation Cap Reductn		0			0	
Spillback Cap Reductn		0			0	
Storage Cap Reductn		0			0	
Reduced v/c Ratio		0.14			0.22	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 116 (97%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.22	
Intersection Signal Delay: 0.7	Intersection LOS: A
Intersection Capacity Utilization 76.5%	ICU Level of Service D
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4066: EB M-96 (Michigan Avenue) & WB to EB Xover W of 15 Mile Rd (South)

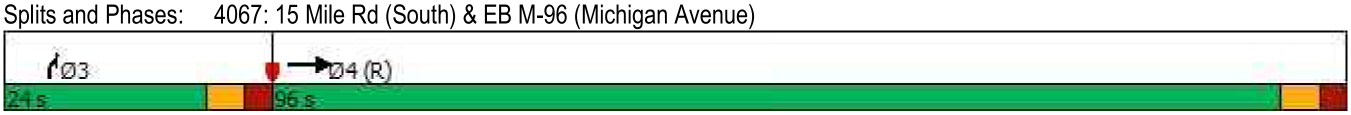


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	473	154	0	0	0	262
Future Volume (vph)	473	154	0	0	0	262
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		50	0		0	250
Storage Lanes		0	0		0	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	1.00	1.00	1.00	0.88
Frt	0.963					0.850
Flt Protected						
Satd. Flow (prot)	4897	0	0	0	0	2814
Flt Permitted						
Satd. Flow (perm)	4897	0	0	0	0	2814
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	167					795
Link Speed (mph)	45			45	45	
Link Distance (ft)	1016			704	1375	
Travel Time (s)	15.4			10.7	20.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.88	0.88
Heavy Vehicles (%)	2%	2%	2%	2%	1%	1%
Adj. Flow (vph)	514	167	0	0	0	298
Shared Lane Traffic (%)						
Lane Group Flow (vph)	681	0	0	0	0	298
Turn Type	NA					Prot
Protected Phases	4					3
Permitted Phases						
Minimum Split (s)	17.0					16.0
Total Split (s)	96.0					24.0
Total Split (%)	80.0%					20.0%
Yellow Time (s)	3.5					3.5
All-Red Time (s)	2.5					2.5
Lost Time Adjust (s)	0.0					0.0
Total Lost Time (s)	6.0					6.0
Lead/Lag	Lag					Lead
Lead-Lag Optimize?	Yes					Yes
Act Effct Green (s)	90.0					18.0
Actuated g/C Ratio	0.75					0.15
v/c Ratio	0.18					0.27
Control Delay	0.4					0.6
Queue Delay	0.0					0.0
Total Delay	0.4					0.6
LOS	A					A
Approach Delay	0.4				0.6	
Approach LOS	A				A	
Queue Length 50th (ft)	0					0
Queue Length 95th (ft)	5					0
Internal Link Dist (ft)	936			624	1295	
Turn Bay Length (ft)						250
Base Capacity (vph)	3714					1097

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Starvation Cap Reductn	0					0
Spillback Cap Reductn	0					0
Storage Cap Reductn	0					0
Reduced v/c Ratio	0.18					0.27

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 4 (3%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.27	
Intersection Signal Delay: 0.5	Intersection LOS: A
Intersection Capacity Utilization 31.7%	ICU Level of Service A
Analysis Period (min) 15	

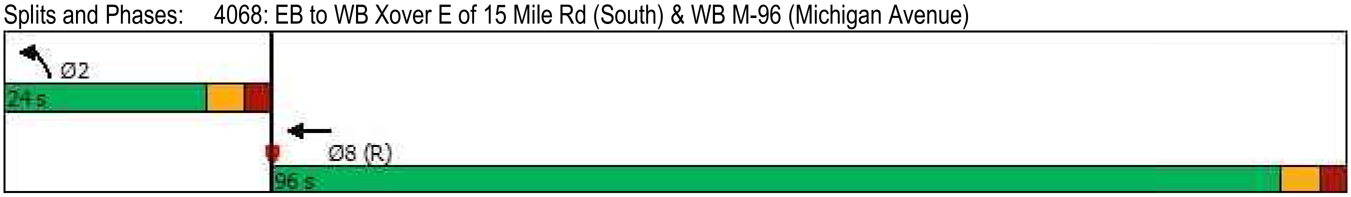
Splits and Phases: 4067: 15 Mile Rd (South) & EB M-96 (Michigan Avenue)



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	2990	151	0
Future Volume (vph)	0	0	0	2990	151	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	5085	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	5085	1770	0
Right Turn on Red		Yes			Yes	Yes
Satd. Flow (RTOR)					3	
Link Speed (mph)	45			45	25	
Link Distance (ft)	687			275	111	
Travel Time (s)	10.4			4.2	3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	3250	164	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	3250	164	0
Turn Type				NA	Prot	
Protected Phases				8	2	
Permitted Phases						
Minimum Split (s)				16.0	13.0	
Total Split (s)				96.0	24.0	
Total Split (%)				80.0%	20.0%	
Yellow Time (s)				3.5	3.5	
All-Red Time (s)				2.5	2.5	
Lost Time Adjust (s)				0.0	0.0	
Total Lost Time (s)				6.0	6.0	
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)				90.0	18.0	
Actuated g/C Ratio				0.75	0.15	
v/c Ratio				0.85	0.61	
Control Delay				11.4	52.3	
Queue Delay				2.0	0.0	
Total Delay				13.4	52.3	
LOS				B	D	
Approach Delay				13.4	52.3	
Approach LOS				B	D	
Queue Length 50th (ft)				566	122	
Queue Length 95th (ft)				680	198	
Internal Link Dist (ft)	607			195	31	
Turn Bay Length (ft)						
Base Capacity (vph)				3813	268	
Starvation Cap Reductn				402	0	
Spillback Cap Reductn				0	0	
Storage Cap Reductn				0	0	
Reduced v/c Ratio				0.95	0.61	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 112 (93%), Referenced to phase 8:WBT, Start of Green			
Natural Cycle: 60			
Control Type: Pretimed			
Maximum v/c Ratio: 0.85			
Intersection Signal Delay: 15.2		Intersection LOS: B	
Intersection Capacity Utilization 105.8%		ICU Level of Service G	
Analysis Period (min) 15			

Splits and Phases: 4068: EB to WB Xover E of 15 Mile Rd (South) & WB M-96 (Michigan Avenue)

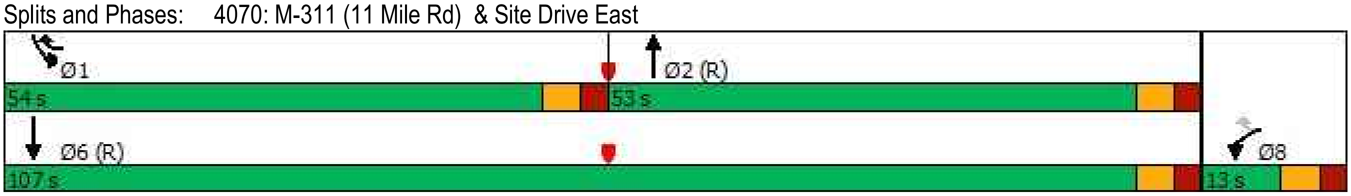


Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	132	30	727	1280
Future Volume (vph)	0	0	132	30	727	1280
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	500		0	400	
Storage Lanes	1	1		0	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.88	0.95	0.95	1.00	0.95
Frt			0.972			
Flt Protected					0.950	
Satd. Flow (prot)	1863	3278	3440	0	1770	3539
Flt Permitted					0.950	
Satd. Flow (perm)	1863	3278	3440	0	1770	3539
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)			27			
Link Speed (mph)	25		55			55
Link Distance (ft)	750		940			974
Travel Time (s)	20.5		11.7			12.1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	143	33	790	1391
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	176	0	790	1391
Turn Type	Prot	pm+ov	NA		Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8				
Detector Phase	8	1	2		1	6
Switch Phase						
Minimum Initial (s)	7.0	7.0	10.0		7.0	10.0
Minimum Split (s)	13.0	13.0	16.0		13.0	16.0
Total Split (s)	13.0	54.0	53.0		54.0	107.0
Total Split (%)	10.8%	45.0%	44.2%		45.0%	89.2%
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5
All-Red Time (s)	2.5	2.5	2.5		2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0		6.0	6.0
Lead/Lag		Lead	Lag		Lead	
Lead-Lag Optimize?						
Recall Mode	None	None	C-Max		None	C-Max
Act Effct Green (s)			47.0		61.0	120.0
Actuated g/C Ratio			0.39		0.51	1.00
v/c Ratio			0.13		0.88	0.39
Control Delay			55.9		37.7	0.1
Queue Delay			0.0		0.0	0.0
Total Delay			55.9		37.7	0.2
LOS			E		D	A
Approach Delay			55.9			13.8
Approach LOS			E			B
Queue Length 50th (ft)			73		659	0
Queue Length 95th (ft)			113		m750	0

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Internal Link Dist (ft)	670		860			894
Turn Bay Length (ft)					400	
Base Capacity (vph)			1363		899	3539
Starvation Cap Reductn			0		0	0
Spillback Cap Reductn			0		0	206
Storage Cap Reductn			0		0	0
Reduced v/c Ratio			0.13		0.88	0.42

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 8 (7%), Referenced to phase 2:NBT and 6:SBT, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.88	
Intersection Signal Delay: 16.9	Intersection LOS: B
Intersection Capacity Utilization 58.6%	ICU Level of Service B
Analysis Period (min) 15	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 4070: M-311 (11 Mile Rd) & Site Drive East

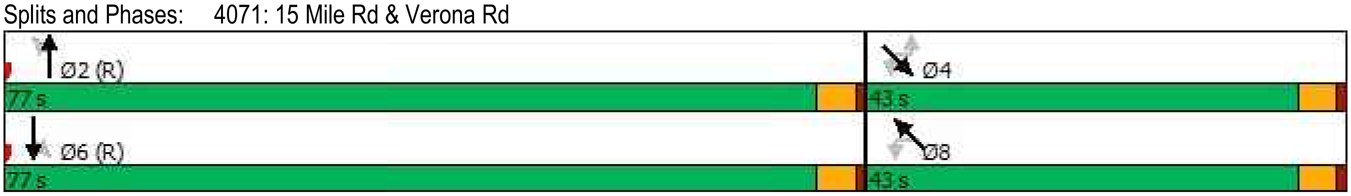


Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	51	13	13	5	9	4	0	87	433	6	118	14
Future Volume (vph)	51	13	13	5	9	4	0	87	433	6	118	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		70	0		0
Storage Lanes	0		0	0		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
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
Frt		0.977			0.968				0.850		0.986	
Flt Protected		0.968			0.987						0.998	
Satd. Flow (prot)	0	1779	0	0	1715	0	0	1845	1392	0	1851	0
Flt Permitted		0.822			0.954						0.991	
Satd. Flow (perm)	0	1511	0	0	1658	0	0	1845	1392	0	1838	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		15			7				487		5	
Link Speed (mph)		45			55			55			55	
Link Distance (ft)		682			426			745			951	
Travel Time (s)		10.3			5.3			9.2			11.8	
Peak Hour Factor	0.80	0.80	0.80	0.60	0.60	0.60	0.89	0.89	0.89	0.86	0.86	0.86
Heavy Vehicles (%)	1%	1%	1%	0%	0%	25%	0%	3%	16%	1%	1%	1%
Adj. Flow (vph)	64	16	16	8	15	7	0	98	487	7	137	16
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	96	0	0	30	0	0	98	487	0	160	0
Turn Type	Perm	NA		Perm	NA			NA	Perm	Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4		4	8		
Minimum Split (s)	22.5	22.5		22.5	22.5		22.5	22.5	22.5	22.5	22.5	
Total Split (s)	77.0	77.0		77.0	77.0		43.0	43.0	43.0	43.0	43.0	
Total Split (%)	64.2%	64.2%		64.2%	64.2%		35.8%	35.8%	35.8%	35.8%	35.8%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0	0.0		0.0	
Total Lost Time (s)		4.5			4.5			4.5	4.5		4.5	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		72.5			72.5			38.5	38.5		38.5	
Actuated g/C Ratio		0.60			0.60			0.32	0.32		0.32	
v/c Ratio		0.10			0.03			0.17	0.63		0.27	
Control Delay		8.8			8.0			30.2	6.7		30.8	
Queue Delay		0.0			0.0			0.0	0.0		0.0	
Total Delay		8.8			8.0			30.2	6.7		30.8	
LOS		A			A			C	A		C	
Approach Delay		8.8			8.0			10.6			30.8	
Approach LOS		A			A			B			C	
Queue Length 50th (ft)		25			7			54	0		89	
Queue Length 95th (ft)		42			12			96	80		139	
Internal Link Dist (ft)		602			346			665			871	
Turn Bay Length (ft)									70			
Base Capacity (vph)		918			1004			591	777		593	

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
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		0.10			0.03			0.17	0.63		0.27	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 45	
Control Type: Pretimed	
Maximum v/c Ratio: 0.63	
Intersection Signal Delay: 14.1	Intersection LOS: B
Intersection Capacity Utilization 54.7%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4071: 15 Mile Rd & Verona Rd

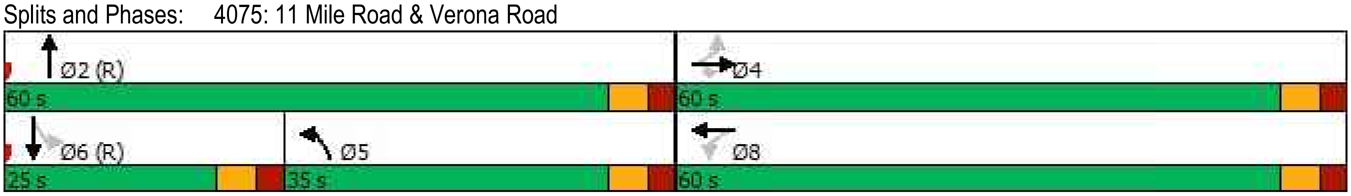


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	518	550	17	135	19	93	68	13	10	82	8
Future Volume (vph)	11	518	550	17	135	19	93	68	13	10	82	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	190		70	190		0	140		0	215		0
Storage Lanes	1		1	1		0	2		0	1		0
Taper Length (ft)	115			140			200			165		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.981			0.976			0.987	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	1900	1468	1805	1852	0	3072	1854	0	1687	1753	0
Flt Permitted	0.631			0.170			0.950			0.697		
Satd. Flow (perm)	1199	1900	1468	323	1852	0	3072	1854	0	1238	1753	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			220		8			10			3	
Link Speed (mph)		55			55			45			55	
Link Distance (ft)		519			1585			1015			821	
Travel Time (s)		6.4			19.6			15.4			10.2	
Peak Hour Factor	0.79	0.79	0.79	0.87	0.87	0.87	0.87	0.87	0.87	0.66	0.66	0.66
Heavy Vehicles (%)	0%	0%	10%	0%	0%	5%	14%	0%	0%	7%	7%	7%
Adj. Flow (vph)	14	656	696	20	155	22	107	78	15	15	124	12
Shared Lane Traffic (%)												
Lane Group Flow (vph)	14	656	696	20	177	0	107	93	0	15	136	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Perm	NA	
Protected Phases		4			8		5	2			6	
Permitted Phases	4		4	8						6		
Minimum Split (s)	25.0	25.0	25.0	25.0	25.0		16.0	25.0		25.0	25.0	
Total Split (s)	60.0	60.0	60.0	60.0	60.0		35.0	60.0		25.0	25.0	
Total Split (%)	50.0%	50.0%	50.0%	50.0%	50.0%		29.2%	50.0%		20.8%	20.8%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	2.5	2.5	2.5	2.5	2.5		2.5	2.5		2.5	2.5	
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)	6.0	6.0	6.0	6.0	6.0		6.0	6.0		6.0	6.0	
Lead/Lag							Lag			Lead	Lead	
Lead-Lag Optimize?							Yes			Yes	Yes	
Act Effct Green (s)	54.0	54.0	54.0	54.0	54.0		29.0	54.0		19.0	19.0	
Actuated g/C Ratio	0.45	0.45	0.45	0.45	0.45		0.24	0.45		0.16	0.16	
v/c Ratio	0.03	0.77	0.89	0.14	0.21		0.14	0.11		0.08	0.49	
Control Delay	18.7	35.0	35.8	22.5	19.9		36.4	17.5		44.3	51.6	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	18.7	35.0	35.8	22.5	19.9		36.4	17.5		44.3	51.6	
LOS	B	D	D	C	B		D	B		D	D	
Approach Delay		35.3			20.2			27.6			50.9	
Approach LOS		D			C			C			D	
Queue Length 50th (ft)	6	418	360	9	78		33	36		10	95	
Queue Length 95th (ft)	16	463	416	26	121		56	67		22	113	
Internal Link Dist (ft)		439			1505			935			741	
Turn Bay Length (ft)	190		70	190			140			215		
Base Capacity (vph)	539	855	781	145	837		742	839		196	280	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0	0	0	0		0	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	0.03	0.77	0.89	0.14	0.21		0.14	0.11		0.08	0.49	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green	
Natural Cycle: 80	
Control Type: Pretimed	
Maximum v/c Ratio: 0.89	
Intersection Signal Delay: 34.1	Intersection LOS: C
Intersection Capacity Utilization 65.7%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 4075: 11 Mile Road & Verona Road



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	1052	143	0	231
Future Volume (vph)	0	0	1052	143	0	231
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200			300	245	245
Storage Lanes	0			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.982			0.865
Flt Protected						
Satd. Flow (prot)	0	0	3339	0	0	1644
Flt Permitted						
Satd. Flow (perm)	0	0	3339	0	0	1644
Link Speed (mph)		55	55		25	
Link Distance (ft)		509	395		760	
Travel Time (s)		6.3	4.9		20.7	
Peak Hour Factor	0.88	0.88	0.91	0.91	0.79	0.79
Heavy Vehicles (%)	1%	1%	7%	0%	0%	0%
Adj. Flow (vph)	0	0	1156	157	0	292
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1313	0	0	292
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 54.6%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	1038	43	0	157
Future Volume (vph)	0	0	1038	43	0	157
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	175			50	0	0
Storage Lanes	0			0	0	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.994			0.865
Flt Protected						
Satd. Flow (prot)	0	0	3362	0	0	1565
Flt Permitted						
Satd. Flow (perm)	0	0	3362	0	0	1565
Link Speed (mph)		55	55		25	
Link Distance (ft)		395	586		185	
Travel Time (s)		4.9	7.3		5.0	
Peak Hour Factor	0.90	0.90	0.95	0.95	0.70	0.70
Heavy Vehicles (%)	1%	1%	7%	0%	5%	5%
Adj. Flow (vph)	0	0	1093	45	0	224
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1138	0	0	224
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 46.4% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	1074	12	0	7
Future Volume (vph)	0	0	1074	12	0	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150			600	0	0
Storage Lanes	0			0	0	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.998			0.865
Flt Protected						
Satd. Flow (prot)	0	0	3370	0	0	1644
Flt Permitted						
Satd. Flow (perm)	0	0	3370	0	0	1644
Link Speed (mph)		55	55		25	
Link Distance (ft)		586	607		1086	
Travel Time (s)		7.3	7.5		29.6	
Peak Hour Factor	0.83	0.83	0.92	0.92	0.60	0.60
Heavy Vehicles (%)	10%	1%	7%	0%	33%	0%
Adj. Flow (vph)	0	0	1167	13	0	12
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1180	0	0	12
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 40.1% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	808	8	0	7
Future Volume (vph)	0	0	808	8	0	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.998			0.865
Flt Protected						
Satd. Flow (prot)	0	0	3532	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	0	3532	0	0	1611
Link Speed (mph)		55	55		55	
Link Distance (ft)		538	1254		1399	
Travel Time (s)		6.7	15.5		17.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	878	9	0	8
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	887	0	0	8
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 32.6%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	0	5	0	93	0	0	460	0
Future Volume (vph)	0	0	0	0	0	5	0	93	0	0	460	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
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
Frt					0.865							
Flt Protected												
Satd. Flow (prot)	0	1863	0	0	1611	0	0	1863	0	0	1863	0
Flt Permitted												
Satd. Flow (perm)	0	1863	0	0	1611	0	0	1863	0	0	1863	0
Link Speed (mph)		45			45			25			45	
Link Distance (ft)		957			1038			516			593	
Travel Time (s)		14.5			15.7			14.1			9.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	0	5	0	101	0	0	500	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	5	0	0	101	0	0	500	0
Sign Control		Stop			Stop			Free			Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 34.2% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBT	EBR	WBL	WBT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	0	0	119	1427	0	0
Future Volume (vph)	0	0	119	1427	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.91	0.91	1.00	1.00
Frt						
Flt Protected				0.996		
Satd. Flow (prot)	0	0	0	5065	0	0
Flt Permitted				0.996		
Satd. Flow (perm)	0	0	0	5065	0	0
Link Speed (mph)	45			45	25	
Link Distance (ft)	183			382	263	
Travel Time (s)	2.8			5.8	7.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	129	1551	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1680	0	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 33.3%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	40	564	0	0	0	0
Future Volume (vph)	40	564	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1610	3390	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1610	3390	0	0	0	0
Link Speed (mph)		45	45		25	
Link Distance (ft)		619	209		329	
Travel Time (s)		9.4	3.2		9.0	
Peak Hour Factor	0.86	0.86	0.92	0.92	0.92	0.92
Adj. Flow (vph)	47	656	0	0	0	0
Shared Lane Traffic (%)	10%					
Lane Group Flow (vph)	42	661	0	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 30.0%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations			↑↑	↱		
Traffic Volume (vph)	0	0	894	168	0	0
Future Volume (vph)	0	0	894	168	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	1.00
Frt				0.850		
Flt Protected						
Satd. Flow (prot)	0	0	3539	1583	0	0
Flt Permitted						
Satd. Flow (perm)	0	0	3539	1583	0	0
Link Speed (mph)		45	45		30	
Link Distance (ft)		213	315		137	
Travel Time (s)		3.2	4.8		3.1	
Peak Hour Factor	0.92	0.92	0.91	0.91	0.92	0.92
Adj. Flow (vph)	0	0	982	185	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	982	185	0	0
Sign Control		Stop	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 48.6%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	686	0	0	159	0
Future Volume (vph)	0	686	0	0	159	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3505	0	0	1787	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3505	0	0	1787	0
Link Speed (mph)		45	45		25	
Link Distance (ft)		309	168		108	
Travel Time (s)		4.7	2.5		2.9	
Peak Hour Factor	0.86	0.86	0.92	0.92	0.87	0.87
Heavy Vehicles (%)	3%	3%	2%	2%	1%	1%
Adj. Flow (vph)	0	798	0	0	183	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	798	0	0	183	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 46.1%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑↑	↰	
Traffic Volume (vph)	0	0	0	1007	182	0
Future Volume (vph)	0	0	0	1007	182	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	5036	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	5036	1770	0
Link Speed (mph)	45			45	25	
Link Distance (ft)	134			152	111	
Travel Time (s)	2.0			2.3	3.0	
Peak Hour Factor	0.92	0.92	0.89	0.89	0.94	0.94
Heavy Vehicles (%)	2%	2%	3%	3%	2%	2%
Adj. Flow (vph)	0	0	0	1131	194	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1131	194	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 39.5%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	664	0	0	80	0
Future Volume (vph)	0	664	0	0	80	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3574	0	0	1787	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3574	0	0	1787	0
Link Speed (mph)		45	45		25	
Link Distance (ft)		222	290		102	
Travel Time (s)		3.4	4.4		2.8	
Peak Hour Factor	0.95	0.95	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	1%	1%	2%	2%	1%	1%
Adj. Flow (vph)	0	699	0	0	87	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	699	0	0	87	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 60.5%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	1026	65	0
Future Volume (vph)	0	0	0	1026	65	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	30			45	25	
Link Distance (ft)	114			1105	101	
Travel Time (s)	2.6			16.7	2.8	
Peak Hour Factor	0.92	0.92	0.88	0.88	0.94	0.94
Adj. Flow (vph)	0	0	0	1166	69	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1166	69	0
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 56.4% ICU Level of Service B

Analysis Period (min) 15

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	174	265	31	4	93	12	14	37	3	13	81	35
Future Volume (vph)	174	265	31	4	93	12	14	37	3	13	81	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	80		0	80		0	110		0	115		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	180			180			140			175		
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
Frt		0.984			0.982			0.988			0.955	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	1870	0	1770	1829	0	1703	1771	0	1770	1779	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1805	1870	0	1770	1829	0	1703	1771	0	1770	1779	0
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		1365			1319			666			571	
Travel Time (s)		20.7			20.0			10.1			8.7	
Peak Hour Factor	0.94	0.94	0.94	0.88	0.88	0.88	0.78	0.78	0.78	0.91	0.91	0.91
Heavy Vehicles (%)	0%	0%	0%	2%	2%	2%	6%	6%	6%	2%	2%	2%
Adj. Flow (vph)	185	282	33	5	106	14	18	47	4	14	89	38
Shared Lane Traffic (%)												
Lane Group Flow (vph)	185	315	0	5	120	0	18	51	0	14	127	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 30.4% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBL2	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	SWL	SWR
Lane Configurations											
Traffic Volume (vph)	55	0	112	0	270	79	81	385	0	0	0
Future Volume (vph)	55	0	112	0	270	79	81	385	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	240	0		0	105		0	0	0
Storage Lanes		1	1	0		0	1		0	0	0
Taper Length (ft)		25		25			70			25	
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
Frt			0.850		0.969						
Flt Protected	0.950						0.950				
Satd. Flow (prot)	1687	0	1615	0	1805	0	1752	1845	0	0	0
Flt Permitted	0.950						0.950				
Satd. Flow (perm)	1687	0	1615	0	1805	0	1752	1845	0	0	0
Link Speed (mph)		25			45			45		25	
Link Distance (ft)		894			1167			685		897	
Travel Time (s)		24.4			17.7			10.4		24.5	
Peak Hour Factor	0.93	0.93	0.93	0.91	0.91	0.91	0.95	0.95	0.95	0.92	0.92
Heavy Vehicles (%)	7%	0%	0%	2%	2%	2%	3%	3%	3%	2%	2%
Adj. Flow (vph)	59	0	120	0	297	87	85	405	0	0	0
Shared Lane Traffic (%)											
Lane Group Flow (vph)	59	0	120	0	384	0	85	405	0	0	0
Sign Control		Stop			Free			Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 33.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	WBL2	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NER
Lane Configurations											
Traffic Volume (vph)	93	0	84	61	264	0	0	373	50	0	0
Future Volume (vph)	93	0	84	61	264	0	0	373	50	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	185	165		0	0		0	0	0
Storage Lanes		1	1	1		0	0		0	0	0
Taper Length (ft)		25		110			25			25	
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
Frt			0.850					0.984			
Flt Protected	0.950			0.950							
Satd. Flow (prot)	1805	0	1455	1752	1845	0	0	1815	0	0	0
Flt Permitted	0.950			0.950							
Satd. Flow (perm)	1805	0	1455	1752	1845	0	0	1815	0	0	0
Link Speed (mph)		25			45			45		25	
Link Distance (ft)		613			685			608		913	
Travel Time (s)		16.7			10.4			9.2		24.9	
Peak Hour Factor	0.81	0.81	0.81	0.87	0.87	0.87	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	11%	3%	3%	3%	3%	3%	3%	2%	2%
Adj. Flow (vph)	115	0	104	70	303	0	0	405	54	0	0
Shared Lane Traffic (%)											
Lane Group Flow (vph)	115	0	104	70	303	0	0	459	0	0	0
Sign Control		Stop			Free			Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 33.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	184	140	0	396	272	0
Future Volume (vph)	184	140	0	396	272	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.850				
Flt Protected	0.950					
Satd. Flow (prot)	1543	1553	0	3505	3374	0
Flt Permitted	0.950					
Satd. Flow (perm)	1543	1553	0	3505	3374	0
Link Speed (mph)	25			55	55	
Link Distance (ft)	119			105	620	
Travel Time (s)	3.2			1.3	7.7	
Peak Hour Factor	0.93	0.93	0.82	0.82	0.92	0.92
Heavy Vehicles (%)	17%	4%	0%	3%	7%	0%
Adj. Flow (vph)	198	151	0	483	296	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	198	151	0	483	296	0
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 27.8%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	396	61	35	377
Future Volume (vph)	0	0	396	61	35	377
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		340	0	
Storage Lanes	0	0		1	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	1.00	0.95	0.95
Frt				0.850		
Flt Protected						0.996
Satd. Flow (prot)	0	0	3505	1568	0	3383
Flt Permitted						0.996
Satd. Flow (perm)	0	0	3505	1568	0	3383
Link Speed (mph)	25		55			55
Link Distance (ft)	664		1109			105
Travel Time (s)	18.1		13.7			1.3
Peak Hour Factor	0.92	0.92	0.82	0.82	0.92	0.92
Heavy Vehicles (%)	2%	2%	3%	3%	20%	5%
Adj. Flow (vph)	0	0	483	74	38	410
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	483	74	0	448
Sign Control	Stop		Free			Free

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 29.1% ICU Level of Service A

Analysis Period (min) 15

Lane Group	WBL2	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NER
Lane Configurations											
Traffic Volume (vph)	52	0	60	0	352	0	0	220	86	0	0
Future Volume (vph)	52	0	60	0	352	0	0	220	86	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	205	0		0	0		135	0	0
Storage Lanes		1	1	0		0	0		1	0	0
Taper Length (ft)		25		25			25			25	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00
Frt			0.850						0.850		
Flt Protected	0.950										
Satd. Flow (prot)	1736	0	1380	0	3438	0	0	3343	1272	0	0
Flt Permitted	0.950										
Satd. Flow (perm)	1736	0	1380	0	3438	0	0	3343	1272	0	0
Link Speed (mph)		25			55			55		25	
Link Distance (ft)		296			230			1367		908	
Travel Time (s)		8.1			2.9			16.9		24.8	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.95	0.95	0.95	0.92	0.92
Heavy Vehicles (%)	4%	0%	17%	0%	5%	0%	0%	8%	27%	2%	2%
Adj. Flow (vph)	59	0	68	0	400	0	0	232	91	0	0
Shared Lane Traffic (%)											
Lane Group Flow (vph)	59	0	68	0	400	0	0	232	91	0	0
Sign Control		Stop			Free			Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 20.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	33	80	0	270	154	0
Future Volume (vph)	33	80	0	270	154	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				
Flt Protected	0.950					
Satd. Flow (prot)	1752	1077	0	1624	1696	0
Flt Permitted	0.950					
Satd. Flow (perm)	1752	1077	0	1624	1696	0
Link Speed (mph)	25			45	45	
Link Distance (ft)	189			1063	114	
Travel Time (s)	5.2			16.1	1.7	
Peak Hour Factor	0.74	0.74	0.93	0.93	0.89	0.89
Heavy Vehicles (%)	3%	50%	17%	17%	12%	12%
Adj. Flow (vph)	45	108	0	290	173	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	45	108	0	290	173	0
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 24.2%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	0	0	182	121	3	154
Future Volume (vph)	0	0	182	121	3	154
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.850		
Flt Protected						0.999
Satd. Flow (prot)	0	0	1624	1380	0	1689
Flt Permitted						0.999
Satd. Flow (perm)	0	0	1624	1380	0	1689
Link Speed (mph)	25		45			45
Link Distance (ft)	105		114			727
Travel Time (s)	2.9		1.7			11.0
Peak Hour Factor	0.92	0.92	0.93	0.93	0.89	0.89
Heavy Vehicles (%)	2%	2%	17%	17%	33%	12%
Adj. Flow (vph)	0	0	196	130	3	173
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	196	130	0	176
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 22.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBR	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	6	97	58	124	60	11
Future Volume (vph)	6	97	58	124	60	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	195	0	0			90
Storage Lanes	1	1	0			1
Taper Length (ft)	135		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				0.850
Flt Protected	0.950			0.984		
Satd. Flow (prot)	1570	1404	0	1615	1776	1509
Flt Permitted	0.950			0.984		
Satd. Flow (perm)	1570	1404	0	1615	1776	1509
Link Speed (mph)	25			45	45	
Link Distance (ft)	597			727	1165	
Travel Time (s)	16.3			11.0	17.7	
Peak Hour Factor	0.83	0.83	0.91	0.91	0.78	0.78
Heavy Vehicles (%)	15%	15%	43%	3%	7%	7%
Adj. Flow (vph)	7	117	64	136	77	14
Shared Lane Traffic (%)						
Lane Group Flow (vph)	7	117	0	200	77	14
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 26.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	18	1528	18	0
Future Volume (vph)	0	0	18	1528	18	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.91	0.91	1.00	1.00
Frt						
Flt Protected				0.999	0.950	
Satd. Flow (prot)	0	0	0	5080	1770	0
Flt Permitted				0.999	0.950	
Satd. Flow (perm)	0	0	0	5080	1770	0
Link Speed (mph)	45			45	25	
Link Distance (ft)	382			217	236	
Travel Time (s)	5.8			3.3	6.4	
Peak Hour Factor	0.90	0.90	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	20	1661	20	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1681	20	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 39.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑					↱
Traffic Volume (vph)	845	0	0	0	0	30
Future Volume (vph)	845	0	0	0	0	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	1.00	1.00	1.00	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	3539	0	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	3539	0	0	0	0	1611
Link Speed (mph)	45			45	25	
Link Distance (ft)	168			432	770	
Travel Time (s)	2.5			6.5	21.0	
Peak Hour Factor	0.87	0.87	0.92	0.92	0.92	0.92
Adj. Flow (vph)	971	0	0	0	0	33
Shared Lane Traffic (%)						
Lane Group Flow (vph)	971	0	0	0	0	33
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 41.1%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations			↑↑↑			↱
Traffic Volume (vph)	0	0	1189	0	0	32
Future Volume (vph)	0	0	1189	0	0	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.91	1.00	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	0	0	5036	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	0	5036	0	0	1611
Link Speed (mph)		45	45		25	
Link Distance (ft)		494	134		230	
Travel Time (s)		7.5	2.0		6.3	
Peak Hour Factor	0.92	0.92	0.89	0.89	0.92	0.92
Heavy Vehicles (%)	2%	2%	3%	3%	2%	2%
Adj. Flow (vph)	0	0	1336	0	0	35
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1336	0	0	35
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 42.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations			↑↱			
Traffic Volume (vph)	0	0	1041	50	0	0
Future Volume (vph)	0	0	1041	50	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.993			
Flt Protected						
Satd. Flow (prot)	0	0	3514	0	0	0
Flt Permitted						
Satd. Flow (perm)	0	0	3514	0	0	0
Link Speed (mph)		30	45		25	
Link Distance (ft)		176	114		201	
Travel Time (s)		4.0	1.7		5.5	
Peak Hour Factor	0.92	0.92	0.88	0.88	0.92	0.92
Adj. Flow (vph)	0	0	1183	57	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1240	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 38.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	NBT	NBR	SBL	SBT	SWL	SWR
Lane Configurations	↑↱			↑↑		
Traffic Volume (vph)	352	228	0	272	0	0
Future Volume (vph)	352	228	0	272	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	1.00	0.95	1.00	1.00
Frt	0.941					
Flt Protected						
Satd. Flow (prot)	3164	0	0	3343	0	0
Flt Permitted						
Satd. Flow (perm)	3164	0	0	3343	0	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	620			230	1088	
Travel Time (s)	7.7			2.9	29.7	
Peak Hour Factor	0.88	0.88	0.95	0.95	0.92	0.92
Heavy Vehicles (%)	5%	11%	8%	8%	2%	2%
Adj. Flow (vph)	400	259	0	286	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	659	0	0	286	0	0
Sign Control	Free			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 20.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	32	1009	0	0	0	0	0	48	29
Future Volume (vph)	0	0	0	32	1009	0	0	0	0	0	48	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	165		0	0		0	0		0
Storage Lanes	0		0	1		0	0		0	0		0
Taper Length (ft)	25			85			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt											0.949	
Flt Protected				0.950								
Satd. Flow (prot)	0	0	0	1770	3539	0	0	0	0	0	1785	0
Flt Permitted				0.950								
Satd. Flow (perm)	0	0	0	1770	3539	0	0	0	0	0	1785	0
Link Speed (mph)		30			45			30			30	
Link Distance (ft)		212			176			102			496	
Travel Time (s)		4.8			2.7			2.3			11.3	
Peak Hour Factor	0.92	0.92	0.92	0.86	0.86	0.86	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	1%	1%	1%
Adj. Flow (vph)	0	0	0	37	1173	0	0	0	0	0	52	32
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	37	1173	0	0	0	0	0	84	0
Sign Control		Free			Free			Yield			Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 38.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	1664	0	0	0	523
Future Volume (vph)	0	1664	0	0	0	523
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	0.88
Frt						0.850
Flt Protected						
Satd. Flow (prot)	0	3539	0	0	0	2787
Flt Permitted						
Satd. Flow (perm)	0	3539	0	0	0	2787
Link Speed (mph)		55	55		55	
Link Distance (ft)		434	1242		1194	
Travel Time (s)		5.4	15.4		14.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1809	0	0	0	568
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1809	0	0	0	568
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 49.3%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	0	119	0	0	92
Future Volume (vph)	0	0	119	0	0	92
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	0	0	1863	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	0	1863	0	0	1611
Link Speed (mph)		25	25		30	
Link Distance (ft)		1199	263		174	
Travel Time (s)		32.7	7.2		4.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.90	0.90
Adj. Flow (vph)	0	0	129	0	0	102
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	129	0	0	102
Sign Control		Free	Yield		Free	

Intersection Summary		
Area Type:	Other	
Control Type: Unsignalized		
Intersection Capacity Utilization 33.3%		ICU Level of Service A
Analysis Period (min) 15		

Lane Group	WBL	WBR	NBL	NBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	168	40	0	0	0
Future Volume (vph)	0	168	40	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.97	1.00	1.00	1.00
Frt		0.865				
Flt Protected			0.950			
Satd. Flow (prot)	0	1627	3303	0	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	1627	3303	0	0	0
Link Speed (mph)	45		45		45	
Link Distance (ft)	255		329		551	
Travel Time (s)	3.9		5.0		8.3	
Peak Hour Factor	0.91	0.91	0.93	0.93	0.92	0.92
Heavy Vehicles (%)	1%	1%	6%	6%	2%	2%
Adj. Flow (vph)	0	185	43	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	185	43	0	0	0
Sign Control	Yield		Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 28.2%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	159	1062	0	0
Future Volume (vph)	0	0	159	1062	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	450		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			85		25	
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	5085	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	5085	0	0
Link Speed (mph)	45			45	30	
Link Distance (ft)	315			494	108	
Travel Time (s)	4.8			7.5	2.5	
Peak Hour Factor	0.92	0.92	0.87	0.87	0.92	0.92
Adj. Flow (vph)	0	0	183	1221	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	183	1221	0	0
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 34.8% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	182	693	0	0	0	0
Future Volume (vph)	182	693	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	275			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	110				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		45	45		30	
Link Distance (ft)		432	161		111	
Travel Time (s)		6.5	2.4		2.5	
Peak Hour Factor	0.94	0.94	0.92	0.92	0.92	0.92
Adj. Flow (vph)	194	737	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	194	737	0	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 45.3%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	102	0	0	0	3038
Future Volume (vph)	0	102	0	0	0	3038
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	0.76
Frt						0.850
Flt Protected						
Satd. Flow (prot)	0	3539	0	0	0	3610
Flt Permitted						
Satd. Flow (perm)	0	3539	0	0	0	3610
Link Speed (mph)		55	55		45	
Link Distance (ft)		1093	655		773	
Travel Time (s)		13.5	8.1		11.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	111	0	0	0	3302
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	111	0	0	0	3302
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 74.2%	ICU Level of Service D
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	65	679	0	0	0	0
Future Volume (vph)	65	679	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	180			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	75				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		45	45		30	
Link Distance (ft)		290	1089		101	
Travel Time (s)		4.4	16.5		2.3	
Peak Hour Factor	0.94	0.94	0.92	0.92	0.92	0.92
Adj. Flow (vph)	69	722	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	69	722	0	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 53.8%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	492	92	0	0	0	0
Future Volume (vph)	492	92	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	1.00	1.00	1.00	1.00
Frt	0.976					
Flt Protected						
Satd. Flow (prot)	4963	0	0	0	0	0
Flt Permitted						
Satd. Flow (perm)	4963	0	0	0	0	0
Link Speed (mph)	45			45	30	
Link Distance (ft)	311			156	174	
Travel Time (s)	4.7			2.4	4.0	
Peak Hour Factor	0.90	0.90	0.92	0.92	0.92	0.92
Adj. Flow (vph)	547	102	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	649	0	0	0	0	0
Sign Control	Free			Stop	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 47.1%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	NBT	NBR	SBL	SBT	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	0	0	112	1563	0	0
Future Volume (vph)	0	0	112	1563	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	500		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			100		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	3539	0	0
Link Speed (mph)	30			25	25	
Link Distance (ft)	266			1471	301	
Travel Time (s)	6.0			40.1	8.2	
Peak Hour Factor	0.92	0.92	0.75	0.75	0.92	0.92
Adj. Flow (vph)	0	0	149	2084	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	149	2084	0	0
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 46.5%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	652	122	0	0	0	0
Future Volume (vph)	652	122	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected		0.960				
Satd. Flow (prot)	0	1788	0	0	0	0
Flt Permitted		0.960				
Satd. Flow (perm)	0	1788	0	0	0	0
Link Speed (mph)		25	30		25	
Link Distance (ft)		1207	315		252	
Travel Time (s)		32.9	7.2		6.9	
Peak Hour Factor	0.75	0.75	0.92	0.92	0.92	0.92
Adj. Flow (vph)	869	163	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1032	0	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 57.4%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	103	0	69	0	0
Future Volume (vph)	0	103	0	69	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.865		
Flt Protected						
Satd. Flow (prot)	0	1652	0	1191	0	0
Flt Permitted						
Satd. Flow (perm)	0	1652	0	1191	0	0
Link Speed (mph)		25	25		25	
Link Distance (ft)		995	597		1154	
Travel Time (s)		27.1	16.3		31.5	
Peak Hour Factor	0.83	0.83	0.89	0.89	0.92	0.92
Heavy Vehicles (%)	15%	15%	38%	38%	2%	2%
Adj. Flow (vph)	0	124	0	78	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	124	0	78	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 8.8%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	53	3346	0	0
Future Volume (vph)	0	0	53	3346	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	250		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	5085	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	5085	0	0
Link Speed (mph)	45			45	25	
Link Distance (ft)	894			534	137	
Travel Time (s)	13.5			8.1	3.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	58	3637	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	58	3637	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 27.0%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		4			1	
Traffic Volume (vph)	0	465	0	0	53	0
Future Volume (vph)	0	465	0	0	53	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.86	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	6408	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	6408	0	0	1770	0
Link Speed (mph)		45	45		25	
Link Distance (ft)		744	1191		137	
Travel Time (s)		11.3	18.0		3.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	505	0	0	58	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	505	0	0	58	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 78.1%	ICU Level of Service D
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	10	508	0	0	0	0
Future Volume (vph)	10	508	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	400			0	0	0
Storage Lanes	2			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	0.97	0.86	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	3433	6408	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	3433	6408	0	0	0	0
Link Speed (mph)		45	45		25	
Link Distance (ft)		1191	262		113	
Travel Time (s)		18.0	4.0		3.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	11	552	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	11	552	0	0	0	0
Sign Control		Free	Stop		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 74.1%	ICU Level of Service D
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	119	3022	0	0
Future Volume (vph)	0	0	119	3022	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	250		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	5085	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	5085	0	0
Link Speed (mph)	45			45	25	
Link Distance (ft)	254			1016	123	
Travel Time (s)	3.8			15.4	3.4	
Peak Hour Factor	0.92	0.92	0.90	0.87	0.92	0.92
Adj. Flow (vph)	0	0	132	3474	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	132	3474	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 148.8%	ICU Level of Service H
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	151	584	0	0	0	0
Future Volume (vph)	151	584	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.91	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	5085	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	5085	0	0	0	0
Link Speed (mph)		45	45		30	
Link Distance (ft)		704	311		111	
Travel Time (s)		10.7	4.7		2.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	164	635	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	164	635	0	0	0	0
Sign Control		Free	Stop		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 77.4%	ICU Level of Service D
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	1249	27	0
Future Volume (vph)	0	0	0	1249	27	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	30	
Link Distance (ft)	583			574	107	
Travel Time (s)	7.2			7.1	2.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	1358	29	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1358	29	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 65.7%	ICU Level of Service C
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	27	886	0	0	0	0
Future Volume (vph)	27	886	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		30	
Link Distance (ft)		1122	576		107	
Travel Time (s)		13.9	7.1		2.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	29	963	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	29	963	0	0	0	0
Sign Control		Free	Stop		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 65.7%	ICU Level of Service C
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	1240	36	0	54
Future Volume (vph)	0	0	1240	36	0	54
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.996			0.865
Flt Protected						
Satd. Flow (prot)	0	0	3525	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	0	3525	0	0	1611
Link Speed (mph)		55	55		30	
Link Distance (ft)		590	583		121	
Travel Time (s)		7.3	7.2		2.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	1348	39	0	59
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1387	0	0	59
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 45.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	168	1126	0	0
Future Volume (vph)	0	0	168	1126	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	250		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	3539	0	0
Link Speed (mph)	55			55	30	
Link Distance (ft)	405			590	104	
Travel Time (s)	5.0			7.3	2.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	183	1224	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	183	1224	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 36.1%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑			↰	
Traffic Volume (vph)	0	745	0	0	168	0
Future Volume (vph)	0	745	0	0	168	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	1770	0
Link Speed (mph)		55	55		30	
Link Distance (ft)		316	1122		104	
Travel Time (s)		3.9	13.9		2.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	810	0	0	183	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	810	0	0	183	0
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 58.4% ICU Level of Service B

Analysis Period (min) 15

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	491	699	0	0
Future Volume (vph)	0	0	491	699	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	250			0
Storage Lanes	0	0	2			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	0.97	0.91	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	3433	5085	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	3433	5085	0	0
Link Speed (mph)	45			55	30	
Link Distance (ft)	105			493	555	
Travel Time (s)	1.6			6.1	12.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	534	760	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	534	760	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary		
Area Type:	Other	
Control Type: Unsignalized		
Intersection Capacity Utilization 85.2%		ICU Level of Service E
Analysis Period (min) 15		

Lane Group	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	540	159	0	0	0	0
Future Volume (vph)	540	159	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.94	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	4990	1863	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	4990	1863	0	0	0	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		555	271		108	
Travel Time (s)		12.6	6.2		2.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	587	173	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	587	173	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 62.4%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	73	0	0	0	0	159
Future Volume (vph)	73	0	0	0	0	159
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	1863	0	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	1863	0	0	0	0	1611
Link Speed (mph)	25			30	25	
Link Distance (ft)	287			1072	271	
Travel Time (s)	7.8			24.4	7.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	79	0	0	0	0	173
Shared Lane Traffic (%)						
Lane Group Flow (vph)	79	0	0	0	0	173
Sign Control	Yield			Free	Free	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 48.6% ICU Level of Service A
Analysis Period (min) 15

Lane Group	NBT	NBR	SBL	SBT	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	0	0	73	2266	0	0
Future Volume (vph)	0	0	73	2266	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.91	0.91	1.00	1.00
Frt						
Flt Protected				0.998		
Satd. Flow (prot)	0	0	0	5070	0	0
Flt Permitted				0.998		
Satd. Flow (perm)	0	0	0	5070	0	0
Link Speed (mph)	45			45	45	
Link Distance (ft)	194			406	287	
Travel Time (s)	2.9			6.2	4.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	5%	2%	2%	2%
Adj. Flow (vph)	0	0	79	2463	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	2542	0	0
Sign Control	Free			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 48.6%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	104	988	0	0	0	0
Future Volume (vph)	104	988	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1719	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1719	3539	0	0	0	0
Link Speed (mph)		25	25		25	
Link Distance (ft)		879	346		271	
Travel Time (s)		24.0	9.4		7.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	2%	2%	2%	2%	2%
Adj. Flow (vph)	113	1074	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	113	1074	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 44.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	79	0	0	81
Future Volume (vph)	0	0	79	0	0	81
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	0	0	1863	0	0	1565
Flt Permitted						
Satd. Flow (perm)	0	0	1863	0	0	1565
Link Speed (mph)		30	45		45	
Link Distance (ft)		874	182		254	
Travel Time (s)		19.9	2.8		3.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	5%
Adj. Flow (vph)	0	0	86	0	0	88
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	86	0	0	88
Sign Control		Free	Free		Yield	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 27.5%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBR	SBL	SBR	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	0	0	0	0	79	565
Future Volume (vph)	0	0	0	0	79	565
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.91
Frt					0.904	0.850
Flt Protected					0.982	
Satd. Flow (prot)	0	0	0	0	1623	2799
Flt Permitted					0.982	
Satd. Flow (perm)	0	0	0	0	1623	2799
Link Speed (mph)	30		30		30	
Link Distance (ft)	182		207		337	
Travel Time (s)	4.1		4.7		7.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	5%
Adj. Flow (vph)	0	0	0	0	86	614
Shared Lane Traffic (%)						25%
Lane Group Flow (vph)	0	0	0	0	240	460
Sign Control	Stop		Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 27.5%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1300	81	0	0	0	0
Future Volume (vph)	1300	81	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00
Frt	0.991					
Flt Protected						
Satd. Flow (prot)	3407	0	0	0	0	0
Flt Permitted						
Satd. Flow (perm)	3407	0	0	0	0	0
Link Speed (mph)	30			45	25	
Link Distance (ft)	306			190	254	
Travel Time (s)	7.0			2.9	6.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	5%	2%	2%	2%	2%
Adj. Flow (vph)	1413	88	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1501	0	0	0	0	0
Sign Control	Free			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 56.9%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations			↑↑	↱		
Traffic Volume (vph)	0	0	1039	151	0	0
Future Volume (vph)	0	0	1039	151	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			250	0	0
Storage Lanes	0			1	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	1.00
Frt				0.850		
Flt Protected						
Satd. Flow (prot)	0	0	3539	1538	0	0
Flt Permitted						
Satd. Flow (perm)	0	0	3539	1538	0	0
Link Speed (mph)		25	25		25	
Link Distance (ft)		241	1465		317	
Travel Time (s)		6.6	40.0		8.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	5%	2%	2%
Adj. Flow (vph)	0	0	1129	164	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1129	164	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 33.7%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑↑	↰	
Traffic Volume (vph)	0	0	0	716	64	0
Future Volume (vph)	0	0	0	716	64	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	4940	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	4940	1770	0
Link Speed (mph)	55			30	25	
Link Distance (ft)	598			415	105	
Travel Time (s)	7.4			9.4	2.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	5%	2%	2%
Adj. Flow (vph)	0	0	0	778	70	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	778	70	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 58.7%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	64	1381	0	0	0	0
Future Volume (vph)	64	1381	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3438	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3438	0	0	0	0
Link Speed (mph)		55	30		25	
Link Distance (ft)		597	306		105	
Travel Time (s)		7.4	7.0		2.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	5%	2%	2%	2%	2%
Adj. Flow (vph)	70	1501	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	70	1501	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 58.7% ICU Level of Service B

Analysis Period (min) 15

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	493	0	0
Future Volume (vph)	0	0	0	493	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	0	0	0	3539	1863	0
Flt Permitted						
Satd. Flow (perm)	0	0	0	3539	1863	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	586			210	99	
Travel Time (s)	7.3			2.6	2.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	536	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	536	0	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 23.6%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	783	0	0	0	0
Future Volume (vph)	0	783	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	1863	3539	0	0	0	0
Flt Permitted						
Satd. Flow (perm)	1863	3539	0	0	0	0
Link Speed (mph)		55	55		25	
Link Distance (ft)		589	212		99	
Travel Time (s)		7.3	2.6		2.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	851	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	851	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 25.0% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	493	0	0
Future Volume (vph)	0	0	0	493	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	0	0	0	3539	0	0
Flt Permitted						
Satd. Flow (perm)	0	0	0	3539	0	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	723			586	81	
Travel Time (s)	9.0			7.3	2.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	536	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	536	0	0
Sign Control	Free			Free	Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 23.6% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	783	0	0	0	0	0	0	0	0	0	0
Future Volume (vph)	0	783	0	0	0	0	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	3539	0	0	0	0	0	0	1863	0	1863	0
Flt Permitted												
Satd. Flow (perm)	0	3539	0	0	0	0	0	0	1863	0	1863	0
Link Speed (mph)		55			55			25			25	
Link Distance (ft)		719			589			84			81	
Travel Time (s)		8.9			7.3			2.3			2.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	851	0	0	0	0	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	851	0	0	0	0	0	0	0	0	0	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 31.6%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	0	783	0	493	0	0
Future Volume (vph)	0	783	0	493	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.88	1.00	0.95	1.00	1.00
Frt		0.850				
Flt Protected						
Satd. Flow (prot)	0	2787	0	3539	0	0
Flt Permitted						
Satd. Flow (perm)	0	2787	0	3539	0	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	997			723	719	
Travel Time (s)	12.4			9.0	19.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	851	0	536	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	851	0	536	0	0
Sign Control	Free			Free	Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 30.7% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	286	600	0	0	0	0
Future Volume (vph)	286	600	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		55	
Link Distance (ft)		2077	2379		116	
Travel Time (s)		25.7	29.5		1.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	311	652	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	311	652	0	0	0	0
Sign Control		Free	Stop		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 45.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	0	0	0	800	286	0
Future Volume (vph)	0	0	0	800	286	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	607			2382	116	
Travel Time (s)	7.5			29.5	3.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	870	311	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	870	311	0
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 52.0% ICU Level of Service A

Analysis Period (min) 15

Lane Group	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	0	0	14	800	0	0
Future Volume (vph)	0	0	14	800	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	250		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	3539	0	0
Link Speed (mph)	55			55	55	
Link Distance (ft)	2382			560	108	
Travel Time (s)	29.5			6.9	1.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	15	870	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	15	870	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 32.3%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	0	600	0	0	14	0
Future Volume (vph)	0	600	0	0	14	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	1770	0
Link Speed (mph)		55	55		25	
Link Distance (ft)		2379	608		108	
Travel Time (s)		29.5	7.5		2.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	652	0	0	15	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	652	0	0	15	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 45.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	575	39	0	0	0	32
Future Volume (vph)	575	39	0	0	0	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		600	600		0	0
Storage Lanes		0	0		0	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00
Frt	0.991					0.865
Flt Protected						
Satd. Flow (prot)	3507	0	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	3507	0	0	0	0	1611
Link Speed (mph)	55			55	45	
Link Distance (ft)	608			628	1089	
Travel Time (s)	7.5			7.8	16.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	625	42	0	0	0	35
Shared Lane Traffic (%)						
Lane Group Flow (vph)	667	0	0	0	0	35
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 27.1%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑	↰	
Traffic Volume (vph)	0	0	0	805	9	0
Future Volume (vph)	0	0	0	805	9	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	645			3831	112	
Travel Time (s)	8.0			47.5	3.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	875	10	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	875	10	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 50.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	9	598	0	0	0	0
Future Volume (vph)	9	598	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		55	
Link Distance (ft)		628	3825		112	
Travel Time (s)		7.8	47.4		1.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	10	650	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	10	650	0	0	0	0
Sign Control		Free	Stop		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 45.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	10	805	0	0
Future Volume (vph)	0	0	10	805	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	250		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	3539	0	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	3831			538	97	
Travel Time (s)	47.5			6.7	2.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	11	875	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	11	875	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 26.5%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	598	0	0	10	0
Future Volume (vph)	0	598	0	0	10	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	1770	0
Link Speed (mph)		55	55		25	
Link Distance (ft)		3825	591		97	
Travel Time (s)		47.4	7.3		2.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	650	0	0	11	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	650	0	0	11	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 45.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	596	12	0	0	0	16
Future Volume (vph)	596	12	0	0	0	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00
Frt	0.997					0.865
Flt Protected						
Satd. Flow (prot)	3529	0	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	3529	0	0	0	0	1611
Link Speed (mph)	55			55	45	
Link Distance (ft)	591			1206	1073	
Travel Time (s)	7.3			15.0	16.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	648	13	0	0	0	17
Shared Lane Traffic (%)						
Lane Group Flow (vph)	661	0	0	0	0	17
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 26.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑	↰	
Traffic Volume (vph)	0	0	0	807	9	0
Future Volume (vph)	0	0	0	807	9	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	1254			1793	105	
Travel Time (s)	15.5			22.2	2.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	877	10	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	877	10	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 51.5%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	9	603	0	0	0	0
Future Volume (vph)	9	603	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		55	
Link Distance (ft)		1206	1786		105	
Travel Time (s)		15.0	22.1		1.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	10	655	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	10	655	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 45.6%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	549	807	0	0
Future Volume (vph)	0	0	549	807	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	500		0	0
Storage Lanes		0	2		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	0.97	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	3433	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	3433	3539	0	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	1793			596	109	
Travel Time (s)	22.2			7.4	3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	597	877	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	597	877	0	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 91.5%	ICU Level of Service F
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑	↰	
Traffic Volume (vph)	0	0	0	1356	0	0
Future Volume (vph)	0	0	0	1356	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	0	0	0	3539	1863	0
Flt Permitted						
Satd. Flow (perm)	0	0	0	3539	1863	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	631			2681	109	
Travel Time (s)	7.8			33.2	3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	1474	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1474	0	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 66.2%	ICU Level of Service C
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	550	0	0	0	0
Future Volume (vph)	0	550	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	1863	3539	0	0	0	0
Flt Permitted						
Satd. Flow (perm)	1863	3539	0	0	0	0
Link Speed (mph)		55	55		55	
Link Distance (ft)		627	2678		109	
Travel Time (s)		7.8	33.2		1.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	598	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	598	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 47.5%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	308	1356	0	0
Future Volume (vph)	0	0	308	1356	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	500		0	0
Storage Lanes		0	2		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	0.97	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	3433	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	3433	3539	0	0
Link Speed (mph)	55			55	55	
Link Distance (ft)	2681			671	109	
Travel Time (s)	33.2			8.3	1.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	335	1474	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	335	1474	0	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 104.0%	ICU Level of Service G
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	1664	0	0
Future Volume (vph)	0	0	0	1664	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	0	0	0	3539	1863	0
Flt Permitted						
Satd. Flow (perm)	0	0	0	3539	1863	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	654			797	95	
Travel Time (s)	8.1			9.9	2.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	1809	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1809	0	0
Sign Control	Free			Free	Stop	

Intersection Summary
Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 76.7% ICU Level of Service D
Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	523	0	0	0	0
Future Volume (vph)	0	523	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	1863	3539	0	0	0	0
Flt Permitted						
Satd. Flow (perm)	1863	3539	0	0	0	0
Link Speed (mph)		55	55		55	
Link Distance (ft)		659	784		95	
Travel Time (s)		8.2	9.7		1.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	568	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	568	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary		
Area Type:	Other	
Control Type: Unsignalized		
Intersection Capacity Utilization 56.0%		ICU Level of Service B
Analysis Period (min) 15		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↱					↱
Traffic Volume (vph)	868	18	0	0	0	18
Future Volume (vph)	868	18	0	0	0	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00
Frt	0.997					0.865
Flt Protected						
Satd. Flow (prot)	3529	0	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	3529	0	0	0	0	1611
Link Speed (mph)	55			55	25	
Link Distance (ft)	576			2077	205	
Travel Time (s)	7.1			25.7	5.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	943	20	0	0	0	20
Shared Lane Traffic (%)						
Lane Group Flow (vph)	963	0	0	0	0	20
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 34.6%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	58	0	0	407	0
Future Volume (vph)	0	58	0	0	407	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	0.97	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	3433	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	3433	0
Link Speed (mph)		45	45		45	
Link Distance (ft)		1021	744		215	
Travel Time (s)		15.5	11.3		3.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	63	0	0	442	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	63	0	0	442	0
Sign Control		Free	Stop		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 21.6%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	0	0	707	3038
Future Volume (vph)	0	0	0	0	707	3038
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		0	250	
Storage Lanes	0	0		0	2	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.97	0.91
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	0	3433	5085
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	0	3433	5085
Link Speed (mph)	55		45			30
Link Distance (ft)	167		773			587
Travel Time (s)	2.1		11.7			13.3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	768	3302
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	0	768	3302
Sign Control	Stop		Stop			Free

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 86.9%	ICU Level of Service E
Analysis Period (min) 15	

1005: WB M-96 (Michigan Avenue) & SB I-69 Off-Ramp (Push Button) Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	7.5	30.1	19.5

1007: EB M-96 (Michigan Avenue) (Push Button) & SB I-69 Off-Ramp/EB M-96 (Michigan Avenue) Perfor

Approach	EB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	26.0	1.8	6.4

1008: WB M-96 (Michigan Avenue)/NB I-69 Off-Ramp & WB M-96 (Michigan Avenue) (Push Button) Perf

Approach	WB	SW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	27.2	4.4	14.0

1009: WB M-96 (Michigan Avenue) (Push Button)/WB M-96 (Michigan Avenue) & EB M-96 (Michigan Ave

Approach	EB	SW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	28.4	17.7	21.6

1010: NB I-69 Off-Ramp (Push Button) & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	3.3	20.1	6.5

3003: M-227/West Drive & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.2	0.0
Total Del/Veh (s)	8.6	5.2	18.5	9.5

3093: M-227/West Drive & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	0.0	2.1	0.0	0.4
Total Del/Veh (s)	4.5	28.6	2.2	8.6

4001: M-96 (Michigan Avenue) & WB Main Entrance/WB M-96 (Michigan Avenue) Performance by appro

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	62.8	6.6	55.6

4003: EB to WB Xover E of 15 Mile Rd (North) & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	2.0	0.0	2.0
Total Del/Veh (s)	25.1	35.4	25.2

4004: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	3.0	55.1	21.7

4005: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	10.6	25.8	17.5

4006: M-311 (11 Mile Rd) & Site Driveway West Performance by approach

Approach	NB	SB	All
Denied Del/Veh (s)	1.2	0.1	0.2
Total Del/Veh (s)	8.8	23.8	21.6

4007: M-311 (11 Mile Rd) & F Drive N Performance by approach

Approach	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	258.5	5.0	15.9

4010: EB M-96 (Michigan Avenue)/EB M-96 (Michigan Avenue) (Push Button) & WB M-96 (Michigan Ave

Approach	WB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	23.3	9.8	19.9

4030: NB M-311 (11 Mile Rd)/WB M-96 (Michigan Avenue)/11 Mile Rd (North) & EB M-96 (Michigan Ave

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	5.4	23.5	7.8

4031: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & WB M-96 (Michigan Avenue) Performance by a

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	8.4	4.3	8.1

4033: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & NB to SB Xover N of M-96 (Michigan Avenue) P

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	38.0	11.8	15.0

4034: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & EB I-94 Off-ramp Performance by approach

Approach	SB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.9	55.6	19.0

4035: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & WB M-96 (Michigan Avenue)/11 Mile Rd (North)

Approach	SB	NW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	11.2	24.0	13.6

4036: EB I-94 Off-ramp & WB M-96 (Michigan Avenue)/11 Mile Rd (North) Performance by approach

Approach	NB	NW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	11.8	1.3	3.1

4037: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & WB I-94 Off-ramp Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	1.4	0.6
Total Del/Veh (s)	2.3	31.9	15.7

4038: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & EB M-96 (Michigan Avenue)/11 Mile Rd (South)

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	18.2	34.0	22.9

4039: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & WB I-94 Off-ramp Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	16.7	4.3	7.1

4040: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & 11 Mile Rd Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	18.7	2.6	11.4

4041: 11 Mile Rd & WB M-96 (Michigan Avenue)/11 Mile Rd (North) Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.2	0.1
Total Del/Veh (s)	13.6	25.4	19.3

4042: 11 Mile Rd & H Dr N Performance by approach

Approach	NE	SW	All
Denied Del/Veh (s)	0.0	0.6	0.4
Total Del/Veh (s)	2.7	5.4	4.5

4050: Prop Site Drive E & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	1.3	1.3

4051: Prop Site Drive W & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.6	2.6

4061: WB M-96 (Michigan Avenue) & Firekeepers Main Drive Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	4.1	51.4	8.5

4065: WB M-96 (Michigan Avenue) & 15 Mile Rd (North) Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	46.1	52.8	47.0

4066: EB M-96 (Michigan Avenue) & WB to EB Xover W of 15 Mile Rd (South) Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.4	37.2	6.9

4067: 15 Mile Rd (South) & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.5	0.2
Total Del/Veh (s)	2.3	47.6	16.9

4068: EB to WB Xover E of 15 Mile Rd (South) & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	1.1	0.0	1.0
Total Del/Veh (s)	13.2	47.7	14.7

4070: M-311 (11 Mile Rd) & Site Drive East Performance by approach

Approach	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	18.5	17.7	17.8

4071: 15 Mile Rd & Verona Rd Performance by approach

Approach	NB	SB	SE	NW	All
Denied Del/Veh (s)	0.1	0.1	3.1	0.2	2.2
Total Del/Veh (s)	7.6	8.3	10.6	30.4	13.9

4075: 11 Mile Road & Verona Road Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.6	2.3	0.6	0.4
Total Del/Veh (s)	20.1	28.0	26.1	45.7	23.3

9002: WB M-96 (Michigan Avenue) & Firekeepers Gas Station Driveway Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.3	0.0
Total Del/Veh (s)	2.2	11.4	3.8

9003: WB M-96 (Michigan Avenue) & Firekeepers E Drive Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.1	11.1	3.3

9004: WB M-96 (Michigan Avenue) & Ackerson Drive Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	1.5	8.1	1.5

9006: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	1.1	2.4	1.1

9008: 15 Mile Rd (North) & Old M-96 (Michigan Ave) Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.0	0.0	0.0
Total Del/Veh (s)	0.8	0.1	1.1	1.1

9013: SB I-69 On-Ramp & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.2	0.2
Total Del/Veh (s)	39.5	39.5

9016: EB M-96 (Michigan Avenue) & NB I-69 On-Ramp Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	8.9	8.9

9017: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	3.1	3.1

9018: EB M-96 (Michigan Avenue) & WB to EB Xover W of M-227/West Drive Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.9	6.2	2.0

9019: EB to WB Xover W of M-227/West Drive & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.6	15.2	3.4

9020: EB M-96 (Michigan Avenue) & WB to EB Xover E of M-227/West Drive Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.1	6.8	1.7

9021: EB to WB Xover E of M-227/West Drive & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.3	0.0	0.3
Total Del/Veh (s)	1.4	14.8	2.0

9023: M-311 (11 Mile Rd) & B Drive North Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	1.5	0.3	1.0	0.5	1.1
Total Del/Veh (s)	1.9	0.8	9.4	9.4	3.6

9025: M-294 (Beadle Lake Road) & EB I-94 Off-Ramp & EB I-94 On-Ramp Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	2.4	0.3	0.0	0.5
Total Del/Veh (s)	6.4	1.6	1.7	2.4

9026: WB I-94 On-Ramp & M-294 (Beadle Lake Road) & WB I-94 Off-Ramp Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	2.0	0.0	0.3	0.5
Total Del/Veh (s)	7.8	1.5	1.2	2.6

9027: Old US-27 & EB I-94 to Old US-27 Off Ramp Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0
Total Del/Veh (s)	7.3	0.2	1.0	2.7

9028: Old US-27 & NB Old US-27 to EB I-94 On Ramp Performance by approach

Approach	NB	SB	All
Denied Del/Veh (s)	0.6	0.0	0.3
Total Del/Veh (s)	0.8	0.5	0.6

9029: SB Old US-27 WB I-94 On Ramp & Old US-27 & WB I-94 to Old US-27 Off Ramp Performance by

Approach	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	1.2	0.5
Total Del/Veh (s)	4.7	0.2	0.8	1.1

9030: I-94BL/Partello Rd & EB I-94 to I-94BL/Partello Off Ramp Performance by approach

Approach	SE	NE	SW	All
Denied Del/Veh (s)	0.0	0.3	0.0	0.1
Total Del/Veh (s)	4.6	1.5	0.2	1.8

9031: I-94BL/Partello Rd & I-94/Partello Rd to EB I-94 On Ramp Performance by approach

Approach	NE	SW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.2	0.8	0.4

9032: I-94BL/Partello Rd & WB I-94 to I-94/Partello Rd Performance by approach

Approach	EB	NE	SW	All
Denied Del/Veh (s)	0.0	0.0	0.8	0.2
Total Del/Veh (s)	3.6	1.3	0.5	1.8

9034: Dummy Node & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.1	0.1	0.1
Total Del/Veh (s)	8.9	96.8	9.8

9035: Dummy Node & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	0.4	5.5	0.6

9036: WB M-96 (Michigan Avenue) & Dummy Node Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	0.6	5.1	0.8

9037: WB M-96 (Michigan Avenue) & Dummy Node Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.5	0.5

9040: Old US-27 & NB Old US-27 to WB I-94 On Ramp Performance by approach

Approach	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.1	0.2	0.8

9041: WB to EB Xover E of M-227/West Drive/McDonald's Dr & WB M-96 (Michigan Avenue) Performanc

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	1.7	17.0	2.8

9128: M-96 (Michigan Avenue)/WB M-96 (Michigan Avenue) & EB M-96 (Michigan Avenue) Performance

Approach	NB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.2	1.6	1.3

9137: SB I-69 On-Ramp Performance by approach

Approach	SB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	8.6	0.1	4.6

9143: NB I-69 On-Ramp Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	3.7	2.8	3.5

9146: WB to EB Xover W of M-227/West Drive & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	1.1	1.1

9147: EB M-96 (Michigan Avenue) & EB to WB Xover W of M-227/West Drive Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	1.8	1.8

9150: M-311 (11 Mile Rd) /NB M-311 (11 Mile Rd) & SB M-311 (11 Mile Rd) Performance by approach

Approach	NB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.3	2.3	2.2

9151: EB M-96 (Michigan Avenue) & EB to WB Xover E of M-227/West Drive Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.5	0.5

9157: SB I-69 On-Ramp & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	1.3	1.3

9158: SB I-69 Off-Ramp (Push Button) & SB I-69 Off-Ramp Performance by approach

Approach	SB	All
Denied Del/Veh (s)	1.4	1.4
Total Del/Veh (s)	26.2	26.2

9159: NB I-69 Off-Ramp & NB I-69 Off-Ramp (Push Button) Performance by approach

Approach	NB	All
Denied Del/Veh (s)	1.4	1.4
Total Del/Veh (s)	15.6	15.6

9178: WB I-94 to BL-94/Partello Rd Off Ramp/WB I-94 to I-94/Partello Rd & BL-94/Partello Rd to WB I-94

Approach	EB	WB	All
Denied Del/Veh (s)	0.1	0.0	0.1
Total Del/Veh (s)	0.2	0.3	0.2

9304: WB to EB Xover W of 15 Mile Rd (North) & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	26.6	26.6

9305: EB M-96 (Michigan Avenue) & WB to EB Xover W of 15 Mile Rd (North) Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.4	6.6	1.1

9307: EB M-96 (Michigan Avenue) & EB to WB Xover E of 15 Mile Rd (North) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.5	0.5

9310: WB to EB Xover W of 15 Mile Rd (South) & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	1.8	1.8
Total Del/Veh (s)	71.7	71.7

9311: EB M-96 (Michigan Avenue) & EB to WB Xover E of 15 Mile Rd (South) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	1.9	1.9

9330: EB to WB Xover E of Old M-311 (11 Mile Rd) & WB M-96 (Michigan Avenue) Performance by appr

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.0	9.6	2.1

9331: EB M-96 (Michigan Avenue) & EB to WB Xover E of Old M-311 (11 Mile Rd) Performance by appro

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	1.1	1.1

9332: WB M-96 (Michigan Avenue) & Old M-311 (11 Mile Rd) Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.3	8.3	1.5

9336: WB to EB Xover W of Old M-311 (11 Mile Rd) & WB M-96 (Michigan Avenue) Performance by app

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.5	2.5

9337: EB M-96 (Michigan Avenue) & WB to EB Xover W of Old M-311 (11 Mile Rd) Performance by appr

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.8	5.6	2.5

9338: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & NB to SB Xover N of M-96 (Michigan Avenue) F

Approach	NB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	4.7	4.7

9339: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & EB I-94 On Ramp Performance by approach

Approach	NB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.7	2.7

9340: EB I-94 On Ramp Performance by approach

Approach	EB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	4.2	0.1	1.3

9342: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & EB I-94 On Ramp Performance by approach

Approach	SB	All
Denied Del/Veh (s)	0.1	0.1
Total Del/Veh (s)	17.9	17.9

9343: EB I-94 Off-ramp Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.7	0.7
Total Del/Veh (s)	25.0	25.0

9346: WB I-94 On Ramp Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.7	5.1	3.0

9347: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & WB I-94 On Ramp Performance by approach

Approach	NW	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	3.3	3.3

9348: WB I-94 On Ramp & EB M-96 (Michigan Avenue)/11 Mile Rd (South) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	9.2	9.2

9349: WB I-94 Off-ramp Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.5	0.5
Total Del/Veh (s)	8.0	8.0

9351: SB to NB Xover E of 11 Mile Rd & WB M-96 (Michigan Avenue)/11 Mile Rd (North) Performance b

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.1	3.5	1.3

9352: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & SB to NB Xover E of 11 Mile Rd Performance by

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	7.1	7.1

9354: EB to WB Xover W of 11 Mile Rd & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	3.0	3.0

9355: EB M-96 (Michigan Avenue) & EB to WB Xover W of 11 Mile Rd Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	3.4	3.4

9356: WB to EB Xover W of 11 Mile Rd & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	1.7	1.7

9357: EB M-96 (Michigan Avenue) & WB to EB Xover W of 11 Mile Rd Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.4	0.4

9359: EB M-96 (Michigan Avenue) & M-96 (Michigan Avenue)/WB M-96 (Michigan Avenue) Performance

Approach	EB	WB	All
Denied Del/Veh (s)	0.2	0.0	0.1
Total Del/Veh (s)	2.7	0.5	1.9

9381: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	1.8	1.8

9382: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	3.1	6.1	4.0

9383: WB M-96 (Michigan Avenue) Performance by approach

Approach	NW	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.6	0.6

9384: EB M-96 (Michigan Avenue) Performance by approach

Approach	SE	SW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.5	3.4	1.5

9385: Ceresco Road/12 Mile Road & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	0.7	3.4	0.9

9386: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	3.5	4.9	3.6

9387: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.5	0.5

9388: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.5	0.5

9389: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.4	3.4	2.4

9390: 13 Mile Rd & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	0.5	2.6	0.6

9392: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.4	4.0	1.5

9393: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.9	0.9

9394: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	11.4	11.4

9396: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.1	2.1

9397: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.6	0.6

9398: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	13.8	13.8

9400: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.6	0.6

9401: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.5	0.5

9410: Retail Drive & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	0.4	5.8	0.5

9415: EB Main Entrance/EB M-96 (Michigan Avenue) & M-96 (Michigan Avenue) Performance by approa

Approach	EB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.1	0.5	0.4

9416: SB M-311 (11 Mile Rd)/EB M-96 (Michigan Avenue)/11 Mile Rd (South) & EB M-96 (Michigan Aver

Approach	SB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	4.5	4.5

Total Network Performance

Denied Del/Veh (s)	1.9
Total Del/Veh (s)	120.8

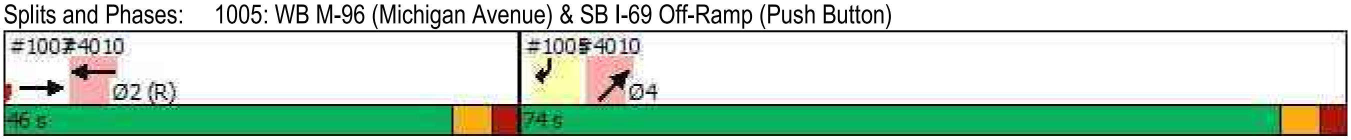
Scenario M2&S2 (Outbound)

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø2
Lane Configurations							
Traffic Volume (vph)	0	0	548	0	0	36	
Future Volume (vph)	0	0	548	0	0	36	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	0.91	1.00	1.00	0.76	
Frt						0.850	
Flt Protected							
Satd. Flow (prot)	0	0	5085	0	0	3610	
Flt Permitted							
Satd. Flow (perm)	0	0	5085	0	0	3610	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)						1157	
Link Speed (mph)		45	45		25		
Link Distance (ft)		275	194		266		
Travel Time (s)		4.2	2.9		7.3		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.84	0.75	
Heavy Vehicles (%)	2%	2%	2%	2%	3%	2%	
Adj. Flow (vph)	0	0	596	0	0	48	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	596	0	0	48	
Turn Type			NA			Prot	
Protected Phases			Free!			4!	2
Permitted Phases							
Minimum Split (s)						17.0	17.0
Total Split (s)						74.0	46.0
Total Split (%)						61.7%	38%
Yellow Time (s)						3.5	3.5
All-Red Time (s)						2.5	2.5
Lost Time Adjust (s)						0.0	
Total Lost Time (s)						6.0	
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)			120.0			68.0	
Actuated g/C Ratio			1.00			0.57	
v/c Ratio			0.12			0.02	
Control Delay			0.1			0.0	
Queue Delay			0.0			0.0	
Total Delay			0.1			0.0	
LOS			A			A	
Approach Delay			0.1				
Approach LOS			A				
Queue Length 50th (ft)			0			0	
Queue Length 95th (ft)			0			0	
Internal Link Dist (ft)		195	114		186		
Turn Bay Length (ft)							
Base Capacity (vph)			5085			2547	
Starvation Cap Reductn			0			0	
Spillback Cap Reductn			33			7	
Storage Cap Reductn			0			0	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø2
Reduced v/c Ratio			0.12			0.02	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 100 (83%), Referenced to phase 2:EBT, Start of Green	
Natural Cycle: 60	
Control Type: Pretimed	
Maximum v/c Ratio: 0.90	
Intersection Signal Delay: 0.1	Intersection LOS: A
Intersection Capacity Utilization 65.5%	ICU Level of Service C
Analysis Period (min) 15	
! Phase conflict between lane groups.	

Splits and Phases: 1005: WB M-96 (Michigan Avenue) & SB I-69 Off-Ramp (Push Button)

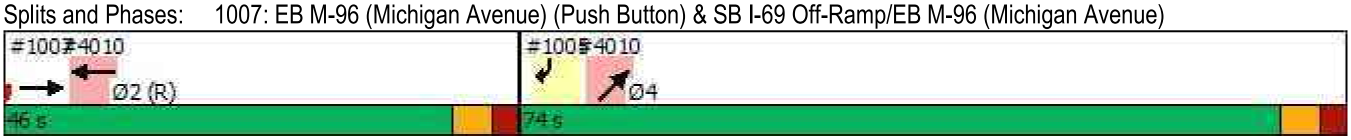


Lane Group	EBT	EBR	WBL	WBT	NEL	NER	Ø4
Lane Configurations							
Traffic Volume (vph)	112	0	0	0	0	2326	
Future Volume (vph)	112	0	0	0	0	2326	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Storage Length (ft)		260	285		0	0	
Storage Lanes		0	0		0	3	
Taper Length (ft)			240		25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.76	
Frt						0.850	
Flt Protected							
Satd. Flow (prot)	1863	0	0	0	0	3610	
Flt Permitted							
Satd. Flow (perm)	1863	0	0	0	0	3610	
Right Turn on Red		Yes				Yes	
Satd. Flow (RTOR)						2086	
Link Speed (mph)	25			45	45		
Link Distance (ft)	301			619	190		
Travel Time (s)	8.2			9.4	2.9		
Peak Hour Factor	0.75	0.84	0.92	0.92	0.90	0.90	
Heavy Vehicles (%)	2%	3%	2%	2%	2%	2%	
Adj. Flow (vph)	149	0	0	0	0	2584	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	149	0	0	0	0	2584	
Turn Type	NA					Free	
Protected Phases	2						4
Permitted Phases						Free	
Minimum Split (s)	17.0						17.0
Total Split (s)	46.0						74.0
Total Split (%)	38.3%						62%
Yellow Time (s)	3.5						3.5
All-Red Time (s)	2.5						2.5
Lost Time Adjust (s)	0.0						
Total Lost Time (s)	6.0						
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)	40.0					120.0	
Actuated g/C Ratio	0.33					1.00	
v/c Ratio	0.24					0.72	
Control Delay	30.3					12.3	
Queue Delay	0.0					0.0	
Total Delay	30.3					12.3	
LOS	C					B	
Approach Delay	30.3				12.3		
Approach LOS	C				B		
Queue Length 50th (ft)	83					458	
Queue Length 95th (ft)	111					254	
Internal Link Dist (ft)	221			539	110		
Turn Bay Length (ft)							
Base Capacity (vph)	621					3610	

Lane Group	EBT	EBR	WBL	WBT	NEL	NER	Ø4
Starvation Cap Reductn	0					0	
Spillback Cap Reductn	0					0	
Storage Cap Reductn	0					0	
Reduced v/c Ratio	0.24					0.72	

Intersection Summary		
Area Type:	Other	
Cycle Length: 120		
Actuated Cycle Length: 120		
Offset: 100 (83%), Referenced to phase 2:EBT, Start of Green		
Natural Cycle: 60		
Control Type: Pretimed		
Maximum v/c Ratio: 0.90		
Intersection Signal Delay: 13.3		Intersection LOS: B
Intersection Capacity Utilization 13.3%		ICU Level of Service A
Analysis Period (min) 15		

Splits and Phases: 1007: EB M-96 (Michigan Avenue) (Push Button) & SB I-69 Off-Ramp/EB M-96 (Michigan Avenue)

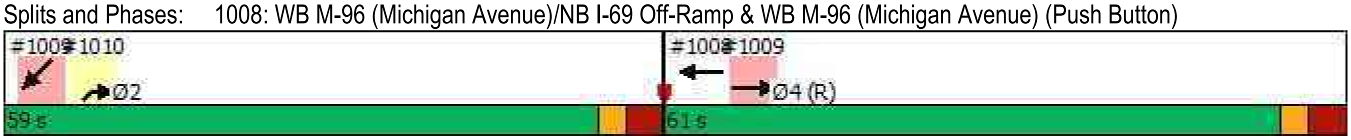


Lane Group	EBL	EBT	WBT	WBR	SWL	SWR	Ø2
Lane Configurations							
Traffic Volume (vph)	0	0	81	0	0	586	
Future Volume (vph)	0	0	81	0	0	586	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.88	
Frt						0.850	
Flt Protected							
Satd. Flow (prot)	0	0	3539	0	0	2787	
Flt Permitted							
Satd. Flow (perm)	0	0	3539	0	0	2787	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)						1666	
Link Speed (mph)		45	25		45		
Link Distance (ft)		217	252		223		
Travel Time (s)		3.3	6.9		3.4		
Peak Hour Factor	0.92	0.92	0.75	0.93	0.92	0.92	
Heavy Vehicles (%)	2%	2%	2%	6%	2%	2%	
Adj. Flow (vph)	0	0	108	0	0	637	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	108	0	0	637	
Turn Type			NA			Free	
Protected Phases			4				2
Permitted Phases						Free	
Minimum Split (s)			16.0				16.0
Total Split (s)			61.0				59.0
Total Split (%)			50.8%				49%
Yellow Time (s)			2.5				2.5
All-Red Time (s)			3.5				3.5
Lost Time Adjust (s)			0.0				
Total Lost Time (s)			6.0				
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)			55.0			120.0	
Actuated g/C Ratio			0.46			1.00	
v/c Ratio			0.07			0.23	
Control Delay			18.4			1.9	
Queue Delay			0.0			0.0	
Total Delay			18.4			1.9	
LOS			B			A	
Approach Delay			18.4		1.9		
Approach LOS			B		A		
Queue Length 50th (ft)			24			37	
Queue Length 95th (ft)			34			44	
Internal Link Dist (ft)		137	172		143		
Turn Bay Length (ft)							
Base Capacity (vph)			1622			2787	
Starvation Cap Reductn			0			0	
Spillback Cap Reductn			0			0	
Storage Cap Reductn			0			0	

Lane Group	EBL	EBT	WBT	WBR	SWL	SWR	Ø2
Reduced v/c Ratio			0.07			0.23	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 92 (77%), Referenced to phase 4:WBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.63	
Intersection Signal Delay: 4.3	Intersection LOS: A
Intersection Capacity Utilization 14.2%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 1008: WB M-96 (Michigan Avenue)/NB I-69 Off-Ramp & WB M-96 (Michigan Avenue) (Push Button)



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↑↑									↑↑	
Traffic Volume (vph)	0	872	0	0	0	0	0	0	0	0	586	0
Future Volume (vph)	0	872	0	0	0	0	0	0	0	0	586	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	3539	0	0	0	0	0	0	0	0	3539	0
Flt Permitted												
Satd. Flow (perm)	0	3539	0	0	0	0	0	0	0	0	3539	0
Right Turn on Red			Yes			Yes			Yes	Yes		Yes
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		209			206			223			213	
Travel Time (s)		3.2			3.1			3.4			3.2	
Peak Hour Factor	0.86	0.86	0.86	0.92	0.92	0.92	0.92	0.92	0.92	0.91	0.91	0.91
Adj. Flow (vph)	0	1014	0	0	0	0	0	0	0	0	644	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1014	0	0	0	0	0	0	0	0	644	0
Turn Type		NA									NA	
Protected Phases		4									2	
Permitted Phases												
Minimum Split (s)		16.0									16.0	
Total Split (s)		61.0									59.0	
Total Split (%)		50.8%									49.2%	
Yellow Time (s)		2.5									2.5	
All-Red Time (s)		3.5									3.5	
Lost Time Adjust (s)		0.0									0.0	
Total Lost Time (s)		6.0									6.0	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		55.0									53.0	
Actuated g/C Ratio		0.46									0.44	
v/c Ratio		0.63									0.41	
Control Delay		24.4									24.0	
Queue Delay		0.0									0.0	
Total Delay		24.4									24.0	
LOS		C									C	
Approach Delay		24.4									24.0	
Approach LOS		C									C	
Queue Length 50th (ft)		354									190	
Queue Length 95th (ft)		336									247	
Internal Link Dist (ft)		129			126			143			133	
Turn Bay Length (ft)												
Base Capacity (vph)		1622									1563	
Starvation Cap Reductn		0									0	
Spillback Cap Reductn		0									0	
Storage Cap Reductn		0									0	
Reduced v/c Ratio		0.63									0.41	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 92 (77%), Referenced to phase 4:WBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.63	
Intersection Signal Delay: 24.3	Intersection LOS: C
Intersection Capacity Utilization 50.3%	ICU Level of Service A
Analysis Period (min) 15	

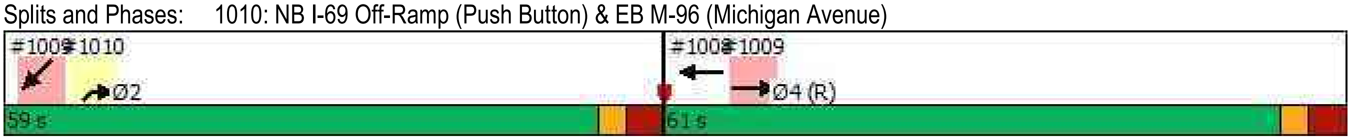
Splits and Phases: 1009: WB M-96 (Michigan Avenue) (Push Button)/WB M-96 (Michigan Avenue) & EB M-96 (Michigan Avenue)

Lane Group	EBT	EBR	WBL	WBT	NEL	NER	Ø4
Lane Configurations							
Traffic Volume (vph)	872	0	0	0	0	122	
Future Volume (vph)	872	0	0	0	0	122	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	0.95	1.00	1.00	1.00	1.00	1.00	
Frt						0.865	
Flt Protected							
Satd. Flow (prot)	3539	0	0	0	0	1611	
Flt Permitted							
Satd. Flow (perm)	3539	0	0	0	0	1611	
Right Turn on Red		Yes				Yes	
Satd. Flow (RTOR)						292	
Link Speed (mph)	45			45	25		
Link Distance (ft)	206			309	315		
Travel Time (s)	3.1			4.7	8.6		
Peak Hour Factor	0.86	0.86	0.92	0.92	0.93	0.75	
Heavy Vehicles (%)	2%	2%	2%	2%	6%	2%	
Adj. Flow (vph)	1014	0	0	0	0	163	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	1014	0	0	0	0	163	
Turn Type	NA					Prot	
Protected Phases	Free!					2!	4
Permitted Phases							
Minimum Split (s)						16.0	16.0
Total Split (s)						59.0	61.0
Total Split (%)						49.2%	51%
Yellow Time (s)						2.5	2.5
All-Red Time (s)						3.5	3.5
Lost Time Adjust (s)						0.0	
Total Lost Time (s)						6.0	
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)	120.0					53.0	
Actuated g/C Ratio	1.00					0.44	
v/c Ratio	0.29					0.19	
Control Delay	0.2					0.5	
Queue Delay	0.0					0.0	
Total Delay	0.2					0.5	
LOS	A					A	
Approach Delay	0.2				0.5		
Approach LOS	A				A		
Queue Length 50th (ft)	0					0	
Queue Length 95th (ft)	0					0	
Internal Link Dist (ft)	126			229	235		
Turn Bay Length (ft)							
Base Capacity (vph)	3539					874	
Starvation Cap Reductn	0					0	
Spillback Cap Reductn	0					0	
Storage Cap Reductn	0					0	

Lane Group	EBT	EBR	WBL	WBT	NEL	NER	Ø4
Reduced v/c Ratio	0.29					0.19	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 92 (77%), Referenced to phase 4:WBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.63	
Intersection Signal Delay: 0.2	Intersection LOS: A
Intersection Capacity Utilization 50.3%	ICU Level of Service A
Analysis Period (min) 15	
! Phase conflict between lane groups.	

Splits and Phases: 1010: NB I-69 Off-Ramp (Push Button) & EB M-96 (Michigan Avenue)



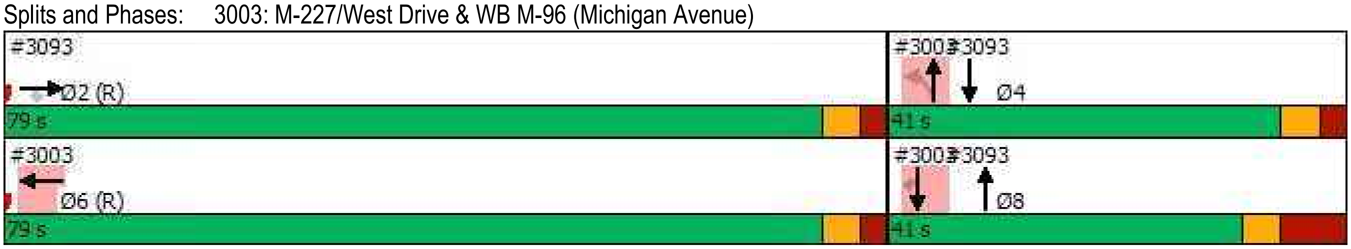
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	538	192	76	50	0	0	84	85
Future Volume (vph)	0	0	0	0	538	192	76	50	0	0	84	85
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		80	0		0	0		0
Storage Lanes	0		0	0		1	1		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.960							0.850
Flt Protected							0.950					
Satd. Flow (prot)	0	0	0	0	4930	0	1671	1863	0	0	1845	1568
Flt Permitted							0.687					
Satd. Flow (perm)	0	0	0	0	4930	0	1209	1863	0	0	1845	1568
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					138							110
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		152			212			101			1197	
Travel Time (s)		2.3			3.2			2.0			23.3	
Peak Hour Factor	0.92	0.92	0.92	0.87	0.87	0.87	0.67	0.67	0.67	0.77	0.77	0.77
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	8%	2%	2%	3%	3%	3%
Adj. Flow (vph)	0	0	0	0	618	221	113	75	0	0	109	110
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	839	0	113	75	0	0	109	110
Turn Type					NA		Perm	NA			NA	Perm
Protected Phases					6			4			8	
Permitted Phases							4					8
Minimum Split (s)					31.0		17.0	17.0			17.0	17.0
Total Split (s)					79.0		41.0	41.0			41.0	41.0
Total Split (%)					65.8%		34.2%	34.2%			34.2%	34.2%
Yellow Time (s)					3.5		3.5	3.5			3.5	3.5
All-Red Time (s)					2.5		2.5	2.5			6.0	6.0
Lost Time Adjust (s)					0.0		0.0	0.0			0.0	0.0
Total Lost Time (s)					6.0		6.0	6.0			9.5	9.5
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)					73.0		35.0	35.0			31.5	31.5
Actuated g/C Ratio					0.61		0.29	0.29			0.26	0.26
v/c Ratio					0.27		0.32	0.14			0.23	0.22
Control Delay					9.3		8.6	5.5			36.2	7.5
Queue Delay					0.0		0.0	0.0			0.0	0.0
Total Delay					9.3		8.6	5.5			36.2	7.5
LOS					A		A	A			D	A
Approach Delay					9.3			7.4			21.8	
Approach LOS					A			A			C	
Queue Length 50th (ft)					85		11	7			66	0
Queue Length 95th (ft)					103		11	8			98	28
Internal Link Dist (ft)		72			132			21			1117	
Turn Bay Length (ft)												
Base Capacity (vph)					3053		352	543			484	492

Lane Group	Ø2
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	2
Permitted Phases	
Minimum Split (s)	16.0
Total Split (s)	79.0
Total Split (%)	66%
Yellow Time (s)	3.5
All-Red Time (s)	2.5
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
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)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
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		0.32	0.14			0.23	0.22

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 112 (93%), Referenced to phase 2:EBT and 6:, Start of Green	
Natural Cycle: 50	
Control Type: Pretimed	
Maximum v/c Ratio: 0.46	
Intersection Signal Delay: 11.2	Intersection LOS: B
Intersection Capacity Utilization 44.8%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 3003: M-227/West Drive & WB M-96 (Michigan Avenue)



Lane Group	Ø2
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

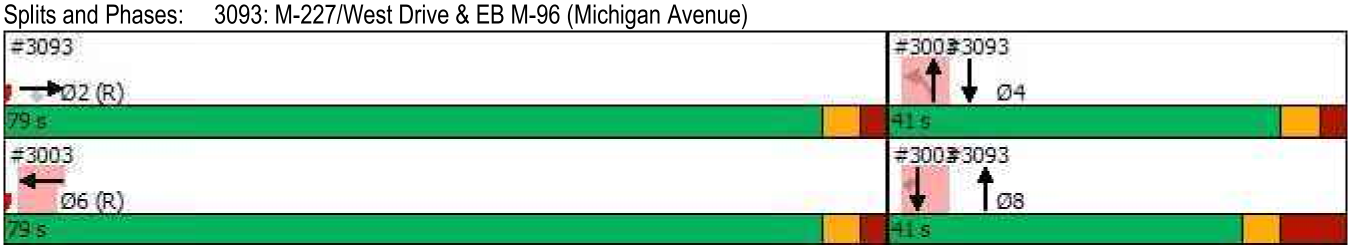
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	942	59	0	0	0	0	126	30	0	84	0
Future Volume (vph)	0	942	59	0	0	0	0	126	30	0	84	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		65	0		0	100		0	0		0
Storage Lanes	0		1	0		0	1		0	0		0
Taper Length (ft)	25			25			70			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Frt			0.850					0.971				
Flt Protected												
Satd. Flow (prot)	0	3574	1442	0	0	0	0	3344	0	0	1881	0
Flt Permitted												
Satd. Flow (perm)	0	3574	1442	0	0	0	0	3344	0	0	1881	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			59					24				
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		161			222			1117			101	
Travel Time (s)		2.4			3.4			21.8			2.0	
Peak Hour Factor	0.95	0.95	0.95	0.92	0.92	0.92	0.72	0.72	0.72	0.83	0.83	0.83
Heavy Vehicles (%)	2%	1%	12%	2%	2%	2%	2%	6%	0%	2%	1%	2%
Adj. Flow (vph)	0	992	62	0	0	0	0	175	42	0	101	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	992	62	0	0	0	0	217	0	0	101	0
Turn Type		NA	Perm					NA			NA	
Protected Phases		2						8			4	
Permitted Phases			2									
Minimum Split (s)		16.0	16.0					17.0			17.0	
Total Split (s)		79.0	79.0					41.0			41.0	
Total Split (%)		65.8%	65.8%					34.2%			34.2%	
Yellow Time (s)		3.5	3.5					3.5			3.5	
All-Red Time (s)		2.5	2.5					6.0			2.5	
Lost Time Adjust (s)		0.0	0.0					0.0			0.0	
Total Lost Time (s)		6.0	6.0					9.5			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		73.0	73.0					31.5			35.0	
Actuated g/C Ratio		0.61	0.61					0.26			0.29	
v/c Ratio		0.46	0.07					0.24			0.18	
Control Delay		4.4	0.2					31.7			0.7	
Queue Delay		0.0	0.0					0.0			0.0	
Total Delay		4.4	0.2					31.7			0.7	
LOS		A	A					C			A	
Approach Delay		4.2						31.7			0.7	
Approach LOS		A						C			A	
Queue Length 50th (ft)		44	1					61			0	
Queue Length 95th (ft)		52	0					73			0	
Internal Link Dist (ft)		81			142			1037			21	
Turn Bay Length (ft)			65									
Base Capacity (vph)		2174	900					895			548	

Lane Group	Ø6
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	6
Permitted Phases	
Minimum Split (s)	31.0
Total Split (s)	79.0
Total Split (%)	66%
Yellow Time (s)	3.5
All-Red Time (s)	2.5
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
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)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn		0	0					0			0	
Spillback Cap Reductn		0	0					18			0	
Storage Cap Reductn		0	0					0			0	
Reduced v/c Ratio		0.46	0.07					0.25			0.18	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 112 (93%), Referenced to phase 2:EBT and 6:, Start of Green	
Natural Cycle: 50	
Control Type: Pretimed	
Maximum v/c Ratio: 0.46	
Intersection Signal Delay: 8.3	Intersection LOS: A
Intersection Capacity Utilization 44.8%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 3093: M-227/West Drive & EB M-96 (Michigan Avenue)



Lane Group	Ø6
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

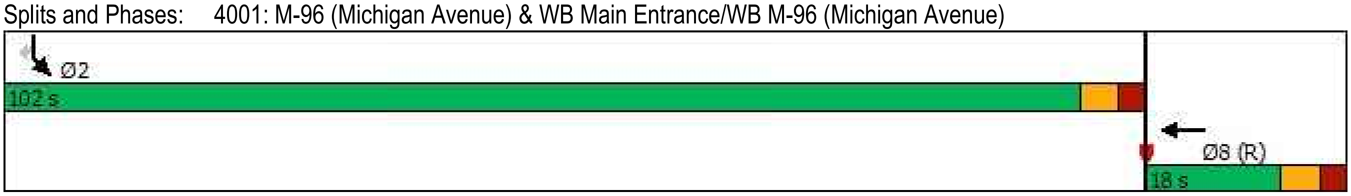
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Lane Configurations										
Traffic Volume (vph)	0	0	0	0	48	490	1688	9	0	0
Future Volume (vph)	0	0	0	0	48	490	1688	9	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	300		300	0	200	0	0
Storage Lanes	0		0	0		1	2	1	0	0
Taper Length (ft)	25			25			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.88	0.97	1.00	1.00	1.00
Frt						0.850		0.850		
Flt Protected							0.950			
Satd. Flow (prot)	0	0	0	0	3539	2787	3433	1583	0	0
Flt Permitted							0.950			
Satd. Flow (perm)	0	0	0	0	3539	2787	3433	1583	0	0
Right Turn on Red			Yes	Yes		Yes		Yes		
Satd. Flow (RTOR)						533		27		
Link Speed (mph)		45			45		55		45	
Link Distance (ft)		858			894		434		215	
Travel Time (s)		13.0			13.5		5.4		3.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	52	533	1835	10	0	0
Shared Lane Traffic (%)										
Lane Group Flow (vph)	0	0	0	0	52	533	1835	10	0	0
Turn Type					NA	Free	Prot	Perm		
Protected Phases					8		2			
Permitted Phases						Free		2		
Minimum Split (s)					16.0		16.0	16.0		
Total Split (s)					18.0		102.0	102.0		
Total Split (%)					15.0%		85.0%	85.0%		
Yellow Time (s)					3.5		3.5	3.5		
All-Red Time (s)					2.5		2.5	2.5		
Lost Time Adjust (s)					0.0		0.0	0.0		
Total Lost Time (s)					6.0		6.0	6.0		
Lead/Lag										
Lead-Lag Optimize?										
Act Effct Green (s)					12.0	120.0	96.0	96.0		
Actuated g/C Ratio					0.10	1.00	0.80	0.80		
v/c Ratio					0.15	0.19	0.67	0.01		
Control Delay					55.6	0.4	2.6	0.0		
Queue Delay					0.0	0.0	0.0	0.0		
Total Delay					55.6	0.4	2.6	0.0		
LOS					E	A	A	A		
Approach Delay					5.3		2.6			
Approach LOS					A		A			
Queue Length 50th (ft)					22	0	46	0		
Queue Length 95th (ft)					45	0	44	m0		
Internal Link Dist (ft)		778			814		354		135	
Turn Bay Length (ft)						300		200		
Base Capacity (vph)					353	2787	2746	1271		
Starvation Cap Reductn					0	0	0	0		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NWL	NWR
Spillback Cap Reductn					0	0	0	0		
Storage Cap Reductn					0	0	0	0		
Reduced v/c Ratio					0.15	0.19	0.67	0.01		

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 36 (30%), Referenced to phase 8:WBT, Start of Green	
Natural Cycle: 60	
Control Type: Pretimed	
Maximum v/c Ratio: 0.67	
Intersection Signal Delay: 3.2	Intersection LOS: A
Intersection Capacity Utilization 66.5%	ICU Level of Service C
Analysis Period (min) 15	
m Volume for 95th percentile queue is metered by upstream signal.	

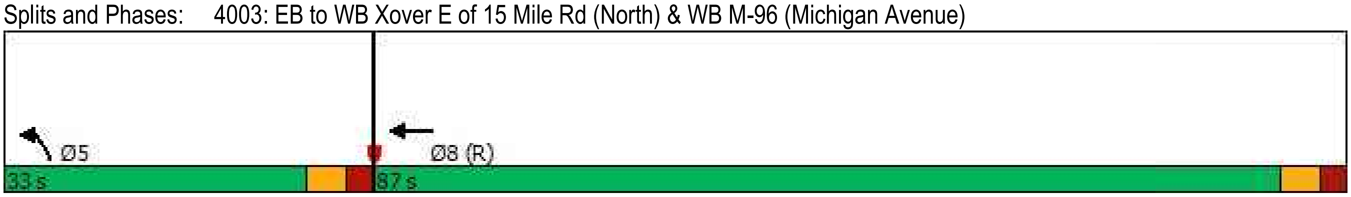
Splits and Phases: 4001: M-96 (Michigan Avenue) & WB Main Entrance/WB M-96 (Michigan Avenue)



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑↑	↰↰	
Traffic Volume (vph)	0	0	0	509	519	0
Future Volume (vph)	0	0	0	509	519	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	0.97	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	5085	3433	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	5085	3433	0
Right Turn on Red		Yes			Yes	Yes
Satd. Flow (RTOR)					734	
Link Speed (mph)	45			45	25	
Link Distance (ft)	660			254	113	
Travel Time (s)	10.0			3.8	3.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.70	0.92
Adj. Flow (vph)	0	0	0	553	741	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	553	741	0
Turn Type				NA	Prot	
Protected Phases				8	5	
Permitted Phases						
Minimum Split (s)				16.0	13.0	
Total Split (s)				87.0	33.0	
Total Split (%)				72.5%	27.5%	
Yellow Time (s)				3.5	3.5	
All-Red Time (s)				2.5	2.5	
Lost Time Adjust (s)				0.0	0.0	
Total Lost Time (s)				6.0	6.0	
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)				81.0	27.0	
Actuated g/C Ratio				0.68	0.22	
v/c Ratio				0.16	0.55	
Control Delay				1.4	7.3	
Queue Delay				0.0	0.0	
Total Delay				1.4	7.3	
LOS				A	A	
Approach Delay				1.4	7.3	
Approach LOS				A	A	
Queue Length 50th (ft)				9	28	
Queue Length 95th (ft)				11	17	
Internal Link Dist (ft)	580			174	33	
Turn Bay Length (ft)						
Base Capacity (vph)				3432	1341	
Starvation Cap Reductn				0	0	
Spillback Cap Reductn				0	0	
Storage Cap Reductn				0	0	
Reduced v/c Ratio				0.16	0.55	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 116 (97%), Referenced to phase 8:WBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.55	
Intersection Signal Delay: 4.8	Intersection LOS: A
Intersection Capacity Utilization 65.1%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 4003: EB to WB Xover E of 15 Mile Rd (North) & WB M-96 (Michigan Avenue)

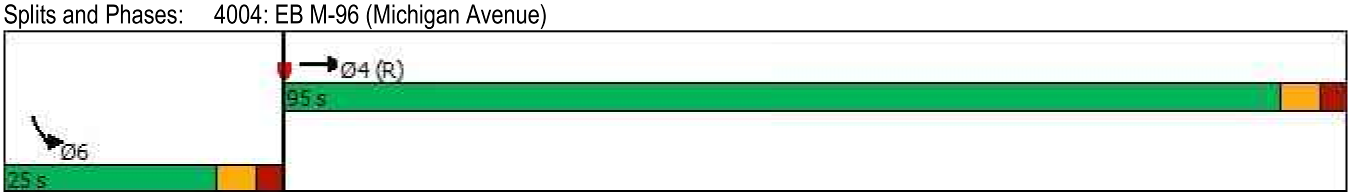


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑			↰↰	
Traffic Volume (vph)	0	1389	0	0	0	0
Future Volume (vph)	0	1389	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	0.97	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	0	3539	0	0	3614	0
Flt Permitted						
Satd. Flow (perm)	0	3539	0	0	3614	0
Right Turn on Red				Yes	Yes	Yes
Satd. Flow (RTOR)						
Link Speed (mph)		55	55		25	
Link Distance (ft)		2678	669		109	
Travel Time (s)		33.2	8.3		3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1510	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1510	0	0	0	0
Turn Type		NA			Prot	
Protected Phases		4			6	
Permitted Phases						
Detector Phase		4			6	
Switch Phase						
Minimum Initial (s)		10.0			7.0	
Minimum Split (s)		16.0			13.0	
Total Split (s)		95.0			25.0	
Total Split (%)		79.2%			20.8%	
Yellow Time (s)		3.5			3.5	
All-Red Time (s)		2.5			2.5	
Lost Time Adjust (s)		0.0			0.0	
Total Lost Time (s)		6.0			6.0	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode		C-Max			None	
Act Effct Green (s)		120.0				
Actuated g/C Ratio		1.00				
v/c Ratio		0.43				
Control Delay		0.4				
Queue Delay		0.0				
Total Delay		0.4				
LOS		A				
Approach Delay		0.4				
Approach LOS		A				
Queue Length 50th (ft)		2				
Queue Length 95th (ft)		0				
Internal Link Dist (ft)		2598	589		29	
Turn Bay Length (ft)						
Base Capacity (vph)		3539				

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Starvation Cap Reductn		0				
Spillback Cap Reductn		1				
Storage Cap Reductn		0				
Reduced v/c Ratio		0.43				

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 20 (17%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 40	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.43	
Intersection Signal Delay: 0.4	Intersection LOS: A
Intersection Capacity Utilization 54.2%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4004: EB M-96 (Michigan Avenue)

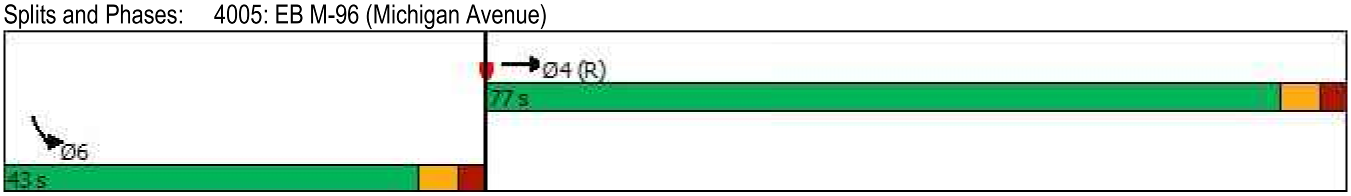


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑			↰↰	
Traffic Volume (vph)	0	840	0	0	0	0
Future Volume (vph)	0	840	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	0.97	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	0	3539	0	0	3614	0
Flt Permitted						
Satd. Flow (perm)	0	3539	0	0	3614	0
Right Turn on Red				Yes	Yes	Yes
Satd. Flow (RTOR)						
Link Speed (mph)		55	55		25	
Link Distance (ft)		1786	608		109	
Travel Time (s)		22.1	7.5		3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	913	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	913	0	0	0	0
Turn Type		NA			Prot	
Protected Phases		4			6	
Permitted Phases						
Detector Phase		4			6	
Switch Phase						
Minimum Initial (s)		10.0			7.0	
Minimum Split (s)		16.0			13.0	
Total Split (s)		77.0			43.0	
Total Split (%)		64.2%			35.8%	
Yellow Time (s)		3.5			3.5	
All-Red Time (s)		2.5			2.5	
Lost Time Adjust (s)		0.0			0.0	
Total Lost Time (s)		6.0			6.0	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode		C-Max			Max	
Act Effct Green (s)		71.0				
Actuated g/C Ratio		0.59				
v/c Ratio		0.44				
Control Delay		14.3				
Queue Delay		0.0				
Total Delay		14.3				
LOS		B				
Approach Delay		14.3				
Approach LOS		B				
Queue Length 50th (ft)		193				
Queue Length 95th (ft)		240				
Internal Link Dist (ft)		1706	528		29	
Turn Bay Length (ft)						
Base Capacity (vph)		2093				

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Starvation Cap Reductn		0				
Spillback Cap Reductn		0				
Storage Cap Reductn		0				
Reduced v/c Ratio		0.44				

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 112 (93%), Referenced to phase 4:EBT, Start of Green			
Natural Cycle: 40			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.44			
Intersection Signal Delay: 14.3		Intersection LOS: B	
Intersection Capacity Utilization 39.1%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 4005: EB M-96 (Michigan Avenue)

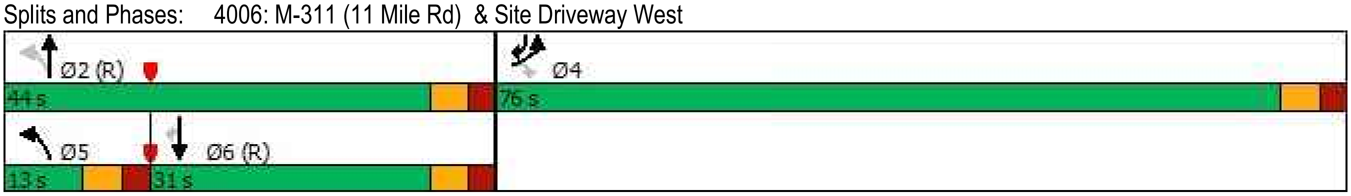


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	1152	61	0	102	189	0
Future Volume (vph)	1152	61	0	102	189	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	250	250			0
Storage Lanes	2	1	1			1
Taper Length (ft)	25		25			
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	1.00
Frt		0.850				
Flt Protected	0.950					
Satd. Flow (prot)	3433	1583	1863	1863	1863	1863
Flt Permitted	0.950					
Satd. Flow (perm)	3433	1583	1863	1863	1863	1863
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		66				
Link Speed (mph)	25			55	55	
Link Distance (ft)	1178			1461	940	
Travel Time (s)	32.1			18.1	11.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1252	66	0	111	205	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1252	66	0	111	205	0
Turn Type	Prot	Perm	pm+pt	NA	NA	pm+ov
Protected Phases	4		5	2	6	4
Permitted Phases		4	2			6
Detector Phase	4	4	5	2	6	4
Switch Phase						
Minimum Initial (s)	7.0	7.0	7.0	10.0	10.0	7.0
Minimum Split (s)	14.0	14.0	13.0	17.0	17.0	14.0
Total Split (s)	76.0	76.0	13.0	44.0	31.0	76.0
Total Split (%)	63.3%	63.3%	10.8%	36.7%	25.8%	63.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.5	2.5	2.5	2.5	2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None	None	Min	C-Max	C-Max	None
Act Effct Green (s)	56.3	56.3		51.7	38.7	
Actuated g/C Ratio	0.47	0.47		0.43	0.32	
v/c Ratio	0.78	0.08		0.14	0.34	
Control Delay	29.9	3.4		23.5	30.0	
Queue Delay	0.0	0.0		0.0	0.0	
Total Delay	29.9	3.4		23.5	30.0	
LOS	C	A		C	C	
Approach Delay	28.6			23.5	30.0	
Approach LOS	C			C	C	
Queue Length 50th (ft)	405	0		51	126	
Queue Length 95th (ft)	415	21		102	210	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Internal Link Dist (ft)	1098			1381	860	
Turn Bay Length (ft)		250				
Base Capacity (vph)	2002	950		803	601	
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	0.63	0.07		0.14	0.34	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 60 (50%), Referenced to phase 2:NBTL and 6:SBT, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.78	
Intersection Signal Delay: 28.4	Intersection LOS: C
Intersection Capacity Utilization 52.8%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4006: M-311 (11 Mile Rd) & Site Driveway West

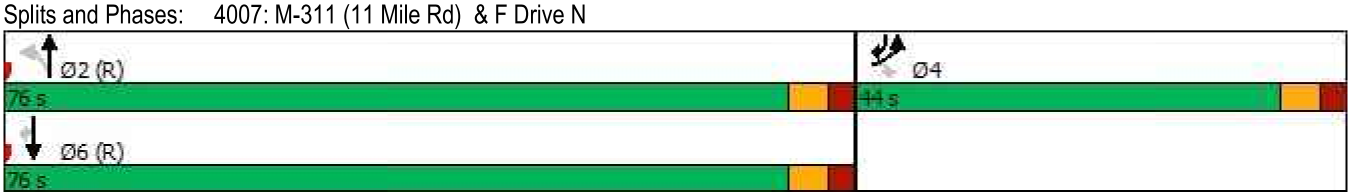


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	1030	30	0	1981	129	0
Future Volume (vph)	1030	30	0	1981	129	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	250	400			0
Storage Lanes	2	1	1			1
Taper Length (ft)	25		25			
Lane Util. Factor	0.97	1.00	1.00	0.95	0.95	1.00
Frt		0.850				
Flt Protected	0.950					
Satd. Flow (prot)	3433	1583	1863	3539	3539	1863
Flt Permitted	0.950					
Satd. Flow (perm)	3433	1583	1863	3539	3539	1863
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		28				
Link Speed (mph)	45			55	55	
Link Distance (ft)	1846			974	1093	
Travel Time (s)	28.0			12.1	13.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1120	33	0	2153	140	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1120	33	0	2153	140	0
Turn Type	Prot	Perm	Perm	NA	NA	pm+ov
Protected Phases	4			2	6	4
Permitted Phases		4	2			6
Detector Phase	4	4	2	2	6	4
Switch Phase						
Minimum Initial (s)	7.0	7.0	10.0	10.0	10.0	7.0
Minimum Split (s)	13.0	13.0	16.0	16.0	16.0	13.0
Total Split (s)	44.0	44.0	76.0	76.0	76.0	44.0
Total Split (%)	36.7%	36.7%	63.3%	63.3%	63.3%	36.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.5	2.5	2.5	2.5	2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None	None	C-Max	C-Max	C-Max	None
Act Effct Green (s)	38.0	38.0		70.0	70.0	
Actuated g/C Ratio	0.32	0.32		0.58	0.58	
v/c Ratio	1.03	0.06		1.04	0.07	
Control Delay	75.9	12.2		55.4	4.1	
Queue Delay	0.0	0.0		0.0	0.0	
Total Delay	75.9	12.2		55.4	4.1	
LOS	E	B		E	A	
Approach Delay	74.0			55.4	4.1	
Approach LOS	E			E	A	
Queue Length 50th (ft)	~478	3		~943	10	
Queue Length 95th (ft)	#611	27		#1090	15	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Internal Link Dist (ft)	1766			894	1013	
Turn Bay Length (ft)		250				
Base Capacity (vph)	1087	520		2064	2064	
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	1.03	0.06		1.04	0.07	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 20 (17%), Referenced to phase 2:NBTL and 6:SBT, Start of Green	
Natural Cycle: 140	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.04	
Intersection Signal Delay: 59.5	Intersection LOS: E
Intersection Capacity Utilization 94.1%	ICU Level of Service F
Analysis Period (min) 15	
~ Volume exceeds capacity, queue is theoretically infinite. Queue shown is maximum after two cycles.	
# 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.	

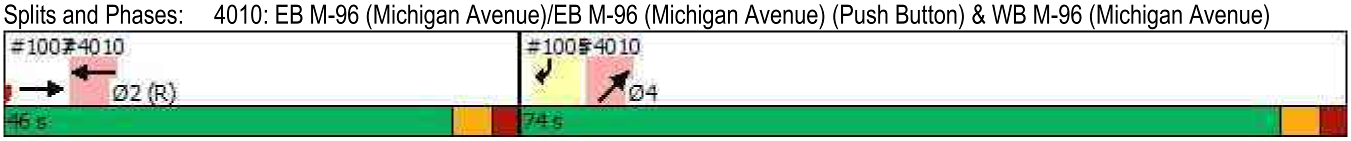
Splits and Phases: 4007: M-311 (11 Mile Rd) & F Drive N



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations					↑↑↑			↑↑↑				
Traffic Volume (vph)	0	0	0	0	548	0	0	2326	0	0	0	0
Future Volume (vph)	0	0	0	0	548	0	0	2326	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.91	1.00	1.00	1.00	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	0	0	0	5085	0	0	5085	0	0	0	0
Flt Permitted												
Satd. Flow (perm)	0	0	0	0	5085	0	0	5085	0	0	0	0
Right Turn on Red			Yes			Yes	Yes		Yes			Yes
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		194			183			156			190	
Travel Time (s)		2.9			2.8			2.4			2.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.90	0.90	0.90	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	596	0	0	2584	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	596	0	0	2584	0	0	0	0
Turn Type					NA			NA				
Protected Phases					2			4				
Permitted Phases												
Minimum Split (s)					17.0			17.0				
Total Split (s)					46.0			74.0				
Total Split (%)					38.3%			61.7%				
Yellow Time (s)					3.5			3.5				
All-Red Time (s)					2.5			2.5				
Lost Time Adjust (s)					0.0			0.0				
Total Lost Time (s)					6.0			6.0				
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)					40.0			68.0				
Actuated g/C Ratio					0.33			0.57				
v/c Ratio					0.35			0.90				
Control Delay					38.0			15.7				
Queue Delay					0.0			0.0				
Total Delay					38.0			15.7				
LOS					D			B				
Approach Delay					38.0			15.7				
Approach LOS					D			B				
Queue Length 50th (ft)					173			387				
Queue Length 95th (ft)					214			584				
Internal Link Dist (ft)		114			103			76			110	
Turn Bay Length (ft)												
Base Capacity (vph)					1695			2881				
Starvation Cap Reductn					0			0				
Spillback Cap Reductn					0			0				
Storage Cap Reductn					0			0				
Reduced v/c Ratio					0.35			0.90				

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 100 (83%), Referenced to phase 2:EBT, Start of Green	
Natural Cycle: 60	
Control Type: Pretimed	
Maximum v/c Ratio: 0.90	
Intersection Signal Delay: 19.9	Intersection LOS: B
Intersection Capacity Utilization 65.5%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 4010: EB M-96 (Michigan Avenue)/EB M-96 (Michigan Avenue) (Push Button) & WB M-96 (Michigan Avenue)



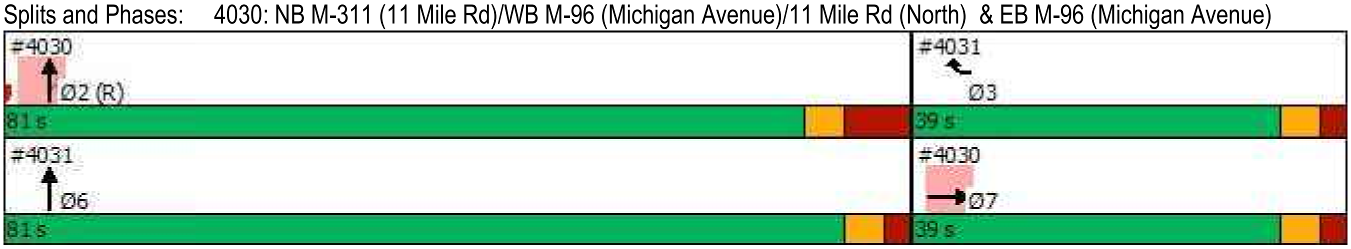
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑						↑↑↑	↱			
Traffic Volume (vph)	0	520	0	0	0	0	0	2549	462	0	0	0
Future Volume (vph)	0	520	0	0	0	0	0	2549	462	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		250	0		0
Storage Lanes	0		0	0		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	1.00	1.00
Frt									0.850			
Flt Protected												
Satd. Flow (prot)	0	3539	0	0	0	0	0	5085	1583	0	0	0
Flt Permitted												
Satd. Flow (perm)	0	3539	0	0	0	0	0	5085	1583	0	0	0
Right Turn on Red	Yes		Yes			Yes			Yes			Yes
Satd. Flow (RTOR)									70			
Link Speed (mph)		55			55			55			30	
Link Distance (ft)		167			316			655			182	
Travel Time (s)		2.1			3.9			8.1			4.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	565	0	0	0	0	0	2771	502	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	565	0	0	0	0	0	2771	502	0	0	0
Turn Type		NA						NA	Perm			
Protected Phases		7						2				
Permitted Phases									2			
Minimum Split (s)		16.0						19.5	19.5			
Total Split (s)		39.0						81.0	81.0			
Total Split (%)		32.5%						67.5%	67.5%			
Yellow Time (s)		3.5						3.5	3.5			
All-Red Time (s)		2.5						6.0	6.0			
Lost Time Adjust (s)		0.0						0.0	0.0			
Total Lost Time (s)		6.0						9.5	9.5			
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		33.0						71.5	71.5			
Actuated g/C Ratio		0.28						0.60	0.60			
v/c Ratio		0.58						0.91	0.52			
Control Delay		31.8						25.1	14.1			
Queue Delay		0.0						0.0	0.0			
Total Delay		31.8						25.1	14.1			
LOS		C						C	B			
Approach Delay		31.8						23.4				
Approach LOS		C						C				
Queue Length 50th (ft)		236						695	212			
Queue Length 95th (ft)		296						m635	m199			
Internal Link Dist (ft)		87			236			575			102	
Turn Bay Length (ft)									250			
Base Capacity (vph)		973						3029	971			
Starvation Cap Reductn		0						0	0			

Lane Group	Ø3	Ø6
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Ideal Flow (vphpl)		
Storage Length (ft)		
Storage Lanes		
Taper Length (ft)		
Lane Util. Factor		
Frt		
Flt Protected		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Peak Hour Factor		
Adj. Flow (vph)		
Shared Lane Traffic (%)		
Lane Group Flow (vph)		
Turn Type		
Protected Phases	3	6
Permitted Phases		
Minimum Split (s)	16.0	16.0
Total Split (s)	39.0	81.0
Total Split (%)	33%	68%
Yellow Time (s)	3.5	3.5
All-Red Time (s)	2.5	2.5
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag		
Lead-Lag Optimize?		
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		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn		0						0	0			
Storage Cap Reductn		0						0	0			
Reduced v/c Ratio		0.58						0.91	0.52			

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 88 (73%), Referenced to phase 2:NBT, Start of Green	
Natural Cycle: 90	
Control Type: Pretimed	
Maximum v/c Ratio: 0.97	
Intersection Signal Delay: 24.6	Intersection LOS: C
Intersection Capacity Utilization 80.0%	ICU Level of Service D
Analysis Period (min) 15	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 4030: NB M-311 (11 Mile Rd)/WB M-96 (Michigan Avenue)/11 Mile Rd (North) & EB M-96 (Michigan Avenue)



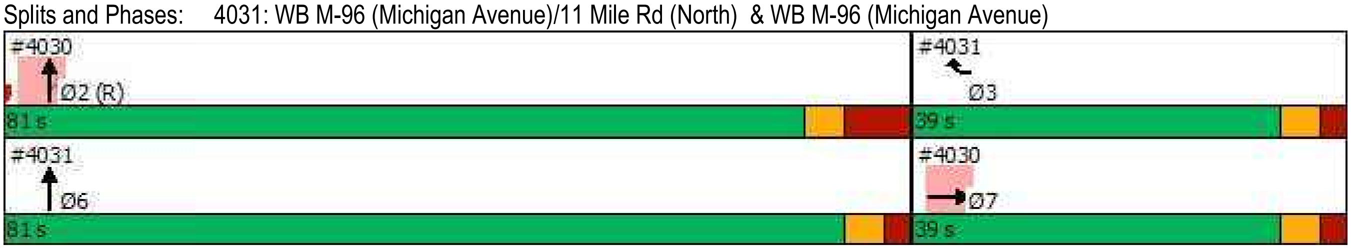
Lane Group	Ø3	Ø6
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		

Intersection Summary

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	Ø2	Ø7
Lane Configurations								
Traffic Volume (vph)	0	889	2549	0	0	0		
Future Volume (vph)	0	889	2549	0	0	0		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Lane Util. Factor	1.00	0.76	0.91	1.00	1.00	1.00		
Frt		0.850						
Flt Protected								
Satd. Flow (prot)	0	3610	5085	0	0	0		
Flt Permitted								
Satd. Flow (perm)	0	3610	5085	0	0	0		
Right Turn on Red		Yes		Yes				
Satd. Flow (RTOR)		5						
Link Speed (mph)	55		55			55		
Link Distance (ft)	405		182			493		
Travel Time (s)	5.0		2.3			6.1		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Adj. Flow (vph)	0	966	2771	0	0	0		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	0	966	2771	0	0	0		
Turn Type		Prot	NA					
Protected Phases		3	6				2	7
Permitted Phases								
Minimum Split (s)		16.0	16.0				19.5	16.0
Total Split (s)		39.0	81.0				81.0	39.0
Total Split (%)		32.5%	67.5%				68%	33%
Yellow Time (s)		3.5	3.5				3.5	3.5
All-Red Time (s)		2.5	2.5				6.0	2.5
Lost Time Adjust (s)		0.0	0.0					
Total Lost Time (s)		6.0	6.0					
Lead/Lag								
Lead-Lag Optimize?								
Act Effct Green (s)		33.0	75.0					
Actuated g/C Ratio		0.28	0.62					
v/c Ratio		0.97	0.87					
Control Delay		63.0	2.0					
Queue Delay		0.0	0.2					
Total Delay		63.0	2.1					
LOS		E	A					
Approach Delay	63.0		2.1					
Approach LOS	E		A					
Queue Length 50th (ft)		324	0					
Queue Length 95th (ft)		#442	0					
Internal Link Dist (ft)	325		102			413		
Turn Bay Length (ft)								
Base Capacity (vph)		996	3178					
Starvation Cap Reductn		0	50					
Spillback Cap Reductn		0	0					
Storage Cap Reductn		0	0					
Reduced v/c Ratio		0.97	0.89					

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 88 (73%), Referenced to phase 2:NBT, Start of Green	
Natural Cycle: 90	
Control Type: Pretimed	
Maximum v/c Ratio: 0.97	
Intersection Signal Delay: 17.9	Intersection LOS: B
Intersection Capacity Utilization 80.0%	ICU Level of Service D
Analysis Period (min) 15	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	

Splits and Phases: 4031: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & WB M-96 (Michigan Avenue)

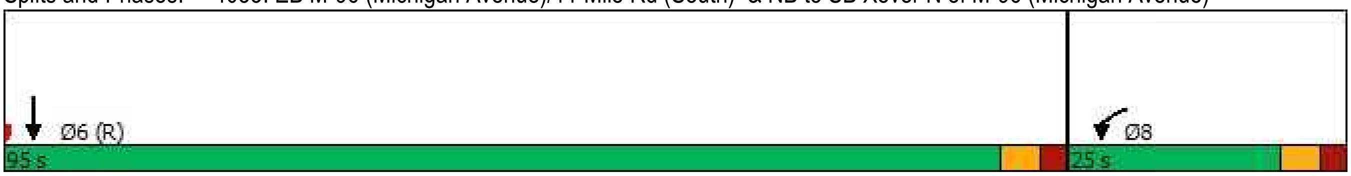


Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	67	0	0	0	0	582
Future Volume (vph)	67	0	0	0	0	582
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	0.91
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	3433	0	0	0	0	5085
Flt Permitted	0.950					
Satd. Flow (perm)	3433	0	0	0	0	5085
Right Turn on Red	Yes	Yes		Yes		
Satd. Flow (RTOR)	701					
Link Speed (mph)	25		55			30
Link Distance (ft)	105		587			495
Travel Time (s)	2.9		7.3			11.3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	73	0	0	0	0	633
Shared Lane Traffic (%)						
Lane Group Flow (vph)	73	0	0	0	0	633
Turn Type	Prot					NA
Protected Phases	8					6
Permitted Phases						
Minimum Split (s)	13.0					16.0
Total Split (s)	25.0					95.0
Total Split (%)	20.8%					79.2%
Yellow Time (s)	3.5					3.5
All-Red Time (s)	2.5					2.5
Lost Time Adjust (s)	0.0					0.0
Total Lost Time (s)	6.0					6.0
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)	19.0					89.0
Actuated g/C Ratio	0.16					0.74
v/c Ratio	0.06					0.17
Control Delay	0.0					1.0
Queue Delay	0.0					0.0
Total Delay	0.0					1.0
LOS	A					A
Approach Delay						1.0
Approach LOS						A
Queue Length 50th (ft)	0					7
Queue Length 95th (ft)	m0					9
Internal Link Dist (ft)	25		507			415
Turn Bay Length (ft)						
Base Capacity (vph)	1133					3771
Starvation Cap Reductn	0					0
Spillback Cap Reductn	0					0
Storage Cap Reductn	0					0
Reduced v/c Ratio	0.06					0.17

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 89 (74%), Referenced to phase 6:SBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.17	
Intersection Signal Delay: 0.9	Intersection LOS: A
Intersection Capacity Utilization 84.7%	ICU Level of Service E
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4033: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & NB to SB Xover N of M-96 (Michigan Avenue)

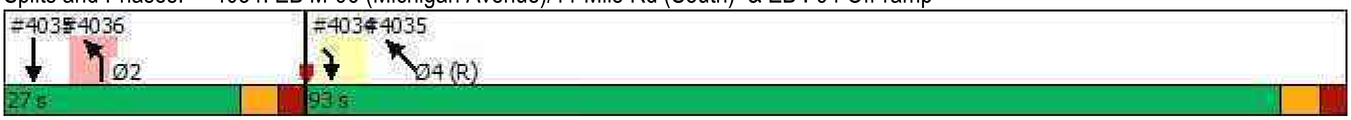


Lane Group	NBL	NBT	SBT	SBR	SEL	SER	Ø2
Lane Configurations							
Traffic Volume (vph)	0	0	472	0	0	110	
Future Volume (vph)	0	0	472	0	0	110	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	0.91	1.00	1.00	0.88	
Frt						0.850	
Flt Protected							
Satd. Flow (prot)	0	0	5085	0	0	2787	
Flt Permitted							
Satd. Flow (perm)	0	0	5085	0	0	2787	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)						995	
Link Speed (mph)		30	30		30		
Link Distance (ft)		495	145		346		
Travel Time (s)		11.3	3.3		7.9		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	0	0	513	0	0	120	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	513	0	0	120	
Turn Type			NA			Prot	
Protected Phases			Free!			4!	2
Permitted Phases							
Minimum Split (s)						16.0	16.0
Total Split (s)						93.0	27.0
Total Split (%)						77.5%	23%
Yellow Time (s)						3.5	3.5
All-Red Time (s)						2.5	2.5
Lost Time Adjust (s)						0.0	
Total Lost Time (s)						6.0	
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)			120.0			87.0	
Actuated g/C Ratio			1.00			0.72	
v/c Ratio			0.10			0.05	
Control Delay			0.0			0.0	
Queue Delay			0.0			0.0	
Total Delay			0.0			0.0	
LOS			A			A	
Approach Delay							
Approach LOS							
Queue Length 50th (ft)			0			0	
Queue Length 95th (ft)			0			0	
Internal Link Dist (ft)		415	65		266		
Turn Bay Length (ft)							
Base Capacity (vph)			5085			2294	
Starvation Cap Reductn			0			0	
Spillback Cap Reductn			0			0	
Storage Cap Reductn			0			0	
Reduced v/c Ratio			0.10			0.05	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 27 (23%), Referenced to phase 4:SER, Start of Green			
Natural Cycle: 50			
Control Type: Pretimed			
Maximum v/c Ratio: 0.67			
Intersection Signal Delay: 0.0		Intersection LOS: A	
Intersection Capacity Utilization 63.0%		ICU Level of Service B	
Analysis Period (min) 15			

! Phase conflict between lane groups.

Splits and Phases: 4034: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & EB I-94 Off-ramp

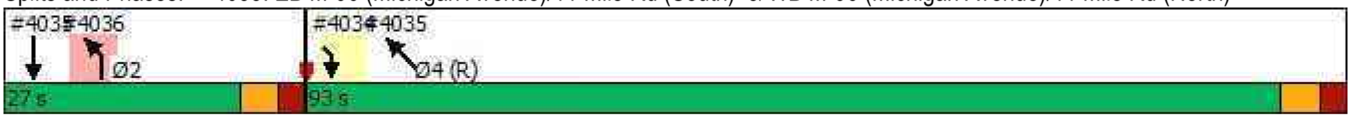


Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	472	0	0	0	0	0	2272	0
Future Volume (vph)	0	0	0	0	472	0	0	0	0	0	2272	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.91	1.00	1.00	1.00	1.00	1.00	0.91	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	0	0	0	5085	0	0	0	0	0	5085	0
Flt Permitted												
Satd. Flow (perm)	0	0	0	0	5085	0	0	0	0	0	5085	0
Right Turn on Red			Yes			Yes			Yes	Yes		Yes
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		145			194			233			108	
Travel Time (s)		3.3			4.4			5.3			2.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	513	0	0	0	0	0	2470	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	513	0	0	0	0	0	2470	0
Turn Type					NA						NA	
Protected Phases					2						4	
Permitted Phases												
Minimum Split (s)					16.0						16.0	
Total Split (s)					27.0						93.0	
Total Split (%)					22.5%						77.5%	
Yellow Time (s)					3.5						3.5	
All-Red Time (s)					2.5						2.5	
Lost Time Adjust (s)					0.0						0.0	
Total Lost Time (s)					6.0						6.0	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)					21.0						87.0	
Actuated g/C Ratio					0.18						0.72	
v/c Ratio					0.58						0.67	
Control Delay					46.6						16.9	
Queue Delay					0.0						0.0	
Total Delay					46.6						16.9	
LOS					D						B	
Approach Delay					46.6						16.9	
Approach LOS					D						B	
Queue Length 50th (ft)					153						549	
Queue Length 95th (ft)					193						m571	
Internal Link Dist (ft)		65			114			153			28	
Turn Bay Length (ft)												
Base Capacity (vph)					889						3686	
Starvation Cap Reductn					0						0	
Spillback Cap Reductn					0						0	
Storage Cap Reductn					0						0	
Reduced v/c Ratio					0.58						0.67	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 27 (23%), Referenced to phase 4:SER, Start of Green	
Natural Cycle: 50	
Control Type: Pretimed	
Maximum v/c Ratio: 0.67	
Intersection Signal Delay: 22.0	Intersection LOS: C
Intersection Capacity Utilization 75.3%	ICU Level of Service D
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4035: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & WB M-96 (Michigan Avenue)/11 Mile Rd (North)

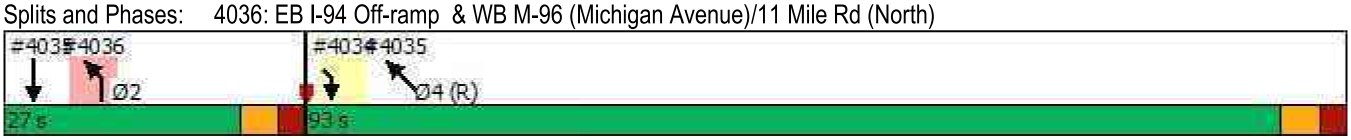


Lane Group	NBL	NBR	SET	SER	NWL	NWT	Ø4
Lane Configurations							
Traffic Volume (vph)	104	0	0	0	0	2272	
Future Volume (vph)	104	0	0	0	0	2272	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.91	
Frt							
Flt Protected	0.950						
Satd. Flow (prot)	1719	0	0	0	0	5085	
Flt Permitted	0.950						
Satd. Flow (perm)	1719	0	0	0	0	5085	
Right Turn on Red	Yes	Yes		Yes			
Satd. Flow (RTOR)	39						
Link Speed (mph)	30		30			30	
Link Distance (ft)	271		337			233	
Travel Time (s)	6.2		7.7			5.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Heavy Vehicles (%)	5%	2%	2%	2%	2%	2%	
Adj. Flow (vph)	113	0	0	0	0	2470	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	113	0	0	0	0	2470	
Turn Type	Prot					NA	
Protected Phases	2!					Free!	4
Permitted Phases							
Minimum Split (s)	16.0						16.0
Total Split (s)	27.0						93.0
Total Split (%)	22.5%						78%
Yellow Time (s)	3.5						3.5
All-Red Time (s)	2.5						2.5
Lost Time Adjust (s)	0.0						
Total Lost Time (s)	6.0						
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)	21.0					120.0	
Actuated g/C Ratio	0.18					1.00	
v/c Ratio	0.34					0.49	
Control Delay	31.4					0.3	
Queue Delay	0.0					0.0	
Total Delay	31.4					0.3	
LOS	C					A	
Approach Delay	31.4					0.3	
Approach LOS	C					A	
Queue Length 50th (ft)	50					0	
Queue Length 95th (ft)	106					0	
Internal Link Dist (ft)	191		257			153	
Turn Bay Length (ft)							
Base Capacity (vph)	333					5085	
Starvation Cap Reductn	0					0	
Spillback Cap Reductn	0					0	
Storage Cap Reductn	0					0	

Lane Group	NBL	NBR	SET	SER	NWL	NWT	Ø4
Reduced v/c Ratio	0.34					0.49	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 27 (23%), Referenced to phase 4:SER, Start of Green	
Natural Cycle: 50	
Control Type: Pretimed	
Maximum v/c Ratio: 0.67	
Intersection Signal Delay: 1.6	Intersection LOS: A
Intersection Capacity Utilization 60.6%	ICU Level of Service B
Analysis Period (min) 15	
! Phase conflict between lane groups.	

Splits and Phases: 4036: EB I-94 Off-ramp & WB M-96 (Michigan Avenue)/11 Mile Rd (North)

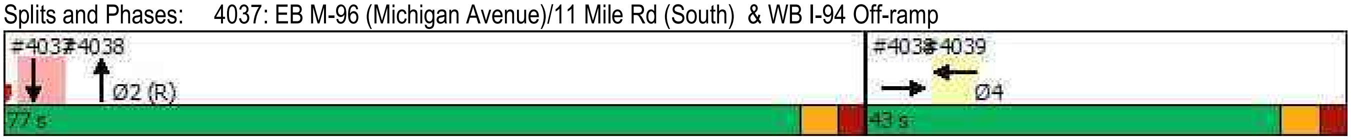


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø4
Lane Configurations							
Traffic Volume (vph)	0	446	0	0	99	0	
Future Volume (vph)	0	446	0	0	99	0	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	0.88	1.00	1.00	0.95	1.00	
Frt		0.850					
Flt Protected							
Satd. Flow (prot)	0	2707	0	0	3438	0	
Flt Permitted							
Satd. Flow (perm)	0	2707	0	0	3438	0	
Right Turn on Red		Yes				Yes	
Satd. Flow (RTOR)		1658					
Link Speed (mph)	30			30	30		
Link Distance (ft)	222			406	241		
Travel Time (s)	5.0			9.2	5.5		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Heavy Vehicles (%)	2%	5%	2%	2%	5%	2%	
Adj. Flow (vph)	0	485	0	0	108	0	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	485	0	0	108	0	
Turn Type		Free			NA		
Protected Phases					2		4
Permitted Phases		Free					
Minimum Split (s)					16.0		16.0
Total Split (s)					77.0		43.0
Total Split (%)					64.2%		36%
Yellow Time (s)					3.5		3.5
All-Red Time (s)					2.5		2.5
Lost Time Adjust (s)					0.0		
Total Lost Time (s)					6.0		
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)		120.0			71.0		
Actuated g/C Ratio		1.00			0.59		
v/c Ratio		0.18			0.05		
Control Delay		2.1			10.4		
Queue Delay		0.0			0.0		
Total Delay		2.1			10.4		
LOS		A			B		
Approach Delay	2.1				10.4		
Approach LOS	A				B		
Queue Length 50th (ft)		35			17		
Queue Length 95th (ft)		43			30		
Internal Link Dist (ft)	142			326	161		
Turn Bay Length (ft)							
Base Capacity (vph)		2707			2034		
Starvation Cap Reductn		0			0		
Spillback Cap Reductn		0			0		
Storage Cap Reductn		0			0		

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø4
Reduced v/c Ratio		0.18			0.05		

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 96 (80%), Referenced to phase 2:SBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.53	
Intersection Signal Delay: 3.6	Intersection LOS: A
Intersection Capacity Utilization 13.3%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4037: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & WB I-94 Off-ramp

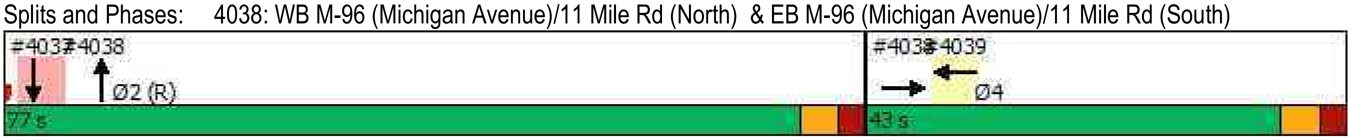


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	446	0	0	0	0	0	1419	0	0	0	0
Future Volume (vph)	0	446	0	0	0	0	0	1419	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	1.00	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	3438	0	0	0	0	0	4940	0	0	0	0
Flt Permitted												
Satd. Flow (perm)	0	3438	0	0	0	0	0	4940	0	0	0	0
Right Turn on Red	Yes		Yes			Yes			Yes			Yes
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		190			222			207			131	
Travel Time (s)		4.3			5.0			4.7			3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	5%	2%	2%	2%	2%	2%	5%	2%	2%	2%	2%
Adj. Flow (vph)	0	485	0	0	0	0	0	1542	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	485	0	0	0	0	0	1542	0	0	0	0
Turn Type		NA						NA				
Protected Phases		4						2				
Permitted Phases												
Minimum Split (s)		16.0						16.0				
Total Split (s)		43.0						77.0				
Total Split (%)		35.8%						64.2%				
Yellow Time (s)		3.5						3.5				
All-Red Time (s)		2.5						2.5				
Lost Time Adjust (s)		0.0						0.0				
Total Lost Time (s)		6.0						6.0				
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		37.0						71.0				
Actuated g/C Ratio		0.31						0.59				
v/c Ratio		0.46						0.53				
Control Delay		32.8						33.3				
Queue Delay		0.0						0.0				
Total Delay		32.8						33.3				
LOS		C						C				
Approach Delay		32.8						33.3				
Approach LOS		C						C				
Queue Length 50th (ft)		178						423				
Queue Length 95th (ft)		233						464				
Internal Link Dist (ft)		110			142			127			51	
Turn Bay Length (ft)												
Base Capacity (vph)		1060						2922				
Starvation Cap Reductn		0						0				
Spillback Cap Reductn		0						0				
Storage Cap Reductn		0						0				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Reduced v/c Ratio		0.46						0.53				

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 96 (80%), Referenced to phase 2:SBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.53	
Intersection Signal Delay: 33.2	Intersection LOS: C
Intersection Capacity Utilization 49.7%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4038: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & EB M-96 (Michigan Avenue)/11 Mile Rd (South)

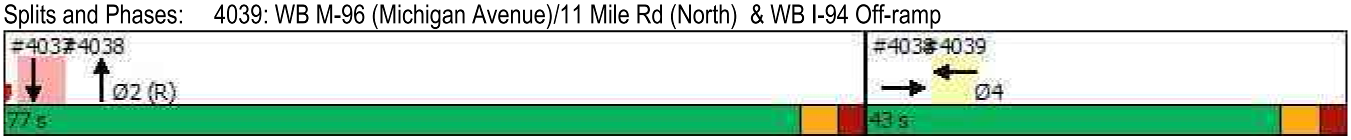


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø2
Lane Configurations							
Traffic Volume (vph)	0	0	0	151	1419	0	
Future Volume (vph)	0	0	0	151	1419	0	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.94	1.00	
Frt							
Flt Protected					0.950		
Satd. Flow (prot)	0	0	0	1810	4848	0	
Flt Permitted					0.950		
Satd. Flow (perm)	0	0	0	1810	4848	0	
Right Turn on Red		Yes			Yes	Yes	
Satd. Flow (RTOR)					2555		
Link Speed (mph)	30			30	30		
Link Distance (ft)	415			317	131		
Travel Time (s)	9.4			7.2	3.0		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Heavy Vehicles (%)	2%	2%	2%	5%	5%	2%	
Adj. Flow (vph)	0	0	0	164	1542	0	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	0	164	1542	0	
Turn Type				NA	Perm		
Protected Phases				4!			2
Permitted Phases					Free!		
Minimum Split (s)				16.0			16.0
Total Split (s)				43.0			77.0
Total Split (%)				35.8%			64%
Yellow Time (s)				3.5			3.5
All-Red Time (s)				2.5			2.5
Lost Time Adjust (s)				0.0			
Total Lost Time (s)				6.0			
Lead/Lag							
Lead-Lag Optimize?							
Act Effct Green (s)				37.0	120.0		
Actuated g/C Ratio				0.31	1.00		
v/c Ratio				0.29	0.32		
Control Delay				33.4	0.5		
Queue Delay				0.0	0.0		
Total Delay				33.4	0.5		
LOS				C	A		
Approach Delay				33.4	0.5		
Approach LOS				C	A		
Queue Length 50th (ft)				96	3		
Queue Length 95th (ft)				156	0		
Internal Link Dist (ft)	335			237	51		
Turn Bay Length (ft)							
Base Capacity (vph)				558	4848		
Starvation Cap Reductn				0	0		
Spillback Cap Reductn				0	0		
Storage Cap Reductn				0	0		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø2
Reduced v/c Ratio				0.29	0.32		

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 96 (80%), Referenced to phase 2:SBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.53	
Intersection Signal Delay: 3.6	Intersection LOS: A
Intersection Capacity Utilization 77.7%	ICU Level of Service D
Analysis Period (min) 15	
! Phase conflict between lane groups.	

Splits and Phases: 4039: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & WB I-94 Off-ramp

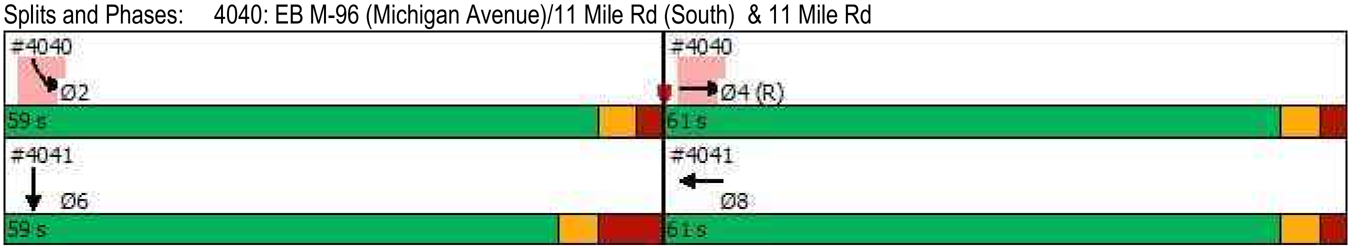


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø6	Ø8
Lane Configurations								
Traffic Volume (vph)	0	384	0	0	207	0		
Future Volume (vph)	0	384	0	0	207	0		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.97	1.00		
Frt								
Flt Protected					0.950			
Satd. Flow (prot)	0	3539	0	0	3335	0		
Flt Permitted					0.950			
Satd. Flow (perm)	0	3539	0	0	3335	0		
Right Turn on Red				Yes	Yes	Yes		
Satd. Flow (RTOR)					651			
Link Speed (mph)		55	55		45			
Link Distance (ft)		212	597		92			
Travel Time (s)		2.6	7.4		1.4			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Heavy Vehicles (%)	2%	2%	2%	2%	5%	2%		
Adj. Flow (vph)	0	417	0	0	225	0		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	0	417	0	0	225	0		
Turn Type		NA			Prot			
Protected Phases		4			2		6	8
Permitted Phases								
Minimum Split (s)		16.0			19.5		19.5	16.0
Total Split (s)		61.0			59.0		59.0	61.0
Total Split (%)		50.8%			49.2%		49%	51%
Yellow Time (s)		3.5			3.5		3.5	3.5
All-Red Time (s)		2.5			2.5		6.0	2.5
Lost Time Adjust (s)		0.0			0.0			
Total Lost Time (s)		6.0			6.0			
Lead/Lag								
Lead-Lag Optimize?								
Act Effct Green (s)		55.0			53.0			
Actuated g/C Ratio		0.46			0.44			
v/c Ratio		0.26			0.12			
Control Delay		20.5			0.1			
Queue Delay		0.0			0.0			
Total Delay		20.5			0.1			
LOS		C			A			
Approach Delay		20.5			0.1			
Approach LOS		C			A			
Queue Length 50th (ft)		102			0			
Queue Length 95th (ft)		137			0			
Internal Link Dist (ft)		132	517		12			
Turn Bay Length (ft)								
Base Capacity (vph)		1622			1836			
Starvation Cap Reductn		0			0			
Spillback Cap Reductn		0			0			
Storage Cap Reductn		0			0			

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø6	Ø8
Reduced v/c Ratio		0.26			0.12			

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 32 (27%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.56	
Intersection Signal Delay: 13.4	Intersection LOS: B
Intersection Capacity Utilization 44.4%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4040: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & 11 Mile Rd



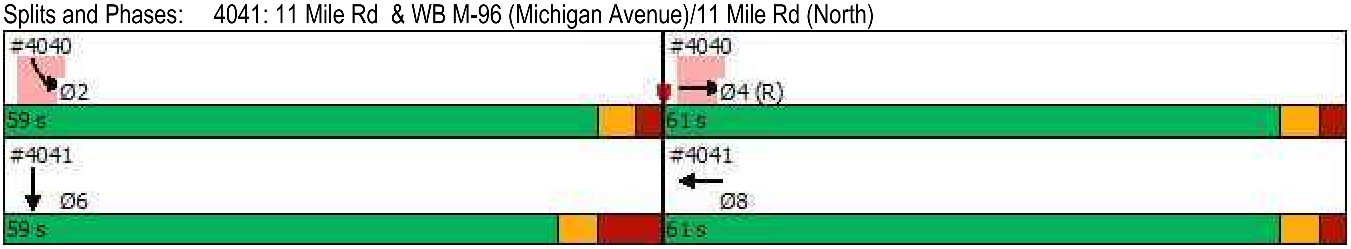
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	836	798	0	0	0	0	207	56
Future Volume (vph)	0	0	0	0	836	798	0	0	0	0	207	56
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		250	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Frt						0.850					0.968	
Flt Protected												
Satd. Flow (prot)	0	0	0	0	3539	1538	0	0	0	0	3348	0
Flt Permitted												
Satd. Flow (perm)	0	0	0	0	3539	1538	0	0	0	0	3348	0
Right Turn on Red			Yes	Yes		Yes			Yes			Yes
Satd. Flow (RTOR)						599					35	
Link Speed (mph)		55			55			45			55	
Link Distance (ft)		210			598			92			259	
Travel Time (s)		2.6			7.4			1.4			3.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	5%	2%	2%	2%	2%	5%	2%
Adj. Flow (vph)	0	0	0	0	909	867	0	0	0	0	225	61
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	909	867	0	0	0	0	286	0
Turn Type					NA	custom					NA	
Protected Phases					8	Free					6	
Permitted Phases												
Minimum Split (s)					16.0						19.5	
Total Split (s)					61.0						59.0	
Total Split (%)					50.8%						49.2%	
Yellow Time (s)					3.5						3.5	
All-Red Time (s)					2.5						6.0	
Lost Time Adjust (s)					0.0						0.0	
Total Lost Time (s)					6.0						9.5	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)					55.0	120.0					49.5	
Actuated g/C Ratio					0.46	1.00					0.41	
v/c Ratio					0.56	0.56					0.20	
Control Delay					29.5	10.5					30.6	
Queue Delay					0.0	0.0					0.0	
Total Delay					29.5	10.5					30.6	
LOS					C	B					C	
Approach Delay					20.2						30.6	
Approach LOS					C						C	
Queue Length 50th (ft)					349	595					85	
Queue Length 95th (ft)					412	712					126	
Internal Link Dist (ft)		130			518			12			179	
Turn Bay Length (ft)						250						
Base Capacity (vph)					1622	1538					1401	

Lane Group	Ø2	Ø4
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Ideal Flow (vphpl)		
Storage Length (ft)		
Storage Lanes		
Taper Length (ft)		
Lane Util. Factor		
Frt		
Flt Protected		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Peak Hour Factor		
Heavy Vehicles (%)		
Adj. Flow (vph)		
Shared Lane Traffic (%)		
Lane Group Flow (vph)		
Turn Type		
Protected Phases	2	4
Permitted Phases		
Minimum Split (s)	19.5	16.0
Total Split (s)	59.0	61.0
Total Split (%)	49%	51%
Yellow Time (s)	3.5	3.5
All-Red Time (s)	2.5	2.5
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag		
Lead-Lag Optimize?		
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)		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn					0	0					0	
Spillback Cap Reductn					0	0					0	
Storage Cap Reductn					0	0					0	
Reduced v/c Ratio					0.56	0.56					0.20	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 32 (27%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.56	
Intersection Signal Delay: 21.7	Intersection LOS: C
Intersection Capacity Utilization 44.4%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4041: 11 Mile Rd & WB M-96 (Michigan Avenue)/11 Mile Rd (North)



Lane Group	Ø2	Ø4
Starvation Cap Reductn		
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		

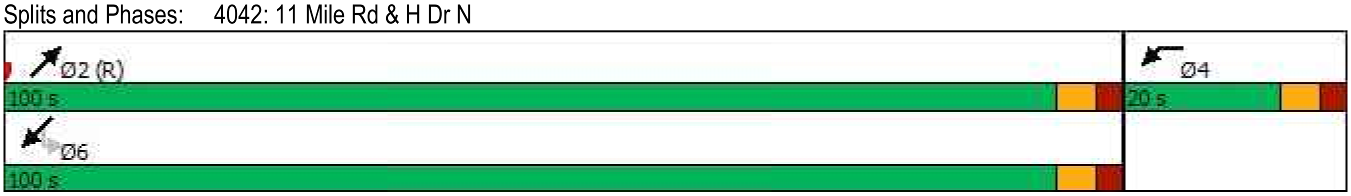
Intersection Summary

Lane Group	WBL	WBR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	0	0	798	0	0	263
Future Volume (vph)	0	0	798	0	0	263
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	1810	0	1863	0	0	1863
Flt Permitted						
Satd. Flow (perm)	1810	0	1863	0	0	1863
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)						
Link Speed (mph)	25		55			55
Link Distance (ft)	1262		1787			680
Travel Time (s)	34.4		22.2			8.4
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	2%	2%	5%	2%	2%
Adj. Flow (vph)	0	0	867	0	0	286
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	867	0	0	286
Turn Type	Prot		NA			NA
Protected Phases	4		2			6
Permitted Phases					6	
Minimum Split (s)	13.0		16.0		13.0	13.0
Total Split (s)	20.0		100.0		100.0	100.0
Total Split (%)	16.7%		83.3%		83.3%	83.3%
Yellow Time (s)	3.5		3.5		3.5	3.5
All-Red Time (s)	2.5		2.5		2.5	2.5
Lost Time Adjust (s)	0.0		0.0			0.0
Total Lost Time (s)	6.0		6.0			6.0
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)			94.0			94.0
Actuated g/C Ratio			0.78			0.78
v/c Ratio			0.59			0.20
Control Delay			3.6			3.7
Queue Delay			0.0			0.0
Total Delay			3.6			3.7
LOS			A			A
Approach Delay			3.6			3.7
Approach LOS			A			A
Queue Length 50th (ft)			65			47
Queue Length 95th (ft)			106			69
Internal Link Dist (ft)	1182		1707			600
Turn Bay Length (ft)						
Base Capacity (vph)			1459			1459
Starvation Cap Reductn			0			0
Spillback Cap Reductn			0			0
Storage Cap Reductn			0			0

Lane Group	WBL	WBR	NET	NER	SWL	SWT
Reduced v/c Ratio			0.59			0.20

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NET, Start of Green	
Natural Cycle: 50	
Control Type: Pretimed	
Maximum v/c Ratio: 0.59	
Intersection Signal Delay: 3.6	Intersection LOS: A
Intersection Capacity Utilization 47.0%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4042: 11 Mile Rd & H Dr N

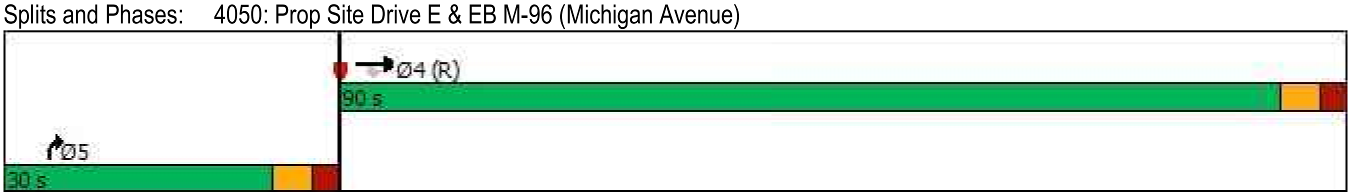


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1389	0	0	0	0	335
Future Volume (vph)	1389	0	0	0	0	335
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		500	600		0	0
Storage Lanes		2	0		0	2
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	0.88	1.00	1.00	1.00	0.88
Frt						0.850
Flt Protected						
Satd. Flow (prot)	3539	3278	0	0	0	2787
Flt Permitted						
Satd. Flow (perm)	3539	3278	0	0	0	2787
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)						107
Link Speed (mph)	55			55	25	
Link Distance (ft)	669			659	1093	
Travel Time (s)	8.3			8.2	29.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1510	0	0	0	0	364
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1510	0	0	0	0	364
Turn Type	NA	Perm				Prot
Protected Phases	4					5
Permitted Phases		4				
Detector Phase	4	4				5
Switch Phase						
Minimum Initial (s)	10.0	10.0				10.0
Minimum Split (s)	16.0	16.0				16.0
Total Split (s)	90.0	90.0				30.0
Total Split (%)	75.0%	75.0%				25.0%
Yellow Time (s)	3.5	3.5				3.5
All-Red Time (s)	2.5	2.5				2.5
Lost Time Adjust (s)	0.0	0.0				0.0
Total Lost Time (s)	6.0	6.0				6.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max	C-Max				None
Act Effct Green (s)	91.2					16.8
Actuated g/C Ratio	0.76					0.14
v/c Ratio	0.56					0.76
Control Delay	5.6					44.8
Queue Delay	0.1					0.0
Total Delay	5.7					44.8
LOS	A					D
Approach Delay	5.7				44.8	
Approach LOS	A				D	
Queue Length 50th (ft)	223					110
Queue Length 95th (ft)	264					160

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Internal Link Dist (ft)	589			579	1013	
Turn Bay Length (ft)						
Base Capacity (vph)	2690					643
Starvation Cap Reductn	183					0
Spillback Cap Reductn	0					0
Storage Cap Reductn	0					0
Reduced v/c Ratio	0.60					0.57

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 52 (43%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 45	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.76	
Intersection Signal Delay: 13.3	Intersection LOS: B
Intersection Capacity Utilization 60.1%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 4050: Prop Site Drive E & EB M-96 (Michigan Avenue)

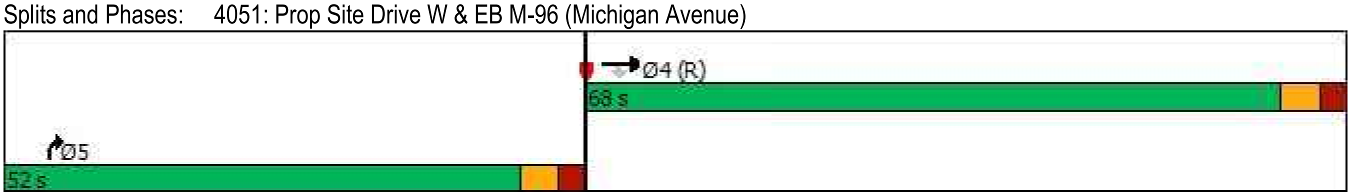


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	840	0	0	0	0	602
Future Volume (vph)	840	0	0	0	0	602
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		500	600		0	0
Storage Lanes		2	0		0	2
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	0.88	1.00	1.00	1.00	0.88
Frt						0.850
Flt Protected						
Satd. Flow (prot)	3539	3278	0	0	0	2787
Flt Permitted						
Satd. Flow (perm)	3539	3278	0	0	0	2787
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)						185
Link Speed (mph)	55			55	25	
Link Distance (ft)	608			627	1293	
Travel Time (s)	7.5			7.8	35.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	913	0	0	0	0	654
Shared Lane Traffic (%)						
Lane Group Flow (vph)	913	0	0	0	0	654
Turn Type	NA	Perm				Prot
Protected Phases	4					5
Permitted Phases		4				
Detector Phase	4	4				5
Switch Phase						
Minimum Initial (s)	10.0	10.0				10.0
Minimum Split (s)	16.0	16.0				16.0
Total Split (s)	68.0	68.0				52.0
Total Split (%)	56.7%	56.7%				43.3%
Yellow Time (s)	3.5	3.5				3.5
All-Red Time (s)	2.5	2.5				2.5
Lost Time Adjust (s)	0.0	0.0				0.0
Total Lost Time (s)	6.0	6.0				6.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max	C-Max				None
Act Effct Green (s)	80.3					27.7
Actuated g/C Ratio	0.67					0.23
v/c Ratio	0.39					0.83
Control Delay	10.7					40.4
Queue Delay	0.0					0.0
Total Delay	10.7					40.4
LOS	B					D
Approach Delay	10.7				40.4	
Approach LOS	B				D	
Queue Length 50th (ft)	256					203
Queue Length 95th (ft)	368					255

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Internal Link Dist (ft)	528			547	1213	
Turn Bay Length (ft)						
Base Capacity (vph)	2367					1182
Starvation Cap Reductn	0					0
Spillback Cap Reductn	0					0
Storage Cap Reductn	0					0
Reduced v/c Ratio	0.39					0.55

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 32 (27%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 40	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.83	
Intersection Signal Delay: 23.1	Intersection LOS: C
Intersection Capacity Utilization 54.3%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4051: Prop Site Drive W & EB M-96 (Michigan Avenue)

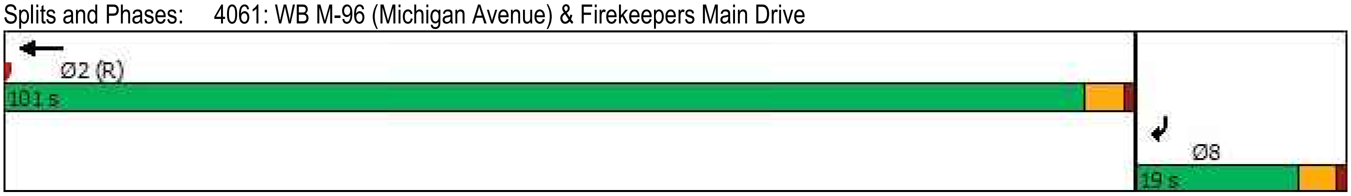


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	878	168	0	134
Future Volume (vph)	0	0	878	168	0	134
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			0	0	0
Storage Lanes	0			0	0	2
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	0.88
Frt			0.977			0.850
Flt Protected						
Satd. Flow (prot)	0	0	3468	0	0	2787
Flt Permitted						
Satd. Flow (perm)	0	0	3468	0	0	2787
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			65			408
Link Speed (mph)		55	55		25	
Link Distance (ft)		574	509		701	
Travel Time (s)		7.1	6.3		19.1	
Peak Hour Factor	0.92	0.92	0.92	0.95	0.67	0.92
Heavy Vehicles (%)	2%	2%	2%	0%	0%	2%
Adj. Flow (vph)	0	0	954	177	0	146
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1131	0	0	146
Turn Type			NA			Prot
Protected Phases			2			8
Permitted Phases						
Detector Phase			2			8
Switch Phase						
Minimum Initial (s)			10.0			10.0
Minimum Split (s)			22.5			14.5
Total Split (s)			101.0			19.0
Total Split (%)			84.2%			15.8%
Yellow Time (s)			3.5			3.5
All-Red Time (s)			1.0			1.0
Lost Time Adjust (s)			0.0			0.0
Total Lost Time (s)			4.5			4.5
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode			C-Max			None
Act Effct Green (s)			101.0			10.0
Actuated g/C Ratio			0.84			0.08
v/c Ratio			0.39			0.24
Control Delay			2.5			0.9
Queue Delay			0.0			0.0
Total Delay			2.5			0.9
LOS			A			A
Approach Delay			2.5		0.9	
Approach LOS			A		A	
Queue Length 50th (ft)			73			0

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Queue Length 95th (ft)			91			0
Internal Link Dist (ft)		494	429		621	
Turn Bay Length (ft)						
Base Capacity (vph)			2929			695
Starvation Cap Reductn			0			0
Spillback Cap Reductn			0			0
Storage Cap Reductn			0			0
Reduced v/c Ratio			0.39			0.21

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:WBT, Start of Green	
Natural Cycle: 40	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.39	
Intersection Signal Delay: 2.3	Intersection LOS: A
Intersection Capacity Utilization 45.5%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4061: WB M-96 (Michigan Avenue) & Firekeepers Main Drive

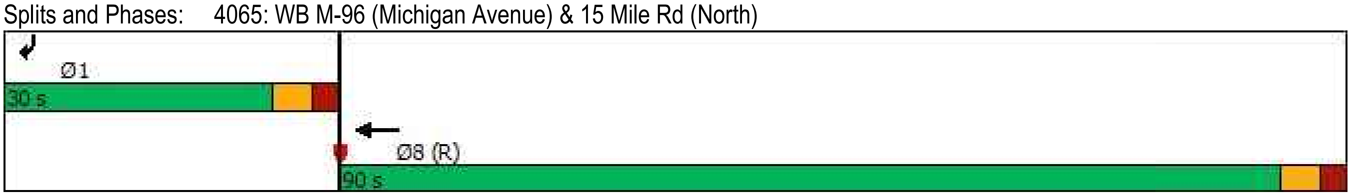


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	533	495	0	58
Future Volume (vph)	0	0	533	495	0	58
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			250	0	200
Storage Lanes	0			0	0	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.91	1.00	1.00	0.88
Frt				0.850		0.850
Flt Protected						
Satd. Flow (prot)	0	0	5085	1583	0	2787
Flt Permitted						
Satd. Flow (perm)	0	0	5085	1583	0	2787
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				538		659
Link Speed (mph)		45	45		45	
Link Distance (ft)		534	660		516	
Travel Time (s)		8.1	10.0		7.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	579	538	0	63
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	579	538	0	63
Turn Type			NA	custom		Prot
Protected Phases			8	Free		1
Permitted Phases						
Minimum Split (s)			16.0			13.0
Total Split (s)			90.0			30.0
Total Split (%)			75.0%			25.0%
Yellow Time (s)			3.5			3.5
All-Red Time (s)			2.5			2.5
Lost Time Adjust (s)			0.0			0.0
Total Lost Time (s)			6.0			6.0
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)			84.0	120.0		24.0
Actuated g/C Ratio			0.70	1.00		0.20
v/c Ratio			0.16	0.34		0.06
Control Delay			2.0	0.6		0.1
Queue Delay			0.0	0.0		0.0
Total Delay			2.0	0.6		0.1
LOS			A	A		A
Approach Delay			1.3		0.1	
Approach LOS			A		A	
Queue Length 50th (ft)			14	0		0
Queue Length 95th (ft)			25	0		0
Internal Link Dist (ft)		454	580		436	
Turn Bay Length (ft)				250		200
Base Capacity (vph)			3559	1583		1084
Starvation Cap Reductn			0	0		0

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Spillback Cap Reductn			0	0		0
Storage Cap Reductn			0	0		0
Reduced v/c Ratio			0.16	0.34		0.06

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 8:WBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.34	
Intersection Signal Delay: 1.3	Intersection LOS: A
Intersection Capacity Utilization 26.1%	ICU Level of Service A
Analysis Period (min) 15	

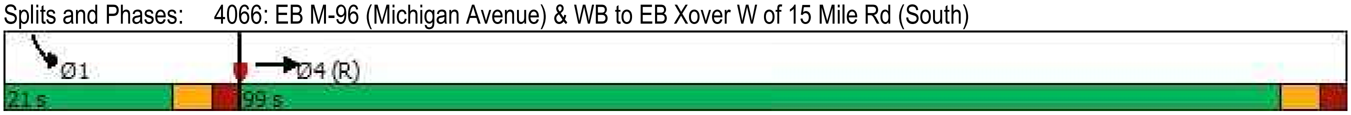
Splits and Phases: 4065: WB M-96 (Michigan Avenue) & 15 Mile Rd (North)



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	3020	0	0	119	0
Future Volume (vph)	0	3020	0	0	119	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.91	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	5085	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	5085	0	0	1770	0
Right Turn on Red				Yes	Yes	Yes
Satd. Flow (RTOR)					3	
Link Speed (mph)		45	45		25	
Link Distance (ft)		262	1016		123	
Travel Time (s)		4.0	15.4		3.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.90	0.92
Adj. Flow (vph)	0	3283	0	0	132	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	3283	0	0	132	0
Turn Type		NA			Prot	
Protected Phases		4			1	
Permitted Phases						
Minimum Split (s)		16.0			16.0	
Total Split (s)		99.0			21.0	
Total Split (%)		82.5%			17.5%	
Yellow Time (s)		3.5			3.5	
All-Red Time (s)		2.5			2.5	
Lost Time Adjust (s)		0.0			0.0	
Total Lost Time (s)		6.0			6.0	
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)		93.0			15.0	
Actuated g/C Ratio		0.78			0.12	
v/c Ratio		0.83			0.59	
Control Delay		16.6			75.2	
Queue Delay		0.0			0.0	
Total Delay		16.6			75.2	
LOS		B			E	
Approach Delay		16.6			75.2	
Approach LOS		B			E	
Queue Length 50th (ft)		807			106	
Queue Length 95th (ft)		885			173	
Internal Link Dist (ft)		182	936		43	
Turn Bay Length (ft)						
Base Capacity (vph)		3940			223	
Starvation Cap Reductn		0			0	
Spillback Cap Reductn		12			0	
Storage Cap Reductn		0			0	
Reduced v/c Ratio		0.84			0.59	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 116 (97%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 65	
Control Type: Pretimed	
Maximum v/c Ratio: 0.83	
Intersection Signal Delay: 18.9	Intersection LOS: B
Intersection Capacity Utilization 76.5%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 4066: EB M-96 (Michigan Avenue) & WB to EB Xover W of 15 Mile Rd (South)

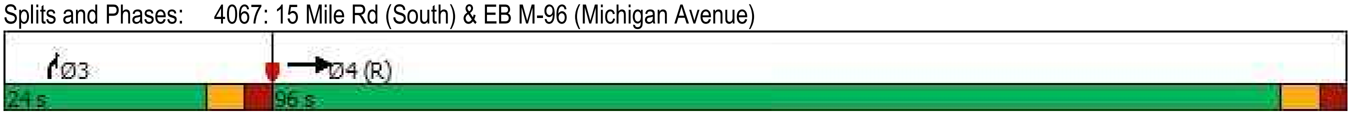


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	2878	261	0	0	0	155
Future Volume (vph)	2878	261	0	0	0	155
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		50	0		0	250
Storage Lanes		0	0		0	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	1.00	1.00	1.00	0.88
Frt	0.988					0.850
Flt Protected						
Satd. Flow (prot)	5024	0	0	0	0	2814
Flt Permitted						
Satd. Flow (perm)	5024	0	0	0	0	2814
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	35					6
Link Speed (mph)	45			45	45	
Link Distance (ft)	1016			704	1375	
Travel Time (s)	15.4			10.7	20.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.88	0.88
Heavy Vehicles (%)	2%	2%	2%	2%	1%	1%
Adj. Flow (vph)	3128	284	0	0	0	176
Shared Lane Traffic (%)						
Lane Group Flow (vph)	3412	0	0	0	0	176
Turn Type	NA					Prot
Protected Phases	4					3
Permitted Phases						
Minimum Split (s)	17.0					16.0
Total Split (s)	96.0					24.0
Total Split (%)	80.0%					20.0%
Yellow Time (s)	3.5					3.5
All-Red Time (s)	2.5					2.5
Lost Time Adjust (s)	0.0					0.0
Total Lost Time (s)	6.0					6.0
Lead/Lag	Lag					Lead
Lead-Lag Optimize?	Yes					Yes
Act Effct Green (s)	90.0					18.0
Actuated g/C Ratio	0.75					0.15
v/c Ratio	0.90					0.41
Control Delay	4.4					47.9
Queue Delay	0.0					0.0
Total Delay	4.4					47.9
LOS	A					D
Approach Delay	4.4				47.9	
Approach LOS	A				D	
Queue Length 50th (ft)	82					68
Queue Length 95th (ft)	90					105
Internal Link Dist (ft)	936			624	1295	
Turn Bay Length (ft)						250
Base Capacity (vph)	3776					427

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Starvation Cap Reductn	2					0
Spillback Cap Reductn	0					0
Storage Cap Reductn	0					0
Reduced v/c Ratio	0.90					0.41

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 4 (3%), Referenced to phase 4:EBT, Start of Green	
Natural Cycle: 75	
Control Type: Pretimed	
Maximum v/c Ratio: 0.90	
Intersection Signal Delay: 6.5	Intersection LOS: A
Intersection Capacity Utilization 79.7%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 4067: 15 Mile Rd (South) & EB M-96 (Michigan Avenue)

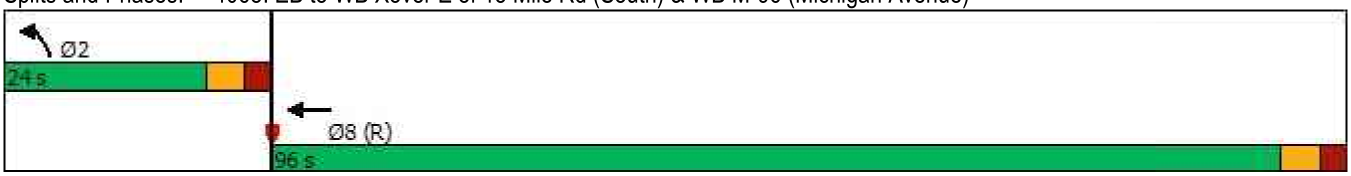


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑↑	↰	
Traffic Volume (vph)	0	0	0	584	44	0
Future Volume (vph)	0	0	0	584	44	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	5085	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	5085	1770	0
Right Turn on Red		Yes			Yes	Yes
Satd. Flow (RTOR)					365	
Link Speed (mph)	45			45	25	
Link Distance (ft)	687			275	111	
Travel Time (s)	10.4			4.2	3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	635	48	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	635	48	0
Turn Type				NA	Prot	
Protected Phases				8	2	
Permitted Phases						
Minimum Split (s)				16.0	13.0	
Total Split (s)				96.0	24.0	
Total Split (%)				80.0%	20.0%	
Yellow Time (s)				3.5	3.5	
All-Red Time (s)				2.5	2.5	
Lost Time Adjust (s)				0.0	0.0	
Total Lost Time (s)				6.0	6.0	
Lead/Lag						
Lead-Lag Optimize?						
Act Effct Green (s)				90.0	18.0	
Actuated g/C Ratio				0.75	0.15	
v/c Ratio				0.17	0.08	
Control Delay				5.0	0.1	
Queue Delay				0.3	0.0	
Total Delay				5.3	0.1	
LOS				A	A	
Approach Delay				5.3	0.1	
Approach LOS				A	A	
Queue Length 50th (ft)				2	0	
Queue Length 95th (ft)				3	m0	
Internal Link Dist (ft)	607			195	31	
Turn Bay Length (ft)						
Base Capacity (vph)				3813	575	
Starvation Cap Reductn				2390	0	
Spillback Cap Reductn				0	0	
Storage Cap Reductn				0	0	
Reduced v/c Ratio				0.45	0.08	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 112 (93%), Referenced to phase 8:WBT, Start of Green	
Natural Cycle: 40	
Control Type: Pretimed	
Maximum v/c Ratio: 0.17	
Intersection Signal Delay: 4.9	Intersection LOS: A
Intersection Capacity Utilization 69.7%	ICU Level of Service C
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4068: EB to WB Xover E of 15 Mile Rd (South) & WB M-96 (Michigan Avenue)

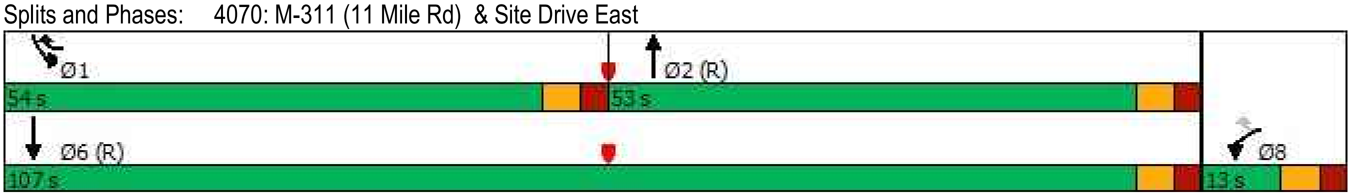


Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	30	727	1253	0	0	159
Future Volume (vph)	30	727	1253	0	0	159
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	500		0	400	
Storage Lanes	1	1		0	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.88	0.95	0.95	1.00	0.95
Frt		0.850				
Flt Protected	0.950					
Satd. Flow (prot)	1770	2787	3539	0	1863	3539
Flt Permitted	0.950					
Satd. Flow (perm)	1770	2787	3539	0	1863	3539
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		16				
Link Speed (mph)	25		55			55
Link Distance (ft)	750		940			974
Travel Time (s)	20.5		11.7			12.1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	33	790	1362	0	0	173
Shared Lane Traffic (%)						
Lane Group Flow (vph)	33	790	1362	0	0	173
Turn Type	Prot	pm+ov	NA		Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8				
Detector Phase	8	1	2		1	6
Switch Phase						
Minimum Initial (s)	7.0	7.0	10.0		7.0	10.0
Minimum Split (s)	13.0	13.0	16.0		13.0	16.0
Total Split (s)	13.0	54.0	53.0		54.0	107.0
Total Split (%)	10.8%	45.0%	44.2%		45.0%	89.2%
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5
All-Red Time (s)	2.5	2.5	2.5		2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0		6.0	6.0
Lead/Lag		Lead	Lag		Lead	
Lead-Lag Optimize?						
Recall Mode	None	None	C-Max		None	C-Max
Act Effct Green (s)	7.0	44.3	63.7			108.6
Actuated g/C Ratio	0.06	0.37	0.53			0.90
v/c Ratio	0.32	0.76	0.72			0.05
Control Delay	62.9	36.9	14.0			2.2
Queue Delay	0.0	0.6	0.0			0.0
Total Delay	62.9	37.5	14.0			2.2
LOS	E	D	B			A
Approach Delay	38.5		14.0			2.2
Approach LOS	D		B			A
Queue Length 50th (ft)	25	284	514			18
Queue Length 95th (ft)	60	318	666			22

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Internal Link Dist (ft)	670		860			894
Turn Bay Length (ft)		500				
Base Capacity (vph)	103	1304	1879			3202
Starvation Cap Reductn	0	0	0			0
Spillback Cap Reductn	0	212	5			0
Storage Cap Reductn	0	0	0			0
Reduced v/c Ratio	0.32	0.72	0.73			0.05

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 8 (7%), Referenced to phase 2:NBT and 6:SBT, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.76	
Intersection Signal Delay: 21.7	Intersection LOS: C
Intersection Capacity Utilization 70.1%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 4070: M-311 (11 Mile Rd) & Site Drive East

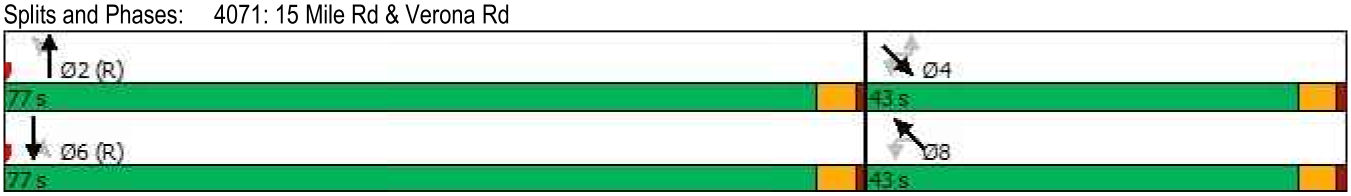


Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	453	13	13	5	9	4	0	87	31	6	118	14
Future Volume (vph)	453	13	13	5	9	4	0	87	31	6	118	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		70	0		0
Storage Lanes	0		0	0		0	0		1	0		0
Taper Length (ft)	25			25			25			25		
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
Frt		0.996			0.968				0.850		0.986	
Flt Protected		0.955			0.987						0.998	
Satd. Flow (prot)	0	1789	0	0	1715	0	0	1845	1392	0	1851	0
Flt Permitted		0.716			0.891						0.991	
Satd. Flow (perm)	0	1342	0	0	1548	0	0	1845	1392	0	1838	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2			7				35		5	
Link Speed (mph)		45			55			55			55	
Link Distance (ft)		682			426			745			951	
Travel Time (s)		10.3			5.3			9.2			11.8	
Peak Hour Factor	0.80	0.80	0.80	0.60	0.60	0.60	0.89	0.89	0.89	0.86	0.86	0.86
Heavy Vehicles (%)	1%	1%	1%	0%	0%	25%	0%	3%	16%	1%	1%	1%
Adj. Flow (vph)	566	16	16	8	15	7	0	98	35	7	137	16
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	598	0	0	30	0	0	98	35	0	160	0
Turn Type	Perm	NA		Perm	NA			NA	Perm	Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4		4	8		
Minimum Split (s)	22.5	22.5		22.5	22.5		22.5	22.5	22.5	22.5	22.5	
Total Split (s)	77.0	77.0		77.0	77.0		43.0	43.0	43.0	43.0	43.0	
Total Split (%)	64.2%	64.2%		64.2%	64.2%		35.8%	35.8%	35.8%	35.8%	35.8%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0	0.0		0.0	
Total Lost Time (s)		4.5			4.5			4.5	4.5		4.5	
Lead/Lag												
Lead-Lag Optimize?												
Act Effct Green (s)		72.5			72.5			38.5	38.5		38.5	
Actuated g/C Ratio		0.60			0.60			0.32	0.32		0.32	
v/c Ratio		0.74			0.03			0.17	0.07		0.27	
Control Delay		23.8			8.0			30.2	9.5		30.8	
Queue Delay		0.0			0.0			0.0	0.0		0.0	
Total Delay		23.8			8.0			30.2	9.5		30.8	
LOS		C			A			C	A		C	
Approach Delay		23.8			8.0			24.8			30.8	
Approach LOS		C			A			C			C	
Queue Length 50th (ft)		310			7			54	0		89	
Queue Length 95th (ft)		367			12			96	23		139	
Internal Link Dist (ft)		602			346			665			871	
Turn Bay Length (ft)									70			
Base Capacity (vph)		811			938			591	470		593	

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
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		0.74			0.03			0.17	0.07		0.27	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 60	
Control Type: Pretimed	
Maximum v/c Ratio: 0.74	
Intersection Signal Delay: 24.6	Intersection LOS: C
Intersection Capacity Utilization 52.7%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4071: 15 Mile Rd & Verona Rd

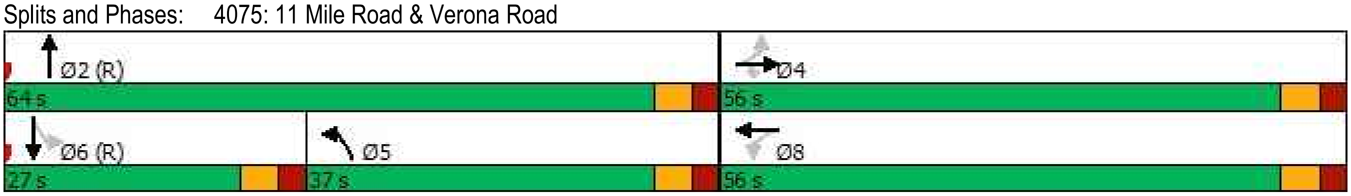


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	116	95	17	537	19	548	68	13	10	82	8
Future Volume (vph)	11	116	95	17	537	19	548	68	13	10	82	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	190		70	190		0	140		0	215		0
Storage Lanes	1		1	1		0	2		0	1		0
Taper Length (ft)	115			140			200			165		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.995			0.976			0.987	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	1900	1468	1805	1887	0	3072	1854	0	1687	1753	0
Flt Permitted	0.148			0.660			0.950			0.697		
Satd. Flow (perm)	281	1900	1468	1254	1887	0	3072	1854	0	1238	1753	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			120		2			11			4	
Link Speed (mph)		55			55			45			55	
Link Distance (ft)		519			1585			1015			821	
Travel Time (s)		6.4			19.6			15.4			10.2	
Peak Hour Factor	0.79	0.79	0.79	0.87	0.87	0.87	0.87	0.87	0.87	0.66	0.66	0.66
Heavy Vehicles (%)	0%	0%	10%	0%	0%	5%	14%	0%	0%	7%	7%	7%
Adj. Flow (vph)	14	147	120	20	617	22	630	78	15	15	124	12
Shared Lane Traffic (%)												
Lane Group Flow (vph)	14	147	120	20	639	0	630	93	0	15	136	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Perm	NA	
Protected Phases		4			8		5	2			6	
Permitted Phases	4		4	8						6		
Minimum Split (s)	25.0	25.0	25.0	25.0	25.0		16.0	25.0		25.0	25.0	
Total Split (s)	56.0	56.0	56.0	56.0	56.0		37.0	64.0		27.0	27.0	
Total Split (%)	46.7%	46.7%	46.7%	46.7%	46.7%		30.8%	53.3%		22.5%	22.5%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	2.5	2.5	2.5	2.5	2.5		2.5	2.5		2.5	2.5	
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)	6.0	6.0	6.0	6.0	6.0		6.0	6.0		6.0	6.0	
Lead/Lag							Lag			Lead	Lead	
Lead-Lag Optimize?							Yes			Yes	Yes	
Act Effct Green (s)	50.0	50.0	50.0	50.0	50.0		31.0	58.0		21.0	21.0	
Actuated g/C Ratio	0.42	0.42	0.42	0.42	0.42		0.26	0.48		0.18	0.18	
v/c Ratio	0.12	0.19	0.18	0.04	0.81		0.79	0.10		0.07	0.44	
Control Delay	24.9	22.9	4.4	21.2	40.5		50.1	15.2		42.5	48.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	24.9	22.9	4.4	21.2	40.5		50.1	15.2		42.5	48.0	
LOS	C	C	A	C	D		D	B		D	D	
Approach Delay		15.1			39.9			45.6			47.5	
Approach LOS		B			D			D			D	
Queue Length 50th (ft)	7	71	0	9	428		235	33		10	92	
Queue Length 95th (ft)	20	101	24	24	557		292	62		22	110	
Internal Link Dist (ft)		439			1505			935			741	
Turn Bay Length (ft)	190		70	190			140			215		
Base Capacity (vph)	117	791	681	522	787		793	901		216	310	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0	0	0	0		0	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	0.12	0.19	0.18	0.04	0.81		0.79	0.10		0.07	0.44	

Intersection Summary	
Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green	
Natural Cycle: 90	
Control Type: Pretimed	
Maximum v/c Ratio: 0.81	
Intersection Signal Delay: 39.0	Intersection LOS: D
Intersection Capacity Utilization 61.7%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 4075: 11 Mile Road & Verona Road



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	815	143	0	231
Future Volume (vph)	0	0	815	143	0	231
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200			300	245	245
Storage Lanes	0			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.978			0.865
Flt Protected						
Satd. Flow (prot)	0	0	3332	0	0	1644
Flt Permitted						
Satd. Flow (perm)	0	0	3332	0	0	1644
Link Speed (mph)		55	55		25	
Link Distance (ft)		509	395		760	
Travel Time (s)		6.3	4.9		20.7	
Peak Hour Factor	0.88	0.88	0.91	0.91	0.79	0.79
Heavy Vehicles (%)	1%	1%	7%	0%	0%	0%
Adj. Flow (vph)	0	0	896	157	0	292
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1053	0	0	292
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 48.1% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	801	43	0	157
Future Volume (vph)	0	0	801	43	0	157
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	175			50	0	0
Storage Lanes	0			0	0	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.992			0.865
Flt Protected						
Satd. Flow (prot)	0	0	3358	0	0	1565
Flt Permitted						
Satd. Flow (perm)	0	0	3358	0	0	1565
Link Speed (mph)		55	55		25	
Link Distance (ft)		395	586		185	
Travel Time (s)		4.9	7.3		5.0	
Peak Hour Factor	0.90	0.90	0.95	0.95	0.70	0.70
Heavy Vehicles (%)	1%	1%	7%	0%	5%	5%
Adj. Flow (vph)	0	0	843	45	0	224
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	888	0	0	224
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 39.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	837	12	0	7
Future Volume (vph)	0	0	837	12	0	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150			600	0	0
Storage Lanes	0			0	0	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.998			0.865
Flt Protected						
Satd. Flow (prot)	0	0	3370	0	0	1644
Flt Permitted						
Satd. Flow (perm)	0	0	3370	0	0	1644
Link Speed (mph)		55	55		25	
Link Distance (ft)		586	607		1086	
Travel Time (s)		7.3	7.5		29.6	
Peak Hour Factor	0.83	0.83	0.92	0.92	0.60	0.60
Heavy Vehicles (%)	10%	1%	7%	0%	33%	0%
Adj. Flow (vph)	0	0	910	13	0	12
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	923	0	0	12
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 33.5% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	571	8	0	7
Future Volume (vph)	0	0	571	8	0	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.998			0.865
Flt Protected						
Satd. Flow (prot)	0	0	3532	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	0	3532	0	0	1611
Link Speed (mph)		55	55		55	
Link Distance (ft)		538	1254		1399	
Travel Time (s)		6.7	15.5		17.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	621	9	0	8
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	630	0	0	8
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 26.0%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	0	5	0	495	0	0	58	0
Future Volume (vph)	0	0	0	0	0	5	0	495	0	0	58	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
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
Frt					0.865							
Flt Protected												
Satd. Flow (prot)	0	1863	0	0	1611	0	0	1863	0	0	1863	0
Flt Permitted												
Satd. Flow (perm)	0	1863	0	0	1611	0	0	1863	0	0	1863	0
Link Speed (mph)		45			45			25			45	
Link Distance (ft)		957			1038			516			593	
Travel Time (s)		14.5			15.7			14.1			9.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	0	5	0	538	0	0	63	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	5	0	0	538	0	0	63	0
Sign Control		Stop			Stop			Free			Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 36.1% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBT	EBR	WBL	WBT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	0	0	119	548	0	0
Future Volume (vph)	0	0	119	548	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.91	0.91	1.00	1.00
Frt						
Flt Protected				0.991		
Satd. Flow (prot)	0	0	0	5040	0	0
Flt Permitted				0.991		
Satd. Flow (perm)	0	0	0	5040	0	0
Link Speed (mph)	45			45	25	
Link Distance (ft)	183			382	263	
Travel Time (s)	2.8			5.8	7.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	129	596	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	725	0	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 54.0%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	1566	872	0	0	0	0
Future Volume (vph)	1566	872	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950	0.977				
Satd. Flow (prot)	1610	3312	0	0	0	0
Flt Permitted	0.950	0.977				
Satd. Flow (perm)	1610	3312	0	0	0	0
Link Speed (mph)		45	45		25	
Link Distance (ft)		619	209		329	
Travel Time (s)		9.4	3.2		9.0	
Peak Hour Factor	0.86	0.86	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1821	1014	0	0	0	0
Shared Lane Traffic (%)	49%					
Lane Group Flow (vph)	929	1906	0	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 64.8% ICU Level of Service C

Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	0	586	168	0	0
Future Volume (vph)	0	0	586	168	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	1.00
Frt				0.850		
Flt Protected						
Satd. Flow (prot)	0	0	3539	1583	0	0
Flt Permitted						
Satd. Flow (perm)	0	0	3539	1583	0	0
Link Speed (mph)		45	45		30	
Link Distance (ft)		213	315		137	
Travel Time (s)		3.2	4.8		3.1	
Peak Hour Factor	0.92	0.92	0.91	0.91	0.92	0.92
Adj. Flow (vph)	0	0	644	185	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	644	185	0	0
Sign Control		Stop	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 48.6%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	994	0	0	159	0
Future Volume (vph)	0	994	0	0	159	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3505	0	0	1787	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3505	0	0	1787	0
Link Speed (mph)		45	45		25	
Link Distance (ft)		309	168		108	
Travel Time (s)		4.7	2.5		2.9	
Peak Hour Factor	0.86	0.86	0.92	0.92	0.87	0.87
Heavy Vehicles (%)	3%	3%	2%	2%	1%	1%
Adj. Flow (vph)	0	1156	0	0	183	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1156	0	0	183	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 48.7%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑↑	↰	
Traffic Volume (vph)	0	0	0	699	182	0
Future Volume (vph)	0	0	0	699	182	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	5036	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	5036	1770	0
Link Speed (mph)	45			45	25	
Link Distance (ft)	134			152	111	
Travel Time (s)	2.0			2.3	3.0	
Peak Hour Factor	0.92	0.92	0.89	0.89	0.94	0.94
Heavy Vehicles (%)	2%	2%	3%	3%	2%	2%
Adj. Flow (vph)	0	0	0	785	194	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	785	194	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 33.6%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	972	0	0	80	0
Future Volume (vph)	0	972	0	0	80	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3574	0	0	1787	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3574	0	0	1787	0
Link Speed (mph)		45	45		25	
Link Distance (ft)		222	290		102	
Travel Time (s)		3.4	4.4		2.8	
Peak Hour Factor	0.95	0.95	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	1%	1%	2%	2%	1%	1%
Adj. Flow (vph)	0	1023	0	0	87	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1023	0	0	87	0
Sign Control		Free	Free		Stop	

Intersection Summary		
Area Type:	Other	
Control Type: Unsignalized		
Intersection Capacity Utilization 60.5%		ICU Level of Service B
Analysis Period (min) 15		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	718	65	0
Future Volume (vph)	0	0	0	718	65	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	30			45	25	
Link Distance (ft)	114			1105	101	
Travel Time (s)	2.6			16.7	2.8	
Peak Hour Factor	0.92	0.92	0.88	0.88	0.94	0.94
Adj. Flow (vph)	0	0	0	816	69	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	816	69	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 56.4%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	53	158	31	4	200	12	14	37	3	13	81	156
Future Volume (vph)	53	158	31	4	200	12	14	37	3	13	81	156
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	80		0	80		0	110		0	115		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	180			180			140			175		
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
Frt		0.975			0.991			0.988			0.901	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	1852	0	1770	1846	0	1703	1771	0	1770	1678	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1805	1852	0	1770	1846	0	1703	1771	0	1770	1678	0
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		1365			1319			666			571	
Travel Time (s)		20.7			20.0			10.1			8.7	
Peak Hour Factor	0.94	0.94	0.94	0.88	0.88	0.88	0.78	0.78	0.78	0.91	0.91	0.91
Heavy Vehicles (%)	0%	0%	0%	2%	2%	2%	6%	6%	6%	2%	2%	2%
Adj. Flow (vph)	56	168	33	5	227	14	18	47	4	14	89	171
Shared Lane Traffic (%)												
Lane Group Flow (vph)	56	201	0	5	241	0	18	51	0	14	260	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 38.4% ICU Level of Service A
Analysis Period (min) 15

Lane Group	EBL2	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	SWL	SWR
Lane Configurations											
Traffic Volume (vph)	55	0	112	0	270	79	81	385	0	0	0
Future Volume (vph)	55	0	112	0	270	79	81	385	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	240	0		0	105		0	0	0
Storage Lanes		1	1	0		0	1		0	0	0
Taper Length (ft)		25		25			70			25	
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
Frt			0.850		0.969						
Flt Protected	0.950						0.950				
Satd. Flow (prot)	1687	0	1615	0	1805	0	1752	1845	0	0	0
Flt Permitted	0.950						0.950				
Satd. Flow (perm)	1687	0	1615	0	1805	0	1752	1845	0	0	0
Link Speed (mph)		25			45			45		25	
Link Distance (ft)		894			1167			685		897	
Travel Time (s)		24.4			17.7			10.4		24.5	
Peak Hour Factor	0.93	0.93	0.93	0.91	0.91	0.91	0.95	0.95	0.95	0.92	0.92
Heavy Vehicles (%)	7%	0%	0%	2%	2%	2%	3%	3%	3%	2%	2%
Adj. Flow (vph)	59	0	120	0	297	87	85	405	0	0	0
Shared Lane Traffic (%)											
Lane Group Flow (vph)	59	0	120	0	384	0	85	405	0	0	0
Sign Control		Stop			Free			Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 33.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	WBL2	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NER
Lane Configurations											
Traffic Volume (vph)	93	0	84	61	264	0	0	373	50	0	0
Future Volume (vph)	93	0	84	61	264	0	0	373	50	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	185	165		0	0		0	0	0
Storage Lanes		1	1	1		0	0		0	0	0
Taper Length (ft)		25		110			25			25	
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
Frt			0.850					0.984			
Flt Protected	0.950			0.950							
Satd. Flow (prot)	1805	0	1455	1752	1845	0	0	1815	0	0	0
Flt Permitted	0.950			0.950							
Satd. Flow (perm)	1805	0	1455	1752	1845	0	0	1815	0	0	0
Link Speed (mph)		25			45			45		25	
Link Distance (ft)		613			685			608		913	
Travel Time (s)		16.7			10.4			9.2		24.9	
Peak Hour Factor	0.81	0.81	0.81	0.87	0.87	0.87	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	11%	3%	3%	3%	3%	3%	3%	2%	2%
Adj. Flow (vph)	115	0	104	70	303	0	0	405	54	0	0
Shared Lane Traffic (%)											
Lane Group Flow (vph)	115	0	104	70	303	0	0	459	0	0	0
Sign Control		Stop			Free			Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 33.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	184	140	0	396	272	0
Future Volume (vph)	184	140	0	396	272	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.850				
Flt Protected	0.950					
Satd. Flow (prot)	1543	1553	0	3505	3374	0
Flt Permitted	0.950					
Satd. Flow (perm)	1543	1553	0	3505	3374	0
Link Speed (mph)	25			55	55	
Link Distance (ft)	119			105	620	
Travel Time (s)	3.2			1.3	7.7	
Peak Hour Factor	0.93	0.93	0.82	0.82	0.92	0.92
Heavy Vehicles (%)	17%	4%	0%	3%	7%	0%
Adj. Flow (vph)	198	151	0	483	296	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	198	151	0	483	296	0
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 27.8%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	396	61	35	377
Future Volume (vph)	0	0	396	61	35	377
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		340	0	
Storage Lanes	0	0		1	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	1.00	0.95	0.95
Frt				0.850		
Flt Protected						0.996
Satd. Flow (prot)	0	0	3505	1568	0	3383
Flt Permitted						0.996
Satd. Flow (perm)	0	0	3505	1568	0	3383
Link Speed (mph)	25		55			55
Link Distance (ft)	664		1109			105
Travel Time (s)	18.1		13.7			1.3
Peak Hour Factor	0.92	0.92	0.82	0.82	0.92	0.92
Heavy Vehicles (%)	2%	2%	3%	3%	20%	5%
Adj. Flow (vph)	0	0	483	74	38	410
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	483	74	0	448
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 29.1%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	WBL2	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NER
Lane Configurations											
Traffic Volume (vph)	52	0	60	0	352	0	0	220	86	0	0
Future Volume (vph)	52	0	60	0	352	0	0	220	86	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	205	0		0	0		135	0	0
Storage Lanes		1	1	0		0	0		1	0	0
Taper Length (ft)		25		25			25			25	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00
Frt			0.850						0.850		
Flt Protected	0.950										
Satd. Flow (prot)	1736	0	1380	0	3438	0	0	3343	1272	0	0
Flt Permitted	0.950										
Satd. Flow (perm)	1736	0	1380	0	3438	0	0	3343	1272	0	0
Link Speed (mph)		25			55			55		25	
Link Distance (ft)		296			230			1367		908	
Travel Time (s)		8.1			2.9			16.9		24.8	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.95	0.95	0.95	0.92	0.92
Heavy Vehicles (%)	4%	0%	17%	0%	5%	0%	0%	8%	27%	2%	2%
Adj. Flow (vph)	59	0	68	0	400	0	0	232	91	0	0
Shared Lane Traffic (%)											
Lane Group Flow (vph)	59	0	68	0	400	0	0	232	91	0	0
Sign Control		Stop			Free			Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 20.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	33	80	0	270	154	0
Future Volume (vph)	33	80	0	270	154	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				
Flt Protected	0.950					
Satd. Flow (prot)	1752	1077	0	1624	1696	0
Flt Permitted	0.950					
Satd. Flow (perm)	1752	1077	0	1624	1696	0
Link Speed (mph)	25			45	45	
Link Distance (ft)	189			1063	114	
Travel Time (s)	5.2			16.1	1.7	
Peak Hour Factor	0.74	0.74	0.93	0.93	0.89	0.89
Heavy Vehicles (%)	3%	50%	17%	17%	12%	12%
Adj. Flow (vph)	45	108	0	290	173	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	45	108	0	290	173	0
Sign Control	Stop			Free	Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 24.2% ICU Level of Service A

Analysis Period (min) 15

Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	0	0	182	121	3	154
Future Volume (vph)	0	0	182	121	3	154
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.850		
Flt Protected						0.999
Satd. Flow (prot)	0	0	1624	1380	0	1689
Flt Permitted						0.999
Satd. Flow (perm)	0	0	1624	1380	0	1689
Link Speed (mph)	25		45			45
Link Distance (ft)	105		114			727
Travel Time (s)	2.9		1.7			11.0
Peak Hour Factor	0.92	0.92	0.93	0.93	0.89	0.89
Heavy Vehicles (%)	2%	2%	17%	17%	33%	12%
Adj. Flow (vph)	0	0	196	130	3	173
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	196	130	0	176
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 22.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBR	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	6	97	58	124	60	11
Future Volume (vph)	6	97	58	124	60	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	195	0	0			90
Storage Lanes	1	1	0			1
Taper Length (ft)	135		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				0.850
Flt Protected	0.950			0.984		
Satd. Flow (prot)	1570	1404	0	1615	1776	1509
Flt Permitted	0.950			0.984		
Satd. Flow (perm)	1570	1404	0	1615	1776	1509
Link Speed (mph)	25			45	45	
Link Distance (ft)	597			727	1165	
Travel Time (s)	16.3			11.0	17.7	
Peak Hour Factor	0.83	0.83	0.91	0.91	0.78	0.78
Heavy Vehicles (%)	15%	15%	43%	3%	7%	7%
Adj. Flow (vph)	7	117	64	136	77	14
Shared Lane Traffic (%)						
Lane Group Flow (vph)	7	117	0	200	77	14
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 26.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	18	649	18	0
Future Volume (vph)	0	0	18	649	18	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.91	0.91	1.00	1.00
Frt						
Flt Protected				0.999	0.950	
Satd. Flow (prot)	0	0	0	5080	1770	0
Flt Permitted				0.999	0.950	
Satd. Flow (perm)	0	0	0	5080	1770	0
Link Speed (mph)	45			45	25	
Link Distance (ft)	382			217	236	
Travel Time (s)	5.8			3.3	6.4	
Peak Hour Factor	0.90	0.90	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	20	705	20	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	725	20	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 22.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1153	0	0	0	0	30
Future Volume (vph)	1153	0	0	0	0	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	1.00	1.00	1.00	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	3539	0	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	3539	0	0	0	0	1611
Link Speed (mph)	45			45	25	
Link Distance (ft)	168			432	770	
Travel Time (s)	2.5			6.5	21.0	
Peak Hour Factor	0.87	0.87	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1325	0	0	0	0	33
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1325	0	0	0	0	33
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 49.6%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations			↑↑↑			↱
Traffic Volume (vph)	0	0	881	0	0	32
Future Volume (vph)	0	0	881	0	0	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.91	1.00	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	0	0	5036	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	0	5036	0	0	1611
Link Speed (mph)		45	45		25	
Link Distance (ft)		494	134		230	
Travel Time (s)		7.5	2.0		6.3	
Peak Hour Factor	0.92	0.92	0.89	0.89	0.92	0.92
Heavy Vehicles (%)	2%	2%	3%	3%	2%	2%
Adj. Flow (vph)	0	0	990	0	0	35
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	990	0	0	35
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 36.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	733	50	0	0
Future Volume (vph)	0	0	733	50	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.990			
Flt Protected						
Satd. Flow (prot)	0	0	3504	0	0	0
Flt Permitted						
Satd. Flow (perm)	0	0	3504	0	0	0
Link Speed (mph)		30	45		25	
Link Distance (ft)		176	114		201	
Travel Time (s)		4.0	1.7		5.5	
Peak Hour Factor	0.92	0.92	0.88	0.88	0.92	0.92
Adj. Flow (vph)	0	0	833	57	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	890	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 30.3%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	NBT	NBR	SBL	SBT	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	352	228	0	272	0	0
Future Volume (vph)	352	228	0	272	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	1.00	0.95	1.00	1.00
Frt	0.941					
Flt Protected						
Satd. Flow (prot)	3164	0	0	3343	0	0
Flt Permitted						
Satd. Flow (perm)	3164	0	0	3343	0	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	620			230	1088	
Travel Time (s)	7.7			2.9	29.7	
Peak Hour Factor	0.88	0.88	0.95	0.95	0.92	0.92
Heavy Vehicles (%)	5%	11%	8%	8%	2%	2%
Adj. Flow (vph)	400	259	0	286	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	659	0	0	286	0	0
Sign Control	Free			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 20.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	32	701	0	0	0	0	0	48	29
Future Volume (vph)	0	0	0	32	701	0	0	0	0	0	48	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	165		0	0		0	0		0
Storage Lanes	0		0	1		0	0		0	0		0
Taper Length (ft)	25			85			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt											0.949	
Flt Protected				0.950								
Satd. Flow (prot)	0	0	0	1770	3539	0	0	0	0	0	1785	0
Flt Permitted				0.950								
Satd. Flow (perm)	0	0	0	1770	3539	0	0	0	0	0	1785	0
Link Speed (mph)		30			45			30			30	
Link Distance (ft)		212			176			102			496	
Travel Time (s)		4.8			2.7			2.3			11.3	
Peak Hour Factor	0.92	0.92	0.92	0.86	0.86	0.86	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	1%	1%	1%
Adj. Flow (vph)	0	0	0	37	815	0	0	0	0	0	52	32
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	37	815	0	0	0	0	0	84	0
Sign Control		Free			Free			Yield			Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 30.3%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	490	0	0	0	1697
Future Volume (vph)	0	490	0	0	0	1697
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	0.88
Frt						0.850
Flt Protected						
Satd. Flow (prot)	0	3539	0	0	0	2787
Flt Permitted						
Satd. Flow (perm)	0	3539	0	0	0	2787
Link Speed (mph)		55	55		55	
Link Distance (ft)		434	1242		1194	
Travel Time (s)		5.4	15.4		14.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	533	0	0	0	1845
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	533	0	0	0	1845
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 62.7%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	0	119	0	0	663
Future Volume (vph)	0	0	119	0	0	663
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	0	0	1863	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	0	1863	0	0	1611
Link Speed (mph)		25	25		30	
Link Distance (ft)		1199	263		174	
Travel Time (s)		32.7	7.2		4.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.90	0.90
Adj. Flow (vph)	0	0	129	0	0	737
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	129	0	0	737
Sign Control		Free	Yield		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 54.0%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	WBL	WBR	NBL	NBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	168	1566	0	0	0
Future Volume (vph)	0	168	1566	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.97	1.00	1.00	1.00
Frt		0.865				
Flt Protected			0.950			
Satd. Flow (prot)	0	1627	3303	0	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	1627	3303	0	0	0
Link Speed (mph)	45		45		45	
Link Distance (ft)	255		329		551	
Travel Time (s)	3.9		5.0		8.3	
Peak Hour Factor	0.91	0.91	0.93	0.93	0.92	0.92
Heavy Vehicles (%)	1%	1%	6%	6%	2%	2%
Adj. Flow (vph)	0	185	1684	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	185	1684	0	0	0
Sign Control	Yield		Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 63.5%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	159	754	0	0
Future Volume (vph)	0	0	159	754	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	450		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			85		25	
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	5085	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	5085	0	0
Link Speed (mph)	45			45	30	
Link Distance (ft)	315			494	108	
Travel Time (s)	4.8			7.5	2.5	
Peak Hour Factor	0.92	0.92	0.87	0.87	0.92	0.92
Adj. Flow (vph)	0	0	183	867	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	183	867	0	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 43.3%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	182	1001	0	0	0	0
Future Volume (vph)	182	1001	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	275			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	110				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		45	45		30	
Link Distance (ft)		432	161		111	
Travel Time (s)		6.5	2.4		2.5	
Peak Hour Factor	0.94	0.94	0.92	0.92	0.92	0.92
Adj. Flow (vph)	194	1065	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	194	1065	0	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 47.8%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	3011	0	0	0	129
Future Volume (vph)	0	3011	0	0	0	129
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	0.76
Frt						0.850
Flt Protected						
Satd. Flow (prot)	0	3539	0	0	0	3610
Flt Permitted						
Satd. Flow (perm)	0	3539	0	0	0	3610
Link Speed (mph)		55	55		45	
Link Distance (ft)		1093	655		773	
Travel Time (s)		13.5	8.1		11.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	3273	0	0	0	140
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	3273	0	0	0	140
Sign Control		Free	Free		Free	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 86.6% ICU Level of Service E
Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	65	987	0	0	0	0
Future Volume (vph)	65	987	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	180			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	75				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		45	45		30	
Link Distance (ft)		290	1089		101	
Travel Time (s)		4.4	16.5		2.3	
Peak Hour Factor	0.94	0.94	0.92	0.92	0.92	0.92
Adj. Flow (vph)	69	1050	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	69	1050	0	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 53.8%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NWL	NWR
Lane Configurations	↑↑↑					
Traffic Volume (vph)	2326	663	0	0	0	0
Future Volume (vph)	2326	663	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	1.00	1.00	1.00	1.00
Frt	0.967					
Flt Protected						
Satd. Flow (prot)	4917	0	0	0	0	0
Flt Permitted						
Satd. Flow (perm)	4917	0	0	0	0	0
Link Speed (mph)	45			45	30	
Link Distance (ft)	311			156	174	
Travel Time (s)	4.7			2.4	4.0	
Peak Hour Factor	0.90	0.90	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2584	737	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	3321	0	0	0	0	0
Sign Control	Free			Stop	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 65.5%	ICU Level of Service C
Analysis Period (min) 15	

Lane Group	NBT	NBR	SBL	SBT	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	0	0	112	36	0	0
Future Volume (vph)	0	0	112	36	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	500		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			100		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	3539	0	0
Link Speed (mph)	30			25	25	
Link Distance (ft)	266			1471	301	
Travel Time (s)	6.0			40.1	8.2	
Peak Hour Factor	0.92	0.92	0.75	0.75	0.92	0.92
Adj. Flow (vph)	0	0	149	48	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	149	48	0	0
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 13.3%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	81	122	0	0	0	0
Future Volume (vph)	81	122	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected		0.980				
Satd. Flow (prot)	0	1825	0	0	0	0
Flt Permitted		0.980				
Satd. Flow (perm)	0	1825	0	0	0	0
Link Speed (mph)		25	30		25	
Link Distance (ft)		1207	315		252	
Travel Time (s)		32.9	7.2		6.9	
Peak Hour Factor	0.75	0.75	0.92	0.92	0.92	0.92
Adj. Flow (vph)	108	163	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	271	0	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 14.2%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	103	0	69	0	0
Future Volume (vph)	0	103	0	69	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.865		
Flt Protected						
Satd. Flow (prot)	0	1652	0	1191	0	0
Flt Permitted						
Satd. Flow (perm)	0	1652	0	1191	0	0
Link Speed (mph)		25	25		25	
Link Distance (ft)		995	597		1154	
Travel Time (s)		27.1	16.3		31.5	
Peak Hour Factor	0.83	0.83	0.89	0.89	0.92	0.92
Heavy Vehicles (%)	15%	15%	38%	38%	2%	2%
Adj. Flow (vph)	0	124	0	78	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	124	0	78	0	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 8.8%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	53	538	0	0
Future Volume (vph)	0	0	53	538	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	250		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	5085	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	5085	0	0
Link Speed (mph)	45			45	25	
Link Distance (ft)	894			534	137	
Travel Time (s)	13.5			8.1	3.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	58	585	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	58	585	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 60.5%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	3486	0	0	53	0
Future Volume (vph)	0	3486	0	0	53	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.86	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	6408	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	6408	0	0	1770	0
Link Speed (mph)		45	45		25	
Link Distance (ft)		744	1191		137	
Travel Time (s)		11.3	18.0		3.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	3789	0	0	58	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	3789	0	0	58	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 67.6%	ICU Level of Service C
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	519	3020	0	0	0	0
Future Volume (vph)	519	3020	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	400			0	0	0
Storage Lanes	2			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	0.97	0.86	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	3433	6408	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	3433	6408	0	0	0	0
Link Speed (mph)		45	45		25	
Link Distance (ft)		1191	262		113	
Travel Time (s)		18.0	4.0		3.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	564	3283	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	564	3283	0	0	0	0
Sign Control		Free	Stop		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 61.9%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	119	509	0	0
Future Volume (vph)	0	0	119	509	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	250		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	5085	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	5085	0	0
Link Speed (mph)	45			45	25	
Link Distance (ft)	254			1016	123	
Travel Time (s)	3.8			15.4	3.4	
Peak Hour Factor	0.92	0.92	0.90	0.87	0.92	0.92
Adj. Flow (vph)	0	0	132	585	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	132	585	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 102.3%	ICU Level of Service G
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	44	2989	0	0	0	0
Future Volume (vph)	44	2989	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.91	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	5085	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	5085	0	0	0	0
Link Speed (mph)		45	45		30	
Link Distance (ft)		704	311		111	
Travel Time (s)		10.7	4.7		2.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	48	3249	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	48	3249	0	0	0	0
Sign Control		Free	Stop		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 77.4%	ICU Level of Service D
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑	↰	
Traffic Volume (vph)	0	0	0	1012	27	0
Future Volume (vph)	0	0	0	1012	27	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	30	
Link Distance (ft)	583			574	107	
Travel Time (s)	7.2			7.1	2.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	1100	29	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1100	29	0
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 65.7% ICU Level of Service C

Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	27	1123	0	0	0	0
Future Volume (vph)	27	1123	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		30	
Link Distance (ft)		1122	576		107	
Travel Time (s)		13.9	7.1		2.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	29	1221	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	29	1221	0	0	0	0
Sign Control		Free	Stop		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 65.7%	ICU Level of Service C
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	1003	36	0	54
Future Volume (vph)	0	0	1003	36	0	54
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt			0.995			0.865
Flt Protected						
Satd. Flow (prot)	0	0	3522	0	0	1611
Flt Permitted						
Satd. Flow (perm)	0	0	3522	0	0	1611
Link Speed (mph)		55	55		30	
Link Distance (ft)		590	583		121	
Travel Time (s)		7.3	7.2		2.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	1090	39	0	59
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1129	0	0	59
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 38.9%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	168	889	0	0
Future Volume (vph)	0	0	168	889	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	250		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	3539	0	0
Link Speed (mph)	55			55	30	
Link Distance (ft)	405			590	104	
Travel Time (s)	5.0			7.3	2.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	183	966	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	183	966	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 42.6%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	982	0	0	168	0
Future Volume (vph)	0	982	0	0	168	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	1770	0
Link Speed (mph)		55	55		30	
Link Distance (ft)		316	1122		104	
Travel Time (s)		3.9	13.9		2.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1067	0	0	183	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1067	0	0	183	0
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 58.4% ICU Level of Service B

Analysis Period (min) 15

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	67	3371	0	0
Future Volume (vph)	0	0	67	3371	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	250			0
Storage Lanes	0	0	2			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	0.97	0.91	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	3433	5085	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	3433	5085	0	0
Link Speed (mph)	45			55	30	
Link Distance (ft)	105			493	555	
Travel Time (s)	1.6			6.1	12.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	73	3664	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	73	3664	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 84.7% ICU Level of Service E

Analysis Period (min) 15

Lane Group	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	2272	1099	0	0	0	0
Future Volume (vph)	2272	1099	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.94	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	4990	1863	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	4990	1863	0	0	0	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		555	271		108	
Travel Time (s)		12.6	6.2		2.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2470	1195	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	2470	1195	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 75.3%	ICU Level of Service D
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NEL	NER
Lane Configurations	↑					↱
Traffic Volume (vph)	73	0	0	0	0	1099
Future Volume (vph)	73	0	0	0	0	1099
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	1863	0	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	1863	0	0	0	0	1611
Link Speed (mph)	25			30	25	
Link Distance (ft)	287			1072	271	
Travel Time (s)	7.8			24.4	7.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	79	0	0	0	0	1195
Shared Lane Traffic (%)						
Lane Group Flow (vph)	79	0	0	0	0	1195
Sign Control	Yield			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 78.6%	ICU Level of Service D
Analysis Period (min) 15	

Lane Group	NBT	NBR	SBL	SBT	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	0	0	73	472	0	0
Future Volume (vph)	0	0	73	472	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.91	0.91	1.00	1.00
Frt						
Flt Protected				0.993		
Satd. Flow (prot)	0	0	0	5030	0	0
Flt Permitted				0.993		
Satd. Flow (perm)	0	0	0	5030	0	0
Link Speed (mph)	45			45	45	
Link Distance (ft)	194			406	287	
Travel Time (s)	2.9			6.2	4.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	5%	2%	2%	2%
Adj. Flow (vph)	0	0	79	513	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	592	0	0
Sign Control	Free			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 78.6%	ICU Level of Service D
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	104	110	0	0	0	0
Future Volume (vph)	104	110	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1719	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1719	3539	0	0	0	0
Link Speed (mph)		25	25		25	
Link Distance (ft)		879	346		271	
Travel Time (s)		24.0	9.4		7.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	2%	2%	2%	2%	2%
Adj. Flow (vph)	113	120	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	113	120	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 59.6% ICU Level of Service B

Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	957	0	0	81
Future Volume (vph)	0	0	957	0	0	81
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.865
Flt Protected						
Satd. Flow (prot)	0	0	1863	0	0	1565
Flt Permitted						
Satd. Flow (perm)	0	0	1863	0	0	1565
Link Speed (mph)		30	45		45	
Link Distance (ft)		874	182		254	
Travel Time (s)		19.9	2.8		3.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	5%
Adj. Flow (vph)	0	0	1040	0	0	88
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1040	0	0	88
Sign Control		Free	Free		Yield	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 82.0%	ICU Level of Service E
Analysis Period (min) 15	

Lane Group	EBL	EBR	SBL	SBR	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	0	0	0	0	957	1419
Future Volume (vph)	0	0	0	0	957	1419
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.91
Frt					0.981	0.850
Flt Protected					0.958	
Satd. Flow (prot)	0	0	0	0	1744	2799
Flt Permitted					0.958	
Satd. Flow (perm)	0	0	0	0	1744	2799
Link Speed (mph)	30		30		30	
Link Distance (ft)	182		207		337	
Travel Time (s)	4.1		4.7		7.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	2%	2%	5%
Adj. Flow (vph)	0	0	0	0	1040	1542
Shared Lane Traffic (%)						10%
Lane Group Flow (vph)	0	0	0	0	1194	1388
Sign Control	Stop		Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 82.0%	ICU Level of Service E
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	446	81	0	0	0	0
Future Volume (vph)	446	81	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00
Frt	0.977					
Flt Protected						
Satd. Flow (prot)	3359	0	0	0	0	0
Flt Permitted						
Satd. Flow (perm)	3359	0	0	0	0	0
Link Speed (mph)	30			45	25	
Link Distance (ft)	306			190	254	
Travel Time (s)	7.0			2.9	6.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	5%	5%	2%	2%	2%	2%
Adj. Flow (vph)	485	88	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	573	0	0	0	0	0
Sign Control	Free			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 49.7%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	0	99	151	0	0
Future Volume (vph)	0	0	99	151	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			250	0	0
Storage Lanes	0			1	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	1.00
Frt				0.850		
Flt Protected						
Satd. Flow (prot)	0	0	3539	1538	0	0
Flt Permitted						
Satd. Flow (perm)	0	0	3539	1538	0	0
Link Speed (mph)		25	25		25	
Link Distance (ft)		241	1465		317	
Travel Time (s)		6.6	40.0		8.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	5%	2%	2%
Adj. Flow (vph)	0	0	108	164	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	108	164	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 13.3%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	1570	64	0
Future Volume (vph)	0	0	0	1570	64	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	4940	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	4940	1770	0
Link Speed (mph)	55			30	25	
Link Distance (ft)	598			415	105	
Travel Time (s)	7.4			9.4	2.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	5%	2%	2%
Adj. Flow (vph)	0	0	0	1707	70	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1707	70	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 51.6%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	64	527	0	0	0	0
Future Volume (vph)	64	527	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3438	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3438	0	0	0	0
Link Speed (mph)		55	30		25	
Link Distance (ft)		597	306		105	
Travel Time (s)		7.4	7.0		2.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	5%	2%	2%	2%	2%
Adj. Flow (vph)	70	573	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	70	573	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 51.6% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑	↰	
Traffic Volume (vph)	0	0	0	892	0	0
Future Volume (vph)	0	0	0	892	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	0	0	0	3539	1863	0
Flt Permitted						
Satd. Flow (perm)	0	0	0	3539	1863	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	586			210	99	
Travel Time (s)	7.3			2.6	2.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	970	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	970	0	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 34.7%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	384	0	0	0	0
Future Volume (vph)	0	384	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	1863	3539	0	0	0	0
Flt Permitted						
Satd. Flow (perm)	1863	3539	0	0	0	0
Link Speed (mph)		55	55		25	
Link Distance (ft)		589	212		99	
Travel Time (s)		7.3	2.6		2.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	417	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	417	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 34.7%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	892	0	0
Future Volume (vph)	0	0	0	892	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	0	0	0	3539	0	0
Flt Permitted						
Satd. Flow (perm)	0	0	0	3539	0	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	723			586	81	
Travel Time (s)	9.0			7.3	2.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	970	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	970	0	0
Sign Control	Free			Free	Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 34.7%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	384	0	0	0	0	0	0	0	0	0	0
Future Volume (vph)	0	384	0	0	0	0	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	3539	0	0	0	0	0	0	1863	0	1863	0
Flt Permitted												
Satd. Flow (perm)	0	3539	0	0	0	0	0	0	1863	0	1863	0
Link Speed (mph)		55			55			25			25	
Link Distance (ft)		719			589			84			81	
Travel Time (s)		8.9			7.3			2.3			2.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	417	0	0	0	0	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	417	0	0	0	0	0	0	0	0	0	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 28.0%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	0	384	0	892	0	0
Future Volume (vph)	0	384	0	892	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.88	1.00	0.95	1.00	1.00
Frt		0.850				
Flt Protected						
Satd. Flow (prot)	0	2787	0	3539	0	0
Flt Permitted						
Satd. Flow (perm)	0	2787	0	3539	0	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	997			723	719	
Travel Time (s)	12.4			9.0	19.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	417	0	970	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	417	0	970	0	0
Sign Control	Free			Free	Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 28.0% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	286	837	0	0	0	0
Future Volume (vph)	286	837	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		55	
Link Distance (ft)		2077	2379		116	
Travel Time (s)		25.7	29.5		1.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	311	910	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	311	910	0	0	0	0
Sign Control		Free	Stop		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 45.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NEL	NER
Lane Configurations				↑↑	↰	
Traffic Volume (vph)	0	0	0	563	286	0
Future Volume (vph)	0	0	0	563	286	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	607			2382	116	
Travel Time (s)	7.5			29.5	3.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	612	311	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	612	311	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 52.0%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	0	0	14	563	0	0
Future Volume (vph)	0	0	14	563	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	250		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	3539	0	0
Link Speed (mph)	55			55	55	
Link Distance (ft)	2382			560	108	
Travel Time (s)	29.5			6.9	1.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	15	612	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	15	612	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 25.7%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	0	837	0	0	14	0
Future Volume (vph)	0	837	0	0	14	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	1770	0
Link Speed (mph)		55	55		25	
Link Distance (ft)		2379	608		108	
Travel Time (s)		29.5	7.5		2.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	910	0	0	15	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	910	0	0	15	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 45.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	812	39	0	0	0	32
Future Volume (vph)	812	39	0	0	0	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		600	600		0	0
Storage Lanes		0	0		0	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00
Frt	0.993					0.865
Flt Protected						
Satd. Flow (prot)	3514	0	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	3514	0	0	0	0	1611
Link Speed (mph)	55			55	45	
Link Distance (ft)	608			628	1089	
Travel Time (s)	7.5			7.8	16.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	883	42	0	0	0	35
Shared Lane Traffic (%)						
Lane Group Flow (vph)	925	0	0	0	0	35
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 33.7%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	568	9	0
Future Volume (vph)	0	0	0	568	9	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	645			3831	112	
Travel Time (s)	8.0			47.5	3.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	617	10	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	617	10	0
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 43.9% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	9	835	0	0	0	0
Future Volume (vph)	9	835	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		55	
Link Distance (ft)		628	3825		112	
Travel Time (s)		7.8	47.4		1.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	10	908	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	10	908	0	0	0	0
Sign Control		Free	Stop		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 45.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	10	568	0	0
Future Volume (vph)	0	0	10	568	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	250		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected			0.950			
Satd. Flow (prot)	0	0	1770	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	0	0	1770	3539	0	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	3831			538	97	
Travel Time (s)	47.5			6.7	2.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	11	617	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	11	617	0	0
Sign Control	Stop			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 33.1%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑			↰	
Traffic Volume (vph)	0	835	0	0	10	0
Future Volume (vph)	0	835	0	0	10	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	1770	0
Link Speed (mph)		55	55		25	
Link Distance (ft)		3825	591		97	
Travel Time (s)		47.4	7.3		2.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	908	0	0	11	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	908	0	0	11	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 45.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	833	12	0	0	0	16
Future Volume (vph)	833	12	0	0	0	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00
Frt	0.998					0.865
Flt Protected						
Satd. Flow (prot)	3532	0	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	3532	0	0	0	0	1611
Link Speed (mph)	55			55	45	
Link Distance (ft)	591			1206	1073	
Travel Time (s)	7.3			15.0	16.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	905	13	0	0	0	17
Shared Lane Traffic (%)						
Lane Group Flow (vph)	918	0	0	0	0	17
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 33.4%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑	↰	
Traffic Volume (vph)	0	0	0	570	9	0
Future Volume (vph)	0	0	0	570	9	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	1254			1793	105	
Travel Time (s)	15.5			22.2	2.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	620	10	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	620	10	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 45.6%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	9	840	0	0	0	0
Future Volume (vph)	9	840	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		55	
Link Distance (ft)		1206	1786		105	
Travel Time (s)		15.0	22.1		1.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	10	913	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	10	913	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 45.6%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	570	0	0
Future Volume (vph)	0	0	0	570	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	500		0	0
Storage Lanes		0	2		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	0.97	0.95	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	0	0	3614	3539	0	0
Flt Permitted						
Satd. Flow (perm)	0	0	3614	3539	0	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	1793			596	109	
Travel Time (s)	22.2			7.4	3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	620	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	620	0	0
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 24.3% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑↑	↰	
Traffic Volume (vph)	0	0	0	517	53	0
Future Volume (vph)	0	0	0	517	53	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	631			2681	109	
Travel Time (s)	7.8			33.2	3.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	562	58	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	562	58	0
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 24.3% ICU Level of Service A

Analysis Period (min) 15

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	53	1389	0	0	0	0
Future Volume (vph)	53	1389	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		55	
Link Distance (ft)		627	2678		109	
Travel Time (s)		7.8	33.2		1.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	58	1510	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	58	1510	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 59.4%	ICU Level of Service B
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	517	0	0
Future Volume (vph)	0	0	0	517	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	500		0	0
Storage Lanes		0	2		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	0.97	0.95	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	0	0	3614	3539	0	0
Flt Permitted						
Satd. Flow (perm)	0	0	3614	3539	0	0
Link Speed (mph)	55			55	55	
Link Distance (ft)	2681			671	109	
Travel Time (s)	33.2			8.3	1.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	562	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	562	0	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 23.5%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	490	27	0
Future Volume (vph)	0	0	0	490	27	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3539	1770	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3539	1770	0
Link Speed (mph)	55			55	25	
Link Distance (ft)	654			797	95	
Travel Time (s)	8.1			9.9	2.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	533	29	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	533	29	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 23.5%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	27	1697	0	0	0	0
Future Volume (vph)	27	1697	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250			0	0	0
Storage Lanes	1			0	0	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	1.00
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	3539	0	0	0	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	3539	0	0	0	0
Link Speed (mph)		55	55		55	
Link Distance (ft)		659	784		95	
Travel Time (s)		8.2	9.7		1.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	29	1845	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	29	1845	0	0	0	0
Sign Control		Free	Free		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 67.1%	ICU Level of Service C
Analysis Period (min) 15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1105	18	0	0	0	18
Future Volume (vph)	1105	18	0	0	0	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00
Frt	0.998					0.865
Flt Protected						
Satd. Flow (prot)	3532	0	0	0	0	1611
Flt Permitted						
Satd. Flow (perm)	3532	0	0	0	0	1611
Link Speed (mph)	55			55	25	
Link Distance (ft)	576			2077	205	
Travel Time (s)	7.1			25.7	5.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1201	20	0	0	0	20
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1221	0	0	0	0	20
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 41.1%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	0	1798	0	0	1688	0
Future Volume (vph)	0	1798	0	0	1688	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	1.00	1.00	0.97	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	3539	0	0	3433	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	0	0	3433	0
Link Speed (mph)		45	45		45	
Link Distance (ft)		1021	744		215	
Travel Time (s)		15.5	11.3		3.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1954	0	0	1835	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1954	0	0	1835	0
Sign Control		Free	Stop		Free	

Intersection Summary	
Area Type: Other	
Control Type: Unsignalized	
Intersection Capacity Utilization 104.5%	ICU Level of Service G
Analysis Period (min) 15	

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	0	0	520	129
Future Volume (vph)	0	0	0	0	520	129
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		0	250	
Storage Lanes	0	0		0	2	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	0.97	0.91
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	0	3433	5085
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	0	3433	5085
Link Speed (mph)	55		45			30
Link Distance (ft)	167		773			587
Travel Time (s)	2.1		11.7			13.3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	565	140
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	0	565	140
Sign Control	Stop		Stop			Free

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 27.1% ICU Level of Service A

Analysis Period (min) 15

1005: WB M-96 (Michigan Avenue) & SB I-69 Off-Ramp (Push Button) Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	4.1	9.0	4.4

1007: EB M-96 (Michigan Avenue) (Push Button) & SB I-69 Off-Ramp/EB M-96 (Michigan Avenue) Perfor

Approach	EB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	30.0	2.9	4.1

1008: WB M-96 (Michigan Avenue)/NB I-69 Off-Ramp & WB M-96 (Michigan Avenue) (Push Button) Perf

Approach	WB	SW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	17.7	2.0	4.1

1009: WB M-96 (Michigan Avenue) (Push Button)/WB M-96 (Michigan Avenue) & EB M-96 (Michigan Ave

Approach	EB	SW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	16.0	13.5	15.0

1010: NB I-69 Off-Ramp (Push Button) & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	3.7	20.4	5.9

3003: M-227/West Drive & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.1	0.0
Total Del/Veh (s)	8.0	5.2	17.9	9.2

3093: M-227/West Drive & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	0.0	1.9	0.1	0.3
Total Del/Veh (s)	3.4	30.1	2.7	6.8

4001: M-96 (Michigan Avenue) & WB Main Entrance/WB M-96 (Michigan Avenue) Performance by appro

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	7.2	4.6	5.2

4003: EB to WB Xover E of 15 Mile Rd (North) & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	125.8	64.5
Total Del/Veh (s)	0.8	38.3	19.8

4004: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	3.6	3.6

4005: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	10.3	10.3

4006: M-311 (11 Mile Rd) & Site Driveway West Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	0.4	0.2	0.0	0.3
Total Del/Veh (s)	34.4	18.5	36.5	33.6

4007: M-311 (11 Mile Rd) & F Drive N Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	0.3	0.0	0.0	0.1
Total Del/Veh (s)	106.9	63.1	4.1	75.5

4010: EB M-96 (Michigan Avenue)/EB M-96 (Michigan Avenue) (Push Button) & WB M-96 (Michigan Ave

Approach	WB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	27.2	14.9	17.3

4030: NB M-311 (11 Mile Rd)/WB M-96 (Michigan Avenue)/11 Mile Rd (North) & EB M-96 (Michigan Ave

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	17.1	26.4	25.1

4031: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & WB M-96 (Michigan Avenue) Performance by a

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	36.9	7.3	15.2

4033: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & NB to SB Xover N of M-96 (Michigan Avenue) P

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	45.6	2.7	7.1

4034: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & EB I-94 Off-ramp Performance by approach

Approach	SB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.3	5.1	2.8

4035: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & WB M-96 (Michigan Avenue)/11 Mile Rd (North)

Approach	SB	NW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	49.4	5.4	12.9

4036: EB I-94 Off-ramp & WB M-96 (Michigan Avenue)/11 Mile Rd (North) Performance by approach

Approach	NB	NW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	44.4	2.0	3.8

4037: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & WB I-94 Off-ramp Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	7.7	25.5	10.8

4038: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & EB M-96 (Michigan Avenue)/11 Mile Rd (South)

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	37.4	19.3	23.8

4039: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & WB I-94 Off-ramp Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	32.1	4.4	7.1

4040: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & 11 Mile Rd Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	19.3	2.9	13.7

4041: 11 Mile Rd & WB M-96 (Michigan Avenue)/11 Mile Rd (North) Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	13.7	24.5	15.2

4042: 11 Mile Rd & H Dr N Performance by approach

Approach	NE	SW	All
Denied Del/Veh (s)	0.0	0.2	0.1
Total Del/Veh (s)	7.1	3.7	6.3

4050: Prop Site Drive E & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	3.6	46.6	12.2

4051: Prop Site Drive W & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.1
Total Del/Veh (s)	9.9	38.3	22.3

4061: WB M-96 (Michigan Avenue) & Firekeepers Main Drive Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	3.9	47.9	8.8

4065: WB M-96 (Michigan Avenue) & 15 Mile Rd (North) Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	4.5	36.6	6.3

4066: EB M-96 (Michigan Avenue) & WB to EB Xover W of 15 Mile Rd (South) Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	10.0	57.9	11.8

4067: 15 Mile Rd (South) & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.6	0.0
Total Del/Veh (s)	20.9	44.9	22.1

4068: EB to WB Xover E of 15 Mile Rd (South) & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.1	34.7	4.3

4070: M-311 (11 Mile Rd) & Site Drive East Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	1.3	0.0	0.0	0.5
Total Del/Veh (s)	31.7	46.5	2.8	37.8

4071: 15 Mile Rd & Verona Rd Performance by approach

Approach	NB	SB	SE	NW	All
Denied Del/Veh (s)	0.4	0.1	1.3	0.2	0.5
Total Del/Veh (s)	16.7	9.7	20.6	26.9	19.1

4075: 11 Mile Road & Verona Road Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.6	451.4	0.5	184.5
Total Del/Veh (s)	13.6	36.0	242.2	41.5	104.8

9002: WB M-96 (Michigan Avenue) & Firekeepers Gas Station Driveway Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.3	0.1
Total Del/Veh (s)	2.0	9.3	3.5

9003: WB M-96 (Michigan Avenue) & Firekeepers E Drive Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.9	9.4	3.1

9004: WB M-96 (Michigan Avenue) & Ackerson Drive Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	1.3	5.1	1.3

9006: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	0.9	2.6	0.9

9008: 15 Mile Rd (North) & Old M-96 (Michigan Ave) Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.0	0.0	0.0
Total Del/Veh (s)	5.5	0.7	0.1	0.6

9013: SB I-69 On-Ramp & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	8.3	8.3

9016: EB M-96 (Michigan Avenue) & NB I-69 On-Ramp Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	16.7	16.7

9017: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	1.2	1.2

9018: EB M-96 (Michigan Avenue) & WB to EB Xover W of M-227/West Drive Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	1.2	10.5	2.5

9019: EB to WB Xover W of M-227/West Drive & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.4	8.5	2.9

9020: EB M-96 (Michigan Avenue) & WB to EB Xover E of M-227/West Drive Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.9	10.2	1.6

9021: EB to WB Xover E of M-227/West Drive & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.2	0.0	0.2
Total Del/Veh (s)	1.1	7.7	1.6

9023: M-311 (11 Mile Rd) & B Drive North Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.9	0.3	1.1	0.5	0.6
Total Del/Veh (s)	1.2	1.3	8.8	8.4	4.1

9025: M-294 (Beadle Lake Road) & EB I-94 Off-Ramp & EB I-94 On-Ramp Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	2.5	0.3	0.0	0.5
Total Del/Veh (s)	6.9	1.5	1.7	2.5

9026: WB I-94 On-Ramp & M-294 (Beadle Lake Road) & WB I-94 Off-Ramp Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	2.0	0.0	0.3	0.5
Total Del/Veh (s)	7.5	1.5	1.2	2.5

9027: Old US-27 & EB I-94 to Old US-27 Off Ramp Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0
Total Del/Veh (s)	7.7	0.2	1.1	2.9

9028: Old US-27 & NB Old US-27 to EB I-94 On Ramp Performance by approach

Approach	NB	SB	All
Denied Del/Veh (s)	0.6	0.0	0.3
Total Del/Veh (s)	0.8	0.4	0.7

9029: SB Old US-27 WB I-94 On Ramp & Old US-27 & WB I-94 to Old US-27 Off Ramp Performance by

Approach	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	1.1	0.4
Total Del/Veh (s)	5.1	0.2	0.8	1.1

9030: I-94BL/Partello Rd & EB I-94 to I-94BL/Partello Off Ramp Performance by approach

Approach	SE	NE	SW	All
Denied Del/Veh (s)	0.0	0.3	0.0	0.1
Total Del/Veh (s)	4.2	1.5	0.2	1.7

9031: I-94BL/Partello Rd & I-94/Partello Rd to EB I-94 On Ramp Performance by approach

Approach	NE	SW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.2	0.6	0.4

9032: I-94BL/Partello Rd & WB I-94 to I-94/Partello Rd Performance by approach

Approach	EB	NE	SW	All
Denied Del/Veh (s)	0.0	0.0	0.9	0.2
Total Del/Veh (s)	3.5	1.3	0.4	1.8

9034: Dummy Node & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	1.3	5.0	1.4

9035: Dummy Node & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	0.5	11.2	0.8

9036: WB M-96 (Michigan Avenue) & Dummy Node Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	0.6	4.1	0.7

9037: WB M-96 (Michigan Avenue) & Dummy Node Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.4	0.4

9040: Old US-27 & NB Old US-27 to WB I-94 On Ramp Performance by approach

Approach	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.0	0.3	0.8

9041: WB to EB Xover E of M-227/West Drive/McDonald's Dr & WB M-96 (Michigan Avenue) Performanc

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	1.1	10.2	1.9

9128: M-96 (Michigan Avenue)/WB M-96 (Michigan Avenue) & EB M-96 (Michigan Avenue) Performance

Approach	NB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.1	3.6	3.0

9137: SB I-69 On-Ramp Performance by approach

Approach	SB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	9.8	0.8	2.3

9143: NB I-69 On-Ramp Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	13.0	3.2	4.1

9146: WB to EB Xover W of M-227/West Drive & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.7	0.7

9147: EB M-96 (Michigan Avenue) & EB to WB Xover W of M-227/West Drive Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	1.7	1.7

9150: M-311 (11 Mile Rd) /NB M-311 (11 Mile Rd) & SB M-311 (11 Mile Rd) Performance by approach

Approach	NB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	19.7	0.3	18.8

9151: EB M-96 (Michigan Avenue) & EB to WB Xover E of M-227/West Drive Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.5	0.5

9157: SB I-69 On-Ramp & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	10.3	10.3

9158: SB I-69 Off-Ramp (Push Button) & SB I-69 Off-Ramp Performance by approach

Approach	SB	All
Denied Del/Veh (s)	1.2	1.2
Total Del/Veh (s)	0.4	0.4

9159: NB I-69 Off-Ramp & NB I-69 Off-Ramp (Push Button) Performance by approach

Approach	NB	All
Denied Del/Veh (s)	0.2	0.2
Total Del/Veh (s)	1.5	1.5

9178: WB I-94 to BL-94/Partello Rd Off Ramp/WB I-94 to I-94/Partello Rd & BL-94/Partello Rd to WB I-94

Approach	EB	WB	All
Denied Del/Veh (s)	0.2	0.0	0.1
Total Del/Veh (s)	0.2	0.3	0.3

9304: WB to EB Xover W of 15 Mile Rd (North) & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	1.6	1.6

9305: EB M-96 (Michigan Avenue) & WB to EB Xover W of 15 Mile Rd (North) Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.6	65.2	3.4

9307: EB M-96 (Michigan Avenue) & EB to WB Xover E of 15 Mile Rd (North) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	26.9	26.9

9310: WB to EB Xover W of 15 Mile Rd (South) & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	1.9	1.9

9311: EB M-96 (Michigan Avenue) & EB to WB Xover E of 15 Mile Rd (South) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	9.2	9.2

9330: EB to WB Xover E of Old M-311 (11 Mile Rd) & WB M-96 (Michigan Avenue) Performance by appr

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.8	6.6	2.0

9331: EB M-96 (Michigan Avenue) & EB to WB Xover E of Old M-311 (11 Mile Rd) Performance by appro

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	1.6	1.6

9332: WB M-96 (Michigan Avenue) & Old M-311 (11 Mile Rd) Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.1	5.5	1.3

9336: WB to EB Xover W of Old M-311 (11 Mile Rd) & WB M-96 (Michigan Avenue) Performance by app

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.8	2.8

9337: EB M-96 (Michigan Avenue) & WB to EB Xover W of Old M-311 (11 Mile Rd) Performance by appr

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.5	7.1	3.2

9338: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & NB to SB Xover N of M-96 (Michigan Avenue) F

Approach	NB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	8.2	8.2

9339: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & EB I-94 On Ramp Performance by approach

Approach	NB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	6.4	6.4

9340: EB I-94 On Ramp Performance by approach

Approach	EB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	30.0	0.4	2.2

9342: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & EB I-94 On Ramp Performance by approach

Approach	SB	All
Denied Del/Veh (s)	3.8	3.8
Total Del/Veh (s)	70.2	70.2

9343: EB I-94 Off-ramp Performance by approach

Approach	EB	All
Denied Del/Veh (s)	1.8	1.8
Total Del/Veh (s)	0.9	0.9

9346: WB I-94 On Ramp Performance by approach

Approach	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.8	24.8	3.6

9347: WB M-96 (Michigan Avenue)/11 Mile Rd (North) & WB I-94 On Ramp Performance by approach

Approach	NW	All
Denied Del/Veh (s)	0.1	0.1
Total Del/Veh (s)	9.2	9.2

9348: WB I-94 On Ramp & EB M-96 (Michigan Avenue)/11 Mile Rd (South) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	12.9	12.9

9349: WB I-94 Off-ramp Performance by approach

Approach	WB	All
Denied Del/Veh (s)	1.2	1.2
Total Del/Veh (s)	0.6	0.6

9351: SB to NB Xover E of 11 Mile Rd & WB M-96 (Michigan Avenue)/11 Mile Rd (North) Performance b

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.4	5.3	1.6

9352: EB M-96 (Michigan Avenue)/11 Mile Rd (South) & SB to NB Xover E of 11 Mile Rd Performance b

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	11.0	11.0

9354: EB to WB Xover W of 11 Mile Rd & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	3.6	3.6

9355: EB M-96 (Michigan Avenue) & EB to WB Xover W of 11 Mile Rd Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.0	2.0

9356: WB to EB Xover W of 11 Mile Rd & WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.6	2.6

9357: EB M-96 (Michigan Avenue) & WB to EB Xover W of 11 Mile Rd Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.2	0.2

9359: EB M-96 (Michigan Avenue) & M-96 (Michigan Avenue)/WB M-96 (Michigan Avenue) Performance

Approach	EB	WB	All
Denied Del/Veh (s)	0.1	0.0	0.0
Total Del/Veh (s)	1.3	0.9	1.0

9381: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.1	2.1

9382: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.4	5.3	3.3

9383: WB M-96 (Michigan Avenue) Performance by approach

Approach	NW	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.5	0.5

9384: EB M-96 (Michigan Avenue) Performance by approach

Approach	SE	SW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.7	4.2	1.7

9385: Ceresco Road/12 Mile Road & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	0.8	4.0	0.9

9386: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.8	4.5	2.8

9387: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.6	0.6

9388: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.4	0.4

9389: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.8	4.3	2.8

9390: 13 Mile Rd & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	0.6	3.5	0.7

9392: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.1	4.3	1.1

9393: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	1.0	1.0

9394: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.3	0.3

9396: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.4	4.8	1.7

9397: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	3.2	3.2

9398: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	0.3	0.3

9400: WB M-96 (Michigan Avenue) Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.3	5.1	0.5

9401: EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.1	2.1

9410: Retail Drive & EB M-96 (Michigan Avenue) Performance by approach

Approach	EB	NB	All
Denied Del/Veh (s)	0.0	0.1	0.0
Total Del/Veh (s)	0.5	7.0	0.6

9415: EB Main Entrance/EB M-96 (Michigan Avenue) & M-96 (Michigan Avenue) Performance by approa

Approach	EB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.1	0.7	1.4

9416: SB M-311 (11 Mile Rd)/EB M-96 (Michigan Avenue)/11 Mile Rd (South) & EB M-96 (Michigan Ave

Approach	SB	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	1.7	1.7

Total Network Performance

Denied Del/Veh (s)	22.6
Total Del/Veh (s)	102.8