# Traffic Impact Study
# **Proposed Lincoln Prairie Mixed-Use Development**

Aurora, Illinois


Prepared For:

## Pulte Homes


KLOA
Kenig, Lindgren, O'Hara, Aboona, Inc.


March 19, 2021

# 1. Introduction

A traffic impact study was conducted for the proposed Lincoln Prairie, a mixed-use development to be located on the eastside of Lincoln Highway (US Route 30) between Wolf's Crossing and 111th Street in Aurora, Illinois. The site, which is currently vacant, is generally bounded by Wolf's Crossing Road to the north, Lincoln Highway to the west, 111th Street to the south and an E.J.&E Railroad to the east. The plans call for single-family homes, the Del Webb Active Adult Community, and approximately 39 acres of commercial development.

The overall plans of the proposed Lincoln Prairie development call for the active adult homes to be located on the eastern side of the site, single-family homes on the north side of the site, two commercial lots on the north and south side of the site fronting Lincoln Highway and approximately 95.3 acres of flex residential land to be developed with either active adult homes or single-family homes (assumed to be developed with 238 single-family homes for analysis purposes). Overall, the entire development proposes the following land uses and densities:

- Active Adult – 548 homes
- Traditional Residential – 162 single-family homes
- Flex Residential – 369 single-family homes
- Commercial – 247,000 square feet

Access to the development will be provided off Lincoln Highway, Eola Road, Wolf's Crossing Road, and 111th Street.

In 2019, the Illinois Department of Transportation (IDOT) improved the intersection of Lincoln Highway at Eola Road. Which included the realignment of Eola Road at Lincoln Highway, signalizing the intersection and providing a northbound right turn lane and a southbound left-turn lane.

The purpose of this study was to examine background traffic conditions, assess the impact that the proposed development will have on traffic conditions in the area, and determine if any roadway or access improvements are necessary to accommodate traffic generated by the proposed development. The sections of this report present the following:

- Existing roadway conditions including vehicle, pedestrian, and bicycle traffic volumes for the weekday morning and weekday evening peak hours
- A description of the proposed development
- Vehicle trip generation for the proposed development
- Directional distribution of development-generated traffic
- Regional growth in traffic for Year 2036 no-build conditions
- Future transportation conditions including access to and from the development

Traffic capacity analyses were conducted for the weekday morning and evening peak hours for the following conditions:

1. Year 2021 Base Conditions – Analyzes the capacity of the existing roadway system using peak hour traffic volumes conducted in 2021 adjusted to represent pre-pandemic conditions.

2. Year 2036 No-Build Conditions – Analyzes the capacity of the existing roadway system using Year 2021 base traffic volumes increased by an ambient area growth factor not attributable to any particular development.

3. Year 2036 Total Projected Conditions – Analyzes the capacity of the future roadway system using the projected traffic volumes that include the Year 2020 base traffic volumes, ambient area growth not attributable to any particular development, and the traffic estimated to be generated by the proposed development.

# 2. Existing Conditions

Existing traffic and roadway conditions were documented based on field visits and traffic counts conducted by KLOA, Inc. The following provides a detailed description of the physical characteristics of the roadways including geometry and traffic control, adjacent land uses, and peak hour traffic flows along area roadways.

## Site Location

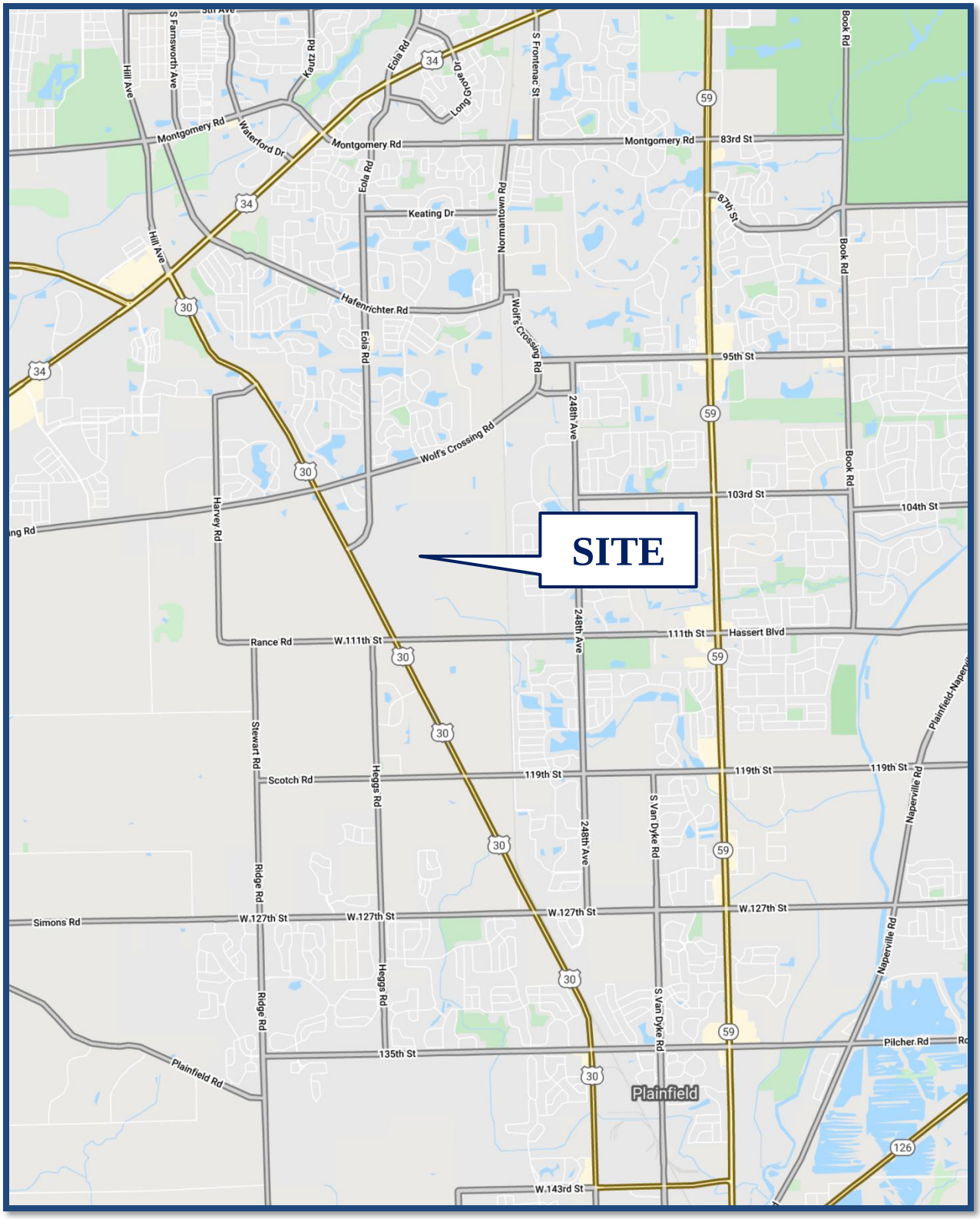
The site, which is currently vacant, is generally bounded by Wolf's Crossing Road to the north, Lincoln Highway to the west, 111th Street to the south and an E.J.&E Railroad to the east. Land uses in the vicinity of the site include the Amber Fields and Lakewood Valley Residential Subdivisions and the Clow Creek Industrial Park and other industrial uses north of the site, the Ashwood Park residential subdivision to the east, and the Sunny Farm Acres and Auburn Lakes residential subdivisions to the south. The Wolf's Crossing Elementary School and Bednarcik Jr. High School are located in the southwest quadrant of the intersection of Wolf's Crossing Road and Eola Road with access on Lundquist Drive which extends between the two roadways.

**Figure 1** shows the location of the site in relation to the area roadway system. **Figure 2** shows the conceptual plan on an aerial.

## Existing Roadway System Characteristics

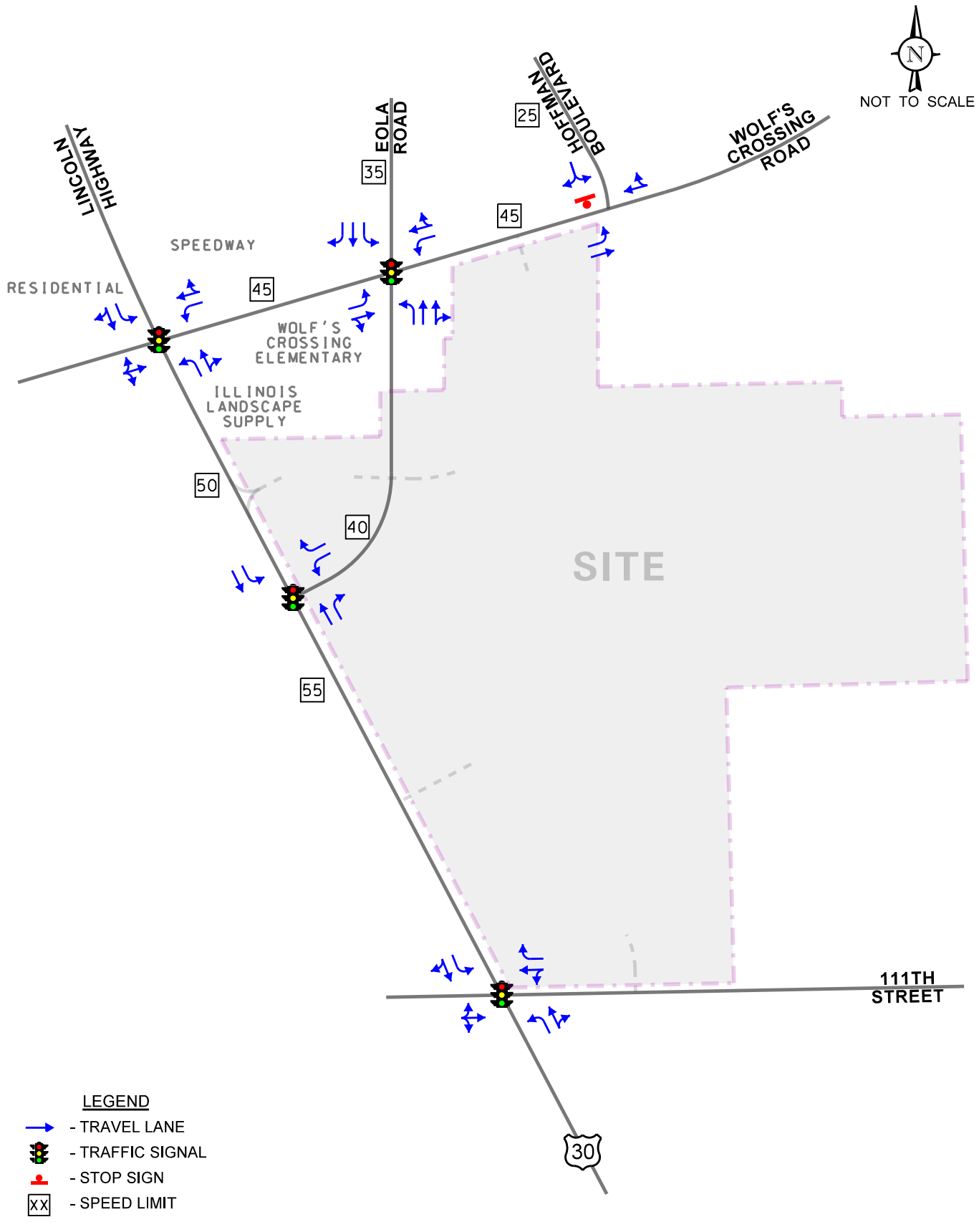
The characteristics of the existing roadways that surround the proposed development are illustrated in **Figure 3** and described below.

*Lincoln Highway (U.S. Route 30)* is a northwest-southeast, other principal arterial roadway that generally provides one lane in each direction. At its signalized intersection with Wolf's Crossing Road, Lincoln Highway provides an exclusive left-turn lane and a shared right-turn/through lane on both approaches. At its signalized intersection with Eola Road, Lincoln Highway provides a through lane and an exclusive right-turn lane on the northbound approach and an exclusive left-turn lane and a through lane on the southbound approach. At its signalized intersection with 111th Street, Lincoln Highway provides an exclusive left-turn lane and a shared through/right-turn lane on both approaches. Lincoln Highway is under the jurisdiction of IDOT, is not designated as a Strategic Regional Arterial (SRA) route, is designated a class II truck route, and is part of the National Highway System (NHS). Lincoln Highway carries an annual average daily traffic (AADT) of 16,800 vehicles north of Wolf's Crossing Road and 20,000 vehicles south of Wolf's Crossing Road (IDOT 2019) and has posted speed limit of 50 mph north of Eola Road and 55 mph south of Eola Road.




**Site Location** **Figure 1**


**Aerial View of Conceptual Plan** **Figure 2**

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Existing Roadway Characteristics

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*Wolf's Crossing Road* is an east-west, minor arterial roadway that generally provides one lane in each direction divided by a stripped median. At its signalized intersection with Lincoln Highway, Wolf's Crossing Road provides a shared left-turn/through/right-turn lane on the eastbound approach and an exclusive left-turn lane and a shared through/right-turn lane on the westbound approach. At its signalized intersection with Eola Road, Wolf's Crossing Road an exclusive left-turn lane and a shared through/right-turn lane on both approaches. At its unsignalized intersection with Hoffman Boulevard, Wolf's Crossing Road provides one through lane in each direction and an exclusive eastbound left-turn lane. Wolf's Crossing Road is under the jurisdiction of the City of Aurora, is not designated as an SRA route, carries an AADT of 8,650 vehicles (IDOT 2019), and has a posted speed limit of 45 mph. Wolf's Crossing Road has a posted weight limit of 12 tons east of Lincoln Highway and a six-ton weight limit per axle west of Lincoln Highway.

*Eola Road* is a north-south collector roadway that generally provides two lanes in each direction north of Wolf's Crossing Road and one lane in each direction south of Wolf's Crossing Road. In 2019, the Illinois Department of Transportation (IDOT) improved the intersection of Lincoln Highway at Eola Road. The improvement involved realigning Eola Road to intersect Lincoln Highway at a perpendicular angle and signalizing the intersection. At this intersection, Eola Road terminates and provides an exclusive left-turn lane and an exclusive right-turn lane. At its signalized intersection with Wolf's Crossing Road, Eola Road provides an exclusive left-turn lane, a through lane, and a shared through/right-turn lane on the northbound approach and an exclusive left-turn lane, a through lane, and an exclusive right-turn lane on the southbound approach. Eola Road is under the jurisdiction of the City of Aurora and is designated as an SRA (WIKADUKE) route. Eola Road carries an AADT of 9,700 vehicles north of Wolf's Crossing Road and 3,900 vehicles south of Wolf's Crossing Road (IDOT 2019) and has posted speed limit of 35 mph north of Wolf's Crossing Road and 40 mph south of Wolf's Crossing Road.

*111th Street* is an east-west roadway that generally provides one lane in each direction and is designated as a minor arterial roadway east of Lincoln Highway and as a major collector roadway west of Lincoln Highway. At its signalized intersection with Lincoln Highway, 111th Street provides a shared left-turn/through/right-turn lane on eastbound approach and a shared through/left-turn lane and an exclusive right-turn lane on the westbound approach. 111th Street is under the jurisdiction of Wheatland Township, is not designated as an SRA route, carries an AADT of 15,100 vehicles (IDOT 2019) and has posted speed limit of 45 mph.

*Hoffman Boulevard* is a north-south local roadway that extends north from Wolf's Crossing Road and provides one lane in each direction. At its unsignalized intersection with Wolf's Crossing Road, Hoffman Boulevard provides a shared left-turn/right-turn lane on the southbound approach. Hoffman Boulevard is under the jurisdiction of the City of Aurora and has posted speed limit of 25 mph.

## Year 2021 Base Traffic Volumes

In order to determine current traffic conditions within the study area, KLOA, Inc. conducted peak period traffic vehicle, pedestrian, and bicycle movement traffic counts utilizing Miovision Scout Collection Units at the following intersections:

- Lincoln Highway with Wolf's Crossing Road
- Lincoln Highway with Eola Road
- Lincoln Highway with 111th Street
- Wolf's Crossing Road with Eola Road
- Wolf's Crossing Road with Hoffman Boulevard

The traffic counts were conducted on Thursday, January 7, 2021 during the weekday morning (6:00 A.M. to 9:00 A.M.) and weekday evening (4:00 P.M. to 6:00 P.M.) peak periods. The results of the traffic counts show that the peak hours of traffic generally occur between 7:30 A.M. and 8:30 A.M. during the weekday morning peak period and between 4:30 P.M. and 5:30 P.M. during the weekday evening peak period. Copies of the traffic count summary sheets are included in the Appendix. In order to present pre-pandemic Year 2021 conditions, the traffic volumes were adjusted (increased by approximately 35 percent) based on the Intersection Design Study (IDS) prepared by IDOT for the intersection of Lincoln Highway with Eola Road and on past traffic projections at the intersection of Lincoln Highway with Wolf's Crossing Road.

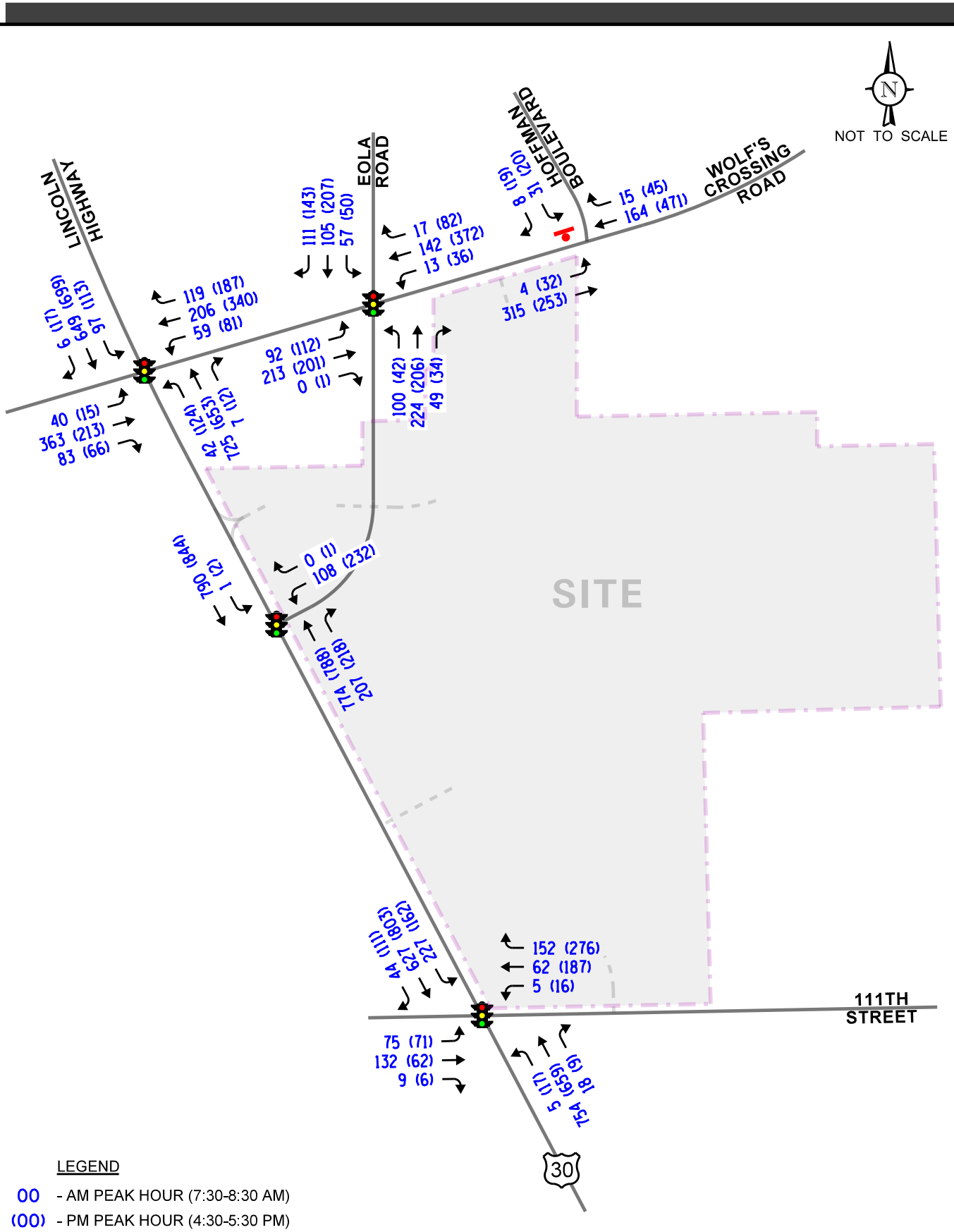
The Year 2021 adjusted traffic volumes are illustrated in **Figure 4.**

## Proposed Regional Improvements

The Village of Oswego has conducted a Pre-Phase I study for the Wolf's Crossing Road corridor from U.S. Route 34 east to Eola Road. In addition to widening Wolf's Crossing Road to provide four through lanes, the following improvements were also identified for the intersection of U.S. Route 30 with Wolf's Crossing Road:

- Widen Wolf's Crossing Road to provide an exclusive left-turn lane, two through lanes and an exclusive right-turn lane on both approaches.
- Widen U.S. Route 30 to provide two through lanes in each direction. The existing exclusive left-turn lanes on both approaches will be maintained.
- Modify the existing traffic signal to provide protected-permissive left-turn phases to the east-west approaches as well as right-turn overlaps.

Based on discussions with the Village of Oswego, all of these improvements will require substantial right-of-way acquisition and no timeframe or funding has been allocated to these improvements.

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Existing Traffic Volumes

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# 3. Traffic Characteristics of the Proposed Development

To evaluate the impact of the subject development on the area roadway system, it was necessary to quantify the number of vehicle trips the site will generate during the respective two peak hours and then determine the directions from which the proposed traffic will approach and depart the site.

## Proposed Site and Development Plan

Lincoln Prairie is a proposed mixed-use development of residential and commercial land uses to be located in the northeast quadrant of the intersection of 111th Street with Lincoln Highway in Aurora, Illinois. The overall plan calls for the site to be developed as follows:

- The Del Webb active adult community on the eastern side of the site. As proposed, the community will consist of 548 homes and a central amenity center with access provided via a proposed access road on Eola Road and a full access on Lincoln Highway.

- A residential subdivision on the northern side of the site. As proposed the subdivision will consist of 162 family home with access provided via a connection to the proposed full access road off Eola Road and via a proposed full movement access drive on Wolf's Crossing Road.

- A 29.9-acre commercial outlot parcel in the northeast corner of Lincoln Highway and Eola Road. Based on preliminary plans, the parcel was assumed to be developed with 157,000 square feet of commercial/retail space with access provided via a restricted access drive on Lincoln Highway and a full movement access drive on Eola Road.

- A 9.0-acre commercial outlot parcel in the northeast corner of the intersection of Lincoln Highway and 111th Street. The parcel was assumed to be developed with 90,000 square feet of commercial/retail space with access provided via a connection to a proposed full movement access road on 111th Street.

- 147.2 acres of flex residential parcels to be developed with either active adult homes or single-family homes. In order to provide a conservative analysis, the parcels were assumed to be developed with single family homes at a density of 2.5 dwelling units per acre (369 total units). Access to Flex parcels were assumed via full access movements to Eola Road, Lincoln Highway and 111th Street.

A copy of the proposed site plan is included in the Appendix.

## Development Access

Access to the development will be provided via the following access roads:

*Wolf's Road Crossing Full Movement Access Road*. To the north, Lincoln Crossing will be access via a full movement access road will extend south from Wolf's Crossing Road approximately 1,300 feet east of Eola Road ("Wolf Access Road"). Wolf Access Road will provide one inbound lane and one outbound lane with outbound movements under stop sign control. Wolf Access Road will extend south through Lincoln Crossing, connect to Eola Access Road (hereinafter defined) and thereby provide a southern point of access for Lincoln Crossing. Wolf's Crossing Road should be restriped to provide a westbound exclusive left-turn lane.

*Lincoln Prairie by Del Webb Proposed Access Road*. The heart of the Lincoln Prairie will be served by a two-lane access road that connects to Eola Road to the north and Lincoln Highway to the south. The central section of this access road, located between guard houses for the Lincoln Prairie by Del Webb subdivision, will be owned and maintained as private road. The portions of the access road located outside of the guard houses (respectively the "Eola Access Road" and "Lincoln Access Road), will be dedicated and maintained as public roads.

*Eola Access Road.* The Eola Access Road is a full movement access located approximately 1,875 feet south of Wolf's Crossing Road which extends east to the guard house for Lincoln Prairie by Del Webb. Eola Access Road will provide one inbound lane and two outbound lanes striped to provide an exclusive left-turn lane and an exclusive right-turn lane. Eola Access Road will serve Lincoln Crossing to the north and Lincoln Prairie by Del Webb to the east. It is anticipated that future access to Commercial Parcel 1 will align with Eola Access Road. At the Eola Access Road, Eola Road will be widened to provide an exclusive northbound right-turn lane and an exclusive southbound left-turn lane. The right-turn lane will provide 115 feet of storage and a 150-foot taper. The left turn lane will provide 115 feet of storage and a 156-foot taper. The Eola Access Road and corresponding improvements to Eola Road should be constructed as part of the first phase of Lincoln Prairie by Del Webb.

*Lincoln Access Road.* The Lincoln Access Road is a full movement access located approximately 2,110 feet south of Eola Road which extends east to the gaurad house for Lincoln Prairie by Del Webb. Lincoln Access Road will serve the Flex Parcels to the north and south and Lincoln Prairie by Del Webb to the east. Lincoln Access Road will provide one inbound lane and two outbound lanes striped to provide a left-turn and a right-turn lane. At Lincoln Access Road, Lincoln Highway will be widened to provide an exclusive northbound right-turn lane and an exclusive southbound left-turn lane. These turn lanes, based on IDOT's Bureau of Design and Environment (BDE) Manual, should provide 240 feet of storage and 240-foot taper. Outbound movements from the access road will be under stop sign control. Lincoln Access Road and corresponding improvements to Lincoln Highway should be constructed as part of the second phase of Lincoln Prairie by Del Webb.

*Lincoln Highway Restricted Access Drive*. A restricted right-in/right-out access drive to Lincoln Highway is anticipated approximately 820 feet north of Eola Road. This restricted access will exclusively serve Commercial Parcel 1. This access drive will provide one inbound lane and one outbound lane channelized and signed to prevent left-turn movements. Lincoln Highway should be widened to provide an exclusive northbound right-turn lane. This turn lane should provide 240 feet of storage a 240-foot taper. Outbound movements from the access drive will be under stop sign control. The restricted access improvements should be constructed as part of the development of Commercial Parcel 1.

*111th Street Full Movement Access Road*. A full movement access road will be provided on 111th Street approximately 900 feet east of Lincoln Highway ("111th Access Road"). 111th Access Road will provide one inbound lane and two outbound lanes. 111th Access Road will serve both Commercial Parcel 2 and Flex Parcel 2. At 111th Access Road, 111th Street should be widened to provide an eastbound exclusive left-turn lane. Outbound movements from the access drive will be under stop sign control. The 111th Access Road should be constructed with the development of Flex Parcel 2 or Commercial Parcel 2, whichever occurs first.

## Eola Road Improvements

It is important to note that Phase I of the development involves the construction of Lincoln Prairie by Del Webb and the Lincoln Crossing single-family homes fronting Wolf's Crossing. In Phase I and based on the projected traffic volumes, a three -lane cross-section on Eola Road will be sufficient to accommodate the projected traffic volumes. However, once the commercial and the flex residential parcels are developed, the road should be widened to provide two lanes in each direction and a traffic signal should be provided (to be discussed later on) at the intersection of Eola Road and the access road to the Active Adult community and the commercial parcel.

## Directional Distribution of Development Traffic

The directions from which traffic will approach and depart the development were estimated based on existing travel patterns, as determined from the existing traffic counts. **Figure 5** illustrates the directional distribution of the traffic projected to be generated by the proposed development. Figure 5 also shows the distance, in feet, between the existing and proposed access intersections.

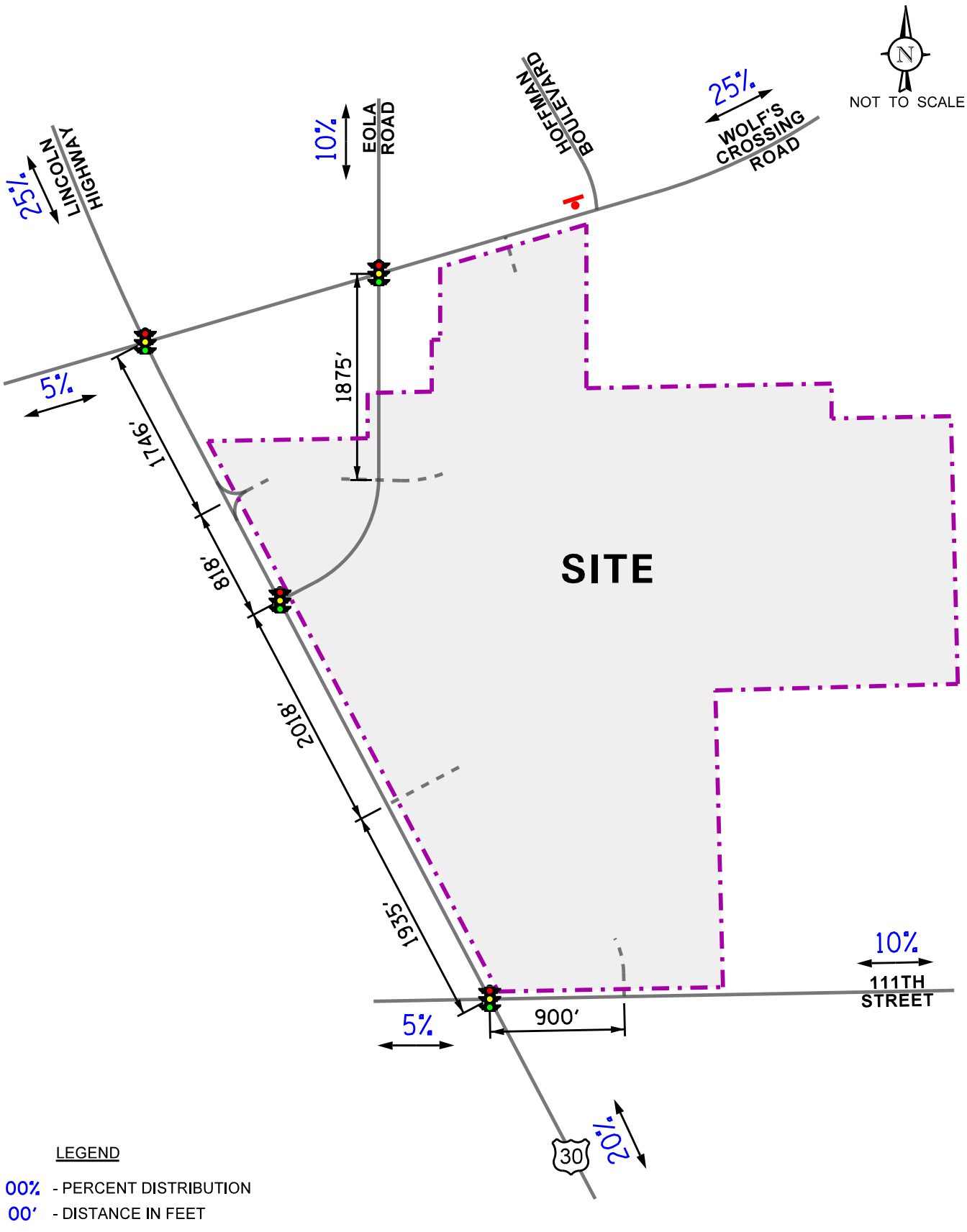
## Development Traffic Generation

The number of peak hour vehicle trips estimated to be generated by the proposed development was based on vehicle trip generation rates contained in *Trip Generation Manual*, 10th Edition, published by the Institute of Transportation Engineers (ITE). Land-use code 251 (Senior Adult Housing – Detached) was used for the Del Webb active adult community, land-use code 210 (Single-Family Detached Housing) was used for the Pulte Homes residential subdivision and flex residential land, and Land-use code 820 (Shopping Center) was used for the commercial developments. Copies of the ITE trip generation sheets are included in the Appendix. It should be noted that it is expected that some of the patrons of the commercial developments will be residents of the active adult community, residential subdivision and the flex residential land. Further, it is expected that number of trips made to the commercial developments will be diverted from the existing traffic on the area roadways and will not be new to area. However, to provide a conservative analysis, no reduction was taken to account for pass-by traffic or interaction between developments. **Table 1** shows the estimated vehicle trip generation for the weekday morning and weekday evening peak hours as well as the weekday daily two-way traffic volumes for the overall development. Inspection of Table 1 indicates that approximately 60 percent of the total site traffic will be generated by the commercial parcels.

Table 1
ESTIMATED VEHICLE TRIP GENERATION FOR PROPOSED DEVELOPMENT

| ITE Land-Use Code | Type/Size | Weekday Morning Peak Hour | | | Weekday Evening Peak Hour | | | Daily Two-Way Trips |
|---|---|---|---|---|---|---|---|---|
| | | In | Out | Total | In | Out | Total | |
| 251 | Senior Adult Housing - Detached (548 Homes)[1] | 49 | 100 | 149 | 110 | 71 | 181 | 2,514 |
| 210 | Single Family Detached Housing (162 Homes)[2] | 30 | 90 | 120 | 101 | 60 | 171 | 1,620 |
| 820 | Shopping Center (247,000 s.f) | 170 | 105 | 275 | 509 | 552 | 1,061 | 11,120 |
| 210 | Single Family Detached Housing (369 Homes)[3] | 67 | 200 | 267 | 224 | 132 | 356 | 3,456 |
| | **Total** | **316** | **495** | **811** | **944** | **815** | **1,759** | **18,710** |

1 – Del Webb Community
2 – Pulte Homes subdivision (north side of the site)
3 – Flex Residential Parcels

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Estimated Directional Distribution

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# 4. Projected Traffic Conditions

The total projected traffic volumes include the existing traffic volumes increased by a regional growth rate and the traffic estimated to be generated by the proposed subject development.

## Development Traffic Assignment

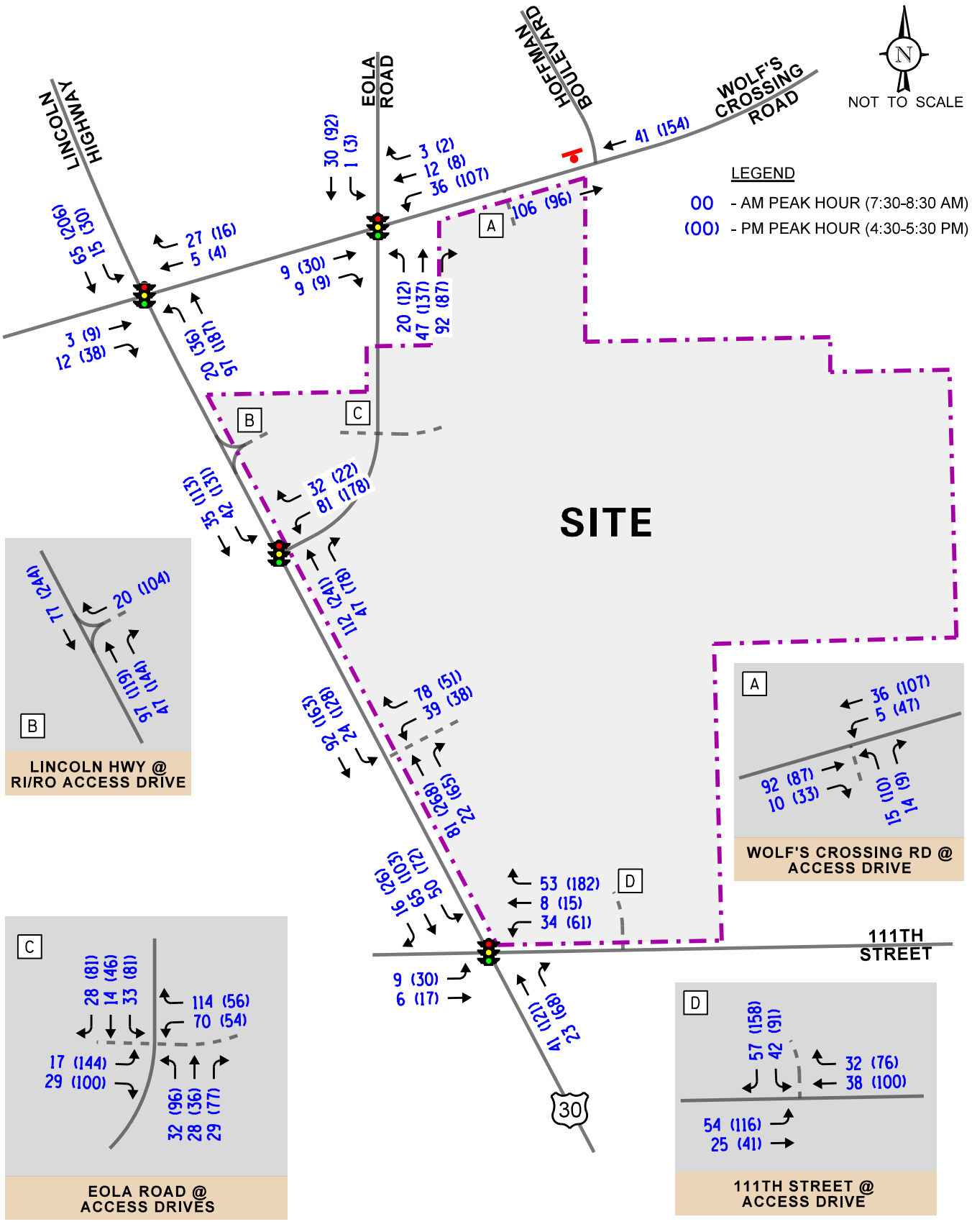
The estimated weekday morning and evening traffic volumes that will be generated by the proposed development were assigned to the roadway system in accordance with the previously described directional distribution (Figure 5). The site traffic assignment for the proposed n development is illustrated in **Figure 6.**

## Background (No-Build) Traffic Conditions

The Year 2021 base traffic volumes (Figure 4) were increased by a regional growth factor to account for the increase in existing traffic related to regional growth in the area (i.e., not attributable to any particular planned development). Based on AADT projections provided by the Chicago Metropolitan Agency for Planning (CMAP), the existing traffic volumes were increased by an annually compounded growth rate of 0.9 percent per year for 15 years (buildout year plus five years) for a total of 15 percent. The projected Year 2036 no-build traffic volumes, which include the adjusted Year 2021 base traffic volumes, are illustrated in **Figure 7.**

## Year 2036 Total Projected Traffic Conditions

The development-generated traffic (Figure 6) was added to the Year 2036 no-build traffic volumes to determine the projected Year 2036 total projected traffic volumes, as shown in **Figure 8**.

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Estimated Site Traffic Assignment

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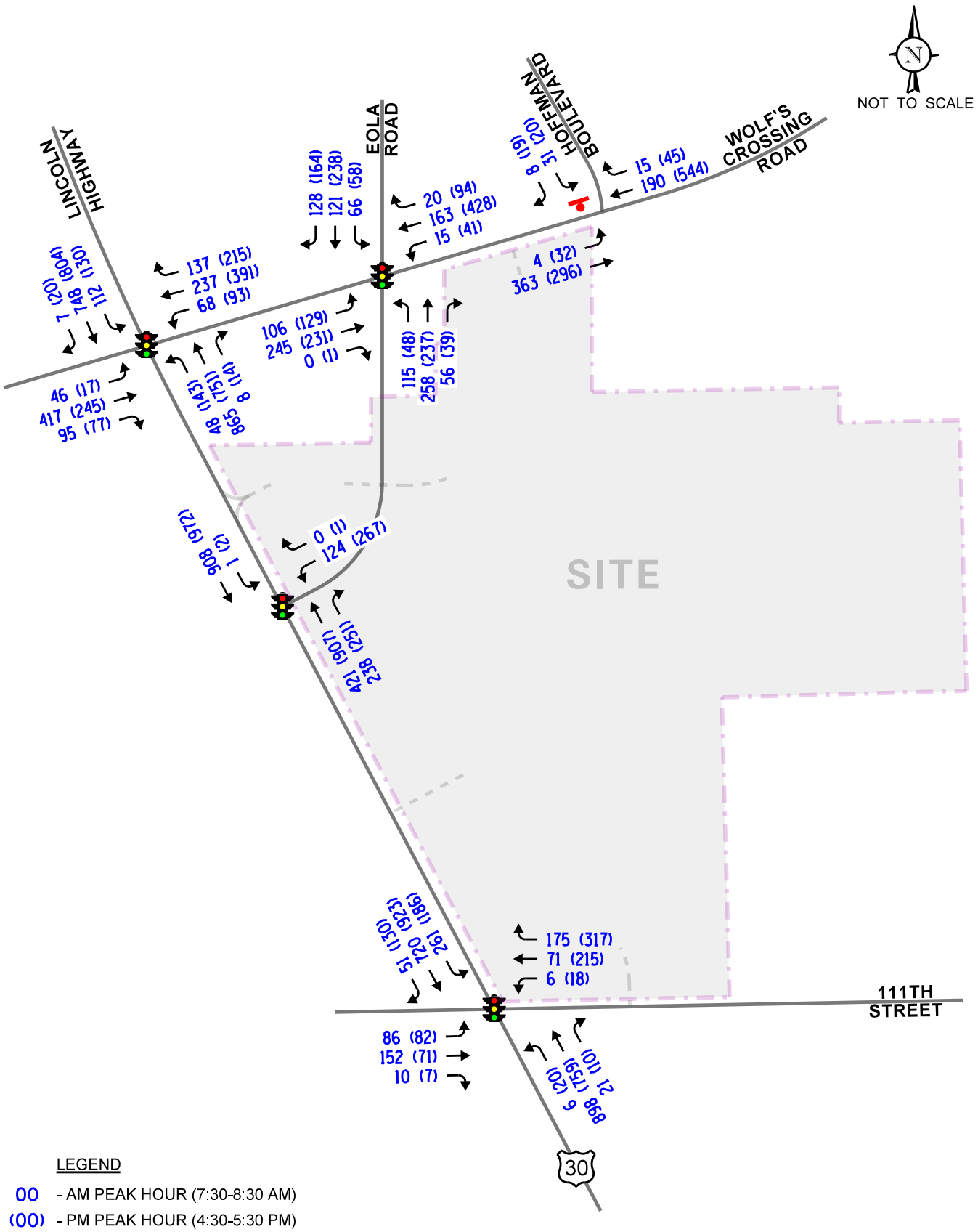


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Year 2036 No-Build Traffic Volumes

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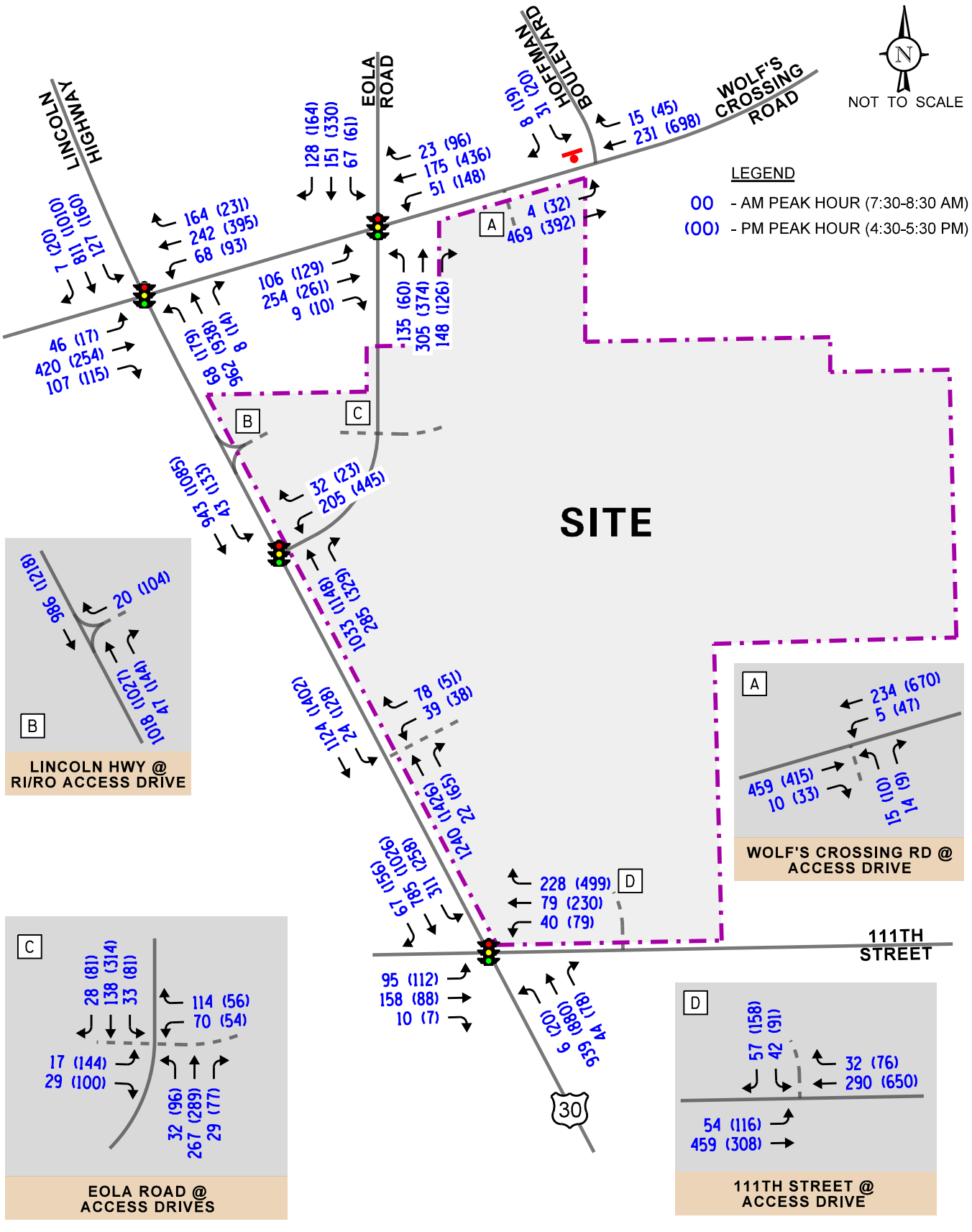


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Total Projected Traffic Volumes

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Job No: 21-001 Figure: 8

# 5. Traffic Analysis and Recommendations

Capacity analyses were performed for the key intersections included in the study area to determine the ability of the existing roadway system to accommodate existing and future traffic demands. Analyses were performed for the weekday morning and weekday evening peak hours for the Year 2021 base, Year 2036 no build, and Year 2036 total projected conditions.

The traffic analyses were performed using the methodologies outlined in the Transportation Research Board's *Highway Capacity Manual (HCM),* 6th Edition and analyzed using Synchro/SimTraffic 10 software. The analysis for the traffic-signal controlled intersections were accomplished using provided cycle lengths and phasings to determine the average overall vehicle delay and levels of service.

The analyses for the unsignalized intersections determine the average control delay to vehicles at an intersection. Control delay is the elapsed time from a vehicle joining the queue at a stop sign (includes the time required to decelerate to a stop) until its departure from the stop sign and resumption of free flow speed. The methodology analyzes each intersection approach controlled by a stop sign and considers traffic volumes on all approaches and lane characteristics.

The ability of an intersection to accommodate traffic flow is expressed in terms of level of service, which is assigned a letter from A to F based on the average control delay experienced by vehicles passing through the intersection. The *Highway Capacity Manual* definitions for levels of service and the corresponding control delay for signalized intersections and unsignalized intersections are included in the Appendix of this report.

Summaries of the traffic analysis results showing the level of service and overall intersection delay (measured in seconds) for the year 2021 base, Year 2036 no-build, and Year 2036 total projected conditions are presented in **Tables 2** through **11**. A discussion of each intersection follows. Summary sheets for the capacity analyses are included in the Appendix.

Table 2
CAPACITY ANALYSIS RESULTS – LINCOLN HIGHWAY WITH WOLF'S CROSSING ROAD

| Peak Hour | Condition | Operating Conditions by Approach | | | | | | | | | | | | Overall |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Eastbound | | | Westbound | | | Northbound | | | Southbound | | | |
| | | L | T | R | L | T | R | L | T | R | L | T | R | |
| Weekday Morning | Year 2021 Base | F 80.5 | | | C 33.8 | C 34.1 | | B 10.5 | D 50.2 | | B 19.8 | C 31.4 | | D 46.7 |
| | | | | | C – 34.1 | | | D – 48.1 | | | C – 29.9 | | | |
| | Year 2036 No Build | F 99+ | | | D 44.1 | D 38.9 | | B 13.0 | F 99+ | | D 35.9 | D 48.2 | | F 99+ |
| | | | | | D – 39.7 | | | F – 99+ | | | D – 46.6 | | | |
| | Year 2036 Total Projected | F 99+ | | | D 46.6 | D 38.0 | | B 17.9 | F 99+ | | D 46.6 | E 67.9 | | F 99+ |
| | | | | | D – 39.2 | | | F – 99+ | | | E – 65.0 | | | |
| Weekday Evening | Year 2021 Base | D 51.8 | | | C 29.7 | E 69.3 | | C 23.5 | D 35.8 | | B 16.0 | D 42.1 | | D 44.8 |
| | | | | | E – 64.1 | | | C – 33.9 | | | D – 38.5 | | | |
| | Year 2036 No Build | F 99+ | | | C 32.8 | F 99+ | | D 41.6 | D 54.9 | | D 36.8 | E 72.0 | | F 95.3 |
| | | | | | F – 99+ | | | D – 52.8 | | | E – 67.2 | | | |
| | Year 2036 Total Projected | F 99+ | | | D 35.5 | F 99+ | | E 75.1 | F 99+ | | E 60.1 | F 99+ | | F 99+ |
| | | | | | F – 99+ | | | F – 99+ | | | F – 99+ | | | |

Delay is Measured in Seconds L – Left, T – Through, R – Right

Table 3
CAPACITY ANALYSIS RESULTS – LINCOLN HIGHWAY WITH WOLF'S CROSSING ROAD
(ASSUMING POTENTIAL REGIONAL IMPROVEMENTS WITHIN THE AVAILABLE RIGHT-OF-WAY)

| Peak Hour | Condition | Operating Conditions by Approach | | | | | | | | | | | | Overall |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Eastbound | | | Westbound | | | Northbound | | | Southbound | | | |
| | | L | T | R | L | T | R | L | T | R | L | T | R | |
| Weekday Morning | Year 2036 Total Projected | F 99+ | | A 7.3 | D 36.3 | C 34.3 | B 14.0 | C 25.1 | F 99+ | | E 71.1 | E 59.8 | | F 87.0 |
| | | F – 99+ | | | C – 27.5 | | | F – 99+ | | | E – 61.3 | | | |
| Weekday Evening | Year 2036 Total Projected | F 99+ | | A 9.6 | D 42.2 | D 52.9 | B 17.6 | F 87.8 | E 71.3 | | E 71.4 | F 98.4 | | E 76.1 |
| | | F – 92.1 | | | D – 40.2 | | | E – 73.9 | | | F – 94.6 | | | |
| Delay is Measured in Seconds L – Left, T – Through, R – Right | | | | | | | | | | | | | | |

Table 4
CAPACITY ANALYSIS RESULTS –WOLF'S CROSSING ROAD WITH EOLA ROAD

| Peak Hour | Condition | Operating Conditions by Approach | | | | | | | | | | | | Overall |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Eastbound | | | Westbound | | | Northbound | | | Southbound | | | |
| | | L | T | R | L | T | R | L | T | R | L | T | R | |
| Weekday Morning | Year 2021 Base | B 19.5 | C 28.6 | | B 16.1 | D 36.9 | | A 9.2 | B 15.0 | | A 9.3 | B 17.4 | B 17.9 | C 20.8 |
| | | C – 25.8 | | | D – 35.3 | | | B – 13.5 | | | B – 15.9 | | | |
| | Year 2036 No Build | B 19.3 | C 28.5 | | B 15.3 | D 36.5 | | B 10.0 | B 16.7 | | B 10.1 | B 18.1 | B 18.8 | C 21.3 |
| | | C – 25.7 | | | C – 34.9 | | | B – 14.9 | | | B – 16.7 | | | |
| | Year 2036 Total Projected | B 18.2 | C 34.6 | | B 16.3 | C 33.1 | | B 11.0 | B 14.4 | | B 11.1 | B 19.7 | A 4.9 | B 19.8 |
| | | C – 29.8 | | | C – 29.7 | | | B – 13.6 | | | B – 12.6 | | | |
| Weekday Evening | Year 2021 Base | B 15.0 | C 20.3 | | B 10.1 | D 37.4 | | B 15.6 | C 22.6 | | B 15.7 | C 24.8 | C 25.0 | C 26.0 |
| | | B – 18.1 | | | D – 35.4 | | | C – 21.6 | | | C – 23.7 | | | |
| | Year 2036 No Build | B 16.0 | B 18.8 | | A 9.7 | D 41.7 | | B 16.5 | C 24.4 | | B 16.6 | C 27.5 | C 27.4 | C 28.2 |
| | | B – 17.8 | | | D – 39.3 | | | C – 23.2 | | | C – 26.1 | | | |
| | Year 2036 Total Projected | B 17.2 | C 21.8 | | B 12.7 | D 40.5 | | B 17.3 | C 26.0 | | B 17.4 | C 34.1 | A 6.1 | C 26.8 |
| | | C – 20.3 | | | C – 34.4 | | | C – 25.1 | | | C – 24.0 | | | |

Delay is Measured in Seconds L – Left, T – Through, R – Right

Table 5
CAPACITY ANALYSIS RESULTS –LINCOLN HIGHWAY WITH EOLA ROAD

| Peak Hour | Condition | Operating Conditions by Approach | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Westbound | | Northbound | | Southbound | | Overall |
| | | L | R | T | R | L | T | |
| Weekday Morning | Year 2021 Base | D 45.1 | -- | B 10.0 | A 5.4 | A 3.0 | A 7.5 | B 11.1 |
| | | D – 45.1 | | B – 10.0 | | A – 7.5 | | |
| | Year 2036 No Build | D 45.3 | -- | B 16.0 | A 6.2 | A 4.0 | B 11.8 | B 14.8 |
| | | D – 45.3 | | B – 14.0 | | B – 11.8 | | |
| | Year 2036 Total Projected | D 46.7 | B 13.3 | D 41.5 | A 2.6 | A 6.6 | B 16.2 | C 27.2 |
| | | D – 42.1 | | C – 33.1 | | B – 15.8 | | |
| Weekday Evening | Year 2021 Base | D 51.8 | C 29.0 | B 14.5 | A 7.4 | A 4.5 | B 13.3 | B 17.4 |
| | | D – 51.7 | | B – 12.9 | | B – 13.2 | | |
| | Year 2036 No Build | E 57.6 | C 29.0 | B 17.7 | A 7.8 | A 4.5 | B 16.6 | C 20.7 |
| | | E – 57.5 | | B – 15.7 | | B – 16.6 | | |
| | Year 2036 Total Projected | F (F) 99+ (99+) | B (B) 18.0 (15.9 | F (E) 97.5 (67.9 | A (A) 3.5 (4.7) | C (E) 25.8 (64.4) | C (C) 24.2 (24.7) | E (E) 72.7 (58.5) |
| | | F – 151.3 (F – 149.9) | | E – 77.3 (E- 53.8) | | C – 24.4 (C – 29.1) | | |

Delay is Measured in Seconds L – Left, T – Through, R – Right
( ) – Assumes increasing the cycle length to 120 seconds

Table 6
CAPACITY ANALYSIS RESULTS –LINCOLN HIGHWAY WITH 111th STREET

| Peak Hour | Condition | Operating Conditions by Approach | | | | | | | | | | | | Overall |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Eastbound | | | Westbound | | | Northbound | | | Southbound | | | |
| | | L | T | R | L | T | R | L | T | R | L | T | R | |
| Weekday Morning | Year 2021 Base | F 80.5 | | | C 33.8 | | C 34.1 | B 10.5 | D 50.2 | | B 19.8 | C 31.4 | | D 46.7 |
| | | | | | C – 34.1 | | | D – 48.1 | | | C – 29.9 | | | |
| | Year 2036 No Build | E 78.8 | | | D 37.9 | | D 52.8 | A 4.3 | E 68.7 | | E 69.5 | A 9.1 | | D 54.6 |
| | | | | | D – 48.2 | | | E – 68.3 | | | C – 31.0 | | | |
| | Year 2036 Total Projected | F 96.6 | | | D 53.6 | | A 9.3 | A 4.5 | F 98.7 | | F 99+ | B 18.2 | | E 66.8 |
| | | | | | C – 24.5 | | | F – 98.2 | | | D – 45.9 | | | |
| Weekday Evening | Year 2021 Base | E 78.5 | | | D 50.2 | | F 99+ | A 4.4 | B 18.4 | | A 7.2 | C 25.7 | | D 37.9 |
| | | | | | F 88.1 | | | B – 18.1 | | | D – 22.9 | | | |
| | Year 2036 No Build | F 99+ | | | E 57.0 | | F 99+ | A 5.3 | C 23.9 | | B 10.9 | D 47.6 | | E 59.8 |
| | | | | | F – 121.2 | | | C – 23.4 | | | D – 42.1 | | | |
| | Year 2036 Total Projected | F 99+ | | | F 99+ | | F 99+ | A 5.3 | E 56.7 | | F 99+ | F 87.1 | | F 99+ |
| | | | | | F – 99+ | | | E – 55.6 | | | F – 99+ | | | |

Table 7
CAPACITY ANALYSIS RESULTS –LINCOLN HIGHWAY WITH 111th STREET
(ASSUMING POTENTIAL REGIONAL IMPROVEMENTS WITHIN THE AVAILABLE RIGHT-OF-WAY)

| Peak Hour | Condition | Operating Conditions by Approach | | | | | | | | | | | | Overall |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Eastbound | | | Westbound | | | Northbound | | | Southbound | | | |
| | | L | T | R | L | T | R | L | T | R | L | T | R | |
| Weekday Morning | Year 2036 Total Projected | D 41.0 | E 65.2 | | D 41.4 | D 49.8 | B 18.2 | A 6.7 | F 99+ | | F 99+ | B 16.8 | A 1.3 | E 65.6 |
| | | E – 56.5 | | | C – 28.1 | | | F – 99+ | | | D – 42.4 | | | |
| Weekday Evening | Year 2036 Total Projected | E 56.5 | D 47.6 | | D 44.7 | E 75.4 | E 59.5 | A 8.7 | F 99+ | | F 89.4 | D 39.9 | A 1.2 | E 68.2 |
| | | D – 52.4 | | | E – 62.6 | | | F – 99+ | | | D – 44.6 | | | |

Table 8
CAPACITY ANALYSIS RESULTS –EOLA ROAD WITH ACCESS ROAD/COMMERCIAL DRIVE

| Peak Hour | Condition | Operating Conditions by Approach | | | | | | | | | | | | Overall |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Eastbound | | | Westbound | | | Northbound | | | Southbound | | | |
| | | L | T | R | L | T | R | L | T | R | L | T | R | |
| Weekday Morning | Year 2036 Total Projected | C 26.7 | B 18.9 | | C 31.0 | B 13.6 | | A 7.5 | B 11.3 | A 0.0 | A 5.2 | A 8.9 | A 0.0 | B 12.4 |
| | | C – 21.7 | | | C – 20.2 | | | A – 9.9 | | | A – 7.0 | | | |
| Weekday Evening | Year 2036 Total Projected | C 32.4 | B 12.9 | | C 26.3 | B 17.1 | | A 9.7 | B 18.7 | A 1.7 | A 6.6 | B 12.3 | A 0.6 | B 14.9 |
| | | C – 24.4 | | | C – 21.6 | | | B – 14.0 | | | A – 9.3 | | | |

Table 9
CAPACITY ANALYSIS RESULTS – UNSIGNALIZED INTERSECTIONS
YEAR 2021 BASE CONDITIONS

| Intersection | Weekday Morning Peak Hour | | Saturday Midday Peak Hour | |
|---|---|---|---|---|
| | LOS | Delay | LOS | Delay |
| **Wolf's Crossing Road with Hoffman Boulevard** | | | | |
| • Eastbound Left Turn | A | 7.6 | A | 8.6 |
| • Southbound Approach | B | 11.9 | B | 14.9 |

LOS = Level of Service
Delay is measured in seconds.

Table 10
CAPACITY ANALYSIS RESULTS – UNSIGNALIZED INTERSECTIONS
YEAR 2036 NO BUILD CONDITIONS

| Intersection | Weekday Morning Peak Hour | | Saturday Midday Peak Hour | |
|---|---|---|---|---|
| | LOS | Delay | LOS | Delay |
| **Wolf's Crossing Road with Hoffman Boulevard** | | | | |
| • Eastbound Left Turn | A | 7.6 | A | 8.8 |
| • Southbound Approach | B | 12.6 | C | 16.6 |

LOS = Level of Service
Delay is measured in seconds.

Table 11
CAPACITY ANALYSIS RESULTS – UNSIGNALIZED INTERSECTIONS
YEAR 2036 TOTAL PROJECTED CONDITIONS

| Intersection | Weekday Morning Peak Hour | | Saturday Midday Peak Hour | |
|---|---|---|---|---|
| | LOS | Delay | LOS | Delay |
| **Wolf's Crossing Road with Hoffman Boulevard** | | | | |
| • Eastbound Left Turn | A | 7.7 | A | 9.4 |
| • Southbound Approach | B | 14.4 | C | 21.9 |
| **Wolf's Crossing Road with the Lincoln Crossing Access Road** | | | | |
| • Westbound Left Turn | A | 8.3 | A | 8.5 |
| • Northbound Approach | B | 13.4 | C | 19.4 |
| **Lincoln Highway with the Commercial Right-In/Right-Out Access Drive** | | | | |
| • Westbound Approach | C | 19.5 | D | 27.5 |
| **Lincoln Highway with the Flex Residential/Del Webb Access Road** | | | | |
| • Westbound Left Turn | E | 39.9 | F | 99+ |
| • Westbound Right Turn | D | 26.9 | E | 41.8 |
| • Southbound Left Turn | B | 12.2 | C | 17.6 |
| **111th Street with the Full Movement Access Road** | | | | |
| • Eastbound Left Turn | A | 8.1 | A | 9.9 |
| • Southbound Approach | C | 15.3 | D | 33.1 |

LOS = Level of Service
Delay is measured in seconds.

# 6. Discussion and Recommendations

The following is an evaluation of the analyzed intersections based on the projected traffic volumes and the capacity analyses performed.

### *Lincoln Highway and Wolf's Crossing Road*

Based on the results of the capacity analyses, this intersection is operating at an overall acceptable LOS D during the weekday morning and evening peak hours. However, it is important to note that various movements and approaches are operating at/or above capacity. Under Year 2036 No Build, this intersection will operate at a LOS F. given the anticipated growth in the area and will continue to do so under Year 2036 Future Conditions. In order to mitigate these deficiencies, which are primarily due to existing conditions and the background traffic conditions, the intersection will require major modifications as part of a regional improvement plan for the area. These were identified in the Village of Oswego Pre-Phase I study of the Wolf's Crossing Road corridor. Given that the identified improvements will require significant right-of-way acquisition and that there are no funds or timeframe allocated for these improvements, KLOA, Inc. has identified interim regional improvements that could potentially be accommodated within the available right-of-way. These improvements are as follows:

- Provide an exclusive westbound to northbound right-turn lane
- Provide an exclusive eastbound to southbound right-turn lane
- Provide right-turn overlap phases for the eastbound and westbound right-turn lanes
- Increasing the cycle length to 120 seconds

Assuming these regional improvements, the intersection overall delay will be reduced by approximately 40 to 50 percent and the eastbound and westbound queues will be reduced substantially, thus having a positive impact on the east-west traffic flow. As previously indicated, these improvements have been identified as part of the Village of Oswego Pre-Phase I study, are needed under Existing and No Build Conditions and are not solely due to the proposed development. An exhibit depicting these improvements is enclosed in the Appendix.

### *Wolf's Crossing Road and Eola Road*

This intersection operates at an overall acceptable LOS during the weekday morning and evening peak hour with all four approaches operating at a LOS D or better. Under Year 2036 No Build conditions and the Year 2036 Future conditions, the intersection will continue to operate at an overall acceptable LOS thus indicating the intersection has sufficient capacity to accommodate the estimated background growth and the site traffic volumes. As such, no additional geometric or signal timing improvements are necessary at this intersection in conjunction with the proposed development.

*Lincoln Highway and Eola Road*

As previously indicated, the Illinois Department of Transportation (IDOT) recently improved this intersection. The improvement involved realigning Eola Road to intersect Lincoln Highway at a perpendicular angle and signalizing the intersection with a cycle length of 90 seconds per the prepared IDS. In addition, exclusive left and right-turn lanes were provided on Lincoln Highway and Eola Road was widened to provide an exclusive left-turn lane and an exclusive right-turn lane. Based on the results of the capacity analyses, the intersection is operating at an overall acceptable LOS. Under Year 2036 No Build traffic conditions, the intersection will continue to operate at an overall acceptable LOS.

Under Year 2036 Future conditions and in order to accommodate the future traffic volumes, the traffic signal cycle length during the weekday evening peak period should be increased to 120 seconds. No additional improvements are necessary in conjunction with the proposed development.

*Lincoln Highway and 111th Street*

Based on the results of the capacity analyses, this intersection is operating at an overall acceptable LOS D during the weekday morning and evening peak hours. However, it is important to note that various movements and approaches are operating at/or above capacity. Under Year 2036 No Build conditions, the intersection will operate at a LOS E given the anticipated growth in the area and various movements will operate at a LOS E or F. Based on a review of the No Build traffic volumes, the intersection will require regional improvements to mitigate these deficiencies such as widening Lincoln Highway to provide two through lanes in each direction and the widening of the eastbound and westbound approaches of 111th Street to provide exclusive left-turn lanes. While under Year 2036 Future conditions, the intersection will experience longer delays, this is primarily due to existing deficiencies and the background growth and as previously indicated should be mitigated as part of regional improvements developed for the Lincoln Highway corridor.

Given that there is no right-of-way available along Lincoln Highway to provide two lanes in each direction, KLOA, Inc. has identified interim regional improvements that could be accommodated within the available right-of-way. These improvements are as follows:

- Provide an exclusive westbound to southbound left-turn lane
- Provide an exclusive eastbound to northbound left-turn lane
- Provide right-turn overlap phase for the existing westbound right-turn lane
- Provide an exclusive southbound to westbound right-turn lane
- Provide right-turn overlap for the future southbound right-turn lane
- Increase the cycle length to 120 seconds

Assuming these regional improvements, the intersection overall delay will be reduced by approximately 45 percent and the eastbound and westbound queues will be reduced substantially thus having a positive impact on the east-west traffic flow. As previously indicated, these improvements are regional in nature and not solely due to the proposed development. An exhibit depicting these improvements is included in the Appendix.

### *Eola Road with Access Road/Commercial Full Access Drive*

Eola Access Road will serve as a main entrance to the Lincoln Prairie by Del Webb and a secondary entrance for Lincoln Crossing. No widening is required to accommodate these residential developments or the development of Flex Parcel 1. As such, in the interim, Eola Road will provide a shared through/right-turn lane in the northbound direction and the southbound direction will provide an exclusive left-turn lane and a through lane. Upon development of Commercial Parcel 1, Eola Road should be widened to provide two lanes in each direction. In addition, an exclusive northbound left-turn lane and an exclusive southbound right-turn lane as well as an exclusive northbound right-turn lane will be provided on Eola Road . Given the wide cross-section of Eola Road and depending on ultimate scope of the development on Commercial Parcel 1, a traffic signal should be considered. Based on the results of the capacity analyses, this intersection, assuming full buildout, will operate at an overall acceptable LOS and as such no additional geometric or traffic control improvements will be necessary in conjunction with the proposed development.

### *Wolf's Crossing Road with Hoffman Boulevard*

Based on the results of the capacity analyses, all of the turning movements at this intersection are operating at an acceptable LOS. Under Year 2036 Future conditions, all of the turning movements will continue to operate at an acceptable LOS. As such, no geometric or traffic control improvements are necessary at this intersection in conjunction with the development.

### *Wolf's Crossing Road and Lincoln Crossing Full Access Road*

This intersection will serve the Pulte Homes subdivision. Based on the projected traffic volumes and for design consistency, Wolf's Crossing Road should be restriped to provide for an exclusive westbound left-turn lane. A review of IDOT's turn lane warrants and the projected traffic volumes indicate that an exclusive right-turn lane into the site will not be necessary. Based on the results of the capacity analyses, all of the turning movements at this intersection will operate at an overall acceptable LOS. As such, no additional improvements will be necessary in conjunction with the proposed development.

### *Lincoln Highway and Commercial Right-in/Right-Out*

This restricted access drive will provide additional accessibility to the northern commercial parcel and will be located approximately 820 feet north of the Lincoln Highway signalized intersection with Eola Road. Based on the projected traffic volumes, an exclusive right-turn lane into the site will be provided. Inspection of the capacity analyses indicate that the outbound movement from this access drive will operate at an acceptable LOS during both peak hours. As such, no additional geometric or traffic control improvements will be necessary in conjunction with the proposed development.

### *Lincoln Highway and Flex Residential/Del Webb Access Road*

This access road will serve the Flex Residential parcels and will provide additional accessibility to Lincoln Prairie by Del Webb. Given the projected traffic volumes, Lincoln Highway will be widened to provide for a southbound exclusive left-turn lane and a northbound exclusive right-turn lane. Based on the results of the capacity analyses, all of the turning movements will operate at an acceptable LOS with the exception of the outbound left-turn movement which will operate at a LOS E and F during the weekday morning and evening peak hours, respectively. This is not uncommon, and it is expected at an unsignalized intersection where a minor road intersects a major arterial like Lincoln Highway. As such, no additional geometric or traffic control improvements will be necessary in conjunction with the proposed development.

### *111th Street and Full Movement Access Road*

This intersection will serve the Flex Residential parcels and Commercial Parcel 2. Based on the projected traffic volumes, 111th Street should be widened to provide for an exclusive eastbound left-turn lane. Based on the results of the capacity analyses, all of the turning movements at this intersection will operate at an overall acceptable LOS. No additional improvements will be necessary in conjunction with the proposed development.

# 7. Conclusion

A traffic impact study was conducted for the proposed Lincoln Prairie, a mixed-use development to be located on the eastside of Lincoln Highway (US Route 30) between Wolf's Crossing and 111th Street in Aurora, Illinois. The site, which is currently utilized for agricultural purposes, is generally bounded by Wolf's Crossing Road to the north, Lincoln Highway to the west, 111th Street to the south and an E.J.&E Railroad to the east. The plans call for single-family homes, a Del Webb Active Adult Community, and approximately 39 acres of commercial development.

Based on the proposed development plan and the traffic capacity analyses for the full buildout of the development, the findings and recommendations of this study are outlined below:

- The proposed development-generated traffic will be consistent and compatible with traffic patterns and volumes in the area.

- Overall, the access system with recommended improvements/modifications will be adequate to accommodate the projected traffic estimated to be generated by the proposed redevelopment.

- The mixture of residential and retail/commercial land uses will result in internal capture of trips resulting in a reduction in the overall trips that will be generated by the proposed development.

- Based on a review of the existing traffic volumes and the Year 2036 No Build projections, capacity deficiencies will continue to exist at the intersections of Lincoln Highway with Wolf's Crossing Road and 111$^{th}$ Street that should be mitigated as part of interim regional improvements and not solely due to site generated traffic volumes.

- Exclusive left-turn lanes should be provided on Wolf's Crossing Road and 111$^{th}$ Street at their respective intersections with the proposed access roads.

- Lincoln Highway at its intersection with the proposed Flex Residential/Del Webb access road should be widened to provide for an exclusive left-turn lane and an exclusive right-turn lane.

- An exclusive right-turn lane should be provided on Lincoln Highway at its intersection with the proposed commercial right-in/right-out access drive.

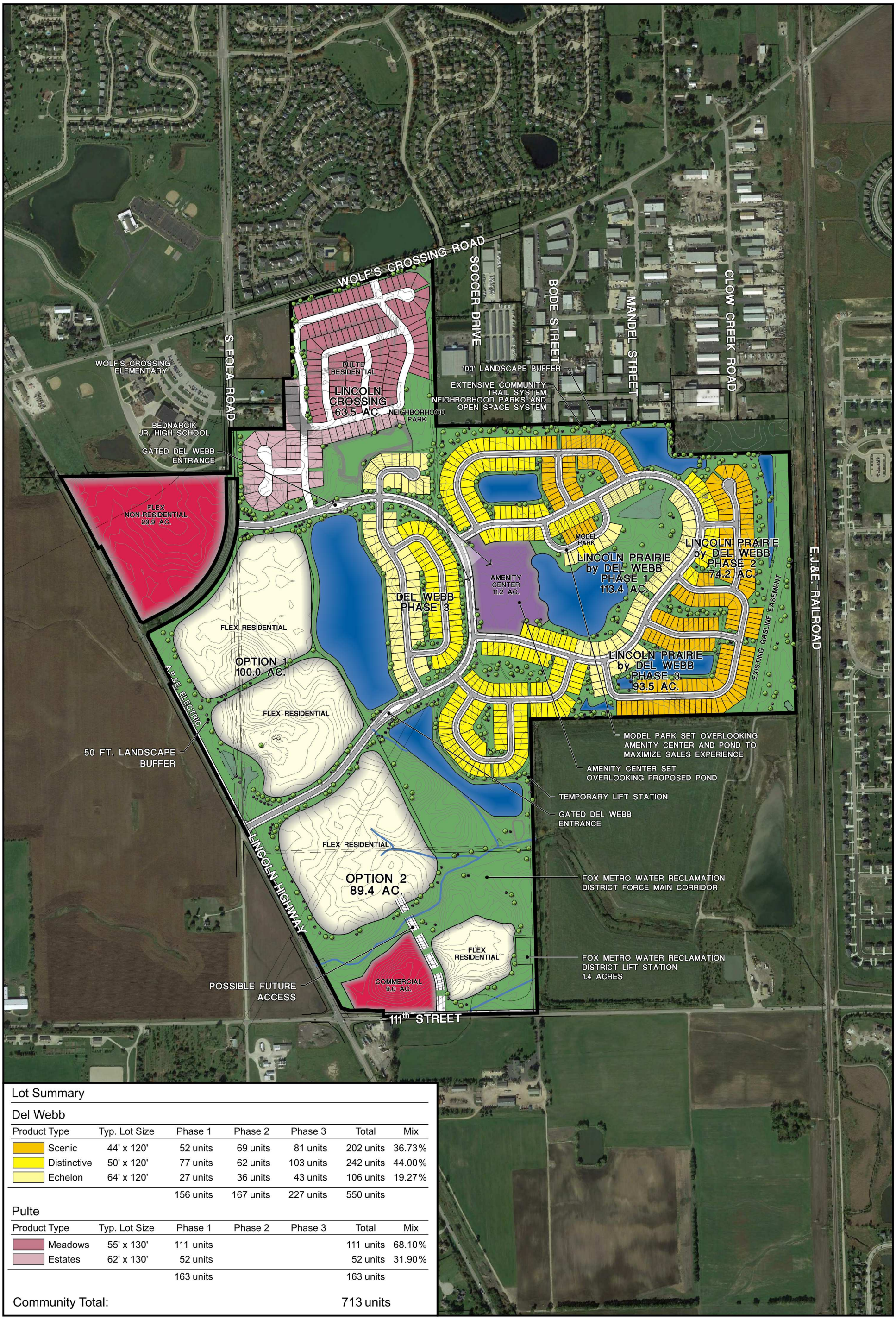
- Eola Road existing cross-section (3 lanes) will be sufficient to accommodate the traffic that will be generated by Lincoln Crossing and Lincoln Prairie by Del Webb.

- With full buildout of the development including the commercial parcels, Eola Road should be widened to 5 lanes and a traffic signal should be installed at its intersection with the access road to Del Webb and the access drive to the commercial parcel.

# Appendix

Site Plan
Traffic Count Summary Sheets
CMAP Traffic Projection Letter/ITE Data
Level of Service Criteria
Capacity Analysis – Existing Conditions
Capacity Analysis – Year 2036 No Build Conditions
Capacity Analysis – Year 2036 Total Conditions
Preliminary Regional Geometric Improvements

# Site Plan




## Lot Summary

### Del Webb

| Product Type | Typ. Lot Size | Phase 1 | Phase 2 | Phase 3 | Total | Mix |
|---|---|---|---|---|---|---|
| Scenic | 44' x 120' | 52 units | 69 units | 81 units | 202 units | 36.73% |
| Distinctive | 50' x 120' | 77 units | 62 units | 103 units | 242 units | 44.00% |
| Echelon | 64' x 120' | 27 units | 36 units | 43 units | 106 units | 19.27% |
| | | 156 units | 167 units | 227 units | 550 units | |

### Pulte

| Product Type | Typ. Lot Size | Phase 1 | Phase 2 | Phase 3 | Total | Mix |
|---|---|---|---|---|---|---|
| Meadows | 55' x 130' | 111 units | | | 111 units | 68.10% |
| Estates | 62' x 130' | 52 units | | | 52 units | 31.90% |
| | | 163 units | | | 163 units | |

Community Total: 713 units

0 400 800 1200

North

Scale: 1" = 800'

Date: March 17, 2021

# COMPOSITE LOTTING PLAN
# LINCOLN PRAIRIE

SEC Planning, LLC
*Land Planning + Landscape Architecture + Community Branding*
AUSTIN, TEXAS
t 512.246.7003
www.secplanning.com + info@secplanning.com

PulteGroup, Inc.
AURORA, ILLINOIS

SHEET FILE: V:\200038-PULT\Cadfiles\PLANNING\Lotting\Composite Lotting 2021-03-17.dwg

Base mapping compiled from best available information. All map data should be considered as preliminary, in need of verification, and subject to change. This land plan is conceptual in nature and does not represent any regulatory approval. Plan is subject to change.

# Traffic Count Summary Sheets

Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990

Count Name: Lincoln Highway with Wolf's Crossing Road
Site Code:
Start Date: 01/07/2021


# Turning Movement Data

| Start Time | Wolf's Crossing Road Eastbound | | | | | | Wolf's Crossing Road Westbound | | | | | | Lincoln Highway Northbound | | | | | | Lincoln Highway Southbound | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | Int. Total |
| 7:00 AM | 0 | 2 | 39 | 13 | 0 | 54 | 0 | 2 | 20 | 9 | 0 | 31 | 0 | 3 | 87 | 2 | 0 | 92 | 0 | 13 | 84 | 3 | 0 | 100 | 277 |
| 7:15 AM | 0 | 5 | 50 | 25 | 0 | 80 | 0 | 7 | 28 | 14 | 0 | 49 | 0 | 8 | 96 | 2 | 0 | 106 | 0 | 14 | 91 | 2 | 0 | 107 | 342 |
| 7:30 AM | 0 | 10 | 57 | 21 | 0 | 88 | 0 | 6 | 34 | 11 | 0 | 51 | 0 | 11 | 115 | 1 | 0 | 127 | 0 | 25 | 118 | 3 | 0 | 146 | 412 |
| 7:45 AM | 0 | 2 | 70 | 14 | 0 | 86 | 0 | 9 | 35 | 18 | 0 | 62 | 0 | 7 | 106 | 1 | 0 | 114 | 0 | 33 | 102 | 0 | 0 | 135 | 397 |
| Hourly Total | 0 | 19 | 216 | 73 | 0 | 308 | 0 | 24 | 117 | 52 | 0 | 193 | 0 | 29 | 404 | 6 | 0 | 439 | 0 | 85 | 395 | 8 | 0 | 488 | 1428 |
| 8:00 AM | 0 | 4 | 41 | 24 | 0 | 69 | 0 | 8 | 29 | 7 | 0 | 44 | 0 | 9 | 93 | 4 | 0 | 106 | 0 | 17 | 98 | 1 | 0 | 116 | 335 |
| 8:15 AM | 0 | 6 | 46 | 24 | 0 | 76 | 0 | 9 | 36 | 10 | 0 | 55 | 0 | 15 | 93 | 1 | 0 | 109 | 0 | 22 | 86 | 2 | 0 | 110 | 350 |
| 8:30 AM | 0 | 3 | 66 | 13 | 0 | 82 | 0 | 10 | 29 | 17 | 0 | 56 | 0 | 15 | 89 | 2 | 0 | 106 | 0 | 17 | 92 | 2 | 0 | 111 | 355 |
| 8:45 AM | 0 | 1 | 59 | 17 | 0 | 77 | 0 | 5 | 33 | 18 | 0 | 56 | 0 | 12 | 105 | 6 | 0 | 123 | 0 | 18 | 74 | 2 | 0 | 94 | 350 |
| Hourly Total | 0 | 14 | 212 | 78 | 0 | 304 | 0 | 32 | 127 | 52 | 0 | 211 | 0 | 51 | 380 | 13 | 0 | 444 | 0 | 74 | 350 | 7 | 0 | 431 | 1390 |
| *** BREAK *** | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 4:00 PM | 0 | 1 | 61 | 19 | 0 | 81 | 0 | 8 | 91 | 23 | 0 | 122 | 0 | 23 | 152 | 8 | 0 | 183 | 0 | 33 | 115 | 4 | 0 | 152 | 538 |
| 4:15 PM | 0 | 2 | 53 | 14 | 0 | 69 | 0 | 4 | 86 | 23 | 0 | 113 | 0 | 27 | 139 | 4 | 0 | 170 | 0 | 19 | 117 | 8 | 0 | 144 | 496 |
| 4:30 PM | 0 | 6 | 57 | 10 | 0 | 73 | 0 | 9 | 85 | 34 | 0 | 128 | 0 | 20 | 127 | 3 | 0 | 150 | 0 | 30 | 120 | 4 | 0 | 154 | 505 |
| 4:45 PM | 0 | 2 | 52 | 20 | 0 | 74 | 0 | 4 | 61 | 34 | 0 | 99 | 0 | 32 | 148 | 3 | 0 | 183 | 0 | 30 | 132 | 6 | 0 | 168 | 524 |
| Hourly Total | 0 | 11 | 223 | 63 | 0 | 297 | 0 | 25 | 323 | 114 | 0 | 462 | 0 | 102 | 566 | 18 | 0 | 686 | 0 | 112 | 484 | 22 | 0 | 618 | 2063 |
| 5:00 PM | 0 | 1 | 45 | 17 | 0 | 63 | 0 | 6 | 66 | 30 | 0 | 102 | 0 | 25 | 91 | 2 | 0 | 118 | 0 | 26 | 123 | 3 | 0 | 152 | 435 |
| 5:15 PM | 0 | 3 | 59 | 19 | 0 | 81 | 0 | 6 | 87 | 25 | 0 | 118 | 0 | 23 | 150 | 4 | 0 | 177 | 0 | 27 | 130 | 4 | 0 | 161 | 537 |
| 5:30 PM | 0 | 4 | 59 | 15 | 0 | 78 | 0 | 7 | 75 | 27 | 0 | 109 | 0 | 23 | 109 | 3 | 0 | 135 | 0 | 29 | 130 | 2 | 0 | 161 | 483 |
| 5:45 PM | 0 | 0 | 52 | 18 | 0 | 70 | 0 | 9 | 75 | 37 | 0 | 121 | 0 | 24 | 144 | 2 | 0 | 170 | 0 | 23 | 112 | 4 | 0 | 139 | 500 |
| Hourly Total | 0 | 8 | 215 | 69 | 0 | 292 | 0 | 28 | 303 | 119 | 0 | 450 | 0 | 95 | 494 | 11 | 0 | 600 | 0 | 105 | 495 | 13 | 0 | 613 | 1955 |
| Grand Total | 0 | 52 | 866 | 283 | 0 | 1201 | 0 | 109 | 870 | 337 | 0 | 1316 | 0 | 277 | 1844 | 48 | 0 | 2169 | 0 | 376 | 1724 | 50 | 0 | 2150 | 6836 |
| Approach % | 0.0 | 4.3 | 72.1 | 23.6 | - | - | 0.0 | 8.3 | 66.1 | 25.6 | - | - | 0.0 | 12.8 | 85.0 | 2.2 | - | - | 0.0 | 17.5 | 80.2 | 2.3 | - | - | - |
| Total % | 0.0 | 0.8 | 12.7 | 4.1 | - | 17.6 | 0.0 | 1.6 | 12.7 | 4.9 | - | 19.3 | 0.0 | 4.1 | 27.0 | 0.7 | - | 31.7 | 0.0 | 5.5 | 25.2 | 0.7 | - | 31.5 | - |
| Lights | 0 | 51 | 855 | 282 | - | 1188 | 0 | 105 | 862 | 323 | - | 1290 | 0 | 272 | 1692 | 46 | - | 2010 | 0 | 358 | 1578 | 48 | - | 1984 | 6472 |
| % Lights | - | 98.1 | 98.7 | 99.6 | - | 98.9 | - | 96.3 | 99.1 | 95.8 | - | 98.0 | - | 98.2 | 91.8 | 95.8 | - | 92.7 | - | 95.2 | 91.5 | 96.0 | - | 92.3 | 94.7 |
| Buses | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 |
| % Buses | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.0 |
| Single-Unit Trucks | 0 | 1 | 11 | 1 | - | 13 | 0 | 2 | 7 | 7 | - | 16 | 0 | 5 | 51 | 1 | - | 57 | 0 | 13 | 62 | 2 | - | 77 | 163 |
| % Single-Unit Trucks | - | 1.9 | 1.3 | 0.4 | - | 1.1 | - | 1.8 | 0.8 | 2.1 | - | 1.2 | - | 1.8 | 2.8 | 2.1 | - | 2.6 | - | 3.5 | 3.6 | 4.0 | - | 3.6 | 2.4 |
| Articulated Trucks | 0 | 0 | 0 | 0 | - | 0 | 0 | 2 | 1 | 7 | - | 10 | 0 | 0 | 101 | 1 | - | 102 | 0 | 5 | 84 | 0 | - | 89 | 201 |
| % Articulated Trucks | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 1.8 | 0.1 | 2.1 | - | 0.8 | - | 0.0 | 5.5 | 2.1 | - | 4.7 | - | 1.3 | 4.9 | 0.0 | - | 4.1 | 2.9 |
| Bicycles on Road | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 |

Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990

Count Name: Lincoln Highway with Wolf's Crossing Road
Site Code:
Start Date: 01/07/2021


# Turning Movement Peak Hour Data (7:30 AM)

| Start Time | Wolf's Crossing Road Eastbound | | | | | | Wolf's Crossing Road Westbound | | | | | | Lincoln Highway Northbound | | | | | | Lincoln Highway Southbound | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | Int. Total |
| 7:30 AM | 0 | 10 | 57 | 21 | 0 | 88 | 0 | 6 | 34 | 11 | 0 | 51 | 0 | 11 | 115 | 1 | 0 | 127 | 0 | 25 | 118 | 3 | 0 | 146 | 412 |
| 7:45 AM | 0 | 2 | 70 | 14 | 0 | 86 | 0 | 9 | 35 | 18 | 0 | 62 | 0 | 7 | 106 | 1 | 0 | 114 | 0 | 33 | 102 | 0 | 0 | 135 | 397 |
| 8:00 AM | 0 | 4 | 41 | 24 | 0 | 69 | 0 | 8 | 29 | 7 | 0 | 44 | 0 | 9 | 93 | 4 | 0 | 106 | 0 | 17 | 98 | 1 | 0 | 116 | 335 |
| 8:15 AM | 0 | 6 | 46 | 24 | 0 | 76 | 0 | 9 | 36 | 10 | 0 | 55 | 0 | 15 | 93 | 1 | 0 | 109 | 0 | 22 | 86 | 2 | 0 | 110 | 350 |
| Total | 0 | 22 | 214 | 83 | 0 | 319 | 0 | 32 | 134 | 46 | 0 | 212 | 0 | 42 | 407 | 7 | 0 | 456 | 0 | 97 | 404 | 6 | 0 | 507 | 1494 |
| Approach % | 0.0 | 6.9 | 67.1 | 26.0 | - | - | 0.0 | 15.1 | 63.2 | 21.7 | - | - | 0.0 | 9.2 | 89.3 | 1.5 | - | - | 0.0 | 19.1 | 79.7 | 1.2 | - | - | - |
| Total % | 0.0 | 1.5 | 14.3 | 5.6 | - | 21.4 | 0.0 | 2.1 | 9.0 | 3.1 | - | 14.2 | 0.0 | 2.8 | 27.2 | 0.5 | - | 30.5 | 0.0 | 6.5 | 27.0 | 0.4 | - | 33.9 | - |
| PHF | 0.000 | 0.550 | 0.764 | 0.865 | - | 0.906 | 0.000 | 0.889 | 0.931 | 0.639 | - | 0.855 | 0.000 | 0.700 | 0.885 | 0.438 | - | 0.898 | 0.000 | 0.735 | 0.856 | 0.500 | - | 0.868 | 0.907 |
| Lights | 0 | 22 | 208 | 83 | - | 313 | 0 | 31 | 131 | 41 | - | 203 | 0 | 37 | 356 | 6 | - | 399 | 0 | 88 | 348 | 5 | - | 441 | 1356 |
| % Lights | - | 100.0 | 97.2 | 100.0 | - | 98.1 | - | 96.9 | 97.8 | 89.1 | - | 95.8 | - | 88.1 | 87.5 | 85.7 | - | 87.5 | - | 90.7 | 86.1 | 83.3 | - | 87.0 | 90.8 |
| Buses | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 |
| % Buses | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.0 |
| Single-Unit Trucks | 0 | 0 | 6 | 0 | - | 6 | 0 | 1 | 2 | 3 | - | 6 | 0 | 5 | 15 | 1 | - | 21 | 0 | 6 | 18 | 1 | - | 25 | 58 |
| % Single-Unit Trucks | - | 0.0 | 2.8 | 0.0 | - | 1.9 | - | 3.1 | 1.5 | 6.5 | - | 2.8 | - | 11.9 | 3.7 | 14.3 | - | 4.6 | - | 6.2 | 4.5 | 16.7 | - | 4.9 | 3.9 |
| Articulated Trucks | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 1 | 2 | - | 3 | 0 | 0 | 36 | 0 | - | 36 | 0 | 3 | 38 | 0 | - | 41 | 80 |
| % Articulated Trucks | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.7 | 4.3 | - | 1.4 | - | 0.0 | 8.8 | 0.0 | - | 7.9 | - | 3.1 | 9.4 | 0.0 | - | 8.1 | 5.4 |
| Bicycles on Road | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 |
| % Bicycles on Road | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.0 |
| Pedestrians | - | - | - | - | 0 | - | - | - | - | - | 0 | - | - | - | - | - | 0 | - | - | - | - | - | 0 | - | - |
| % Pedestrians | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |

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9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990

Count Name: Lincoln Highway with Wolf's Crossing Road
Site Code:
Start Date: 01/07/2021


# Turning Movement Peak Hour Data (4:30 PM)

| Start Time | Wolf's Crossing Road Eastbound | | | | | | Wolf's Crossing Road Westbound | | | | | | Lincoln Highway Northbound | | | | | | Lincoln Highway Southbound | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | Int. Total |
| 4:30 PM | 0 | 6 | 57 | 10 | 0 | 73 | 0 | 9 | 85 | 34 | 0 | 128 | 0 | 20 | 127 | 3 | 0 | 150 | 0 | 30 | 120 | 4 | 0 | 154 | 505 |
| 4:45 PM | 0 | 2 | 52 | 20 | 0 | 74 | 0 | 4 | 61 | 34 | 0 | 99 | 0 | 32 | 148 | 3 | 0 | 183 | 0 | 30 | 132 | 6 | 0 | 168 | 524 |
| 5:00 PM | 0 | 1 | 45 | 17 | 0 | 63 | 0 | 6 | 66 | 30 | 0 | 102 | 0 | 25 | 91 | 2 | 0 | 118 | 0 | 26 | 123 | 3 | 0 | 152 | 435 |
| 5:15 PM | 0 | 3 | 59 | 19 | 0 | 81 | 0 | 6 | 87 | 25 | 0 | 118 | 0 | 23 | 150 | 4 | 0 | 177 | 0 | 27 | 130 | 4 | 0 | 161 | 537 |
| Total | 0 | 12 | 213 | 66 | 0 | 291 | 0 | 25 | 299 | 123 | 0 | 447 | 0 | 100 | 516 | 12 | 0 | 628 | 0 | 113 | 505 | 17 | 0 | 635 | 2001 |
| Approach % | 0.0 | 4.1 | 73.2 | 22.7 | - | - | 0.0 | 5.6 | 66.9 | 27.5 | - | - | 0.0 | 15.9 | 82.2 | 1.9 | - | - | 0.0 | 17.8 | 79.5 | 2.7 | - | - | - |
| Total % | 0.0 | 0.6 | 10.6 | 3.3 | - | 14.5 | 0.0 | 1.2 | 14.9 | 6.1 | - | 22.3 | 0.0 | 5.0 | 25.8 | 0.6 | - | 31.4 | 0.0 | 5.6 | 25.2 | 0.8 | - | 31.7 | - |
| PHF | 0.000 | 0.500 | 0.903 | 0.825 | - | 0.898 | 0.000 | 0.694 | 0.859 | 0.904 | - | 0.873 | 0.000 | 0.781 | 0.860 | 0.750 | - | 0.858 | 0.000 | 0.942 | 0.956 | 0.708 | - | 0.945 | 0.932 |
| Lights | 0 | 12 | 213 | 66 | - | 291 | 0 | 25 | 297 | 118 | - | 440 | 0 | 100 | 483 | 12 | - | 595 | 0 | 109 | 479 | 17 | - | 605 | 1931 |
| % Lights | - | 100.0 | 100.0 | 100.0 | - | 100.0 | - | 100.0 | 99.3 | 95.9 | - | 98.4 | - | 100.0 | 93.6 | 100.0 | - | 94.7 | - | 96.5 | 94.9 | 100.0 | - | 95.3 | 96.5 |
| Buses | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 |
| % Buses | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.0 |
| Single-Unit Trucks | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 2 | 4 | - | 6 | 0 | 0 | 11 | 0 | - | 11 | 0 | 3 | 11 | 0 | - | 14 | 31 |
| % Single-Unit Trucks | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.7 | 3.3 | - | 1.3 | - | 0.0 | 2.1 | 0.0 | - | 1.8 | - | 2.7 | 2.2 | 0.0 | - | 2.2 | 1.5 |
| Articulated Trucks | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 1 | - | 1 | 0 | 0 | 22 | 0 | - | 22 | 0 | 1 | 15 | 0 | - | 16 | 39 |
| % Articulated Trucks | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.8 | - | 0.2 | - | 0.0 | 4.3 | 0.0 | - | 3.5 | - | 0.9 | 3.0 | 0.0 | - | 2.5 | 1.9 |
| Bicycles on Road | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 |
| % Bicycles on Road | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.0 |
| Pedestrians | - | - | - | - | 0 | - | - | - | - | - | 0 | - | - | - | - | - | 0 | - | - | - | - | - | 0 | - | - |
| % Pedestrians | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |

Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990

Count Name: Eola Road with Lincoln Highway
Site Code:
Start Date: 01/07/2021


# Turning Movement Data

| Start Time | Eola Road Westbound | | | | | Lincoln Highway Northbound | | | | | Lincoln Highway Southbound | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | U-Turn | Left | Right | Peds | App. Total | U-Turn | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Peds | App. Total | Int. Total |
| 7:00 AM | 0 | 25 | 0 | 0 | 25 | 0 | 92 | 33 | 0 | 125 | 0 | 0 | 94 | 0 | 94 | 244 |
| 7:15 AM | 0 | 40 | 0 | 0 | 40 | 0 | 106 | 45 | 0 | 151 | 0 | 0 | 120 | 0 | 120 | 311 |
| 7:30 AM | 0 | 26 | 0 | 0 | 26 | 0 | 130 | 67 | 0 | 197 | 0 | 1 | 136 | 0 | 137 | 360 |
| 7:45 AM | 0 | 25 | 0 | 0 | 25 | 0 | 117 | 58 | 0 | 175 | 0 | 0 | 142 | 0 | 142 | 342 |
| Hourly Total | 0 | 116 | 0 | 0 | 116 | 0 | 445 | 203 | 0 | 648 | 0 | 1 | 492 | 0 | 493 | 1257 |
| 8:00 AM | 0 | 34 | 0 | 0 | 34 | 0 | 106 | 39 | 0 | 145 | 0 | 0 | 127 | 0 | 127 | 306 |
| 8:15 AM | 0 | 23 | 0 | 0 | 23 | 0 | 106 | 43 | 0 | 149 | 0 | 0 | 125 | 0 | 125 | 297 |
| 8:30 AM | 0 | 33 | 0 | 0 | 33 | 0 | 106 | 45 | 0 | 151 | 0 | 0 | 103 | 0 | 103 | 287 |
| 8:45 AM | 0 | 24 | 0 | 0 | 24 | 0 | 124 | 48 | 0 | 172 | 0 | 0 | 112 | 0 | 112 | 308 |
| Hourly Total | 0 | 114 | 0 | 0 | 114 | 0 | 442 | 175 | 0 | 617 | 0 | 0 | 467 | 0 | 467 | 1198 |
| *** BREAK *** | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 4:00 PM | 0 | 53 | 0 | 0 | 53 | 0 | 158 | 32 | 0 | 190 | 0 | 0 | 135 | 0 | 135 | 378 |
| 4:15 PM | 0 | 56 | 1 | 0 | 57 | 0 | 176 | 56 | 0 | 232 | 0 | 1 | 134 | 0 | 135 | 424 |
| 4:30 PM | 0 | 69 | 1 | 0 | 70 | 0 | 161 | 48 | 0 | 209 | 0 | 0 | 147 | 0 | 147 | 426 |
| 4:45 PM | 0 | 60 | 0 | 0 | 60 | 0 | 176 | 57 | 0 | 233 | 0 | 0 | 160 | 0 | 160 | 453 |
| Hourly Total | 0 | 238 | 2 | 0 | 240 | 0 | 671 | 193 | 0 | 864 | 0 | 1 | 576 | 0 | 577 | 1681 |
| 5:00 PM | 0 | 55 | 0 | 0 | 55 | 0 | 117 | 52 | 0 | 169 | 0 | 0 | 126 | 0 | 126 | 350 |
| 5:15 PM | 0 | 48 | 0 | 0 | 48 | 0 | 175 | 61 | 0 | 236 | 0 | 2 | 158 | 0 | 160 | 444 |
| 5:30 PM | 0 | 63 | 0 | 0 | 63 | 0 | 139 | 34 | 0 | 173 | 0 | 0 | 152 | 0 | 152 | 388 |
| 5:45 PM | 0 | 52 | 0 | 0 | 52 | 0 | 160 | 49 | 0 | 209 | 0 | 0 | 138 | 0 | 138 | 399 |
| Hourly Total | 0 | 218 | 0 | 0 | 218 | 0 | 591 | 196 | 0 | 787 | 0 | 2 | 574 | 0 | 576 | 1581 |
| Grand Total | 0 | 686 | 2 | 0 | 688 | 0 | 2149 | 767 | 0 | 2916 | 0 | 4 | 2109 | 0 | 2113 | 5717 |
| Approach % | 0.0 | 99.7 | 0.3 | - | - | 0.0 | 73.7 | 26.3 | - | - | 0.0 | 0.2 | 99.8 | - | - | - |
| Total % | 0.0 | 12.0 | 0.0 | - | 12.0 | 0.0 | 37.6 | 13.4 | - | 51.0 | 0.0 | 0.1 | 36.9 | - | 37.0 | - |
| Lights | 0 | 675 | 2 | - | 677 | 0 | 1993 | 751 | - | 2744 | 0 | 3 | 1963 | - | 1966 | 5387 |
| % Lights | - | 98.4 | 100.0 | - | 98.4 | - | 92.7 | 97.9 | - | 94.1 | - | 75.0 | 93.1 | - | 93.0 | 94.2 |
| Buses | 0 | 1 | 0 | - | 1 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | - | 0 | 1 |
| % Buses | - | 0.1 | 0.0 | - | 0.1 | - | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | - | 0.0 | 0.0 |
| Single-Unit Trucks | 0 | 6 | 0 | - | 6 | 0 | 50 | 10 | - | 60 | 0 | 0 | 61 | - | 61 | 127 |
| % Single-Unit Trucks | - | 0.9 | 0.0 | - | 0.9 | - | 2.3 | 1.3 | - | 2.1 | - | 0.0 | 2.9 | - | 2.9 | 2.2 |
| Articulated Trucks | 0 | 4 | 0 | - | 4 | 0 | 106 | 6 | - | 112 | 0 | 1 | 85 | - | 86 | 202 |
| % Articulated Trucks | - | 0.6 | 0.0 | - | 0.6 | - | 4.9 | 0.8 | - | 3.8 | - | 25.0 | 4.0 | - | 4.1 | 3.5 |
| Bicycles on Road | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | - | 0 | 0 |
| % Bicycles on Road | - | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | - | 0.0 | 0.0 |
| Pedestrians | - | - | - | 0 | - | - | - | - | 0 | - | - | - | - | 0 | - | - |
| % Pedestrians | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |

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Rosemont, Illinois, United States 60018
(847)518-9990

Count Name: Eola Road with Lincoln Highway
Site Code:
Start Date: 01/07/2021


# Turning Movement Peak Hour Data (7:30 AM)

| Start Time | Eola Road Westbound | | | | | Lincoln Highway Northbound | | | | | Lincoln Highway Southbound | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | U-Turn | Left | Right | Peds | App. Total | U-Turn | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Peds | App. Total | Int. Total |
| 7:30 AM | 0 | 26 | 0 | 0 | 26 | 0 | 130 | 67 | 0 | 197 | 0 | 1 | 136 | 0 | 137 | 360 |
| 7:45 AM | 0 | 25 | 0 | 0 | 25 | 0 | 117 | 58 | 0 | 175 | 0 | 0 | 142 | 0 | 142 | 342 |
| 8:00 AM | 0 | 34 | 0 | 0 | 34 | 0 | 106 | 39 | 0 | 145 | 0 | 0 | 127 | 0 | 127 | 306 |
| 8:15 AM | 0 | 23 | 0 | 0 | 23 | 0 | 106 | 43 | 0 | 149 | 0 | 0 | 125 | 0 | 125 | 297 |
| Total | 0 | 108 | 0 | 0 | 108 | 0 | 459 | 207 | 0 | 666 | 0 | 1 | 530 | 0 | 531 | 1305 |
| Approach % | 0.0 | 100.0 | 0.0 | - | - | 0.0 | 68.9 | 31.1 | - | - | 0.0 | 0.2 | 99.8 | - | - | - |
| Total % | 0.0 | 8.3 | 0.0 | - | 8.3 | 0.0 | 35.2 | 15.9 | - | 51.0 | 0.0 | 0.1 | 40.6 | - | 40.7 | - |
| PHF | 0.000 | 0.794 | 0.000 | - | 0.794 | 0.000 | 0.883 | 0.772 | - | 0.845 | 0.000 | 0.250 | 0.933 | - | 0.935 | 0.906 |
| Lights | 0 | 104 | 0 | - | 104 | 0 | 401 | 202 | - | 603 | 0 | 0 | 472 | - | 472 | 1179 |
| % Lights | - | 96.3 | - | - | 96.3 | - | 87.4 | 97.6 | - | 90.5 | - | 0.0 | 89.1 | - | 88.9 | 90.3 |
| Buses | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | - | 0 | 0 |
| % Buses | - | 0.0 | - | - | 0.0 | - | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | - | 0.0 | 0.0 |
| Single-Unit Trucks | 0 | 3 | 0 | - | 3 | 0 | 21 | 3 | - | 24 | 0 | 0 | 18 | - | 18 | 45 |
| % Single-Unit Trucks | - | 2.8 | - | - | 2.8 | - | 4.6 | 1.4 | - | 3.6 | - | 0.0 | 3.4 | - | 3.4 | 3.4 |
| Articulated Trucks | 0 | 1 | 0 | - | 1 | 0 | 37 | 2 | - | 39 | 0 | 1 | 40 | - | 41 | 81 |
| % Articulated Trucks | - | 0.9 | - | - | 0.9 | - | 8.1 | 1.0 | - | 5.9 | - | 100.0 | 7.5 | - | 7.7 | 6.2 |
| Bicycles on Road | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | - | 0 | 0 |
| % Bicycles on Road | - | 0.0 | - | - | 0.0 | - | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | - | 0.0 | 0.0 |
| Pedestrians | - | - | - | 0 | - | - | - | - | 0 | - | - | - | - | 0 | - | - |
| % Pedestrians | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |

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Rosemont, Illinois, United States 60018
(847)518-9990

Count Name: Eola Road with Lincoln Highway
Site Code:
Start Date: 01/07/2021


# Turning Movement Peak Hour Data (4:30 PM)

| Start Time | Eola Road Westbound | | | | | Lincoln Highway Northbound | | | | | Lincoln Highway Southbound | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | U-Turn | Left | Right | Peds | App. Total | U-Turn | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Peds | App. Total | Int. Total |
| 4:30 PM | 0 | 69 | 1 | 0 | 70 | 0 | 161 | 48 | 0 | 209 | 0 | 0 | 147 | 0 | 147 | 426 |
| 4:45 PM | 0 | 60 | 0 | 0 | 60 | 0 | 176 | 57 | 0 | 233 | 0 | 0 | 160 | 0 | 160 | 453 |
| 5:00 PM | 0 | 55 | 0 | 0 | 55 | 0 | 117 | 52 | 0 | 169 | 0 | 0 | 126 | 0 | 126 | 350 |
| 5:15 PM | 0 | 48 | 0 | 0 | 48 | 0 | 175 | 61 | 0 | 236 | 0 | 2 | 158 | 0 | 160 | 444 |
| Total | 0 | 232 | 1 | 0 | 233 | 0 | 629 | 218 | 0 | 847 | 0 | 2 | 591 | 0 | 593 | 1673 |
| Approach % | 0.0 | 99.6 | 0.4 | - | - | 0.0 | 74.3 | 25.7 | - | - | 0.0 | 0.3 | 99.7 | - | - | - |
| Total % | 0.0 | 13.9 | 0.1 | - | 13.9 | 0.0 | 37.6 | 13.0 | - | 50.6 | 0.0 | 0.1 | 35.3 | - | 35.4 | - |
| PHF | 0.000 | 0.841 | 0.250 | - | 0.832 | 0.000 | 0.893 | 0.893 | - | 0.897 | 0.000 | 0.250 | 0.923 | - | 0.927 | 0.923 |
| Lights | 0 | 229 | 1 | - | 230 | 0 | 597 | 215 | - | 812 | 0 | 2 | 562 | - | 564 | 1606 |
| % Lights | - | 98.7 | 100.0 | - | 98.7 | - | 94.9 | 98.6 | - | 95.9 | - | 100.0 | 95.1 | - | 95.1 | 96.0 |
| Buses | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | - | 0 | 0 |
| % Buses | - | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | - | 0.0 | 0.0 |
| Single-Unit Trucks | 0 | 1 | 0 | - | 1 | 0 | 8 | 2 | - | 10 | 0 | 0 | 14 | - | 14 | 25 |
| % Single-Unit Trucks | - | 0.4 | 0.0 | - | 0.4 | - | 1.3 | 0.9 | - | 1.2 | - | 0.0 | 2.4 | - | 2.4 | 1.5 |
| Articulated Trucks | 0 | 2 | 0 | - | 2 | 0 | 24 | 1 | - | 25 | 0 | 0 | 15 | - | 15 | 42 |
| % Articulated Trucks | - | 0.9 | 0.0 | - | 0.9 | - | 3.8 | 0.5 | - | 3.0 | - | 0.0 | 2.5 | - | 2.5 | 2.5 |
| Bicycles on Road | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | - | 0 | 0 |
| % Bicycles on Road | - | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | - | 0.0 | 0.0 |
| Pedestrians | - | - | - | 0 | - | - | - | - | 0 | - | - | - | - | 0 | - | - |
| % Pedestrians | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |

Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990

Count Name: Lincoln Highway with 111th Street
Site Code:
Start Date: 01/07/2021


# Turning Movement Data

| Start Time | 111th Street Eastbound | | | | | | 111th Street Westbound | | | | | | Lincoln highway Northbound | | | | | | Lincoln Highway Southbound | | | | | | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | |
| 7:00 AM | 0 | 21 | 20 | 1 | 0 | 42 | 0 | 2 | 13 | 27 | 0 | 42 | 0 | 0 | 95 | 6 | 0 | 101 | 0 | 40 | 74 | 9 | 0 | 123 | 308 |
| 7:15 AM | 0 | 26 | 28 | 1 | 0 | 55 | 0 | 2 | 13 | 35 | 0 | 50 | 0 | 1 | 91 | 2 | 0 | 94 | 0 | 60 | 85 | 13 | 0 | 158 | 357 |
| 7:30 AM | 0 | 26 | 39 | 1 | 0 | 66 | 0 | 0 | 21 | 34 | 0 | 55 | 0 | 1 | 115 | 7 | 0 | 123 | 0 | 61 | 84 | 12 | 0 | 157 | 401 |
| 7:45 AM | 0 | 15 | 34 | 3 | 0 | 52 | 0 | 1 | 10 | 45 | 0 | 56 | 0 | 1 | 124 | 5 | 0 | 130 | 0 | 70 | 87 | 9 | 0 | 166 | 404 |
| Hourly Total | 0 | 88 | 121 | 6 | 0 | 215 | 0 | 5 | 57 | 141 | 0 | 203 | 0 | 3 | 425 | 20 | 0 | 448 | 0 | 231 | 330 | 43 | 0 | 604 | 1470 |
| 8:00 AM | 0 | 17 | 25 | 2 | 0 | 44 | 0 | 3 | 23 | 36 | 0 | 62 | 0 | 0 | 95 | 4 | 0 | 99 | 0 | 52 | 94 | 11 | 0 | 157 | 362 |
| 8:15 AM | 0 | 17 | 34 | 3 | 0 | 54 | 0 | 1 | 8 | 37 | 0 | 46 | 0 | 3 | 94 | 2 | 0 | 99 | 0 | 44 | 90 | 12 | 0 | 146 | 345 |
| 8:30 AM | 0 | 17 | 30 | 0 | 0 | 47 | 0 | 0 | 9 | 45 | 0 | 54 | 0 | 0 | 113 | 2 | 0 | 115 | 0 | 43 | 83 | 15 | 0 | 141 | 357 |
| 8:45 AM | 0 | 27 | 18 | 2 | 0 | 47 | 0 | 2 | 11 | 29 | 0 | 42 | 0 | 1 | 87 | 7 | 0 | 95 | 0 | 35 | 80 | 8 | 0 | 123 | 307 |
| Hourly Total | 0 | 78 | 107 | 7 | 0 | 192 | 0 | 6 | 51 | 147 | 0 | 204 | 0 | 4 | 389 | 15 | 0 | 408 | 0 | 174 | 347 | 46 | 0 | 567 | 1371 |
| *** BREAK *** | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 4:00 PM | 0 | 9 | 24 | 4 | 0 | 37 | 0 | 2 | 53 | 70 | 0 | 125 | 0 | 6 | 104 | 4 | 0 | 114 | 0 | 43 | 118 | 23 | 0 | 184 | 460 |
| 4:15 PM | 0 | 15 | 25 | 1 | 0 | 41 | 0 | 4 | 59 | 75 | 0 | 138 | 0 | 3 | 139 | 3 | 0 | 145 | 0 | 46 | 107 | 39 | 0 | 192 | 516 |
| 4:30 PM | 0 | 27 | 18 | 3 | 0 | 48 | 0 | 6 | 46 | 77 | 0 | 129 | 0 | 5 | 118 | 3 | 0 | 126 | 0 | 33 | 146 | 24 | 0 | 203 | 506 |
| 4:45 PM | 0 | 15 | 18 | 2 | 0 | 35 | 0 | 3 | 46 | 68 | 0 | 117 | 0 | 4 | 137 | 3 | 0 | 144 | 0 | 47 | 147 | 28 | 0 | 222 | 518 |
| Hourly Total | 0 | 66 | 85 | 10 | 0 | 161 | 0 | 15 | 204 | 290 | 0 | 509 | 0 | 18 | 498 | 13 | 0 | 529 | 0 | 169 | 518 | 114 | 0 | 801 | 2000 |
| 5:00 PM | 0 | 11 | 10 | 0 | 0 | 21 | 0 | 4 | 42 | 57 | 0 | 103 | 0 | 5 | 101 | 2 | 0 | 108 | 0 | 36 | 122 | 26 | 0 | 184 | 416 |
| 5:15 PM | 0 | 18 | 16 | 1 | 0 | 35 | 0 | 3 | 53 | 74 | 0 | 130 | 0 | 3 | 127 | 1 | 0 | 131 | 0 | 46 | 138 | 25 | 0 | 209 | 505 |
| 5:30 PM | 0 | 9 | 11 | 1 | 0 | 21 | 0 | 0 | 35 | 62 | 0 | 97 | 0 | 3 | 110 | 3 | 0 | 116 | 0 | 49 | 146 | 28 | 0 | 223 | 457 |
| 5:45 PM | 0 | 22 | 20 | 0 | 0 | 42 | 0 | 3 | 24 | 74 | 0 | 101 | 0 | 4 | 124 | 3 | 0 | 131 | 0 | 43 | 120 | 25 | 0 | 188 | 462 |
| Hourly Total | 0 | 60 | 57 | 2 | 0 | 119 | 0 | 10 | 154 | 267 | 0 | 431 | 0 | 15 | 462 | 9 | 0 | 486 | 0 | 174 | 526 | 104 | 0 | 804 | 1840 |
| Grand Total | 0 | 292 | 370 | 25 | 0 | 687 | 0 | 36 | 466 | 845 | 0 | 1347 | 0 | 40 | 1774 | 57 | 0 | 1871 | 0 | 748 | 1721 | 307 | 0 | 2776 | 6681 |
| Approach % | 0.0 | 42.5 | 53.9 | 3.6 | - | - | 0.0 | 2.7 | 34.6 | 62.7 | - | - | 0.0 | 2.1 | 94.8 | 3.0 | - | - | 0.0 | 26.9 | 62.0 | 11.1 | - | - | - |
| Total % | 0.0 | 4.4 | 5.5 | 0.4 | - | 10.3 | 0.0 | 0.5 | 7.0 | 12.6 | - | 20.2 | 0.0 | 0.6 | 26.6 | 0.9 | - | 28.0 | 0.0 | 11.2 | 25.8 | 4.6 | - | 41.6 | - |
| Lights | 0 | 291 | 366 | 23 | - | 680 | 0 | 28 | 462 | 809 | - | 1299 | 0 | 39 | 1641 | 51 | - | 1731 | 0 | 721 | 1597 | 304 | - | 2622 | 6332 |
| % Lights | - | 99.7 | 98.9 | 92.0 | - | 99.0 | - | 77.8 | 99.1 | 95.7 | - | 96.4 | - | 97.5 | 92.5 | 89.5 | - | 92.5 | - | 96.4 | 92.8 | 99.0 | - | 94.5 | 94.8 |
| Buses | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 1 | 0 | - | 1 | 0 | 2 | 0 | 0 | - | 2 | 3 |
| % Buses | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.1 | 0.0 | - | 0.1 | - | 0.3 | 0.0 | 0.0 | - | 0.1 | 0.0 |
| Single-Unit Trucks | 0 | 1 | 4 | 2 | - | 7 | 0 | 1 | 4 | 16 | - | 21 | 0 | 1 | 40 | 2 | - | 43 | 0 | 16 | 44 | 3 | - | 63 | 134 |
| % Single-Unit Trucks | - | 0.3 | 1.1 | 8.0 | - | 1.0 | - | 2.8 | 0.9 | 1.9 | - | 1.6 | - | 2.5 | 2.3 | 3.5 | - | 2.3 | - | 2.1 | 2.6 | 1.0 | - | 2.3 | 2.0 |
| Articulated Trucks | 0 | 0 | 0 | 0 | - | 0 | 0 | 7 | 0 | 20 | - | 27 | 0 | 0 | 92 | 4 | - | 96 | 0 | 9 | 80 | 0 | - | 89 | 212 |
| % Articulated Trucks | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 19.4 | 0.0 | 2.4 | - | 2.0 | - | 0.0 | 5.2 | 7.0 | - | 5.1 | - | 1.2 | 4.6 | 0.0 | - | 3.2 | 3.2 |
| Bicycles on Road | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 |

Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990

Count Name: Lincoln Highway with 111th Street
Site Code:
Start Date: 01/07/2021


# Turning Movement Peak Hour Data (7:30 AM)

| Start Time | 111th Street Eastbound | | | | | | 111th Street Westbound | | | | | | Lincoln highway Northbound | | | | | | Lincoln Highway Southbound | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | Int. Total |
| 7:30 AM | 0 | 26 | 39 | 1 | 0 | 66 | 0 | 0 | 21 | 34 | 0 | 55 | 0 | 1 | 115 | 7 | 0 | 123 | 0 | 61 | 84 | 12 | 0 | 157 | 401 |
| 7:45 AM | 0 | 15 | 34 | 3 | 0 | 52 | 0 | 1 | 10 | 45 | 0 | 56 | 0 | 1 | 124 | 5 | 0 | 130 | 0 | 70 | 87 | 9 | 0 | 166 | 404 |
| 8:00 AM | 0 | 17 | 25 | 2 | 0 | 44 | 0 | 3 | 23 | 36 | 0 | 62 | 0 | 0 | 95 | 4 | 0 | 99 | 0 | 52 | 94 | 11 | 0 | 157 | 362 |
| 8:15 AM | 0 | 17 | 34 | 3 | 0 | 54 | 0 | 1 | 8 | 37 | 0 | 46 | 0 | 3 | 94 | 2 | 0 | 99 | 0 | 44 | 90 | 12 | 0 | 146 | 345 |
| Total | 0 | 75 | 132 | 9 | 0 | 216 | 0 | 5 | 62 | 152 | 0 | 219 | 0 | 5 | 428 | 18 | 0 | 451 | 0 | 227 | 355 | 44 | 0 | 626 | 1512 |
| Approach % | 0.0 | 34.7 | 61.1 | 4.2 | - | - | 0.0 | 2.3 | 28.3 | 69.4 | - | - | 0.0 | 1.1 | 94.9 | 4.0 | - | - | 0.0 | 36.3 | 56.7 | 7.0 | - | - | - |
| Total % | 0.0 | 5.0 | 8.7 | 0.6 | - | 14.3 | 0.0 | 0.3 | 4.1 | 10.1 | - | 14.5 | 0.0 | 0.3 | 28.3 | 1.2 | - | 29.8 | 0.0 | 15.0 | 23.5 | 2.9 | - | 41.4 | - |
| PHF | 0.000 | 0.721 | 0.846 | 0.750 | - | 0.818 | 0.000 | 0.417 | 0.674 | 0.844 | - | 0.883 | 0.000 | 0.417 | 0.863 | 0.643 | - | 0.867 | 0.000 | 0.811 | 0.944 | 0.917 | - | 0.943 | 0.936 |
| Lights | 0 | 75 | 131 | 9 | - | 215 | 0 | 2 | 62 | 142 | - | 206 | 0 | 5 | 380 | 12 | - | 397 | 0 | 217 | 308 | 43 | - | 568 | 1386 |
| % Lights | - | 100.0 | 99.2 | 100.0 | - | 99.5 | - | 40.0 | 100.0 | 93.4 | - | 94.1 | - | 100.0 | 88.8 | 66.7 | - | 88.0 | - | 95.6 | 86.8 | 97.7 | - | 90.7 | 91.7 |
| Buses | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 |
| % Buses | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.0 |
| Single-Unit Trucks | 0 | 0 | 1 | 0 | - | 1 | 0 | 1 | 0 | 7 | - | 8 | 0 | 0 | 14 | 2 | - | 16 | 0 | 6 | 11 | 1 | - | 18 | 43 |
| % Single-Unit Trucks | - | 0.0 | 0.8 | 0.0 | - | 0.5 | - | 20.0 | 0.0 | 4.6 | - | 3.7 | - | 0.0 | 3.3 | 11.1 | - | 3.5 | - | 2.6 | 3.1 | 2.3 | - | 2.9 | 2.8 |
| Articulated Trucks | 0 | 0 | 0 | 0 | - | 0 | 0 | 2 | 0 | 3 | - | 5 | 0 | 0 | 34 | 4 | - | 38 | 0 | 4 | 36 | 0 | - | 40 | 83 |
| % Articulated Trucks | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 40.0 | 0.0 | 2.0 | - | 2.3 | - | 0.0 | 7.9 | 22.2 | - | 8.4 | - | 1.8 | 10.1 | 0.0 | - | 6.4 | 5.5 |
| Bicycles on Road | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 |
| % Bicycles on Road | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.0 |
| Pedestrians | - | - | - | - | 0 | - | - | - | - | - | 0 | - | - | - | - | - | 0 | - | - | - | - | - | 0 | - | - |
| % Pedestrians | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |

Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990

Count Name: Lincoln Highway with 111th Street
Site Code:
Start Date: 01/07/2021


# Turning Movement Peak Hour Data (4:30 PM)

| Start Time | 111th Street Eastbound | | | | | | 111th Street Westbound | | | | | | Lincoln highway Northbound | | | | | | Lincoln Highway Southbound | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | Int. Total |
| 4:30 PM | 0 | 27 | 18 | 3 | 0 | 48 | 0 | 6 | 46 | 77 | 0 | 129 | 0 | 5 | 118 | 3 | 0 | 126 | 0 | 33 | 146 | 24 | 0 | 203 | 506 |
| 4:45 PM | 0 | 15 | 18 | 2 | 0 | 35 | 0 | 3 | 46 | 68 | 0 | 117 | 0 | 4 | 137 | 3 | 0 | 144 | 0 | 47 | 147 | 28 | 0 | 222 | 518 |
| 5:00 PM | 0 | 11 | 10 | 0 | 0 | 21 | 0 | 4 | 42 | 57 | 0 | 103 | 0 | 5 | 101 | 2 | 0 | 108 | 0 | 36 | 122 | 26 | 0 | 184 | 416 |
| 5:15 PM | 0 | 18 | 16 | 1 | 0 | 35 | 0 | 3 | 53 | 74 | 0 | 130 | 0 | 3 | 127 | 1 | 0 | 131 | 0 | 46 | 138 | 25 | 0 | 209 | 505 |
| Total | 0 | 71 | 62 | 6 | 0 | 139 | 0 | 16 | 187 | 276 | 0 | 479 | 0 | 17 | 483 | 9 | 0 | 509 | 0 | 162 | 553 | 103 | 0 | 818 | 1945 |
| Approach % | 0.0 | 51.1 | 44.6 | 4.3 | - | - | 0.0 | 3.3 | 39.0 | 57.6 | - | - | 0.0 | 3.3 | 94.9 | 1.8 | - | - | 0.0 | 19.8 | 67.6 | 12.6 | - | - | - |
| Total % | 0.0 | 3.7 | 3.2 | 0.3 | - | 7.1 | 0.0 | 0.8 | 9.6 | 14.2 | - | 24.6 | 0.0 | 0.9 | 24.8 | 0.5 | - | 26.2 | 0.0 | 8.3 | 28.4 | 5.3 | - | 42.1 | - |
| PHF | 0.000 | 0.657 | 0.861 | 0.500 | - | 0.724 | 0.000 | 0.667 | 0.882 | 0.896 | - | 0.921 | 0.000 | 0.850 | 0.881 | 0.750 | - | 0.884 | 0.000 | 0.862 | 0.940 | 0.920 | - | 0.921 | 0.939 |
| Lights | 0 | 71 | 62 | 6 | - | 139 | 0 | 15 | 185 | 262 | - | 462 | 0 | 17 | 460 | 9 | - | 486 | 0 | 159 | 527 | 102 | - | 788 | 1875 |
| % Lights | - | 100.0 | 100.0 | 100.0 | - | 100.0 | - | 93.8 | 98.9 | 94.9 | - | 96.5 | - | 100.0 | 95.2 | 100.0 | - | 95.5 | - | 98.1 | 95.3 | 99.0 | - | 96.3 | 96.4 |
| Buses | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 |
| % Buses | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.0 |
| Single-Unit Trucks | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 2 | 2 | - | 4 | 0 | 0 | 9 | 0 | - | 9 | 0 | 2 | 11 | 1 | - | 14 | 27 |
| % Single-Unit Trucks | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 1.1 | 0.7 | - | 0.8 | - | 0.0 | 1.9 | 0.0 | - | 1.8 | - | 1.2 | 2.0 | 1.0 | - | 1.7 | 1.4 |
| Articulated Trucks | 0 | 0 | 0 | 0 | - | 0 | 0 | 1 | 0 | 12 | - | 13 | 0 | 0 | 14 | 0 | - | 14 | 0 | 1 | 15 | 0 | - | 16 | 43 |
| % Articulated Trucks | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 6.3 | 0.0 | 4.3 | - | 2.7 | - | 0.0 | 2.9 | 0.0 | - | 2.8 | - | 0.6 | 2.7 | 0.0 | - | 2.0 | 2.2 |
| Bicycles on Road | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 |
| % Bicycles on Road | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.0 |
| Pedestrians | - | - | - | - | 0 | - | - | - | - | - | 0 | - | - | - | - | - | 0 | - | - | - | - | - | 0 | - | - |
| % Pedestrians | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |

Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990

Count Name: Wolf's Crossing Road with Eola Road
Site Code:
Start Date: 01/07/2021


# Turning Movement Data

| Start Time | Wolf's Crossing Road Eastbound | | | | | | Wolf's Crossing Road Westbound | | | | | | Eola Road Northbound | | | | | | Eola Road Southbound | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | Int. Total |
| 7:00 AM | 0 | 21 | 36 | 0 | 0 | 57 | 0 | 1 | 20 | 8 | 0 | 29 | 0 | 1 | 25 | 6 | 0 | 32 | 0 | 10 | 30 | 11 | 0 | 51 | 169 |
| 7:15 AM | 0 | 27 | 37 | 0 | 0 | 64 | 0 | 1 | 29 | 4 | 0 | 34 | 0 | 0 | 40 | 1 | 0 | 41 | 0 | 9 | 34 | 21 | 0 | 64 | 203 |
| 7:30 AM | 0 | 21 | 55 | 0 | 0 | 76 | 0 | 1 | 25 | 5 | 0 | 31 | 0 | 0 | 60 | 10 | 0 | 70 | 0 | 14 | 31 | 19 | 0 | 64 | 241 |
| 7:45 AM | 0 | 26 | 77 | 0 | 0 | 103 | 0 | 3 | 23 | 3 | 0 | 29 | 0 | 0 | 45 | 7 | 0 | 52 | 0 | 14 | 26 | 24 | 0 | 64 | 248 |
| Hourly Total | 0 | 95 | 205 | 0 | 0 | 300 | 0 | 6 | 97 | 20 | 0 | 123 | 0 | 1 | 170 | 24 | 0 | 195 | 0 | 47 | 121 | 75 | 0 | 243 | 861 |
| 8:00 AM | 0 | 26 | 37 | 0 | 0 | 63 | 0 | 3 | 22 | 5 | 0 | 30 | 0 | 0 | 34 | 4 | 0 | 38 | 0 | 15 | 32 | 14 | 0 | 61 | 192 |
| 8:15 AM | 0 | 19 | 44 | 0 | 0 | 63 | 0 | 6 | 27 | 4 | 0 | 37 | 0 | 0 | 35 | 8 | 0 | 43 | 0 | 14 | 16 | 18 | 0 | 48 | 191 |
| 8:30 AM | 0 | 24 | 52 | 0 | 0 | 76 | 0 | 5 | 25 | 6 | 0 | 36 | 0 | 0 | 35 | 9 | 0 | 44 | 0 | 12 | 29 | 17 | 0 | 58 | 214 |
| 8:45 AM | 0 | 27 | 55 | 0 | 0 | 82 | 0 | 2 | 36 | 11 | 0 | 49 | 0 | 1 | 30 | 14 | 0 | 45 | 0 | 12 | 20 | 15 | 0 | 47 | 223 |
| Hourly Total | 0 | 96 | 188 | 0 | 0 | 284 | 0 | 16 | 110 | 26 | 0 | 152 | 0 | 1 | 134 | 35 | 0 | 170 | 0 | 53 | 97 | 64 | 0 | 214 | 820 |
| *** BREAK *** | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 4:00 PM | 0 | 32 | 62 | 0 | 0 | 94 | 0 | 9 | 76 | 10 | 0 | 95 | 0 | 0 | 29 | 4 | 0 | 33 | 0 | 15 | 38 | 28 | 0 | 81 | 303 |
| 4:15 PM | 0 | 23 | 51 | 1 | 0 | 75 | 0 | 14 | 80 | 25 | 0 | 119 | 0 | 1 | 44 | 6 | 0 | 51 | 0 | 12 | 50 | 34 | 0 | 96 | 341 |
| 4:30 PM | 0 | 32 | 43 | 0 | 0 | 75 | 0 | 9 | 78 | 17 | 0 | 104 | 0 | 0 | 43 | 11 | 0 | 54 | 0 | 12 | 54 | 38 | 2 | 104 | 337 |
| 4:45 PM | 0 | 29 | 51 | 1 | 0 | 81 | 0 | 7 | 55 | 19 | 0 | 81 | 0 | 1 | 46 | 4 | 0 | 51 | 0 | 9 | 52 | 32 | 0 | 93 | 306 |
| Hourly Total | 0 | 116 | 207 | 2 | 0 | 325 | 0 | 39 | 289 | 71 | 0 | 399 | 0 | 2 | 162 | 25 | 0 | 189 | 0 | 48 | 194 | 132 | 2 | 374 | 1287 |
| 5:00 PM | 0 | 24 | 46 | 0 | 0 | 70 | 0 | 10 | 69 | 19 | 0 | 98 | 0 | 1 | 46 | 5 | 0 | 52 | 0 | 17 | 50 | 34 | 0 | 101 | 321 |
| 5:15 PM | 0 | 27 | 61 | 0 | 0 | 88 | 0 | 10 | 56 | 27 | 0 | 93 | 0 | 0 | 56 | 4 | 0 | 60 | 0 | 12 | 51 | 39 | 0 | 102 | 343 |
| 5:30 PM | 0 | 27 | 53 | 2 | 0 | 82 | 0 | 9 | 76 | 23 | 0 | 108 | 0 | 0 | 31 | 3 | 0 | 34 | 0 | 10 | 46 | 44 | 0 | 100 | 324 |
| 5:45 PM | 0 | 40 | 33 | 0 | 0 | 73 | 0 | 7 | 62 | 19 | 0 | 88 | 0 | 0 | 44 | 6 | 0 | 50 | 0 | 11 | 48 | 46 | 0 | 105 | 316 |
| Hourly Total | 0 | 118 | 193 | 2 | 0 | 313 | 0 | 36 | 263 | 88 | 0 | 387 | 0 | 1 | 177 | 18 | 0 | 196 | 0 | 50 | 195 | 163 | 0 | 408 | 1304 |
| Grand Total | 0 | 425 | 793 | 4 | 0 | 1222 | 0 | 97 | 759 | 205 | 0 | 1061 | 0 | 5 | 643 | 102 | 0 | 750 | 0 | 198 | 607 | 434 | 2 | 1239 | 4272 |
| Approach % | 0.0 | 34.8 | 64.9 | 0.3 | - | - | 0.0 | 9.1 | 71.5 | 19.3 | - | - | 0.0 | 0.7 | 85.7 | 13.6 | - | - | 0.0 | 16.0 | 49.0 | 35.0 | - | - | - |
| Total % | 0.0 | 9.9 | 18.6 | 0.1 | - | 28.6 | 0.0 | 2.3 | 17.8 | 4.8 | - | 24.8 | 0.0 | 0.1 | 15.1 | 2.4 | - | 17.6 | 0.0 | 4.6 | 14.2 | 10.2 | - | 29.0 | - |
| Lights | 0 | 422 | 767 | 4 | - | 1193 | 0 | 91 | 740 | 202 | - | 1033 | 0 | 5 | 629 | 96 | - | 730 | 0 | 194 | 600 | 430 | - | 1224 | 4180 |
| % Lights | - | 99.3 | 96.7 | 100.0 | - | 97.6 | - | 93.8 | 97.5 | 98.5 | - | 97.4 | - | 100.0 | 97.8 | 94.1 | - | 97.3 | - | 98.0 | 98.8 | 99.1 | - | 98.8 | 97.8 |
| Buses | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 1 | 0 | - | 1 | 1 |
| % Buses | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.2 | 0.0 | - | 0.1 | 0.0 |
| Single-Unit Trucks | 0 | 3 | 21 | 0 | - | 24 | 0 | 4 | 14 | 1 | - | 19 | 0 | 0 | 9 | 3 | - | 12 | 0 | 3 | 4 | 3 | - | 10 | 65 |
| % Single-Unit Trucks | - | 0.7 | 2.6 | 0.0 | - | 2.0 | - | 4.1 | 1.8 | 0.5 | - | 1.8 | - | 0.0 | 1.4 | 2.9 | - | 1.6 | - | 1.5 | 0.7 | 0.7 | - | 0.8 | 1.5 |
| Articulated Trucks | 0 | 0 | 5 | 0 | - | 5 | 0 | 2 | 5 | 2 | - | 9 | 0 | 0 | 5 | 3 | - | 8 | 0 | 1 | 2 | 1 | - | 4 | 26 |
| % Articulated Trucks | - | 0.0 | 0.6 | 0.0 | - | 0.4 | - | 2.1 | 0.7 | 1.0 | - | 0.8 | - | 0.0 | 0.8 | 2.9 | - | 1.1 | - | 0.5 | 0.3 | 0.2 | - | 0.3 | 0.6 |
| Bicycles on Road | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 |

Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990

Count Name: Wolf's Crossing Road with Eola Road
Site Code:
Start Date: 01/07/2021


# Turning Movement Peak Hour Data (7:30 AM)

| Start Time | Wolf's Crossing Road Eastbound | | | | | | Wolf's Crossing Road Westbound | | | | | | Eola Road Northbound | | | | | | Eola Road Southbound | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | Int. Total |
| 7:30 AM | 0 | 21 | 55 | 0 | 0 | 76 | 0 | 1 | 25 | 5 | 0 | 31 | 0 | 0 | 60 | 10 | 0 | 70 | 0 | 14 | 31 | 19 | 0 | 64 | 241 |
| 7:45 AM | 0 | 26 | 77 | 0 | 0 | 103 | 0 | 3 | 23 | 3 | 0 | 29 | 0 | 0 | 45 | 7 | 0 | 52 | 0 | 14 | 26 | 24 | 0 | 64 | 248 |
| 8:00 AM | 0 | 26 | 37 | 0 | 0 | 63 | 0 | 3 | 22 | 5 | 0 | 30 | 0 | 0 | 34 | 4 | 0 | 38 | 0 | 15 | 32 | 14 | 0 | 61 | 192 |
| 8:15 AM | 0 | 19 | 44 | 0 | 0 | 63 | 0 | 6 | 27 | 4 | 0 | 37 | 0 | 0 | 35 | 8 | 0 | 43 | 0 | 14 | 16 | 18 | 0 | 48 | 191 |
| Total | 0 | 92 | 213 | 0 | 0 | 305 | 0 | 13 | 97 | 17 | 0 | 127 | 0 | 0 | 174 | 29 | 0 | 203 | 0 | 57 | 105 | 75 | 0 | 237 | 872 |
| Approach % | 0.0 | 30.2 | 69.8 | 0.0 | - | - | 0.0 | 10.2 | 76.4 | 13.4 | - | - | 0.0 | 0.0 | 85.7 | 14.3 | - | - | 0.0 | 24.1 | 44.3 | 31.6 | - | - | - |
| Total % | 0.0 | 10.6 | 24.4 | 0.0 | - | 35.0 | 0.0 | 1.5 | 11.1 | 1.9 | - | 14.6 | 0.0 | 0.0 | 20.0 | 3.3 | - | 23.3 | 0.0 | 6.5 | 12.0 | 8.6 | - | 27.2 | - |
| PHF | 0.000 | 0.885 | 0.692 | 0.000 | - | 0.740 | 0.000 | 0.542 | 0.898 | 0.850 | - | 0.858 | 0.000 | 0.000 | 0.725 | 0.725 | - | 0.725 | 0.000 | 0.950 | 0.820 | 0.781 | - | 0.926 | 0.879 |
| Lights | 0 | 91 | 200 | 0 | - | 291 | 0 | 11 | 92 | 16 | - | 119 | 0 | 0 | 168 | 29 | - | 197 | 0 | 57 | 103 | 73 | - | 233 | 840 |
| % Lights | - | 98.9 | 93.9 | - | - | 95.4 | - | 84.6 | 94.8 | 94.1 | - | 93.7 | - | - | 96.6 | 100.0 | - | 97.0 | - | 100.0 | 98.1 | 97.3 | - | 98.3 | 96.3 |
| Buses | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 |
| % Buses | - | 0.0 | 0.0 | - | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | - | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.0 |
| Single-Unit Trucks | 0 | 1 | 11 | 0 | - | 12 | 0 | 1 | 4 | 0 | - | 5 | 0 | 0 | 3 | 0 | - | 3 | 0 | 0 | 2 | 1 | - | 3 | 23 |
| % Single-Unit Trucks | - | 1.1 | 5.2 | - | - | 3.9 | - | 7.7 | 4.1 | 0.0 | - | 3.9 | - | - | 1.7 | 0.0 | - | 1.5 | - | 0.0 | 1.9 | 1.3 | - | 1.3 | 2.6 |
| Articulated Trucks | 0 | 0 | 2 | 0 | - | 2 | 0 | 1 | 1 | 1 | - | 3 | 0 | 0 | 3 | 0 | - | 3 | 0 | 0 | 0 | 1 | - | 1 | 9 |
| % Articulated Trucks | - | 0.0 | 0.9 | - | - | 0.7 | - | 7.7 | 1.0 | 5.9 | - | 2.4 | - | - | 1.7 | 0.0 | - | 1.5 | - | 0.0 | 0.0 | 1.3 | - | 0.4 | 1.0 |
| Bicycles on Road | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 |
| % Bicycles on Road | - | 0.0 | 0.0 | - | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | - | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.0 |
| Pedestrians | - | - | - | - | 0 | - | - | - | - | - | 0 | - | - | - | - | - | 0 | - | - | - | - | - | 0 | - | - |
| % Pedestrians | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |

Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990

Count Name: Wolf's Crossing Road with Eola Road
Site Code:
Start Date: 01/07/2021


# Turning Movement Peak Hour Data (4:30 PM)

| Start Time | Wolf's Crossing Road Eastbound | | | | | | Wolf's Crossing Road Westbound | | | | | | Eola Road Northbound | | | | | | Eola Road Southbound | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | Int. Total |
| 4:30 PM | 0 | 32 | 43 | 0 | 0 | 75 | 0 | 9 | 78 | 17 | 0 | 104 | 0 | 0 | 43 | 11 | 0 | 54 | 0 | 12 | 54 | 38 | 2 | 104 | 337 |
| 4:45 PM | 0 | 29 | 51 | 1 | 0 | 81 | 0 | 7 | 55 | 19 | 0 | 81 | 0 | 1 | 46 | 4 | 0 | 51 | 0 | 9 | 52 | 32 | 0 | 93 | 306 |
| 5:00 PM | 0 | 24 | 46 | 0 | 0 | 70 | 0 | 10 | 69 | 19 | 0 | 98 | 0 | 1 | 46 | 5 | 0 | 52 | 0 | 17 | 50 | 34 | 0 | 101 | 321 |
| 5:15 PM | 0 | 27 | 61 | 0 | 0 | 88 | 0 | 10 | 56 | 27 | 0 | 93 | 0 | 0 | 56 | 4 | 0 | 60 | 0 | 12 | 51 | 39 | 0 | 102 | 343 |
| Total | 0 | 112 | 201 | 1 | 0 | 314 | 0 | 36 | 258 | 82 | 0 | 376 | 0 | 2 | 191 | 24 | 0 | 217 | 0 | 50 | 207 | 143 | 2 | 400 | 1307 |
| Approach % | 0.0 | 35.7 | 64.0 | 0.3 | - | - | 0.0 | 9.6 | 68.6 | 21.8 | - | - | 0.0 | 0.9 | 88.0 | 11.1 | - | - | 0.0 | 12.5 | 51.8 | 35.8 | - | - | - |
| Total % | 0.0 | 8.6 | 15.4 | 0.1 | - | 24.0 | 0.0 | 2.8 | 19.7 | 6.3 | - | 28.8 | 0.0 | 0.2 | 14.6 | 1.8 | - | 16.6 | 0.0 | 3.8 | 15.8 | 10.9 | - | 30.6 | - |
| PHF | 0.000 | 0.875 | 0.824 | 0.250 | - | 0.892 | 0.000 | 0.900 | 0.827 | 0.759 | - | 0.904 | 0.000 | 0.500 | 0.853 | 0.545 | - | 0.904 | 0.000 | 0.735 | 0.958 | 0.917 | - | 0.962 | 0.953 |
| Lights | 0 | 112 | 197 | 1 | - | 310 | 0 | 32 | 251 | 82 | - | 365 | 0 | 2 | 189 | 21 | - | 212 | 0 | 49 | 205 | 142 | - | 396 | 1283 |
| % Lights | - | 100.0 | 98.0 | 100.0 | - | 98.7 | - | 88.9 | 97.3 | 100.0 | - | 97.1 | - | 100.0 | 99.0 | 87.5 | - | 97.7 | - | 98.0 | 99.0 | 99.3 | - | 99.0 | 98.2 |
| Buses | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 |
| % Buses | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.0 |
| Single-Unit Trucks | 0 | 0 | 3 | 0 | - | 3 | 0 | 3 | 6 | 0 | - | 9 | 0 | 0 | 2 | 2 | - | 4 | 0 | 1 | 1 | 1 | - | 3 | 19 |
| % Single-Unit Trucks | - | 0.0 | 1.5 | 0.0 | - | 1.0 | - | 8.3 | 2.3 | 0.0 | - | 2.4 | - | 0.0 | 1.0 | 8.3 | - | 1.8 | - | 2.0 | 0.5 | 0.7 | - | 0.8 | 1.5 |
| Articulated Trucks | 0 | 0 | 1 | 0 | - | 1 | 0 | 1 | 1 | 0 | - | 2 | 0 | 0 | 0 | 1 | - | 1 | 0 | 0 | 1 | 0 | - | 1 | 5 |
| % Articulated Trucks | - | 0.0 | 0.5 | 0.0 | - | 0.3 | - | 2.8 | 0.4 | 0.0 | - | 0.5 | - | 0.0 | 0.0 | 4.2 | - | 0.5 | - | 0.0 | 0.5 | 0.0 | - | 0.3 | 0.4 |
| Bicycles on Road | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 |
| % Bicycles on Road | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.0 |
| Pedestrians | - | - | - | - | 0 | - | - | - | - | - | 0 | - | - | - | - | - | 0 | - | - | - | - | - | 2 | - | - |
| % Pedestrians | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 100.0 | - | - |

Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990

Count Name: Wolf's Crossing Road with Hoffman Boulevard
Site Code:
Start Date: 01/07/2021


# Turning Movement Data

| Start Time | Wolf's Crossing Road Eastbound | | | | | Wolf's Crossing Road Westbound | | | | | Hoffman Boulevard Southbound | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | U-Turn | Left | Thru | Peds | App. Total | U-Turn | Thru | Right | Peds | App. Total | U-Turn | Left | Right | Peds | App. Total | Int. Total |
| 7:00 AM | 0 | 0 | 49 | 0 | 49 | 0 | 27 | 1 | 0 | 28 | 0 | 10 | 2 | 0 | 12 | 89 |
| 7:15 AM | 0 | 1 | 51 | 0 | 52 | 0 | 28 | 1 | 0 | 29 | 0 | 10 | 6 | 0 | 16 | 97 |
| 7:30 AM | 0 | 0 | 80 | 0 | 80 | 0 | 34 | 5 | 0 | 39 | 0 | 8 | 0 | 0 | 8 | 127 |
| 7:45 AM | 0 | 1 | 95 | 0 | 96 | 0 | 27 | 2 | 0 | 29 | 0 | 9 | 2 | 0 | 11 | 136 |
| Hourly Total | 0 | 2 | 275 | 0 | 277 | 0 | 116 | 9 | 0 | 125 | 0 | 37 | 10 | 0 | 47 | 449 |
| 8:00 AM | 0 | 1 | 57 | 0 | 58 | 0 | 27 | 5 | 0 | 32 | 0 | 8 | 2 | 0 | 10 | 100 |
| 8:15 AM | 0 | 2 | 65 | 0 | 67 | 0 | 35 | 3 | 0 | 38 | 0 | 6 | 4 | 0 | 10 | 115 |
| 8:30 AM | 0 | 1 | 71 | 0 | 72 | 0 | 37 | 2 | 0 | 39 | 0 | 6 | 5 | 0 | 11 | 122 |
| 8:45 AM | 0 | 2 | 75 | 0 | 77 | 0 | 35 | 6 | 0 | 41 | 0 | 4 | 4 | 0 | 8 | 126 |
| Hourly Total | 0 | 6 | 268 | 0 | 274 | 0 | 134 | 16 | 0 | 150 | 0 | 24 | 15 | 0 | 39 | 463 |
| *** BREAK *** | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 4:00 PM | 0 | 5 | 73 | 0 | 78 | 0 | 92 | 12 | 0 | 104 | 0 | 8 | 0 | 0 | 8 | 190 |
| 4:15 PM | 0 | 8 | 62 | 0 | 70 | 0 | 112 | 7 | 0 | 119 | 0 | 6 | 10 | 0 | 16 | 205 |
| 4:30 PM | 0 | 5 | 60 | 0 | 65 | 0 | 99 | 6 | 0 | 105 | 0 | 9 | 7 | 0 | 16 | 186 |
| 4:45 PM | 0 | 13 | 59 | 0 | 72 | 0 | 72 | 8 | 0 | 80 | 0 | 1 | 4 | 0 | 5 | 157 |
| Hourly Total | 0 | 31 | 254 | 0 | 285 | 0 | 375 | 33 | 0 | 408 | 0 | 24 | 21 | 0 | 45 | 738 |
| 5:00 PM | 0 | 6 | 61 | 0 | 67 | 0 | 101 | 18 | 0 | 119 | 0 | 5 | 5 | 0 | 10 | 196 |
| 5:15 PM | 0 | 8 | 64 | 0 | 72 | 0 | 89 | 13 | 0 | 102 | 0 | 5 | 3 | 0 | 8 | 182 |
| 5:30 PM | 0 | 7 | 61 | 0 | 68 | 0 | 90 | 17 | 0 | 107 | 0 | 8 | 12 | 0 | 20 | 195 |
| 5:45 PM | 0 | 5 | 47 | 0 | 52 | 0 | 87 | 15 | 0 | 102 | 0 | 3 | 3 | 0 | 6 | 160 |
| Hourly Total | 0 | 26 | 233 | 0 | 259 | 0 | 367 | 63 | 0 | 430 | 0 | 21 | 23 | 0 | 44 | 733 |
| Grand Total | 0 | 65 | 1030 | 0 | 1095 | 0 | 992 | 121 | 0 | 1113 | 0 | 106 | 69 | 0 | 175 | 2383 |
| Approach % | 0.0 | 5.9 | 94.1 | - | - | 0.0 | 89.1 | 10.9 | - | - | 0.0 | 60.6 | 39.4 | - | - | - |
| Total % | 0.0 | 2.7 | 43.2 | - | 46.0 | 0.0 | 41.6 | 5.1 | - | 46.7 | 0.0 | 4.4 | 2.9 | - | 7.3 | - |
| Lights | 0 | 65 | 995 | - | 1060 | 0 | 964 | 121 | - | 1085 | 0 | 105 | 69 | - | 174 | 2319 |
| % Lights | - | 100.0 | 96.6 | - | 96.8 | - | 97.2 | 100.0 | - | 97.5 | - | 99.1 | 100.0 | - | 99.4 | 97.3 |
| Buses | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | - | 0 | 0 |
| % Buses | - | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | - | 0.0 | 0.0 |
| Single-Unit Trucks | 0 | 0 | 26 | - | 26 | 0 | 19 | 0 | - | 19 | 0 | 1 | 0 | - | 1 | 46 |
| % Single-Unit Trucks | - | 0.0 | 2.5 | - | 2.4 | - | 1.9 | 0.0 | - | 1.7 | - | 0.9 | 0.0 | - | 0.6 | 1.9 |
| Articulated Trucks | 0 | 0 | 9 | - | 9 | 0 | 9 | 0 | - | 9 | 0 | 0 | 0 | - | 0 | 18 |
| % Articulated Trucks | - | 0.0 | 0.9 | - | 0.8 | - | 0.9 | 0.0 | - | 0.8 | - | 0.0 | 0.0 | - | 0.0 | 0.8 |
| Bicycles on Road | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | - | 0 | 0 |
| % Bicycles on Road | - | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | - | 0.0 | 0.0 |
| Pedestrians | - | - | - | 0 | - | - | - | - | 0 | - | - | - | - | 0 | - | - |
| % Pedestrians | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |

Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990

Count Name: Wolf's Crossing Road with Hoffman Boulevard
Site Code:
Start Date: 01/07/2021


# Turning Movement Peak Hour Data (7:30 AM)

| Start Time | Wolf's Crossing Road Eastbound | | | | | Wolf's Crossing Road Westbound | | | | | Hoffman Boulevard Southbound | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | U-Turn | Left | Thru | Peds | App. Total | U-Turn | Thru | Right | Peds | App. Total | U-Turn | Left | Right | Peds | App. Total | Int. Total |
| 7:30 AM | 0 | 0 | 80 | 0 | 80 | 0 | 34 | 5 | 0 | 39 | 0 | 8 | 0 | 0 | 8 | 127 |
| 7:45 AM | 0 | 1 | 95 | 0 | 96 | 0 | 27 | 2 | 0 | 29 | 0 | 9 | 2 | 0 | 11 | 136 |
| 8:00 AM | 0 | 1 | 57 | 0 | 58 | 0 | 27 | 5 | 0 | 32 | 0 | 8 | 2 | 0 | 10 | 100 |
| 8:15 AM | 0 | 2 | 65 | 0 | 67 | 0 | 35 | 3 | 0 | 38 | 0 | 6 | 4 | 0 | 10 | 115 |
| Total | 0 | 4 | 297 | 0 | 301 | 0 | 123 | 15 | 0 | 138 | 0 | 31 | 8 | 0 | 39 | 478 |
| Approach % | 0.0 | 1.3 | 98.7 | - | - | 0.0 | 89.1 | 10.9 | - | - | 0.0 | 79.5 | 20.5 | - | - | - |
| Total % | 0.0 | 0.8 | 62.1 | - | 63.0 | 0.0 | 25.7 | 3.1 | - | 28.9 | 0.0 | 6.5 | 1.7 | - | 8.2 | - |
| PHF | 0.000 | 0.500 | 0.782 | - | 0.784 | 0.000 | 0.879 | 0.750 | - | 0.885 | 0.000 | 0.861 | 0.500 | - | 0.886 | 0.879 |
| Lights | 0 | 4 | 285 | - | 289 | 0 | 115 | 15 | - | 130 | 0 | 31 | 8 | - | 39 | 458 |
| % Lights | - | 100.0 | 96.0 | - | 96.0 | - | 93.5 | 100.0 | - | 94.2 | - | 100.0 | 100.0 | - | 100.0 | 95.8 |
| Buses | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | - | 0 | 0 |
| % Buses | - | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | - | 0.0 | 0.0 |
| Single-Unit Trucks | 0 | 0 | 10 | - | 10 | 0 | 5 | 0 | - | 5 | 0 | 0 | 0 | - | 0 | 15 |
| % Single-Unit Trucks | - | 0.0 | 3.4 | - | 3.3 | - | 4.1 | 0.0 | - | 3.6 | - | 0.0 | 0.0 | - | 0.0 | 3.1 |
| Articulated Trucks | 0 | 0 | 2 | - | 2 | 0 | 3 | 0 | - | 3 | 0 | 0 | 0 | - | 0 | 5 |
| % Articulated Trucks | - | 0.0 | 0.7 | - | 0.7 | - | 2.4 | 0.0 | - | 2.2 | - | 0.0 | 0.0 | - | 0.0 | 1.0 |
| Bicycles on Road | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | - | 0 | 0 |
| % Bicycles on Road | - | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | - | 0.0 | 0.0 |
| Pedestrians | - | - | - | 0 | - | - | - | - | 0 | - | - | - | - | 0 | - | - |
| % Pedestrians | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |

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Rosemont, Illinois, United States 60018
(847)518-9990

Count Name: Wolf's Crossing Road with Hoffman Boulevard
Site Code:
Start Date: 01/07/2021


# Turning Movement Peak Hour Data (4:30 PM)

| Start Time | Wolf's Crossing Road Eastbound | | | | | Wolf's Crossing Road Westbound | | | | | Hoffman Boulevard Southbound | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | U-Turn | Left | Thru | Peds | App. Total | U-Turn | Thru | Right | Peds | App. Total | U-Turn | Left | Right | Peds | App. Total | Int. Total |
| 4:30 PM | 0 | 5 | 60 | 0 | 65 | 0 | 99 | 6 | 0 | 105 | 0 | 9 | 7 | 0 | 16 | 186 |
| 4:45 PM | 0 | 13 | 59 | 0 | 72 | 0 | 72 | 8 | 0 | 80 | 0 | 1 | 4 | 0 | 5 | 157 |
| 5:00 PM | 0 | 6 | 61 | 0 | 67 | 0 | 101 | 18 | 0 | 119 | 0 | 5 | 5 | 0 | 10 | 196 |
| 5:15 PM | 0 | 8 | 64 | 0 | 72 | 0 | 89 | 13 | 0 | 102 | 0 | 5 | 3 | 0 | 8 | 182 |
| Total | 0 | 32 | 244 | 0 | 276 | 0 | 361 | 45 | 0 | 406 | 0 | 20 | 19 | 0 | 39 | 721 |
| Approach % | 0.0 | 11.6 | 88.4 | - | - | 0.0 | 88.9 | 11.1 | - | - | 0.0 | 51.3 | 48.7 | - | - | - |
| Total % | 0.0 | 4.4 | 33.8 | - | 38.3 | 0.0 | 50.1 | 6.2 | - | 56.3 | 0.0 | 2.8 | 2.6 | - | 5.4 | - |
| PHF | 0.000 | 0.615 | 0.953 | - | 0.958 | 0.000 | 0.894 | 0.625 | - | 0.853 | 0.000 | 0.556 | 0.679 | - | 0.609 | 0.920 |
| Lights | 0 | 32 | 235 | - | 267 | 0 | 351 | 45 | - | 396 | 0 | 20 | 19 | - | 39 | 702 |
| % Lights | - | 100.0 | 96.3 | - | 96.7 | - | 97.2 | 100.0 | - | 97.5 | - | 100.0 | 100.0 | - | 100.0 | 97.4 |
| Buses | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | - | 0 | 0 |
| % Buses | - | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | - | 0.0 | 0.0 |
| Single-Unit Trucks | 0 | 0 | 7 | - | 7 | 0 | 8 | 0 | - | 8 | 0 | 0 | 0 | - | 0 | 15 |
| % Single-Unit Trucks | - | 0.0 | 2.9 | - | 2.5 | - | 2.2 | 0.0 | - | 2.0 | - | 0.0 | 0.0 | - | 0.0 | 2.1 |
| Articulated Trucks | 0 | 0 | 2 | - | 2 | 0 | 2 | 0 | - | 2 | 0 | 0 | 0 | - | 0 | 4 |
| % Articulated Trucks | - | 0.0 | 0.8 | - | 0.7 | - | 0.6 | 0.0 | - | 0.5 | - | 0.0 | 0.0 | - | 0.0 | 0.6 |
| Bicycles on Road | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | - | 0 | 0 |
| % Bicycles on Road | - | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | - | 0.0 | 0.0 |
| Pedestrians | - | - | - | 0 | - | - | - | - | 0 | - | - | - | - | 0 | - | - |
| % Pedestrians | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |

# CMAP Traffic Projection Letter/ITE Data

Chicago Metropolitan Agency for Planning

433 West Van Buren Street
Suite 450
Chicago, IL 60607

312-454-0400
cmap.illinois.gov

January 15, 2021

Javier Millan
Senior Consultant
Kenig, Lindgren, O'Hara and Aboona. Inc.
9575 West Higgins Road
Suite 400
Rosemont, IL 60018

***Subject:*** ***US 30 - Eola Road - Wolfs Crossing Road -111th Street***
IDOT

Dear Mr. Millan:

In response to a request made on your behalf and dated January 15, 2021, we have developed year 2050 average daily traffic (ADT) projections for the subject location.

| ROAD SEGMENT | Current Volumes | Year 2050 ADT |
|---|---|---|
| US 30 north of Wolfs Crossing Rd | 16,800 | 22,000 |
| US 30 south of Wolfs Crossing Rd | 20,000 | 23,200 |
| Eola Rd north of Wolfs Crossing Rd | 9,700 | 12,700 |
| Eola Rd south of Wolfs Crossing Rd | 3,900 | 4,500 |
| Wolfs Crossing Rd west of US 30 | 8,650 | 13,500 |
| 111th St west of Lincoln Hwy | 15,100 | 23,600 |

Traffic projections are developed using existing ADT data provided in the request letter and the results from the June 2020 CMAP Travel Demand Analysis. The regional travel model uses CMAP 2050 socioeconomic projections and assumes the implementation of the ON TO 2050 Comprehensive Regional Plan for the Northeastern Illinois area. The provision of this data in support of your request does not constitute a CMAP endorsement of the proposed development or any subsequent developments.

If you have any questions, please call me at (312) 386-8806.

Sincerely,

Jose Rodriguez, PTP, AICP
Senior Planner, Research & Analysis

cc: Quigley (IDOT)
2021_CY_TrafficForecast\Aurora\ke-01-21\ke-01-21.docx

# Land Use: 251
# Senior Adult Housing—Detached

### Description

Senior adult housing consists of detached independent living developments, including retirement communities, age-restricted housing, and active adult communities. These developments may include amenities such as golf courses, swimming pools, 24-hour security, transportation, and common recreational facilities. However, they generally lack centralized dining and on-site health facilities. Detached senior adult housing communities may or may not be gated. Residents in these communities are typically active (requiring little to no medical supervision). The percentage of retired residents varies by development. Senior adult housing—attached (Land Use 252), congregate care facility (Land Use 253), assisted living (Land Use 254), and continuing care retirement community (Land Use 255) are related land uses.

### Additional Data

***Caution should be used when applying trip rates for this land use as it may contain a wide variety of studies ranging from communities with very active, working residents to communities with older, retired residents. As more data becomes available, consideration will be given to future stratification of this land use.***

Many factors affected the trip rates for detached senior adult housing. Factors such as the average age of residents, development location and size, affluence of residents, employment status, and vehicular access should be taken into consideration when conducting an analysis. Some developments were located within close proximity to medical facilities, restaurants, shopping centers, banks, and recreational activities.

For the six sites for which the numbers of both total dwelling units and occupied dwelling units were available, an average of 98.5 percent of the total dwelling units were occupied.

Time-of-day distribution data for this land use are presented in Appendix A. For the six general urban/suburban sites with data, the overall highest vehicle volumes during the AM and PM on a weekday were counted between 11:45 a.m. and 12:45 p.m. and 5:00 and 6:00 p.m., respectively.

For the six sites for which data were provided for both occupied dwelling units and total dwelling units, an average of 98.5 percent of the units were occupied.

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in Alberta (CAN), California, Delaware, Florida, New Hampshire, New Jersey, and Pennsylvania.

### Source Numbers

221, 289, 398, 421, 500, 550, 598, 601, 629, 734, 930

# Senior Adult Housing - Detached
(251)

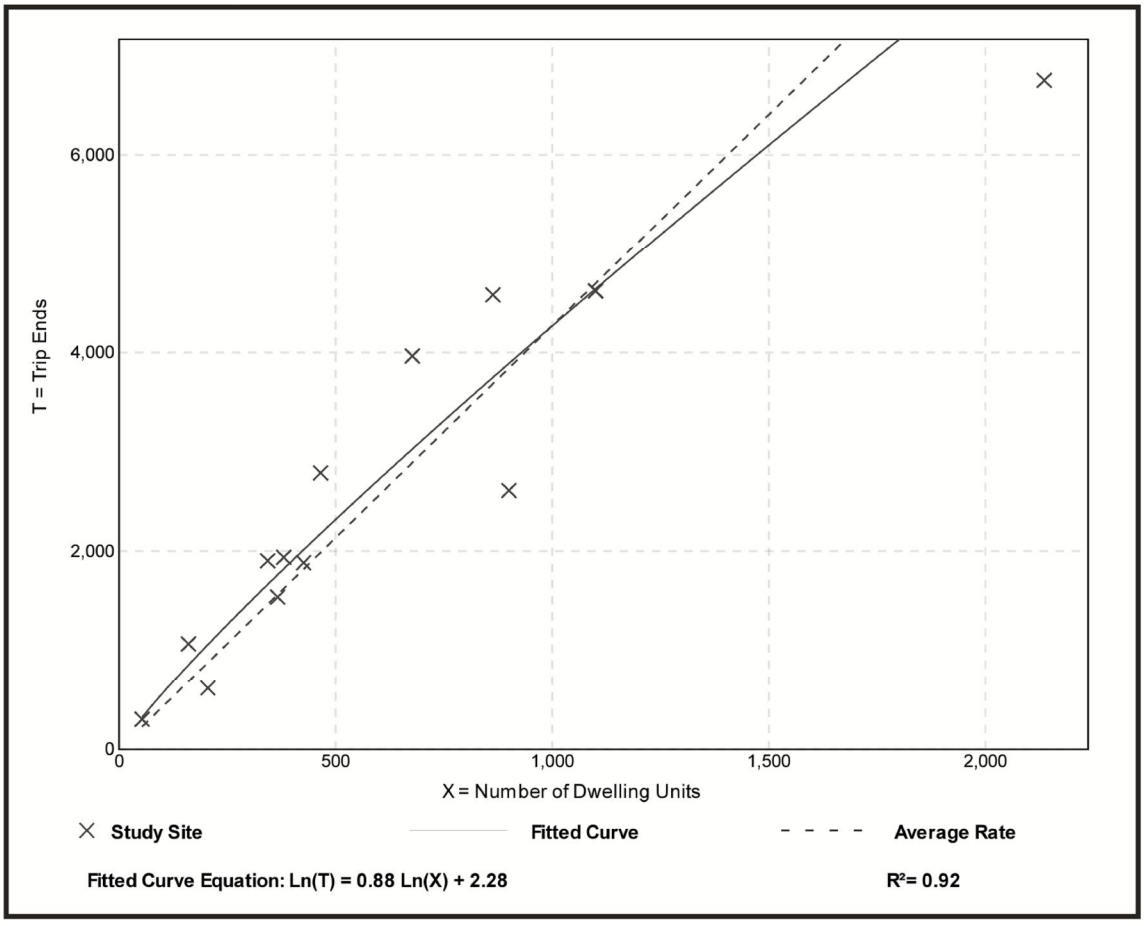
**Vehicle Trip Ends vs:** **Dwelling Units**
**On a:** **Weekday**

**Setting/Location:** **General Urban/Suburban**
Number of Studies: 14
Avg. Num. of Dwelling Units: 655
Directional Distribution: 50% entering, 50% exiting

## Vehicle Trip Generation per Dwelling Unit

| Average Rate | Range of Rates | Standard Deviation |
|---|---|---|
| 4.27 | 2.90 - 6.66 | 1.11 |

## Data Plot and Equation



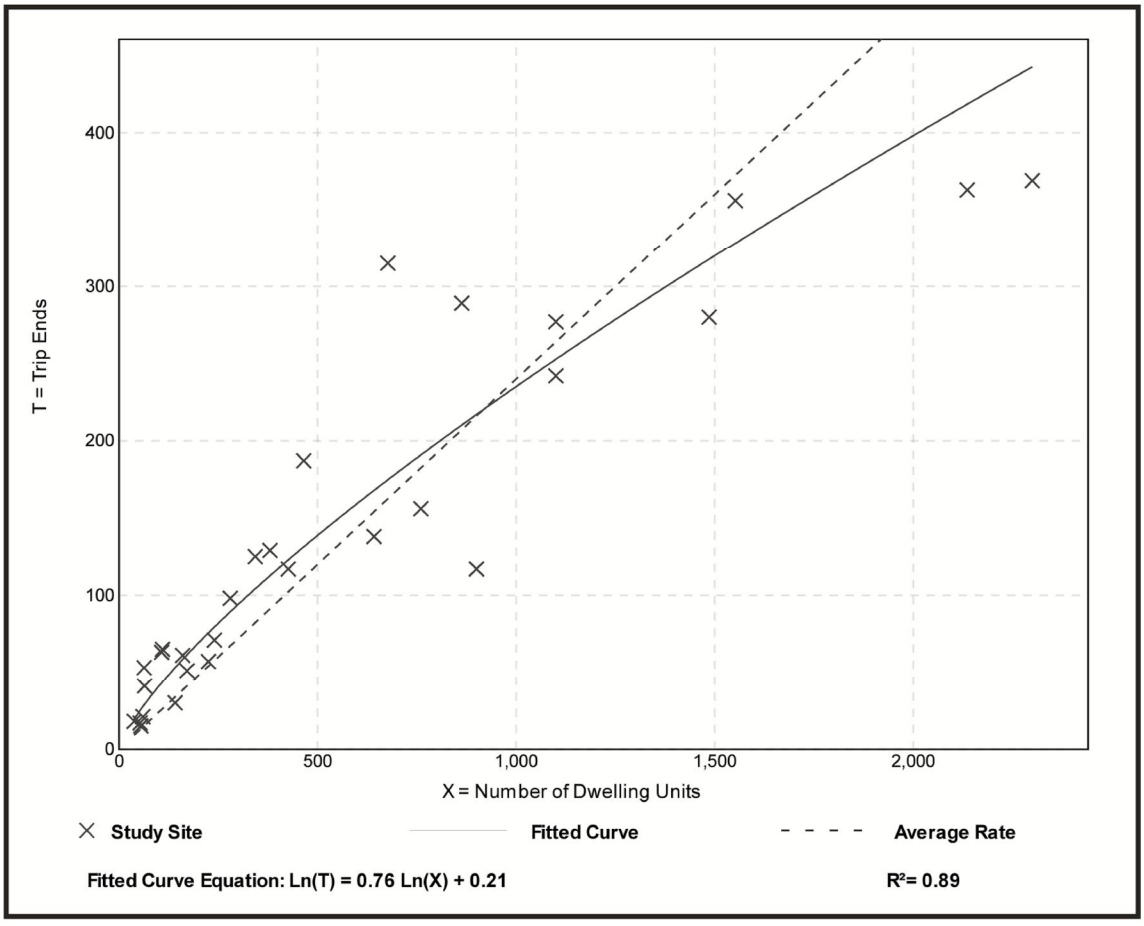
# Senior Adult Housing - Detached
(251)

**Vehicle Trip Ends vs:** **Dwelling Units**
**On a:** **Weekday,**
**Peak Hour of Adjacent Street Traffic,**
**One Hour Between 7 and 9 a.m.**
**Setting/Location:** **General Urban/Suburban**
Number of Studies: 29
Avg. Num. of Dwelling Units: 583
Directional Distribution: 33% entering, 67% exiting

## Vehicle Trip Generation per Dwelling Unit

| Average Rate | Range of Rates | Standard Deviation |
|---|---|---|
| 0.24 | 0.13 - 0.84 | 0.10 |

## Data Plot and Equation



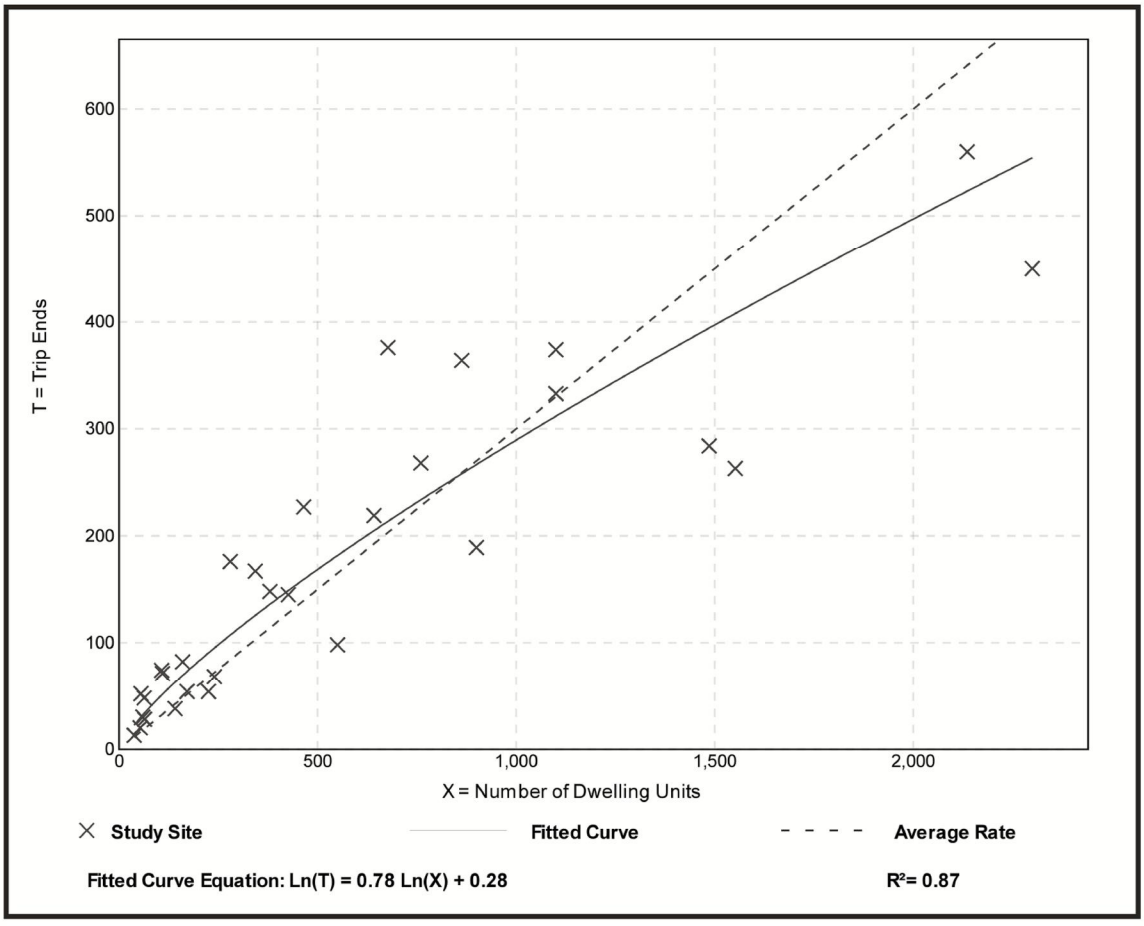
# Senior Adult Housing - Detached
(251)

**Vehicle Trip Ends vs:** **Dwelling Units**
**On a:** **Weekday,**
**Peak Hour of Adjacent Street Traffic,**
**One Hour Between 4 and 6 p.m.**
**Setting/Location:** **General Urban/Suburban**
Number of Studies: 30
Avg. Num. of Dwelling Units: 582
Directional Distribution: 61% entering, 39% exiting

## Vehicle Trip Generation per Dwelling Unit

| Average Rate | Range of Rates | Standard Deviation |
|---|---|---|
| 0.30 | 0.17 - 0.95 | 0.13 |

## Data Plot and Equation



# Land Use: 210
# Single-Family Detached Housing

### Description

Single-family detached housing includes all single-family detached homes on individual lots. A typical site surveyed is a suburban subdivision.

### Additional Data

The number of vehicles and residents had a high correlation with average weekday vehicle trip ends. The use of these variables was limited, however, because the number of vehicles and residents was often difficult to obtain or predict. The number of dwelling units was generally used as the independent variable of choice because it was usually readily available, easy to project, and had a high correlation with average weekday vehicle trip ends.

This land use included data from a wide variety of units with different sizes, price ranges, locations, and ages. Consequently, there was a wide variation in trips generated within this category. Other factors, such as geographic location and type of adjacent and nearby development, may also have had an effect on the site trip generation.

Single-family detached units had the highest trip generation rate per dwelling unit of all residential uses because they were the largest units in size and had more residents and more vehicles per unit than other residential land uses; they were generally located farther away from shopping centers, employment areas, and other trip attractors than other residential land uses; and they generally had fewer alternative modes of transportation available because they were typically not as concentrated as other residential land uses.

Time-of-day distribution data for this land use are presented in Appendix A. For the six general urban/suburban sites with data, the overall highest vehicle volumes during the AM and PM on a weekday were counted between 7:15 and 8:15 a.m. and 4:00 and 5:00 p.m., respectively. For the two sites with Saturday data, the overall highest vehicle volume was counted between 3:00 and 4:00 p.m. For the one site with Sunday data, the overall highest vehicle volume was counted between 10:15 and 11:15 a.m.

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in California, Connecticut, Delaware, Illinois, Indiana, Maryland, Minnesota, Montana, New Jersey, North Carolina, Ohio, Oregon, Pennsylvania, South Carolina, South Dakota, Tennessee, Vermont, and Virginia.

### Source Numbers

100, 105, 114, 126, 157, 167, 177, 197, 207, 211, 217, 267, 275, 293, 300, 319, 320, 356, 357, 367, 384, 387, 407, 435, 522, 550, 552, 579, 598, 601, 603, 614, 637, 711, 716, 720, 728, 735, 868, 903, 925, 936

# Single-Family Detached Housing
(210)

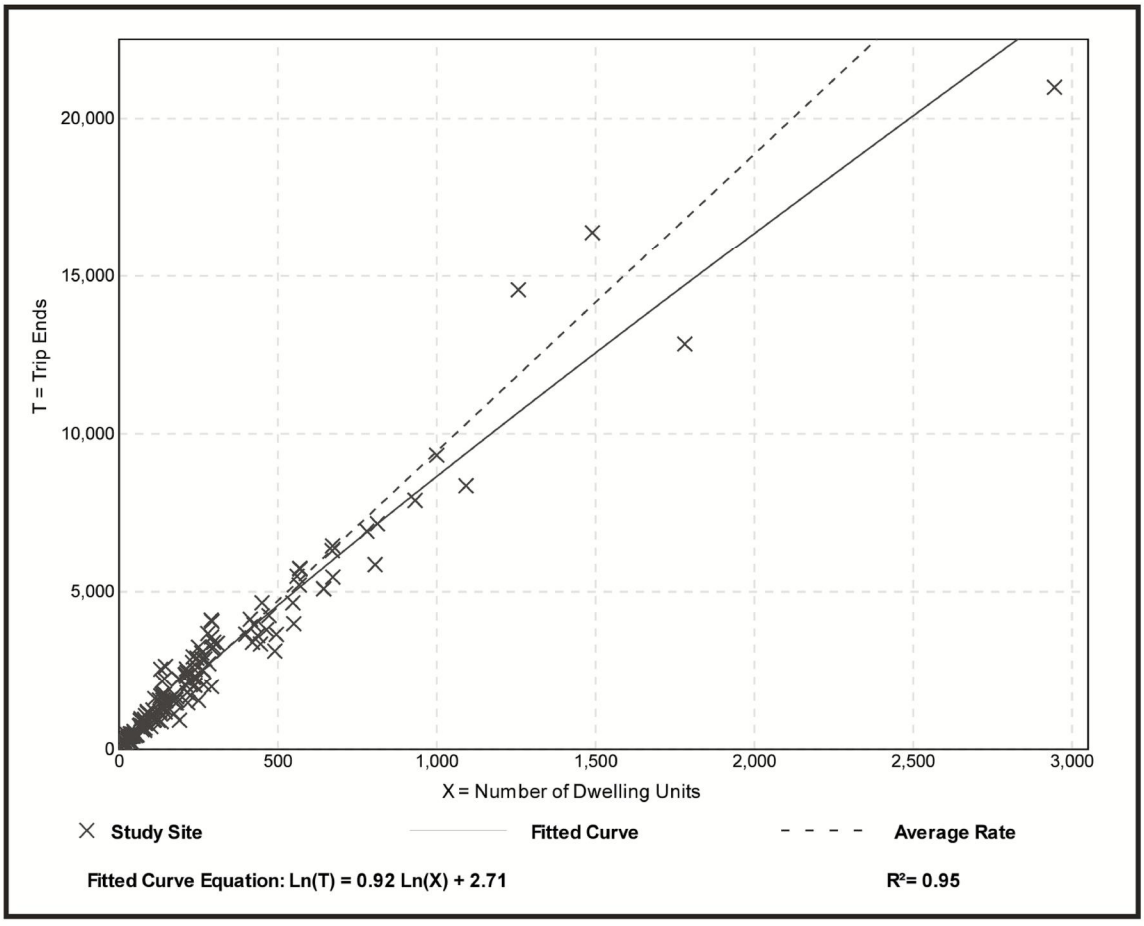
**Vehicle Trip Ends vs:** **Dwelling Units**
**On a:** **Weekday**

**Setting/Location:** **General Urban/Suburban**
Number of Studies: 159
Avg. Num. of Dwelling Units: 264
Directional Distribution: 50% entering, 50% exiting

## Vehicle Trip Generation per Dwelling Unit

| Average Rate | Range of Rates | Standard Deviation |
|---|---|---|
| 9.44 | 4.81 - 19.39 | 2.10 |

## Data Plot and Equation



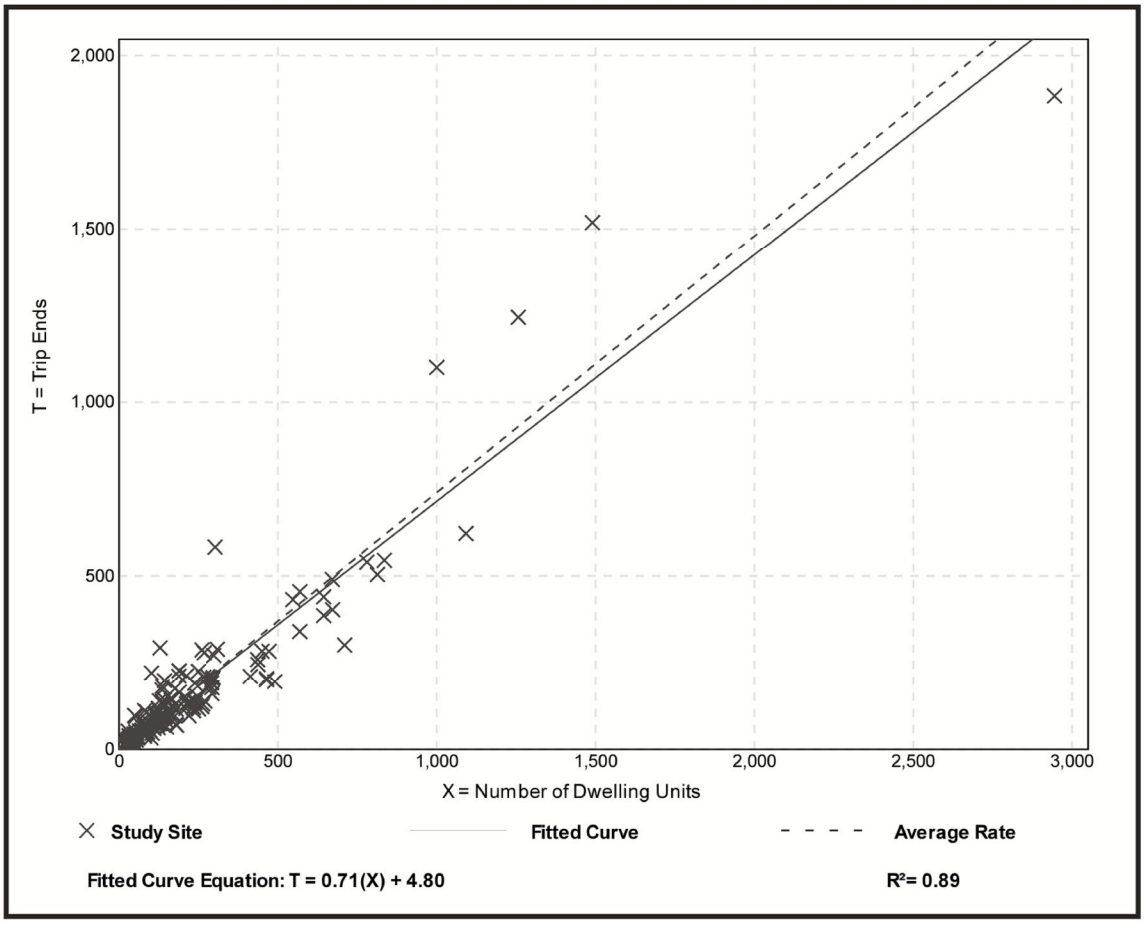
# Single-Family Detached Housing
(210)

**Vehicle Trip Ends vs:** **Dwelling Units**
**On a:** **Weekday,**
**Peak Hour of Adjacent Street Traffic,**
**One Hour Between 7 and 9 a.m.**
**Setting/Location:** **General Urban/Suburban**
Number of Studies: 173
Avg. Num. of Dwelling Units: 219
Directional Distribution: 25% entering, 75% exiting

## Vehicle Trip Generation per Dwelling Unit

| Average Rate | Range of Rates | Standard Deviation |
|---|---|---|
| 0.74 | 0.33 - 2.27 | 0.27 |

## Data Plot and Equation



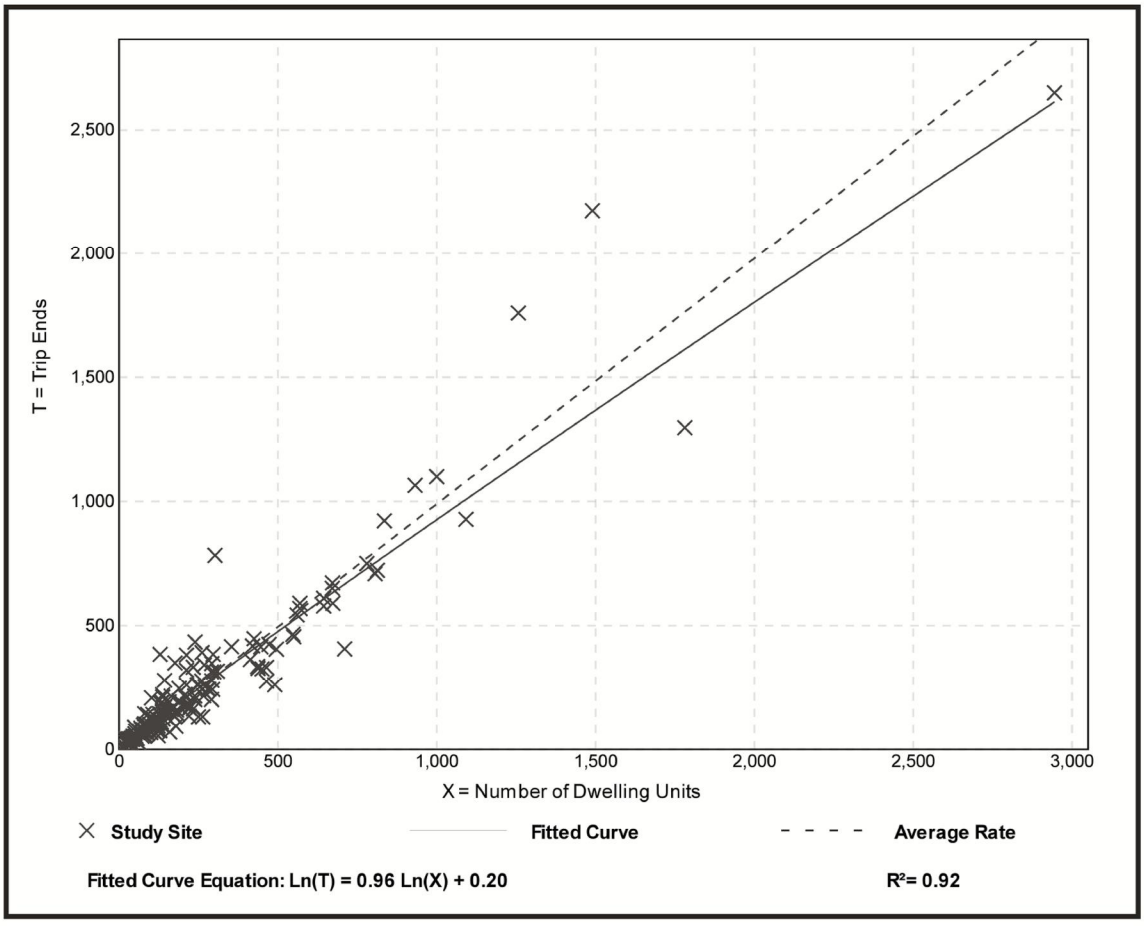
# Single-Family Detached Housing
(210)

**Vehicle Trip Ends vs:** **Dwelling Units**
**On a:** **Weekday,**
**Peak Hour of Adjacent Street Traffic,**
**One Hour Between 4 and 6 p.m.**
**Setting/Location:** **General Urban/Suburban**
Number of Studies: 190
Avg. Num. of Dwelling Units: 242
Directional Distribution: 63% entering, 37% exiting

## Vehicle Trip Generation per Dwelling Unit

| Average Rate | Range of Rates | Standard Deviation |
|---|---|---|
| 0.99 | 0.44 - 2.98 | 0.31 |

## Data Plot and Equation



# Shopping Center
(820)

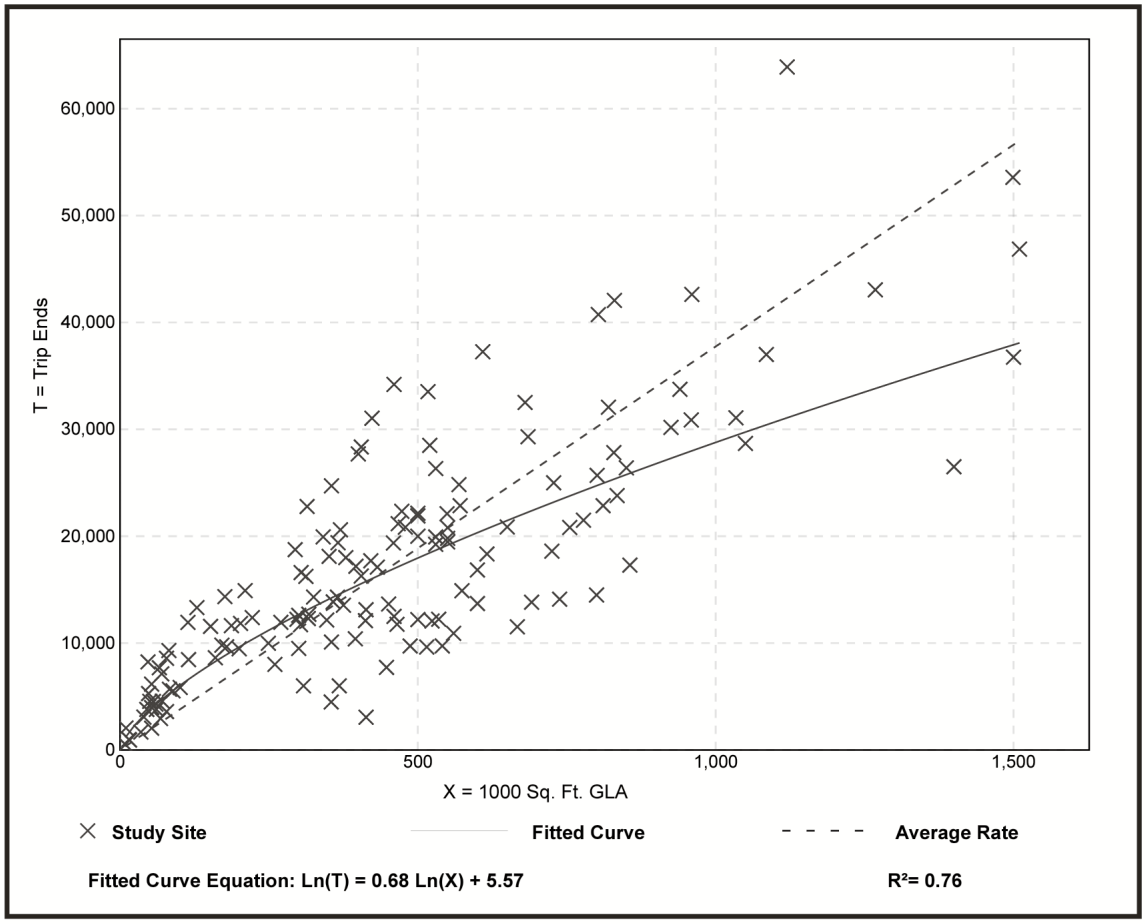
**Vehicle Trip Ends vs:** **1000 Sq. Ft. GLA**
**On a:** **Weekday**

**Setting/Location:** **General Urban/Suburban**
Number of Studies: 147
1000 Sq. Ft. GLA: 453
Directional Distribution: 50% entering, 50% exiting

## Vehicle Trip Generation per 1000 Sq. Ft. GLA

| Average Rate | Range of Rates | Standard Deviation |
|---|---|---|
| 37.75 | 7.42 - 207.98 | 16.41 |

## Data Plot and Equation



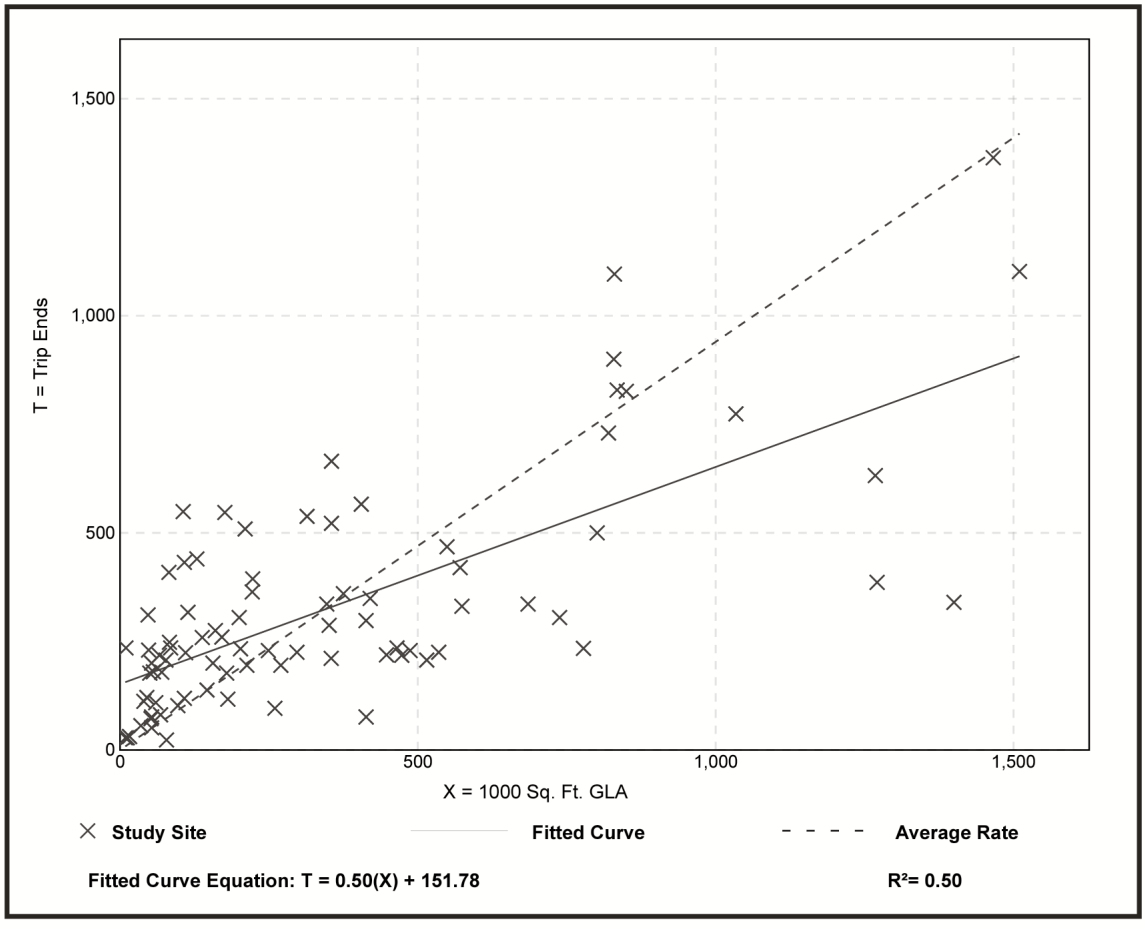
# Shopping Center
(820)

**Vehicle Trip Ends vs:** **1000 Sq. Ft. GLA**
**On a:** **Weekday,**
**Peak Hour of Adjacent Street Traffic,**
**One Hour Between 7 and 9 a.m.**
**Setting/Location:** **General Urban/Suburban**
Number of Studies: 84
1000 Sq. Ft. GLA: 351
Directional Distribution: 62% entering, 38% exiting

## Vehicle Trip Generation per 1000 Sq. Ft. GLA

| Average Rate | Range of Rates | Standard Deviation |
|---|---|---|
| 0.94 | 0.18 - 23.74 | 0.87 |

## Data Plot and Equation



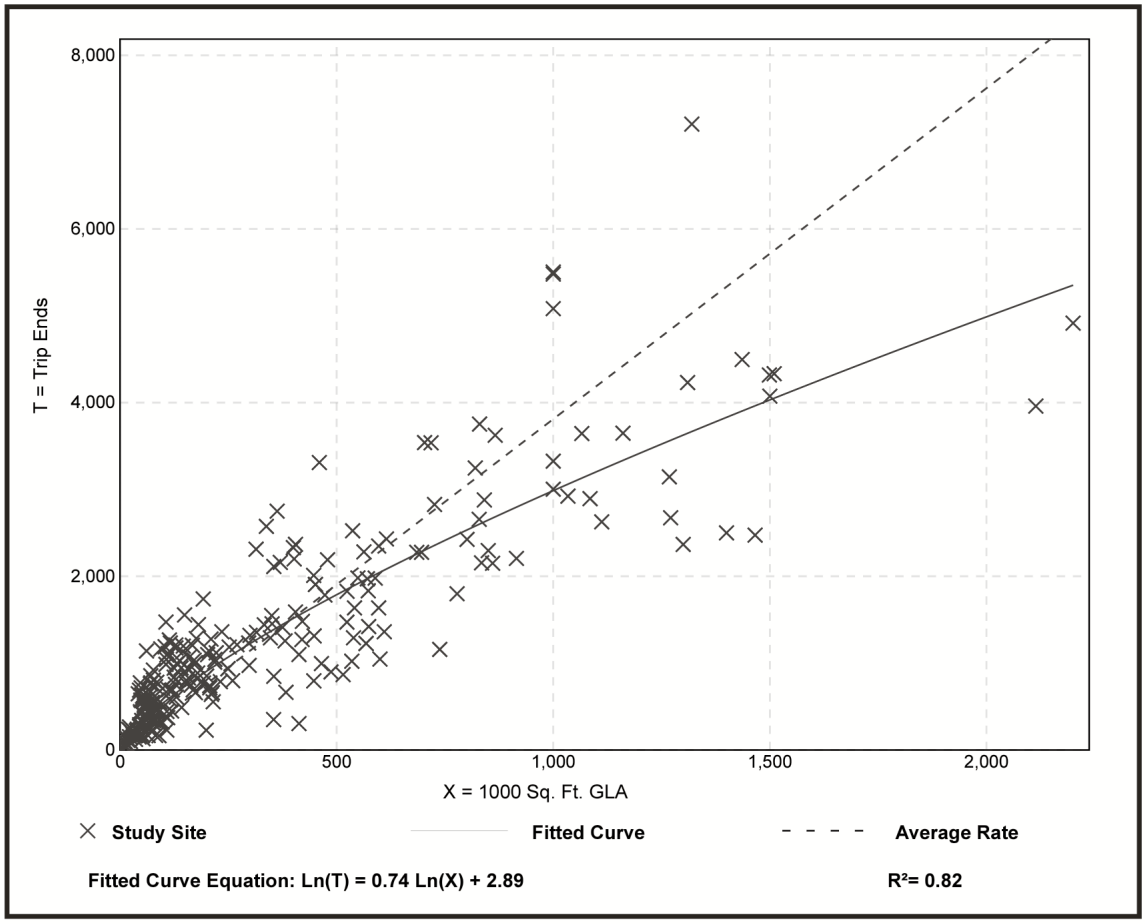
# Shopping Center
(820)

| | |
|---|---|
| **Vehicle Trip Ends vs:** | **1000 Sq. Ft. GLA** |
| **On a:** | **Weekday,** |
| | **Peak Hour of Adjacent Street Traffic,** |
| | **One Hour Between 4 and 6 p.m.** |
| **Setting/Location:** | **General Urban/Suburban** |
| Number of Studies: | 261 |
| 1000 Sq. Ft. GLA: | 327 |
| Directional Distribution: | 48% entering, 52% exiting |

## Vehicle Trip Generation per 1000 Sq. Ft. GLA

| Average Rate | Range of Rates | Standard Deviation |
|---|---|---|
| 3.81 | 0.74 - 18.69 | 2.04 |

## Data Plot and Equation



# Level of Service Criteria

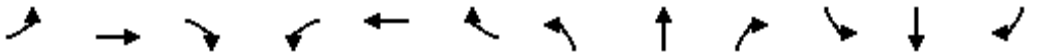
LEVEL OF SERVICE CRITERIA

| Signalized Intersections | | |
|---|---|---|
| Level of Service | Interpretation | Average Control Delay (seconds per vehicle) |
| A | Favorable progression. Most vehicles arrive during the green indication and travel through the intersection without stopping. | ≤10 |
| B | Good progression, with more vehicles stopping than for Level of Service A. | >10 - 20 |
| C | Individual cycle failures (i.e., one or more queued vehicles are not able to depart as a result of insufficient capacity during the cycle) may begin to appear. Number of vehicles stopping is significant, although many vehicles still pass through the intersection without stopping. | >20 - 35 |
| D | The volume-to-capacity ratio is high and either progression is ineffective or the cycle length is too long. Many vehicles stop and individual cycle failures are noticeable. | >35 - 55 |
| E | Progression is unfavorable. The volume-to-capacity ratio is high and the cycle length is long. Individual cycle failures are frequent. | >55 - 80 |
| F | The volume-to-capacity ratio is very high, progression is very poor, and the cycle length is long. Most cycles fail to clear the queue. | >80.0 |

| Unsignalized Intersections | |
|---|---|
| Level of Service | Average Total Delay (SEC/VEH) |
| A | 0 - 10 |
| B | > 10 - 15 |
| C | > 15 - 25 |
| D | > 25 - 35 |
| E | > 35 - 50 |
| F | > 50 |

Source: *Highway Capacity Manual*, 2010.

# Capacity Analysis – Existing Conditions



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 40 | 363 | 83 | 59 | 206 | 119 | 42 | 725 | 7 | 97 | 649 | 6 |
| Future Volume (vph) | 40 | 363 | 83 | 59 | 206 | 119 | 42 | 725 | 7 | 97 | 649 | 6 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 |
| Grade (%) | | 0% | | | 0% | | | 0% | | | 0% | |
| Storage Length (ft) | 0 | | 0 | 280 | | 0 | 130 | | 0 | 282 | | 0 |
| Storage Lanes | 0 | | 0 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 25 | | | 255 | | | 112 | | | 180 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped Bike Factor | | | | | | | | | | | | |
| Frt | | 0.977 | | | 0.945 | | | 0.999 | | | 0.999 | |
| Flt Protected | | 0.996 | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 0 | 1808 | 0 | 1752 | 1705 | 0 | 1612 | 1694 | 0 | 1656 | 1725 | 0 |
| Flt Permitted | | 0.844 | | 0.286 | | | 0.193 | | | 0.108 | | |
| Satd. Flow (perm) | 0 | 1532 | 0 | 528 | 1705 | 0 | 327 | 1694 | 0 | 188 | 1725 | 0 |
| Right Turn on Red | | | No | | | No | | | No | | | No |
| Satd. Flow (RTOR) | | | | | | | | | | | | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 1099 | | | 2118 | | | 1789 | | | 736 | |
| Travel Time (s) | | 25.0 | | | 48.1 | | | 40.7 | | | 16.7 | |
| Confl. Peds. (#/hr) | | | | | | | | | | | | |
| Confl. Bikes (#/hr) | | | | | | | | | | | | |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Growth Factor | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| Heavy Vehicles (%) | 0% | 3% | 0% | 3% | 2% | 11% | 12% | 12% | 14% | 9% | 10% | 17% |
| Bus Blockages (#/hr) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Parking (#/hr) | | | | | | | | | | | | |
| Mid-Block Traffic (%) | | 0% | | | 0% | | | 0% | | | 0% | |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 511 | 0 | 62 | 342 | 0 | 44 | 770 | 0 | 102 | 689 | 0 |
| Turn Type | Perm | NA | | Perm | NA | | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | | 4 | | | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | | 8 | | | 2 | | | 6 | | |
| Detector Phase | 4 | 4 | | 8 | 8 | | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 5.0 | | 5.0 | 5.0 | | 5.0 | 5.0 | | 5.0 | 5.0 | |
| Minimum Split (s) | 24.0 | 24.0 | | 24.0 | 24.0 | | 9.5 | 24.0 | | 9.5 | 24.0 | |
| Total Split (s) | 38.0 | 38.0 | | 38.0 | 38.0 | | 9.6 | 52.4 | | 9.6 | 52.4 | |
| Total Split (%) | 38.0% | 38.0% | | 38.0% | 38.0% | | 9.6% | 52.4% | | 9.6% | 52.4% | |
| Yellow Time (s) | 4.0 | 4.0 | | 4.0 | 4.0 | | 3.5 | 4.0 | | 3.5 | 4.0 | |
| All-Red Time (s) | 2.0 | 2.0 | | 2.0 | 2.0 | | 0.0 | 2.0 | | 0.0 | 2.0 | |
| Lost Time Adjust (s) | | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | | 6.0 | | 6.0 | 6.0 | | 3.5 | 6.0 | | 3.5 | 6.0 | |
| Lead/Lag | | | | | | | Lead | Lag | | Lead | Lag | |
| Lead-Lag Optimize? | | | | | | | Yes | Yes | | Yes | Yes | |
| Recall Mode | None | None | | None | None | | None | Max | | None | Max | |
| Act Effct Green (s) | | 32.1 | | 32.1 | 32.1 | | 53.8 | 46.5 | | 54.5 | 48.4 | |
| Actuated g/C Ratio | | 0.33 | | 0.33 | 0.33 | | 0.55 | 0.47 | | 0.56 | 0.49 | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| v/c Ratio | | 1.02 | | 0.36 | 0.61 | | 0.17 | 0.96 | | 0.52 | 0.81 | |
| Control Delay | | 80.5 | | 33.8 | 34.1 | | 10.5 | 50.2 | | 19.8 | 31.4 | |
| Queue Delay | | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | | 80.5 | | 33.8 | 34.1 | | 10.5 | 50.2 | | 19.8 | 31.4 | |
| LOS | | F | | C | C | | B | D | | B | C | |
| Approach Delay | | 80.5 | | | 34.1 | | | 48.1 | | | 29.9 | |
| Approach LOS | | F | | | C | | | D | | | C | |
| Queue Length 50th (ft) | | ~355 | | 30 | 184 | | 11 | 467 | | 27 | 380 | |
| Queue Length 95th (ft) | | #555 | | 71 | 282 | | 26 | #730 | | 53 | #604 | |
| Internal Link Dist (ft) | | 1019 | | | 2038 | | | 1709 | | | 656 | |
| Turn Bay Length (ft) | | | | 280 | | | 130 | | | 282 | | |
| Base Capacity (vph) | | 500 | | 172 | 557 | | 259 | 803 | | 195 | 850 | |
| Starvation Cap Reductn | | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | | 1.02 | | 0.36 | 0.61 | | 0.17 | 0.96 | | 0.52 | 0.81 | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 100 | | | |
| Actuated Cycle Length: 98.1 | | | |
| Natural Cycle: 100 | | | |
| Control Type: Actuated-Uncoordinated | | | |
| Maximum v/c Ratio: 1.02 | | | |
| Intersection Signal Delay: 46.7 | | Intersection LOS: D | |
| Intersection Capacity Utilization 106.7% | | 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. | | | |

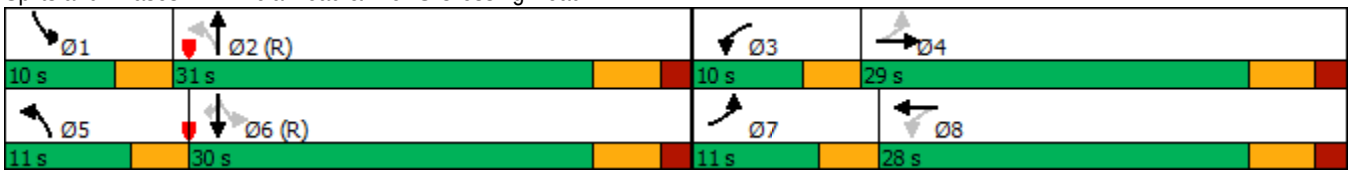
Splits and Phases: 1: US 30 & Wolf'S Crossing Road

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 92 | 213 | 0 | 13 | 142 | 17 | 100 | 224 | 49 | 57 | 105 | 111 |
| Future Volume (vph) | 92 | 213 | 0 | 13 | 142 | 17 | 100 | 224 | 49 | 57 | 105 | 111 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 2000 | 1900 |
| Lane Width (ft) | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 |
| Grade (%) | | 0% | | | 0% | | | 0% | | | 0% | |
| Storage Length (ft) | 185 | | 0 | 260 | | 0 | 165 | | 0 | 220 | | 0 |
| Storage Lanes | 1 | | 0 | 1 | | 0 | 1 | | 0 | 1 | | 1 |
| Taper Length (ft) | 140 | | | 220 | | | 180 | | | 170 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 |
| Ped Bike Factor | | | | | | | | | | | | |
| Frt | | | | | 0.984 | | | 0.973 | | | | 0.850 |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1787 | 1792 | 0 | 1570 | 1779 | 0 | 1805 | 3401 | 0 | 1805 | 1961 | 1568 |
| Flt Permitted | 0.512 | | | 0.619 | | | 0.646 | | | 0.575 | | |
| Satd. Flow (perm) | 963 | 1792 | 0 | 1023 | 1779 | 0 | 1227 | 3401 | 0 | 1092 | 1961 | 1568 |
| Right Turn on Red | | | No | | | No | | | No | | | No |
| Satd. Flow (RTOR) | | | | | | | | | | | | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 2118 | | | 1282 | | | 1814 | | | 1197 | |
| Travel Time (s) | | 48.1 | | | 29.1 | | | 41.2 | | | 27.2 | |
| Confl. Peds. (#/hr) | | | | | | | | | | | | |
| Confl. Bikes (#/hr) | | | | | | | | | | | | |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Growth Factor | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| Heavy Vehicles (%) | 1% | 6% | 0% | 15% | 5% | 6% | 0% | 4% | 0% | 0% | 2% | 3% |
| Bus Blockages (#/hr) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Parking (#/hr) | | | | | | | | | | | | |
| Mid-Block Traffic (%) | | 0% | | | 0% | | | 0% | | | 0% | |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 97 | 224 | 0 | 14 | 167 | 0 | 105 | 288 | 0 | 60 | 111 | 117 |
| Turn Type | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | Perm |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | | 8 | | | 2 | | | 6 | | 6 |
| Detector Phase | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | 6 |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 5.0 | | 5.0 | 5.0 | | 5.0 | 5.0 | | 5.0 | 5.0 | 5.0 |
| Minimum Split (s) | 9.5 | 24.0 | | 9.5 | 24.0 | | 9.5 | 24.0 | | 9.5 | 24.0 | 24.0 |
| Total Split (s) | 11.0 | 29.0 | | 10.0 | 28.0 | | 11.0 | 31.0 | | 10.0 | 30.0 | 30.0 |
| Total Split (%) | 13.8% | 36.3% | | 12.5% | 35.0% | | 13.8% | 38.8% | | 12.5% | 37.5% | 37.5% |
| Yellow Time (s) | 3.5 | 4.0 | | 3.5 | 4.0 | | 3.5 | 4.0 | | 3.5 | 4.0 | 4.0 |
| All-Red Time (s) | 0.0 | 2.0 | | 0.0 | 2.0 | | 0.0 | 2.0 | | 0.0 | 2.0 | 2.0 |
| 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) | 3.5 | 6.0 | | 3.5 | 6.0 | | 3.5 | 6.0 | | 3.5 | 6.0 | 6.0 |
| Lead/Lag | Lead | Lag | | Lead | Lag | | Lead | Lag | | Lead | Lag | Lag |
| Lead-Lag Optimize? | Yes | Yes | | Yes | Yes | | Yes | Yes | | Yes | Yes | Yes |
| Recall Mode | None | None | | None | None | | None | C-Max | | None | C-Max | C-Max |
| Act Effct Green (s) | 24.3 | 20.3 | | 20.9 | 13.5 | | 46.7 | 39.1 | | 44.6 | 36.4 | 36.4 |
| Actuated g/C Ratio | 0.30 | 0.25 | | 0.26 | 0.17 | | 0.58 | 0.49 | | 0.56 | 0.46 | 0.46 |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| v/c Ratio | 0.27 | 0.49 | | 0.05 | 0.55 | | 0.14 | 0.17 | | 0.09 | 0.12 | 0.16 |
| Control Delay | 19.5 | 28.6 | | 16.1 | 36.9 | | 9.2 | 15.0 | | 9.3 | 17.4 | 17.9 |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 |
| Total Delay | 19.5 | 28.6 | | 16.1 | 36.9 | | 9.2 | 15.0 | | 9.3 | 17.4 | 17.9 |
| LOS | B | C | | B | D | | A | B | | A | B | B |
| Approach Delay | | 25.8 | | | 35.3 | | | 13.5 | | | 15.9 | |
| Approach LOS | | C | | | D | | | B | | | B | |
| Queue Length 50th (ft) | 34 | 89 | | 5 | 78 | | 21 | 45 | | 12 | 33 | 36 |
| Queue Length 95th (ft) | 58 | 161 | | 15 | 125 | | 52 | 87 | | 34 | 79 | 85 |
| Internal Link Dist (ft) | | 2038 | | | 1202 | | | 1734 | | | 1117 | |
| Turn Bay Length (ft) | 185 | | | 260 | | | 165 | | | 220 | | |
| Base Capacity (vph) | 370 | 531 | | 316 | 489 | | 775 | 1662 | | 672 | 892 | 713 |
| 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 | 0.26 | 0.42 | | 0.04 | 0.34 | | 0.14 | 0.17 | | 0.09 | 0.12 | 0.16 |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 80 | | | |
| Actuated Cycle Length: 80 | | | |
| Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green | | | |
| Natural Cycle: 70 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.55 | | | |
| Intersection Signal Delay: 20.8 | | Intersection LOS: C | |
| Intersection Capacity Utilization 44.0% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 2: Eola Road & Wolf'S Crossing Road

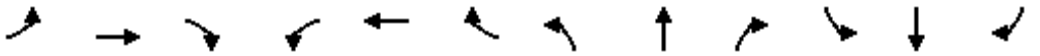


| Lane Group | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 108 | 0 | 774 | 207 | 1 | 709 |
| Future Volume (vph) | 108 | 0 | 774 | 207 | 1 | 709 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 12 | 12 | 12 | 12 | 12 | 12 |
| Grade (%) | 0% | | 0% | | | 0% |
| Storage Length (ft) | 310 | 0 | | 240 | 240 | |
| Storage Lanes | 1 | 1 | | 1 | 1 | |
| Taper Length (ft) | 200 | | | | 240 | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped Bike Factor | | | | | | |
| Frt | | | | 0.850 | | |
| Flt Protected | 0.950 | | | | 0.950 | |
| Satd. Flow (prot) | 1736 | 1900 | 1681 | 1583 | 1805 | 1712 |
| Flt Permitted | 0.950 | | | | 0.255 | |
| Satd. Flow (perm) | 1736 | 1900 | 1681 | 1583 | 484 | 1712 |
| Right Turn on Red | | No | | No | | |
| Satd. Flow (RTOR) | | | | | | |
| Link Speed (mph) | 30 | | 30 | | | 30 |
| Link Distance (ft) | 660 | | 2004 | | | 828 |
| Travel Time (s) | 15.0 | | 45.5 | | | 18.8 |
| Confl. Peds. (#/hr) | | | | | | |
| Confl. Bikes (#/hr) | | | | | | |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Growth Factor | 100% | 100% | 100% | 100% | 100% | 100% |
| Heavy Vehicles (%) | 4% | 0% | 13% | 2% | 0% | 11% |
| Bus Blockages (#/hr) | 0 | 0 | 0 | 0 | 0 | 0 |
| Parking (#/hr) | | | | | | |
| Mid-Block Traffic (%) | 0% | | 0% | | | 0% |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 114 | 0 | 815 | 218 | 1 | 746 |
| Turn Type | Prot | Perm | NA | Perm | pm+pt | NA |
| Protected Phases | 8 | | 2 | | 1 | 6 |
| Permitted Phases | | 8 | | 2 | 6 | |
| Detector Phase | 8 | 8 | 2 | 2 | 1 | 6 |
| Switch Phase | | | | | | |
| Minimum Initial (s) | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| Minimum Split (s) | 24.0 | 24.0 | 24.0 | 24.0 | 9.5 | 24.0 |
| Total Split (s) | 24.0 | 24.0 | 56.5 | 56.5 | 9.5 | 66.0 |
| Total Split (%) | 26.7% | 26.7% | 62.8% | 62.8% | 10.6% | 73.3% |
| Yellow Time (s) | 4.0 | 4.0 | 4.0 | 4.0 | 3.5 | 4.0 |
| All-Red Time (s) | 2.0 | 2.0 | 2.0 | 2.0 | 0.0 | 2.0 |
| 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 | 3.5 | 6.0 |
| Lead/Lag | | | Lag | Lag | Lead | |
| Lead-Lag Optimize? | | | Yes | Yes | Yes | |
| Recall Mode | None | None | C-Max | C-Max | None | C-Max |
| Act Effct Green (s) | 11.2 | | 68.7 | 68.7 | 71.9 | 70.6 |
| Actuated g/C Ratio | 0.12 | | 0.76 | 0.76 | 0.80 | 0.78 |

| Lane Group | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| v/c Ratio | 0.53 | | 0.63 | 0.18 | 0.00 | 0.56 |
| Control Delay | 45.1 | | 11.3 | 5.4 | 3.0 | 7.5 |
| Queue Delay | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 45.1 | | 11.3 | 5.4 | 3.0 | 7.5 |
| LOS | D | | B | A | A | A |
| Approach Delay | 45.1 | | 10.0 | | | 7.5 |
| Approach LOS | D | | B | | | A |
| Queue Length 50th (ft) | 62 | | 189 | 30 | 0 | 158 |
| Queue Length 95th (ft) | 109 | | #536 | 91 | 1 | 304 |
| Internal Link Dist (ft) | 580 | | 1924 | | | 748 |
| Turn Bay Length (ft) | 310 | | | 240 | 240 | |
| Base Capacity (vph) | 347 | | 1284 | 1209 | 474 | 1342 |
| 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 | 0.33 | | 0.63 | 0.18 | 0.00 | 0.56 |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 90 | | | |
| Actuated Cycle Length: 90 | | | |
| Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green | | | |
| Natural Cycle: 80 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.63 | | | |
| Intersection Signal Delay: 11.1 | | Intersection LOS: B | |
| Intersection Capacity Utilization 56.7% | | 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: 3: US 30 & Eola Road



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 75 | 132 | 9 | 5 | 62 | 152 | 5 | 754 | 18 | 227 | 627 | 44 |
| Future Volume (vph) | 75 | 132 | 9 | 5 | 62 | 152 | 5 | 754 | 18 | 227 | 627 | 44 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 |
| Grade (%) | | 0% | | | 0% | | | 0% | | | 0% | |
| Storage Length (ft) | 0 | | 0 | 0 | | 190 | 125 | | 0 | 190 | | 0 |
| Storage Lanes | 0 | | 0 | 0 | | 1 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 150 | | | 160 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped Bike Factor | | | | | | | | | | | | |
| Frt | | 0.995 | | | | 0.850 | | 0.996 | | | 0.990 | |
| Flt Protected | | 0.983 | | | 0.996 | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 0 | 1847 | 0 | 0 | 1815 | 1509 | 1805 | 1697 | 0 | 1736 | 1675 | 0 |
| Flt Permitted | | 0.856 | | | 0.973 | | 0.351 | | | 0.170 | | |
| Satd. Flow (perm) | 0 | 1608 | 0 | 0 | 1773 | 1509 | 667 | 1697 | 0 | 311 | 1675 | 0 |
| Right Turn on Red | | | No | | | No | | | No | | | No |
| Satd. Flow (RTOR) | | | | | | | | | | | | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 2372 | | | 910 | | | 1113 | | | 1927 | |
| Travel Time (s) | | 53.9 | | | 20.7 | | | 25.3 | | | 43.8 | |
| Confl. Peds. (#/hr) | | | | | | | | | | | | |
| Confl. Bikes (#/hr) | | | | | | | | | | | | |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Growth Factor | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| Heavy Vehicles (%) | 0% | 1% | 0% | 60% | 0% | 7% | 0% | 11% | 33% | 4% | 13% | 2% |
| Bus Blockages (#/hr) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Parking (#/hr) | | | | | | | | | | | | |
| Mid-Block Traffic (%) | | 0% | | | 0% | | | 0% | | | 0% | |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 227 | 0 | 0 | 70 | 160 | 5 | 813 | 0 | 239 | 706 | 0 |
| Turn Type | Perm | NA | | Perm | NA | Perm | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | | 4 | | | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | | 8 | | 8 | 2 | | | 6 | | |
| Detector Phase | 4 | 4 | | 8 | 8 | 8 | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 5.0 | | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | | 5.0 | 5.0 | |
| Minimum Split (s) | 24.0 | 24.0 | | 24.0 | 24.0 | 24.0 | 9.5 | 24.0 | | 9.5 | 24.0 | |
| Total Split (s) | 24.0 | 24.0 | | 24.0 | 24.0 | 24.0 | 9.6 | 60.5 | | 15.5 | 66.4 | |
| Total Split (%) | 24.0% | 24.0% | | 24.0% | 24.0% | 24.0% | 9.6% | 60.5% | | 15.5% | 66.4% | |
| Yellow Time (s) | 4.0 | 4.0 | | 4.0 | 4.0 | 4.0 | 3.5 | 4.0 | | 3.5 | 4.0 | |
| All-Red Time (s) | 2.0 | 2.0 | | 2.0 | 2.0 | 2.0 | 0.0 | 2.0 | | 0.0 | 2.0 | |
| Lost Time Adjust (s) | | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | | 6.0 | | | 6.0 | 6.0 | 3.5 | 6.0 | | 3.5 | 6.0 | |
| Lead/Lag | | | | | | | Lead | Lag | | Lead | Lag | |
| Lead-Lag Optimize? | | | | | | | Yes | Yes | | Yes | Yes | |
| Recall Mode | None | None | | None | None | None | None | Max | | None | Max | |
| Act Effct Green (s) | | 16.5 | | | 16.5 | 16.5 | 62.7 | 54.6 | | 70.5 | 66.2 | |
| Actuated g/C Ratio | | 0.17 | | | 0.17 | 0.17 | 0.65 | 0.57 | | 0.73 | 0.69 | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| v/c Ratio | | 0.83 | | | 0.23 | 0.62 | 0.01 | 0.85 | | 0.64 | 0.61 | |
| Control Delay | | 63.8 | | | 37.0 | 48.8 | 4.4 | 28.8 | | 14.2 | 12.2 | |
| Queue Delay | | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | | 63.8 | | | 37.0 | 48.8 | 4.4 | 28.8 | | 14.2 | 12.2 | |
| LOS | | E | | | D | D | A | C | | B | B | |
| Approach Delay | | 63.8 | | | 45.2 | | | 28.6 | | | 12.7 | |
| Approach LOS | | E | | | D | | | C | | | B | |
| Queue Length 50th (ft) | | 136 | | | 37 | 92 | 1 | 405 | | 41 | 204 | |
| Queue Length 95th (ft) | | #258 | | | 79 | 164 | 4 | #697 | | 88 | 420 | |
| Internal Link Dist (ft) | | 2292 | | | 830 | | | 1033 | | | 1847 | |
| Turn Bay Length (ft) | | | | | | 190 | 125 | | | 190 | | |
| Base Capacity (vph) | | 300 | | | 331 | 281 | 509 | 959 | | 404 | 1148 | |
| Starvation Cap Reductn | | 0 | | | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | | 0 | | | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | | 0 | | | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | | 0.76 | | | 0.21 | 0.57 | 0.01 | 0.85 | | 0.59 | 0.61 | |

Intersection Summary

Area Type: Other
Cycle Length: 100
Actuated Cycle Length: 96.5
Natural Cycle: 90
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.85
Intersection Signal Delay: 27.2 Intersection LOS: C
Intersection Capacity Utilization 85.0% 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: 4: US 30 & 11th Street

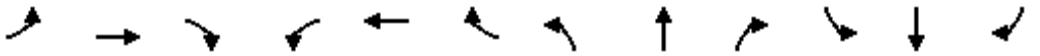
| Intersection | |
|---|---|
| Int Delay, s/veh | 0.9 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 4 | 315 | 164 | 15 | 31 | 8 |
| Future Vol, veh/h | 4 | 315 | 164 | 15 | 31 | 8 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 100 | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 95 | 95 | 95 | 95 | 95 | 95 |
| Heavy Vehicles, % | 0 | 8 | 5 | 0 | 0 | 0 |
| Mvmt Flow | 4 | 332 | 173 | 16 | 33 | 8 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 189 | 0 | - | 0 | 521 | 181 |
| Stage 1 | - | - | - | - | 181 | - |
| Stage 2 | - | - | - | - | 340 | - |
| 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 | 1397 | - | - | - | 519 | 867 |
| Stage 1 | - | - | - | - | 855 | - |
| Stage 2 | - | - | - | - | 725 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 1397 | - | - | - | 517 | 867 |
| Mov Cap-2 Maneuver | - | - | - | - | 517 | - |
| Stage 1 | - | - | - | - | 852 | - |
| Stage 2 | - | - | - | - | 725 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s | 0.1 | 0 | 11.9 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1397 | - | - | - | 564 |
| HCM Lane V/C Ratio | 0.003 | - | - | - | 0.073 |
| HCM Control Delay (s) | 7.6 | - | - | - | 11.9 |
| HCM Lane LOS | A | - | - | - | B |
| HCM 95th %tile Q(veh) | 0 | - | - | - | 0.2 |

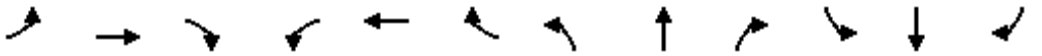


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 15 | 213 | 66 | 81 | 340 | 187 | 124 | 653 | 12 | 113 | 699 | 17 |
| Future Volume (vph) | 15 | 213 | 66 | 81 | 340 | 187 | 124 | 653 | 12 | 113 | 699 | 17 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 |
| Grade (%) | | 0% | | | 0% | | | 0% | | | 0% | |
| Storage Length (ft) | 0 | | 0 | 280 | | 0 | 130 | | 0 | 282 | | 0 |
| Storage Lanes | 0 | | 0 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 25 | | | 255 | | | 112 | | | 180 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped Bike Factor | | | | | | | | | | | | |
| Frt | | 0.970 | | | 0.947 | | | 0.997 | | | 0.996 | |
| Flt Protected | | 0.997 | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 0 | 1837 | 0 | 1805 | 1763 | 0 | 1805 | 1789 | 0 | 1752 | 1804 | 0 |
| Flt Permitted | | 0.633 | | 0.448 | | | 0.108 | | | 0.153 | | |
| Satd. Flow (perm) | 0 | 1167 | 0 | 851 | 1763 | 0 | 205 | 1789 | 0 | 282 | 1804 | 0 |
| Right Turn on Red | | | No | | | No | | | No | | | No |
| Satd. Flow (RTOR) | | | | | | | | | | | | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 1099 | | | 2118 | | | 1789 | | | 736 | |
| Travel Time (s) | | 25.0 | | | 48.1 | | | 40.7 | | | 16.7 | |
| Confl. Peds. (#/hr) | | | | | | | | | | | | |
| Confl. Bikes (#/hr) | | | | | | | | | | | | |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Growth Factor | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| Heavy Vehicles (%) | 0% | 0% | 0% | 0% | 1% | 4% | 0% | 6% | 0% | 3% | 5% | 0% |
| Bus Blockages (#/hr) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Parking (#/hr) | | | | | | | | | | | | |
| Mid-Block Traffic (%) | | 0% | | | 0% | | | 0% | | | 0% | |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 309 | 0 | 85 | 555 | 0 | 131 | 700 | 0 | 119 | 754 | 0 |
| Turn Type | Perm | NA | | Perm | NA | | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | | 4 | | | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | | 8 | | | 2 | | | 6 | | |
| Detector Phase | 4 | 4 | | 8 | 8 | | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 5.0 | | 5.0 | 5.0 | | 5.0 | 5.0 | | 5.0 | 5.0 | |
| Minimum Split (s) | 24.0 | 24.0 | | 24.0 | 24.0 | | 9.5 | 24.0 | | 9.5 | 24.0 | |
| Total Split (s) | 38.0 | 38.0 | | 38.0 | 38.0 | | 10.0 | 52.0 | | 10.0 | 52.0 | |
| Total Split (%) | 38.0% | 38.0% | | 38.0% | 38.0% | | 10.0% | 52.0% | | 10.0% | 52.0% | |
| Yellow Time (s) | 4.0 | 4.0 | | 4.0 | 4.0 | | 3.5 | 4.0 | | 3.5 | 4.0 | |
| All-Red Time (s) | 2.0 | 2.0 | | 2.0 | 2.0 | | 0.0 | 2.0 | | 0.0 | 2.0 | |
| Lost Time Adjust (s) | | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | | 6.0 | | 6.0 | 6.0 | | 3.5 | 6.0 | | 3.5 | 6.0 | |
| Lead/Lag | | | | | | | Lead | Lag | | Lead | Lag | |
| Lead-Lag Optimize? | | | | | | | Yes | Yes | | Yes | Yes | |
| Recall Mode | None | None | | None | None | | None | Max | | None | Max | |
| Act Effct Green (s) | | 32.0 | | 32.0 | 32.0 | | 55.0 | 46.0 | | 55.0 | 46.0 | |
| Actuated g/C Ratio | | 0.32 | | 0.32 | 0.32 | | 0.55 | 0.46 | | 0.55 | 0.46 | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| v/c Ratio | | 0.83 | | 0.31 | 0.98 | | 0.61 | 0.85 | | 0.48 | 0.91 | |
| Control Delay | | 51.8 | | 29.7 | 69.3 | | 23.5 | 35.8 | | 16.0 | 42.1 | |
| Queue Delay | | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | | 51.8 | | 29.7 | 69.3 | | 23.5 | 35.8 | | 16.0 | 42.1 | |
| LOS | | D | | C | E | | C | D | | B | D | |
| Approach Delay | | 51.8 | | | 64.1 | | | 33.9 | | | 38.5 | |
| Approach LOS | | D | | | E | | | C | | | D | |
| Queue Length 50th (ft) | | 181 | | 41 | 349 | | 35 | 384 | | 32 | 432 | |
| Queue Length 95th (ft) | | #330 | | 84 | #570 | | #76 | #605 | | 57 | #678 | |
| Internal Link Dist (ft) | | 1019 | | | 2038 | | | 1709 | | | 656 | |
| Turn Bay Length (ft) | | | | 280 | | | 130 | | | 282 | | |
| Base Capacity (vph) | | 373 | | 272 | 564 | | 216 | 823 | | 250 | 829 | |
| Starvation Cap Reductn | | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | | 0.83 | | 0.31 | 0.98 | | 0.61 | 0.85 | | 0.48 | 0.91 | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 100 | | | |
| Actuated Cycle Length: 100 | | | |
| Natural Cycle: 90 | | | |
| Control Type: Actuated-Uncoordinated | | | |
| Maximum v/c Ratio: 0.98 | | | |
| Intersection Signal Delay: 44.8 | | Intersection LOS: D | |
| Intersection Capacity Utilization 96.2% | | 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. | | | |

Splits and Phases: 1: US 30 & Wolf'S Crossing Road



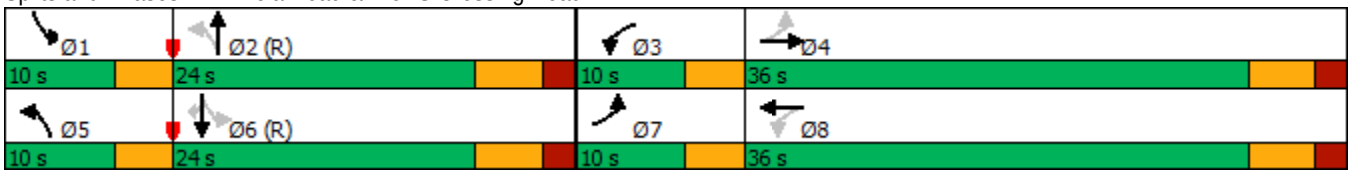
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 112 | 201 | 1 | 36 | 372 | 82 | 42 | 206 | 34 | 50 | 207 | 143 |
| Future Volume (vph) | 112 | 201 | 1 | 36 | 372 | 82 | 42 | 206 | 34 | 50 | 207 | 143 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 2000 | 1900 |
| Lane Width (ft) | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 |
| Grade (%) | | 0% | | | 0% | | | 0% | | | 0% | |
| Storage Length (ft) | 185 | | 0 | 260 | | 0 | 165 | | 0 | 220 | | 0 |
| Storage Lanes | 1 | | 0 | 1 | | 0 | 1 | | 0 | 1 | | 1 |
| Taper Length (ft) | 140 | | | 220 | | | 180 | | | 170 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 |
| Ped Bike Factor | | | | | | | | | | | | |
| Frt | | 0.999 | | | 0.973 | | | 0.979 | | | | 0.850 |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1805 | 1861 | 0 | 1626 | 1804 | 0 | 1805 | 3441 | 0 | 1770 | 1980 | 1599 |
| Flt Permitted | 0.230 | | | 0.625 | | | 0.587 | | | 0.593 | | |
| Satd. Flow (perm) | 437 | 1861 | 0 | 1070 | 1804 | 0 | 1115 | 3441 | 0 | 1105 | 1980 | 1599 |
| Right Turn on Red | | | No | | | No | | | No | | | No |
| Satd. Flow (RTOR) | | | | | | | | | | | | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 2118 | | | 1282 | | | 1814 | | | 1197 | |
| Travel Time (s) | | 48.1 | | | 29.1 | | | 41.2 | | | 27.2 | |
| Confl. Peds. (#/hr) | | | | | | | | | | | | |
| Confl. Bikes (#/hr) | | | | | | | | | | | | |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Growth Factor | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| Heavy Vehicles (%) | 0% | 2% | 0% | 11% | 3% | 0% | 0% | 1% | 13% | 2% | 1% | 1% |
| Bus Blockages (#/hr) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Parking (#/hr) | | | | | | | | | | | | |
| Mid-Block Traffic (%) | | 0% | | | 0% | | | 0% | | | 0% | |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 118 | 213 | 0 | 38 | 478 | 0 | 44 | 253 | 0 | 53 | 218 | 151 |
| Turn Type | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | Perm |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | | 8 | | | 2 | | | 6 | | 6 |
| Detector Phase | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | 6 |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 5.0 | | 5.0 | 5.0 | | 5.0 | 5.0 | | 5.0 | 5.0 | 5.0 |
| Minimum Split (s) | 9.5 | 24.0 | | 9.5 | 24.0 | | 9.5 | 24.0 | | 9.5 | 24.0 | 24.0 |
| Total Split (s) | 10.0 | 36.0 | | 10.0 | 36.0 | | 10.0 | 24.0 | | 10.0 | 24.0 | 24.0 |
| Total Split (%) | 12.5% | 45.0% | | 12.5% | 45.0% | | 12.5% | 30.0% | | 12.5% | 30.0% | 30.0% |
| Yellow Time (s) | 3.5 | 4.0 | | 3.5 | 4.0 | | 3.5 | 4.0 | | 3.5 | 4.0 | 4.0 |
| All-Red Time (s) | 0.0 | 2.0 | | 0.0 | 2.0 | | 0.0 | 2.0 | | 0.0 | 2.0 | 2.0 |
| 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) | 3.5 | 6.0 | | 3.5 | 6.0 | | 3.5 | 6.0 | | 3.5 | 6.0 | 6.0 |
| Lead/Lag | Lead | Lag | | Lead | Lag | | Lead | Lag | | Lead | Lag | Lag |
| Lead-Lag Optimize? | Yes | Yes | | Yes | Yes | | Yes | Yes | | Yes | Yes | Yes |
| Recall Mode | None | None | | None | None | | None | C-Max | | None | C-Max | C-Max |
| Act Effct Green (s) | 34.1 | 27.7 | | 33.3 | 25.7 | | 34.7 | 28.2 | | 34.8 | 28.3 | 28.3 |
| Actuated g/C Ratio | 0.43 | 0.35 | | 0.42 | 0.32 | | 0.43 | 0.35 | | 0.44 | 0.35 | 0.35 |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| v/c Ratio | 0.40 | 0.33 | | 0.08 | 0.83 | | 0.08 | 0.21 | | 0.10 | 0.31 | 0.27 |
| Control Delay | 15.0 | 20.3 | | 10.1 | 37.4 | | 15.6 | 22.6 | | 15.7 | 24.8 | 25.0 |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 |
| Total Delay | 15.0 | 20.3 | | 10.1 | 37.4 | | 15.6 | 22.6 | | 15.7 | 24.8 | 25.0 |
| LOS | B | C | | B | D | | B | C | | B | C | C |
| Approach Delay | | 18.4 | | | 35.4 | | | 21.6 | | | 23.7 | |
| Approach LOS | | B | | | D | | | C | | | C | |
| Queue Length 50th (ft) | 30 | 79 | | 9 | 213 | | 13 | 53 | | 15 | 91 | 62 |
| Queue Length 95th (ft) | 53 | 126 | | 22 | 308 | | 34 | 88 | | 39 | 161 | 120 |
| Internal Link Dist (ft) | | 2038 | | | 1202 | | | 1734 | | | 1117 | |
| Turn Bay Length (ft) | 185 | | | 260 | | | 165 | | | 220 | | |
| Base Capacity (vph) | 297 | 712 | | 491 | 676 | | 539 | 1213 | | 535 | 700 | 565 |
| 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 | 0.40 | 0.30 | | 0.08 | 0.71 | | 0.08 | 0.21 | | 0.10 | 0.31 | 0.27 |

**Intersection Summary**

Area Type: Other
Cycle Length: 80
Actuated Cycle Length: 80
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 70
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.83
Intersection Signal Delay: 26.0 Intersection LOS: C
Intersection Capacity Utilization 61.9% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 2: Eola Road & Wolf'S Crossing Road

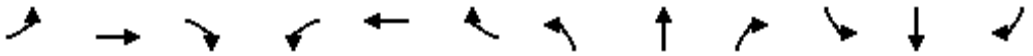


| Lane Group | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 232 | 1 | 788 | 218 | 2 | 844 |
| Future Volume (vph) | 232 | 1 | 788 | 218 | 2 | 844 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 12 | 12 | 12 | 12 | 12 | 12 |
| Grade (%) | 0% | | 0% | | | 0% |
| Storage Length (ft) | 310 | 0 | | 240 | 240 | |
| Storage Lanes | 1 | 1 | | 1 | 1 | |
| Taper Length (ft) | 200 | | | | 240 | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped Bike Factor | | | | | | |
| Frt | | 0.850 | | 0.850 | | |
| Flt Protected | 0.950 | | | | 0.950 | |
| Satd. Flow (prot) | 1787 | 1615 | 1810 | 1599 | 1805 | 1810 |
| Flt Permitted | 0.950 | | | | 0.207 | |
| Satd. Flow (perm) | 1787 | 1615 | 1810 | 1599 | 393 | 1810 |
| Right Turn on Red | | No | | No | | |
| Satd. Flow (RTOR) | | | | | | |
| Link Speed (mph) | 30 | | 30 | | | 30 |
| Link Distance (ft) | 660 | | 2004 | | | 828 |
| Travel Time (s) | 15.0 | | 45.5 | | | 18.8 |
| Confl. Peds. (#/hr) | | | | | | |
| Confl. Bikes (#/hr) | | | | | | |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Growth Factor | 100% | 100% | 100% | 100% | 100% | 100% |
| Heavy Vehicles (%) | 1% | 0% | 5% | 1% | 0% | 5% |
| Bus Blockages (#/hr) | 0 | 0 | 0 | 0 | 0 | 0 |
| Parking (#/hr) | | | | | | |
| Mid-Block Traffic (%) | 0% | | 0% | | | 0% |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 244 | 1 | 829 | 229 | 2 | 888 |
| Turn Type | Prot | Perm | NA | Perm | pm+pt | NA |
| Protected Phases | 8 | | 2 | | 1 | 6 |
| Permitted Phases | | 8 | | 2 | 6 | |
| Detector Phase | 8 | 8 | 2 | 2 | 1 | 6 |
| Switch Phase | | | | | | |
| Minimum Initial (s) | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| Minimum Split (s) | 24.0 | 24.0 | 24.0 | 24.0 | 9.5 | 24.0 |
| Total Split (s) | 24.0 | 24.0 | 56.5 | 56.5 | 9.5 | 66.0 |
| Total Split (%) | 26.7% | 26.7% | 62.8% | 62.8% | 10.6% | 73.3% |
| Yellow Time (s) | 4.0 | 4.0 | 4.0 | 4.0 | 3.5 | 4.0 |
| All-Red Time (s) | 2.0 | 2.0 | 2.0 | 2.0 | 0.0 | 2.0 |
| 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 | 3.5 | 6.0 |
| Lead/Lag | | | Lag | Lag | Lead | |
| Lead-Lag Optimize? | | | Yes | Yes | Yes | |
| Recall Mode | None | None | C-Max | C-Max | None | C-Max |
| Act Effct Green (s) | 16.0 | 16.0 | 60.2 | 60.2 | 64.5 | 62.0 |
| Actuated g/C Ratio | 0.18 | 0.18 | 0.67 | 0.67 | 0.72 | 0.69 |

| Lane Group | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| v/c Ratio | 0.77 | 0.00 | 0.69 | 0.21 | 0.01 | 0.71 |
| Control Delay | 51.8 | 29.0 | 14.5 | 7.4 | 4.5 | 13.2 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| Total Delay | 51.8 | 29.0 | 14.5 | 7.4 | 4.5 | 13.3 |
| LOS | D | C | B | A | A | B |
| Approach Delay | 51.7 | | 12.9 | | | 13.2 |
| Approach LOS | D | | B | | | B |
| Queue Length 50th (ft) | 131 | 0 | 250 | 44 | 0 | 285 |
| Queue Length 95th (ft) | #217 | 5 | 533 | 102 | 2 | 445 |
| Internal Link Dist (ft) | 580 | | 1924 | | | 748 |
| Turn Bay Length (ft) | 310 | | | 240 | 240 | |
| Base Capacity (vph) | 357 | 323 | 1210 | 1069 | 376 | 1247 |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 25 |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 0.68 | 0.00 | 0.69 | 0.21 | 0.01 | 0.73 |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 90 | | | |
| Actuated Cycle Length: 90 | | | |
| Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green | | | |
| Natural Cycle: 80 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.77 | | | |
| Intersection Signal Delay: 17.4 | | Intersection LOS: B | |
| Intersection Capacity Utilization 67.3% | | 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: 3: US 30 & Eola Road



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 71 | 62 | 6 | 16 | 187 | 276 | 17 | 659 | 9 | 162 | 803 | 111 |
| Future Volume (vph) | 71 | 62 | 6 | 16 | 187 | 276 | 17 | 659 | 9 | 162 | 803 | 111 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 |
| Grade (%) | | 0% | | | 0% | | | 0% | | | 0% | |
| Storage Length (ft) | 0 | | 0 | 0 | | 190 | 125 | | 0 | 190 | | 0 |
| Storage Lanes | 0 | | 0 | 0 | | 1 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 150 | | | 160 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped Bike Factor | | | | | | | | | | | | |
| Frt | | 0.994 | | | | 0.850 | | 0.998 | | | 0.982 | |
| Flt Protected | | 0.975 | | | 0.996 | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 0 | 1833 | 0 | 0 | 1806 | 1509 | 1805 | 1704 | 0 | 1736 | 1671 | 0 |
| Flt Permitted | | 0.513 | | | 0.970 | | 0.156 | | | 0.255 | | |
| Satd. Flow (perm) | 0 | 965 | 0 | 0 | 1759 | 1509 | 296 | 1704 | 0 | 466 | 1671 | 0 |
| Right Turn on Red | | | No | | | No | | | No | | | No |
| Satd. Flow (RTOR) | | | | | | | | | | | | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 2372 | | | 910 | | | 1113 | | | 1927 | |
| Travel Time (s) | | 53.9 | | | 20.7 | | | 25.3 | | | 43.8 | |
| Confl. Peds. (#/hr) | | | | | | | | | | | | |
| Confl. Bikes (#/hr) | | | | | | | | | | | | |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Growth Factor | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| Heavy Vehicles (%) | 0% | 1% | 0% | 60% | 0% | 7% | 0% | 11% | 33% | 4% | 13% | 2% |
| Bus Blockages (#/hr) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Parking (#/hr) | | | | | | | | | | | | |
| Mid-Block Traffic (%) | | 0% | | | 0% | | | 0% | | | 0% | |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 146 | 0 | 0 | 214 | 291 | 18 | 703 | 0 | 171 | 962 | 0 |
| Turn Type | Perm | NA | | Perm | NA | Perm | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | | 4 | | | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | | 8 | | 8 | 2 | | | 6 | | |
| Detector Phase | 4 | 4 | | 8 | 8 | 8 | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 5.0 | | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | | 5.0 | 5.0 | |
| Minimum Split (s) | 24.0 | 24.0 | | 24.0 | 24.0 | 24.0 | 9.5 | 24.0 | | 9.5 | 24.0 | |
| Total Split (s) | 24.0 | 24.0 | | 24.0 | 24.0 | 24.0 | 9.6 | 65.6 | | 10.4 | 66.4 | |
| Total Split (%) | 24.0% | 24.0% | | 24.0% | 24.0% | 24.0% | 9.6% | 65.6% | | 10.4% | 66.4% | |
| Yellow Time (s) | 4.0 | 4.0 | | 4.0 | 4.0 | 4.0 | 3.5 | 4.0 | | 3.5 | 4.0 | |
| All-Red Time (s) | 2.0 | 2.0 | | 2.0 | 2.0 | 2.0 | 0.0 | 2.0 | | 0.0 | 2.0 | |
| Lost Time Adjust (s) | | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | | 6.0 | | | 6.0 | 6.0 | 3.5 | 6.0 | | 3.5 | 6.0 | |
| Lead/Lag | | | | | | | Lead | Lag | | Lead | Lag | |
| Lead-Lag Optimize? | | | | | | | Yes | Yes | | Yes | Yes | |
| Recall Mode | None | None | | None | None | None | None | Max | | None | Max | |
| Act Effct Green (s) | | 18.0 | | | 18.0 | 18.0 | 67.8 | 59.6 | | 71.4 | 66.1 | |
| Actuated g/C Ratio | | 0.18 | | | 0.18 | 0.18 | 0.68 | 0.60 | | 0.71 | 0.66 | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| v/c Ratio | | 0.84 | | | 0.68 | 1.07 | 0.06 | 0.69 | | 0.41 | 0.87 | |
| Control Delay | | 78.5 | | | 50.2 | 116.0 | 4.4 | 18.4 | | 7.2 | 25.7 | |
| Queue Delay | | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | | 78.5 | | | 50.2 | 116.0 | 4.4 | 18.4 | | 7.2 | 25.7 | |
| LOS | | E | | | D | F | A | B | | A | C | |
| Approach Delay | | 78.5 | | | 88.1 | | | 18.1 | | | 22.9 | |
| Approach LOS | | E | | | F | | | B | | | C | |
| Queue Length 50th (ft) | | 91 | | | 129 | ~207 | 3 | 286 | | 29 | 379 | |
| Queue Length 95th (ft) | | #203 | | | #212 | #370 | 8 | 424 | | 48 | #849 | |
| Internal Link Dist (ft) | | 2292 | | | 830 | | | 1033 | | | 1847 | |
| Turn Bay Length (ft) | | | | | | 190 | 125 | | | 190 | | |
| Base Capacity (vph) | | 173 | | | 316 | 271 | 293 | 1016 | | 420 | 1105 | |
| Starvation Cap Reductn | | 0 | | | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | | 0 | | | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | | 0 | | | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | | 0.84 | | | 0.68 | 1.07 | 0.06 | 0.69 | | 0.41 | 0.87 | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 100 | | | |
| Actuated Cycle Length: 99.9 | | | |
| Natural Cycle: 90 | | | |
| Control Type: Actuated-Uncoordinated | | | |
| Maximum v/c Ratio: 1.07 | | | |
| Intersection Signal Delay: 37.9 | | Intersection LOS: D | |
| Intersection Capacity Utilization 89.8% | | 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. | | | |

Splits and Phases: 4: US 30 & 11th Street

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

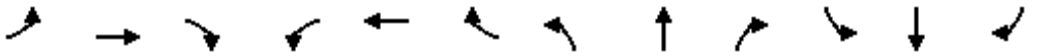
| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 32 | 253 | 471 | 45 | 20 | 19 |
| Future Vol, veh/h | 32 | 253 | 471 | 45 | 20 | 19 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 100 | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 95 | 95 | 95 | 95 | 95 | 95 |
| Heavy Vehicles, % | 0 | 8 | 5 | 0 | 0 | 0 |
| Mvmt Flow | 34 | 266 | 496 | 47 | 21 | 20 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 543 | 0 | - | 0 | 854 | 520 |
| Stage 1 | - | - | - | - | 520 | - |
| Stage 2 | - | - | - | - | 334 | - |
| 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 | 1036 | - | - | - | 332 | 560 |
| Stage 1 | - | - | - | - | 601 | - |
| Stage 2 | - | - | - | - | 730 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 1036 | - | - | - | 321 | 560 |
| Mov Cap-2 Maneuver | - | - | - | - | 321 | - |
| Stage 1 | - | - | - | - | 581 | - |
| Stage 2 | - | - | - | - | 730 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s | 1 | 0 | 14.9 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1036 | - | - | - | 405 |
| HCM Lane V/C Ratio | 0.033 | - | - | - | 0.101 |
| HCM Control Delay (s) | 8.6 | - | - | - | 14.9 |
| HCM Lane LOS | A | - | - | - | B |
| HCM 95th %tile Q(veh) | 0.1 | - | - | - | 0.3 |

# Capacity Analysis – Year 2036 Base Projected Conditions



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 46 | 417 | 95 | 68 | 237 | 137 | 48 | 865 | 8 | 112 | 746 | 7 |
| Future Volume (vph) | 46 | 417 | 95 | 68 | 237 | 137 | 48 | 865 | 8 | 112 | 746 | 7 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 |
| Grade (%) | | 0% | | | 0% | | | 0% | | | 0% | |
| Storage Length (ft) | 0 | | 0 | 280 | | 0 | 130 | | 0 | 282 | | 0 |
| Storage Lanes | 0 | | 0 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 25 | | | 255 | | | 112 | | | 180 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped Bike Factor | | | | | | | | | | | | |
| Frt | | 0.977 | | | 0.945 | | | 0.999 | | | 0.999 | |
| Flt Protected | | 0.996 | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 0 | 1808 | 0 | 1752 | 1705 | 0 | 1612 | 1694 | 0 | 1656 | 1725 | 0 |
| Flt Permitted | | 0.708 | | 0.233 | | | 0.102 | | | 0.083 | | |
| Satd. Flow (perm) | 0 | 1285 | 0 | 430 | 1705 | 0 | 173 | 1694 | 0 | 145 | 1725 | 0 |
| Right Turn on Red | | | No | | | No | | | No | | | No |
| Satd. Flow (RTOR) | | | | | | | | | | | | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 1099 | | | 2118 | | | 1789 | | | 736 | |
| Travel Time (s) | | 25.0 | | | 48.1 | | | 40.7 | | | 16.7 | |
| Confl. Peds. (#/hr) | | | | | | | | | | | | |
| Confl. Bikes (#/hr) | | | | | | | | | | | | |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Growth Factor | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| Heavy Vehicles (%) | 0% | 3% | 0% | 3% | 2% | 11% | 12% | 12% | 14% | 9% | 10% | 17% |
| Bus Blockages (#/hr) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Parking (#/hr) | | | | | | | | | | | | |
| Mid-Block Traffic (%) | | 0% | | | 0% | | | 0% | | | 0% | |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 587 | 0 | 72 | 393 | 0 | 51 | 919 | 0 | 118 | 792 | 0 |
| Turn Type | Perm | NA | | Perm | NA | | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | | 4 | | | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | | 8 | | | 2 | | | 6 | | |
| Detector Phase | 4 | 4 | | 8 | 8 | | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 5.0 | | 5.0 | 5.0 | | 5.0 | 5.0 | | 5.0 | 5.0 | |
| Minimum Split (s) | 24.0 | 24.0 | | 24.0 | 24.0 | | 9.5 | 24.0 | | 9.5 | 24.0 | |
| Total Split (s) | 38.0 | 38.0 | | 38.0 | 38.0 | | 9.6 | 52.4 | | 9.6 | 52.4 | |
| Total Split (%) | 38.0% | 38.0% | | 38.0% | 38.0% | | 9.6% | 52.4% | | 9.6% | 52.4% | |
| Yellow Time (s) | 4.0 | 4.0 | | 4.0 | 4.0 | | 3.5 | 4.0 | | 3.5 | 4.0 | |
| All-Red Time (s) | 2.0 | 2.0 | | 2.0 | 2.0 | | 0.0 | 2.0 | | 0.0 | 2.0 | |
| Lost Time Adjust (s) | | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | | 6.0 | | 6.0 | 6.0 | | 3.5 | 6.0 | | 3.5 | 6.0 | |
| Lead/Lag | | | | | | | Lead | Lag | | Lead | Lag | |
| Lead-Lag Optimize? | | | | | | | Yes | Yes | | Yes | Yes | |
| Recall Mode | None | None | | None | None | | None | Max | | None | Max | |
| Act Effct Green (s) | | 32.0 | | 32.0 | 32.0 | | 54.9 | 46.4 | | 55.7 | 48.3 | |
| Actuated g/C Ratio | | 0.32 | | 0.32 | 0.32 | | 0.55 | 0.46 | | 0.56 | 0.48 | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| v/c Ratio | | 1.43 | | 0.53 | 0.72 | | 0.28 | 1.17 | | 0.69 | 0.95 | |
| Control Delay | | 235.6 | | 44.1 | 38.9 | | 13.0 | 116.9 | | 35.9 | 48.2 | |
| Queue Delay | | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | | 235.6 | | 44.1 | 38.9 | | 13.0 | 116.9 | | 35.9 | 48.2 | |
| LOS | | F | | D | D | | B | F | | D | D | |
| Approach Delay | | 235.6 | | | 39.7 | | | 111.4 | | | 46.6 | |
| Approach LOS | | F | | | D | | | F | | | D | |
| Queue Length 50th (ft) | | ~509 | | 37 | 220 | | 13 | ~702 | | 31 | 484 | |
| Queue Length 95th (ft) | | #717 | | #92 | 331 | | 29 | #938 | | #108 | #751 | |
| Internal Link Dist (ft) | | 1019 | | | 2038 | | | 1709 | | | 656 | |
| Turn Bay Length (ft) | | | | 280 | | | 130 | | | 282 | | |
| Base Capacity (vph) | | 411 | | 137 | 545 | | 182 | 786 | | 172 | 833 | |
| Starvation Cap Reductn | | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | | 1.43 | | 0.53 | 0.72 | | 0.28 | 1.17 | | 0.69 | 0.95 | |

**Intersection Summary**

Area Type: Other
Cycle Length: 100
Actuated Cycle Length: 100
Natural Cycle: 150
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 1.43
Intersection Signal Delay: 104.8 Intersection LOS: F
Intersection Capacity Utilization 121.6% 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.

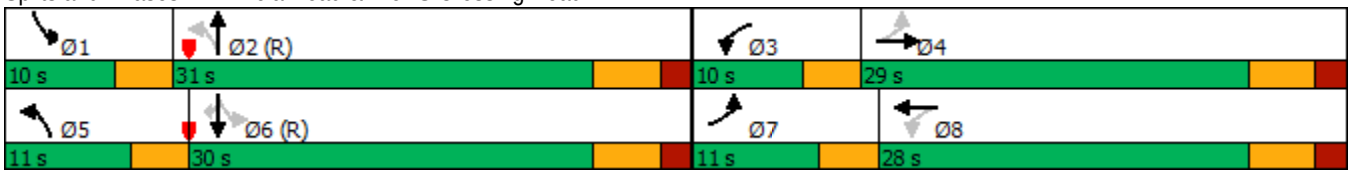
Splits and Phases: 1: US 30 & Wolf'S Crossing Road

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 106 | 245 | 0 | 15 | 163 | 20 | 115 | 258 | 56 | 66 | 121 | 128 |
| Future Volume (vph) | 106 | 245 | 0 | 15 | 163 | 20 | 115 | 258 | 56 | 66 | 121 | 128 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 2000 | 1900 |
| Lane Width (ft) | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 |
| Grade (%) | | 0% | | | 0% | | | 0% | | | 0% | |
| Storage Length (ft) | 185 | | 0 | 260 | | 0 | 165 | | 0 | 220 | | 0 |
| Storage Lanes | 1 | | 0 | 1 | | 0 | 1 | | 0 | 1 | | 1 |
| Taper Length (ft) | 140 | | | 220 | | | 180 | | | 170 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 |
| Ped Bike Factor | | | | | | | | | | | | |
| Frt | | | | | 0.984 | | | 0.973 | | | | 0.850 |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1787 | 1792 | 0 | 1570 | 1779 | 0 | 1805 | 3401 | 0 | 1805 | 1961 | 1568 |
| Flt Permitted | 0.478 | | | 0.600 | | | 0.657 | | | 0.552 | | |
| Satd. Flow (perm) | 899 | 1792 | 0 | 991 | 1779 | 0 | 1248 | 3401 | 0 | 1049 | 1961 | 1568 |
| Right Turn on Red | | | No | | | No | | | No | | | No |
| Satd. Flow (RTOR) | | | | | | | | | | | | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 2118 | | | 1282 | | | 1814 | | | 1197 | |
| Travel Time (s) | | 48.1 | | | 29.1 | | | 41.2 | | | 27.2 | |
| Confl. Peds. (#/hr) | | | | | | | | | | | | |
| Confl. Bikes (#/hr) | | | | | | | | | | | | |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Growth Factor | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| Heavy Vehicles (%) | 1% | 6% | 0% | 15% | 5% | 6% | 0% | 4% | 0% | 0% | 2% | 3% |
| Bus Blockages (#/hr) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Parking (#/hr) | | | | | | | | | | | | |
| Mid-Block Traffic (%) | | 0% | | | 0% | | | 0% | | | 0% | |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 112 | 258 | 0 | 16 | 193 | 0 | 121 | 331 | 0 | 69 | 127 | 135 |
| Turn Type | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | Perm |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | | 8 | | | 2 | | | 6 | | 6 |
| Detector Phase | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | 6 |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 5.0 | | 5.0 | 5.0 | | 5.0 | 5.0 | | 5.0 | 5.0 | 5.0 |
| Minimum Split (s) | 9.5 | 24.0 | | 9.5 | 24.0 | | 9.5 | 24.0 | | 9.5 | 24.0 | 24.0 |
| Total Split (s) | 11.0 | 29.0 | | 10.0 | 28.0 | | 11.0 | 31.0 | | 10.0 | 30.0 | 30.0 |
| Total Split (%) | 13.8% | 36.3% | | 12.5% | 35.0% | | 13.8% | 38.8% | | 12.5% | 37.5% | 37.5% |
| Yellow Time (s) | 3.5 | 4.0 | | 3.5 | 4.0 | | 3.5 | 4.0 | | 3.5 | 4.0 | 4.0 |
| All-Red Time (s) | 0.0 | 2.0 | | 0.0 | 2.0 | | 0.0 | 2.0 | | 0.0 | 2.0 | 2.0 |
| 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) | 3.5 | 6.0 | | 3.5 | 6.0 | | 3.5 | 6.0 | | 3.5 | 6.0 | 6.0 |
| Lead/Lag | Lead | Lag | | Lead | Lag | | Lead | Lag | | Lead | Lag | Lag |
| Lead-Lag Optimize? | Yes | Yes | | Yes | Yes | | Yes | Yes | | Yes | Yes | Yes |
| Recall Mode | None | None | | None | None | | None | C-Max | | None | C-Max | C-Max |
| Act Effct Green (s) | 25.6 | 21.6 | | 22.2 | 14.8 | | 45.0 | 36.1 | | 43.2 | 35.2 | 35.2 |
| Actuated g/C Ratio | 0.32 | 0.27 | | 0.28 | 0.18 | | 0.56 | 0.45 | | 0.54 | 0.44 | 0.44 |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| v/c Ratio | 0.30 | 0.53 | | 0.05 | 0.59 | | 0.16 | 0.22 | | 0.11 | 0.15 | 0.20 |
| Control Delay | 19.3 | 28.5 | | 15.3 | 36.5 | | 10.0 | 16.7 | | 10.1 | 18.1 | 18.8 |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 |
| Total Delay | 19.3 | 28.5 | | 15.3 | 36.5 | | 10.0 | 16.7 | | 10.1 | 18.1 | 18.8 |
| LOS | B | C | | B | D | | B | B | | B | B | B |
| Approach Delay | | 25.7 | | | 34.9 | | | 14.9 | | | 16.7 | |
| Approach LOS | | C | | | C | | | B | | | B | |
| Queue Length 50th (ft) | 39 | 103 | | 5 | 90 | | 26 | 55 | | 14 | 40 | 43 |
| Queue Length 95th (ft) | 63 | 180 | | 15 | 137 | | 62 | 100 | | 39 | 89 | 97 |
| Internal Link Dist (ft) | | 2038 | | | 1202 | | | 1734 | | | 1117 | |
| Turn Bay Length (ft) | 185 | | | 260 | | | 165 | | | 220 | | |
| Base Capacity (vph) | 370 | 542 | | 325 | 489 | | 758 | 1533 | | 632 | 863 | 690 |
| 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 | 0.30 | 0.48 | | 0.05 | 0.39 | | 0.16 | 0.22 | | 0.11 | 0.15 | 0.20 |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 80 | | | |
| Actuated Cycle Length: 80 | | | |
| Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green | | | |
| Natural Cycle: 70 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.59 | | | |
| Intersection Signal Delay: 21.3 | | Intersection LOS: C | |
| Intersection Capacity Utilization 46.8% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 2: Eola Road & Wolf'S Crossing Road

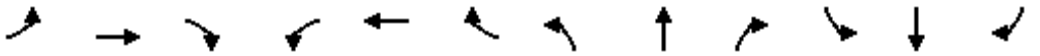


| Lane Group | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 124 | 0 | 921 | 238 | 1 | 908 |
| Future Volume (vph) | 124 | 0 | 921 | 238 | 1 | 908 |
| Ideal Flow (vphpl) | 1900 | 1900 | 2000 | 1900 | 1900 | 2000 |
| Lane Width (ft) | 12 | 12 | 12 | 12 | 12 | 12 |
| Grade (%) | 0% | | 0% | | | 0% |
| Storage Length (ft) | 310 | 0 | | 240 | 240 | |
| Storage Lanes | 1 | 1 | | 1 | 1 | |
| Taper Length (ft) | 200 | | | | 240 | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped Bike Factor | | | | | | |
| Frt | | | | 0.850 | | |
| Flt Protected | 0.950 | | | | 0.950 | |
| Satd. Flow (prot) | 1736 | 1900 | 1770 | 1583 | 1805 | 1802 |
| Flt Permitted | 0.950 | | | | 0.162 | |
| Satd. Flow (perm) | 1736 | 1900 | 1770 | 1583 | 308 | 1802 |
| Right Turn on Red | | No | | No | | |
| Satd. Flow (RTOR) | | | | | | |
| Link Speed (mph) | 30 | | 30 | | | 30 |
| Link Distance (ft) | 660 | | 2004 | | | 828 |
| Travel Time (s) | 15.0 | | 45.5 | | | 18.8 |
| Confl. Peds. (#/hr) | | | | | | |
| Confl. Bikes (#/hr) | | | | | | |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Growth Factor | 100% | 100% | 100% | 100% | 100% | 100% |
| Heavy Vehicles (%) | 4% | 0% | 13% | 2% | 0% | 11% |
| Bus Blockages (#/hr) | 0 | 0 | 0 | 0 | 0 | 0 |
| Parking (#/hr) | | | | | | |
| Mid-Block Traffic (%) | 0% | | 0% | | | 0% |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 131 | 0 | 969 | 251 | 1 | 956 |
| Turn Type | Prot | Perm | NA | Perm | pm+pt | NA |
| Protected Phases | 8 | | 2 | | 1 | 6 |
| Permitted Phases | | 8 | | 2 | 6 | |
| Detector Phase | 8 | 8 | 2 | 2 | 1 | 6 |
| Switch Phase | | | | | | |
| Minimum Initial (s) | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| Minimum Split (s) | 24.0 | 24.0 | 24.0 | 24.0 | 9.5 | 24.0 |
| Total Split (s) | 24.0 | 24.0 | 56.0 | 56.0 | 10.0 | 66.0 |
| Total Split (%) | 26.7% | 26.7% | 62.2% | 62.2% | 11.1% | 73.3% |
| Yellow Time (s) | 4.0 | 4.0 | 4.0 | 4.0 | 3.5 | 4.0 |
| All-Red Time (s) | 2.0 | 2.0 | 2.0 | 2.0 | 0.0 | 2.0 |
| 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 | 3.5 | 6.0 |
| Lead/Lag | | | Lag | Lag | Lead | |
| Lead-Lag Optimize? | | | Yes | Yes | Yes | |
| Recall Mode | None | None | C-Max | C-Max | None | C-Max |
| Act Effct Green (s) | 12.1 | | 64.1 | 64.1 | 68.4 | 65.9 |
| Actuated g/C Ratio | 0.13 | | 0.71 | 0.71 | 0.76 | 0.73 |

| Lane Group | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| v/c Ratio | 0.56 | | 0.77 | 0.22 | 0.00 | 0.72 |
| Control Delay | 45.3 | | 16.0 | 6.2 | 4.0 | 11.8 |
| Queue Delay | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 45.3 | | 16.0 | 6.2 | 4.0 | 11.8 |
| LOS | D | | B | A | A | B |
| Approach Delay | 45.3 | | 14.0 | | | 11.8 |
| Approach LOS | D | | B | | | B |
| Queue Length 50th (ft) | 71 | | 270 | 38 | 0 | 257 |
| Queue Length 95th (ft) | 121 | | #778 | 108 | 1 | 502 |
| Internal Link Dist (ft) | 580 | | 1924 | | | 748 |
| Turn Bay Length (ft) | 310 | | | 240 | 240 | |
| Base Capacity (vph) | 347 | | 1261 | 1127 | 342 | 1320 |
| 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 | | 0.77 | 0.22 | 0.00 | 0.72 |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 90 | | | |
| Actuated Cycle Length: 90 | | | |
| Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green | | | |
| Natural Cycle: 90 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.77 | | | |
| Intersection Signal Delay: 14.8 | | Intersection LOS: B | |
| Intersection Capacity Utilization 62.9% | | 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: 3: US 30 & Eola Road



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 86 | 152 | 10 | 6 | 71 | 175 | 6 | 898 | 21 | 261 | 408 | 51 |
| Future Volume (vph) | 86 | 152 | 10 | 6 | 71 | 175 | 6 | 898 | 21 | 261 | 408 | 51 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 |
| Grade (%) | | 0% | | | 0% | | | 0% | | | 0% | |
| Storage Length (ft) | 0 | | 0 | 0 | | 190 | 125 | | 0 | 190 | | 0 |
| Storage Lanes | 0 | | 0 | 0 | | 1 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 150 | | | 160 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped Bike Factor | | | | | | | | | | | | |
| Frt | | 0.994 | | | | 0.850 | | 0.997 | | | 0.983 | |
| Flt Protected | | 0.983 | | | 0.996 | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 0 | 1845 | 0 | 0 | 1812 | 1509 | 1805 | 1699 | 0 | 1736 | 1671 | 0 |
| Flt Permitted | | 0.852 | | | 0.964 | | 0.488 | | | 0.066 | | |
| Satd. Flow (perm) | 0 | 1599 | 0 | 0 | 1754 | 1509 | 927 | 1699 | 0 | 121 | 1671 | 0 |
| Right Turn on Red | | | No | | | No | | | No | | | No |
| Satd. Flow (RTOR) | | | | | | | | | | | | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 2372 | | | 910 | | | 1113 | | | 1927 | |
| Travel Time (s) | | 53.9 | | | 20.7 | | | 25.3 | | | 43.8 | |
| Confl. Peds. (#/hr) | | | | | | | | | | | | |
| Confl. Bikes (#/hr) | | | | | | | | | | | | |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Growth Factor | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| Heavy Vehicles (%) | 0% | 1% | 0% | 60% | 0% | 7% | 0% | 11% | 33% | 4% | 13% | 2% |
| Bus Blockages (#/hr) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Parking (#/hr) | | | | | | | | | | | | |
| Mid-Block Traffic (%) | | 0% | | | 0% | | | 0% | | | 0% | |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 262 | 0 | 0 | 81 | 184 | 6 | 967 | 0 | 275 | 483 | 0 |
| Turn Type | Perm | NA | | Perm | NA | Perm | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | | 4 | | | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | | 8 | | 8 | 2 | | | 6 | | |
| Detector Phase | 4 | 4 | | 8 | 8 | 8 | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 5.0 | | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | | 5.0 | 5.0 | |
| Minimum Split (s) | 24.0 | 24.0 | | 24.0 | 24.0 | 24.0 | 9.5 | 24.0 | | 9.5 | 24.0 | |
| Total Split (s) | 24.0 | 24.0 | | 24.0 | 24.0 | 24.0 | 9.6 | 60.0 | | 16.0 | 66.4 | |
| Total Split (%) | 24.0% | 24.0% | | 24.0% | 24.0% | 24.0% | 9.6% | 60.0% | | 16.0% | 66.4% | |
| Yellow Time (s) | 4.0 | 4.0 | | 4.0 | 4.0 | 4.0 | 3.5 | 4.0 | | 3.5 | 4.0 | |
| All-Red Time (s) | 2.0 | 2.0 | | 2.0 | 2.0 | 2.0 | 0.0 | 2.0 | | 0.0 | 2.0 | |
| Lost Time Adjust (s) | | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | | 6.0 | | | 6.0 | 6.0 | 3.5 | 6.0 | | 3.5 | 6.0 | |
| Lead/Lag | | | | | | | Lead | Lag | | Lead | Lag | |
| Lead-Lag Optimize? | | | | | | | Yes | Yes | | Yes | Yes | |
| Recall Mode | None | None | | None | None | None | None | Max | | None | Max | |
| Act Effct Green (s) | | 17.8 | | | 17.8 | 17.8 | 62.1 | 54.0 | | 72.5 | 68.2 | |
| Actuated g/C Ratio | | 0.18 | | | 0.18 | 0.18 | 0.62 | 0.54 | | 0.73 | 0.68 | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| v/c Ratio | | 0.92 | | | 0.26 | 0.69 | 0.01 | 1.05 | | 0.95 | 0.42 | |
| Control Delay | | 78.8 | | | 37.9 | 52.8 | 4.3 | 68.7 | | 69.5 | 9.1 | |
| Queue Delay | | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | | 78.8 | | | 37.9 | 52.8 | 4.3 | 68.7 | | 69.5 | 9.1 | |
| LOS | | E | | | D | D | A | E | | E | A | |
| Approach Delay | | 78.8 | | | 48.2 | | | 68.3 | | | 31.0 | |
| Approach LOS | | E | | | D | | | E | | | C | |
| Queue Length 50th (ft) | | 165 | | | 45 | 111 | 1 | ~678 | | 125 | 113 | |
| Queue Length 95th (ft) | | #315 | | | 88 | #200 | 4 | #918 | | #286 | 234 | |
| Internal Link Dist (ft) | | 2292 | | | 830 | | | 1033 | | | 1847 | |
| Turn Bay Length (ft) | | | | | | 190 | 125 | | | 190 | | |
| Base Capacity (vph) | | 288 | | | 316 | 272 | 635 | 919 | | 290 | 1141 | |
| Starvation Cap Reductn | | 0 | | | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | | 0 | | | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | | 0 | | | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | | 0.91 | | | 0.26 | 0.68 | 0.01 | 1.05 | | 0.95 | 0.42 | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 100 | | | |
| Actuated Cycle Length: 99.8 | | | |
| Natural Cycle: 100 | | | |
| Control Type: Actuated-Uncoordinated | | | |
| Maximum v/c Ratio: 1.05 | | | |
| Intersection Signal Delay: 54.6 | | Intersection LOS: D | |
| Intersection Capacity Utilization 96.4% | | 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: 4: US 30 & 11th Street

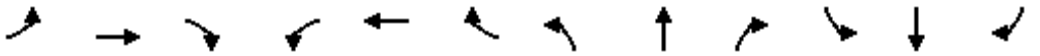
| Intersection | |
|---|---|
| Int Delay, s/veh | 0.9 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 4 | 363 | 190 | 15 | 31 | 8 |
| Future Vol, veh/h | 4 | 363 | 190 | 15 | 31 | 8 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 100 | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 95 | 95 | 95 | 95 | 95 | 95 |
| Heavy Vehicles, % | 0 | 8 | 5 | 0 | 0 | 0 |
| Mvmt Flow | 4 | 382 | 200 | 16 | 33 | 8 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 216 | 0 | - | 0 | 598 | 208 |
| Stage 1 | - | - | - | - | 208 | - |
| Stage 2 | - | - | - | - | 390 | - |
| 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 | 1366 | - | - | - | 468 | 837 |
| Stage 1 | - | - | - | - | 832 | - |
| Stage 2 | - | - | - | - | 689 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 1366 | - | - | - | 467 | 837 |
| Mov Cap-2 Maneuver | - | - | - | - | 467 | - |
| Stage 1 | - | - | - | - | 830 | - |
| Stage 2 | - | - | - | - | 689 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s | 0.1 | 0 | 12.6 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1366 | - | - | - | 514 |
| HCM Lane V/C Ratio | 0.003 | - | - | - | 0.08 |
| HCM Control Delay (s) | 7.6 | - | - | - | 12.6 |
| HCM Lane LOS | A | - | - | - | B |
| HCM 95th %tile Q(veh) | 0 | - | - | - | 0.3 |

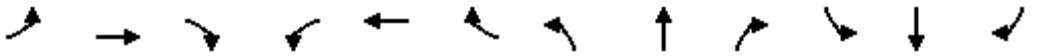


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 17 | 245 | 77 | 93 | 391 | 215 | 143 | 751 | 14 | 130 | 804 | 20 |
| Future Volume (vph) | 17 | 245 | 77 | 93 | 391 | 215 | 143 | 751 | 14 | 130 | 804 | 20 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 |
| Grade (%) | | 0% | | | 0% | | | 0% | | | 0% | |
| Storage Length (ft) | 0 | | 0 | 280 | | 0 | 130 | | 0 | 282 | | 0 |
| Storage Lanes | 0 | | 0 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 25 | | | 255 | | | 112 | | | 180 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped Bike Factor | | | | | | | | | | | | |
| Frt | | 0.969 | | | 0.947 | | | 0.997 | | | 0.996 | |
| Flt Protected | | 0.997 | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 0 | 1836 | 0 | 1805 | 1763 | 0 | 1805 | 1789 | 0 | 1752 | 1804 | 0 |
| Flt Permitted | | 0.405 | | 0.399 | | | 0.087 | | | 0.087 | | |
| Satd. Flow (perm) | 0 | 746 | 0 | 758 | 1763 | 0 | 165 | 1789 | 0 | 160 | 1804 | 0 |
| Right Turn on Red | | | No | | | No | | | No | | | No |
| Satd. Flow (RTOR) | | | | | | | | | | | | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 1099 | | | 2118 | | | 1789 | | | 736 | |
| Travel Time (s) | | 25.0 | | | 48.1 | | | 40.7 | | | 16.7 | |
| Confl. Peds. (#/hr) | | | | | | | | | | | | |
| Confl. Bikes (#/hr) | | | | | | | | | | | | |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Growth Factor | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| Heavy Vehicles (%) | 0% | 0% | 0% | 0% | 1% | 4% | 0% | 6% | 0% | 3% | 5% | 0% |
| Bus Blockages (#/hr) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Parking (#/hr) | | | | | | | | | | | | |
| Mid-Block Traffic (%) | | 0% | | | 0% | | | 0% | | | 0% | |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 357 | 0 | 98 | 638 | 0 | 151 | 806 | 0 | 137 | 867 | 0 |
| Turn Type | Perm | NA | | Perm | NA | | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | | 4 | | | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | | 8 | | | 2 | | | 6 | | |
| Detector Phase | 4 | 4 | | 8 | 8 | | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 5.0 | | 5.0 | 5.0 | | 5.0 | 5.0 | | 5.0 | 5.0 | |
| Minimum Split (s) | 24.0 | 24.0 | | 24.0 | 24.0 | | 9.5 | 24.0 | | 9.5 | 24.0 | |
| Total Split (s) | 38.0 | 38.0 | | 38.0 | 38.0 | | 10.0 | 52.0 | | 10.0 | 52.0 | |
| Total Split (%) | 38.0% | 38.0% | | 38.0% | 38.0% | | 10.0% | 52.0% | | 10.0% | 52.0% | |
| Yellow Time (s) | 4.0 | 4.0 | | 4.0 | 4.0 | | 3.5 | 4.0 | | 3.5 | 4.0 | |
| All-Red Time (s) | 2.0 | 2.0 | | 2.0 | 2.0 | | 0.0 | 2.0 | | 0.0 | 2.0 | |
| Lost Time Adjust (s) | | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | | 6.0 | | 6.0 | 6.0 | | 3.5 | 6.0 | | 3.5 | 6.0 | |
| Lead/Lag | | | | | | | Lead | Lag | | Lead | Lag | |
| Lead-Lag Optimize? | | | | | | | Yes | Yes | | Yes | Yes | |
| Recall Mode | None | None | | None | None | | None | Max | | None | Max | |
| Act Effct Green (s) | | 32.0 | | 32.0 | 32.0 | | 55.0 | 46.0 | | 55.0 | 46.0 | |
| Actuated g/C Ratio | | 0.32 | | 0.32 | 0.32 | | 0.55 | 0.46 | | 0.55 | 0.46 | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| v/c Ratio | | 1.50 | | 0.40 | 1.13 | | 0.77 | 0.98 | | 0.72 | 1.05 | |
| Control Delay | | 274.3 | | 32.8 | 112.7 | | 41.6 | 54.9 | | 36.8 | 72.0 | |
| Queue Delay | | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | | 274.3 | | 32.8 | 112.7 | | 41.6 | 54.9 | | 36.8 | 72.0 | |
| LOS | | F | | C | F | | D | D | | D | E | |
| Approach Delay | | 274.3 | | | 102.0 | | | 52.8 | | | 67.2 | |
| Approach LOS | | F | | | F | | | D | | | E | |
| Queue Length 50th (ft) | | ~317 | | 48 | ~475 | | 41 | 489 | | 37 | ~603 | |
| Queue Length 95th (ft) | | #493 | | 99 | #688 | | #141 | #754 | | #124 | #837 | |
| Internal Link Dist (ft) | | 1019 | | | 2038 | | | 1709 | | | 656 | |
| Turn Bay Length (ft) | | | | 280 | | | 130 | | | 282 | | |
| Base Capacity (vph) | | 238 | | 242 | 564 | | 197 | 822 | | 191 | 829 | |
| Starvation Cap Reductn | | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | | 1.50 | | 0.40 | 1.13 | | 0.77 | 0.98 | | 0.72 | 1.05 | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 100 | | | |
| Actuated Cycle Length: 100 | | | |
| Natural Cycle: 140 | | | |
| Control Type: Actuated-Uncoordinated | | | |
| Maximum v/c Ratio: 1.50 | | | |
| Intersection Signal Delay: 95.3 | | 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. | | | |

Splits and Phases: 1: US 30 & Wolf'S Crossing Road



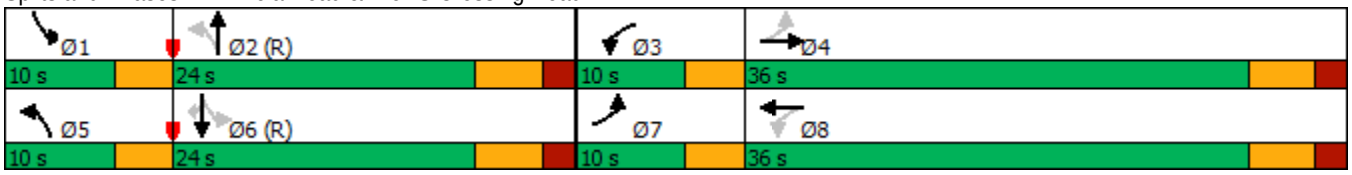
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 129 | 231 | 1 | 41 | 428 | 94 | 48 | 237 | 39 | 58 | 238 | 164 |
| Future Volume (vph) | 129 | 231 | 1 | 41 | 428 | 94 | 48 | 237 | 39 | 58 | 238 | 164 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 2000 | 1900 |
| Lane Width (ft) | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 |
| Grade (%) | | 0% | | | 0% | | | 0% | | | 0% | |
| Storage Length (ft) | 185 | | 0 | 260 | | 0 | 165 | | 0 | 220 | | 0 |
| Storage Lanes | 1 | | 0 | 1 | | 0 | 1 | | 0 | 1 | | 1 |
| Taper Length (ft) | 140 | | | 220 | | | 180 | | | 170 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 |
| Ped Bike Factor | | | | | | | | | | | | |
| Frt | | 0.999 | | | 0.973 | | | 0.979 | | | | 0.850 |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1805 | 1861 | 0 | 1626 | 1804 | 0 | 1805 | 3441 | 0 | 1770 | 1980 | 1599 |
| Flt Permitted | 0.184 | | | 0.607 | | | 0.506 | | | 0.574 | | |
| Satd. Flow (perm) | 350 | 1861 | 0 | 1039 | 1804 | 0 | 961 | 3441 | 0 | 1069 | 1980 | 1599 |
| Right Turn on Red | | | No | | | No | | | No | | | No |
| Satd. Flow (RTOR) | | | | | | | | | | | | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 2118 | | | 1282 | | | 1814 | | | 1197 | |
| Travel Time (s) | | 48.1 | | | 29.1 | | | 41.2 | | | 27.2 | |
| Confl. Peds. (#/hr) | | | | | | | | | | | | |
| Confl. Bikes (#/hr) | | | | | | | | | | | | |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Growth Factor | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| Heavy Vehicles (%) | 0% | 2% | 0% | 11% | 3% | 0% | 0% | 1% | 13% | 2% | 1% | 1% |
| Bus Blockages (#/hr) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Parking (#/hr) | | | | | | | | | | | | |
| Mid-Block Traffic (%) | | 0% | | | 0% | | | 0% | | | 0% | |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 136 | 244 | 0 | 43 | 550 | 0 | 51 | 290 | 0 | 61 | 251 | 173 |
| Turn Type | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | Perm |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | | 8 | | | 2 | | | 6 | | 6 |
| Detector Phase | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | 6 |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 5.0 | | 5.0 | 5.0 | | 5.0 | 5.0 | | 5.0 | 5.0 | 5.0 |
| Minimum Split (s) | 9.5 | 24.0 | | 9.5 | 24.0 | | 9.5 | 24.0 | | 9.5 | 24.0 | 24.0 |
| Total Split (s) | 10.0 | 36.0 | | 10.0 | 36.0 | | 10.0 | 24.0 | | 10.0 | 24.0 | 24.0 |
| Total Split (%) | 12.5% | 45.0% | | 12.5% | 45.0% | | 12.5% | 30.0% | | 12.5% | 30.0% | 30.0% |
| Yellow Time (s) | 3.5 | 4.0 | | 3.5 | 4.0 | | 3.5 | 4.0 | | 3.5 | 4.0 | 4.0 |
| All-Red Time (s) | 0.0 | 2.0 | | 0.0 | 2.0 | | 0.0 | 2.0 | | 0.0 | 2.0 | 2.0 |
| 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) | 3.5 | 6.0 | | 3.5 | 6.0 | | 3.5 | 6.0 | | 3.5 | 6.0 | 6.0 |
| Lead/Lag | Lead | Lag | | Lead | Lag | | Lead | Lag | | Lead | Lag | Lag |
| Lead-Lag Optimize? | Yes | Yes | | Yes | Yes | | Yes | Yes | | Yes | Yes | Yes |
| Recall Mode | None | None | | None | None | | None | C-Max | | None | C-Max | C-Max |
| Act Effct Green (s) | 38.1 | 31.7 | | 36.4 | 27.7 | | 30.7 | 24.3 | | 30.7 | 24.3 | 24.3 |
| Actuated g/C Ratio | 0.48 | 0.40 | | 0.46 | 0.35 | | 0.38 | 0.30 | | 0.38 | 0.30 | 0.30 |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| v/c Ratio | 0.48 | 0.33 | | 0.08 | 0.88 | | 0.12 | 0.28 | | 0.13 | 0.42 | 0.36 |
| Control Delay | 16.0 | 18.8 | | 9.7 | 41.7 | | 16.5 | 24.4 | | 16.6 | 27.5 | 27.4 |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 |
| Total Delay | 16.0 | 18.8 | | 9.7 | 41.7 | | 16.5 | 24.4 | | 16.6 | 27.5 | 27.4 |
| LOS | B | B | | A | D | | B | C | | B | C | C |
| Approach Delay | | 17.8 | | | 39.3 | | | 23.2 | | | 26.1 | |
| Approach LOS | | B | | | D | | | C | | | C | |
| Queue Length 50th (ft) | 32 | 86 | | 10 | 242 | | 16 | 64 | | 19 | 112 | 76 |
| Queue Length 95th (ft) | 60 | 143 | | 24 | #412 | | 38 | 100 | | 43 | 185 | 136 |
| Internal Link Dist (ft) | | 2038 | | | 1202 | | | 1734 | | | 1117 | |
| Turn Bay Length (ft) | 185 | | | 260 | | | 165 | | | 220 | | |
| Base Capacity (vph) | 284 | 736 | | 524 | 676 | | 437 | 1046 | | 467 | 601 | 485 |
| 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 | 0.48 | 0.33 | | 0.08 | 0.81 | | 0.12 | 0.28 | | 0.13 | 0.42 | 0.36 |

Intersection Summary

Area Type: Other
Cycle Length: 80
Actuated Cycle Length: 80
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 70
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.88
Intersection Signal Delay: 28.2 Intersection LOS: C
Intersection Capacity Utilization 68.1% 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.

Splits and Phases: 2: Eola Road & Wolf'S Crossing Road

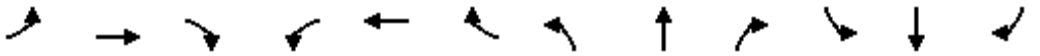


| Lane Group | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 267 | 1 | 921 | 238 | 2 | 972 |
| Future Volume (vph) | 267 | 1 | 921 | 238 | 2 | 972 |
| Ideal Flow (vphpl) | 1900 | 1900 | 2000 | 1900 | 1900 | 2000 |
| Lane Width (ft) | 12 | 12 | 12 | 12 | 12 | 12 |
| Grade (%) | 0% | | 0% | | | 0% |
| Storage Length (ft) | 310 | 0 | | 240 | 240 | |
| Storage Lanes | 1 | 1 | | 1 | 1 | |
| Taper Length (ft) | 200 | | | | 240 | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped Bike Factor | | | | | | |
| Frt | | 0.850 | | 0.850 | | |
| Flt Protected | 0.950 | | | | 0.950 | |
| Satd. Flow (prot) | 1787 | 1615 | 1905 | 1599 | 1805 | 1905 |
| Flt Permitted | 0.950 | | | | 0.121 | |
| Satd. Flow (perm) | 1787 | 1615 | 1905 | 1599 | 230 | 1905 |
| Right Turn on Red | | No | | No | | |
| Satd. Flow (RTOR) | | | | | | |
| Link Speed (mph) | 30 | | 30 | | | 30 |
| Link Distance (ft) | 660 | | 2004 | | | 828 |
| Travel Time (s) | 15.0 | | 45.5 | | | 18.8 |
| Confl. Peds. (#/hr) | | | | | | |
| Confl. Bikes (#/hr) | | | | | | |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Growth Factor | 100% | 100% | 100% | 100% | 100% | 100% |
| Heavy Vehicles (%) | 1% | 0% | 5% | 1% | 0% | 5% |
| Bus Blockages (#/hr) | 0 | 0 | 0 | 0 | 0 | 0 |
| Parking (#/hr) | | | | | | |
| Mid-Block Traffic (%) | 0% | | 0% | | | 0% |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 281 | 1 | 969 | 251 | 2 | 1023 |
| Turn Type | Prot | Perm | NA | Perm | pm+pt | NA |
| Protected Phases | 8 | | 2 | | 1 | 6 |
| Permitted Phases | | 8 | | 2 | 6 | |
| Detector Phase | 8 | 8 | 2 | 2 | 1 | 6 |
| Switch Phase | | | | | | |
| Minimum Initial (s) | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| Minimum Split (s) | 24.0 | 24.0 | 24.0 | 24.0 | 9.5 | 24.0 |
| Total Split (s) | 24.0 | 24.0 | 56.5 | 56.5 | 9.5 | 66.0 |
| Total Split (%) | 26.7% | 26.7% | 62.8% | 62.8% | 10.6% | 73.3% |
| Yellow Time (s) | 4.0 | 4.0 | 4.0 | 4.0 | 3.5 | 4.0 |
| All-Red Time (s) | 2.0 | 2.0 | 2.0 | 2.0 | 0.0 | 2.0 |
| 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 | 3.5 | 6.0 |
| Lead/Lag | | | Lag | Lag | Lead | |
| Lead-Lag Optimize? | | | Yes | Yes | Yes | |
| Recall Mode | None | None | C-Max | C-Max | None | C-Max |
| Act Effct Green (s) | 16.9 | 16.9 | 59.3 | 59.3 | 63.6 | 61.1 |
| Actuated g/C Ratio | 0.19 | 0.19 | 0.66 | 0.66 | 0.71 | 0.68 |

| Lane Group | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| v/c Ratio | 0.84 | 0.00 | 0.77 | 0.24 | 0.01 | 0.79 |
| Control Delay | 57.6 | 29.0 | 17.7 | 7.8 | 4.5 | 16.3 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 |
| Total Delay | 57.6 | 29.0 | 17.7 | 7.8 | 4.5 | 16.6 |
| LOS | E | C | B | A | A | B |
| Approach Delay | 57.5 | | 15.7 | | | 16.6 |
| Approach LOS | E | | B | | | B |
| Queue Length 50th (ft) | 153 | 0 | 329 | 50 | 0 | 369 |
| Queue Length 95th (ft) | #276 | 5 | #747 | 112 | 2 | 567 |
| Internal Link Dist (ft) | 580 | | 1924 | | | 748 |
| Turn Bay Length (ft) | 310 | | | 240 | 240 | |
| Base Capacity (vph) | 357 | 323 | 1254 | 1053 | 267 | 1293 |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 46 |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 0.79 | 0.00 | 0.77 | 0.24 | 0.01 | 0.82 |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 90 | | | |
| Actuated Cycle Length: 90 | | | |
| Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green | | | |
| Natural Cycle: 90 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.84 | | | |
| Intersection Signal Delay: 20.7 | | Intersection LOS: C | |
| Intersection Capacity Utilization 73.4% | | 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: 3: US 30 & Eola Road



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 82 | 71 | 7 | 18 | 215 | 317 | 20 | 759 | 10 | 186 | 923 | 130 |
| Future Volume (vph) | 82 | 71 | 7 | 18 | 215 | 317 | 20 | 759 | 10 | 186 | 923 | 130 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 |
| Grade (%) | | 0% | | | 0% | | | 0% | | | 0% | |
| Storage Length (ft) | 0 | | 0 | 0 | | 190 | 125 | | 0 | 190 | | 0 |
| Storage Lanes | 0 | | 0 | 0 | | 1 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 150 | | | 160 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped Bike Factor | | | | | | | | | | | | |
| Frt | | 0.994 | | | | 0.850 | | 0.998 | | | 0.981 | |
| Flt Protected | | 0.975 | | | 0.996 | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 0 | 1833 | 0 | 0 | 1808 | 1509 | 1805 | 1704 | 0 | 1736 | 1670 | 0 |
| Flt Permitted | | 0.428 | | | 0.967 | | 0.065 | | | 0.187 | | |
| Satd. Flow (perm) | 0 | 805 | 0 | 0 | 1756 | 1509 | 124 | 1704 | 0 | 342 | 1670 | 0 |
| Right Turn on Red | | | No | | | No | | | No | | | No |
| Satd. Flow (RTOR) | | | | | | | | | | | | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 2372 | | | 910 | | | 1113 | | | 1927 | |
| Travel Time (s) | | 53.9 | | | 20.7 | | | 25.3 | | | 43.8 | |
| Confl. Peds. (#/hr) | | | | | | | | | | | | |
| Confl. Bikes (#/hr) | | | | | | | | | | | | |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Growth Factor | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| Heavy Vehicles (%) | 0% | 1% | 0% | 60% | 0% | 7% | 0% | 11% | 33% | 4% | 13% | 2% |
| Bus Blockages (#/hr) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Parking (#/hr) | | | | | | | | | | | | |
| Mid-Block Traffic (%) | | 0% | | | 0% | | | 0% | | | 0% | |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 168 | 0 | 0 | 245 | 334 | 21 | 810 | 0 | 196 | 1109 | 0 |
| Turn Type | Perm | NA | | Perm | NA | Perm | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | | 4 | | | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | | 8 | | 8 | 2 | | | 6 | | |
| Detector Phase | 4 | 4 | | 8 | 8 | 8 | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 5.0 | | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | | 5.0 | 5.0 | |
| Minimum Split (s) | 24.0 | 24.0 | | 24.0 | 24.0 | 24.0 | 9.5 | 24.0 | | 9.5 | 24.0 | |
| Total Split (s) | 24.0 | 24.0 | | 24.0 | 24.0 | 24.0 | 10.0 | 65.0 | | 11.0 | 66.0 | |
| Total Split (%) | 24.0% | 24.0% | | 24.0% | 24.0% | 24.0% | 10.0% | 65.0% | | 11.0% | 66.0% | |
| Yellow Time (s) | 4.0 | 4.0 | | 4.0 | 4.0 | 4.0 | 3.5 | 4.0 | | 3.5 | 4.0 | |
| All-Red Time (s) | 2.0 | 2.0 | | 2.0 | 2.0 | 2.0 | 0.0 | 2.0 | | 0.0 | 2.0 | |
| Lost Time Adjust (s) | | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | | 6.0 | | | 6.0 | 6.0 | 3.5 | 6.0 | | 3.5 | 6.0 | |
| Lead/Lag | | | | | | | Lead | Lag | | Lead | Lag | |
| Lead-Lag Optimize? | | | | | | | Yes | Yes | | Yes | Yes | |
| Recall Mode | None | None | | None | None | None | None | Max | | None | Max | |
| Act Effct Green (s) | | 18.0 | | | 18.0 | 18.0 | 67.4 | 59.0 | | 71.5 | 66.0 | |
| Actuated g/C Ratio | | 0.18 | | | 0.18 | 0.18 | 0.67 | 0.59 | | 0.72 | 0.66 | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| v/c Ratio | | 1.17 | | | 0.78 | 1.23 | 0.12 | 0.81 | | 0.56 | 1.00 | |
| Control Delay | | 165.0 | | | 57.0 | 168.4 | 5.3 | 23.9 | | 10.9 | 47.6 | |
| Queue Delay | | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | | 165.0 | | | 57.0 | 168.4 | 5.3 | 23.9 | | 10.9 | 47.6 | |
| LOS | | F | | | E | F | A | C | | B | D | |
| Approach Delay | | 165.0 | | | 121.2 | | | 23.4 | | | 42.1 | |
| Approach LOS | | F | | | F | | | C | | | D | |
| Queue Length 50th (ft) | | ~128 | | | 150 | ~264 | 3 | 375 | | 33 | 552 | |
| Queue Length 95th (ft) | | #258 | | | #268 | #437 | 9 | 564 | | 54 | #1056 | |
| Internal Link Dist (ft) | | 2292 | | | 830 | | | 1033 | | | 1847 | |
| Turn Bay Length (ft) | | | | | | 190 | 125 | | | 190 | | |
| Base Capacity (vph) | | 144 | | | 316 | 271 | 193 | 1006 | | 349 | 1104 | |
| Starvation Cap Reductn | | 0 | | | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | | 0 | | | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | | 0 | | | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | | 1.17 | | | 0.78 | 1.23 | 0.11 | 0.81 | | 0.56 | 1.00 | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 100 | | | |
| Actuated Cycle Length: 99.9 | | | |
| Natural Cycle: 150 | | | |
| Control Type: Actuated-Uncoordinated | | | |
| Maximum v/c Ratio: 1.23 | | | |
| Intersection Signal Delay: 59.8 | | Intersection LOS: E | |
| Intersection Capacity Utilization 100.0% | | 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: 4: US 30 & 11th Street

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

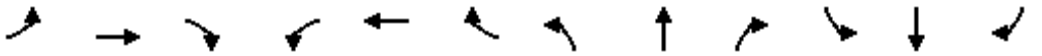
| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 32 | 296 | 544 | 45 | 20 | 19 |
| Future Vol, veh/h | 32 | 296 | 544 | 45 | 20 | 19 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 100 | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 95 | 95 | 95 | 95 | 95 | 95 |
| Heavy Vehicles, % | 0 | 8 | 5 | 0 | 0 | 0 |
| Mvmt Flow | 34 | 312 | 573 | 47 | 21 | 20 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 620 | 0 | - | 0 | 977 | 597 |
| Stage 1 | - | - | - | - | 597 | - |
| Stage 2 | - | - | - | - | 380 | - |
| 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 | 970 | - | - | - | 281 | 507 |
| Stage 1 | - | - | - | - | 554 | - |
| Stage 2 | - | - | - | - | 696 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 970 | - | - | - | 271 | 507 |
| Mov Cap-2 Maneuver | - | - | - | - | 271 | - |
| Stage 1 | - | - | - | - | 535 | - |
| Stage 2 | - | - | - | - | 696 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s | 0.9 | 0 | 16.6 |
| HCM LOS | | | C |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 970 | - | - | - | 350 |
| HCM Lane V/C Ratio | 0.035 | - | - | - | 0.117 |
| HCM Control Delay (s) | 8.8 | - | - | - | 16.6 |
| HCM Lane LOS | A | - | - | - | C |
| HCM 95th %tile Q(veh) | 0.1 | - | - | - | 0.4 |

# Capacity Analysis – Year 2036 Total Projected Conditions



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 46 | 420 | 107 | 68 | 242 | 164 | 68 | 962 | 8 | 127 | 811 | 7 |
| Future Volume (vph) | 46 | 420 | 107 | 68 | 242 | 164 | 68 | 962 | 8 | 127 | 811 | 7 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 0 | | 0 | 280 | | 0 | 130 | | 0 | 282 | | 0 |
| Storage Lanes | 0 | | 0 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 25 | | | 255 | | | 112 | | | 180 | | |
| 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 | | | 0.939 | | | 0.999 | | | 0.999 | |
| Flt Protected | | 0.996 | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 0 | 1805 | 0 | 1752 | 1689 | 0 | 1612 | 1694 | 0 | 1656 | 1725 | 0 |
| Flt Permitted | | 0.642 | | 0.223 | | | 0.085 | | | 0.083 | | |
| Satd. Flow (perm) | 0 | 1164 | 0 | 411 | 1689 | 0 | 144 | 1694 | 0 | 145 | 1725 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 12 | | | 36 | | | 1 | | | 1 | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 1099 | | | 2118 | | | 1789 | | | 736 | |
| Travel Time (s) | | 25.0 | | | 48.1 | | | 40.7 | | | 16.7 | |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Heavy Vehicles (%) | 0% | 3% | 0% | 3% | 2% | 11% | 12% | 12% | 14% | 9% | 10% | 17% |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 603 | 0 | 72 | 428 | 0 | 72 | 1021 | 0 | 134 | 861 | 0 |
| Turn Type | Perm | NA | | Perm | NA | | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | | 4 | | | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | | 8 | | | 2 | | | 6 | | |
| Detector Phase | 4 | 4 | | 8 | 8 | | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 5.0 | | 5.0 | 5.0 | | 5.0 | 5.0 | | 5.0 | 5.0 | |
| Minimum Split (s) | 24.0 | 24.0 | | 24.0 | 24.0 | | 9.5 | 24.0 | | 9.5 | 24.0 | |
| Total Split (s) | 38.0 | 38.0 | | 38.0 | 38.0 | | 9.6 | 52.4 | | 9.6 | 52.4 | |
| Total Split (%) | 38.0% | 38.0% | | 38.0% | 38.0% | | 9.6% | 52.4% | | 9.6% | 52.4% | |
| Yellow Time (s) | 4.0 | 4.0 | | 4.0 | 4.0 | | 3.5 | 4.0 | | 3.5 | 4.0 | |
| All-Red Time (s) | 2.0 | 2.0 | | 2.0 | 2.0 | | 0.0 | 2.0 | | 0.0 | 2.0 | |
| Lost Time Adjust (s) | | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | | 6.0 | | 6.0 | 6.0 | | 3.5 | 6.0 | | 3.5 | 6.0 | |
| Lead/Lag | | | | | | | Lead | Lag | | Lead | Lag | |
| Lead-Lag Optimize? | | | | | | | Yes | Yes | | Yes | Yes | |
| Recall Mode | None | None | | None | None | | None | Max | | None | Max | |
| Act Effct Green (s) | | 32.0 | | 32.0 | 32.0 | | 54.9 | 46.4 | | 55.7 | 48.3 | |
| Actuated g/C Ratio | | 0.32 | | 0.32 | 0.32 | | 0.55 | 0.46 | | 0.56 | 0.48 | |
| v/c Ratio | | 1.59 | | 0.55 | 0.76 | | 0.43 | 1.30 | | 0.78 | 1.03 | |
| Control Delay | | 303.4 | | 46.6 | 38.0 | | 17.9 | 170.3 | | 46.6 | 67.9 | |
| Queue Delay | | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | | 303.4 | | 46.6 | 38.0 | | 17.9 | 170.3 | | 46.6 | 67.9 | |
| LOS | | F | | D | D | | B | F | | D | E | |
| Approach Delay | | 303.4 | | | 39.2 | | | 160.3 | | | 65.0 | |
| Approach LOS | | F | | | D | | | F | | | E | |
| Queue Length 50th (ft) | | ~551 | | 38 | 224 | | 19 | ~843 | | 36 | ~616 | |
| Queue Length 95th (ft) | | #766 | | #99 | #348 | | 40 | #1090 | | #135 | #854 | |

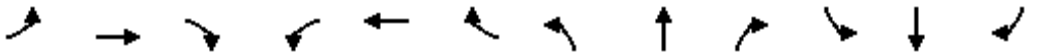
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Internal Link Dist (ft) | | 1019 | | | 2038 | | | 1709 | | | 656 | |
| Turn Bay Length (ft) | | | | 280 | | | 130 | | | 282 | | |
| Base Capacity (vph) | | 380 | | 131 | 564 | | 168 | 786 | | 172 | 833 | |
| Starvation Cap Reductn | | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | | 1.59 | | 0.55 | 0.76 | | 0.43 | 1.30 | | 0.78 | 1.03 | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 100 | | | |
| Actuated Cycle Length: 100 | | | |
| Natural Cycle: 150 | | | |
| Control Type: Actuated-Uncoordinated | | | |
| Maximum v/c Ratio: 1.59 | | | |
| Intersection Signal Delay: 138.7 | | Intersection LOS: F | |
| Intersection Capacity Utilization 130.4% | | 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.

Splits and Phases: 1: US 30 & Wolf'S Crossing Road

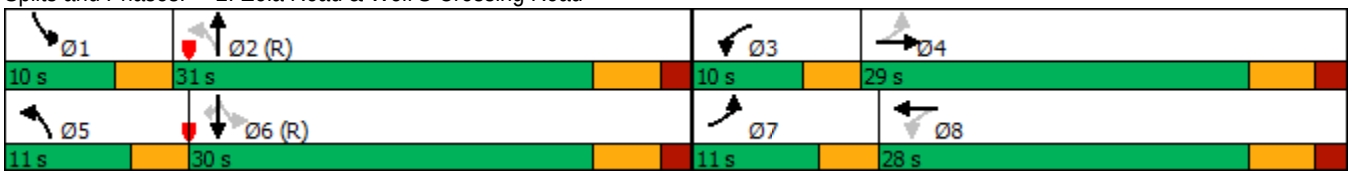


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 106 | 254 | 9 | 51 | 175 | 23 | 135 | 305 | 148 | 67 | 151 | 128 |
| Future Volume (vph) | 106 | 254 | 9 | 51 | 175 | 23 | 135 | 305 | 148 | 67 | 151 | 128 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 2000 | 1900 |
| Storage Length (ft) | 185 | | 0 | 260 | | 0 | 165 | | 0 | 220 | | 0 |
| Storage Lanes | 1 | | 0 | 1 | | 0 | 1 | | 0 | 1 | | 1 |
| Taper Length (ft) | 140 | | | 220 | | | 180 | | | 170 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 |
| Frt | | 0.995 | | | 0.983 | | | 0.951 | | | | 0.850 |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1787 | 1787 | 0 | 1570 | 1777 | 0 | 1805 | 3343 | 0 | 1805 | 1961 | 1568 |
| Flt Permitted | 0.483 | | | 0.486 | | | 0.608 | | | 0.479 | | |
| Satd. Flow (perm) | 909 | 1787 | 0 | 803 | 1777 | 0 | 1155 | 3343 | 0 | 910 | 1961 | 1568 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 2 | | | 8 | | | 107 | | | | 136 |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 2118 | | | 1282 | | | 1814 | | | 1197 | |
| Travel Time (s) | | 48.1 | | | 29.1 | | | 41.2 | | | 27.2 | |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Heavy Vehicles (%) | 1% | 6% | 0% | 15% | 5% | 6% | 0% | 4% | 0% | 0% | 2% | 3% |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 112 | 276 | 0 | 54 | 208 | 0 | 142 | 477 | 0 | 71 | 159 | 135 |
| Turn Type | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | Perm |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | | 8 | | | 2 | | | 6 | | 6 |
| Detector Phase | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | 6 |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 5.0 | | 5.0 | 5.0 | | 5.0 | 5.0 | | 5.0 | 5.0 | 5.0 |
| Minimum Split (s) | 9.5 | 24.0 | | 9.5 | 24.0 | | 9.5 | 24.0 | | 9.5 | 24.0 | 24.0 |
| Total Split (s) | 11.0 | 29.0 | | 10.0 | 28.0 | | 11.0 | 31.0 | | 10.0 | 30.0 | 30.0 |
| Total Split (%) | 13.8% | 36.3% | | 12.5% | 35.0% | | 13.8% | 38.8% | | 12.5% | 37.5% | 37.5% |
| Yellow Time (s) | 3.5 | 4.0 | | 3.5 | 4.0 | | 3.5 | 4.0 | | 3.5 | 4.0 | 4.0 |
| All-Red Time (s) | 0.0 | 2.0 | | 0.0 | 2.0 | | 0.0 | 2.0 | | 0.0 | 2.0 | 2.0 |
| 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) | 3.5 | 6.0 | | 3.5 | 6.0 | | 3.5 | 6.0 | | 3.5 | 6.0 | 6.0 |
| Lead/Lag | Lead | Lag | | Lead | Lag | | Lead | Lag | | Lead | Lag | Lag |
| Lead-Lag Optimize? | Yes | Yes | | Yes | Yes | | Yes | Yes | | Yes | Yes | Yes |
| Recall Mode | None | None | | None | None | | None | C-Max | | None | C-Max | C-Max |
| Act Effct Green (s) | 25.9 | 18.9 | | 23.8 | 16.1 | | 43.9 | 34.8 | | 40.8 | 31.7 | 31.7 |
| Actuated g/C Ratio | 0.32 | 0.24 | | 0.30 | 0.20 | | 0.55 | 0.44 | | 0.51 | 0.40 | 0.40 |
| v/c Ratio | 0.30 | 0.65 | | 0.18 | 0.57 | | 0.20 | 0.32 | | 0.13 | 0.20 | 0.19 |
| Control Delay | 18.2 | 34.6 | | 16.3 | 33.1 | | 11.0 | 14.4 | | 11.1 | 19.7 | 4.9 |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 |
| Total Delay | 18.2 | 34.6 | | 16.3 | 33.1 | | 11.0 | 14.4 | | 11.1 | 19.7 | 4.9 |
| LOS | B | C | | B | C | | B | B | | B | B | A |
| Approach Delay | | 29.8 | | | 29.7 | | | 13.6 | | | 12.6 | |
| Approach LOS | | C | | | C | | | B | | | B | |
| Queue Length 50th (ft) | 37 | 127 | | 17 | 90 | | 33 | 66 | | 16 | 55 | 0 |
| Queue Length 95th (ft) | 62 | 189 | | 35 | 142 | | 72 | 116 | | 41 | 108 | 38 |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Internal Link Dist (ft) | | 2038 | | | 1202 | | | 1734 | | | 1117 | |
| Turn Bay Length (ft) | 185 | | | 260 | | | 165 | | | 220 | | |
| Base Capacity (vph) | 377 | 515 | | 301 | 494 | | 701 | 1513 | | 543 | 777 | 703 |
| 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 | 0.30 | 0.54 | | 0.18 | 0.42 | | 0.20 | 0.32 | | 0.13 | 0.20 | 0.19 |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 80 | | | |
| Actuated Cycle Length: 80 | | | |
| Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green | | | |
| Natural Cycle: 70 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.65 | | | |
| Intersection Signal Delay: 19.8 | | Intersection LOS: B | |
| Intersection Capacity Utilization 52.1% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 2: Eola Road & Wolf'S Crossing Road

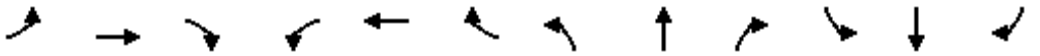


| Lane Group | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 205 | 32 | 1033 | 285 | 43 | 943 |
| Future Volume (vph) | 205 | 32 | 1033 | 285 | 43 | 943 |
| Ideal Flow (vphpl) | 1900 | 1900 | 2000 | 1900 | 1900 | 2000 |
| Storage Length (ft) | 0 | 0 | | 240 | 240 | |
| Storage Lanes | 1 | 1 | | 1 | 1 | |
| Taper Length (ft) | 200 | | | | 240 | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frt | | 0.850 | | 0.850 | | |
| Flt Protected | 0.950 | | | | 0.950 | |
| Satd. Flow (prot) | 1736 | 1615 | 1770 | 1583 | 1805 | 1802 |
| Flt Permitted | 0.950 | | | | 0.068 | |
| Satd. Flow (perm) | 1736 | 1615 | 1770 | 1583 | 129 | 1802 |
| Right Turn on Red | | Yes | | Yes | | |
| Satd. Flow (RTOR) | | 34 | | 263 | | |
| Link Speed (mph) | 30 | | 30 | | | 30 |
| Link Distance (ft) | 1415 | | 2004 | | | 828 |
| Travel Time (s) | 32.2 | | 45.5 | | | 18.8 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Heavy Vehicles (%) | 4% | 0% | 13% | 2% | 0% | 11% |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 216 | 34 | 1087 | 300 | 45 | 993 |
| Turn Type | Prot | Perm | NA | Perm | pm+pt | NA |
| Protected Phases | 8 | | 2 | | 1 | 6 |
| Permitted Phases | | 8 | | 2 | 6 | |
| Detector Phase | 8 | 8 | 2 | 2 | 1 | 6 |
| Switch Phase | | | | | | |
| Minimum Initial (s) | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| Minimum Split (s) | 24.0 | 24.0 | 24.0 | 24.0 | 9.5 | 24.0 |
| Total Split (s) | 24.0 | 24.0 | 56.0 | 56.0 | 10.0 | 66.0 |
| Total Split (%) | 26.7% | 26.7% | 62.2% | 62.2% | 11.1% | 73.3% |
| Yellow Time (s) | 4.0 | 4.0 | 4.0 | 4.0 | 3.5 | 4.0 |
| All-Red Time (s) | 2.0 | 2.0 | 2.0 | 2.0 | 0.0 | 2.0 |
| 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 | 3.5 | 6.0 |
| Lead/Lag | | | Lag | Lag | Lead | |
| Lead-Lag Optimize? | | | Yes | Yes | Yes | |
| Recall Mode | None | None | C-Max | C-Max | None | C-Max |
| Act Effct Green (s) | 15.3 | 15.3 | 56.8 | 56.8 | 65.2 | 62.7 |
| Actuated g/C Ratio | 0.17 | 0.17 | 0.63 | 0.63 | 0.72 | 0.70 |
| v/c Ratio | 0.73 | 0.11 | 0.97 | 0.27 | 0.22 | 0.79 |
| Control Delay | 46.7 | 13.3 | 41.5 | 2.6 | 6.6 | 16.2 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 46.7 | 13.3 | 41.5 | 2.6 | 6.6 | 16.2 |
| LOS | D | B | D | A | A | B |
| Approach Delay | 42.1 | | 33.1 | | | 15.8 |
| Approach LOS | D | | C | | | B |
| Queue Length 50th (ft) | 98 | 0 | ~687 | 8 | 6 | 343 |
| Queue Length 95th (ft) | 155 | 22 | #951 | 45 | 17 | 583 |

| Lane Group | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Internal Link Dist (ft) | 1335 | | 1924 | | | 748 |
| Turn Bay Length (ft) | | | | 240 | 240 | |
| Base Capacity (vph) | 347 | 350 | 1116 | 1095 | 214 | 1255 |
| 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 | 0.62 | 0.10 | 0.97 | 0.27 | 0.21 | 0.79 |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 90 | | | |
| Actuated Cycle Length: 90 | | | |
| Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green | | | |
| Natural Cycle: 100 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.97 | | | |
| Intersection Signal Delay: 27.2 | | Intersection LOS: C | |
| Intersection Capacity Utilization 73.0% | | 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: 3: US 30 & Eola Road

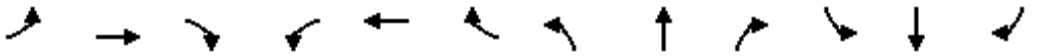


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 95 | 158 | 10 | 40 | 79 | 228 | 6 | 939 | 44 | 311 | 785 | 67 |
| Future Volume (vph) | 95 | 158 | 10 | 40 | 79 | 228 | 6 | 939 | 44 | 311 | 785 | 67 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 0 | | 0 | 0 | | 190 | 125 | | 0 | 190 | | 0 |
| Storage Lanes | 0 | | 0 | 0 | | 1 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 150 | | | 160 | | |
| 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 | | | | 0.850 | | 0.993 | | | 0.988 | |
| Flt Protected | | 0.982 | | | 0.983 | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 0 | 1845 | 0 | 0 | 1554 | 1509 | 1805 | 1685 | 0 | 1736 | 1674 | 0 |
| Flt Permitted | | 0.814 | | | 0.699 | | 0.232 | | | 0.066 | | |
| Satd. Flow (perm) | 0 | 1530 | 0 | 0 | 1105 | 1509 | 441 | 1685 | 0 | 121 | 1674 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 2 | | | | 238 | | 4 | | | 8 | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 2372 | | | 910 | | | 1113 | | | 1927 | |
| Travel Time (s) | | 53.9 | | | 20.7 | | | 25.3 | | | 43.8 | |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Heavy Vehicles (%) | 0% | 1% | 0% | 60% | 0% | 7% | 0% | 11% | 33% | 4% | 13% | 2% |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 277 | 0 | 0 | 125 | 240 | 6 | 1034 | 0 | 327 | 897 | 0 |
| Turn Type | Perm | NA | | Perm | NA | Perm | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | | 4 | | | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | | 8 | | 8 | 2 | | | 6 | | |
| Detector Phase | 4 | 4 | | 8 | 8 | 8 | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 5.0 | | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | | 5.0 | 5.0 | |
| Minimum Split (s) | 24.0 | 24.0 | | 24.0 | 24.0 | 24.0 | 9.5 | 24.0 | | 9.5 | 24.0 | |
| Total Split (s) | 24.0 | 24.0 | | 24.0 | 24.0 | 24.0 | 9.6 | 60.0 | | 16.0 | 66.4 | |
| Total Split (%) | 24.0% | 24.0% | | 24.0% | 24.0% | 24.0% | 9.6% | 60.0% | | 16.0% | 66.4% | |
| Yellow Time (s) | 4.0 | 4.0 | | 4.0 | 4.0 | 4.0 | 3.5 | 4.0 | | 3.5 | 4.0 | |
| All-Red Time (s) | 2.0 | 2.0 | | 2.0 | 2.0 | 2.0 | 0.0 | 2.0 | | 0.0 | 2.0 | |
| Lost Time Adjust (s) | | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | | 6.0 | | | 6.0 | 6.0 | 3.5 | 6.0 | | 3.5 | 6.0 | |
| Lead/Lag | | | | | | | Lead | Lag | | Lead | Lag | |
| Lead-Lag Optimize? | | | | | | | Yes | Yes | | Yes | Yes | |
| Recall Mode | None | None | | None | None | None | None | Max | | None | Max | |
| Act Effct Green (s) | | 18.0 | | | 18.0 | 18.0 | 62.1 | 54.0 | | 72.5 | 68.1 | |
| Actuated g/C Ratio | | 0.18 | | | 0.18 | 0.18 | 0.62 | 0.54 | | 0.72 | 0.68 | |
| v/c Ratio | | 1.00 | | | 0.63 | 0.52 | 0.02 | 1.14 | | 1.13 | 0.78 | |
| Control Delay | | 96.6 | | | 53.6 | 9.3 | 4.5 | 98.7 | | 121.8 | 18.2 | |
| Queue Delay | | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | | 96.6 | | | 53.6 | 9.3 | 4.5 | 98.7 | | 121.8 | 18.2 | |
| LOS | | F | | | D | A | A | F | | F | B | |
| Approach Delay | | 96.6 | | | 24.5 | | | 98.2 | | | 45.9 | |
| Approach LOS | | F | | | C | | | F | | | D | |
| Queue Length 50th (ft) | | 177 | | | 74 | 1 | 1 | ~773 | | ~194 | 319 | |
| Queue Length 95th (ft) | | #347 | | | #150 | 67 | 4 | #1021 | | #368 | #752 | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Internal Link Dist (ft) | | 2292 | | | 830 | | | 1033 | | | 1847 | |
| Turn Bay Length (ft) | | | | | | 190 | 125 | | | 190 | | |
| Base Capacity (vph) | | 277 | | | 198 | 466 | 359 | 911 | | 289 | 1143 | |
| Starvation Cap Reductn | | 0 | | | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | | 0 | | | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | | 0 | | | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | | 1.00 | | | 0.63 | 0.52 | 0.02 | 1.14 | | 1.13 | 0.78 | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 100 | | | |
| Actuated Cycle Length: 100 | | | |
| Natural Cycle: 110 | | | |
| Control Type: Actuated-Uncoordinated | | | |
| Maximum v/c Ratio: 1.14 | | | |
| Intersection Signal Delay: 66.8 | | Intersection LOS: E | |
| Intersection Capacity Utilization 103.5% | | 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. | | | |

Splits and Phases: 4: US 30 & 111th Street

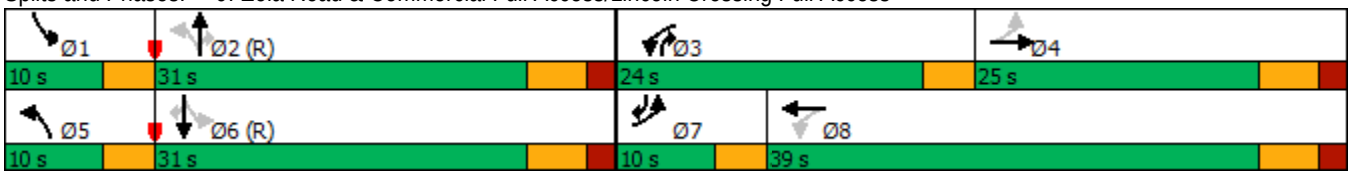


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 17 | 1 | 29 | 70 | 1 | 114 | 32 | 267 | 29 | 33 | 138 | 28 |
| Future Volume (vph) | 17 | 1 | 29 | 70 | 1 | 114 | 32 | 267 | 29 | 33 | 138 | 28 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 2000 | 1900 | 1900 | 2000 | 1900 |
| Storage Length (ft) | 0 | | 0 | 0 | | 0 | 185 | | 115 | 115 | | 185 |
| Storage Lanes | 1 | | 0 | 1 | | 0 | 1 | | 1 | 1 | | 1 |
| Taper Length (ft) | 25 | | | 25 | | | 200 | | | 156 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 |
| Frt | | 0.855 | | | 0.851 | | | | 0.850 | | | 0.850 |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1770 | 1594 | 0 | 1805 | 1617 | 0 | 1770 | 3725 | 1615 | 1805 | 3725 | 1583 |
| Flt Permitted | 0.784 | | | 0.465 | | | 0.660 | | | 0.579 | | |
| Satd. Flow (perm) | 1460 | 1594 | 0 | 884 | 1617 | 0 | 1229 | 3725 | 1615 | 1100 | 3725 | 1583 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 31 | | | 120 | | | | 79 | | | 121 |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 403 | | | 295 | | | 1415 | | | 1814 | |
| Travel Time (s) | | 9.2 | | | 6.7 | | | 32.2 | | | 41.2 | |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Heavy Vehicles (%) | 2% | 0% | 2% | 0% | 0% | 0% | 2% | 2% | 0% | 0% | 2% | 2% |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 18 | 32 | 0 | 74 | 121 | 0 | 34 | 281 | 31 | 35 | 145 | 29 |
| Turn Type | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | pm+ov | pm+pt | NA | pm+ov |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | 3 | 1 | 6 | 7 |
| Permitted Phases | 4 | | | 8 | | | 2 | | 2 | 6 | | 6 |
| Detector Phase | 7 | 4 | | 3 | 8 | | 5 | 2 | 3 | 1 | 6 | 7 |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 5.0 | | 5.0 | 5.0 | | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| Minimum Split (s) | 9.5 | 24.0 | | 24.0 | 24.0 | | 9.5 | 24.0 | 24.0 | 9.5 | 24.0 | 9.5 |
| Total Split (s) | 10.0 | 25.0 | | 24.0 | 39.0 | | 10.0 | 31.0 | 24.0 | 10.0 | 31.0 | 10.0 |
| Total Split (%) | 11.1% | 27.8% | | 26.7% | 43.3% | | 11.1% | 34.4% | 26.7% | 11.1% | 34.4% | 11.1% |
| Yellow Time (s) | 3.5 | 4.0 | | 3.5 | 4.0 | | 3.5 | 4.0 | 3.5 | 3.5 | 4.0 | 3.5 |
| All-Red Time (s) | 0.0 | 2.0 | | 0.0 | 2.0 | | 0.0 | 2.0 | 0.0 | 0.0 | 2.0 | 0.0 |
| Lost Time Adjust (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Lost Time (s) | 3.5 | 6.0 | | 3.5 | 6.0 | | 3.5 | 6.0 | 3.5 | 3.5 | 6.0 | 3.5 |
| Lead/Lag | Lead | Lag | | Lead | Lag | | Lead | Lag | Lead | Lead | Lag | Lead |
| Lead-Lag Optimize? | Yes | Yes | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes | Yes |
| Recall Mode | None | None | | None | None | | None | C-Max | None | None | C-Max | None |
| Act Effct Green (s) | 12.1 | 6.2 | | 16.5 | 8.3 | | 64.1 | 57.8 | 73.1 | 64.1 | 57.8 | 69.8 |
| Actuated g/C Ratio | 0.13 | 0.07 | | 0.18 | 0.09 | | 0.71 | 0.64 | 0.81 | 0.71 | 0.64 | 0.78 |
| v/c Ratio | 0.08 | 0.23 | | 0.30 | 0.47 | | 0.04 | 0.12 | 0.02 | 0.04 | 0.06 | 0.02 |
| Control Delay | 26.7 | 18.9 | | 31.0 | 13.6 | | 7.5 | 11.3 | 0.0 | 5.2 | 8.9 | 0.0 |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 26.7 | 18.9 | | 31.0 | 13.6 | | 7.5 | 11.3 | 0.0 | 5.2 | 8.9 | 0.0 |
| LOS | C | B | | C | B | | A | B | A | A | A | A |
| Approach Delay | | 21.7 | | | 20.2 | | | 9.9 | | | 7.0 | |
| Approach LOS | | C | | | C | | | A | | | A | |
| Queue Length 50th (ft) | 8 | 1 | | 34 | 1 | | 6 | 40 | 0 | 5 | 18 | 0 |
| Queue Length 95th (ft) | 24 | 28 | | 65 | 48 | | 24 | 85 | 0 | 17 | 37 | 0 |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Internal Link Dist (ft) | | 323 | | | 215 | | | 1335 | | | 1734 | |
| Turn Bay Length (ft) | | | | | | | 185 | | 115 | 115 | | 185 |
| Base Capacity (vph) | 222 | 360 | | 424 | 668 | | 917 | 2390 | 1455 | 837 | 2390 | 1262 |
| Starvation Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 0.08 | 0.09 | | 0.17 | 0.18 | | 0.04 | 0.12 | 0.02 | 0.04 | 0.06 | 0.02 |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 90 | | | |
| Actuated Cycle Length: 90 | | | |
| Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green | | | |
| Natural Cycle: 85 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.47 | | | |
| Intersection Signal Delay: 12.4 | | Intersection LOS: B | |
| Intersection Capacity Utilization 35.1% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 9: Eola Road & Commercial Full Access/Lincoln Crossing Full Access



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

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 4 | 469 | 231 | 15 | 31 | 8 |
| Future Vol, veh/h | 4 | 469 | 231 | 15 | 31 | 8 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 100 | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 95 | 95 | 95 | 95 | 95 | 95 |
| Heavy Vehicles, % | 0 | 8 | 5 | 0 | 0 | 0 |
| Mvmt Flow | 4 | 494 | 243 | 16 | 33 | 8 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 259 | 0 | - | 0 | 753 | 251 |
| Stage 1 | - | - | - | - | 251 | - |
| Stage 2 | - | - | - | - | 502 | - |
| 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 | 1317 | - | - | - | 380 | 793 |
| Stage 1 | - | - | - | - | 795 | - |
| Stage 2 | - | - | - | - | 612 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 1317 | - | - | - | 379 | 793 |
| Mov Cap-2 Maneuver | - | - | - | - | 379 | - |
| Stage 1 | - | - | - | - | 793 | - |
| Stage 2 | - | - | - | - | 612 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s | 0.1 | 0 | 14.4 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1317 | - | - | - | 424 |
| HCM Lane V/C Ratio | 0.003 | - | - | - | 0.097 |
| HCM Control Delay (s) | 7.7 | - | - | - | 14.4 |
| HCM Lane LOS | A | - | - | - | B |
| HCM 95th %tile Q(veh) | 0 | - | - | - | 0.3 |

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

| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 459 | 10 | 5 | 234 | 15 | 14 |
| Future Vol, veh/h | 459 | 10 | 5 | 234 | 15 | 14 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | 100 | - | 0 | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 95 | 95 | 95 | 95 | 95 | 95 |
| Heavy Vehicles, % | 2 | 0 | 0 | 2 | 0 | 0 |
| Mvmt Flow | 483 | 11 | 5 | 246 | 16 | 15 |

| Major/Minor | Major1 | | Major2 | | Minor1 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 0 | 0 | 494 | 0 | 745 | 489 |
| Stage 1 | - | - | - | - | 489 | - |
| Stage 2 | - | - | - | - | 256 | - |
| Critical Hdwy | - | - | 4.1 | - | 6.4 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.4 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.4 | - |
| Follow-up Hdwy | - | - | 2.2 | - | 3.5 | 3.3 |
| Pot Cap-1 Maneuver | - | - | 1080 | - | 384 | 583 |
| Stage 1 | - | - | - | - | 621 | - |
| Stage 2 | - | - | - | - | 791 | - |
| Platoon blocked, % | - | - | | - | | |
| Mov Cap-1 Maneuver | - | - | 1080 | - | 382 | 583 |
| Mov Cap-2 Maneuver | - | - | - | - | 382 | - |
| Stage 1 | - | - | - | - | 621 | - |
| Stage 2 | - | - | - | - | 787 | - |

| Approach | EB | WB | NB |
|---|---|---|---|
| HCM Control Delay, s | 0 | 0.2 | 13.4 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL | WBT |
|---|---|---|---|---|---|
| Capacity (veh/h) | 458 | - | - | 1080 | - |
| HCM Lane V/C Ratio | 0.067 | - | - | 0.005 | - |
| HCM Control Delay (s) | 13.4 | - | - | 8.3 | - |
| HCM Lane LOS | B | - | - | A | - |
| HCM 95th %tile Q(veh) | 0.2 | - | - | 0 | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.2 |

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 0 | 20 | 1018 | 47 | 0 | 986 |
| Future Vol, veh/h | 0 | 20 | 1018 | 47 | 0 | 986 |
| 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 | - | 240 | - | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 95 | 95 | 95 | 95 | 95 | 95 |
| Heavy Vehicles, % | 2 | 0 | 13 | 0 | 0 | 11 |
| Mvmt Flow | 0 | 21 | 1072 | 49 | 0 | 1038 |

| Major/Minor | Minor1 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | - | 1072 | 0 | 0 | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | - | 6.2 | - | - | - | - |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | - | 3.3 | - | - | - | - |
| Pot Cap-1 Maneuver | 0 | 270 | - | - | 0 | - |
| Stage 1 | 0 | - | - | - | 0 | - |
| Stage 2 | 0 | - | - | - | 0 | - |
| Platoon blocked, % | | | - | - | | - |
| Mov Cap-1 Maneuver | - | 270 | - | - | - | - |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | WB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 19.5 | 0 | 0 |
| HCM LOS | C | | |

| Minor Lane/Major Mvmt | NBT | NBR | WBLn1 | SBT |
|---|---|---|---|---|
| Capacity (veh/h) | - | - | 270 | - |
| HCM Lane V/C Ratio | - | - | 0.078 | - |
| HCM Control Delay (s) | - | - | 19.5 | - |
| HCM Lane LOS | - | - | C | - |
| HCM 95th %tile Q(veh) | - | - | 0.3 | - |

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

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 28 | 32 | 1240 | 22 | 24 | 1124 |
| Future Vol, veh/h | 28 | 32 | 1240 | 22 | 24 | 1124 |
| 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 | - | 240 | 240 | - |
| Veh in Median Storage, # | 1 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 95 | 95 | 95 | 95 | 95 | 95 |
| Heavy Vehicles, % | 0 | 0 | 13 | 0 | 0 | 11 |
| Mvmt Flow | 29 | 34 | 1305 | 23 | 25 | 1183 |

| Major/Minor | Minor1 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 2538 | 1305 | 0 | 0 | 1328 | 0 |
| Stage 1 | 1305 | - | - | - | - | - |
| Stage 2 | 1233 | - | - | - | - | - |
| Critical Hdwy | 6.4 | 6.2 | - | - | 4.1 | - |
| Critical Hdwy Stg 1 | 5.4 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.4 | - | - | - | - | - |
| Follow-up Hdwy | 3.5 | 3.3 | - | - | 2.2 | - |
| Pot Cap-1 Maneuver | 30 | 198 | - | - | 527 | - |
| Stage 1 | 256 | - | - | - | - | - |
| Stage 2 | 278 | - | - | - | - | - |
| Platoon blocked, % | | | - | - | | - |
| Mov Cap-1 Maneuver | ~ 29 | 198 | - | - | 527 | - |
| Mov Cap-2 Maneuver | 132 | - | - | - | - | - |
| Stage 1 | 256 | - | - | - | - | - |
| Stage 2 | 265 | - | - | - | - | - |

| Approach | WB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 33 | 0 | 0.3 |
| HCM LOS | D | | |

| Minor Lane/Major Mvmt | NBT | NBR | WBLn1 | WBLn2 | SBL | SBT |
|---|---|---|---|---|---|---|
| Capacity (veh/h) | - | - | 132 | 198 | 527 | - |
| HCM Lane V/C Ratio | - | - | 0.223 | 0.17 | 0.048 | - |
| HCM Control Delay (s) | - | - | 39.9 | 26.9 | 12.2 | - |
| HCM Lane LOS | - | - | E | D | B | - |
| HCM 95th %tile Q(veh) | - | - | 0.8 | 0.6 | 0.2 | - |

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

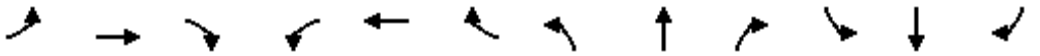
| Intersection | |
|---|---|
| Int Delay, s/veh | 2.1 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 54 | 459 | 290 | 32 | 42 | 57 |
| Future Vol, veh/h | 54 | 459 | 290 | 32 | 42 | 57 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 185 | - | - | 185 | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 95 | 95 | 95 | 95 | 95 | 95 |
| Heavy Vehicles, % | 0 | 2 | 2 | 0 | 0 | 0 |
| Mvmt Flow | 57 | 483 | 305 | 34 | 44 | 60 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 339 | 0 | - | 0 | 902 | 305 |
| Stage 1 | - | - | - | - | 305 | - |
| Stage 2 | - | - | - | - | 597 | - |
| 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 | 1231 | - | - | - | 311 | 740 |
| Stage 1 | - | - | - | - | 752 | - |
| Stage 2 | - | - | - | - | 554 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 1231 | - | - | - | 297 | 740 |
| Mov Cap-2 Maneuver | - | - | - | - | 297 | - |
| Stage 1 | - | - | - | - | 717 | - |
| Stage 2 | - | - | - | - | 554 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s | 0.8 | 0 | 15.3 |
| HCM LOS | | | C |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1231 | - | - | - | 453 |
| HCM Lane V/C Ratio | 0.046 | - | - | - | 0.23 |
| HCM Control Delay (s) | 8.1 | - | - | - | 15.3 |
| HCM Lane LOS | A | - | - | - | C |
| HCM 95th %tile Q(veh) | 0.1 | - | - | - | 0.9 |



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 46 | 420 | 107 | 68 | 242 | 164 | 68 | 962 | 8 | 127 | 811 | 7 |
| Future Volume (vph) | 46 | 420 | 107 | 68 | 242 | 164 | 68 | 962 | 8 | 127 | 811 | 7 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 2000 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 0 | | 215 | 280 | | 280 | 130 | | 0 | 282 | | 0 |
| Storage Lanes | 0 | | 1 | 1 | | 1 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 25 | | | 255 | | | 112 | | | 180 | | |
| 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 | | | 0.850 | | | 0.850 | | 0.999 | | | 0.999 | |
| Flt Protected | | 0.995 | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 0 | 1841 | 1615 | 1752 | 1961 | 1455 | 1612 | 1694 | 0 | 1656 | 1725 | 0 |
| Flt Permitted | | 0.936 | | 0.123 | | | 0.068 | | | 0.067 | | |
| Satd. Flow (perm) | 0 | 1732 | 1615 | 227 | 1961 | 1455 | 115 | 1694 | 0 | 117 | 1725 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 102 | | | 70 | | | | | | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 1099 | | | 2118 | | | 1789 | | | 736 | |
| Travel Time (s) | | 25.0 | | | 48.1 | | | 40.7 | | | 16.7 | |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Heavy Vehicles (%) | 0% | 3% | 0% | 3% | 2% | 11% | 12% | 12% | 14% | 9% | 10% | 17% |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 490 | 113 | 72 | 255 | 173 | 72 | 1021 | 0 | 134 | 861 | 0 |
| Turn Type | Perm | NA | pm+ov | pm+pt | NA | pm+ov | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | | 4 | 5 | 3 | 8 | 1 | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | 4 | 8 | | 8 | 2 | | | 6 | | |
| Detector Phase | 4 | 4 | 5 | 3 | 8 | 1 | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | | 5.0 | 5.0 | |
| Minimum Split (s) | 24.0 | 24.0 | 9.5 | 9.5 | 24.0 | 9.5 | 9.5 | 24.0 | | 9.5 | 24.0 | |
| Total Split (s) | 35.0 | 35.0 | 10.0 | 10.0 | 45.0 | 10.0 | 10.0 | 65.0 | | 10.0 | 65.0 | |
| Total Split (%) | 29.2% | 29.2% | 8.3% | 8.3% | 37.5% | 8.3% | 8.3% | 54.2% | | 8.3% | 54.2% | |
| Yellow Time (s) | 4.0 | 4.0 | 3.5 | 3.5 | 4.0 | 3.5 | 3.5 | 4.0 | | 3.5 | 4.0 | |
| All-Red Time (s) | 2.0 | 2.0 | 0.0 | 0.0 | 2.0 | 0.0 | 0.0 | 2.0 | | 0.0 | 2.0 | |
| 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 | 3.5 | 3.5 | 6.0 | 3.5 | 3.5 | 6.0 | | 3.5 | 6.0 | |
| Lead/Lag | Lag | Lag | Lead | Lead | | Lead | Lead | Lag | | Lead | Lag | |
| Lead-Lag Optimize? | Yes | Yes | Yes | Yes | | Yes | Yes | Yes | | Yes | Yes | |
| Recall Mode | None | None | None | None | None | None | None | Max | | None | Max | |
| Act Effct Green (s) | | 29.0 | 41.4 | 39.4 | 36.9 | 49.4 | 67.9 | 59.1 | | 68.3 | 59.2 | |
| Actuated g/C Ratio | | 0.25 | 0.35 | 0.33 | 0.31 | 0.42 | 0.58 | 0.50 | | 0.58 | 0.50 | |
| v/c Ratio | | 1.15 | 0.18 | 0.46 | 0.42 | 0.27 | 0.49 | 1.21 | | 0.88 | 0.99 | |
| Control Delay | | 132.7 | 7.3 | 36.3 | 34.3 | 14.0 | 25.1 | 132.4 | | 71.1 | 59.8 | |
| Queue Delay | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | | 132.7 | 7.3 | 36.3 | 34.3 | 14.0 | 25.1 | 132.4 | | 71.1 | 59.8 | |
| LOS | | F | A | D | C | B | C | F | | E | E | |
| Approach Delay | | 109.2 | | | 27.5 | | | 125.3 | | | 61.3 | |
| Approach LOS | | F | | | C | | | F | | | E | |
| Queue Length 50th (ft) | | ~453 | 6 | 38 | 153 | 48 | 22 | ~974 | | 55 | ~678 | |
| Queue Length 95th (ft) | | #662 | 46 | 73 | 229 | 99 | 55 | #1228 | | #176 | #949 | |

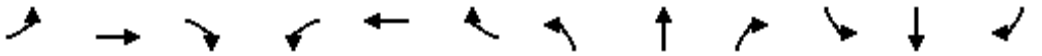
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Internal Link Dist (ft) | | 1019 | | | 2038 | | | 1709 | | | 656 | |
| Turn Bay Length (ft) | | | 215 | 280 | | 280 | 130 | | | 282 | | |
| Base Capacity (vph) | | 426 | 634 | 160 | 649 | 650 | 149 | 847 | | 152 | 866 | |
| 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 | | 1.15 | 0.18 | 0.45 | 0.39 | 0.27 | 0.48 | 1.21 | | 0.88 | 0.99 | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 120 | | | |
| Actuated Cycle Length: 118 | | | |
| Natural Cycle: 150 | | | |
| Control Type: Actuated-Uncoordinated | | | |
| Maximum v/c Ratio: 1.21 | | | |
| Intersection Signal Delay: 87.0 | | Intersection LOS: F | |
| Intersection Capacity Utilization 113.2% | | 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.

Splits and Phases: 1: US 30 & Wolf'S Crossing Road



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 95 | 158 | 10 | 40 | 79 | 228 | 6 | 939 | 44 | 311 | 785 | 67 |
| Future Volume (vph) | 95 | 158 | 10 | 40 | 79 | 228 | 6 | 939 | 44 | 311 | 785 | 67 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 2000 | 1900 | 1900 | 1900 | 1900 | 1900 | 2000 | 1900 |
| Storage Length (ft) | 240 | | 0 | 240 | | 240 | 125 | | 0 | 190 | | 265 |
| Storage Lanes | 1 | | 0 | 1 | | 1 | 1 | | 0 | 1 | | 1 |
| Taper Length (ft) | 240 | | | 240 | | | 150 | | | 160 | | |
| 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 | | 0.991 | | | | 0.850 | | 0.993 | | | | 0.850 |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1805 | 1865 | 0 | 1128 | 2000 | 1509 | 1805 | 1685 | 0 | 1736 | 1770 | 1583 |
| Flt Permitted | 0.581 | | | 0.514 | | | 0.277 | | | 0.059 | | |
| Satd. Flow (perm) | 1104 | 1865 | 0 | 610 | 2000 | 1509 | 526 | 1685 | 0 | 108 | 1770 | 1583 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 2 | | | | 121 | | 3 | | | | 71 |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 2372 | | | 910 | | | 1113 | | | 1927 | |
| Travel Time (s) | | 53.9 | | | 20.7 | | | 25.3 | | | 43.8 | |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Heavy Vehicles (%) | 0% | 1% | 0% | 60% | 0% | 7% | 0% | 11% | 33% | 4% | 13% | 2% |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 100 | 177 | 0 | 42 | 83 | 240 | 6 | 1034 | 0 | 327 | 826 | 71 |
| Turn Type | pm+pt | NA | | pm+pt | NA | pm+ov | pm+pt | NA | | pm+pt | NA | pm+ov |
| Protected Phases | 7 | 4 | | 3 | 8 | 1 | 5 | 2 | | 1 | 6 | 7 |
| Permitted Phases | 4 | | | 8 | | 8 | 2 | | | 6 | | 6 |
| Detector Phase | 7 | 4 | | 3 | 8 | 1 | 5 | 2 | | 1 | 6 | 7 |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 5.0 | | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | | 5.0 | 5.0 | 5.0 |
| Minimum Split (s) | 9.5 | 24.0 | | 9.5 | 24.0 | 9.5 | 9.5 | 24.0 | | 9.5 | 24.0 | 9.5 |
| Total Split (s) | 10.0 | 24.0 | | 10.0 | 24.0 | 19.0 | 10.0 | 67.0 | | 19.0 | 76.0 | 10.0 |
| Total Split (%) | 8.3% | 20.0% | | 8.3% | 20.0% | 15.8% | 8.3% | 55.8% | | 15.8% | 63.3% | 8.3% |
| Yellow Time (s) | 3.5 | 4.0 | | 3.5 | 4.0 | 3.5 | 3.5 | 4.0 | | 3.5 | 4.0 | 3.5 |
| All-Red Time (s) | 0.0 | 2.0 | | 0.0 | 2.0 | 0.0 | 0.0 | 2.0 | | 0.0 | 2.0 | 0.0 |
| Lost Time Adjust (s) | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 |
| Total Lost Time (s) | 3.5 | 6.0 | | 3.5 | 6.0 | 3.5 | 3.5 | 6.0 | | 3.5 | 6.0 | 3.5 |
| Lead/Lag | Lead | Lag | | Lead | Lag | Lead | Lead | Lag | | Lead | Lag | Lead |
| Lead-Lag Optimize? | Yes | Yes | | Yes | Yes | Yes | Yes | Yes | | Yes | Yes | Yes |
| Recall Mode | None | None | | None | None | None | None | Max | | None | Max | None |
| Act Effct Green (s) | 22.6 | 15.0 | | 21.1 | 14.3 | 33.0 | 69.4 | 61.3 | | 82.8 | 78.5 | 93.2 |
| Actuated g/C Ratio | 0.20 | 0.13 | | 0.18 | 0.12 | 0.29 | 0.60 | 0.53 | | 0.72 | 0.68 | 0.81 |
| v/c Ratio | 0.38 | 0.72 | | 0.30 | 0.34 | 0.46 | 0.02 | 1.15 | | 1.10 | 0.68 | 0.05 |
| Control Delay | 41.0 | 65.2 | | 41.4 | 49.8 | 18.2 | 6.7 | 109.2 | | 115.8 | 16.8 | 1.3 |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 |
| Total Delay | 41.0 | 65.2 | | 41.4 | 49.8 | 18.2 | 6.7 | 109.2 | | 115.8 | 16.8 | 1.3 |
| LOS | D | E | | D | D | B | A | F | | F | B | A |
| Approach Delay | | 56.5 | | | 28.1 | | | 108.6 | | | 42.4 | |
| Approach LOS | | E | | | C | | | F | | | D | |
| Queue Length 50th (ft) | 61 | 129 | | 25 | 58 | 67 | 1 | ~954 | | ~241 | 348 | 0 |
| Queue Length 95th (ft) | 110 | 206 | | 57 | 107 | 141 | 6 | #1238 | | #436 | 658 | 14 |

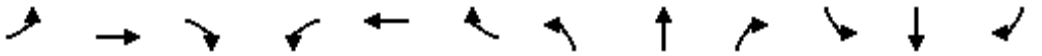
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Internal Link Dist (ft) | | 2292 | | | 830 | | | 1033 | | | 1847 | |
| Turn Bay Length (ft) | 240 | | | 240 | | 240 | 125 | | | 190 | | 265 |
| Base Capacity (vph) | 264 | 294 | | 142 | 314 | 519 | 393 | 897 | | 297 | 1206 | 1294 |
| Starvation Cap Reductn | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 |
| Reduced v/c Ratio | 0.38 | 0.60 | | 0.30 | 0.26 | 0.46 | 0.02 | 1.15 | | 1.10 | 0.68 | 0.05 |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 120 | | | |
| Actuated Cycle Length: 115.2 | | | |
| Natural Cycle: 150 | | | |
| Control Type: Actuated-Uncoordinated | | | |
| Maximum v/c Ratio: 1.15 | | | |
| Intersection Signal Delay: 65.6 | | Intersection LOS: E | |
| Intersection Capacity Utilization 99.1% | | 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: 4: US 30 & 11th Street



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 17 | 254 | 115 | 93 | 395 | 231 | 179 | 938 | 14 | 160 | 1010 | 20 |
| Future Volume (vph) | 17 | 254 | 115 | 93 | 395 | 231 | 179 | 938 | 14 | 160 | 1010 | 20 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 0 | | 0 | 280 | | 0 | 130 | | 0 | 282 | | 0 |
| Storage Lanes | 0 | | 0 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 25 | | | 255 | | | 112 | | | 180 | | |
| 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 | | 0.960 | | | 0.945 | | | 0.998 | | | 0.997 | |
| Flt Protected | | 0.998 | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 0 | 1820 | 0 | 1805 | 1758 | 0 | 1805 | 1790 | 0 | 1752 | 1806 | 0 |
| Flt Permitted | | 0.386 | | 0.353 | | | 0.087 | | | 0.087 | | |
| Satd. Flow (perm) | 0 | 704 | 0 | 671 | 1758 | 0 | 165 | 1790 | 0 | 160 | 1806 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 22 | | | 31 | | | 1 | | | 1 | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 1099 | | | 2118 | | | 1789 | | | 736 | |
| Travel Time (s) | | 25.0 | | | 48.1 | | | 40.7 | | | 16.7 | |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Heavy Vehicles (%) | 0% | 0% | 0% | 0% | 1% | 4% | 0% | 6% | 0% | 3% | 5% | 0% |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 406 | 0 | 98 | 659 | 0 | 188 | 1002 | 0 | 168 | 1084 | 0 |
| Turn Type | Perm | NA | | Perm | NA | | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | | 4 | | | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | | 8 | | | 2 | | | 6 | | |
| Detector Phase | 4 | 4 | | 8 | 8 | | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 5.0 | | 5.0 | 5.0 | | 5.0 | 5.0 | | 5.0 | 5.0 | |
| Minimum Split (s) | 24.0 | 24.0 | | 24.0 | 24.0 | | 9.5 | 24.0 | | 9.5 | 24.0 | |
| Total Split (s) | 38.0 | 38.0 | | 38.0 | 38.0 | | 10.0 | 52.0 | | 10.0 | 52.0 | |
| Total Split (%) | 38.0% | 38.0% | | 38.0% | 38.0% | | 10.0% | 52.0% | | 10.0% | 52.0% | |
| Yellow Time (s) | 4.0 | 4.0 | | 4.0 | 4.0 | | 3.5 | 4.0 | | 3.5 | 4.0 | |
| All-Red Time (s) | 2.0 | 2.0 | | 2.0 | 2.0 | | 0.0 | 2.0 | | 0.0 | 2.0 | |
| Lost Time Adjust (s) | | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | | 6.0 | | 6.0 | 6.0 | | 3.5 | 6.0 | | 3.5 | 6.0 | |
| Lead/Lag | | | | | | | Lead | Lag | | Lead | Lag | |
| Lead-Lag Optimize? | | | | | | | Yes | Yes | | Yes | Yes | |
| Recall Mode | None | None | | None | None | | None | Max | | None | Max | |
| Act Effct Green (s) | | 32.0 | | 32.0 | 32.0 | | 55.0 | 46.0 | | 55.0 | 46.0 | |
| Actuated g/C Ratio | | 0.32 | | 0.32 | 0.32 | | 0.55 | 0.46 | | 0.55 | 0.46 | |
| v/c Ratio | | 1.69 | | 0.46 | 1.13 | | 0.95 | 1.22 | | 0.88 | 1.30 | |
| Control Delay | | 353.9 | | 35.5 | 110.4 | | 75.1 | 136.0 | | 60.1 | 172.3 | |
| Queue Delay | | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | | 353.9 | | 35.5 | 110.4 | | 75.1 | 136.0 | | 60.1 | 172.3 | |
| LOS | | F | | D | F | | E | F | | E | F | |
| Approach Delay | | 353.9 | | | 100.7 | | | 126.4 | | | 157.2 | |
| Approach LOS | | F | | | F | | | F | | | F | |
| Queue Length 50th (ft) | | ~376 | | 49 | ~477 | | 66 | ~792 | | 53 | ~898 | |
| Queue Length 95th (ft) | | #565 | | 103 | #698 | | #204 | #1038 | | #175 | #1149 | |

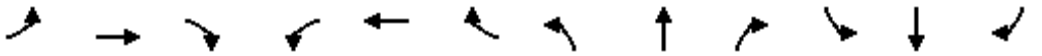
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Internal Link Dist (ft) | | 1019 | | | 2038 | | | 1709 | | | 656 | |
| Turn Bay Length (ft) | | | | 280 | | | 130 | | | 282 | | |
| Base Capacity (vph) | | 240 | | 214 | 583 | | 197 | 823 | | 191 | 831 | |
| Starvation Cap Reductn | | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | | 1.69 | | 0.46 | 1.13 | | 0.95 | 1.22 | | 0.88 | 1.30 | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 100 | | | |
| Actuated Cycle Length: 100 | | | |
| Natural Cycle: 150 | | | |
| Control Type: Actuated-Uncoordinated | | | |
| Maximum v/c Ratio: 1.69 | | | |
| Intersection Signal Delay: 157.3 | | Intersection LOS: F | |
| Intersection Capacity Utilization 124.2% | | 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.

Splits and Phases: 1: US 30 & Wolf's Crossing Road

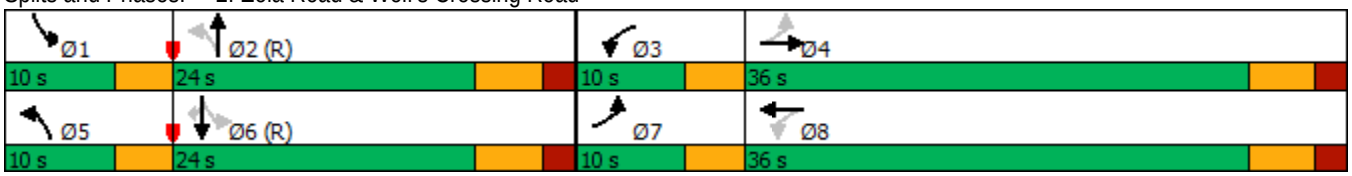


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 129 | 261 | 10 | 148 | 436 | 96 | 60 | 374 | 126 | 61 | 330 | 164 |
| Future Volume (vph) | 129 | 261 | 10 | 148 | 436 | 96 | 60 | 374 | 126 | 61 | 330 | 164 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 2000 | 1900 |
| Storage Length (ft) | 185 | | 0 | 260 | | 0 | 165 | | 0 | 220 | | 0 |
| Storage Lanes | 1 | | 0 | 1 | | 0 | 1 | | 0 | 1 | | 1 |
| Taper Length (ft) | 140 | | | 220 | | | 180 | | | 170 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 |
| Frt | | 0.994 | | | 0.973 | | | 0.962 | | | | 0.850 |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1805 | 1853 | 0 | 1626 | 1804 | 0 | 1805 | 3338 | 0 | 1770 | 1980 | 1599 |
| Flt Permitted | 0.167 | | | 0.503 | | | 0.348 | | | 0.358 | | |
| Satd. Flow (perm) | 317 | 1853 | 0 | 861 | 1804 | 0 | 661 | 3338 | 0 | 667 | 1980 | 1599 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 3 | | | 16 | | | 54 | | | | 173 |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 2118 | | | 1282 | | | 1814 | | | 1197 | |
| Travel Time (s) | | 48.1 | | | 29.1 | | | 41.2 | | | 27.2 | |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Heavy Vehicles (%) | 0% | 2% | 0% | 11% | 3% | 0% | 0% | 1% | 13% | 2% | 1% | 1% |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 136 | 286 | 0 | 156 | 560 | 0 | 63 | 527 | 0 | 64 | 347 | 173 |
| Turn Type | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | Perm |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | | 8 | | | 2 | | | 6 | | 6 |
| Detector Phase | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | 6 |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 5.0 | | 5.0 | 5.0 | | 5.0 | 5.0 | | 5.0 | 5.0 | 5.0 |
| Minimum Split (s) | 9.5 | 24.0 | | 9.5 | 24.0 | | 9.5 | 24.0 | | 9.5 | 24.0 | 24.0 |
| Total Split (s) | 10.0 | 36.0 | | 10.0 | 36.0 | | 10.0 | 24.0 | | 10.0 | 24.0 | 24.0 |
| Total Split (%) | 12.5% | 45.0% | | 12.5% | 45.0% | | 12.5% | 30.0% | | 12.5% | 30.0% | 30.0% |
| Yellow Time (s) | 3.5 | 4.0 | | 3.5 | 4.0 | | 3.5 | 4.0 | | 3.5 | 4.0 | 4.0 |
| All-Red Time (s) | 0.0 | 2.0 | | 0.0 | 2.0 | | 0.0 | 2.0 | | 0.0 | 2.0 | 2.0 |
| 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) | 3.5 | 6.0 | | 3.5 | 6.0 | | 3.5 | 6.0 | | 3.5 | 6.0 | 6.0 |
| Lead/Lag | Lead | Lag | | Lead | Lag | | Lead | Lag | | Lead | Lag | Lag |
| Lead-Lag Optimize? | Yes | Yes | | Yes | Yes | | Yes | Yes | | Yes | Yes | Yes |
| Recall Mode | None | None | | None | None | | None | C-Max | | None | C-Max | C-Max |
| Act Effct Green (s) | 36.8 | 27.8 | | 36.8 | 27.8 | | 29.9 | 22.3 | | 29.9 | 22.3 | 22.3 |
| Actuated g/C Ratio | 0.46 | 0.35 | | 0.46 | 0.35 | | 0.37 | 0.28 | | 0.37 | 0.28 | 0.28 |
| v/c Ratio | 0.51 | 0.44 | | 0.34 | 0.88 | | 0.19 | 0.54 | | 0.19 | 0.63 | 0.30 |
| Control Delay | 17.2 | 21.8 | | 12.7 | 40.5 | | 17.3 | 26.0 | | 17.4 | 34.1 | 6.1 |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 |
| Total Delay | 17.2 | 21.8 | | 12.7 | 40.5 | | 17.3 | 26.0 | | 17.4 | 34.1 | 6.1 |
| LOS | B | C | | B | D | | B | C | | B | C | A |
| Approach Delay | | 20.3 | | | 34.4 | | | 25.1 | | | 24.0 | |
| Approach LOS | | C | | | C | | | C | | | C | |
| Queue Length 50th (ft) | 32 | 102 | | 38 | 240 | | 20 | 113 | | 20 | 164 | 0 |
| Queue Length 95th (ft) | 60 | 168 | | 70 | #414 | | 44 | 166 | | 45 | #291 | 47 |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Internal Link Dist (ft) | | 2038 | | | 1202 | | | 1734 | | | 1117 | |
| Turn Bay Length (ft) | 185 | | | 260 | | | 165 | | | 220 | | |
| Base Capacity (vph) | 266 | 696 | | 457 | 686 | | 340 | 967 | | 339 | 550 | 569 |
| 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 | 0.51 | 0.41 | | 0.34 | 0.82 | | 0.19 | 0.54 | | 0.19 | 0.63 | 0.30 |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 80 | | | |
| Actuated Cycle Length: 80 | | | |
| Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green | | | |
| Natural Cycle: 75 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.88 | | | |
| Intersection Signal Delay: 26.8 | | Intersection LOS: C | |
| Intersection Capacity Utilization 73.3% | | 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: 2: Eola Road & Wolf's Crossing Road

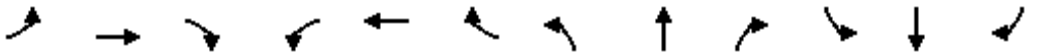


| Lane Group | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 445 | 23 | 1148 | 313 | 133 | 1085 |
| Future Volume (vph) | 445 | 23 | 1148 | 313 | 133 | 1085 |
| Ideal Flow (vphpl) | 1900 | 1900 | 2000 | 1900 | 1900 | 2000 |
| Storage Length (ft) | 0 | 0 | | 240 | 240 | |
| Storage Lanes | 1 | 1 | | 1 | 1 | |
| Taper Length (ft) | 200 | | | | 240 | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frt | | 0.850 | | 0.850 | | |
| Flt Protected | 0.950 | | | | 0.950 | |
| Satd. Flow (prot) | 1787 | 1615 | 1905 | 1599 | 1805 | 1905 |
| Flt Permitted | 0.950 | | | | 0.075 | |
| Satd. Flow (perm) | 1787 | 1615 | 1905 | 1599 | 142 | 1905 |
| Right Turn on Red | | Yes | | Yes | | |
| Satd. Flow (RTOR) | | 24 | | 260 | | |
| Link Speed (mph) | 30 | | 30 | | | 30 |
| Link Distance (ft) | 601 | | 2004 | | | 828 |
| Travel Time (s) | 13.7 | | 45.5 | | | 18.8 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Heavy Vehicles (%) | 1% | 0% | 5% | 1% | 0% | 5% |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 468 | 24 | 1208 | 329 | 140 | 1142 |
| Turn Type | Prot | Perm | NA | Perm | pm+pt | NA |
| Protected Phases | 8 | | 2 | | 1 | 6 |
| Permitted Phases | | 8 | | 2 | 6 | |
| Detector Phase | 8 | 8 | 2 | 2 | 1 | 6 |
| Switch Phase | | | | | | |
| Minimum Initial (s) | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| Minimum Split (s) | 24.0 | 24.0 | 24.0 | 24.0 | 9.5 | 24.0 |
| Total Split (s) | 24.0 | 24.0 | 56.0 | 56.0 | 10.0 | 66.0 |
| Total Split (%) | 26.7% | 26.7% | 62.2% | 62.2% | 11.1% | 73.3% |
| Yellow Time (s) | 4.0 | 4.0 | 4.0 | 4.0 | 3.5 | 4.0 |
| All-Red Time (s) | 2.0 | 2.0 | 2.0 | 2.0 | 0.0 | 2.0 |
| 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 | 3.5 | 6.0 |
| Lead/Lag | | | Lag | Lag | Lead | |
| Lead-Lag Optimize? | | | Yes | Yes | Yes | |
| Recall Mode | None | None | C-Max | C-Max | None | C-Max |
| Act Effct Green (s) | 18.0 | 18.0 | 50.0 | 50.0 | 62.5 | 60.0 |
| Actuated g/C Ratio | 0.20 | 0.20 | 0.56 | 0.56 | 0.69 | 0.67 |
| v/c Ratio | 1.31 | 0.07 | 1.14 | 0.33 | 0.64 | 0.90 |
| Control Delay | 192.5 | 18.0 | 97.5 | 3.5 | 25.8 | 24.2 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 192.5 | 18.0 | 97.5 | 3.5 | 25.8 | 24.2 |
| LOS | F | B | F | A | C | C |
| Approach Delay | 184.0 | | 77.3 | | | 24.4 |
| Approach LOS | F | | E | | | C |
| Queue Length 50th (ft) | ~361 | 0 | ~811 | 17 | 23 | 477 |
| Queue Length 95th (ft) | #555 | 25 | #1056 | 56 | #98 | #849 |

| Lane Group | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Internal Link Dist (ft) | 521 | | 1924 | | | 748 |
| Turn Bay Length (ft) | | | | 240 | 240 | |
| Base Capacity (vph) | 357 | 342 | 1058 | 1003 | 218 | 1270 |
| 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 | 1.31 | 0.07 | 1.14 | 0.33 | 0.64 | 0.90 |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 90 | | | |
| Actuated Cycle Length: 90 | | | |
| Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green | | | |
| Natural Cycle: 140 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 1.31 | | | |
| Intersection Signal Delay: 72.7 | | Intersection LOS: E | |
| Intersection Capacity Utilization 102.8% | | 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. | | | |

Splits and Phases: 3: US 30 & Eola Road



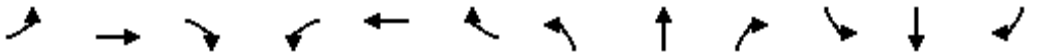
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 112 | 88 | 7 | 79 | 230 | 499 | 20 | 880 | 78 | 258 | 1026 | 156 |
| Future Volume (vph) | 112 | 88 | 7 | 79 | 230 | 499 | 20 | 880 | 78 | 258 | 1026 | 156 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 0 | | 0 | 0 | | 190 | 125 | | 0 | 190 | | 0 |
| Storage Lanes | 0 | | 0 | 0 | | 1 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 150 | | | 160 | | |
| 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 | | | | 0.850 | | 0.988 | | | 0.980 | |
| Flt Protected | | 0.974 | | | 0.987 | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 0 | 1835 | 0 | 0 | 1626 | 1509 | 1805 | 1664 | 0 | 1736 | 1669 | 0 |
| Flt Permitted | | 0.202 | | | 0.835 | | 0.065 | | | 0.069 | | |
| Satd. Flow (perm) | 0 | 381 | 0 | 0 | 1376 | 1509 | 124 | 1664 | 0 | 126 | 1669 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 1 | | | | 232 | | 8 | | | 14 | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 2372 | | | 910 | | | 1113 | | | 1927 | |
| Travel Time (s) | | 53.9 | | | 20.7 | | | 25.3 | | | 43.8 | |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Heavy Vehicles (%) | 0% | 1% | 0% | 60% | 0% | 7% | 0% | 11% | 33% | 4% | 13% | 2% |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 218 | 0 | 0 | 325 | 525 | 21 | 1008 | 0 | 272 | 1244 | 0 |
| Turn Type | Perm | NA | | Perm | NA | Perm | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | | 4 | | | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | | 8 | | 8 | 2 | | | 6 | | |
| Detector Phase | 4 | 4 | | 8 | 8 | 8 | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 5.0 | | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | | 5.0 | 5.0 | |
| Minimum Split (s) | 24.0 | 24.0 | | 24.0 | 24.0 | 24.0 | 9.5 | 24.0 | | 9.5 | 24.0 | |
| Total Split (s) | 24.0 | 24.0 | | 24.0 | 24.0 | 24.0 | 10.0 | 65.0 | | 11.0 | 66.0 | |
| Total Split (%) | 24.0% | 24.0% | | 24.0% | 24.0% | 24.0% | 10.0% | 65.0% | | 11.0% | 66.0% | |
| Yellow Time (s) | 4.0 | 4.0 | | 4.0 | 4.0 | 4.0 | 3.5 | 4.0 | | 3.5 | 4.0 | |
| All-Red Time (s) | 2.0 | 2.0 | | 2.0 | 2.0 | 2.0 | 0.0 | 2.0 | | 0.0 | 2.0 | |
| Lost Time Adjust (s) | | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | | 6.0 | | | 6.0 | 6.0 | 3.5 | 6.0 | | 3.5 | 6.0 | |
| Lead/Lag | | | | | | | Lead | Lag | | Lead | Lag | |
| Lead-Lag Optimize? | | | | | | | Yes | Yes | | Yes | Yes | |
| Recall Mode | None | None | | None | None | None | None | Max | | None | Max | |
| Act Effct Green (s) | | 18.0 | | | 18.0 | 18.0 | 67.3 | 59.0 | | 71.6 | 66.1 | |
| Actuated g/C Ratio | | 0.18 | | | 0.18 | 0.18 | 0.67 | 0.59 | | 0.72 | 0.66 | |
| v/c Ratio | | 3.16 | | | 1.32 | 1.14 | 0.12 | 1.02 | | 1.29 | 1.12 | |
| Control Delay | | 1025.5 | | | 202.8 | 108.5 | 5.3 | 56.7 | | 185.5 | 87.1 | |
| Queue Delay | | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | | 1025.5 | | | 202.8 | 108.5 | 5.3 | 56.7 | | 185.5 | 87.1 | |
| LOS | | F | | | F | F | A | E | | F | F | |
| Approach Delay | | 1025.5 | | | 144.5 | | | 55.6 | | | 104.7 | |
| Approach LOS | | F | | | F | | | E | | | F | |
| Queue Length 50th (ft) | | ~248 | | | ~268 | ~262 | 3 | ~686 | | ~166 | ~877 | |
| Queue Length 95th (ft) | | #398 | | | #439 | #468 | 9 | #932 | | #334 | #1245 | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Internal Link Dist (ft) | | 2292 | | | 830 | | | 1033 | | | 1847 | |
| Turn Bay Length (ft) | | | | | | 190 | 125 | | | 190 | | |
| Base Capacity (vph) | | 69 | | | 247 | 461 | 193 | 985 | | 211 | 1108 | |
| Starvation Cap Reductn | | 0 | | | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | | 0 | | | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | | 0 | | | 0 | 0 | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | | 3.16 | | | 1.32 | 1.14 | 0.11 | 1.02 | | 1.29 | 1.12 | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 100 | | | |
| Actuated Cycle Length: 100 | | | |
| Natural Cycle: 150 | | | |
| Control Type: Actuated-Uncoordinated | | | |
| Maximum v/c Ratio: 3.16 | | | |
| Intersection Signal Delay: 155.7 | | Intersection LOS: F | |
| Intersection Capacity Utilization 113.7% | | 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.

Splits and Phases: 4: US 30 & 111th Street

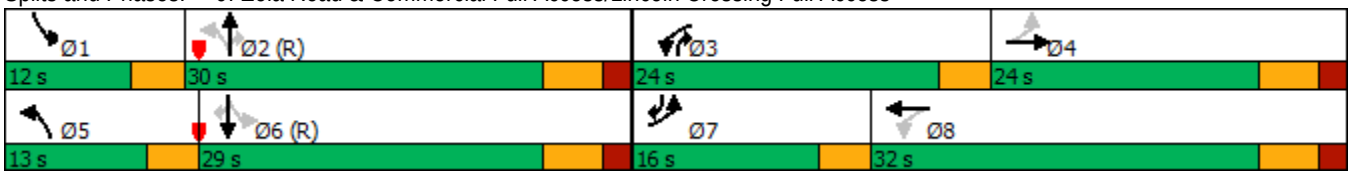


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 144 | 1 | 100 | 54 | 1 | 56 | 96 | 289 | 77 | 81 | 314 | 81 |
| Future Volume (vph) | 144 | 1 | 100 | 54 | 1 | 56 | 96 | 289 | 77 | 81 | 314 | 81 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 0 | | 0 | 0 | | 0 | 185 | | 115 | 115 | | 185 |
| Storage Lanes | 1 | | 0 | 1 | | 0 | 1 | | 1 | 1 | | 1 |
| Taper Length (ft) | 25 | | | 25 | | | 200 | | | 156 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 |
| Frt | | 0.851 | | | 0.852 | | | | 0.850 | | | 0.850 |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1770 | 1585 | 0 | 1805 | 1619 | 0 | 1770 | 3539 | 1615 | 1805 | 3539 | 1583 |
| Flt Permitted | 0.449 | | | 0.741 | | | 0.549 | | | 0.567 | | |
| Satd. Flow (perm) | 836 | 1585 | 0 | 1408 | 1619 | 0 | 1023 | 3539 | 1615 | 1077 | 3539 | 1583 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 105 | | | 59 | | | | 81 | | | 121 |
| Link Speed (mph) | | 25 | | | 25 | | | 30 | | | 30 | |
| Link Distance (ft) | | 532 | | | 295 | | | 834 | | | 1814 | |
| Travel Time (s) | | 14.5 | | | 8.0 | | | 19.0 | | | 41.2 | |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Heavy Vehicles (%) | 2% | 0% | 2% | 0% | 0% | 0% | 2% | 2% | 0% | 0% | 2% | 2% |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 152 | 106 | 0 | 57 | 60 | 0 | 101 | 304 | 81 | 85 | 331 | 85 |
| Turn Type | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | pm+ov | pm+pt | NA | pm+ov |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | 3 | 1 | 6 | 7 |
| Permitted Phases | 4 | | | 8 | | | 2 | | 2 | 6 | | 6 |
| Detector Phase | 7 | 4 | | 3 | 8 | | 5 | 2 | 3 | 1 | 6 | 7 |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 5.0 | | 5.0 | 5.0 | | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| Minimum Split (s) | 9.5 | 24.0 | | 22.5 | 24.0 | | 9.5 | 24.0 | 22.5 | 9.5 | 24.0 | 9.5 |
| Total Split (s) | 16.0 | 24.0 | | 24.0 | 32.0 | | 13.0 | 30.0 | 24.0 | 12.0 | 29.0 | 16.0 |
| Total Split (%) | 17.8% | 26.7% | | 26.7% | 35.6% | | 14.4% | 33.3% | 26.7% | 13.3% | 32.2% | 17.8% |
| Yellow Time (s) | 3.5 | 4.0 | | 3.5 | 4.0 | | 3.5 | 4.0 | 3.5 | 3.5 | 4.0 | 3.5 |
| All-Red Time (s) | 0.0 | 2.0 | | 0.0 | 2.0 | | 0.0 | 2.0 | 0.0 | 0.0 | 2.0 | 0.0 |
| Lost Time Adjust (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Lost Time (s) | 3.5 | 6.0 | | 3.5 | 6.0 | | 3.5 | 6.0 | 3.5 | 3.5 | 6.0 | 3.5 |
| Lead/Lag | Lead | Lag | | Lead | Lag | | Lead | Lag | Lead | Lead | Lag | Lead |
| Lead-Lag Optimize? | Yes | Yes | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes | Yes |
| Recall Mode | None | None | | None | None | | None | C-Max | None | None | C-Max | None |
| Act Effct Green (s) | 21.0 | 9.3 | | 15.2 | 6.5 | | 59.2 | 50.5 | 64.2 | 58.6 | 50.1 | 67.9 |
| Actuated g/C Ratio | 0.23 | 0.10 | | 0.17 | 0.07 | | 0.66 | 0.56 | 0.71 | 0.65 | 0.56 | 0.75 |
| v/c Ratio | 0.49 | 0.41 | | 0.21 | 0.35 | | 0.14 | 0.15 | 0.07 | 0.11 | 0.17 | 0.07 |
| Control Delay | 32.4 | 12.9 | | 26.3 | 17.1 | | 9.7 | 18.7 | 1.7 | 6.6 | 12.3 | 0.6 |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 32.4 | 12.9 | | 26.3 | 17.1 | | 9.7 | 18.7 | 1.7 | 6.6 | 12.3 | 0.6 |
| LOS | C | B | | C | B | | A | B | A | A | B | A |
| Approach Delay | | 24.4 | | | 21.6 | | | 14.0 | | | 9.3 | |
| Approach LOS | | C | | | C | | | B | | | A | |
| Queue Length 50th (ft) | 70 | 1 | | 25 | 1 | | 22 | 59 | 0 | 15 | 50 | 0 |
| Queue Length 95th (ft) | 115 | 46 | | 51 | 37 | | m59 | 111 | m13 | 36 | 86 | 8 |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Internal Link Dist (ft) | | 452 | | | 215 | | | 754 | | | 1734 | |
| Turn Bay Length (ft) | | | | | | | 185 | | 115 | 115 | | 185 |
| Base Capacity (vph) | 333 | 401 | | 462 | 509 | | 767 | 1984 | 1362 | 781 | 1971 | 1232 |
| Starvation Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 0.46 | 0.26 | | 0.12 | 0.12 | | 0.13 | 0.15 | 0.06 | 0.11 | 0.17 | 0.07 |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 90 | | | |
| Actuated Cycle Length: 90 | | | |
| Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green | | | |
| Natural Cycle: 80 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.49 | | | |
| Intersection Signal Delay: 14.9 | | Intersection LOS: B | |
| Intersection Capacity Utilization 42.0% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |
| m Volume for 95th percentile queue is metered by upstream signal. | | | |

Splits and Phases: 9: Eola Road & Commercial Full Access/Lincoln Crossing Full Access



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

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 32 | 392 | 698 | 45 | 20 | 19 |
| Future Vol, veh/h | 32 | 392 | 698 | 45 | 20 | 19 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 100 | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 95 | 95 | 95 | 95 | 95 | 95 |
| Heavy Vehicles, % | 0 | 8 | 5 | 0 | 0 | 0 |
| Mvmt Flow | 34 | 413 | 735 | 47 | 21 | 20 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 782 | 0 | - | 0 | 1240 | 759 |
| Stage 1 | - | - | - | - | 759 | - |
| Stage 2 | - | - | - | - | 481 | - |
| 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 | 845 | - | - | - | 195 | 410 |
| Stage 1 | - | - | - | - | 466 | - |
| Stage 2 | - | - | - | - | 626 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 845 | - | - | - | 187 | 410 |
| Mov Cap-2 Maneuver | - | - | - | - | 187 | - |
| Stage 1 | - | - | - | - | 447 | - |
| Stage 2 | - | - | - | - | 626 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s | 0.7 | 0 | 21.9 |
| HCM LOS | | | C |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 845 | - | - | - | 254 |
| HCM Lane V/C Ratio | 0.04 | - | - | - | 0.162 |
| HCM Control Delay (s) | 9.4 | - | - | - | 21.9 |
| HCM Lane LOS | A | - | - | - | C |
| HCM 95th %tile Q(veh) | 0.1 | - | - | - | 0.6 |

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

| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 415 | 33 | 47 | 670 | 10 | 9 |
| Future Vol, veh/h | 415 | 33 | 47 | 670 | 10 | 9 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | 100 | - | 0 | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 95 | 95 | 95 | 95 | 95 | 95 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 437 | 35 | 49 | 705 | 11 | 9 |

| Major/Minor | Major1 | | Major2 | | Minor1 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 0 | 0 | 472 | 0 | 1258 | 455 |
| Stage 1 | - | - | - | - | 455 | - |
| Stage 2 | - | - | - | - | 803 | - |
| Critical Hdwy | - | - | 4.12 | - | 6.42 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.42 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.42 | - |
| Follow-up Hdwy | - | - | 2.218 | - | 3.518 | 3.318 |
| Pot Cap-1 Maneuver | - | - | 1090 | - | 189 | 605 |
| Stage 1 | - | - | - | - | 639 | - |
| Stage 2 | - | - | - | - | 441 | - |
| Platoon blocked, % | - | - | | - | | |
| Mov Cap-1 Maneuver | - | - | 1090 | - | 180 | 605 |
| Mov Cap-2 Maneuver | - | - | - | - | 180 | - |
| Stage 1 | - | - | - | - | 639 | - |
| Stage 2 | - | - | - | - | 421 | - |

| Approach | EB | WB | NB |
|---|---|---|---|
| HCM Control Delay, s | 0 | 0.6 | 19.4 |
| HCM LOS | | | C |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL | WBT |
|---|---|---|---|---|---|
| Capacity (veh/h) | 270 | - | - | 1090 | - |
| HCM Lane V/C Ratio | 0.074 | - | - | 0.045 | - |
| HCM Control Delay (s) | 19.4 | - | - | 8.5 | - |
| HCM Lane LOS | C | - | - | A | - |
| HCM 95th %tile Q(veh) | 0.2 | - | - | 0.1 | - |

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

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 0 | 104 | 1027 | 144 | 0 | 1218 |
| Future Vol, veh/h | 0 | 104 | 1027 | 144 | 0 | 1218 |
| 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 | - | 240 | - | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 95 | 95 | 95 | 95 | 95 | 95 |
| Heavy Vehicles, % | 0 | 0 | 2 | 0 | 0 | 2 |
| Mvmt Flow | 0 | 109 | 1081 | 152 | 0 | 1282 |

| Major/Minor | Minor1 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | - | 1081 | 0 | 0 | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | - | 6.2 | - | - | - | - |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | - | 3.3 | - | - | - | - |
| Pot Cap-1 Maneuver | 0 | 267 | - | - | 0 | - |
| Stage 1 | 0 | - | - | - | 0 | - |
| Stage 2 | 0 | - | - | - | 0 | - |
| Platoon blocked, % | | | - | - | | - |
| Mov Cap-1 Maneuver | - | 267 | - | - | - | - |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | WB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 27.5 | 0 | 0 |
| HCM LOS | D | | |

| Minor Lane/Major Mvmt | NBT | NBR | WBLn1 | SBT |
|---|---|---|---|---|
| Capacity (veh/h) | - | - | 267 | - |
| HCM Lane V/C Ratio | - | - | 0.41 | - |
| HCM Control Delay (s) | - | - | 27.5 | - |
| HCM Lane LOS | - | - | D | - |
| HCM 95th %tile Q(veh) | - | - | 1.9 | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 2.9 |

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 38 | 51 | 1426 | 65 | 128 | 1402 |
| Future Vol, veh/h | 38 | 51 | 1426 | 65 | 128 | 1402 |
| 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 | - | 240 | 240 | - |
| Veh in Median Storage, # | 1 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 95 | 95 | 95 | 95 | 95 | 95 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 40 | 54 | 1501 | 68 | 135 | 1476 |

| Major/Minor | Minor1 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 3247 | 1501 | 0 | 0 | 1569 | 0 |
| Stage 1 | 1501 | - | - | - | - | - |
| Stage 2 | 1746 | - | - | - | - | - |
| Critical Hdwy | 6.42 | 6.22 | - | - | 4.12 | - |
| Critical Hdwy Stg 1 | 5.42 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.42 | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 3.318 | - | - | 2.218 | - |
| Pot Cap-1 Maneuver | ~ 10 | 150 | - | - | 420 | - |
| Stage 1 | 204 | - | - | - | - | - |
| Stage 2 | 154 | - | - | - | - | - |
| Platoon blocked, % | | | - | - | | - |
| Mov Cap-1 Maneuver | ~ 7 | 150 | - | - | 420 | - |
| Mov Cap-2 Maneuver | 66 | - | - | - | - | - |
| Stage 1 | 204 | - | - | - | - | - |
| Stage 2 | 105 | - | - | - | - | - |

| Approach | WB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 75.9 | 0 | 1.5 |
| HCM LOS | F | | |

| Minor Lane/Major Mvmt | NBT | NBR | WBLn1 | WBLn2 | SBL | SBT |
|---|---|---|---|---|---|---|
| Capacity (veh/h) | - | - | 66 | 150 | 420 | - |
| HCM Lane V/C Ratio | - | - | 0.606 | 0.358 | 0.321 | - |
| HCM Control Delay (s) | - | - | 121.7 | 41.8 | 17.6 | - |
| HCM Lane LOS | - | - | F | E | C | - |
| HCM 95th %tile Q(veh) | - | - | 2.6 | 1.5 | 1.4 | - |

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

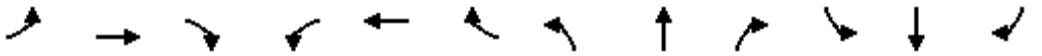
| Intersection | |
|---|---|
| Int Delay, s/veh | 6.7 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 116 | 308 | 650 | 76 | 91 | 158 |
| Future Vol, veh/h | 116 | 308 | 650 | 76 | 91 | 158 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 185 | - | - | 185 | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 1 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 95 | 95 | 95 | 95 | 95 | 95 |
| Heavy Vehicles, % | 0 | 2 | 2 | 0 | 0 | 0 |
| Mvmt Flow | 122 | 324 | 684 | 80 | 96 | 166 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 764 | 0 | - | 0 | 1252 | 684 |
| Stage 1 | - | - | - | - | 684 | - |
| Stage 2 | - | - | - | - | 568 | - |
| 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 | 858 | - | - | - | 192 | 452 |
| Stage 1 | - | - | - | - | 505 | - |
| Stage 2 | - | - | - | - | 571 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 858 | - | - | - | 165 | 452 |
| Mov Cap-2 Maneuver | - | - | - | - | 298 | - |
| Stage 1 | - | - | - | - | 433 | - |
| Stage 2 | - | - | - | - | 571 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s | 2.7 | 0 | 33.1 |
| HCM LOS | | | D |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 858 | - | - | - | 380 |
| HCM Lane V/C Ratio | 0.142 | - | - | - | 0.69 |
| HCM Control Delay (s) | 9.9 | - | - | - | 33.1 |
| HCM Lane LOS | A | - | - | - | D |
| HCM 95th %tile Q(veh) | 0.5 | - | - | - | 5 |



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 17 | 254 | 115 | 93 | 395 | 231 | 179 | 938 | 14 | 160 | 1010 | 20 |
| Future Volume (vph) | 17 | 254 | 115 | 93 | 395 | 231 | 179 | 938 | 14 | 160 | 1010 | 20 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 2000 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 100 | | 215 | 280 | | 280 | 130 | | 0 | 282 | | 0 |
| Storage Lanes | 0 | | 1 | 1 | | 1 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 150 | | | 255 | | | 112 | | | 180 | | |
| 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 | | | 0.850 | | | 0.850 | | 0.998 | | | 0.997 | |
| Flt Protected | | 0.997 | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 0 | 1894 | 1615 | 1805 | 1980 | 1553 | 1805 | 1790 | 0 | 1752 | 1806 | 0 |
| Flt Permitted | | 0.754 | | 0.219 | | | 0.062 | | | 0.062 | | |
| Satd. Flow (perm) | 0 | 1433 | 1615 | 416 | 1980 | 1553 | 118 | 1790 | 0 | 114 | 1806 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 100 | | | 93 | | 1 | | | 1 | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 1099 | | | 2118 | | | 1789 | | | 736 | |
| Travel Time (s) | | 25.0 | | | 48.1 | | | 40.7 | | | 16.7 | |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Heavy Vehicles (%) | 0% | 0% | 0% | 0% | 1% | 4% | 0% | 6% | 0% | 3% | 5% | 0% |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 285 | 121 | 98 | 416 | 243 | 188 | 1002 | 0 | 168 | 1084 | 0 |
| Turn Type | Perm | NA | pm+ov | pm+pt | NA | pm+ov | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | | 4 | 5 | 3 | 8 | 1 | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | 4 | 8 | | 8 | 2 | | | 6 | | |
| Detector Phase | 4 | 4 | 5 | 3 | 8 | 1 | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | | 5.0 | 5.0 | |
| Minimum Split (s) | 24.0 | 24.0 | 9.5 | 9.5 | 24.0 | 9.5 | 9.5 | 24.0 | | 9.5 | 24.0 | |
| Total Split (s) | 28.0 | 28.0 | 12.0 | 10.0 | 38.0 | 12.0 | 12.0 | 70.0 | | 12.0 | 70.0 | |
| Total Split (%) | 23.3% | 23.3% | 10.0% | 8.3% | 31.7% | 10.0% | 10.0% | 58.3% | | 10.0% | 58.3% | |
| Yellow Time (s) | 4.0 | 4.0 | 3.5 | 3.5 | 4.0 | 3.5 | 3.5 | 4.0 | | 3.5 | 4.0 | |
| All-Red Time (s) | 2.0 | 2.0 | 0.0 | 0.0 | 2.0 | 0.0 | 0.0 | 2.0 | | 0.0 | 2.0 | |
| 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 | 3.5 | 3.5 | 6.0 | 3.5 | 3.5 | 6.0 | | 3.5 | 6.0 | |
| Lead/Lag | Lag | Lag | Lead | Lead | | Lead | Lead | Lag | | Lead | Lag | |
| Lead-Lag Optimize? | Yes | Yes | Yes | Yes | | Yes | Yes | Yes | | Yes | Yes | |
| Recall Mode | None | None | None | None | None | None | None | Max | | None | Max | |
| Act Effct Green (s) | | 22.0 | 36.5 | 34.5 | 32.0 | 46.5 | 75.0 | 64.0 | | 75.0 | 64.0 | |
| Actuated g/C Ratio | | 0.18 | 0.30 | 0.29 | 0.27 | 0.39 | 0.62 | 0.53 | | 0.62 | 0.53 | |
| v/c Ratio | | 1.09 | 0.22 | 0.51 | 0.79 | 0.37 | 0.97 | 1.05 | | 0.90 | 1.13 | |
| Control Delay | | 127.2 | 9.6 | 42.2 | 52.9 | 17.6 | 87.8 | 71.3 | | 71.4 | 98.2 | |
| Queue Delay | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | | 127.2 | 9.6 | 42.2 | 52.9 | 17.6 | 87.8 | 71.3 | | 71.4 | 98.2 | |
| LOS | | F | A | D | D | B | F | E | | E | F | |
| Approach Delay | | 92.1 | | | 40.2 | | | 73.9 | | | 94.6 | |
| Approach LOS | | F | | | D | | | E | | | F | |
| Queue Length 50th (ft) | | ~248 | 12 | 57 | 300 | 79 | 93 | ~846 | | 78 | ~973 | |
| Queue Length 95th (ft) | | #422 | 56 | 102 | #445 | 147 | #245 | #1102 | | #213 | #1234 | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Internal Link Dist (ft) | | 1019 | | | 2038 | | | 1709 | | | 656 | |
| Turn Bay Length (ft) | | | 215 | 280 | | 280 | 130 | | | 282 | | |
| Base Capacity (vph) | | 262 | 560 | 194 | 528 | 658 | 193 | 955 | | 187 | 963 | |
| 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 | | 1.09 | 0.22 | 0.51 | 0.79 | 0.37 | 0.97 | 1.05 | | 0.90 | 1.13 | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 120 | | | |
| Actuated Cycle Length: 120 | | | |
| Natural Cycle: 140 | | | |
| Control Type: Actuated-Uncoordinated | | | |
| Maximum v/c Ratio: 1.13 | | | |
| Intersection Signal Delay: 76.1 | | Intersection LOS: E | |
| Intersection Capacity Utilization 116.7% | | 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.

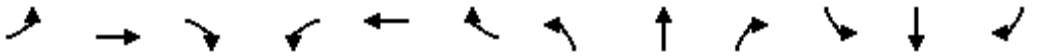
Splits and Phases: 1: US 30 & Wolf's Crossing Road

| Lane Group | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 445 | 23 | 1148 | 329 | 133 | 1085 |
| Future Volume (vph) | 445 | 23 | 1148 | 329 | 133 | 1085 |
| Ideal Flow (vphpl) | 1900 | 1900 | 2000 | 1900 | 1900 | 2000 |
| Storage Length (ft) | 310 | 0 | | 240 | 240 | |
| Storage Lanes | 1 | 1 | | 1 | 1 | |
| Taper Length (ft) | 200 | | | | 240 | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frt | | 0.850 | | 0.850 | | |
| Flt Protected | 0.950 | | | | 0.950 | |
| Satd. Flow (prot) | 1787 | 1615 | 1905 | 1599 | 1805 | 1905 |
| Flt Permitted | 0.950 | | | | 0.053 | |
| Satd. Flow (perm) | 1787 | 1615 | 1905 | 1599 | 101 | 1905 |
| Right Turn on Red | | Yes | | Yes | | |
| Satd. Flow (RTOR) | | 22 | | 228 | | |
| Link Speed (mph) | 30 | | 30 | | | 30 |
| Link Distance (ft) | 660 | | 2004 | | | 828 |
| Travel Time (s) | 15.0 | | 45.5 | | | 18.8 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Heavy Vehicles (%) | 1% | 0% | 5% | 1% | 0% | 5% |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 468 | 24 | 1208 | 346 | 140 | 1142 |
| Turn Type | Prot | Perm | NA | Perm | pm+pt | NA |
| Protected Phases | 8 | | 2 | | 1 | 6 |
| Permitted Phases | | 8 | | 2 | 6 | |
| Detector Phase | 8 | 8 | 2 | 2 | 1 | 6 |
| Switch Phase | | | | | | |
| Minimum Initial (s) | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| Minimum Split (s) | 24.0 | 24.0 | 24.0 | 24.0 | 9.5 | 24.0 |
| Total Split (s) | 32.0 | 32.0 | 78.0 | 78.0 | 10.0 | 88.0 |
| Total Split (%) | 26.7% | 26.7% | 65.0% | 65.0% | 8.3% | 73.3% |
| Yellow Time (s) | 4.0 | 4.0 | 4.0 | 4.0 | 3.5 | 4.0 |
| All-Red Time (s) | 2.0 | 2.0 | 2.0 | 2.0 | 0.0 | 2.0 |
| 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 | 3.5 | 6.0 |
| Lead/Lag | | | Lag | Lag | Lead | |
| Lead-Lag Optimize? | | | Yes | Yes | Yes | |
| Recall Mode | None | None | C-Max | C-Max | None | C-Max |
| Act Effct Green (s) | 26.0 | 26.0 | 72.0 | 72.0 | 84.5 | 82.0 |
| Actuated g/C Ratio | 0.22 | 0.22 | 0.60 | 0.60 | 0.70 | 0.68 |
| v/c Ratio | 1.21 | 0.07 | 1.06 | 0.33 | 0.86 | 0.88 |
| Control Delay | 156.8 | 15.9 | 67.9 | 4.7 | 64.4 | 24.7 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 156.8 | 15.9 | 67.9 | 4.7 | 64.4 | 24.7 |
| LOS | F | B | E | A | E | C |
| Approach Delay | 149.9 | | 53.8 | | | 29.1 |
| Approach LOS | F | | D | | | C |
| Queue Length 50th (ft) | ~442 | 1 | ~1026 | 37 | 54 | 635 |
| Queue Length 95th (ft) | #650 | 24 | #1285 | 83 | #173 | 913 |

| Lane Group | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Internal Link Dist (ft) | 580 | | 1924 | | | 748 |
| Turn Bay Length (ft) | 310 | | | 240 | 240 | |
| Base Capacity (vph) | 387 | 367 | 1143 | 1050 | 163 | 1301 |
| 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 | 1.21 | 0.07 | 1.06 | 0.33 | 0.86 | 0.88 |

| 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: 140 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 1.21 | | | |
| Intersection Signal Delay: 58.5 | | Intersection LOS: E | |
| Intersection Capacity Utilization 102.8% | | 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. | | | |

Splits and Phases: 3: US 30 & Eola Road



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 112 | 88 | 7 | 79 | 230 | 499 | 20 | 880 | 78 | 258 | 1026 | 156 |
| Future Volume (vph) | 112 | 88 | 7 | 79 | 230 | 499 | 20 | 880 | 78 | 258 | 1026 | 156 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 2000 | 1900 | 1900 | 1900 | 1900 | 1900 | 2000 | 1900 |
| Storage Length (ft) | 240 | | 0 | 240 | | 240 | 125 | | 0 | 190 | | 265 |
| Storage Lanes | 1 | | 0 | 1 | | 1 | 1 | | 0 | 1 | | 1 |
| Taper Length (ft) | 240 | | | 240 | | | 150 | | | 160 | | |
| 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 | | 0.989 | | | | 0.850 | | 0.988 | | | | 0.850 |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1805 | 1862 | 0 | 1128 | 2000 | 1509 | 1805 | 1664 | 0 | 1736 | 1770 | 1583 |
| Flt Permitted | 0.243 | | | 0.692 | | | 0.062 | | | 0.059 | | |
| Satd. Flow (perm) | 462 | 1862 | 0 | 822 | 2000 | 1509 | 118 | 1664 | 0 | 108 | 1770 | 1583 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 3 | | | | 113 | | 5 | | | | 164 |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 2372 | | | 910 | | | 1113 | | | 1927 | |
| Travel Time (s) | | 53.9 | | | 20.7 | | | 25.3 | | | 43.8 | |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Heavy Vehicles (%) | 0% | 1% | 0% | 60% | 0% | 7% | 0% | 11% | 33% | 4% | 13% | 2% |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 118 | 100 | 0 | 83 | 242 | 525 | 21 | 1008 | 0 | 272 | 1080 | 164 |
| Turn Type | pm+pt | NA | | pm+pt | NA | pm+ov | pm+pt | NA | | pm+pt | NA | pm+ov |
| Protected Phases | 7 | 4 | | 3 | 8 | 1 | 5 | 2 | | 1 | 6 | 7 |
| Permitted Phases | 4 | | | 8 | | 8 | 2 | | | 6 | | 6 |
| Detector Phase | 7 | 4 | | 3 | 8 | 1 | 5 | 2 | | 1 | 6 | 7 |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 5.0 | | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | | 5.0 | 5.0 | 5.0 |
| Minimum Split (s) | 9.5 | 24.0 | | 9.5 | 24.0 | 9.5 | 9.5 | 24.0 | | 9.5 | 24.0 | 9.5 |
| Total Split (s) | 10.0 | 24.0 | | 10.0 | 24.0 | 18.0 | 10.0 | 68.0 | | 18.0 | 76.0 | 10.0 |
| Total Split (%) | 8.3% | 20.0% | | 8.3% | 20.0% | 15.0% | 8.3% | 56.7% | | 15.0% | 63.3% | 8.3% |
| Yellow Time (s) | 3.5 | 4.0 | | 3.5 | 4.0 | 3.5 | 3.5 | 4.0 | | 3.5 | 4.0 | 3.5 |
| All-Red Time (s) | 0.0 | 2.0 | | 0.0 | 2.0 | 0.0 | 0.0 | 2.0 | | 0.0 | 2.0 | 0.0 |
| Lost Time Adjust (s) | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 |
| Total Lost Time (s) | 3.5 | 6.0 | | 3.5 | 6.0 | 3.5 | 3.5 | 6.0 | | 3.5 | 6.0 | 3.5 |
| Lead/Lag | Lead | Lag | | Lead | Lag | Lead | Lead | Lag | | Lead | Lag | Lead |
| Lead-Lag Optimize? | Yes | Yes | | Yes | Yes | Yes | Yes | Yes | | Yes | Yes | Yes |
| Recall Mode | None | None | | None | None | None | None | Max | | None | Max | None |
| Act Effct Green (s) | 26.8 | 19.1 | | 26.1 | 17.1 | 37.6 | 70.5 | 62.0 | | 82.5 | 76.1 | 88.6 |
| Actuated g/C Ratio | 0.23 | 0.16 | | 0.22 | 0.14 | 0.32 | 0.59 | 0.52 | | 0.69 | 0.64 | 0.74 |
| v/c Ratio | 0.67 | 0.33 | | 0.42 | 0.85 | 0.95 | 0.14 | 1.16 | | 1.00 | 0.95 | 0.13 |
| Control Delay | 56.5 | 47.6 | | 44.7 | 75.4 | 59.5 | 8.7 | 113.2 | | 89.4 | 39.9 | 1.2 |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 |
| Total Delay | 56.5 | 47.6 | | 44.7 | 75.4 | 59.5 | 8.7 | 113.2 | | 89.4 | 39.9 | 1.2 |
| LOS | E | D | | D | E | E | A | F | | F | D | A |
| Approach Delay | | 52.4 | | | 62.6 | | | 111.1 | | | 44.6 | |
| Approach LOS | | D | | | E | | | F | | | D | |
| Queue Length 50th (ft) | 73 | 68 | | 52 | 184 | 324 | 5 | ~932 | | ~164 | 655 | 0 |
| Queue Length 95th (ft) | #141 | 123 | | 100 | #313 | #547 | 13 | #1189 | | #345 | #1163 | 20 |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Internal Link Dist (ft) | | 2292 | | | 830 | | | 1033 | | | 1847 | |
| Turn Bay Length (ft) | 240 | | | 240 | | 240 | 125 | | | 190 | | 265 |
| Base Capacity (vph) | 177 | 302 | | 196 | 302 | 553 | 162 | 869 | | 272 | 1131 | 1219 |
| Starvation Cap Reductn | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 |
| Reduced v/c Ratio | 0.67 | 0.33 | | 0.42 | 0.80 | 0.95 | 0.13 | 1.16 | | 1.00 | 0.95 | 0.13 |

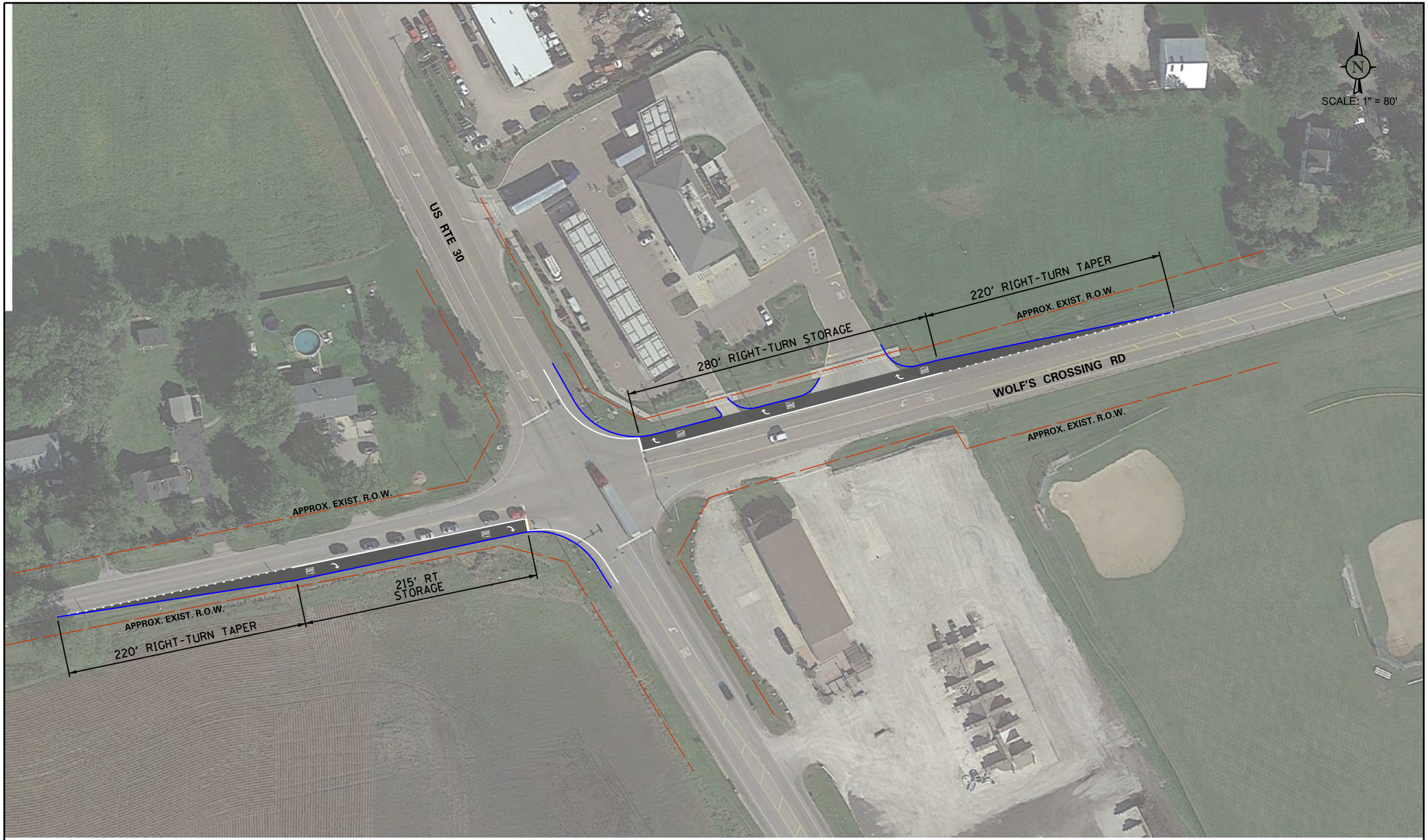
| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 120 | | | |
| Actuated Cycle Length: 119.1 | | | |
| Natural Cycle: 150 | | | |
| Control Type: Actuated-Uncoordinated | | | |
| Maximum v/c Ratio: 1.16 | | | |
| Intersection Signal Delay: 68.2 | | Intersection LOS: E | |
| Intersection Capacity Utilization 99.8% | | 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: 4: US 30 & 111th Street

# Preliminary Regional Geometric Improvements



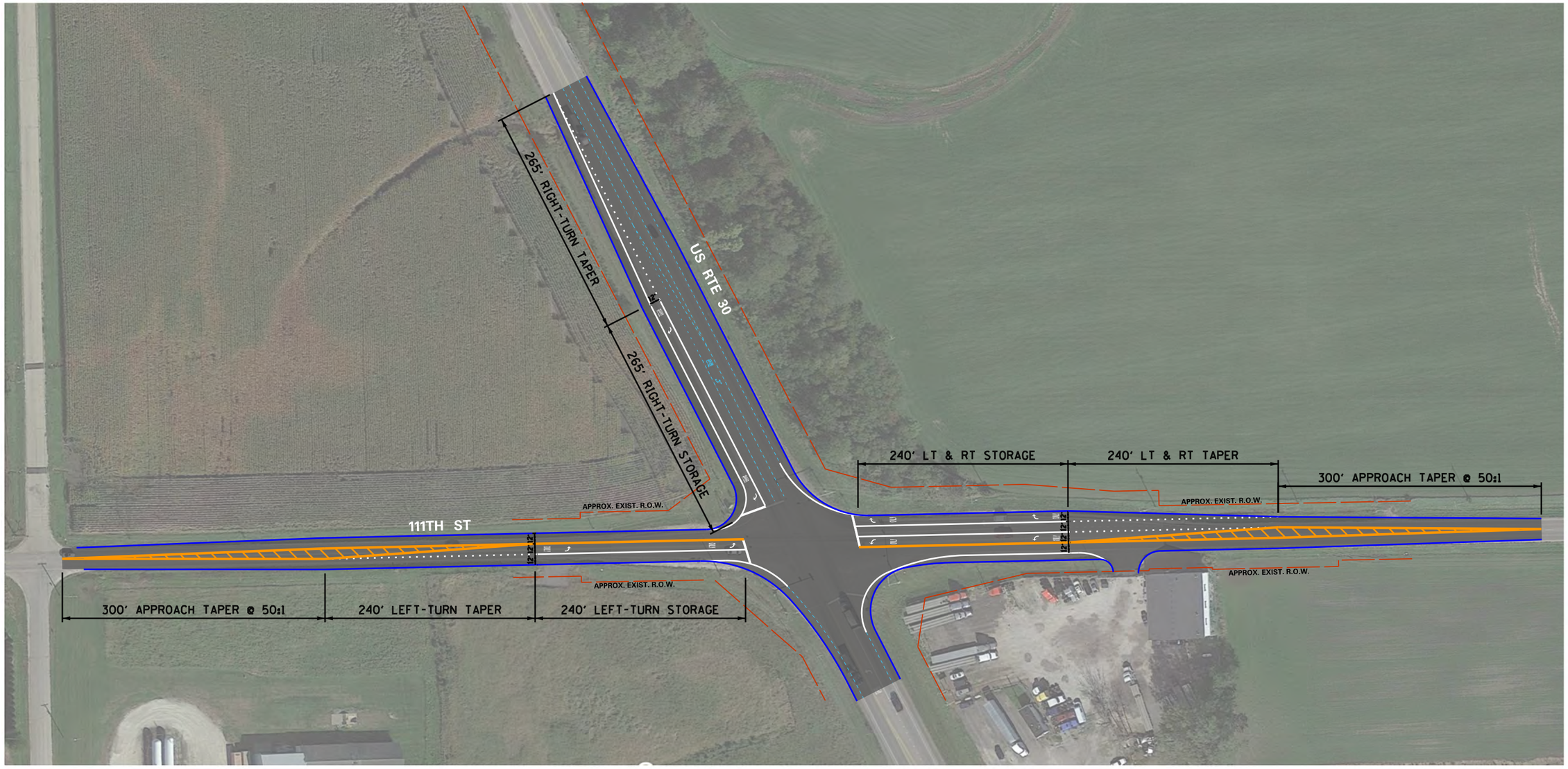

LINCOLN PRAIRIE
AURORA, ILLINOIS

# PROPOSED PRELIMINARY IMPROVEMENTS
# (ADDITION OF RIGHT-TURN LANES ON WOLF'S CROSSING RD)

DRAWN: MD
DATE: 02-09-21
PROJECT # 21-001
EXHIBIT: A
CHECKED: JM
REV:

KLOA
Kenig,Lindgren,O'Hara,Aboona,Inc.

SCALE: 1" = 120'




LINCOLN PRAIRIE
AURORA, ILLINOIS

# PROPOSED PRELIMINARY IMPROVEMENTS
# (SB RT ON US RTE 30 AND LT LANES ON 111TH ST)

DRAWN: MD CHECKED: JM
DATE: 02-09-21 REV:
PROJECT # 21-001
EXHIBIT: B

KLOA
Kenig,Lindgren,O'Hara,Aboona,Inc.