Traffic Impact Study
Wagner Farms Development

Naperville, Illinois

Prepared For:

Pulte Homes

Prepared By:

KLOA

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

October 29, 2018

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1. Introduction

This report summarizes the methodologies, results, and findings of a traffic impact study conducted by Kenig, Lindgren, O'Hara, Aboona, Inc. (KLOA, Inc.) for a proposed church and residential development to be located in the northeast quadrant of the intersection of IL Route 59 with 103rd Street in Naperville, Illinois. As proposed, the site, which is currently occupied by Wagner Farms Nursery, will be developed with approximately 312 single-family home lots and an approximately 38,000 square-foot church with an up to 600 seat worship center and traditional associated facilities of a traditional religious institution. Access to the proposed residential development will be provided via two access roadways off IL Route 59, one access roadway off 103rd Street, and via a connection to Falcon Drive. Access to the proposed church will be provided via one restricted access drive off IL Route 59, one restricted access drive off 103rd Street and a connection to the roadway system serving the residential development.

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.

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

The sections of this report present the following:

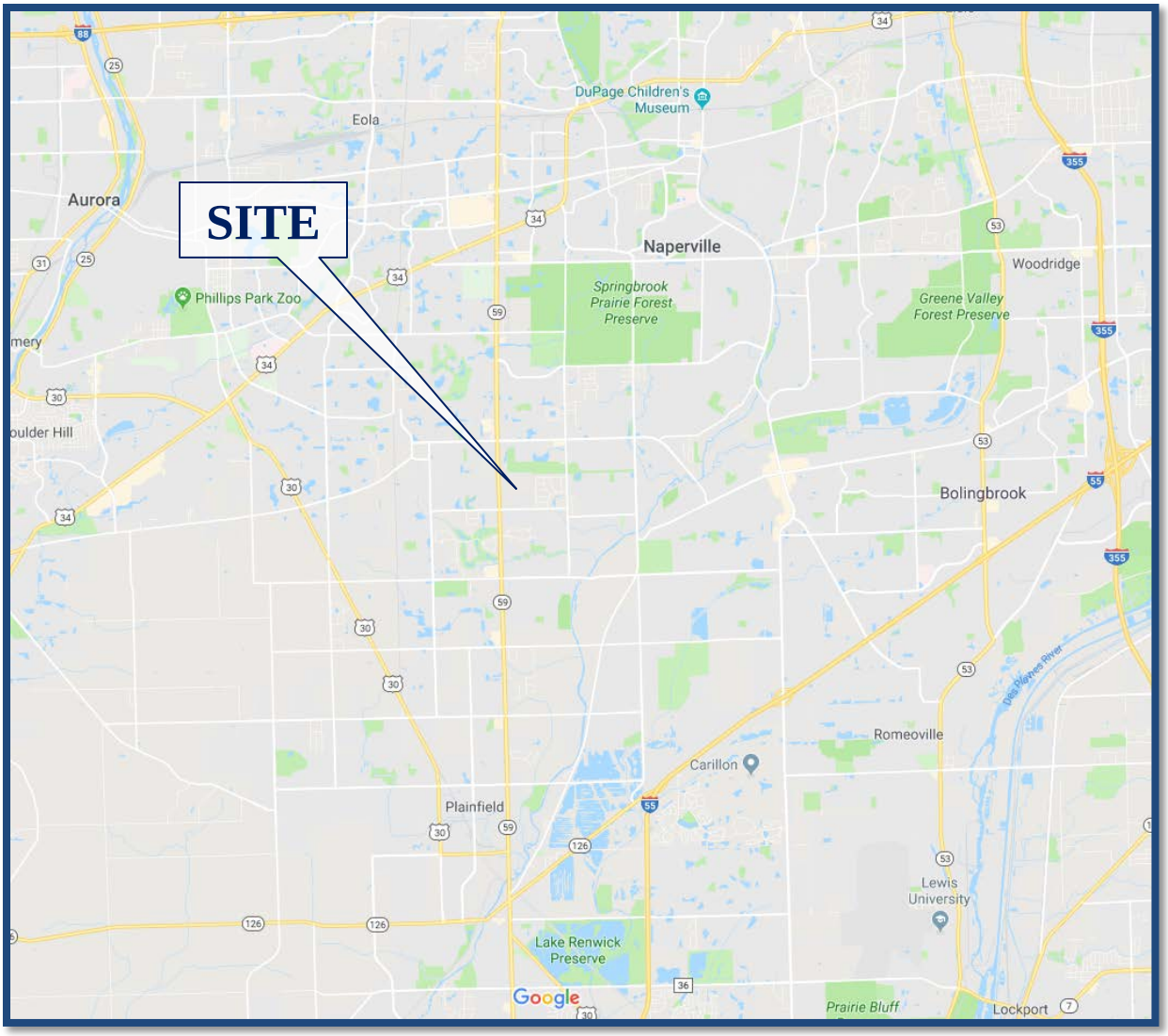
- Existing roadway conditions
- A description of the proposed development
- Directional distribution of the development traffic
- Vehicle trip generation for the development
- Future traffic conditions including access to the development
- Traffic analyses for the weekday morning, weekday evening, and Saturday midday peak hours
- Recommendations with respect to adequacy of the site access and adjacent roadway system

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

1. Existing Conditions - Analyzes the capacity of the existing roadway system using existing peak hour traffic volumes in the surrounding area.

2. No-Build Conditions – Analyzes the projected traffic volumes which includes the existing traffic volumes increased by an ambient area growth factor.

3. Future Conditions – Analyzes the projected traffic volumes which includes the existing traffic volumes increased by an ambient area growth factor (growth not attributable to any particular development) and the traffic estimated to be generated by the proposed subject development.



Site Location **Figure 1**

Aerial View of Site Location **Figure 2**

2. Existing Conditions

Existing transportation conditions in the vicinity of the site were documented based on field visits conducted by KLOA, Inc. in order to obtain a database for projecting future conditions. The following provides a description of the geographical location of the site, physical characteristics of the area roadway system including lane usage and traffic control devices, and existing peak hour traffic volumes.

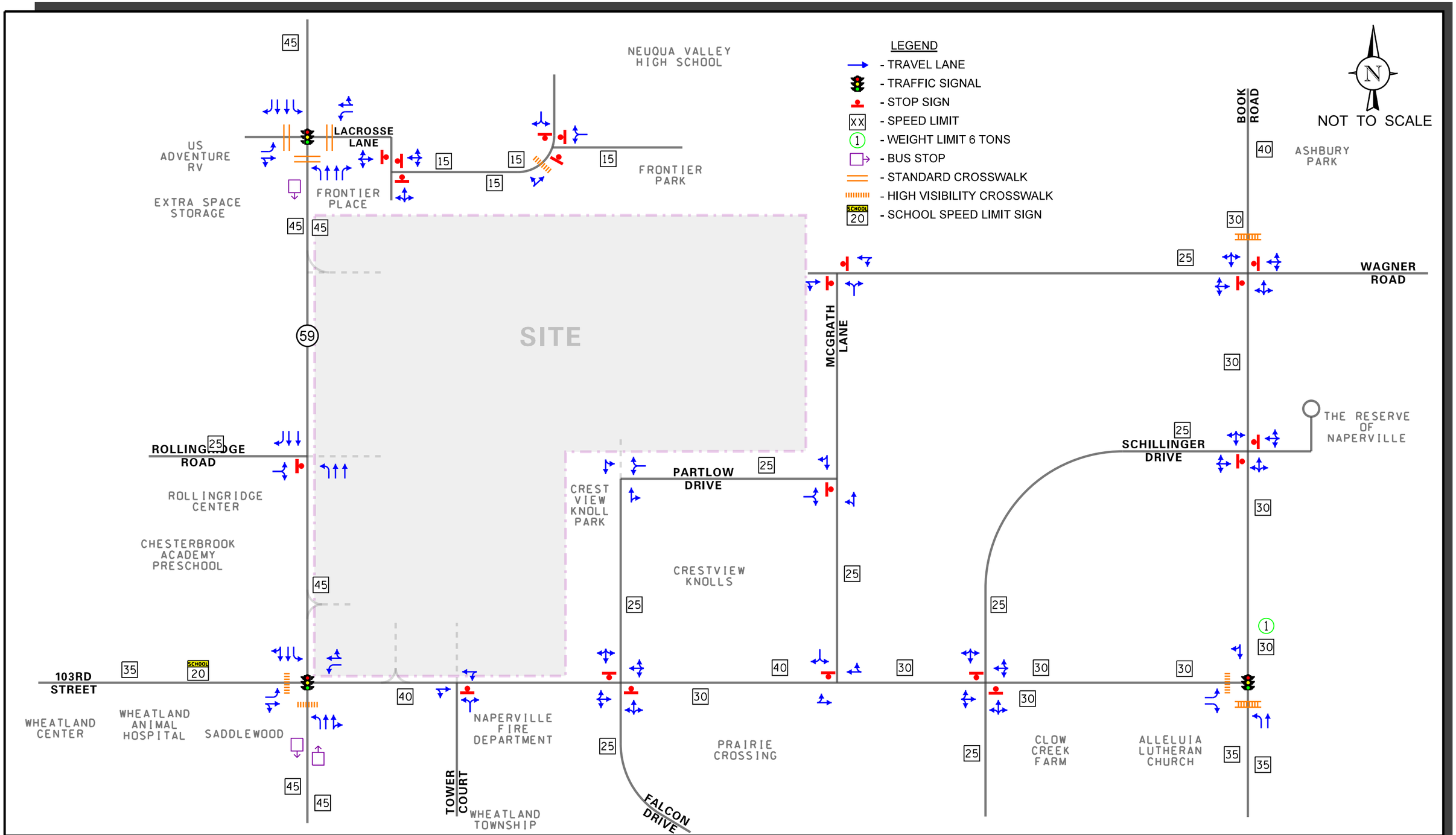
Site Location

The site, which is located in the northeast quadrant of the intersection of IL Route 59 with 103rd Street, is currently occupied by Wagner Farms Nursery. Land uses in the vicinity of the site include the following: Frontier Park, Neuqua Valley High School, Frontier Place, US Adventure RV and Extra Space Storage to the north; Rollingridge Center, Chesterbrook Academy Preschool, Scullen Middle School, Wheatland Center, Wheatland Animal Hospital, and Saddlewood to the west; Naperville Fire Department, Wheatland Township, Crestview Knolls subdivision, Crestview Knoll Park, and Prairie Crossing subdivision to the south; and Clow Creek Farm, Alleluia Lutheran Church, and the Reserve of Naperville subdivision to the east. It should be noted that an unincorporated residential neighborhood is located immediately east of the site that is generally bounded by McGrath Lane on the west, Wagner Road on the north, Book Road on the east, and 103rd Street on the south. Additionally, Patterson Elementary School is located approximately 5,000 feet to the east and Kendall Elementary School is located approximately 4,500 feet to the south.

Existing Roadway System Characteristics

The characteristics of the existing roadways near the development are described below. **Figure 3** illustrates the existing roadway characteristics.

IL Route 59 is a north-south arterial roadway that in the vicinity of the site provides two through lanes in each direction separated by a raised landscaped median. At its signalized intersection with 103rd Street, IL Route 59 provides an exclusive left-turn lane, a through lane and a shared through/right-turn lane on the northbound and southbound approaches. The south leg of the intersection provides a high visibility crosswalk with pedestrian countdown timers. At its signalized intersection with Lacrosse Lane/US Adventure RV access drive, IL Route 59 provides an exclusive left-turn lane, two through lanes, and an exclusive right-turn lane on both approaches. The south leg of the intersection provides a standard style crosswalk with pedestrian countdown timers. At its unsignalized intersection with Rollingridge Road, IL Route 59 provides an exclusive left-turn lane and two through lanes on the northbound approach and two through lanes and an exclusive right-turn lane on the southbound approach. IL Route 59 is under the jurisdiction of the Illinois Department of Transportation (IDOT), carries an annual average daily traffic (AADT) volume of 41,900 vehicles (IDOT AADT 2017), is classified as a Strategic Regional Arterial (SRA) route, and has a posted speed limit of 45 miles per hour.



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EXISTING ROADWAY CHARACTERISTICS

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103rd Street is an east-west roadway that provides one through lane in each direction, is classified as a minor arterial roadway by the City of Naperville Southwest Community Area Plan and extends from Book Road approximately two miles west to 248th Avenue. At its signalized intersection with IL Route 59, 103rd Street provides an exclusive left-turn lane and a shared through/right-turn lane on the eastbound and westbound approaches. The west leg of the intersection provides a high visibility crosswalk and pedestrian countdown timers. At its signalized intersection with Book Road, 103rd Street provides an exclusive left-turn lane, an exclusive right-turn lane, and a high visibility crosswalk with pedestrian countdown signals. At its unsignalized intersections with Falcon Drive and Schillinger Drive, 103rd Street provides a shared left-turn/through/right-turn lane on the eastbound and westbound approaches. At its unsignalized intersection with McGrath Lane, 103rd Street provides a shared left-turn/through lane on the eastbound approach and a shared through/right-turn lane on the westbound approach. At its unsignalized intersection with Tower Court, 103rd Street provides a shared through/right-turn lane on the eastbound approach and a shared left-turn/through lane on the westbound approach. 103rd Street is under the jurisdiction of the City of Naperville, carries an AADT volume of 3,750 vehicles west of IL Route 59 (IDOT AADT 2016), 5,000 vehicles between IL Route 59 and Falcon Drive (IDOT AADT 2016), 4,000 vehicles between Falcon Drive and McGrath Lane (IDOT AADT 2016) and 3,750 vehicles between McGrath Lane and Book Road (IDOT AADT 2016). 103rd Street has a posted speed limit of 35 miles per hour west of IL Route 59, 40 miles per hour between IL Route 59 and McGrath Lane, and 20 miles per hour between McGrath Lane and Book Road.

Book Road is a north-south roadway that provides one through lane in each direction and is classified as a minor arterial roadway by the City of Naperville Southwest Community Area Plan. At its signalized intersection with 103rd Street, Book Road provides an exclusive left-turn lane, a through lane, and a high visibility crosswalk with pedestrian countdown signals on the northbound approach and a shared through/right-turn lane on the southbound approach. At its unsignalized intersections with Wagner Road and Schillinger Drive, Book Road provides a shared left/through/right-turn lane on the northbound and southbound approaches. Book Road is under the jurisdiction of the City of Naperville. North of 103rd Street, Book Road carries an AADT volume of 9,300 vehicles, has a posted speed limit of 30 miles per hour between 103rd Street and Wagner Road and a posted speed limit of 40 miles per hour north of Wagner Road. South of 103rd Street, Book Road carries an AADT volume of 9,400 vehicles and has a posted speed limit of 35 miles per hour. It should be noted that approximately 240 feet north of Wagner Road is a high visibility crossing for the Tall Grass Greenway Trail.

Wagner Road is an east-west roadway that extends from Book Road to approximately 215 feet west of McGrath Lane, provides one through lane in each direction, and is classified as a neighborhood connector roadway by the City of Naperville Southwest Community Area Plan. It should be noted that this roadway ends approximately 15 feet east of the subject site. At its unsignalized intersection with Book Road, Wagner Road provides a shared left-turn/through/right-turn lane on the eastbound and westbound approaches. Both approaches are under stop sign control. At its unsignalized intersection with McGrath Lane, Wagner Road provides a shared through/right-turn lane on the eastbound approach and a shared left-turn/through lane on the westbound approach. Both approaches are under stop sign control. Wagner Road is under the jurisdiction of the Wheatland Township Highway Department and has a posted speed limit of 25 miles per hour.

Falcon Drive is a north-south roadway that extends from 103rd Street to approximately 175 feet north of Partlow Drive, provides one through lane in each direction, and is classified as a neighborhood connector roadway by the City of Naperville Southwest Community Area Plan. At its unsignalized intersection with 103rd Street, Falcon Drive provides a shared left-turn/through/right-turn lane on the northbound and southbound approaches. Both approaches are under stop sign control. At its unsignalized intersection with Partlow Drive, Falcon Drive provides a shared through/right-turn lane on the northbound approach and a shared left-turn/through lane on the southbound approach. Falcon Drive is under the jurisdiction of the City of Naperville and has a posted speed limit of 25 miles per hour.

McGrath Lane is a north-south local roadway that extends from 103rd Street to Wagner Road and provides one through lane in each direction. At its unsignalized intersection with 103rd Street, McGrath Lane provides a shared left-turn/right-turn lane under stop sign control. At its unsignalized intersection with Wagner Road, McGrath Lane provides a shared left-turn/right-turn lane. At its unsignalized intersection with Partlow Drive, McGrath Lane provides a shared left-turn/through lane on the northbound approach and a shared through/right-turn lane on the southbound approach. McGrath Lane is under the jurisdiction of the Wheatland Township Highway Department and has a posted speed limit of 25 miles per hour.

Partlow Drive is an east-west local roadway that extends from McGrath Lane to Falcon Drive and provides one through lane in each direction. At its unsignalized intersection with McGrath Lane, Partlow Drive provides a shared left-turn/right-turn lane under stop sign control. At its unsignalized intersection with Falcon Drive, Partlow Drive provides a shared left-turn/right-turn lane. Partlow Drive is under the jurisdiction of the City of Naperville and has a posted speed limit of 25 miles per hour.

Rollingridge Road is an east-west roadway that extends from IL Route 59 to Tall Grass Drive, provides one through lane in each direction, and is classified as a neighborhood connector roadway by the City of Naperville Southwest Community Area Plan. At its unsignalized intersection with IL Route 59, Rollingridge Road provides a shared left-turn/right-turn lane under stop sign control. Rollingridge Road is under the jurisdiction of the City of Naperville and has a posted speed limit of 25 miles per hour.

Tower Court is a north-south access roadway that provides one through lane in each direction, extends from 103rd Street approximately 850 feet south to its terminus at the Wheatland Township building and also provides access to the Naperville Fire Department. At its unsignalized intersection with 103rd Street, Tower Court provides a shared left/right-turn lane under stop-sign control.

Lacrosse Lane is an east-west local roadway that extends from IL Route 59 to Cedar Glade Drive and provides access to the retail developments on the east side of IL Route 59. At its signalized intersection with IL Route 59, Lacrosse Lane provides an exclusive left-turn lane and a shared through/right-turn lane on the westbound approach. The west leg of this intersection is the access drive serving US Adventure RV which provides an exclusive left-turn lane and a shared through/right-turn lane. Both legs of the intersection provide a standard style crosswalk and pedestrian countdown signals. Lacrosse Lane is under the jurisdiction of the City of Naperville and has a posted speed limit of 15 miles per hour.

Existing Traffic Volumes

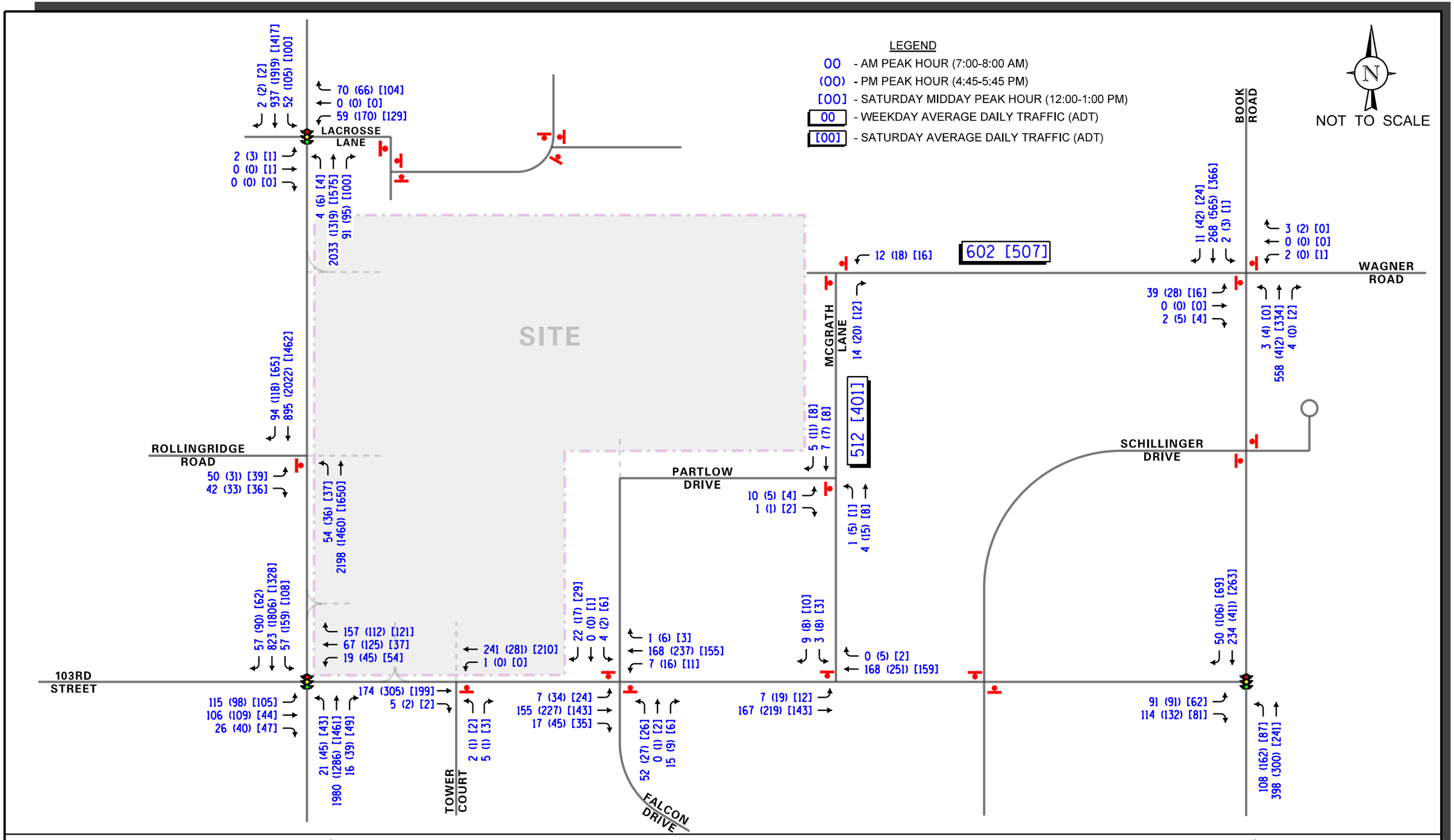
In order to determine current traffic conditions in the vicinity of the site, KLOA, Inc. conducted peak period traffic counts using Miovision Scout Video Collection Units on Tuesday, March 20, 2018 during the weekday morning (7:00 A.M. to 9:00 A.M.) and evening (2:30 P.M. to 6:00 P.M.) peak periods and on Saturday, March 17, 2018 during the midday (12:00 P.M. to 2:00 P.M.) peak period at the following intersections:

- IL Route 59 with 103rd Street
- IL Route 59 with Lacrosse Lane
- IL Route 59 with Rollingridge Road
- 103rd Street with Book Road
- 103rd Street with Falcon Drive
- 103rd Street with McGrath Lane
- Book Road with Wagner Road
- McGrath Lane with Partlow Drive

The results of the traffic counts showed that the weekday morning peak hour of traffic occurs from 7:00 A.M. to 8:00 A.M., the weekday evening peak hour of traffic occurs from 4:45 P.M. to 5:45 P.M., and the Saturday midday peak hour of traffic occurs from 12:00 P.M. to 1:00 P.M. These counts were supplemented by 12-hour counts conducted by KLOA Inc. at the intersection of IL Route 59 with Rollingridge Road on Thursday, April 5, 2018 and by counts conducted at the intersection of 103rd Street with Tower Court on Wednesday, October 17, 2018 and on Saturday, October 20, 2018 during the previously described peak periods.

Additionally, 24-hour two-way traffic volume counts were conducted on a Saturday, Wednesday, and Thursday (March 17, March 21, and March 22, respectively) on Wagner Road between Walter Lane and Whittington Lane. The results of the traffic counts indicated that Wagner Road carries a weekday average daily traffic volume of 602 vehicles and a Saturday daily traffic volume of 507 vehicles. Furthermore, 24-hour two-way traffic volume counts were conducted on Saturday, March 17 and on Wednesday, March 21 on McGrath Lane just north of Partlow Drive. The results of the traffic counts indicated that McGrath Lane carries a weekday daily traffic volume of 512 vehicles and a Saturday daily traffic volume of 401 vehicles.

Figure 4 illustrates the existing peak hour and 24-hour traffic volumes. Copies of the traffic count summary sheets are included in the Appendix.



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EXISTING TRAFFIC VOLUMES

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Crash Analysis

KLOA, Inc. obtained crash data[1] for the past most recent available five years (2012 to 2016) for the study intersections. **Tables 1** through **3** summarize the crash data for the intersections of IL Route 59 with 103rd Street, IL Route 59 with Lacrosse Lane, and IL Route 59 with Rollingridge Road, respectively. A review of the crash data indicated the following:

- The intersection of 103rd Street with Book Road experienced one crash in 2013, 2014, and 2015 and two crashes in 2016 equating to an average of one crash per year.
- The intersection of 103rd Street with Falcon Drive experienced one crash in 2012, 2013, and 2016 equating to an average of less than one crash per year.
- The intersection of 103rd Street with McGrath Lane experienced one crash in 2016 equating to an average of less than one crash per year.
- The intersection of Book Road with Wagner Road experienced one crash in 2012, 2015, and 2016 equating to an average of less than one crash per year.
- The intersection of McGrath Lane with Partlow Drive did not experience any crashes between 2012 and 2016.
- No fatalities were reported at any of the study area intersections.

[1] IDOT DISCLAIMER: The motor vehicle crash data referenced herein was provided by the Illinois Department of Transportation. Any conclusions drawn from analysis of the aforementioned data are the sole responsibility of the data recipient(s). Additionally, for coding years 2015 to present, the Bureau of Data Collection uses the exact latitude/longitude supplied by the investigating law enforcement agency to locate crashes. Therefore, location data may vary in previous years since data prior to 2015 was physically located by bureau personnel.

Table 1
IL ROUTE 59 WITH 103rd STREET – CRASH SUMMARY

	Type of Crash Frequency							
Year	**Angle**	**Head On**	**Object**	**Rear End**	**Sideswipe**	**Turning**	**Other**	**Total**
2012	0	0	0	6	3	0	0	9
2013	0	0	0	4	0	0	0	4
2014	0	0	1	6	1	1	0	9
2015	1	0	1	8	1	2	0	13
2016	2	0	0	12	1	0	0	15
Total	**3**	**0**	**2**	**36**	**6**	**3**	**0**	**50**
Average	**< 1**	**0**	**< 1**	**7.2**	**1.2**	**< 1**	**0**	**10**

Table 2
IL ROUTE 59 WITH LACROSSE LANE – CRASH SUMMARY

	Type of Crash Frequency							
Year	**Angle**	**Head On**	**Object**	**Rear End**	**Sideswipe**	**Turning**	**Other**	**Total**
2012	0	0	0	0	1	1	0	2
2013	0	0	0	2	0	1	0	3
2014	0	0	0	1	0	1	0	2
2015	1	0	1	0	0	0	0	2
2016	0	0	2	2	1	1	0	6
Total	**1**	**0**	**3**	**5**	**2**	**4**	**0**	**15**
Average	**< 1**	**0**	**< 1**	**1**	**< 1**	**< 1**	**0**	**3**

Table 3
IL ROUTE 59 WITH ROLLINGRIDGE ROAD – CRASH SUMMARY

	Type of Crash Frequency							
Year	**Angle**	**Head On**	**Object**	**Rear End**	**Sideswipe**	**Turning**	**Other**	**Total**
2012	0	0	0	1	1	1	0	3
2013	1	0	0	1	1	1	0	4
2014	0	0	0	3	0	3	0	6
2015	0	0	1	2	0	3	0	6
2016	0	0	0	1	1	2	1	5
Total	**1**	**0**	**1**	**8**	**3**	**10**	**1**	**24**
Average	**< 1**	**0**	**< 1**	**1.6**	**< 1**	**2**	**< 1**	**4.8**

3. Traffic Characteristics of the Proposed Development

In order to properly evaluate future traffic conditions in the surrounding area, it was necessary to determine the traffic characteristics of the proposed development, including the directional distribution and volumes of traffic that it will generate.

Proposed Site and Development Plan

As proposed, the plans call for developing the site with 312 single-family home lots and a two story, approximately 38,000 square-foot church. As proposed the 38,000 square-foot church will have an up to 600-seat worship center with traditional ancillary facilities. The church will have service on Saturday night, Sunday morning and Sunday nights and is not proposed to provide a day school or day care center. Access to the site will be provided via the following:

- A three-quarter movement access roadway off IL Route 59 that will be located approximately 1,150 feet north of Rollingridge Road at the location of the existing full-movement access roadway serving Wagner Farms Nursery. This access roadway will provide one inbound lane and one outbound lane. Outbound movements will be physically restricted to right-turning movements only and this restriction will be further reinforced with appropriate signage. Outbound movements will be under stop sign control. It should be noted that an existing southbound left-turn lane and northbound right-turn lane are currently provided on IL Route 59 at the location of the proposed access roadway.

- A full-movement access roadway off IL Route 59 aligned opposite Rollingridge Road approximately 1,325 feet north of 103rd Street. This access roadway should provide one inbound lane and two outbound lanes with outbound movements under stop sign control. It should be noted that at the location of the proposed access roadway, the landscaped median along IL Route 59 tapers and is striped to accommodate the future provision of a southbound left-turn lane at this intersection. Furthermore, a northbound right-turn lane on IL Route 59 will be provided as part of the proposed development serving the access roadway.

- A right-in/right-out access drive off IL Route 59 that will be located approximately 850 feet south of Rollingridge Road and approximately 475 feet north of 103rd Street. This access drive will provide one inbound lane and one outbound lane with outbound movements under stop-sign control. The right-in/right-out restriction will be regulated via the existing landscaped median along IL Route 59. This access drive will primarily serve the church parcel of the development.

- A full-movement access roadway off 103rd Street aligned opposite Tower Court approximately 900 feet east of IL Route 59. This access roadway will provide one inbound lane and two outbound lanes striped to provide a shared left-turn/through lane and an exclusive right-turn lane. Outbound movements will be under stop-sign control. As part of the proposed development, 103rd Street will be restriped to provide eastbound and westbound exclusive left-turn lanes serving Tower Court and the proposed access roadway.

- A right-in/right-out access drive off 103rd Street that will be located approximately 550 feet east of IL Route 59 and approximately 325 feet west of Tower Court. This access drive will provide one inbound lane and one outbound lane with outbound movements under stop-sign control. The right-in/right-out restriction will be regulated via a raised triangular median and appropriate signage. This access drive will primarily serve the church parcel of the development.

- Additional access to the development will be provided via a connection to Falcon Drive and its respective intersection with 103rd Street. Connecting to this roadway will allow existing residents east of the site to access IL Route 59 through the proposed development.

A copy of the preliminary site plan depicting the proposed development and access is included in the Appendix.

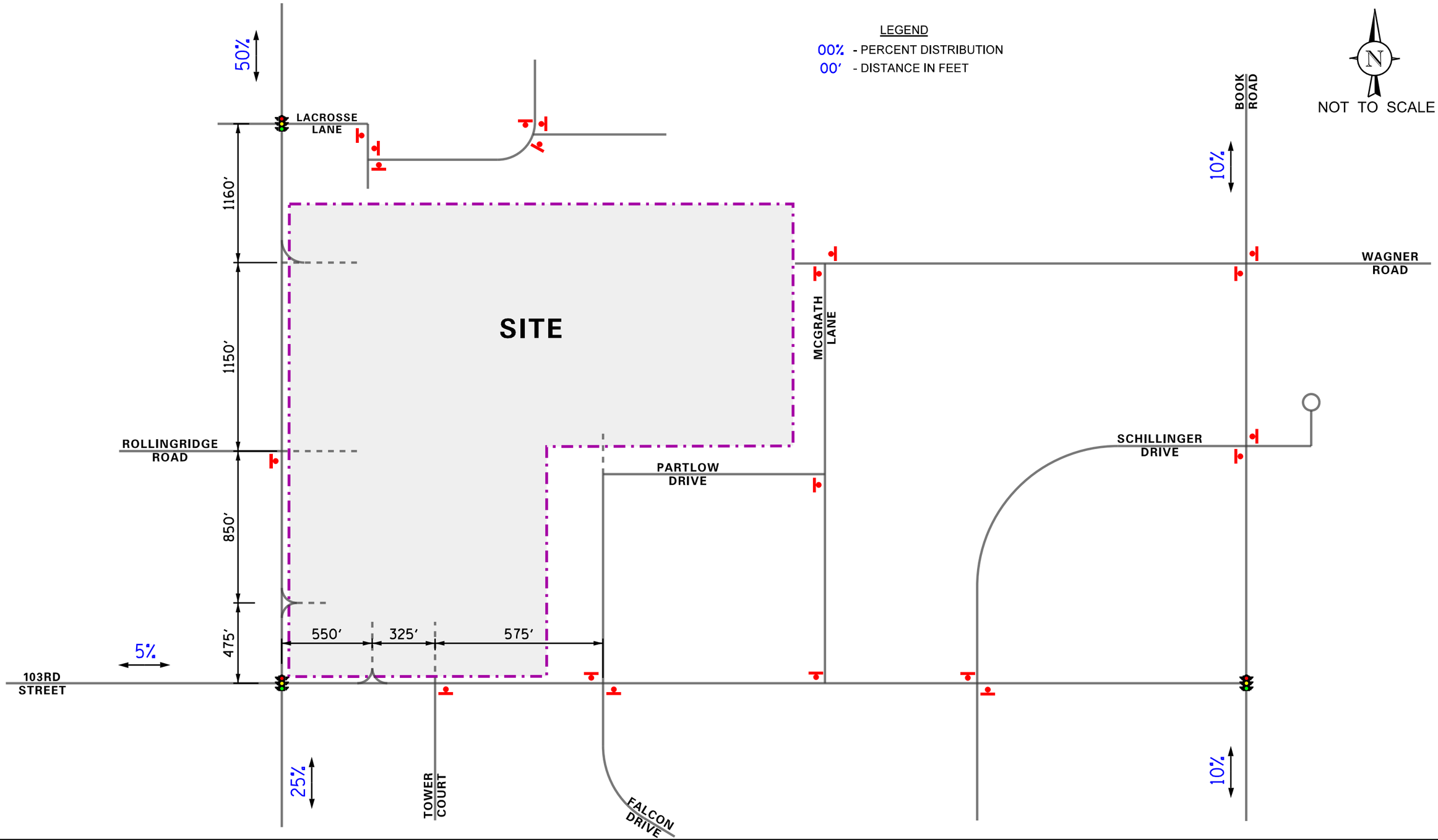
Directional Distribution

The directions from which residents will approach and depart the site were estimated based on existing travel patterns, as determined from the traffic counts. **Figure 5** illustrates the directional distribution of the development-generated traffic.

Estimated Site Traffic Generation

The volume of traffic generated be the proposed development was estimated using data published in the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 10th Edition. The "Single-Family Detached Housing" (Land-Use Code 210) was used for the single-family homes. As previously indicated the proposed church is proposed to have Sunday morning, Sunday evening and Saturday evening services only and no school or day care facilities will be provided. As such, the church is projected to generate a limited volume of traffic during the weekday morning, weekday evening and Saturday midday peak periods. The "Church" (Land-Use Code 560) was used for the church during the weekday morning and weekday evening peak hours and the trip generation was based on the number of proposed seats within the church. The trip generation during the Saturday midday peak hour was conservatively assumed to be 10 inbound trips and 10 outbound trips.

Table 4 tabulates the peak hour vehicle trips anticipated for this development and **Table 5** tabulates the daily vehicle trips anticipated for this development.



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ESTIMATED DIRECTIONAL DISTRIBUTION

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Table 4
ESTIMATED PEAK HOUR SITE-GENERATED TRAFFIC VOLUMES

ITE Land Use Code	Type/Size	Weekday Morning Peak Hour			Weekday Evening Peak Hour			Saturday Midday Peak Hour		
		In	Out	Total	In	Out	Total	In	Out	Total
210	Single-Family (312 Units)	56	170	226	191	112	303	151	129	280
560	Church (600 Seats)	3	3	6	7	11	18	10	10	20
	Total	**59**	**173**	**232**	**198**	**123**	**321**	**161**	**139**	**300**

Table 5
ESTIMATED DAILY SITE-GENERATED TRAFFIC VOLUMES

ITE Land Use Code	Type/Size	Weekday Two-Way Traffic			Saturday Two-Way Traffic		
		In	Out	Total	In	Out	Total
210	Single-Family (312 Units)	1,481	1,481	2,962	1,430	1,430	2,860
560	Church (600 Seats)	132	132	264	75	75	150
	Total	**1,613**	**1,613**	**3,226**	**1,505**	**1,505**	**3,010**

4. Projected Traffic Conditions

The total projected traffic volumes include the existing traffic volumes, increase in background traffic due to growth, and the traffic estimated to be generated by the proposed subject development.

Development Traffic Assignment

The estimated weekday morning, weekday evening, and Saturday midday peak hour 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 total new traffic assignment for the development is illustrated in **Figure 6**.

Background (No-Build) Traffic Conditions

The existing 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). The ADT projections provided by the Chicago Metropolitan Agency for Planning (CMAP) in a letter dated April 3, 2018 are as follows:

- IL Route 59 is projected to increase by approximately 0.5 percent per year.
- 103rd Street east of IL Route 59 is projected to increase by approximately 3.25 percent per year.
- 103rd Street west of IL Route 59 is projected to increase by approximately 5.5 percent per year.

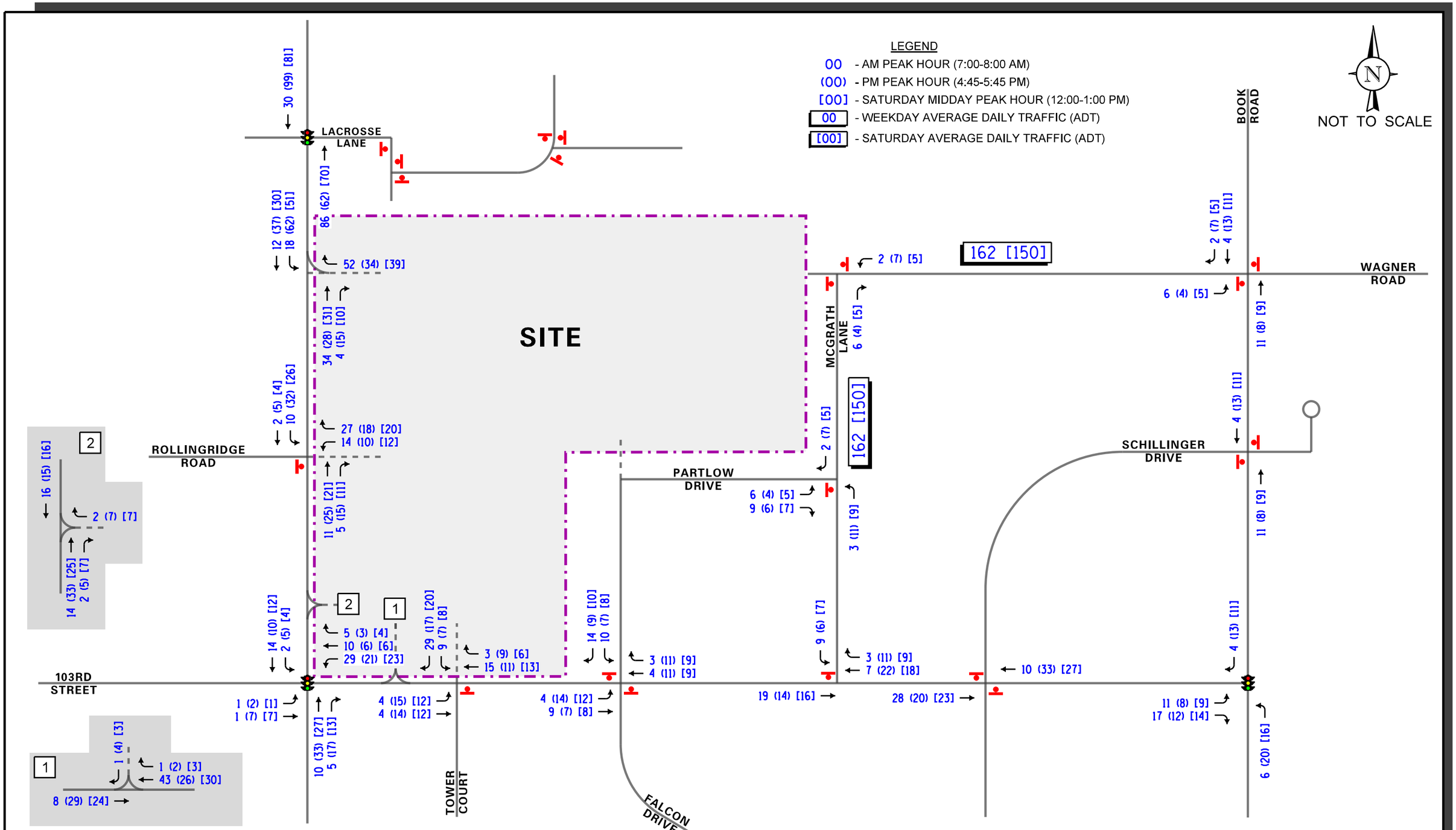
As such, an increase of approximately 4.5 percent, 29 percent, and 50 percent, respectively was applied to project Year 2027 conditions (buildout Year 2022 plus five years). It should be noted that the background growth applied to the east leg of 103rd Street at IL Route 59 was also applied to the through volumes on Book Road. A copy of the CMAP 2040 projections letter is included in the Appendix.

Furthermore, the traffic projected to be generated by the previously approved Clow Farms Residential Development that will be located on the south side of 103rd Street west of Book Road was included in the Year 2027 background traffic volumes.

The Year 2027 no-build traffic volumes, which include the existing traffic volumes increased by ambient growth factors and the traffic projected to be generated by the Clow Farms Residential Development, are illustrated in **Figure 7**.

Total Projected Traffic Volumes

The development-generated traffic (Figures 6 and 7) were added to the Year 2027 no-build traffic volumes (Figure 8) to determine the Year 2027 total projected traffic volumes, as illustrated in **Figure 8**.



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SITE TRAFFIC ASSIGNMENT

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Job No: 18-062 Figure: 6

LEGEND

00 - AM PEAK HOUR (7:00-8:00 AM)
(00) - PM PEAK HOUR (4:45-5:45 PM)
[00] - SATURDAY MIDDAY PEAK HOUR (12:00-1:00 PM)

NOT TO SCALE

SITE

LACROSSE LANE
2 (2) [2]
1028 (2111) [1557]
52 (105) [100]
70 (66) [104]
0 (0) [0]
59 (170) [129]
2 (3) [1]
0 (0) [1]
0 (0) [0]
4 (6) [4]
2246 (1471) [1744]
91 (95) [100]

BOOK ROAD
11 (42) [24]
373 (733) [475]
2 (3) [1]
3 (2) [0]
0 (0) [0]
2 (0) [1]

WAGNER ROAD
39 (28) [16]
0 (0) [0]
2 (5) [4]
3 (4) [0]
724 (534) [434]
4 (0) [2]

MCGRATH LANE
5 (11) [8]
7 (7) [8]
1 (6) [1]
4 (15) [8]
9 (8) [10]
3 (8) [3]
0 (5) [2]
268 (351) [244]

ROLLINGRIDGE ROAD
94 (118) [65]
986 (2214) [1602]
50 (31) [39]
42 (33) [36]
54 (36) [37]
2411 (1612) [1819]

PARTLOW DRIVE
10 (5) [4]
1 (1) [2]

SCHILLINGER DRIVE

103RD STREET
86 (135) [93]
860 (1887) [1388]
82 (225) [157]
223 (157) [171]
86 (161) [48]
35 (64) [78]
342 (381) [295]
1 (0) [0]
261 (447) [293]
5 (2) [2]
173 (147) [158]
159 (164) [66]
39 (60) [71]
32 (68) [65]
2069 (1344) [1527]
25 (60) [72]
22 (17) [29]
0 (0) [1]
4 (2) [6]
1 (6) [3]
269 (337) [340]
7 (16) [11]
7 (34) [24]
242 (369) [237]
17 (45) [35]
7 (19) [12]
254 (361) [237]
66 (141) [92]
302 (530) [339]
121 (120) [83]
151 (173) [107]
140 (213) [115]
513 (387) [311]

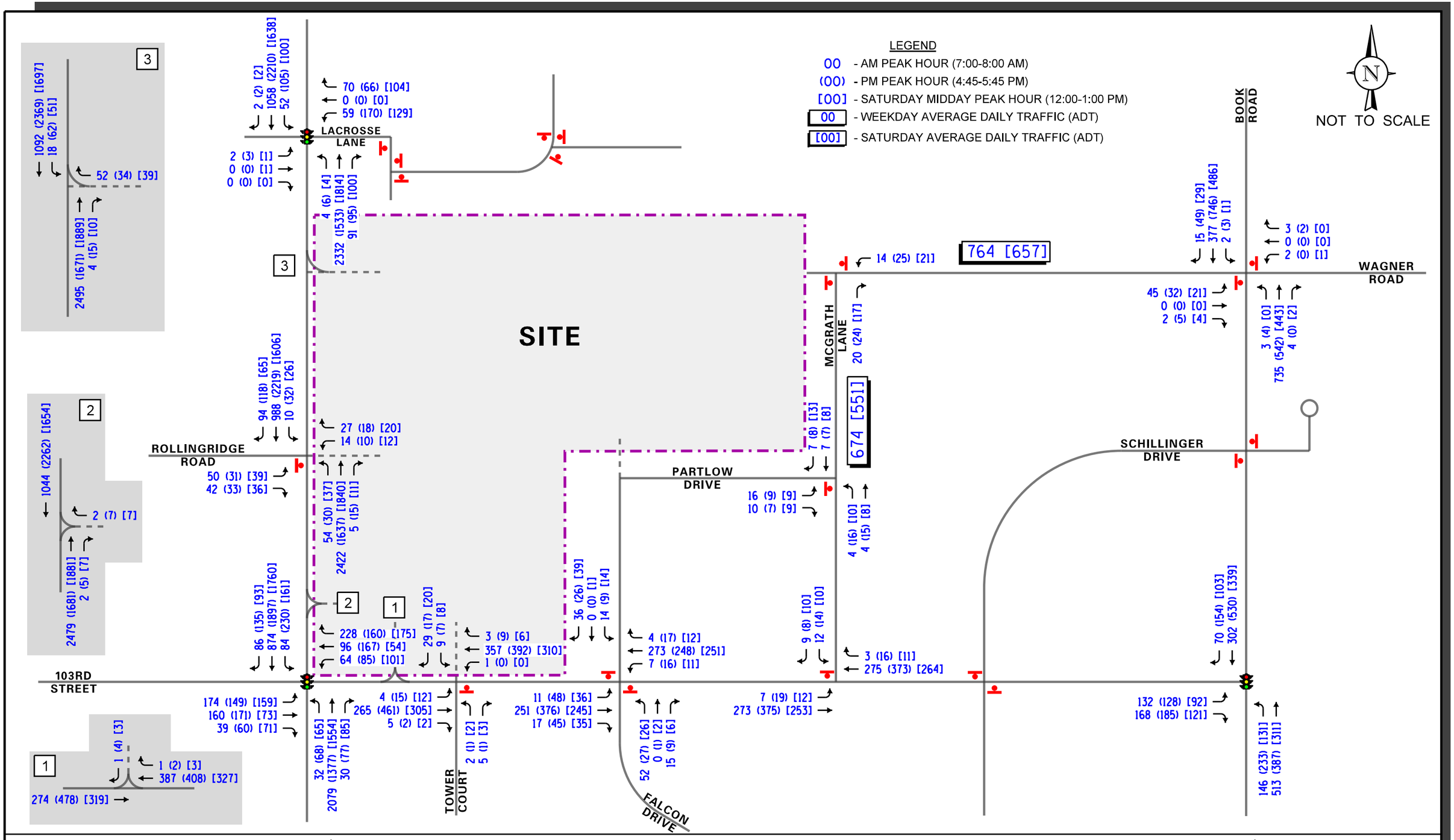
TOWER COURT
2 (1) [2]
5 (1) [3]

FALCON DRIVE
52 (27) [26]
0 (1) [2]
15 (9) [6]

WAGNER FARM
RESIDENTIAL DEVELOPMENT
NAPERVILLE, ILLINOIS

YEAR 2027 NO-BUILD TRAFFIC VOLUMES

KLOA
Kenig,Lindgren,O'Hara,Aboona,Inc.
Job No: 18-062
Figure: 7



WAGNER FARM
RESIDENTIAL DEVELOPMENT
NAPERVILLE, ILLINOIS

YEAR 2027 TOTAL PROJECTED TRAFFIC VOLUMES

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

Job No: 18-062 Figure: 8

5. Traffic Analysis and Recommendations

The following provides an evaluation conducted for the weekday morning, weekday evening, and Saturday midday peak hours. The analysis includes conducting capacity analyses to determine how well the roadway system and access roadways are projected to operate and whether any roadway improvements or modifications are required.

Traffic Analyses

Roadway and adjacent or nearby intersection analyses were performed for the weekday morning, weekday evening, and Saturday midday peak hours for the existing (Year 2018), Year 2027 no-build, and Year 2027 total projected traffic volumes.

The traffic analyses were performed using the methodologies outlined in the Transportation Research Board's *Highway Capacity Manual (HCM), 2010* and analyzed using the Synchro/SimTraffic 10 computer software. Synchro/SimTraffic 9 was utilized to represent the operations of the intersections, particularly the intersections along IL Route 59, as Synchro/SimTraffic 10 takes into consideration the coordination of the intersections of IL Route 59 with 103rd Street and IL Route 59 with Lacrosse Lane.

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 existing, Year 2027 no-build, and Year 2027 total projected conditions are presented in **Tables 6** through **15**. A discussion of the intersections follows. Summary sheets for the capacity analyses are included in the Appendix.

Table 6
CAPACITY ANALYSIS RESULTS – IL ROUTE 59 WITH 103rd STREET - SIGNALIZED

	Peak Hour	Eastbound			Westbound			Northbound			Southbound			Overall
		L	T	R	L	T	R	L	T	R	L	T	R	
Weekday Morning Peak Hour	2018 Existing Conditions	E 74.6	E 74.0		D 48.2	F 267.9		E 71.4	D 54.8		F 100.3	B 15.2		E – 60.8
		E – 74.3			F – 157.9			E -55.0			C – 20.4			
	2027 No-Build Conditions	F 147.1	F 200.4		D 51.2	F 477.3		E 76.6	E 75.3		F 156.5	B 17.4		F – 104.3
		F – 176.4			F – 321.0			E – 75.4			C – 28.4			
	2027 Projected Conditions	F 132.5	F 339.4		D 54.8	F 544.9		E 76.6	E 78.6		F 165.0	B 17.0		F – 118.8
		F – 242.8			F – 464.3			E – 78.5			C – 28.9			
Weekday Evening Peak Hour	2018 Existing Conditions	D 48.4	D 53.8		D 38.9	E 77.2		E 76.6	C 32.8		E 77.5	D 42.5		D – 43.6
		D – 51.7			E – 71.1			C – 34.3			D – 45.2			
	2027 No-Build Conditions	E 74.5	E 62.1		D 40.6	F 121.8		F 87.5	D 40.6		F 98.8	E 70.8		E – 65.9
		E – 67.0			F – 108.2			D – 42.8			E – 73.6			
	2027 Projected Conditions	E 73.0	E 70.1		D 43.5	F 132.4		F 87.5	D 43.7		F 103.6	E 72.2		E – 68.6
		E – 71.2			F – 114.1			D – 45.6			E – 75.4			
Saturday Midday Peak Hour	2018 Existing Conditions	C 34.1	C 27.2		C 29.4	C 21.5		D 50.4	C 28.6		E 60.4	B 15.6		C – 24.4
		C – 30.9			C – 23.5			C – 29.2			B – 18.8			
	2027 No-Build Conditions	D 43.2	C 34.5		C 29.6	C 28.7		E 55.8	D 42.9		E 70.0	C 20.5		C – 34.4
		D – 39.2			C – 29.0			D – 43.5			C – 25.3			
	2027 Projected Conditions	D 43.1	C 36.5		C 30.3	C 33.9		E 55.8	D 48.8		E 79.8	C 21.7		D – 38.0
		D – 39.9			C – 32.8			D – 49.0			C – 27.3			

Letter denotes Level of Service
Delay is measured in seconds.
L – Left Turns
T – Through
R – Right Turns

Table 6 - Continued

CAPACITY ANALYSIS RESULTS – IL ROUTE 59 WITH 103rd STREET - SIGNALIZED

	Peak Hour	Eastbound			Westbound			Northbound			Southbound			Overall
		L	T	R	L	T	R	L	T	R	L	T	R	
2027 Projected Conditions[1]	Weekday Morning Peak Hour	F 110.9	F 339.4		D 54.4	F 113.6	E 67.2	E 76.6	E 78.7		F 164.1	B 17.4		E – 79.9
		F – 232.7			E – 76.7			E – 78.5			C – 29.3			
	Weekday Evening Peak Hour	D 51.6	F 80.7		D 45.7	E 66.1	C 24.1	F 87.5	D 41.8		F 88.7	E 60.2		E – 55.6
		E – 69.3			D – 45.6			D – 43.9			E – 63.1			
	Saturday Midday Peak Hour	D 36.7	D 41.5		C 31.6	D 42.4	B 19.7	E 55.6	D 39.8		E 71.3	B 19.6		C – 32.7
		D – 39.0			C – 27.1			D – 40.4			C – 24.6			

Letter denotes Level of Service L – Left Turns R – Right Turns
Delay is measured in seconds. T – Through 1 – With westbound right-turn lane improvements

Table 7
CAPACITY ANALYSIS RESULTS – IL ROUTE 59 WITH LACROSSE LANE/US ADVENTURE RV ACCESS DRIVE - SIGNALIZED

	Peak Hour	Eastbound			Westbound			Northbound			Southbound			Overall
		L	T	R	L	T	R	L	T	R	L	T	R	
Weekday Morning Peak Hour	2018 Existing Conditions	E 64.5	--		E 73.8	A 2.2		E 77.8	A 5.8	A 0.1	E 73.1	A 4.1	A 0.0	A – 7.5
		E – 64.5			C – 35.0			A – 5.7			A – 7.7			
	2027 No-Build Conditions	E 64.5	--		E 73.8	A 2.3		E 73.2	A 9.0	A 0.3	E 73.1	A 4.3	A 0.0	A – 9.4
		E – 64.5			D – 35.0			A – 8.8			A – 7.6			
	2027 Projected Conditions	E 64.5	--		E 73.8	A 2.3		E 770.5	B 11.1	A 0.4	E 73.1	A 4.4	A 0.0	B – 10.7
		E – 64.5			D – 35.0			B – 10.8			A – 7.6			
Weekday Evening Peak Hour	2018 Existing Conditions	E 65.3	--		F 153.8	A 1.4		F 84.0	A 3.5	A 0.2	E 72.0	A 6.9	A 0.0	B – 14.2
		E – 65.3			F – 111.2			A – 3.6			B – 10.3			
	2027 No-Build Conditions	E 65.3	--		F 153.8	A 1.6		F 81.7	A 4.6	A 0.2	E 72.0	A 8.2	A 0.0	B – 14.5
		E – 65.3			F – 111.2			A – 4.6			B – 11.2			
	2027 Projected Conditions	E 65.3	--		F 153.8	A 1.6		F 81.5	A 5.2	A 0.2	E 72.0	A 9.0	A 0.0	B – 14.9
		E – 65.3			F – 111.2			A – 5.1			B – 11.8			
Saturday Midday Peak Hour	2018 Existing Conditions	C 35.0	D 43.0		D 50.9	A 1.2		D 48.2	A 7.1	A 0.3	D 50.8	A 7.5	A 0.0	A – 9.9
		D – 39.0			C – 28.7			A – 6.8			B – 10.3			
	2027 No-Build Conditions	C 35.0	D 43.0		D 50.9	A 1.2		D 47.0	A 9.1	A 0.2	D 50.8	A 8.1	A 0.0	B – 10.8
		D – 39.0			C – 28.7			A – 8.7			B – 10.7			
	2027 Projected Conditions	C 35.0	D 43.0		D 50.9	A 1.2		D 46.0	B 10.8	A 0.3	D 50.8	A 8.6	A 0.0	B – 11.7
		D – 39.0			C – 28.7			B – 10.3			B – 11.0			

Letter denotes Level of Service L – Left Turns R – Right Turns
Delay is measured in seconds. T – Through

Table 8
CAPACITY ANALYSIS RESULTS – 103rd STREET WITH BOOK ROAD – SIGNALIZED

	Peak Hour	Eastbound		Northbound		Southbound		Overall
		L	R	L	T	T	R	
Weekday Morning Peak Hour	2018 Existing Conditions	D 42.4	B 10.4	A 4.2	A 5.7	A – 8.9		B – 10.3
		C – 24.6		A – 5.4				
	2027 No-Build Conditions	D 43.4	A 9.5	A 5.8	A 7.6	B – 12.2		B – 12.3
		C – 24.6		A – 7.2				
	2027 Projected Conditions	D 44.0	A 9.3	A 6.2	A 7.8	B – 12.5		B – 12.7
		C – 24.6		A – 7.4				
Weekday Evening Peak Hour	2018 Existing Conditions	D 54.9	B 12.8	A 3.8	A 3.8	B – 10.4		B – 11.5
		C – 30.0		A – 3.8				
	2027 No-Build Conditions	E 58.4	B 12.2	A 6.1	A 4.4	B – 13.8		B – 13.7
		C – 31.1		A – 5.0				
	2027 Projected Conditions	E 59.6	B 12.0	A 7.1	A 4.5	B – 14.6		B – 14.4
		C – 31.5		A – 5.5				
Saturday Midday Peak Hour	2018 Existing Conditions	D 41.0	B 12.3	A 2.7	A 3.3	A – 6.9		A – 8.5
		C – 24.8		A – 3.1				
	2027 No-Build Conditions	D 41.6	B 11.1	A 3.3	A 4.1	A – 9.4		A – 9.9
		C – 24.4		A – 3.9				
	2027 Projected Conditions	D 41.9	B 10.7	A 3.6	A 4.3	A – 9.9		B – 10.3
		C – 24.2		A – 4.1				

Letter denotes Level of Service L – Left Turns R – Right Turns
Delay is measured in seconds. T – Through

Table 9
CAPACITY ANALYSIS RESULTS
IL ROUTE 59 WITH ROLLINGRIDGE ROAD - UNSIGNALIZED

Intersection	Weekday Morning Peak Hour		Weekday Evening Peak Hour		Saturday Midday Peak Hour	
	LOS	Delay	LOS	Delay	LOS	Delay
Existing Conditions						
• Eastbound Left Turns	F	99+	F	99+	F	59.1
• Eastbound Right Turns	B	13.1	D	25.5	C	16.3
• Northbound Left Turns	B	11.8	C	24.7	B	14.3
Year 2027 No-Build Conditions						
• Eastbound Left Turns	F	99+	F	99+	F	77.8
• Eastbound Right Turns	B	13.8	D	30.1	C	17.8
• Northbound Left Turns	B	12.5	D	30.7	C	15.7
Year 2027 Total Projected Conditions						
• Eastbound Left Turns	F	99+	F	99+	F	99+
• Eastbound Right Turns	B	13.8	D	30.1	C	17.8
• Northbound Left Turns	B	12.5	D	30.7	C	15.8
• Westbound Left Turns	F	99+	F	99+	F	99+
• Westbound Right Turns	E	43.3	C	18.3	C	19.7
• Southbound Left Turns	E	35.7	C	16.5	C	17.4

LOS = Level of Service
Delay is measured in seconds.
1 – Two-Way Stop Sign Control
2 – All-Way Stop Sign Control

Table 10
CAPACITY ANALYSIS RESULTS
FALCON DRIVE WITH 103rd STREET - UNSIGNALIZED

Intersection	Weekday Morning Peak Hour		Weekday Evening Peak Hour		Saturday Midday Peak Hour	
	LOS	Delay	LOS	Delay	LOS	Delay
Existing Conditions						
• Northbound Approach	B	13.1	B	14.5	B	12.2
• Southbound Approach	B	10.0	B	10.3	A	9.9
• Eastbound Left Turns	A	7.6	A	7.8	A	7.6
• Westbound Left Turns	A	7.8	A	7.8	A	7.6
Year 2027 No-Build Conditions						
• Northbound Approach	C	17.3	C	19.6	B	14.8
• Southbound Approach	B	11.3	B	11.5	B	11.0
• Eastbound Left Turns	A	8.0	A	8.1	A	7.9
• Westbound Left Turns	A	8.1	A	8.2	A	7.9
Year 2027 Total Projected Conditions						
• Northbound Approach	C	18.7	C	21.6	C	16.0
• Southbound Approach	B	12.8	B	13.9	B	11.9
• Eastbound Left Turns	A	8.0	A	8.2	A	7.9
• Westbound Left Turns	A	8.1	A	8.3	A	7.9

LOS = Level of Service
Delay is measured in seconds.
1 – Two-Way Stop Sign Control
2 – All-Way Stop Sign Control

Table 11
CAPACITY ANALYSIS RESULTS
MCGRATH LANE WITH 103rd STREET - UNSIGNALIZED

Intersection	Weekday Morning Peak Hour		Weekday Evening Peak Hour		Saturday Midday Peak Hour	
	LOS	Delay	LOS	Delay	LOS	Delay
Existing Conditions						
• Southbound Approach	A	9.9	B	11.4	A	9.6
• Eastbound Left Turns	A	7.8	A	7.8	A	7.6
Year 2027 No-Build Conditions						
• Southbound Approach	B	11.0	B	13.6	B	10.5
• Eastbound Left Turns	A	8.2	A	8.1	A	7.8
Year 2027 Total Projected Conditions						
• Southbound Approach	B	12.7	C	15.2	B	11.7
• Eastbound Left Turns	A	8.2	A	8.2	A	7.9

LOS = Level of Service
Delay is measured in seconds.
1 – Two-Way Stop Sign Control
2 – All-Way Stop Sign Control

Table 12
CAPACITY ANALYSIS RESULTS
BOOK ROAD WITH WAGNER ROAD - UNSIGNALIZED

Intersection	Weekday Morning Peak Hour		Weekday Evening Peak Hour		Saturday Midday Peak Hour	
	LOS	Delay	LOS	Delay	LOS	Delay
Existing Conditions						
• Eastbound Approach	D	29.4	D	28.8	C	15.7
• Westbound Approach	C	17.6	B	11.1	C	16.0
• Northbound Left Turn	A	9.0	A	9.0	--	--
• Southbound Left Turn	A	9.0	A	8.3	A	8.0
Year 2027 No-Build Conditions						
• Eastbound Approach	F	55.7	F	52.8	C	20.0
• Westbound Approach	C	24.3	B	12.3	C	20.5
• Northbound Left Turn	A	9.4	A	9.7	--	--
• Southbound Left Turn	A	9.8	A	8.7	A	8.2
Year 2027 Total Projected Conditions						
• Eastbound Approach	F	65.2	F	60.9	C	21.4
• Westbound Approach	C	24.8	B	12.4	C	21.0
• Northbound Left Turn	A	9.5	A	9.8	--	--
• Southbound Left Turn	A	9.8	A	8.7	A	8.2

LOS = Level of Service
Delay is measured in seconds.
1 – Two-Way Stop Sign Control
2 – All-Way Stop Sign Control

Table 13
CAPACITY ANALYSIS RESULTS
103rd STREET WITH TOWER COURT - UNSIGNALIZED

Intersection	Weekday Morning Peak Hour		Weekday Evening Peak Hour		Saturday Midday Peak Hour	
	LOS	Delay	LOS	Delay	LOS	Delay
Existing Conditions						
• Northbound Approach	B	10.0	B	11.6	B	10.2
• Westbound Left Turns	A	7.6	--	--	--	--
Year 2027 No-Build Conditions						
• Northbound Approach	B	11.0	B	14.0	B	11.4
• Westbound Left Turns	A	7.9	--	--	--	--
Year 2027 Total Projected Conditions						
• Northbound Approach	B	11.8	C	16.4	B	12.5
• Southbound Approach	B	12.1	B	13.9	B	11.8
• Eastbound Left Turns	A	8.1	A	8.2	A	8.0
• Westbound Left Turns	A	7.9	--	--	--	--

LOS = Level of Service
Delay is measured in seconds.
1 – Two-Way Stop Sign Control
2 – All-Way Stop Sign Control

Table 14
CAPACITY ANALYSIS RESULTS
MCGRATH LANE WITH PARTLOW DRIVE - UNSIGNALIZED

Intersection	Weekday Morning Peak Hour		Weekday Evening Peak Hour		Saturday Midday Peak Hour	
	LOS	Delay	LOS	Delay	LOS	Delay
Existing Conditions						
• Eastbound Approach	A	8.7	A	8.7	A	8.7
• Northbound Left Turns	A	7.2	A	7.3	A	7.2
Year 2027 No-Build Conditions						
• Eastbound Approach	A	8.7	A	8.7	A	8.7
• Northbound Left Turns	A	7.2	A	7.3	A	7.2
Year 2027 Total Projected Conditions						
• Southbound Approach	A	8.7	A	8.7	A	8.8
• Eastbound Left Turns	A	7.2	A	7.3	A	7.3

LOS = Level of Service
Delay is measured in seconds.
1 – Two-Way Stop Sign Control
2 – All-Way Stop Sign Control

Table 15
CAPACITY ANALYSIS RESULTS – UNSIGNALIZED
PROPOSED ACCESS ROADWAYS – YEAR 2027 PROJECTED CONDITIONS

Intersection	Weekday Morning Peak Hour		Weekday Evening Peak Hour		Saturday Midday Peak Hour	
	LOS	Delay	LOS	Delay	LOS	Delay
IL Route 59 Northerly Three-Quarter Access Roadway						
• Westbound Right Turns	E	47.6	C	19.9	C	24.0
• Southbound Left Turns	C	33.2	C	18.7	C	22.0
IL Route 59 Southerly Right-In/Right-Out Access Drive						
• Westbound Approach	D	29.3	C	17.9	C	21.0
103rd Street with Right-In/Right-Out Access Drive						
• Southbound Approach	B	10.6	B	10.8	B	10.3

LOS = Level of Service
Delay is measured in seconds.
1 – Two-Way Stop Sign Control
2 – All-Way Stop Sign Control

Discussion and Recommendations

The following summarizes how the intersections are projected to operate and identify any roadway and traffic control improvements to accommodate the development traffic. As discussed in this section, the results of the capacity analysis under Year 2027 total projected conditions reflect primarily the assumed increase in background traffic volumes due to the regional growth factors discussed in the previous chapter.

IL Route 59 with 103rd Street

The results of the capacity analysis indicate that overall this intersection currently operates at Level of Service (LOS) E during the weekday morning peak hour, LOS D during the weekday evening peak hour and at LOS C during the Saturday midday peak hour. It should be noted that the westbound approach and the southbound left-turn movement currently operate at LOS F and the eastbound and northbound approaches currently operate at LOS E during the weekday morning peak hour. Furthermore, the westbound approach currently operates at LOS E during the weekday evening peak hour. This level of service is due to the long cycle length and the high volume of existing traffic along IL Route 59 which limits the available green time allocated to the eastbound and westbound approaches as well as the northbound and southbound left-turn movements, which operate under a protected phase only.

Under Year 2027 no-build conditions, this intersection overall is projected to operate at LOS F during the weekday morning peak hour, LOS E during the weekday evening peak hour, and LOS C during the Saturday midday peak hour with increases in delay of approximately 43 seconds, 22 seconds, and 10 seconds, respectively. It should be noted that the eastbound approach, westbound approach, and southbound left-turn movement are projected to operate at LOS F during the weekday morning peak hour. Furthermore, the westbound approach, northbound left-turn movements, and southbound left-turn movements are projected to operate at LOS F during the weekday evening peak hour.

Under Year 2027 total projected traffic conditions, this intersection overall is projected to continue operating at LOS F during the weekday morning peak hour, LOS E during the weekday evening peak hour, and is projected to operate at LOS D during the Saturday midday peak hour with increases in delay of approximately 14 seconds, three seconds, and four seconds, respectively, over Year 2027 no-build conditions. As previously indicated, the eastbound and westbound approaches and the southbound left-turn movement are projected to operate at LOS F during the weekday morning peak hour. Furthermore, the westbound approach, northbound left-turn movements and southbound left-turn movements are projected to operate at LOS F during the weekday evening peak hour. However, as can be seen from the results of the capacity analysis for the Year 2027 no-build conditions, the projected levels of service are primarily the result of the existing traffic volumes increased by the regional growth factors. In order to improve the operations of this intersection, consideration should be given to providing an exclusive right-turn lane on the westbound approach and modifying the signal to provide a westbound right-turn overlap phase. With this improvement, the intersection overall is projected to operate at LOS E during the weekday morning peak hour, on the threshold of LOS D/E during the weekday evening peak hour, and at LOS C during the Saturday midday peak hour with decreases in delay of approximately 39 seconds, 13 seconds, and five seconds, respectively.

Furthermore, the westbound approach is projected to operate at LOS E during the weekday morning peak hour with an approximately 83 percent reduction in delay, LOS D during the weekday evening peak hour with an approximately 60 percent reduction in delay, and at LOS C during the Saturday midday peak hour with an approximately 16 percent reduction in delay.

IL Route 59 with Lacrosse Lane

The results of the capacity analysis indicate that overall this intersection currently operates at LOS A during the weekday morning peak hour, LOS B during the weekday evening peak hour, and at LOS A during the Saturday midday peak hour. It should be noted that the westbound approach currently operates at LOS F during the weekday evening peak hour. This level of service is a result of the minimal volume of green time allocated to the westbound approach.

Under Year 2027 no-build conditions, this intersection overall is projected to operate at LOS A during the weekday morning peak hour, LOS B during the weekday evening peak hour, and at LOS B during the Saturday midday peak hour with increases in delay of approximately two seconds or less. The westbound approach is projected to continue operating at LOS F during the weekday evening peak hour with increases in delay of less than one second.

Under Year 2027 total projected conditions, this intersection is projected to operate at LOS B during the weekday morning, weekday evening, and Saturday midday peak hours with an increase in delay of approximately one second or less over Year 2027 background conditions. The westbound approach is projected to continue operating at LOS F during the weekday evening peak hour with increases in delay of less than one second. However, this level of service is due to the existing traffic volumes and the limited amount of green time allocated to the westbound approach.

As such, this intersection has sufficient reserve capacity to accommodate the traffic projected to be generated by the proposed development.

103rd Street with Book Road

The results of the capacity analysis indicate that overall this intersection currently operates at LOS B during the weekday morning and evening peak hours and at LOS A during the Saturday midday peak hour. Under Year 2027 no-build conditions, this intersection is projected to continue operating at LOS B during the weekday morning and evening peak hours and at LOS A during the Saturday midday peak hour with increases in delay of approximately two seconds or less.

Under Year 2027 total projected conditions, this intersection overall is projected to operate at LOS B during all three peak hours with increases in delay of less than one second over Year 2027 background conditions. Furthermore, all of the approaches are projected to operate at LOS C or better during the peak hours with increases in delay of approximately one second or less over background conditions.

As such, this intersection has sufficient reserve capacity to accommodate the traffic projected to be generated by the proposed development and no roadway improvements or signal modifications will be required.

IL Route 59 with Rollingridge Road/Proposed Access Roadway

It should be noted that field observations conducted at the intersection of IL Route 59 with Rollingridge Road indicated that the eastbound approach operates as an exclusive left-turn lane and an exclusive right-turn lane. The capacity analyses were conducted to reflect the operation of this approach accordingly.

The results of the capacity analysis indicate that the eastbound left-turn turn movements from Rollingridge Road onto IL Route 59 currently operate at LOS F during the weekday morning, weekday evening and Saturday midday peak hours. The LOS F experienced during the peak hours is expected for a minor roadway such as Rollingridge Road that has an unsignalized intersection with a major arterial roadway such as IL Route 59. Additionally, eastbound left-turning movements experience increased delay during the peak hours due to the high volume of through traffic in both directions on IL Route 59. Eastbound right-turn movements currently operate at LOS B during the weekday morning peak hour, LOS D during the weekday evening peak hour, and at LOS C during the Saturday midday peak hour.

Under Year 2027 no-build conditions, eastbound left-turn movements from Rollingridge Road onto IL Route 59 are projected to continue operating at LOS F during the peak hours. However, as previously indicated, this level of service is expected for Rollingridge Road and its unsignalized intersection with IL Route 59. Eastbound right-turn movements are projected to continue operating at existing levels of service with increases in delay of approximately five seconds or less.

Under Year 2027 total projected conditions, eastbound left-turn movements are projected to continue operating at LOS F during the weekday morning, weekday evening, and Saturday midday peak hours. Eastbound right-turning movements are projected to operate at existing levels of service during the peak hours with increases in delay of less than one second over Year 2027 no-build conditions. The 95th percentile queues for the eastbound approach are projected to be six vehicles during the weekday morning peak hour, five vehicles during the weekday evening peak hour and three vehicles during the Saturday midday peak hour. Furthermore, northbound left-turn movements from IL Route 59 onto Rollingridge Road are projected to operate at LOS D or better during the peak hours with 95th percentile queues of one to two vehicles.

Westbound left-turn movements from the proposed access roadway onto IL Route 59 are projected to operate at LOS F during the weekday morning, weekday evening, and Saturday midday peak hours with 95th percentile queues of three vehicles. Similar to the operation of Rollingridge Road, this level of service is expected for the proposed access roadway and its unsignalized intersection with IL Route 59. Westbound right-turn movements from the proposed access roadway onto IL Route 59 are projected to operate at LOS E during the weekday morning peak hour, and at LOS C during the weekday evening and Saturday midday peak hours. Southbound left-turn movements from IL Route 59 onto the proposed access roadway are projected to operate at LOS E during the weekday morning peak hour and at LOS C during the weekday evening and Saturday midday peak hours. As previously indicated, as part of the proposed development, IL Route 59 will be restriped to provide a southbound left-turn lane and a northbound right-turn lane will be constructed.

Overall, the level of service and delay currently experienced by left-turning movements to/from Rollingridge Road and the level of service and delay projected to occur under Year 2027 total projected conditions are a result of the high volume of traffic traversing IL Route 59 during the peak hours. However, based on field observations conducted during the peak hours, left-turning movements are able to occur at this intersection when gaps are created in the IL Route 59 traffic stream at its respective signalized intersections with 103rd Street and Lacrosse Lane. Furthermore, providing two outbound lanes at the proposed access roadway will allow left-turning movements to queue on-site without obstructing the right-turning movements. As such, the proposed access roadway will be adequate in accommodating the traffic projected to be generated by the proposed development and will ensure flexible access is provided.

As previously indicated, 12-hour traffic counts were conducted at the intersection of IL Route 59 with Rollingridge Road to determine if a traffic signal will be warranted under future conditions. Installation of a traffic signal requires that one or more of the nine signal warrants outlined in the *Manual on Uniform Traffic Control Devices* (MUTCD 2009) is met. However, as IL Route 59 is classified as a SRA route by IDOT, of these nine warrants that can be applied in establishing the justification for a traffic signal, IDOT SRA signal warrant requirements utilize only Warrant 1, Eight-Hour Vehicular Volume.

Warrant 1, Eight-Hour Vehicular Volume states that the Minimum Vehicular Volume, Condition A, is intended for application at locations where a large volume of intersecting traffic is the principal reason to consider installing a traffic control signal. The Interruption of Continuous Traffic, Condition B, is intended for application at locations where Condition A is not satisfied and where the traffic volumes on a major street are so heavy that traffic on the minor intersecting street suffers excessive delay or conflict in entering or crossing the major street. Given that IL Route 59 provides two or more lanes, the required vehicles per hour on the major street is 600 (total of both approaches) and the required vehicles per hour on the minor street (one direction only) is 200 for Condition A. For Condition B, the required number of vehicles per hour on the major street is 900 (total of both approaches) and the required number of vehicles per hour on the minor street (one direction only) is 75. However, for SRA routes, the requirements on the minor street for Condition B shall be increased from 75 vehicles per hour to 100 for a single-lane minor approach and from 100 vehicles per hour to 150 for a two or more lane minor approaches. Furthermore, based on IDOT's guidelines, the right-turn volume from the minor approach will be reduced by 40 percent.

Table 16 summarizes the 12-hour traffic counts for the intersection modified to reflect IDOT's required right-turn reduction. **Tables A**, **B**, and **C**, included in the appendix, summarize the raw turning movement counts, the right-turn reductions applied to the eastbound right-turning movements and the adjusted traffic volumes utilized for the SRA warrant evaluation as shown in Table 16. As can be seen from Table 16, when the IDOT SRA traffic signal warrant criteria are applied to the existing traffic volumes on Rollingridge Road (evaluated as a single lane approach), only one hour is met where eight are required. As such, a traffic signal is not warranted at this intersection. It should be noted that the Rollingridge Road is the higher volume minor approach during each hour as the traffic volumes projected to be generated by the development at the proposed access drive are not expected to exceed 41 vehicles per hour.

Table 16
12-HOUR TRAFFIC VOLUMES – IL ROUTE 59 WITH ROLLINGRIDGE ROAD

Time	Major Approach Total (IL Route 59)	Minor Approach Total (Rollingridge Road)[1]	Single Lane Approach Minimum Met?	
			Condition A	Condition B
6:00 AM	2448	53	No	No
7:00 AM	3352	100	No	Yes
8:00 AM	2629	75	No	No
9:00 AM	2320	76	No	No
10:00 AM	2110	71	No	No
11:00 AM	2217	84	No	No
12:00 PM	2406	87	No	No
1:00 PM	2409	63	No	No
2:00 PM	2810	64	No	No
3:00 PM	3107	89	No	No
4:00 PM	3268	70	No	No
5:00 PM	3509	67	No	No
6:00 PM	3111	44	No	No

1 – This includes the right-turn on red reduction as required by IDOT.
Warrant 1A requires a major approach volume of 600 vehicles and a minor approach volume of 200 vehicles.
Warrant 1B requires a major approach volume of 900 vehicles and a minor approach volume of 100 vehicles (increased per IDOT requirements for SRA Routes).

103rd Street with Falcon Drive

The results of the capacity analysis indicate that the northbound and southbound approaches currently operate at LOS B or better during the weekday morning, weekday evening, and Saturday midday peak hours. Under Year 2027 no-build conditions, the northbound and southbound approaches are projected to operate at LOS C or better during the peak hours with increases in delay of approximately five seconds or less. Under Year 2027 total projected conditions, the northbound and southbound approaches are projected to continue operating at LOS C or better during the peak hours with increases in delay of approximately two seconds or less over Year 2027 no-build conditions. Furthermore, eastbound and westbound left-turn movements onto Falcon Drive are projected to continue operating at LOS A during the peak hours with 95th percentile queues of one to two vehicles. As such, this intersection has sufficient reserve capacity to accommodate the traffic projected to be generated by the proposed development and no roadway or traffic control improvements will be required.

103rd Street with McGrath Lane

The results of the capacity analysis indicate that the southbound approach currently operates at LOS A during the weekday morning and Saturday midday peak hours and at LOS B during the weekday evening peak hour. Under Year 2027 no-build conditions, the southbound approach is projected to operate at LOS B during the weekday morning, weekday evening, and Saturday midday peak hours with increases in delay of approximately two seconds or less. Under Year 2027 total projected conditions, the southbound approach is projected to continue operating at LOS B during the weekday morning and Saturday midday peak hour and is projected to operate on the threshold of LOS B/C during the weekday evening peak hour with increases in delay of approximately two seconds or less over Year 2027 no-build conditions. Furthermore, the eastbound left-turn movements form 103rd Street onto McGrath Lane are projected to continue operating at LOS A during the peak hours with increases in delay of less than one second and 95th percentile queues of one to two vehicles. As such, this intersection has sufficient reserve capacity to accommodate the traffic projected to be generated by the proposed development and no roadway or traffic control improvements will be required.

Book Road with Wagner Road

The results of the capacity analysis indicate that the eastbound approach currently operates at LOS D during the weekday morning and evening peak hours and at LOS C during the Saturday midday peak hour. The westbound approach currently operates at LOS C during the weekday morning and Saturday midday peak hours and at LOS B during the weekday evening peak hour. Under Year 2027 no-build conditions, the eastbound approach is projected to operate at LOS F during the weekday morning and weekday evening peak hours and at LOS C during the Saturday midday peak hour with increases in delay of approximately 26 seconds, 24 seconds, and four seconds, respectively. The westbound approach is projected to continue operating at existing levels of service with increases in delay of approximately seven, one, and five seconds, respectively. Under Year 2027 total projected conditions, the eastbound approach is projected to continue operating at LOS F during the weekday morning and evening peak hours and at LOS C during the Saturday midday peak hour with increases in delay of approximately ten seconds, eight seconds, and one second, respectively, over Year 2027 no-build conditions.

The westbound approach is projected to operate at LOS C during the weekday morning peak hour, LOS B during the weekday evening peak hour, and at LOS C during the Saturday midday peak hour with increases in delay of less than one second over Year 2027 no-build conditions. Furthermore, northbound and southbound left-turn movements from Book Road onto Wagner Road are projected to continue operating at LOS A during the peak hours with increases in delay of less than one second. As can be seen from the analyses of the Year 2027 no-build conditions, the level of service and delay experienced by the eastbound approach is primarily attributed to the existing traffic volumes on Book Road increased by the projected background growth. As such, the proposed development-generated traffic will have a limited impact on the operations of this intersection.

103rd Street with Tower Court

The results of the capacity analysis indicate that the northbound approach currently operates at LOS B during the weekday morning, weekday evening and Saturday midday peak hours. Under Year 2027 no-build traffic conditions, the northbound approach is projected to continue operating at LOS B during the peak hours with increases in delay of approximately three seconds or less over existing conditions. Under Year 2027 total projected conditions, with the provision of the proposed access roadway and associated geometric improvements, the northbound approach is projected to operate at LOS B during the weekday morning and Saturday midday peak hours and at LOS C during the weekday evening peak hours with increases in delay of approximately one and two seconds, respectively, over Year 2027 no-build conditions. Outbound movements from the proposed access roadway onto 103rd Street are projected to operate at LOS C or better during the weekday morning, weekday evening, and Saturday midday peak hours. Additionally, eastbound and westbound left-turn movements from 103rd Street onto Tower Court/the proposed access roadway are projected to operate at LOS A during the peak hours with 95th percentile queues of one to two vehicles.

As previously indicated, as part of the proposed development, 103rd Street (which provides sufficient pavement width) will be restriped to provide exclusive eastbound and westbound left-turn lanes. Based on a design speed of 45 mph (posted speed of 40 mph plus 5 mph), the left-turn lanes should provide a minimum of 185 feet of storage and 200 feet of taper. As such, the proposed access roadway will be adequate in accommodating the traffic projected to be generated by the proposed development and will ensure efficient and flexible access is provided.

McGrath Lane with Partlow Drive

The results of the capacity analysis indicate that the eastbound approach currently operates at LOS A during the weekday morning, weekday evening, and Saturday midday peak hours. Under Year 2027 no-build and total projected conditions, the eastbound approach is projected to continue operating at LOS A during the peak hours with increases in delay of less than one second. Furthermore, northbound left-turn movements from McGrath Lane onto Partlow Drive are projected to continue operating at LOS A during the peak hours with increases in delay of less than one second and 95th percentile queues of one to two vehicles. As such, this intersection has sufficient reserve capacity to accommodate the traffic projected to be generated by the proposed development and no roadway or traffic control improvements will be required.

IL Route 59 with the Proposed Residential Three-Quarter Access Roadway

The results of the capacity analysis indicate that westbound right-turn movements from the proposed access roadway onto IL Route 59 are projected to operate at LOS E during the weekday morning peak hour and at LOS C during the weekday evening and Saturday midday peak hours with 95th percentile queues of one to two vehicles. However, this level of service during the weekday morning peak hour is expected for a minor roadway that has an unsignalized intersection with a major arterial roadway such as IL Route 59 and due to the high volume of traffic along IL Route 59, particularly in the northbound direction, during the weekday morning peak hour. The southbound left-turning movements are projected to operate at LOS C during the weekday morning peak hour, weekday evening and Saturday midday peak hours with 95th percentile queues of one to two vehicles which can be accommodated with the existing 200 feet of left-turn lane storage. Furthermore, as previously indicated this intersection is currently served by a northbound right-turn lane which will continue to be provided with the proposed development. As such, these access roadways will be adequate in accommodating the traffic projected to be generated by the proposed development, will ensure flexible access is provided and no roadway or traffic control improvements will be required at this intersection.

IL Route 59/103rd Street with Proposed Right-In/Right-Out Church Access Drives

As proposed, access to the proposed church will be provided via a right-in/right-out access drive off IL Route 59 and via right-in/right-out access drive off 103rd Street. Additional access to the church will be provided via a connection to the full movement residential access roadway off 103rd Street (aligned opposite Tower Court). The right-in/right-out access drives will allow church traffic to ingress and egress the site directly from/to IL Route 59 and 103rd Street while minimizing the amount of church traffic utilizing the residential access roadways. It should be noted that churches typically generate peak traffic on Sunday mornings when traffic along IL Route 59 and 103rd Street will be lower than during the weekday and Saturday peak hours.

Outbound movements from the proposed right-in/right-out access drive onto IL Route 59 are projected to operate at LOS D during the weekday morning peak hour and at LOS C during the weekday evening and Saturday midday peak hours with 95th percentile queues of one to two vehicles. Outbound movements from the proposed right-in/right-out access drive onto 103rd Street are projected to operate at LOS B during the weekday morning peak hour, weekday evening and Saturday midday peak hours with 95th percentile queues of one to two vehicles.

When the projected peak hour traffic volumes are compared to the turn lane warrant guidelines published in Chapter 36 of the IDOT Bureau of Design and Environment (BDE) Manual, exclusive right-turn lanes serving the proposed right-in/right-out access drives will not be warranted.

As such, the proposed right-in/right-out access drives will be adequate in accommodating the projected traffic volumes, will ensure efficient and flexible access is provided to the church and will minimize the amount of traffic utilizing the proposed residential access roadways.

6. Alternative Development Access Evaluation

As previously indicated, Wagner Road is under the jurisdiction of the Wheatland Township Highway Department and the roadway does not currently fully extend to the property line of the subject site.

An alternative access plan for the development potentially includes a connection to Wagner Road in order to provide more flexible access to Book Road. In the event that a connection is made and in order to determine the impact of the proposed development on the adjacent roadway network, the traffic projected to the proposed development was reassigned to the adjacent roadway network. **Figure 9** illustrates the site traffic assignment with the alternative access configuration and **Figure 10** illustrates the Year 2027 total projected traffic volumes with the alternative development access.

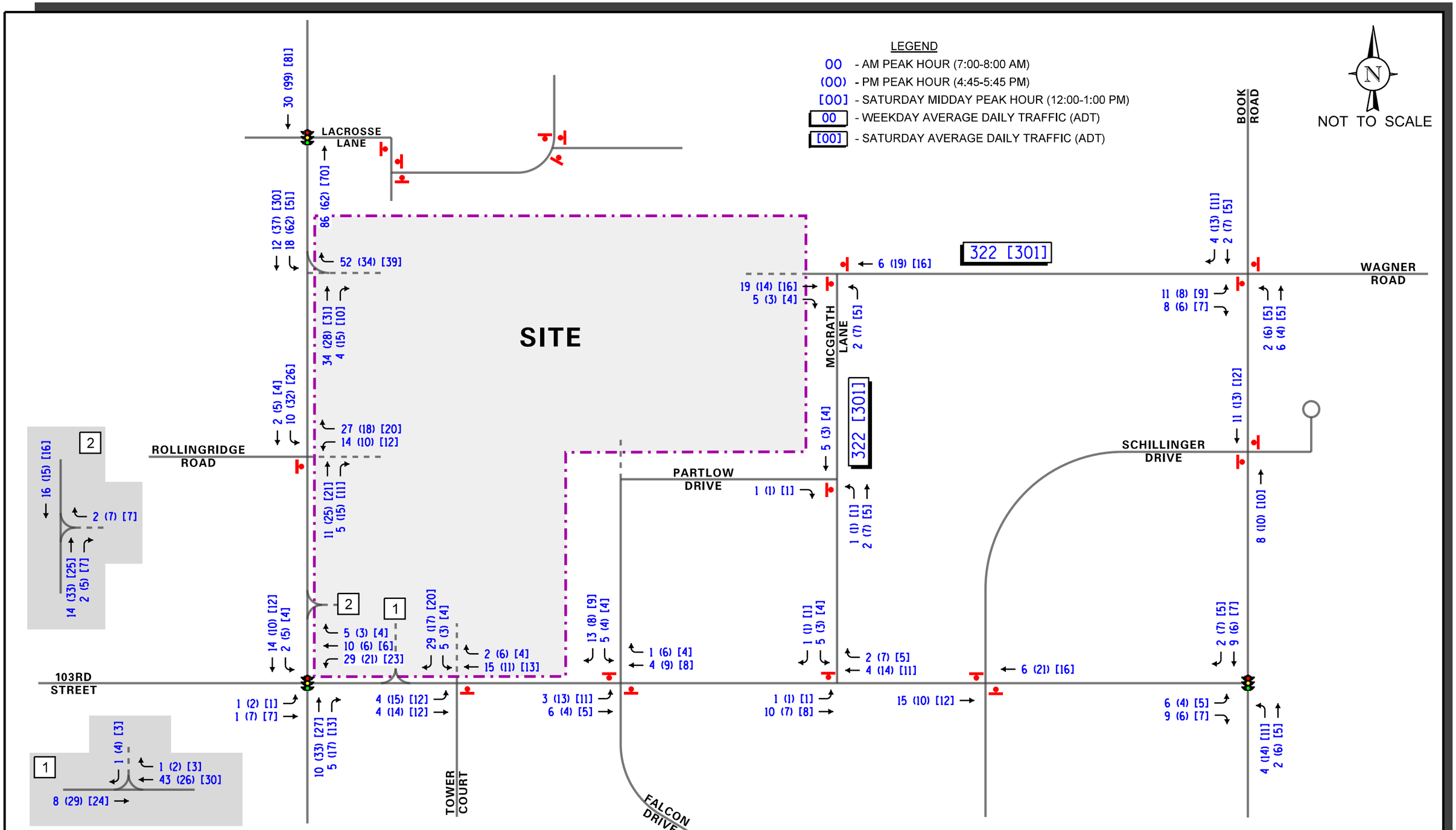
As shown from the traffic counts, Wagner Road carries an average weekday traffic volume of 602 vehicles and a Saturday daily traffic volume of 507 vehicles. With the connection to Wagner Road, the development is projected to increase the volume of traffic traversing this roadway by a total of 322 vehicles on a typical weekday and 301 vehicles on a Saturday. This equates to a daily traffic volume of 924 and 808 vehicles on a weekday and Saturday, respectively.

Additionally, this roadway is classified as a neighborhood connector roadway by the City of Naperville Southwest Community Area Plan which also shows it as a connector roadway between Book Road and IL Route 59. As described in the City of Naperville Design Manual for Public Improvements, neighborhood connector roadways connect residential and local roadways within a neighborhood to collector streets and to the arterial street network. These projected traffic volumes will continue to classify this roadway as a local roadway based on the typical City-wide daily traffic volume ranges experienced on neighborhood streets within the City of Naperville as provided by the City. These volume ranges are summarized in **Table 17**.

It should be noted that the City of Naperville traffic volume ranges are consistent with national residential street standards as contained in *Residential Streets*, Third Edition published by the Urban Land Institute (ULI), National Associate of Home Builders (NAHB), American Society of Civil Engineers (ASCE), and ITE, which indicates local roadways typically carry an average daily traffic volume of less than 1,500 vehicles. As such, with the proposed connection to Wager Road and the traffic projected to be generated by the proposed development, Wagner Road will continue to function as a local roadway.

Table 17
CITY OF NAPERVILLE RESIDENTIAL ROADWAY TRAFFIC VOLUMES

Roadway Classification	Daily Traffic Volumes
Collector Street	5,000 to 12,000
Neighborhood Connector Streets	500 to 5,000
Local Street	0 to 1,500

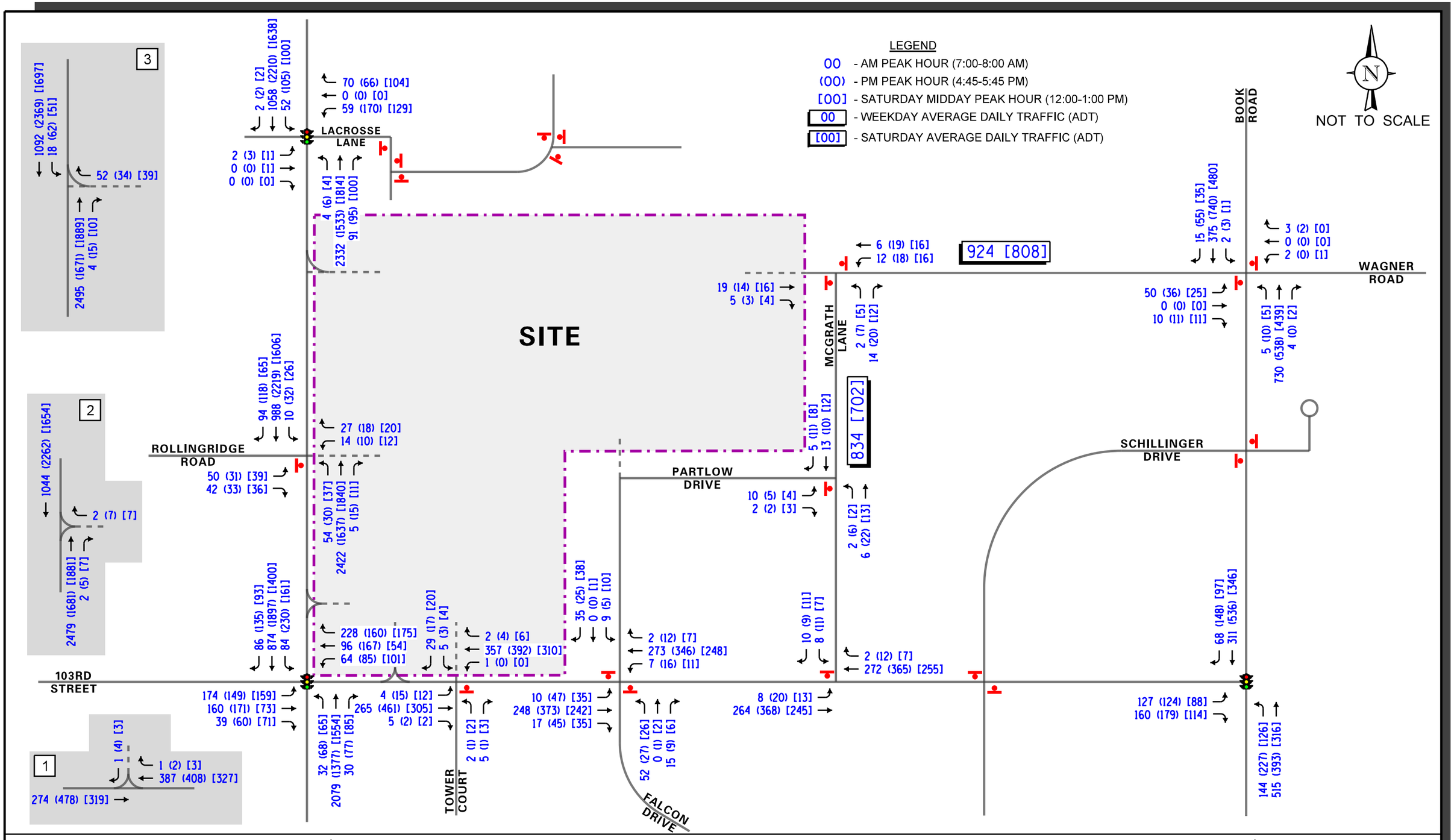


WAGNER FARM
RESIDENTIAL DEVELOPMENT
NAPERVILLE, ILLINOIS

RESIDENTIAL DEVELOPMENT SITE TRAFFIC ASSIGNMENT - ALTERNATE ACCESS

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

Job No: 18-062 Figure: 9



WAGNER FARM
RESIDENTIAL DEVELOPMENT
NAPERVILLE, ILLINOIS

YEAR 2027 TOTAL PROJECTED TRAFFIC VOLUMES - ALTERNATE ACCESS

KLOA
Kenig,Lindgren,O'Hara,Aboona,Inc.
Job No: 18-062 Figure: 10

Roadway and adjacent or nearby intersection analyses were performed for the weekday morning, weekday evening, and Saturday midday peak hours for the Year 2027 total projected traffic volumes for the intersections of 103rd Street with Book Road, 103rd Street with Falcon Drive, 103rd Street with McGrath Lane, Book Road with Wagner Road, McGrath Lane with Partlow Drive, and 103rd Street with the proposed full-movement access drive. Summaries of the traffic analysis results showing the level of service and overall intersection delay (measured in seconds) for the Year 2027 total projected traffic volumes with the alternative access configuration are presented in **Tables 18** through **23**. A discussion of the intersections follows. Summary sheets for the capacity analyses are included in the Appendix.

As can be seen from the results of the capacity analysis, the intersections that will be impacted by the alternative access are projected to continue operating at acceptable levels of service during the weekday morning, weekday evening, and Saturday midday peak hours with the exception of the eastbound approach of Wagner Road at Book Road. This movement is projected to continue operating at LOS F during the weekday morning and weekday evening peak hours. However, as previously indicated, this level of service is a result of the existing traffic volumes increased by the regional growth factor as the proposed development is projected to increase the traffic traversing this intersection by approximately four percent or less during the peak hours with the alternative access configuration.

As such, the area roadway network has sufficient reserve capacity to accommodate the traffic projected to be generated by the proposed development if the connection to Wagner Road is provided.

Table 18
CAPACITY ANALYSIS RESULTS – 103rd STREET WITH BOOK ROAD – SIGNALIZED

	Peak Hour	Eastbound		Northbound		Southbound		Overall
		L	R	L	T	T	R	
Year 2027 Projected Conditions	Weekday Morning Peak Hour	D 43.7	A 9.4	A 6.1	A 7.7	B – 12.6		B – 12.6
		C – 24.6		A – 7.4				
	Weekday Evening Peak Hour	E 59.1	B 12.1	A 6.8	A 4.5	B – 14.4		B – 14.1
		C – 31.3		A – 5.3				
	Saturday Midday Peak Hour	D 41.7	B 10.9	A 3.5	A 4.3	A – 9.7		B – 10.1
		C – 24.3		A – 4.1				

Letter denotes Level of Service L – Left Turns R – Right Turns
Delay is measured in seconds. T – Through

Table 19
CAPACITY ANALYSIS RESULTS
FALCON DRIVE WITH 103rd STREET - UNSIGNALIZED

Intersection	Weekday Morning Peak Hour		Weekday Evening Peak Hour		Saturday Midday Peak Hour	
	LOS	Delay	LOS	Delay	LOS	Delay
Year 2027 Total Projected Conditions						
• Northbound Approach	C	18.5	C	21.3	C	15.8
• Southbound Approach	B	12.0	B	13.0	B	11.4
• Eastbound Left Turns	A	8.0	A	8.2	A	7.9
• Westbound Left Turns	A	8.1	A	8.3	A	7.9

LOS = Level of Service
Delay is measured in seconds.
1 – Two-Way Stop Sign Control
2 – All-Way Stop Sign Control

Table 20
CAPACITY ANALYSIS RESULTS
MCGRATH LANE WITH 103rd STREET - UNSIGNALIZED

Intersection	Weekday Morning Peak Hour		Weekday Evening Peak Hour		Saturday Midday Peak Hour	
	LOS	Delay	LOS	Delay	LOS	Delay
Year 2027 Total Projected Conditions						
• Southbound Approach	B	12.0	B	14.4	B	11.2
• Eastbound Left Turns	A	8.2	A	8.2	A	7.9

LOS = Level of Service
Delay is measured in seconds.
1 – Two-Way Stop Sign Control
2 – All-Way Stop Sign Control

Table 21
CAPACITY ANALYSIS RESULTS
BOOK ROAD WITH WAGNER ROAD - UNSIGNALIZED

Intersection	Weekday Morning Peak Hour		Weekday Evening Peak Hour		Saturday Midday Peak Hour	
	LOS	Delay	LOS	Delay	LOS	Delay
Year 2027 Total Projected Conditions						
• Eastbound Approach	F	66.8	F	63.1	C	20.6
• Westbound Approach	D	25.1	B	12.3	C	21.4
• Northbound Left Turn	A	9.5	A	9.8	A	8.5
• Southbound Left Turn	A	9.8	A	8.7	A	8.2

LOS = Level of Service
Delay is measured in seconds.
1 – Two-Way Stop Sign Control
2 – All-Way Stop Sign Control

Table 22
CAPACITY ANALYSIS RESULTS
103rd STREET WITH TOWER COURT - UNSIGNALIZED

Intersection	Weekday Morning Peak Hour		Weekday Evening Peak Hour		Saturday Midday Peak Hour	
	LOS	Delay	LOS	Delay	LOS	Delay
Year 2027 Total Projected Conditions						
• Northbound Approach	B	11.8	C	16.4	B	12.5
• Southbound Approach	B	11.6	B	12.4	B	11.2
• Eastbound Left Turn	A	8.1	A	8.2	A	8.0
• Westbound Left Turn	A	7.9	--	--	--	--

LOS = Level of Service
Delay is measured in seconds.
1 – Two-Way Stop Sign Control
2 – All-Way Stop Sign Control

Table 23
CAPACITY ANALYSIS RESULTS
MCGRATH LANE WITH PARTLOW DRIVE - UNSIGNALIZED

Intersection	Weekday Morning Peak Hour		Weekday Evening Peak Hour		Saturday Midday Peak Hour	
	LOS	Delay	LOS	Delay	LOS	Delay
Year 2027 Total Projected Conditions						
• Southbound Approach	A	8.7	A	8.7	A	8.7
• Eastbound Left Turns	A	7.2	A	7.3	A	7.2

LOS = Level of Service
Delay is measured in seconds.
1 – Two-Way Stop Sign Control
2 – All-Way Stop Sign Control

7. Conclusion

Based on the preceding analyses and recommendations, the following conclusions have been made:

- The traffic that will be generated by the proposed development can be accommodated by the area roadway system, given the recommended improvements and access plan.

- The proposed access system that will serve the residential development and the church will ensure that efficient and flexible access is provided and will reduce the load that will occur at any one access point.

- Providing a connection to Falcon Drive will ensure sufficient access for emergency vehicles, that adjoining neighborhoods are provided with direct access and will allow residents of the existing residential neighborhoods east of the site to access IL Route 59 through the proposed development.

- An exclusive southbound left-turn lane and northbound right-turn lane are provided at the existing access drive serving Wagner Farms. These turn lanes will continue to serve the proposed access drive without any modification.

- IL Route 59 will be restriped to provide a southbound left-turn lane at the proposed access roadway aligned opposite Rollingridge Road and a northbound right-turn lane will be constructed as part of the proposed development.

- 103rd Street will be restriped to provide eastbound and westbound left-turn lanes serving Tower Court and the proposed access roadway.

- Consideration should be given to providing an exclusive westbound right-turn lane with a right-turn overlap phase at the intersection of IL Route 59 with 103rd Street.

- If the access connection to Wagner Road is provided, the study area intersections impacted by the alternative access configuration are projected to continue operating at acceptable levels of service.

Appendix

Traffic Count Summary Sheets
Site Plan
CMAP 2040 Projections Letter
Level of Service Criteria
Capacity Analysis Summary Sheets
SRA Traffic Signal Warrant Tables

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: IL Route 59 with 103rd Street
Site Code:
Start Date: 03/17/2018

Turning Movement Data

Start Time	103rd Street Eastbound						103rd Street Westbound						IL 59 Northbound						IL 59 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	
12:00 PM	0	43	21	15	0	79	0	18	8	26	0	52	0	12	366	12	0	390	0	26	313	16	0	355	876
12:15 PM	0	22	3	12	0	37	0	8	10	33	0	51	0	12	339	17	0	368	0	34	306	7	0	347	803
12:30 PM	0	22	6	11	0	39	0	10	6	36	0	52	0	9	378	6	0	393	0	22	363	19	0	404	888
12:45 PM	0	18	6	9	0	33	0	18	11	26	0	55	0	10	351	14	0	375	0	26	343	20	0	389	852
Hourly Total	0	105	36	47	0	188	0	54	35	121	0	210	0	43	1434	49	0	1526	0	108	1325	62	0	1495	3419
1:00 PM	0	29	10	11	0	50	0	5	15	30	0	50	0	8	306	11	0	325	0	19	339	18	0	376	801
1:15 PM	0	11	11	8	0	30	0	16	16	26	0	58	0	10	337	9	0	356	0	26	317	14	0	357	801
1:30 PM	0	9	15	13	1	37	0	14	14	26	0	54	0	9	340	13	0	362	0	31	360	14	0	405	858
1:45 PM	0	17	15	14	0	46	0	15	18	34	0	67	0	11	339	9	0	359	0	17	373	11	0	401	873
Hourly Total	0	66	51	46	1	163	0	50	63	116	0	229	0	38	1322	42	0	1402	0	93	1389	57	0	1539	3333
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7:00 AM	0	42	24	9	0	75	0	4	7	64	0	75	0	6	625	9	0	640	0	9	182	8	0	199	989
7:15 AM	0	33	27	4	0	64	0	5	18	42	0	65	0	6	485	3	0	494	0	19	219	12	0	250	873
7:30 AM	0	18	21	5	0	44	0	3	9	28	0	40	1	3	429	2	0	435	0	9	187	13	0	209	728
7:45 AM	0	22	34	8	0	64	0	7	16	23	0	46	0	5	399	2	0	406	0	20	220	24	0	264	780
Hourly Total	0	115	106	26	0	247	0	19	50	157	0	226	1	20	1938	16	0	1975	0	57	808	57	0	922	3370
8:00 AM	0	27	21	6	0	54	0	6	28	24	0	58	0	7	331	3	1	341	0	20	180	34	0	234	687
8:15 AM	0	32	19	11	0	62	0	4	12	17	0	33	0	4	424	8	0	436	0	14	213	15	0	242	773
8:30 AM	0	28	23	9	0	60	0	10	12	27	0	49	0	3	370	7	0	380	0	18	212	13	0	243	732
8:45 AM	0	15	28	5	0	48	0	10	23	26	0	59	1	11	345	9	0	366	0	19	192	9	0	220	693
Hourly Total	0	102	91	31	0	224	0	30	75	94	0	199	1	25	1470	27	1	1523	0	71	797	71	0	939	2885
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2:30 PM	0	16	15	7	1	38	0	6	13	20	0	39	0	10	293	11	0	314	0	28	324	24	0	376	767
2:45 PM	0	11	15	10	0	36	0	10	19	24	0	53	2	12	279	7	0	300	0	30	279	23	0	332	721
Hourly Total	0	27	30	17	1	74	0	16	32	44	0	92	2	22	572	18	0	614	0	58	603	47	0	708	1488
3:00 PM	0	20	22	10	0	52	0	5	23	16	0	44	0	11	278	12	1	301	0	30	400	28	0	458	855
3:15 PM	0	40	30	13	0	83	0	18	23	23	0	64	0	7	256	7	0	270	0	31	337	18	0	386	803
3:30 PM	0	34	17	10	0	61	0	13	18	32	0	63	0	10	312	7	0	329	0	27	432	20	0	479	932
3:45 PM	0	36	29	9	0	74	0	10	26	21	0	57	0	16	282	3	0	301	0	18	324	22	0	364	796
Hourly Total	0	130	98	42	0	270	0	46	90	92	0	228	0	44	1128	29	1	1201	0	106	1493	88	0	1687	3386
4:00 PM	0	27	21	13	0	61	0	13	25	36	0	74	0	16	290	6	0	312	0	40	472	23	0	535	982
4:15 PM	0	28	15	14	0	57	0	7	16	30	0	53	1	5	297	6	0	309	0	29	443	22	0	494	913
4:30 PM	0	32	29	5	0	66	0	8	25	33	0	66	0	12	259	6	0	277	0	35	382	13	0	430	839
4:45 PM	0	23	20	5	0	48	0	12	28	23	0	63	0	11	333	8	0	352	0	39	505	31	0	575	1038
Hourly Total	0	110	85	37	0	232	0	40	94	122	0	256	1	44	1179	26	0	1250	0	143	1802	89	0	2034	3772
5:00 PM	0	33	36	12	0	81	0	13	33	23	0	69	0	15	328	20	0	363	0	34	362	12	0	408	921
5:15 PM	0	22	21	12	0	55	1	11	34	42	0	88	0	9	314	7	0	330	0	38	508	28	0	574	1047

5:30 PM	0	20	23	11	0	54	0	8	30	24	0	62	0	10	311	4	0	325	0	48	431	19	0	498	939
5:45 PM	0	26	22	10	0	58	0	14	21	41	0	76	0	15	281	8	0	304	0	52	406	20	0	478	916
Hourly Total	0	101	102	45	0	248	1	46	118	130	0	295	0	49	1234	39	0	1322	0	172	1707	79	0	1958	3823
Grand Total	0	756	599	291	2	1646	1	301	557	876	0	1735	5	285	10277	246	2	10813	0	808	9924	550	0	11282	25476
Approach %	0.0	45.9	36.4	17.7	-	-	0.1	17.3	32.1	50.5	-	-	0.0	2.6	95.0	2.3	-	-	0.0	7.2	88.0	4.9	-	-	-
Total %	0.0	3.0	2.4	1.1	-	6.5	0.0	1.2	2.2	3.4	-	6.8	0.0	1.1	40.3	1.0	-	42.4	0.0	3.2	39.0	2.2	-	44.3	-
Lights	0	728	575	287	-	1590	1	299	529	870	-	1699	5	280	9946	245	-	10476	0	791	9572	526	-	10889	24654
% Lights	-	96.3	96.0	98.6	-	96.6	100.0	99.3	95.0	99.3	-	97.9	100.0	98.2	96.8	99.6	-	96.9	-	97.9	96.5	95.6	-	96.5	96.8
Buses	0	21	17	1	-	39	0	1	24	5	-	30	0	4	22	1	-	27	0	11	35	23	-	69	165
% Buses	-	2.8	2.8	0.3	-	2.4	0.0	0.3	4.3	0.6	-	1.7	0.0	1.4	0.2	0.4	-	0.2	-	1.4	0.4	4.2	-	0.6	0.6
Single-Unit Trucks	0	6	6	3	-	15	0	1	3	1	-	5	0	1	112	0	-	113	0	6	112	1	-	119	252
% Single-Unit Trucks	-	0.8	1.0	1.0	-	0.9	0.0	0.3	0.5	0.1	-	0.3	0.0	0.4	1.1	0.0	-	1.0	-	0.7	1.1	0.2	-	1.1	1.0
Articulated Trucks	0	1	1	0	-	2	0	0	0	0	-	0	0	0	197	0	-	197	0	0	205	0	-	205	404
% Articulated Trucks	-	0.1	0.2	0.0	-	0.1	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	1.9	0.0	-	1.8	-	0.0	2.1	0.0	-	1.8	1.6
Bicycles on Road	0	0	0	0	-	0	0	0	1	0	-	1	0	0	0	0	-	0	0	0	0	0	-	0	1
% Bicycles on Road	-	0.0	0.0	0.0	-	0.0	0.0	0.0	0.2	0.0	-	0.1	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-

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

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

Count Name: IL Route 59 with 103rd Street
Site Code:
Start Date: 03/17/2018

Turning Movement Peak Hour Data (12:00 PM)

Start Time	103rd Street Eastbound						103rd Street Westbound						IL 59 Northbound						IL 59 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	
12:00 PM	0	43	21	15	0	79	0	18	8	26	0	52	0	12	366	12	0	390	0	26	313	16	0	355	876
12:15 PM	0	22	3	12	0	37	0	8	10	33	0	51	0	12	339	17	0	368	0	34	306	7	0	347	803
12:30 PM	0	22	6	11	0	39	0	10	6	36	0	52	0	9	378	6	0	393	0	22	363	19	0	404	888
12:45 PM	0	18	6	9	0	33	0	18	11	26	0	55	0	10	351	14	0	375	0	26	343	20	0	389	852
Total	0	105	36	47	0	188	0	54	35	121	0	210	0	43	1434	49	0	1526	0	108	1325	62	0	1495	3419
Approach %	0.0	55.9	19.1	25.0	-	-	0.0	25.7	16.7	57.6	-	-	0.0	2.8	94.0	3.2	-	-	0.0	7.2	88.6	4.1	-	-	-
Total %	0.0	3.1	1.1	1.4	-	5.5	0.0	1.6	1.0	3.5	-	6.1	0.0	1.3	41.9	1.4	-	44.6	0.0	3.2	38.8	1.8	-	43.7	-
PHF	0.000	0.610	0.429	0.783	-	0.595	0.000	0.750	0.795	0.840	-	0.955	0.000	0.896	0.948	0.721	-	0.971	0.000	0.794	0.913	0.775	-	0.925	0.963
Lights	0	105	36	46	-	187	0	53	34	121	-	208	0	42	1417	49	-	1508	0	108	1313	62	-	1483	3386
% Lights	-	100.0	100.0	97.9	-	99.5	-	98.1	97.1	100.0	-	99.0	-	97.7	98.8	100.0	-	98.8	-	100.0	99.1	100.0	-	99.2	99.0
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	1	1	0	-	2	0	0	0	0	-	0	2
% Buses	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	2.3	0.1	0.0	-	0.1	-	0.0	0.0	0.0	-	0.0	0.1
Single-Unit Trucks	0	0	0	1	-	1	0	1	1	0	-	2	0	0	8	0	-	8	0	0	6	0	-	6	17
% Single-Unit Trucks	-	0.0	0.0	2.1	-	0.5	-	1.9	2.9	0.0	-	1.0	-	0.0	0.6	0.0	-	0.5	-	0.0	0.5	0.0	-	0.4	0.5
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	8	0	-	8	0	0	6	0	-	6	14
% Articulated Trucks	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.6	0.0	-	0.5	-	0.0	0.5	0.0	-	0.4	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	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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

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

Count Name: IL Route 59 with 103rd Street
Site Code:
Start Date: 03/17/2018

Turning Movement Peak Hour Data (7:00 AM)

Start Time	103rd Street Eastbound						103rd Street Westbound						IL 59 Northbound						IL 59 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	42	24	9	0	75	0	4	7	64	0	75	0	6	625	9	0	640	0	9	182	8	0	199	989
7:15 AM	0	33	27	4	0	64	0	5	18	42	0	65	0	6	485	3	0	494	0	19	219	12	0	250	873
7:30 AM	0	18	21	5	0	44	0	3	9	28	0	40	1	3	429	2	0	435	0	9	187	13	0	209	728
7:45 AM	0	22	34	8	0	64	0	7	16	23	0	46	0	5	399	2	0	406	0	20	220	24	0	264	780
Total	0	115	106	26	0	247	0	19	50	157	0	226	1	20	1938	16	0	1975	0	57	808	57	0	922	3370
Approach %	0.0	46.6	42.9	10.5	-	-	0.0	8.4	22.1	69.5	-	-	0.1	1.0	98.1	0.8	-	-	0.0	6.2	87.6	6.2	-	-	-
Total %	0.0	3.4	3.1	0.8	-	7.3	0.0	0.6	1.5	4.7	-	6.7	0.0	0.6	57.5	0.5	-	58.6	0.0	1.7	24.0	1.7	-	27.4	-
PHF	0.000	0.685	0.779	0.722	-	0.823	0.000	0.679	0.694	0.613	-	0.753	0.250	0.833	0.775	0.444	-	0.771	0.000	0.713	0.918	0.594	-	0.873	0.852
Lights	0	111	100	26	-	237	0	19	48	156	-	223	1	19	1861	15	-	1896	0	48	732	56	-	836	3192
% Lights	-	96.5	94.3	100.0	-	96.0	-	100.0	96.0	99.4	-	98.7	100.0	95.0	96.0	93.8	-	96.0	-	84.2	90.6	98.2	-	90.7	94.7
Buses	0	1	3	0	-	4	0	0	2	1	-	3	0	1	3	1	-	5	0	8	11	1	-	20	32
% Buses	-	0.9	2.8	0.0	-	1.6	-	0.0	4.0	0.6	-	1.3	0.0	5.0	0.2	6.3	-	0.3	-	14.0	1.4	1.8	-	2.2	0.9
Single-Unit Trucks	0	3	3	0	-	6	0	0	0	0	-	0	0	0	24	0	-	24	0	1	27	0	-	28	58
% Single-Unit Trucks	-	2.6	2.8	0.0	-	2.4	-	0.0	0.0	0.0	-	0.0	0.0	0.0	1.2	0.0	-	1.2	-	1.8	3.3	0.0	-	3.0	1.7
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	50	0	-	50	0	0	38	0	-	38	88
% Articulated Trucks	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0	0.0	2.6	0.0	-	2.5	-	0.0	4.7	0.0	-	4.1	2.6
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% 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	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: IL Route 59 with 103rd Street
Site Code:
Start Date: 03/17/2018

Turning Movement Peak Hour Data (4:45 PM)

Start Time	103rd Street Eastbound						103rd Street Westbound						IL 59 Northbound						IL 59 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	
4:45 PM	0	23	20	5	0	48	0	12	28	23	0	63	0	11	333	8	0	352	0	39	505	31	0	575	1038
5:00 PM	0	33	36	12	0	81	0	13	33	23	0	69	0	15	328	20	0	363	0	34	362	12	0	408	921
5:15 PM	0	22	21	12	0	55	1	11	34	42	0	88	0	9	314	7	0	330	0	38	508	28	0	574	1047
5:30 PM	0	20	23	11	0	54	0	8	30	24	0	62	0	10	311	4	0	325	0	48	431	19	0	498	939
Total	0	98	100	40	0	238	1	44	125	112	0	282	0	45	1286	39	0	1370	0	159	1806	90	0	2055	3945
Approach %	0.0	41.2	42.0	16.8	-	-	0.4	15.6	44.3	39.7	-	-	0.0	3.3	93.9	2.8	-	-	0.0	7.7	87.9	4.4	-	-	-
Total %	0.0	2.5	2.5	1.0	-	6.0	0.0	1.1	3.2	2.8	-	7.1	0.0	1.1	32.6	1.0	-	34.7	0.0	4.0	45.8	2.3	-	52.1	-
PHF	0.000	0.742	0.694	0.833	-	0.735	0.250	0.846	0.919	0.667	-	0.801	0.000	0.750	0.965	0.488	-	0.944	0.000	0.828	0.889	0.726	-	0.893	0.942
Lights	0	97	99	40	-	236	1	44	125	112	-	282	0	45	1257	39	-	1341	0	157	1772	90	-	2019	3878
% Lights	-	99.0	99.0	100.0	-	99.2	100.0	100.0	100.0	100.0	-	100.0	-	100.0	97.7	100.0	-	97.9	-	98.7	98.1	100.0	-	98.2	98.3
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	-	0.0	0.1	0.0	-	0.0	0.0
Single-Unit Trucks	0	1	0	0	-	1	0	0	0	0	-	0	0	0	9	0	-	9	0	2	16	0	-	18	28
% Single-Unit Trucks	-	1.0	0.0	0.0	-	0.4	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.7	0.0	-	0.7	-	1.3	0.9	0.0	-	0.9	0.7
Articulated Trucks	0	0	1	0	-	1	0	0	0	0	-	0	0	0	20	0	-	20	0	0	17	0	-	17	38
% Articulated Trucks	-	0.0	1.0	0.0	-	0.4	0.0	0.0	0.0	0.0	-	0.0	-	0.0	1.6	0.0	-	1.5	-	0.0	0.9	0.0	-	0.8	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	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: IL Route 59 with Lacrosse Lane
Site Code:
Start Date: 03/17/2018

Turning Movement Data

Start Time	US Adventure Access Drive Eastbound						Lacrosse Lane Westbound						IL Route 59 Northbound						IL Route 59 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	
12:00 PM	0	1	0	0	0	1	0	33	0	27	0	60	1	0	421	30	0	452	1	23	330	0	0	354	867
12:15 PM	0	0	0	0	0	0	0	39	0	25	0	64	1	0	377	23	0	401	1	23	323	1	0	348	813
12:30 PM	0	0	0	0	0	0	0	24	0	24	0	48	0	0	387	26	0	413	1	29	389	1	0	420	881
12:45 PM	0	0	1	0	0	1	0	33	0	28	0	61	2	0	390	21	0	413	1	21	375	0	0	397	872
Hourly Total	0	1	1	0	0	2	0	129	0	104	0	233	4	0	1575	100	0	1679	4	96	1417	2	0	1519	3433
1:00 PM	0	1	1	1	0	3	0	23	1	14	1	38	1	1	346	20	0	368	3	29	367	1	0	400	809
1:15 PM	0	1	0	0	0	1	0	28	0	24	0	52	0	0	374	16	0	390	0	26	359	3	0	388	831
1:30 PM	0	1	1	0	0	2	0	29	0	24	0	53	0	1	347	18	0	366	0	13	399	0	0	412	833
1:45 PM	0	3	0	0	0	3	0	31	0	23	0	54	0	1	357	20	0	378	2	30	351	1	0	384	819
Hourly Total	0	6	2	1	0	9	0	111	1	85	1	197	1	3	1424	74	0	1502	5	98	1476	5	0	1584	3292
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7:00 AM	0	0	0	0	0	0	0	22	0	18	0	40	0	0	573	35	0	608	1	16	196	0	0	213	861
7:15 AM	0	0	0	0	0	0	0	11	0	12	0	23	0	0	575	24	0	599	0	10	266	0	0	276	898
7:30 AM	0	0	0	0	0	0	0	14	0	19	0	33	1	1	417	16	0	435	0	13	206	0	0	219	687
7:45 AM	0	2	0	0	0	2	0	12	0	21	0	33	0	2	468	16	0	486	0	12	269	2	0	283	804
Hourly Total	0	2	0	0	0	2	0	59	0	70	0	129	1	3	2033	91	0	2128	1	51	937	2	0	991	3250
8:00 AM	0	0	0	0	0	0	1	10	0	16	0	27	2	1	371	24	0	398	1	11	235	0	0	247	672
8:15 AM	0	0	0	0	0	0	0	13	0	18	0	31	0	1	430	25	0	456	1	12	213	0	0	226	713
8:30 AM	0	2	0	0	0	2	1	16	0	13	0	30	0	1	416	23	0	440	0	11	243	5	0	259	731
8:45 AM	0	2	0	0	0	2	0	17	0	9	0	26	1	0	359	24	0	384	0	14	235	0	0	249	661
Hourly Total	0	4	0	0	0	4	2	56	0	56	0	114	3	3	1576	96	0	1678	2	48	926	5	0	981	2777
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2:30 PM	0	3	0	1	0	4	0	33	0	19	0	52	2	0	308	22	0	332	1	17	354	2	0	374	762
2:45 PM	0	0	0	0	0	0	0	16	0	15	0	31	1	0	277	23	0	301	3	16	358	0	0	377	709
Hourly Total	0	3	0	1	0	4	0	49	0	34	0	83	3	0	585	45	0	633	4	33	712	2	0	751	1471
3:00 PM	0	0	0	0	0	0	0	21	1	18	0	40	0	0	291	22	0	313	0	24	395	0	0	419	772
3:15 PM	0	0	1	0	0	1	0	28	0	17	0	45	0	0	314	17	0	331	1	9	409	0	0	419	796
3:30 PM	0	0	0	0	0	0	0	33	0	15	0	48	2	0	309	20	0	331	1	22	424	0	0	447	826
3:45 PM	0	0	0	0	0	0	0	23	0	18	0	41	0	0	336	18	0	354	0	16	397	1	0	414	809
Hourly Total	0	0	1	0	0	1	0	105	1	68	0	174	2	0	1250	77	0	1329	2	71	1625	1	0	1699	3203
4:00 PM	0	0	0	0	0	0	0	29	0	14	0	43	1	0	318	16	0	335	0	25	507	0	0	532	910
4:15 PM	0	0	0	0	0	0	0	20	0	9	0	29	1	0	330	23	0	354	0	18	445	1	0	464	847
4:30 PM	0	0	0	0	0	0	0	37	0	24	0	61	0	0	301	20	0	321	2	14	447	1	0	464	846
4:45 PM	0	1	0	0	0	1	0	43	0	15	0	58	2	0	316	32	0	350	1	33	488	1	0	523	932
Hourly Total	0	1	0	0	0	1	0	129	0	62	0	191	4	0	1265	91	0	1360	3	90	1887	3	0	1983	3535
5:00 PM	0	0	0	0	0	0	0	36	0	16	0	52	1	0	368	23	0	392	0	19	429	0	0	448	892
5:15 PM	0	0	0	0	0	0	0	43	0	16	0	59	1	1	299	19	0	320	2	28	538	1	0	569	948

5:30 PM	0	2	0	0	0	2	0	48	0	19	0	67	0	1	336	21	0	358	0	22	464	0	0	486	913
5:45 PM	0	0	0	0	0	0	0	47	0	18	0	65	1	0	275	26	0	302	0	31	443	0	0	474	841
Hourly Total	0	2	0	0	0	2	0	174	0	69	0	243	3	2	1278	89	0	1372	2	100	1874	1	0	1977	3594
Grand Total	0	19	4	2	0	25	2	812	2	548	1	1364	21	11	10986	663	0	11681	23	587	10854	21	0	11485	24555
Approach %	0.0	76.0	16.0	8.0	-	-	0.1	59.5	0.1	40.2	-	-	0.2	0.1	94.1	5.7	-	-	0.2	5.1	94.5	0.2	-	-	-
Total %	0.0	0.1	0.0	0.0	-	0.1	0.0	3.3	0.0	2.2	-	5.6	0.1	0.0	44.7	2.7	-	47.6	0.1	2.4	44.2	0.1	-	46.8	-
Lights	0	18	3	2	-	23	2	793	2	545	-	1342	21	10	10624	657	-	11312	23	587	10480	19	-	11109	23786
% Lights	-	94.7	75.0	100.0	-	92.0	100.0	97.7	100.0	99.5	-	98.4	100.0	90.9	96.7	99.1	-	96.8	100.0	100.0	96.6	90.5	-	96.7	96.9
Buses	0	0	0	0	-	0	0	18	0	1	-	19	0	0	53	3	-	56	0	0	51	0	-	51	126
% Buses	-	0.0	0.0	0.0	-	0.0	0.0	2.2	0.0	0.2	-	1.4	0.0	0.0	0.5	0.5	-	0.5	0.0	0.0	0.5	0.0	-	0.4	0.5
Single-Unit Trucks	0	1	0	0	-	1	0	1	0	2	-	3	0	1	117	3	-	121	0	0	122	2	-	124	249
% Single-Unit Trucks	-	5.3	0.0	0.0	-	4.0	0.0	0.1	0.0	0.4	-	0.2	0.0	9.1	1.1	0.5	-	1.0	0.0	0.0	1.1	9.5	-	1.1	1.0
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	192	0	-	192	0	0	201	0	-	201	393
% Articulated Trucks	-	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	1.7	0.0	-	1.6	0.0	0.0	1.9	0.0	-	1.8	1.6
Bicycles on Road	0	0	1	0	-	1	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	1
% Bicycles on Road	-	0.0	25.0	0.0	-	4.0	0.0	0.0	0.0	0.0	-	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	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% 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: IL Route 59 with Lacrosse Lane
Site Code:
Start Date: 03/17/2018

Turning Movement Peak Hour Data (12:00 PM)

Start Time	US Adventure Access Drive Eastbound						Lacrosse Lane Westbound						IL Route 59 Northbound						IL Route 59 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	
12:00 PM	0	1	0	0	0	1	0	33	0	27	0	60	1	0	421	30	0	452	1	23	330	0	0	354	867
12:15 PM	0	0	0	0	0	0	0	39	0	25	0	64	1	0	377	23	0	401	1	23	323	1	0	348	813
12:30 PM	0	0	0	0	0	0	0	24	0	24	0	48	0	0	387	26	0	413	1	29	389	1	0	420	881
12:45 PM	0	0	1	0	0	1	0	33	0	28	0	61	2	0	390	21	0	413	1	21	375	0	0	397	872
Total	0	1	1	0	0	2	0	129	0	104	0	233	4	0	1575	100	0	1679	4	96	1417	2	0	1519	3433
Approach %	0.0	50.0	50.0	0.0	-	-	0.0	55.4	0.0	44.6	-	-	0.2	0.0	93.8	6.0	-	-	0.3	6.3	93.3	0.1	-	-	-
Total %	0.0	0.0	0.0	0.0	-	0.1	0.0	3.8	0.0	3.0	-	6.8	0.1	0.0	45.9	2.9	-	48.9	0.1	2.8	41.3	0.1	-	44.2	-
PHF	0.000	0.250	0.250	0.000	-	0.500	0.000	0.827	0.000	0.929	-	0.910	0.500	0.000	0.935	0.833	-	0.929	1.000	0.828	0.911	0.500	-	0.904	0.974
Lights	0	1	1	0	-	2	0	128	0	104	-	232	4	0	1557	99	-	1660	4	96	1404	2	-	1506	3400
% Lights	-	100.0	100.0	-	-	100.0	-	99.2	-	100.0	-	99.6	100.0	-	98.9	99.0	-	98.9	100.0	100.0	99.1	100.0	-	99.1	99.0
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Buses	-	0.0	0.0	-	-	0.0	-	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0
Single-Unit Trucks	0	0	0	0	-	0	0	1	0	0	-	1	0	0	9	1	-	10	0	0	7	0	-	7	18
% Single-Unit Trucks	-	0.0	0.0	-	-	0.0	-	0.8	-	0.0	-	0.4	0.0	-	0.6	1.0	-	0.6	0.0	0.0	0.5	0.0	-	0.5	0.5
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	9	0	-	9	0	0	6	0	-	6	15
% Articulated Trucks	-	0.0	0.0	-	-	0.0	-	0.0	-	0.0	-	0.0	0.0	-	0.6	0.0	-	0.5	0.0	0.0	0.4	0.0	-	0.4	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
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: IL Route 59 with Lacrosse Lane
Site Code:
Start Date: 03/17/2018

Turning Movement Peak Hour Data (7:00 AM)

Start Time	US Adventure Access Drive Eastbound						Lacrosse Lane Westbound						IL Route 59 Northbound						IL Route 59 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	0	0	0	0	0	0	22	0	18	0	40	0	0	573	35	0	608	1	16	196	0	0	213	861
7:15 AM	0	0	0	0	0	0	0	11	0	12	0	23	0	0	575	24	0	599	0	10	266	0	0	276	898
7:30 AM	0	0	0	0	0	0	0	14	0	19	0	33	1	1	417	16	0	435	0	13	206	0	0	219	687
7:45 AM	0	2	0	0	0	2	0	12	0	21	0	33	0	2	468	16	0	486	0	12	269	2	0	283	804
Total	0	2	0	0	0	2	0	59	0	70	0	129	1	3	2033	91	0	2128	1	51	937	2	0	991	3250
Approach %	0.0	100.0	0.0	0.0	-	-	0.0	45.7	0.0	54.3	-	-	0.0	0.1	95.5	4.3	-	-	0.1	5.1	94.6	0.2	-	-	-
Total %	0.0	0.1	0.0	0.0	-	0.1	0.0	1.8	0.0	2.2	-	4.0	0.0	0.1	62.6	2.8	-	65.5	0.0	1.6	28.8	0.1	-	30.5	-
PHF	0.000	0.250	0.000	0.000	-	0.250	0.000	0.670	0.000	0.833	-	0.806	0.250	0.375	0.884	0.650	-	0.875	0.250	0.797	0.871	0.250	-	0.875	0.905
Lights	0	2	0	0	-	2	0	45	0	69	-	114	1	3	1955	90	-	2049	1	51	863	2	-	917	3082
% Lights	-	100.0	-	-	-	100.0	-	76.3	-	98.6	-	88.4	100.0	100.0	96.2	98.9	-	96.3	100.0	100.0	92.1	100.0	-	92.5	94.8
Buses	0	0	0	0	-	0	0	14	0	0	-	14	0	0	5	0	-	5	0	0	7	0	-	7	26
% Buses	-	0.0	-	-	-	0.0	-	23.7	-	0.0	-	10.9	0.0	0.0	0.2	0.0	-	0.2	0.0	0.0	0.7	0.0	-	0.7	0.8
Single-Unit Trucks	0	0	0	0	-	0	0	0	0	1	-	1	0	0	26	1	-	27	0	0	31	0	-	31	59
% Single-Unit Trucks	-	0.0	-	-	-	0.0	-	0.0	-	1.4	-	0.8	0.0	0.0	1.3	1.1	-	1.3	0.0	0.0	3.3	0.0	-	3.1	1.8
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	47	0	-	47	0	0	36	0	-	36	83
% Articulated Trucks	-	0.0	-	-	-	0.0	-	0.0	-	0.0	-	0.0	0.0	0.0	2.3	0.0	-	2.2	0.0	0.0	3.8	0.0	-	3.6	2.6
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% 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
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: IL Route 59 with Lacrosse Lane
Site Code:
Start Date: 03/17/2018

Turning Movement Peak Hour Data (4:45 PM)

Start Time	US Adventure Access Drive Eastbound						Lacrosse Lane Westbound						IL Route 59 Northbound						IL Route 59 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	
4:45 PM	0	1	0	0	0	1	0	43	0	15	0	58	2	0	316	32	0	350	1	33	488	1	0	523	932
5:00 PM	0	0	0	0	0	0	0	36	0	16	0	52	1	0	368	23	0	392	0	19	429	0	0	448	892
5:15 PM	0	0	0	0	0	0	0	43	0	16	0	59	1	1	299	19	0	320	2	28	538	1	0	569	948
5:30 PM	0	2	0	0	0	2	0	48	0	19	0	67	0	1	336	21	0	358	0	22	464	0	0	486	913
Total	0	3	0	0	0	3	0	170	0	66	0	236	4	2	1319	95	0	1420	3	102	1919	2	0	2026	3685
Approach %	0.0	100.0	0.0	0.0	-	-	0.0	72.0	0.0	28.0	-	-	0.3	0.1	92.9	6.7	-	-	0.1	5.0	94.7	0.1	-	-	-
Total %	0.0	0.1	0.0	0.0	-	0.1	0.0	4.6	0.0	1.8	-	6.4	0.1	0.1	35.8	2.6	-	38.5	0.1	2.8	52.1	0.1	-	55.0	-
PHF	0.000	0.375	0.000	0.000	-	0.375	0.000	0.885	0.000	0.868	-	0.881	0.500	0.500	0.896	0.742	-	0.906	0.375	0.773	0.892	0.500	-	0.890	0.972
Lights	0	3	0	0	-	3	0	170	0	66	-	236	4	2	1290	95	-	1391	3	102	1885	1	-	1991	3621
% Lights	-	100.0	-	-	-	100.0	-	100.0	-	100.0	-	100.0	100.0	100.0	97.8	100.0	-	98.0	100.0	100.0	98.2	50.0	-	98.3	98.3
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	0	4	0	-	4	0	0	1	0	-	1	5
% Buses	-	0.0	-	-	-	0.0	-	0.0	-	0.0	-	0.0	0.0	0.0	0.3	0.0	-	0.3	0.0	0.0	0.1	0.0	-	0.0	0.1
Single-Unit Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	7	0	-	7	0	0	17	1	-	18	25
% Single-Unit Trucks	-	0.0	-	-	-	0.0	-	0.0	-	0.0	-	0.0	0.0	0.0	0.5	0.0	-	0.5	0.0	0.0	0.9	50.0	-	0.9	0.7
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	18	0	-	18	0	0	16	0	-	16	34
% Articulated Trucks	-	0.0	-	-	-	0.0	-	0.0	-	0.0	-	0.0	0.0	0.0	1.4	0.0	-	1.3	0.0	0.0	0.8	0.0	-	0.8	0.9
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
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: 103rd Street with Book Road
Site Code:
Start Date: 03/17/2018

Turning Movement Data

Start Time	103rd Street Eastbound					Book Road Northbound					Book Road Southbound					Int. Total
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	
12:00 PM	0	23	19	0	42	0	16	61	0	77	0	59	23	0	82	201
12:15 PM	0	11	22	0	33	0	25	69	0	94	0	70	15	0	85	212
12:30 PM	0	11	16	0	27	0	24	56	0	80	0	64	11	0	75	182
12:45 PM	0	17	24	0	41	0	22	55	0	77	0	70	20	0	90	208
Hourly Total	0	62	81	0	143	0	87	241	0	328	0	263	69	0	332	803
1:00 PM	0	13	15	0	28	0	18	61	0	79	0	62	12	0	74	181
1:15 PM	0	10	19	0	29	0	26	60	0	86	0	65	19	0	84	199
1:30 PM	0	14	20	0	34	0	23	71	0	94	0	77	14	0	91	219
1:45 PM	0	29	23	0	52	0	19	57	0	76	0	60	23	0	83	211
Hourly Total	0	66	77	0	143	0	86	249	0	335	0	264	68	0	332	810
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7:00 AM	0	34	37	0	71	0	42	137	0	179	0	59	13	0	72	322
7:15 AM	0	24	27	0	51	0	23	115	0	138	0	86	15	0	101	290
7:30 AM	0	17	21	0	38	0	19	80	1	99	0	45	9	0	54	191
7:45 AM	0	16	29	0	45	0	24	66	0	90	0	44	13	0	57	192
Hourly Total	0	91	114	0	205	0	108	398	1	506	0	234	50	0	284	995
8:00 AM	0	25	25	0	50	0	23	74	0	97	0	41	14	0	55	202
8:15 AM	0	16	23	0	39	0	16	62	0	78	0	52	11	0	63	180
8:30 AM	0	20	19	0	39	0	24	74	0	98	0	33	10	0	43	180
8:45 AM	0	25	23	0	48	0	35	78	0	113	0	61	20	0	81	242
Hourly Total	0	86	90	0	176	0	98	288	0	386	0	187	55	0	242	804
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2:30 PM	0	12	27	0	39	0	18	32	0	50	0	65	19	0	84	173
2:45 PM	0	5	23	0	28	0	24	65	1	89	0	56	17	0	73	190
Hourly Total	0	17	50	0	67	0	42	97	1	139	0	121	36	0	157	363
3:00 PM	0	21	31	0	52	0	23	49	0	72	0	69	20	0	89	213
3:15 PM	0	20	34	0	54	0	25	52	0	77	0	86	23	0	109	240
3:30 PM	0	21	27	0	48	0	30	64	0	94	0	103	15	0	118	260
3:45 PM	0	15	27	0	42	0	30	63	0	93	0	90	20	0	110	245
Hourly Total	0	77	119	0	196	0	108	228	0	336	0	348	78	0	426	958
4:00 PM	0	11	29	0	40	0	29	69	2	98	0	84	16	0	100	238
4:15 PM	0	16	24	0	40	0	36	70	0	106	0	89	21	0	110	256
4:30 PM	0	21	32	0	53	0	31	76	0	107	0	92	27	0	119	279
4:45 PM	0	23	35	0	58	0	34	76	0	110	0	96	25	0	121	289
Hourly Total	0	71	120	0	191	0	130	291	2	421	0	361	89	0	450	1062
5:00 PM	0	28	40	0	68	0	38	66	0	104	0	107	23	0	130	302
5:15 PM	0	23	24	0	47	0	55	91	0	146	0	107	33	0	140	333
5:30 PM	0	17	33	0	50	0	35	67	0	102	0	101	25	0	126	278

5:45 PM	0	26	32	0	58	0	38	79	0	117	0	115	39	0	154	329
Hourly Total	0	94	129	0	223	0	166	303	0	469	0	430	120	0	550	1242
Grand Total	0	564	780	0	1344	0	825	2095	4	2920	0	2208	565	0	2773	7037
Approach %	0.0	42.0	58.0	-	-	0.0	28.3	71.7	-	-	0.0	79.6	20.4	-	-	-
Total %	0.0	8.0	11.1	-	19.1	0.0	11.7	29.8	-	41.5	0.0	31.4	8.0	-	39.4	-
Lights	0	552	756	-	1308	0	806	2063	-	2869	0	2178	557	-	2735	6912
% Lights	-	97.9	96.9	-	97.3	-	97.7	98.5	-	98.3	-	98.6	98.6	-	98.6	98.2
Buses	0	11	15	-	26	0	9	28	-	37	0	21	6	-	27	90
% Buses	-	2.0	1.9	-	1.9	-	1.1	1.3	-	1.3	-	1.0	1.1	-	1.0	1.3
Single-Unit Trucks	0	1	8	-	9	0	10	4	-	14	0	8	2	-	10	33
% Single-Unit Trucks	-	0.2	1.0	-	0.7	-	1.2	0.2	-	0.5	-	0.4	0.4	-	0.4	0.5
Articulated Trucks	0	0	1	-	1	0	0	0	-	0	0	1	0	-	1	2
% Articulated Trucks	-	0.0	0.1	-	0.1	-	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
% 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	-	-	-	-	4	-	-	-	-	0	-	-
% 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: 103rd Street with Book Road
Site Code:
Start Date: 03/17/2018

Turning Movement Peak Hour Data (12:00 PM)

Start Time	103rd Street Eastbound					Book Road Northbound					Book Road Southbound					
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	Int. Total
12:00 PM	0	23	19	0	42	0	16	61	0	77	0	59	23	0	82	201
12:15 PM	0	11	22	0	33	0	25	69	0	94	0	70	15	0	85	212
12:30 PM	0	11	16	0	27	0	24	56	0	80	0	64	11	0	75	182
12:45 PM	0	17	24	0	41	0	22	55	0	77	0	70	20	0	90	208
Total	0	62	81	0	143	0	87	241	0	328	0	263	69	0	332	803
Approach %	0.0	43.4	56.6	-	-	0.0	26.5	73.5	-	-	0.0	79.2	20.8	-	-	-
Total %	0.0	7.7	10.1	-	17.8	0.0	10.8	30.0	-	40.8	0.0	32.8	8.6	-	41.3	-
PHF	0.000	0.674	0.844	-	0.851	0.000	0.870	0.873	-	0.872	0.000	0.939	0.750	-	0.922	0.947
Lights	0	62	81	-	143	0	87	241	-	328	0	263	68	-	331	802
% Lights	-	100.0	100.0	-	100.0	-	100.0	100.0	-	100.0	-	100.0	98.6	-	99.7	99.9
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	0	-	0	0	0	0	-	0	0	0	1	-	1	1
% Single-Unit Trucks	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	1.4	-	0.3	0.1
Articulated Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Articulated Trucks	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
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: 103rd Street with Book Road
Site Code:
Start Date: 03/17/2018

Turning Movement Peak Hour Data (7:00 AM)

Start Time	103rd Street Eastbound					Book Road Northbound					Book Road Southbound					
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	Int. Total
7:00 AM	0	34	37	0	71	0	42	137	0	179	0	59	13	0	72	322
7:15 AM	0	24	27	0	51	0	23	115	0	138	0	86	15	0	101	290
7:30 AM	0	17	21	0	38	0	19	80	1	99	0	45	9	0	54	191
7:45 AM	0	16	29	0	45	0	24	66	0	90	0	44	13	0	57	192
Total	0	91	114	0	205	0	108	398	1	506	0	234	50	0	284	995
Approach %	0.0	44.4	55.6	-	-	0.0	21.3	78.7	-	-	0.0	82.4	17.6	-	-	-
Total %	0.0	9.1	11.5	-	20.6	0.0	10.9	40.0	-	50.9	0.0	23.5	5.0	-	28.5	-
PHF	0.000	0.669	0.770	-	0.722	0.000	0.643	0.726	-	0.707	0.000	0.680	0.833	-	0.703	0.773
Lights	0	88	105	-	193	0	107	392	-	499	0	225	48	-	273	965
% Lights	-	96.7	92.1	-	94.1	-	99.1	98.5	-	98.6	-	96.2	96.0	-	96.1	97.0
Buses	0	3	7	-	10	0	0	5	-	5	0	8	2	-	10	25
% Buses	-	3.3	6.1	-	4.9	-	0.0	1.3	-	1.0	-	3.4	4.0	-	3.5	2.5
Single-Unit Trucks	0	0	2	-	2	0	1	1	-	2	0	1	0	-	1	5
% Single-Unit Trucks	-	0.0	1.8	-	1.0	-	0.9	0.3	-	0.4	-	0.4	0.0	-	0.4	0.5
Articulated Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Articulated Trucks	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
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	-	-	-	-	1	-	-	-	-	0	-	-
% 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: 103rd Street with Book Road
Site Code:
Start Date: 03/17/2018

Turning Movement Peak Hour Data (4:45 PM)

Start Time	103rd Street Eastbound					Book Road Northbound					Book Road Southbound					
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	Int. Total
4:45 PM	0	23	35	0	58	0	34	76	0	110	0	96	25	0	121	289
5:00 PM	0	28	40	0	68	0	38	66	0	104	0	107	23	0	130	302
5:15 PM	0	23	24	0	47	0	55	91	0	146	0	107	33	0	140	333
5:30 PM	0	17	33	0	50	0	35	67	0	102	0	101	25	0	126	278
Total	0	91	132	0	223	0	162	300	0	462	0	411	106	0	517	1202
Approach %	0.0	40.8	59.2	-	-	0.0	35.1	64.9	-	-	0.0	79.5	20.5	-	-	-
Total %	0.0	7.6	11.0	-	18.6	0.0	13.5	25.0	-	38.4	0.0	34.2	8.8	-	43.0	-
PHF	0.000	0.813	0.825	-	0.820	0.000	0.736	0.824	-	0.791	0.000	0.960	0.803	-	0.923	0.902
Lights	0	91	129	-	220	0	162	298	-	460	0	411	106	-	517	1197
% Lights	-	100.0	97.7	-	98.7	-	100.0	99.3	-	99.6	-	100.0	100.0	-	100.0	99.6
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	2	-	2	0	0	2	-	2	0	0	0	-	0	4
% Single-Unit Trucks	-	0.0	1.5	-	0.9	-	0.0	0.7	-	0.4	-	0.0	0.0	-	0.0	0.3
Articulated Trucks	0	0	1	-	1	0	0	0	-	0	0	0	0	-	0	1
% Articulated Trucks	-	0.0	0.8	-	0.4	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.1
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: IL Route 59 with Rollingridge Road
Site Code:
Start Date: 03/17/2018

Turning Movement Data

Start Time	Rollingridge Road Eastbound					IL 59 Northbound					IL 59 Southbound					
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	Int. Total
12:00 PM	0	12	13	0	25	0	9	432	0	441	0	351	14	0	365	831
12:15 PM	0	10	6	0	16	1	7	392	0	400	0	345	16	0	361	777
12:30 PM	0	9	8	0	17	0	9	427	0	436	0	382	13	0	395	848
12:45 PM	0	8	9	0	17	0	11	399	0	410	0	384	22	0	406	833
Hourly Total	0	39	36	0	75	1	36	1650	0	1687	0	1462	65	0	1527	3289
1:00 PM	0	8	5	0	13	0	7	360	0	367	0	371	17	0	388	768
1:15 PM	0	14	8	0	22	0	5	371	0	376	0	362	16	0	378	776
1:30 PM	0	4	9	1	13	0	10	371	0	381	0	401	25	0	426	820
1:45 PM	0	7	5	0	12	0	7	380	0	387	0	368	13	0	381	780
Hourly Total	0	33	27	1	60	0	29	1482	0	1511	0	1502	71	0	1573	3144
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6:00 AM	0	10	1	0	11	0	1	288	0	289	0	102	2	0	104	404
6:15 AM	0	8	4	0	12	0	5	390	0	395	0	129	5	0	134	541
6:30 AM	0	9	9	0	18	0	4	523	0	527	0	164	8	0	172	717
6:45 AM	0	14	6	1	20	0	7	535	0	542	0	168	14	0	182	744
Hourly Total	0	41	20	1	61	0	17	1736	0	1753	0	563	29	0	592	2406
7:00 AM	0	13	4	0	17	0	9	734	0	743	0	204	12	0	216	976
7:15 AM	0	13	10	0	23	0	13	565	0	578	0	247	28	0	275	876
7:30 AM	1	10	11	0	22	0	14	463	0	477	0	184	17	0	201	700
7:45 AM	0	14	17	0	31	0	18	436	0	454	0	260	37	0	297	782
Hourly Total	1	50	42	0	93	0	54	2198	0	2252	0	895	94	0	989	3334
8:00 AM	0	27	24	0	51	0	9	381	0	390	0	214	34	0	248	689
8:15 AM	0	17	14	0	31	0	17	456	0	473	0	221	25	0	246	750
Grand Total	1	207	163	2	371	1	162	7903	0	8066	0	4857	318	0	5175	13612
Approach %	0.3	55.8	43.9	-	-	0.0	2.0	98.0	-	-	0.0	93.9	6.1	-	-	-
Total %	0.0	1.5	1.2	-	2.7	0.0	1.2	58.1	-	59.3	0.0	35.7	2.3	-	38.0	-
Lights	1	206	161	-	368	1	160	7671	-	7832	0	4644	316	-	4960	13160
% Lights	100.0	99.5	98.8	-	99.2	100.0	98.8	97.1	-	97.1	-	95.6	99.4	-	95.8	96.7
Buses	0	0	1	-	1	0	1	31	-	32	0	39	2	-	41	74
% Buses	0.0	0.0	0.6	-	0.3	0.0	0.6	0.4	-	0.4	-	0.8	0.6	-	0.8	0.5
Single-Unit Trucks	0	1	1	-	2	0	1	85	-	86	0	69	0	-	69	157
% Single-Unit Trucks	0.0	0.5	0.6	-	0.5	0.0	0.6	1.1	-	1.1	-	1.4	0.0	-	1.3	1.2
Articulated Trucks	0	0	0	-	0	0	0	116	-	116	0	105	0	-	105	221
% Articulated Trucks	0.0	0.0	0.0	-	0.0	0.0	0.0	1.5	-	1.4	-	2.2	0.0	-	2.0	1.6
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	-	0.0	0.0
Pedestrians	-	-	-	2	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-

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

Count Name: IL Route 59 with Rollingridge Road
Site Code:
Start Date: 03/17/2018

Turning Movement Peak Hour Data (12:00 PM)

Start Time	Rollingridge Road Eastbound					IL 59 Northbound					IL 59 Southbound					
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	Int. Total
12:00 PM	0	12	13	0	25	0	9	432	0	441	0	351	14	0	365	831
12:15 PM	0	10	6	0	16	1	7	392	0	400	0	345	16	0	361	777
12:30 PM	0	9	8	0	17	0	9	427	0	436	0	382	13	0	395	848
12:45 PM	0	8	9	0	17	0	11	399	0	410	0	384	22	0	406	833
Total	0	39	36	0	75	1	36	1650	0	1687	0	1462	65	0	1527	3289
Approach %	0.0	52.0	48.0	-	-	0.1	2.1	97.8	-	-	0.0	95.7	4.3	-	-	-
Total %	0.0	1.2	1.1	-	2.3	0.0	1.1	50.2	-	51.3	0.0	44.5	2.0	-	46.4	-
PHF	0.000	0.813	0.692	-	0.750	0.250	0.818	0.955	-	0.956	0.000	0.952	0.739	-	0.940	0.970
Lights	0	39	36	-	75	1	36	1631	-	1668	0	1449	65	-	1514	3257
% Lights	-	100.0	100.0	-	100.0	100.0	100.0	98.8	-	98.9	-	99.1	100.0	-	99.1	99.0
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	0.0
Single-Unit Trucks	0	0	0	-	0	0	0	11	-	11	0	7	0	-	7	18
% Single-Unit Trucks	-	0.0	0.0	-	0.0	0.0	0.0	0.7	-	0.7	-	0.5	0.0	-	0.5	0.5
Articulated Trucks	0	0	0	-	0	0	0	8	-	8	0	6	0	-	6	14
% Articulated Trucks	-	0.0	0.0	-	0.0	0.0	0.0	0.5	-	0.5	-	0.4	0.0	-	0.4	0.4
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	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: IL Route 59 with Rollingridge Road
Site Code:
Start Date: 03/17/2018

Turning Movement Peak Hour Data (7:00 AM)

Start Time	Rollingridge Road Eastbound					IL 59 Northbound					IL 59 Southbound					
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	Int. Total
7:00 AM	0	13	4	0	17	0	9	734	0	743	0	204	12	0	216	976
7:15 AM	0	13	10	0	23	0	13	565	0	578	0	247	28	0	275	876
7:30 AM	1	10	11	0	22	0	14	463	0	477	0	184	17	0	201	700
7:45 AM	0	14	17	0	31	0	18	436	0	454	0	260	37	0	297	782
Total	1	50	42	0	93	0	54	2198	0	2252	0	895	94	0	989	3334
Approach %	1.1	53.8	45.2	-	-	0.0	2.4	97.6	-	-	0.0	90.5	9.5	-	-	-
Total %	0.0	1.5	1.3	-	2.8	0.0	1.6	65.9	-	67.5	0.0	26.8	2.8	-	29.7	-
PHF	0.250	0.893	0.618	-	0.750	0.000	0.750	0.749	-	0.758	0.000	0.861	0.635	-	0.832	0.854
Lights	1	50	41	-	92	0	53	2116	-	2169	0	806	94	-	900	3161
% Lights	100.0	100.0	97.6	-	98.9	-	98.1	96.3	-	96.3	-	90.1	100.0	-	91.0	94.8
Buses	0	0	1	-	1	0	1	5	-	6	0	22	0	-	22	29
% Buses	0.0	0.0	2.4	-	1.1	-	1.9	0.2	-	0.3	-	2.5	0.0	-	2.2	0.9
Single-Unit Trucks	0	0	0	-	0	0	0	28	-	28	0	29	0	-	29	57
% Single-Unit Trucks	0.0	0.0	0.0	-	0.0	-	0.0	1.3	-	1.2	-	3.2	0.0	-	2.9	1.7
Articulated Trucks	0	0	0	-	0	0	0	49	-	49	0	38	0	-	38	87
% Articulated Trucks	0.0	0.0	0.0	-	0.0	-	0.0	2.2	-	2.2	-	4.2	0.0	-	3.8	2.6
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	0.0
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Kenig Lindgren O'Hara Aboona, Inc.
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Rosemont, Illinois, United States 60018
(847)518-9990

Count Name: IL Route 59 with Rollingridge Road
Site Code:
Start Date: 04/05/2018

Turning Movement Data

Start Time	Rollingridge Road Eastbound					IL Route 59 Northbound					IL Route 59 Southbound					
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	Int. Total
6:00 AM	0	8	2	0	10	0	0	310	0	310	0	100	4	0	104	424
6:15 AM	0	4	2	0	6	0	2	385	0	387	0	152	10	0	162	555
6:30 AM	0	12	4	0	16	0	3	550	0	553	0	171	21	0	192	761
6:45 AM	0	15	9	0	24	0	8	543	0	551	0	173	16	0	189	764
Hourly Total	0	39	17	0	56	0	13	1788	0	1801	0	596	51	0	647	2504
7:00 AM	0	15	5	0	20	0	7	732	0	739	0	194	17	0	211	970
7:15 AM	0	11	11	0	22	0	7	548	0	555	0	233	29	0	262	839
7:30 AM	0	15	13	0	28	0	11	459	0	470	0	251	40	0	291	789
7:45 AM	0	22	33	0	55	0	13	502	0	515	0	282	27	0	309	879
Hourly Total	0	63	62	0	125	0	38	2241	0	2279	0	960	113	0	1073	3477
8:00 AM	0	9	13	0	22	0	15	414	0	429	0	213	15	0	228	679
8:15 AM	0	15	8	0	23	0	20	442	0	462	0	214	11	0	225	710
8:30 AM	0	8	10	0	18	1	13	404	0	418	0	201	17	0	218	654
8:45 AM	0	11	22	0	33	0	15	397	0	412	0	217	21	0	238	683
Hourly Total	0	43	53	0	96	1	63	1657	0	1721	0	845	64	0	909	2726
9:00 AM	0	18	11	0	29	0	14	418	0	432	0	222	17	0	239	700
9:15 AM	0	14	6	0	20	0	10	319	0	329	0	193	13	0	206	555
9:30 AM	0	7	10	0	17	0	11	336	0	347	0	226	16	0	242	606
9:45 AM	0	13	13	0	26	0	8	296	0	304	0	195	26	0	221	551
Hourly Total	0	52	40	0	92	0	43	1369	0	1412	0	836	72	0	908	2412
10:00 AM	0	12	13	0	25	0	7	294	0	301	0	181	18	0	199	525
10:15 AM	0	16	12	0	28	0	6	267	0	273	0	209	7	0	216	517
10:30 AM	0	9	10	0	19	0	13	299	0	312	0	233	20	0	253	584
10:45 AM	0	8	8	2	16	0	14	297	0	311	0	228	17	0	245	572
Hourly Total	0	45	43	2	88	0	40	1157	0	1197	0	851	62	0	913	2198
11:00 AM	0	16	8	0	24	0	9	267	0	276	0	265	17	0	282	582
11:15 AM	0	13	10	1	23	1	6	263	0	270	0	240	15	0	255	548
11:30 AM	0	12	8	0	20	0	11	274	0	285	0	268	10	0	278	583
11:45 AM	0	19	14	0	33	0	9	293	0	302	0	255	15	0	270	605
Hourly Total	0	60	40	1	100	1	35	1097	0	1133	0	1028	57	0	1085	2318
12:00 PM	0	24	14	0	38	0	9	289	0	298	0	256	11	0	267	603
12:15 PM	0	13	8	0	21	0	8	302	0	310	0	297	10	0	307	638
12:30 PM	0	14	8	0	22	0	5	305	0	310	0	279	14	0	293	625
12:45 PM	0	12	10	0	22	0	8	295	0	303	0	287	31	0	318	643
Hourly Total	0	63	40	0	103	0	30	1191	0	1221	0	1119	66	0	1185	2509
1:00 PM	0	9	7	0	16	1	5	294	0	300	0	309	22	0	331	647
1:15 PM	0	9	9	0	18	0	6	277	0	283	0	270	18	0	288	589
1:30 PM	0	14	6	0	20	0	8	293	0	301	0	300	24	0	324	645

1:45 PM	0	11	11	0	22	0	8	266	0	274	0	294	15	0	309	605
Hourly Total	0	43	33	0	76	1	27	1130	0	1158	0	1173	79	0	1252	2486
2:00 PM	0	5	17	0	22	0	10	262	0	272	0	342	19	0	361	655
2:15 PM	0	14	6	0	20	0	6	307	0	313	0	342	22	0	364	697
2:30 PM	0	10	6	0	16	0	10	291	0	301	0	428	22	0	450	767
2:45 PM	0	11	11	0	22	0	8	276	0	284	0	429	36	0	465	771
Hourly Total	0	40	40	0	80	0	34	1136	0	1170	0	1541	99	0	1640	2890
3:00 PM	0	15	21	0	36	0	12	271	0	283	0	406	28	0	434	753
3:15 PM	0	15	10	0	25	1	10	325	0	336	0	410	13	0	423	784
3:30 PM	1	5	9	0	15	0	16	313	0	329	0	471	18	0	489	833
3:45 PM	0	21	15	0	36	0	11	345	0	356	0	431	27	0	458	850
Hourly Total	1	56	55	0	112	1	49	1254	0	1304	0	1718	86	0	1804	3220
4:00 PM	0	7	15	0	22	0	11	310	0	321	0	414	31	0	445	788
4:15 PM	0	8	16	0	24	0	15	341	0	356	0	448	33	0	481	861
4:30 PM	0	15	8	0	23	0	17	355	0	372	0	452	30	0	482	877
4:45 PM	0	6	17	0	23	0	6	361	0	367	0	413	31	0	444	834
Hourly Total	0	36	56	0	92	0	49	1367	0	1416	0	1727	125	0	1852	3360
5:00 PM	0	8	20	0	28	0	7	363	0	370	0	452	38	0	490	888
5:15 PM	0	8	15	0	23	0	10	386	0	396	0	547	29	0	576	995
5:30 PM	0	9	13	1	22	0	13	401	0	414	0	466	20	0	486	922
5:45 PM	0	8	8	0	16	0	11	319	0	330	0	426	21	0	447	793
Hourly Total	0	33	56	1	89	0	41	1469	0	1510	0	1891	108	0	1999	3598
6:00 PM	0	5	13	1	18	0	10	353	0	363	0	405	37	0	442	823
6:15 PM	0	9	10	0	19	0	10	334	0	344	0	463	34	0	497	860
6:30 PM	1	2	13	1	16	0	12	279	0	291	0	463	25	0	488	795
6:45 PM	0	3	6	0	9	0	6	283	0	289	0	378	19	0	397	695
Hourly Total	1	19	42	2	62	0	38	1249	0	1287	0	1709	115	0	1824	3173
Grand Total	2	592	577	6	1171	4	500	18105	0	18609	0	15994	1097	0	17091	36871
Approach %	0.2	50.6	49.3	-	-	0.0	2.7	97.3	-	-	0.0	93.6	6.4	-	-	-
Total %	0.0	1.6	1.6	-	3.2	0.0	1.4	49.1	-	50.5	0.0	43.4	3.0	-	46.4	-
Lights	2	589	568	-	1159	4	495	17288	-	17787	0	15161	1088	-	16249	35195
% Lights	100.0	99.5	98.4	-	99.0	100.0	99.0	95.5	-	95.6	-	94.8	99.2	-	95.1	95.5
Buses	0	1	6	-	7	0	4	103	-	107	0	106	6	-	112	226
% Buses	0.0	0.2	1.0	-	0.6	0.0	0.8	0.6	-	0.6	-	0.7	0.5	-	0.7	0.6
Single-Unit Trucks	0	2	3	-	5	0	1	264	-	265	0	252	3	-	255	525
% Single-Unit Trucks	0.0	0.3	0.5	-	0.4	0.0	0.2	1.5	-	1.4	-	1.6	0.3	-	1.5	1.4
Articulated Trucks	0	0	0	-	0	0	0	450	-	450	0	475	0	-	475	925
% Articulated Trucks	0.0	0.0	0.0	-	0.0	0.0	0.0	2.5	-	2.4	-	3.0	0.0	-	2.8	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	-	0.0	0.0
Pedestrians	-	-	-	6	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-

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(847)518-9990

Count Name: IL Route 59 with Rollingridge Road
Site Code:
Start Date: 04/05/2018

Turning Movement Peak Hour Data (7:00 AM)

Start Time	Rollingridge Road Eastbound					IL Route 59 Northbound					IL Route 59 Southbound					
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	Int. Total
7:00 AM	0	15	5	0	20	0	7	732	0	739	0	194	17	0	211	970
7:15 AM	0	11	11	0	22	0	7	548	0	555	0	233	29	0	262	839
7:30 AM	0	15	13	0	28	0	11	459	0	470	0	251	40	0	291	789
7:45 AM	0	22	33	0	55	0	13	502	0	515	0	282	27	0	309	879
Total	0	63	62	0	125	0	38	2241	0	2279	0	960	113	0	1073	3477
Approach %	0.0	50.4	49.6	-	-	0.0	1.7	98.3	-	-	0.0	89.5	10.5	-	-	-
Total %	0.0	1.8	1.8	-	3.6	0.0	1.1	64.5	-	65.5	0.0	27.6	3.2	-	30.9	-
PHF	0.000	0.716	0.470	-	0.568	0.000	0.731	0.765	-	0.771	0.000	0.851	0.706	-	0.868	0.896
Lights	0	63	61	-	124	0	36	2165	-	2201	0	865	113	-	978	3303
% Lights	-	100.0	98.4	-	99.2	-	94.7	96.6	-	96.6	-	90.1	100.0	-	91.1	95.0
Buses	0	0	1	-	1	0	1	11	-	12	0	28	0	-	28	41
% Buses	-	0.0	1.6	-	0.8	-	2.6	0.5	-	0.5	-	2.9	0.0	-	2.6	1.2
Single-Unit Trucks	0	0	0	-	0	0	1	20	-	21	0	20	0	-	20	41
% Single-Unit Trucks	-	0.0	0.0	-	0.0	-	2.6	0.9	-	0.9	-	2.1	0.0	-	1.9	1.2
Articulated Trucks	0	0	0	-	0	0	0	45	-	45	0	47	0	-	47	92
% Articulated Trucks	-	0.0	0.0	-	0.0	-	0.0	2.0	-	2.0	-	4.9	0.0	-	4.4	2.6
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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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(847)518-9990

Count Name: IL Route 59 with Rollingridge Road
Site Code:
Start Date: 04/05/2018

Turning Movement Peak Hour Data (12:15 PM)

Start Time	Rollingridge Road Eastbound					IL Route 59 Northbound					IL Route 59 Southbound					
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	Int. Total
12:15 PM	0	13	8	0	21	0	8	302	0	310	0	297	10	0	307	638
12:30 PM	0	14	8	0	22	0	5	305	0	310	0	279	14	0	293	625
12:45 PM	0	12	10	0	22	0	8	295	0	303	0	287	31	0	318	643
1:00 PM	0	9	7	0	16	1	5	294	0	300	0	309	22	0	331	647
Total	0	48	33	0	81	1	26	1196	0	1223	0	1172	77	0	1249	2553
Approach %	0.0	59.3	40.7	-	-	0.1	2.1	97.8	-	-	0.0	93.8	6.2	-	-	-
Total %	0.0	1.9	1.3	-	3.2	0.0	1.0	46.8	-	47.9	0.0	45.9	3.0	-	48.9	-
PHF	0.000	0.857	0.825	-	0.920	0.250	0.813	0.980	-	0.986	0.000	0.948	0.621	-	0.943	0.986
Lights	0	47	30	-	77	1	26	1122	-	1149	0	1110	75	-	1185	2411
% Lights	-	97.9	90.9	-	95.1	100.0	100.0	93.8	-	93.9	-	94.7	97.4	-	94.9	94.4
Buses	0	1	1	-	2	0	0	5	-	5	0	2	1	-	3	10
% Buses	-	2.1	3.0	-	2.5	0.0	0.0	0.4	-	0.4	-	0.2	1.3	-	0.2	0.4
Single-Unit Trucks	0	0	2	-	2	0	0	31	-	31	0	23	1	-	24	57
% Single-Unit Trucks	-	0.0	6.1	-	2.5	0.0	0.0	2.6	-	2.5	-	2.0	1.3	-	1.9	2.2
Articulated Trucks	0	0	0	-	0	0	0	38	-	38	0	37	0	-	37	75
% Articulated Trucks	-	0.0	0.0	-	0.0	0.0	0.0	3.2	-	3.1	-	3.2	0.0	-	3.0	2.9
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	0.0
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Count Name: IL Route 59 with Rollingridge Road
Site Code:
Start Date: 04/05/2018

Turning Movement Peak Hour Data (4:45 PM)

Start Time	Rollingridge Road Eastbound					IL Route 59 Northbound					IL Route 59 Southbound					
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	Int. Total
4:45 PM	0	6	17	0	23	0	6	361	0	367	0	413	31	0	444	834
5:00 PM	0	8	20	0	28	0	7	363	0	370	0	452	38	0	490	888
5:15 PM	0	8	15	0	23	0	10	386	0	396	0	547	29	0	576	995
5:30 PM	0	9	13	1	22	0	13	401	0	414	0	466	20	0	486	922
Total	0	31	65	1	96	0	36	1511	0	1547	0	1878	118	0	1996	3639
Approach %	0.0	32.3	67.7	-	-	0.0	2.3	97.7	-	-	0.0	94.1	5.9	-	-	-
Total %	0.0	0.9	1.8	-	2.6	0.0	1.0	41.5	-	42.5	0.0	51.6	3.2	-	54.9	-
PHF	0.000	0.861	0.813	-	0.857	0.000	0.692	0.942	-	0.934	0.000	0.858	0.776	-	0.866	0.914
Lights	0	31	65	-	96	0	36	1482	-	1518	0	1849	118	-	1967	3581
% Lights	-	100.0	100.0	-	100.0	-	100.0	98.1	-	98.1	-	98.5	100.0	-	98.5	98.4
Buses	0	0	0	-	0	0	0	3	-	3	0	2	0	-	2	5
% Buses	-	0.0	0.0	-	0.0	-	0.0	0.2	-	0.2	-	0.1	0.0	-	0.1	0.1
Single-Unit Trucks	0	0	0	-	0	0	0	9	-	9	0	14	0	-	14	23
% Single-Unit Trucks	-	0.0	0.0	-	0.0	-	0.0	0.6	-	0.6	-	0.7	0.0	-	0.7	0.6
Articulated Trucks	0	0	0	-	0	0	0	17	-	17	0	13	0	-	13	30
% Articulated Trucks	-	0.0	0.0	-	0.0	-	0.0	1.1	-	1.1	-	0.7	0.0	-	0.7	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	-	-	-	1	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-

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9575 W. Higgins Rd., Suite 400

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

Count Name: IL Route 59 with Rollingridge Road
Site Code:
Start Date: 04/05/2018

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

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

Count Name: 103rd Street with Falcon Drive
Site Code:
Start Date: 03/17/2018

Turning Movement Data

Start Time	103rd Street Eastbound						103rd Street Westbound						Falcon Drive Northbound						Falcon Drive 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	
12:00 PM	0	6	47	11	0	64	0	3	37	0	0	40	0	5	1	1	0	7	0	3	0	7	0	10	121
12:15 PM	0	7	36	10	0	53	0	2	39	1	0	42	0	5	0	2	0	7	0	3	1	3	0	7	109
12:30 PM	0	3	28	6	0	37	0	2	39	0	0	41	0	10	0	0	0	10	0	0	0	8	0	8	96
12:45 PM	0	8	31	8	0	47	0	4	40	2	0	46	0	6	1	3	0	10	0	0	0	11	0	11	114
Hourly Total	0	24	142	35	0	201	0	11	155	3	0	169	0	26	2	6	0	34	0	6	1	29	0	36	440
1:00 PM	0	4	30	7	0	41	0	1	32	2	2	35	0	10	0	2	0	12	0	1	0	7	0	8	96
1:15 PM	0	4	34	8	0	46	0	0	45	3	0	48	0	11	1	2	0	14	0	3	0	3	0	6	114
1:30 PM	0	8	45	8	0	61	0	2	38	0	0	40	0	6	0	3	1	9	0	0	0	9	0	9	119
1:45 PM	0	5	27	7	0	39	0	5	50	1	0	56	0	12	0	4	0	16	0	3	0	8	0	11	122
Hourly Total	0	21	136	30	0	187	0	8	165	6	2	179	0	39	1	11	1	51	0	7	0	27	0	34	451
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7:00 AM	0	2	41	3	0	46	0	2	57	0	0	59	0	23	0	3	0	26	0	2	0	8	0	10	141
7:15 AM	0	3	39	5	0	47	0	1	43	0	0	44	0	11	0	6	0	17	0	1	0	5	0	6	114
7:30 AM	0	0	30	3	0	33	0	2	29	0	0	31	0	10	1	3	0	14	0	0	0	5	1	5	83
7:45 AM	0	2	44	6	0	52	0	2	39	1	0	42	0	8	0	3	0	11	0	1	0	4	0	5	110
Hourly Total	0	7	154	17	0	178	0	7	168	1	0	176	0	52	1	15	0	68	0	4	0	22	1	26	448
8:00 AM	0	0	45	3	1	48	0	0	42	0	0	42	0	6	0	2	0	8	0	1	0	5	0	6	104
8:15 AM	0	3	32	4	0	39	0	1	25	0	0	26	0	8	0	4	0	12	0	1	0	2	0	3	80
8:30 AM	0	4	40	2	0	46	0	2	34	1	0	37	0	8	0	6	0	14	0	0	0	2	0	2	99
8:45 AM	0	2	55	2	0	59	0	0	64	0	0	64	0	6	0	1	0	7	0	2	0	6	0	8	138
Hourly Total	0	9	172	11	1	192	0	3	165	1	0	169	0	28	0	13	0	41	0	4	0	15	0	19	421
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2:30 PM	0	3	39	12	0	54	0	1	37	2	0	40	0	5	2	0	0	7	0	0	1	3	0	4	105
2:45 PM	0	5	39	8	0	52	0	2	34	0	2	36	0	7	2	0	0	9	0	0	1	8	0	9	106
Hourly Total	0	8	78	20	0	106	0	3	71	2	2	76	0	12	4	0	0	16	0	0	2	11	0	13	211
3:00 PM	0	8	51	4	0	63	0	3	39	0	1	42	0	2	0	1	1	3	0	2	1	3	0	6	114
3:15 PM	0	5	49	13	0	67	0	4	55	2	1	61	0	10	0	6	0	16	0	0	0	1	0	1	145
3:30 PM	0	3	44	7	0	54	0	2	51	2	0	55	0	13	0	5	1	18	0	0	0	3	0	3	130
3:45 PM	0	3	40	6	0	49	0	1	44	2	0	47	0	10	0	3	0	13	0	3	0	5	0	8	117
Hourly Total	0	19	184	30	0	233	0	10	189	6	2	205	0	35	0	15	2	50	0	5	1	12	0	18	506
4:00 PM	0	10	44	14	0	68	0	2	50	2	0	54	0	4	0	0	0	4	0	0	0	7	0	7	133
4:15 PM	0	6	38	9	0	53	0	1	45	1	0	47	0	3	1	4	0	8	0	0	0	6	0	6	114
4:30 PM	0	4	59	9	0	72	0	2	51	1	1	54	0	5	0	2	1	7	0	0	0	7	0	7	140
4:45 PM	0	8	59	10	0	77	0	3	58	1	0	62	0	9	1	2	0	12	0	0	0	3	0	3	154
Hourly Total	0	28	200	42	0	270	0	8	204	5	1	217	0	21	2	8	1	31	0	0	0	23	0	23	541
5:00 PM	0	10	67	12	0	89	0	5	55	1	0	61	0	3	0	2	0	5	0	2	0	5	0	7	162
5:15 PM	0	10	48	9	0	67	0	5	74	2	1	81	0	9	0	2	0	11	0	0	0	7	0	7	166

5:30 PM	0	6	52	14	0	72	0	3	50	2	0	55	0	6	0	3	0	9	0	0	0	2	0	2	138
5:45 PM	0	6	67	11	0	84	0	2	65	3	0	70	0	9	0	2	0	11	0	1	0	2	0	3	168
Hourly Total	0	32	234	46	0	312	0	15	244	8	1	267	0	27	0	9	0	36	0	3	0	16	0	19	634
Grand Total	0	148	1300	231	1	1679	0	65	1361	32	8	1458	0	240	10	77	4	327	0	29	4	155	1	188	3652
Approach %	0.0	8.8	77.4	13.8	-	-	0.0	4.5	93.3	2.2	-	-	0.0	73.4	3.1	23.5	-	-	0.0	15.4	2.1	82.4	-	-	-
Total %	0.0	4.1	35.6	6.3	-	46.0	0.0	1.8	37.3	0.9	-	39.9	0.0	6.6	0.3	2.1	-	9.0	0.0	0.8	0.1	4.2	-	5.1	-
Lights	0	143	1268	226	-	1637	0	64	1333	31	-	1428	0	234	7	74	-	315	0	28	3	152	-	183	3563
% Lights	-	96.6	97.5	97.8	-	97.5	-	98.5	97.9	96.9	-	97.9	-	97.5	70.0	96.1	-	96.3	-	96.6	75.0	98.1	-	97.3	97.6
Buses	0	4	24	5	-	33	0	1	21	1	-	23	0	5	1	2	-	8	0	1	1	2	-	4	68
% Buses	-	2.7	1.8	2.2	-	2.0	-	1.5	1.5	3.1	-	1.6	-	2.1	10.0	2.6	-	2.4	-	3.4	25.0	1.3	-	2.1	1.9
Single-Unit Trucks	0	1	6	0	-	7	0	0	7	0	-	7	0	0	1	1	-	2	0	0	0	1	-	1	17
% Single-Unit Trucks	-	0.7	0.5	0.0	-	0.4	-	0.0	0.5	0.0	-	0.5	-	0.0	10.0	1.3	-	0.6	-	0.0	0.0	0.6	-	0.5	0.5
Articulated Trucks	0	0	2	0	-	2	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	2
% Articulated Trucks	-	0.0	0.2	0.0	-	0.1	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.1
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	1	1	0	-	2	0	0	0	0	-	0	2
% Bicycles on Road	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.4	10.0	0.0	-	0.6	-	0.0	0.0	0.0	-	0.0	0.1
Pedestrians	-	-	-	-	1	-	-	-	-	-	8	-	-	-	-	-	4	-	-	-	-	-	1	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-

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

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

Count Name: 103rd Street with Falcon Drive
Site Code:
Start Date: 03/17/2018

Turning Movement Peak Hour Data (12:00 PM)

Start Time	103rd Street Eastbound						103rd Street Westbound						Falcon Drive Northbound						Falcon Drive 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	
12:00 PM	0	6	47	11	0	64	0	3	37	0	0	40	0	5	1	1	0	7	0	3	0	7	0	10	121
12:15 PM	0	7	36	10	0	53	0	2	39	1	0	42	0	5	0	2	0	7	0	3	1	3	0	7	109
12:30 PM	0	3	28	6	0	37	0	2	39	0	0	41	0	10	0	0	0	10	0	0	0	8	0	8	96
12:45 PM	0	8	31	8	0	47	0	4	40	2	0	46	0	6	1	3	0	10	0	0	0	11	0	11	114
Total	0	24	142	35	0	201	0	11	155	3	0	169	0	26	2	6	0	34	0	6	1	29	0	36	440
Approach %	0.0	11.9	70.6	17.4	-	-	0.0	6.5	91.7	1.8	-	-	0.0	76.5	5.9	17.6	-	-	0.0	16.7	2.8	80.6	-	-	-
Total %	0.0	5.5	32.3	8.0	-	45.7	0.0	2.5	35.2	0.7	-	38.4	0.0	5.9	0.5	1.4	-	7.7	0.0	1.4	0.2	6.6	-	8.2	-
PHF	0.000	0.750	0.755	0.795	-	0.785	0.000	0.688	0.969	0.375	-	0.918	0.000	0.650	0.500	0.500	-	0.850	0.000	0.500	0.250	0.659	-	0.818	0.909
Lights	0	23	142	35	-	200	0	11	154	3	-	168	0	26	2	6	-	34	0	6	1	28	-	35	437
% Lights	-	95.8	100.0	100.0	-	99.5	-	100.0	99.4	100.0	-	99.4	-	100.0	100.0	100.0	-	100.0	-	100.0	100.0	96.6	-	97.2	99.3
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	-	0.0	0.0
Single-Unit Trucks	0	1	0	0	-	1	0	0	1	0	-	1	0	0	0	0	-	0	0	0	0	1	-	1	3
% Single-Unit Trucks	-	4.2	0.0	0.0	-	0.5	-	0.0	0.6	0.0	-	0.6	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	3.4	-	2.8	0.7
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Articulated Trucks	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Bicycles on 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: 103rd Street with Falcon Drive
Site Code:
Start Date: 03/17/2018

Turning Movement Peak Hour Data (7:00 AM)

Start Time	103rd Street Eastbound						103rd Street Westbound						Falcon Drive Northbound						Falcon Drive 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	2	41	3	0	46	0	2	57	0	0	59	0	23	0	3	0	26	0	2	0	8	0	10	141
7:15 AM	0	3	39	5	0	47	0	1	43	0	0	44	0	11	0	6	0	17	0	1	0	5	0	6	114
7:30 AM	0	0	30	3	0	33	0	2	29	0	0	31	0	10	1	3	0	14	0	0	0	5	1	5	83
7:45 AM	0	2	44	6	0	52	0	2	39	1	0	42	0	8	0	3	0	11	0	1	0	4	0	5	110
Total	0	7	154	17	0	178	0	7	168	1	0	176	0	52	1	15	0	68	0	4	0	22	1	26	448
Approach %	0.0	3.9	86.5	9.6	-	-	0.0	4.0	95.5	0.6	-	-	0.0	76.5	1.5	22.1	-	-	0.0	15.4	0.0	84.6	-	-	-
Total %	0.0	1.6	34.4	3.8	-	39.7	0.0	1.6	37.5	0.2	-	39.3	0.0	11.6	0.2	3.3	-	15.2	0.0	0.9	0.0	4.9	-	5.8	-
PHF	0.000	0.583	0.875	0.708	-	0.856	0.000	0.875	0.737	0.250	-	0.746	0.000	0.565	0.250	0.625	-	0.654	0.000	0.500	0.000	0.688	-	0.650	0.794
Lights	0	7	141	16	-	164	0	6	168	0	-	174	0	51	0	15	-	66	0	4	0	22	-	26	430
% Lights	-	100.0	91.6	94.1	-	92.1	-	85.7	100.0	0.0	-	98.9	-	98.1	0.0	100.0	-	97.1	-	100.0	-	100.0	-	100.0	96.0
Buses	0	0	11	1	-	12	0	1	0	1	-	2	0	1	0	0	-	1	0	0	0	0	-	0	15
% Buses	-	0.0	7.1	5.9	-	6.7	-	14.3	0.0	100.0	-	1.1	-	1.9	0.0	0.0	-	1.5	-	0.0	-	0.0	-	0.0	3.3
Single-Unit Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Single-Unit Trucks	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	-	0.0	-	0.0	0.0
Articulated Trucks	0	0	2	0	-	2	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	2
% Articulated Trucks	-	0.0	1.3	0.0	-	1.1	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	-	0.0	-	0.0	0.4
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	1	0	-	1	0	0	0	0	-	0	1
% Bicycles on Road	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	100.0	0.0	-	1.5	-	0.0	-	0.0	-	0.0	0.2
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-

Kenig Lindgren O'Hara Aboona, Inc.
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(847)518-9990

Count Name: 103rd Street with Falcon Drive
Site Code:
Start Date: 03/17/2018

Turning Movement Peak Hour Data (4:45 PM)

Start Time	103rd Street Eastbound						103rd Street Westbound						Falcon Drive Northbound						Falcon Drive 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	
4:45 PM	0	8	59	10	0	77	0	3	58	1	0	62	0	9	1	2	0	12	0	0	0	3	0	3	154
5:00 PM	0	10	67	12	0	89	0	5	55	1	0	61	0	3	0	2	0	5	0	2	0	5	0	7	162
5:15 PM	0	10	48	9	0	67	0	5	74	2	1	81	0	9	0	2	0	11	0	0	0	7	0	7	166
5:30 PM	0	6	52	14	0	72	0	3	50	2	0	55	0	6	0	3	0	9	0	0	0	2	0	2	138
Total	0	34	226	45	0	305	0	16	237	6	1	259	0	27	1	9	0	37	0	2	0	17	0	19	620
Approach %	0.0	11.1	74.1	14.8	-	-	0.0	6.2	91.5	2.3	-	-	0.0	73.0	2.7	24.3	-	-	0.0	10.5	0.0	89.5	-	-	-
Total %	0.0	5.5	36.5	7.3	-	49.2	0.0	2.6	38.2	1.0	-	41.8	0.0	4.4	0.2	1.5	-	6.0	0.0	0.3	0.0	2.7	-	3.1	-
PHF	0.000	0.850	0.843	0.804	-	0.857	0.000	0.800	0.801	0.750	-	0.799	0.000	0.750	0.250	0.750	-	0.771	0.000	0.250	0.000	0.607	-	0.679	0.934
Lights	0	34	223	45	-	302	0	16	237	6	-	259	0	27	1	9	-	37	0	2	0	17	-	19	617
% Lights	-	100.0	98.7	100.0	-	99.0	-	100.0	100.0	100.0	-	100.0	-	100.0	100.0	100.0	-	100.0	-	100.0	-	100.0	-	100.0	99.5
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
Single-Unit Trucks	0	0	3	0	-	3	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	3
% Single-Unit Trucks	-	0.0	1.3	0.0	-	1.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	-	0.0	-	0.0	0.5
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Articulated Trucks	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	-	0.0	-	0.0	0.0
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
Pedestrians	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% 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: 103rd Street with McGrath Lane
Site Code:
Start Date: 03/17/2018

Turning Movement Data

Start Time	103rd Street Eastbound					103rd Street Westbound					McGrath Lane Southbound					
	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Right	Peds	App. Total	Int. Total
12:00 PM	0	3	48	0	51	0	40	0	0	40	0	1	1	0	2	93
12:15 PM	0	6	37	0	43	0	35	0	0	35	0	1	3	0	4	82
12:30 PM	0	2	23	0	25	0	37	1	0	38	0	1	4	0	5	68
12:45 PM	0	1	35	0	36	0	45	1	0	46	0	0	2	0	2	84
Hourly Total	0	12	143	0	155	0	157	2	0	159	0	3	10	0	13	327
1:00 PM	1	2	30	0	33	0	35	2	0	37	0	2	2	1	4	74
1:15 PM	0	3	37	0	40	0	46	0	0	46	0	1	0	0	1	87
1:30 PM	0	2	44	0	46	0	38	1	0	39	0	0	2	0	2	87
1:45 PM	0	3	33	0	36	0	51	2	0	53	0	0	5	0	5	94
Hourly Total	1	10	144	0	155	0	170	5	0	175	0	3	9	1	12	342
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7:00 AM	0	2	45	0	47	0	59	0	0	59	0	0	3	1	3	109
7:15 AM	0	0	44	0	44	0	39	0	0	39	0	1	2	0	3	86
7:30 AM	0	2	33	0	35	0	30	0	0	30	0	1	0	1	1	66
7:45 AM	1	2	44	0	47	0	40	0	0	40	0	1	4	0	5	92
Hourly Total	1	6	166	0	173	0	168	0	0	168	0	3	9	2	12	353
8:00 AM	0	2	42	0	44	0	38	0	0	38	0	0	4	0	4	86
8:15 AM	0	5	36	0	41	0	24	0	0	24	0	1	0	0	1	66
8:30 AM	0	0	42	0	42	0	32	2	0	34	0	3	5	0	8	84
8:45 AM	0	1	59	0	60	0	66	0	0	66	0	1	2	0	3	129
Hourly Total	0	8	179	0	187	0	160	2	0	162	0	5	11	0	16	365
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2:30 PM	0	3	37	0	40	0	40	0	0	40	1	0	2	0	3	83
2:45 PM	0	3	36	0	39	0	34	0	0	34	0	1	2	0	3	76
Hourly Total	0	6	73	0	79	0	74	0	0	74	1	1	4	0	6	159
3:00 PM	0	2	51	0	53	0	39	0	0	39	0	2	4	0	6	98
3:15 PM	0	4	49	0	53	0	57	1	0	58	0	0	2	0	2	113
3:30 PM	0	6	45	0	51	0	51	1	0	52	0	0	2	0	2	105
3:45 PM	0	6	40	0	46	0	44	1	0	45	0	2	6	0	8	99
Hourly Total	0	18	185	0	203	0	191	3	0	194	0	4	14	0	18	415
4:00 PM	0	2	41	0	43	0	48	0	0	48	0	2	4	0	6	97
4:15 PM	0	2	41	0	43	0	48	2	0	50	0	0	1	0	1	94
4:30 PM	0	5	54	0	59	0	52	1	0	53	0	1	1	0	2	114
4:45 PM	0	2	59	0	61	0	58	2	0	60	0	3	2	0	5	126
Hourly Total	0	11	195	0	206	0	206	5	0	211	0	6	8	0	14	431
5:00 PM	0	6	64	0	70	0	60	0	0	60	0	2	1	0	3	133
5:15 PM	0	4	48	0	52	0	79	3	0	82	0	0	4	0	4	138
5:30 PM	0	7	48	0	55	0	54	0	0	54	0	3	1	0	4	113

5:45 PM	0	1	71	0	72	0	68	0	0	68	0	0	6	0	6	146
Hourly Total	0	18	231	0	249	0	261	3	0	264	0	5	12	0	17	530
Grand Total	2	89	1316	0	1407	0	1387	20	0	1407	1	30	77	3	108	2922
Approach %	0.1	6.3	93.5	-	-	0.0	98.6	1.4	-	-	0.9	27.8	71.3	-	-	-
Total %	0.1	3.0	45.0	-	48.2	0.0	47.5	0.7	-	48.2	0.0	1.0	2.6	-	3.7	-
Lights	2	86	1280	-	1368	0	1359	19	-	1378	1	29	77	-	107	2853
% Lights	100.0	96.6	97.3	-	97.2	-	98.0	95.0	-	97.9	100.0	96.7	100.0	-	99.1	97.6
Buses	0	2	25	-	27	0	23	1	-	24	0	0	0	-	0	51
% Buses	0.0	2.2	1.9	-	1.9	-	1.7	5.0	-	1.7	0.0	0.0	0.0	-	0.0	1.7
Single-Unit Trucks	0	1	11	-	12	0	5	0	-	5	0	1	0	-	1	18
% Single-Unit Trucks	0.0	1.1	0.8	-	0.9	-	0.4	0.0	-	0.4	0.0	3.3	0.0	-	0.9	0.6
Articulated Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Articulated Trucks	0.0	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0
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	-	0.0	0.0
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	3	-	-
% 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: 103rd Street with McGrath Lane
Site Code:
Start Date: 03/17/2018

Turning Movement Peak Hour Data (12:00 PM)

Start Time	103rd Street Eastbound					103rd Street Westbound					McGrath Lane Southbound					
	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Right	Peds	App. Total	Int. Total
12:00 PM	0	3	48	0	51	0	40	0	0	40	0	1	1	0	2	93
12:15 PM	0	6	37	0	43	0	35	0	0	35	0	1	3	0	4	82
12:30 PM	0	2	23	0	25	0	37	1	0	38	0	1	4	0	5	68
12:45 PM	0	1	35	0	36	0	45	1	0	46	0	0	2	0	2	84
Total	0	12	143	0	155	0	157	2	0	159	0	3	10	0	13	327
Approach %	0.0	7.7	92.3	-	-	0.0	98.7	1.3	-	-	0.0	23.1	76.9	-	-	-
Total %	0.0	3.7	43.7	-	47.4	0.0	48.0	0.6	-	48.6	0.0	0.9	3.1	-	4.0	-
PHF	0.000	0.500	0.745	-	0.760	0.000	0.872	0.500	-	0.864	0.000	0.750	0.625	-	0.650	0.879
Lights	0	12	142	-	154	0	156	2	-	158	0	3	10	-	13	325
% Lights	-	100.0	99.3	-	99.4	-	99.4	100.0	-	99.4	-	100.0	100.0	-	100.0	99.4
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	1	-	1	0	1	0	-	1	0	0	0	-	0	2
% Single-Unit Trucks	-	0.0	0.7	-	0.6	-	0.6	0.0	-	0.6	-	0.0	0.0	-	0.0	0.6
Articulated Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Articulated Trucks	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
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: 103rd Street with McGrath Lane
Site Code:
Start Date: 03/17/2018

Turning Movement Peak Hour Data (7:00 AM)

Start Time	103rd Street Eastbound					103rd Street Westbound					McGrath Lane 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	2	45	0	47	0	59	0	0	59	0	0	3	1	3	109
7:15 AM	0	0	44	0	44	0	39	0	0	39	0	1	2	0	3	86
7:30 AM	0	2	33	0	35	0	30	0	0	30	0	1	0	1	1	66
7:45 AM	1	2	44	0	47	0	40	0	0	40	0	1	4	0	5	92
Total	1	6	166	0	173	0	168	0	0	168	0	3	9	2	12	353
Approach %	0.6	3.5	96.0	-	-	0.0	100.0	0.0	-	-	0.0	25.0	75.0	-	-	-
Total %	0.3	1.7	47.0	-	49.0	0.0	47.6	0.0	-	47.6	0.0	0.8	2.5	-	3.4	-
PHF	0.250	0.750	0.922	-	0.920	0.000	0.712	0.000	-	0.712	0.000	0.750	0.563	-	0.600	0.810
Lights	1	5	153	-	159	0	165	0	-	165	0	3	9	-	12	336
% Lights	100.0	83.3	92.2	-	91.9	-	98.2	-	-	98.2	-	100.0	100.0	-	100.0	95.2
Buses	0	1	10	-	11	0	3	0	-	3	0	0	0	-	0	14
% Buses	0.0	16.7	6.0	-	6.4	-	1.8	-	-	1.8	-	0.0	0.0	-	0.0	4.0
Single-Unit Trucks	0	0	3	-	3	0	0	0	-	0	0	0	0	-	0	3
% Single-Unit Trucks	0.0	0.0	1.8	-	1.7	-	0.0	-	-	0.0	-	0.0	0.0	-	0.0	0.8
Articulated Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Articulated Trucks	0.0	0.0	0.0	-	0.0	-	0.0	-	-	0.0	-	0.0	0.0	-	0.0	0.0
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	-	-	-	-	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: 103rd Street with McGrath Lane
Site Code:
Start Date: 03/17/2018

Turning Movement Peak Hour Data (4:45 PM)

Start Time	103rd Street Eastbound					103rd Street Westbound					McGrath Lane Southbound					
	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Right	Peds	App. Total	Int. Total
4:45 PM	0	2	59	0	61	0	58	2	0	60	0	3	2	0	5	126
5:00 PM	0	6	64	0	70	0	60	0	0	60	0	2	1	0	3	133
5:15 PM	0	4	48	0	52	0	79	3	0	82	0	0	4	0	4	138
5:30 PM	0	7	48	0	55	0	54	0	0	54	0	3	1	0	4	113
Total	0	19	219	0	238	0	251	5	0	256	0	8	8	0	16	510
Approach %	0.0	8.0	92.0	-	-	0.0	98.0	2.0	-	-	0.0	50.0	50.0	-	-	-
Total %	0.0	3.7	42.9	-	46.7	0.0	49.2	1.0	-	50.2	0.0	1.6	1.6	-	3.1	-
PHF	0.000	0.679	0.855	-	0.850	0.000	0.794	0.417	-	0.780	0.000	0.667	0.500	-	0.800	0.924
Lights	0	19	215	-	234	0	251	5	-	256	0	7	8	-	15	505
% Lights	-	100.0	98.2	-	98.3	-	100.0	100.0	-	100.0	-	87.5	100.0	-	93.8	99.0
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	0	4	-	4	0	0	0	-	0	0	1	0	-	1	5
% Single-Unit Trucks	-	0.0	1.8	-	1.7	-	0.0	0.0	-	0.0	-	12.5	0.0	-	6.3	1.0
Articulated Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Articulated Trucks	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
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: Book Road with Wagner Road
Site Code:
Start Date: 03/17/2018

Turning Movement Data

Start Time	Wagner Road Eastbound						Wagner Road Westbound						Book Road Northbound						Book Road 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	
12:00 PM	0	2	0	0	0	2	0	0	0	0	0	0	0	0	87	0	0	87	0	0	99	6	0	105	194
12:15 PM	0	4	0	1	0	5	0	0	0	0	0	0	0	0	90	0	0	90	0	0	97	3	0	100	195
12:30 PM	0	3	0	1	0	4	0	0	0	0	0	0	0	0	77	0	0	77	0	0	84	6	0	90	171
12:45 PM	0	7	0	2	0	9	0	1	0	0	3	1	0	0	80	2	0	82	0	1	86	9	1	96	188
Hourly Total	0	16	0	4	0	20	0	1	0	0	3	1	0	0	334	2	0	336	0	1	366	24	1	391	748
1:00 PM	0	4	0	0	0	4	0	1	0	0	2	1	0	0	80	0	0	80	0	0	83	2	0	85	170
1:15 PM	0	8	0	1	0	9	0	0	0	0	1	0	0	1	71	0	0	72	0	0	86	5	0	91	172
1:30 PM	0	4	0	0	0	4	0	0	0	0	0	0	0	0	85	0	0	85	0	0	97	3	0	100	189
1:45 PM	0	5	0	1	0	6	0	0	2	0	0	2	0	3	94	1	0	98	0	0	86	7	0	93	199
Hourly Total	0	21	0	2	0	23	0	1	2	0	3	3	0	4	330	1	0	335	0	0	352	17	0	369	730
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7:00 AM	0	8	0	0	0	8	0	0	0	1	0	1	0	0	193	0	0	193	0	1	74	5	0	80	282
7:15 AM	0	8	0	1	0	9	0	0	0	1	0	1	0	1	165	1	0	167	0	1	104	3	0	108	285
7:30 AM	0	15	0	0	0	15	0	2	0	1	0	3	0	1	102	0	0	103	0	0	52	2	0	54	175
7:45 AM	0	8	0	1	0	9	0	0	0	0	3	0	0	1	98	3	0	102	0	0	58	1	0	59	170
Hourly Total	0	39	0	2	0	41	0	2	0	3	3	5	0	3	558	4	0	565	0	2	288	11	0	301	912
8:00 AM	0	7	0	0	0	7	0	0	1	0	0	1	0	1	111	0	0	112	0	0	57	5	0	62	182
8:15 AM	0	11	0	0	0	11	0	0	0	0	0	0	0	1	85	0	0	86	0	0	70	2	0	72	169
8:30 AM	0	8	0	1	0	9	0	0	0	0	0	0	0	1	100	0	0	101	0	0	37	2	0	39	149
8:45 AM	0	10	0	0	0	10	0	0	0	0	0	0	0	0	107	0	0	107	0	0	76	1	0	77	194
Hourly Total	0	36	0	1	0	37	0	0	1	0	0	1	0	3	403	0	0	406	0	0	240	10	0	250	694
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2:30 PM	0	3	0	1	0	4	0	0	0	1	0	1	0	1	47	0	0	48	0	0	81	4	0	85	138
2:45 PM	0	4	1	0	0	5	0	0	0	0	0	0	0	0	77	0	0	77	0	0	77	1	0	78	160
Hourly Total	0	7	1	1	0	9	0	0	0	1	0	1	0	1	124	0	0	125	0	0	158	5	0	163	298
3:00 PM	0	3	0	1	0	4	0	0	0	0	5	0	0	0	84	0	0	84	0	0	102	9	0	111	199
3:15 PM	0	3	0	1	0	4	0	0	0	1	3	1	0	1	65	0	0	66	0	0	122	6	0	128	199
3:30 PM	0	4	0	1	0	5	0	0	0	0	2	0	0	0	83	0	0	83	0	1	119	5	0	125	213
3:45 PM	0	5	0	1	0	6	0	0	0	1	1	1	0	1	95	0	0	96	0	0	114	9	0	123	226
Hourly Total	0	15	0	4	0	19	0	0	0	2	11	2	0	2	327	0	0	329	0	1	457	29	0	487	837
4:00 PM	0	5	0	0	0	5	0	0	0	0	0	0	0	0	90	0	0	90	0	1	105	7	0	113	208
4:15 PM	0	5	0	0	0	5	0	0	0	1	0	1	0	0	91	0	0	91	0	0	111	10	0	121	218
4:30 PM	0	5	0	1	0	6	0	0	0	0	1	0	0	0	109	0	0	109	0	1	124	6	0	131	246
4:45 PM	0	8	0	1	0	9	0	0	0	1	0	1	0	2	106	0	0	108	0	0	129	16	0	145	263
Hourly Total	0	23	0	2	0	25	0	0	0	2	1	2	0	2	396	0	0	398	0	2	469	39	0	510	935
5:00 PM	0	8	0	1	0	9	0	0	0	1	0	1	0	0	90	0	0	90	0	0	141	11	0	152	252
5:15 PM	0	6	0	2	0	8	0	0	0	0	0	0	0	1	123	0	0	124	0	3	158	11	0	172	304

5:30 PM	0	6	0	1	0	7	0	0	0	0	0	0	0	1	93	0	0	94	0	0	137	4	0	141	242
5:45 PM	0	5	0	0	0	5	0	0	0	0	2	0	0	1	109	0	0	110	0	1	174	7	0	182	297
Hourly Total	0	25	0	4	0	29	0	0	0	1	2	1	0	3	415	0	0	418	0	4	610	33	0	647	1095
Grand Total	0	182	1	20	0	203	0	4	3	9	23	16	0	18	2887	7	0	2912	0	10	2940	168	1	3118	6249
Approach %	0.0	89.7	0.5	9.9	-	-	0.0	25.0	18.8	56.3	-	-	0.0	0.6	99.1	0.2	-	-	0.0	0.3	94.3	5.4	-	-	-
Total %	0.0	2.9	0.0	0.3	-	3.2	0.0	0.1	0.0	0.1	-	0.3	0.0	0.3	46.2	0.1	-	46.6	0.0	0.2	47.0	2.7	-	49.9	-
Lights	0	176	0	16	-	192	0	4	2	8	-	14	0	14	2839	7	-	2860	0	10	2891	163	-	3064	6130
% Lights	-	96.7	0.0	80.0	-	94.6	-	100.0	66.7	88.9	-	87.5	-	77.8	98.3	100.0	-	98.2	-	100.0	98.3	97.0	-	98.3	98.1
Buses	0	1	0	2	-	3	0	0	0	0	-	0	0	4	36	0	-	40	0	0	30	0	-	30	73
% Buses	-	0.5	0.0	10.0	-	1.5	-	0.0	0.0	0.0	-	0.0	-	22.2	1.2	0.0	-	1.4	-	0.0	1.0	0.0	-	1.0	1.2
Single-Unit Trucks	0	4	0	2	-	6	0	0	1	1	-	2	0	0	12	0	-	12	0	0	19	5	-	24	44
% Single-Unit Trucks	-	2.2	0.0	10.0	-	3.0	-	0.0	33.3	11.1	-	12.5	-	0.0	0.4	0.0	-	0.4	-	0.0	0.6	3.0	-	0.8	0.7
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Articulated Trucks	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Bicycles on Road	0	1	1	0	-	2	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	2
% Bicycles on Road	-	0.5	100.0	0.0	-	1.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Pedestrians	-	-	-	-	0	-	-	-	-	-	23	-	-	-	-	-	0	-	-	-	-	-	1	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-

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

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

Count Name: Book Road with Wagner Road
Site Code:
Start Date: 03/17/2018

Turning Movement Peak Hour Data (12:00 PM)

Start Time	Wagner Road Eastbound						Wagner Road Westbound						Book Road Northbound						Book Road 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	
12:00 PM	0	2	0	0	0	2	0	0	0	0	0	0	0	0	87	0	0	87	0	0	99	6	0	105	194
12:15 PM	0	4	0	1	0	5	0	0	0	0	0	0	0	0	90	0	0	90	0	0	97	3	0	100	195
12:30 PM	0	3	0	1	0	4	0	0	0	0	0	0	0	0	77	0	0	77	0	0	84	6	0	90	171
12:45 PM	0	7	0	2	0	9	0	1	0	0	3	1	0	0	80	2	0	82	0	1	86	9	1	96	188
Total	0	16	0	4	0	20	0	1	0	0	3	1	0	0	334	2	0	336	0	1	366	24	1	391	748
Approach %	0.0	80.0	0.0	20.0	-	-	0.0	100.0	0.0	0.0	-	-	0.0	0.0	99.4	0.6	-	-	0.0	0.3	93.6	6.1	-	-	-
Total %	0.0	2.1	0.0	0.5	-	2.7	0.0	0.1	0.0	0.0	-	0.1	0.0	0.0	44.7	0.3	-	44.9	0.0	0.1	48.9	3.2	-	52.3	-
PHF	0.000	0.571	0.000	0.500	-	0.556	0.000	0.250	0.000	0.000	-	0.250	0.000	0.000	0.928	0.250	-	0.933	0.000	0.250	0.924	0.667	-	0.931	0.959
Lights	0	14	0	3	-	17	0	1	0	0	-	1	0	0	333	2	-	335	0	1	364	22	-	387	740
% Lights	-	87.5	-	75.0	-	85.0	-	100.0	-	-	-	100.0	-	-	99.7	100.0	-	99.7	-	100.0	99.5	91.7	-	99.0	98.9
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
Single-Unit Trucks	0	1	0	1	-	2	0	0	0	0	-	0	0	0	1	0	-	1	0	0	2	2	-	4	7
% Single-Unit Trucks	-	6.3	-	25.0	-	10.0	-	0.0	-	-	-	0.0	-	-	0.3	0.0	-	0.3	-	0.0	0.5	8.3	-	1.0	0.9
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Articulated Trucks	-	0.0	-	0.0	-	0.0	-	0.0	-	-	-	0.0	-	-	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Bicycles on Road	0	1	0	0	-	1	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	1
% Bicycles on Road	-	6.3	-	0.0	-	5.0	-	0.0	-	-	-	0.0	-	-	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.1
Pedestrians	-	-	-	-	0	-	-	-	-	-	3	-	-	-	-	-	0	-	-	-	-	-	1	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-

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

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

Count Name: Book Road with Wagner Road
Site Code:
Start Date: 03/17/2018

Turning Movement Peak Hour Data (7:00 AM)

Start Time	Wagner Road Eastbound						Wagner Road Westbound						Book Road Northbound						Book 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	8	0	0	0	8	0	0	0	1	0	1	0	0	193	0	0	193	0	1	74	5	0	80	282
7:15 AM	0	8	0	1	0	9	0	0	0	1	0	1	0	1	165	1	0	167	0	1	104	3	0	108	285
7:30 AM	0	15	0	0	0	15	0	2	0	1	0	3	0	1	102	0	0	103	0	0	52	2	0	54	175
7:45 AM	0	8	0	1	0	9	0	0	0	0	3	0	0	1	98	3	0	102	0	0	58	1	0	59	170
Total	0	39	0	2	0	41	0	2	0	3	3	5	0	3	558	4	0	565	0	2	288	11	0	301	912
Approach %	0.0	95.1	0.0	4.9	-	-	0.0	40.0	0.0	60.0	-	-	0.0	0.5	98.8	0.7	-	-	0.0	0.7	95.7	3.7	-	-	-
Total %	0.0	4.3	0.0	0.2	-	4.5	0.0	0.2	0.0	0.3	-	0.5	0.0	0.3	61.2	0.4	-	62.0	0.0	0.2	31.6	1.2	-	33.0	-
PHF	0.000	0.650	0.000	0.500	-	0.683	0.000	0.250	0.000	0.750	-	0.417	0.000	0.750	0.723	0.333	-	0.732	0.000	0.500	0.692	0.550	-	0.697	0.800
Lights	0	38	0	2	-	40	0	2	0	3	-	5	0	1	551	4	-	556	0	2	276	11	-	289	890
% Lights	-	97.4	-	100.0	-	97.6	-	100.0	-	100.0	-	100.0	-	33.3	98.7	100.0	-	98.4	-	100.0	95.8	100.0	-	96.0	97.6
Buses	0	1	0	0	-	1	0	0	0	0	-	0	0	2	6	0	-	8	0	0	12	0	-	12	21
% Buses	-	2.6	-	0.0	-	2.4	-	0.0	-	0.0	-	0.0	-	66.7	1.1	0.0	-	1.4	-	0.0	4.2	0.0	-	4.0	2.3
Single-Unit Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	1	0	-	1	0	0	0	0	-	0	1
% Single-Unit Trucks	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	0.2	0.0	-	0.2	-	0.0	0.0	0.0	-	0.0	0.1
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Articulated Trucks	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0
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	-	-	-	-	-	3	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% 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: Book Road with Wagner Road
Site Code:
Start Date: 03/17/2018

Turning Movement Peak Hour Data (4:45 PM)

Start Time	Wagner Road Eastbound						Wagner Road Westbound						Book Road Northbound						Book 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
4:45 PM	0	8	0	1	0	9	0	0	0	1	0	1	0	2	106	0	0	108	0	0	129	16	0	145	263
5:00 PM	0	8	0	1	0	9	0	0	0	1	0	1	0	0	90	0	0	90	0	0	141	11	0	152	252
5:15 PM	0	6	0	2	0	8	0	0	0	0	0	0	0	1	123	0	0	124	0	3	158	11	0	172	304
5:30 PM	0	6	0	1	0	7	0	0	0	0	0	0	0	1	93	0	0	94	0	0	137	4	0	141	242
Total	0	28	0	5	0	33	0	0	0	2	0	2	0	4	412	0	0	416	0	3	565	42	0	610	1061
Approach %	0.0	84.8	0.0	15.2	-	-	0.0	0.0	0.0	100.0	-	-	0.0	1.0	99.0	0.0	-	-	0.0	0.5	92.6	6.9	-	-	-
Total %	0.0	2.6	0.0	0.5	-	3.1	0.0	0.0	0.0	0.2	-	0.2	0.0	0.4	38.8	0.0	-	39.2	0.0	0.3	53.3	4.0	-	57.5	-
PHF	0.000	0.875	0.000	0.625	-	0.917	0.000	0.000	0.000	0.500	-	0.500	0.000	0.500	0.837	0.000	-	0.839	0.000	0.250	0.894	0.656	-	0.887	0.873
Lights	0	28	0	5	-	33	0	0	0	2	-	2	0	4	409	0	-	413	0	3	563	40	-	606	1054
% Lights	-	100.0	-	100.0	-	100.0	-	-	-	100.0	-	100.0	-	100.0	99.3	-	-	99.3	-	100.0	99.6	95.2	-	99.3	99.3
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	0	1	0	-	1	0	0	0	0	-	0	1
% Buses	-	0.0	-	0.0	-	0.0	-	-	-	0.0	-	0.0	-	0.0	0.2	-	-	0.2	-	0.0	0.0	0.0	-	0.0	0.1
Single-Unit Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	2	0	-	2	0	0	2	2	-	4	6
% Single-Unit Trucks	-	0.0	-	0.0	-	0.0	-	-	-	0.0	-	0.0	-	0.0	0.5	-	-	0.5	-	0.0	0.4	4.8	-	0.7	0.6
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Articulated Trucks	-	0.0	-	0.0	-	0.0	-	-	-	0.0	-	0.0	-	0.0	0.0	-	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0
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
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: McGrath Lane with Partlow Drive
Site Code:
Start Date: 03/17/2018

Turning Movement Data

Start Time	Partlow Drive Eastbound					McGrath Lane Northbound					McGrath Lane Southbound					
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	Int. Total
12:00 PM	0	2	1	0	3	0	0	3	0	3	0	1	2	0	3	9
12:15 PM	0	1	1	0	2	0	0	4	0	4	0	3	1	0	4	10
12:30 PM	0	1	0	0	1	0	1	1	0	2	0	3	4	0	7	10
12:45 PM	1	0	0	0	1	0	0	0	0	0	0	1	1	0	2	3
Hourly Total	1	4	2	0	7	0	1	8	0	9	0	8	8	0	16	32
1:00 PM	0	1	0	0	1	0	1	3	0	4	0	1	2	0	3	8
1:15 PM	0	2	1	0	3	0	0	2	0	2	0	1	1	0	2	7
1:30 PM	0	1	0	0	1	0	1	2	0	3	0	1	1	0	2	6
1:45 PM	0	1	0	0	1	0	1	2	0	3	0	3	5	0	8	12
Hourly Total	0	5	1	0	6	0	3	9	0	12	0	6	9	0	15	33
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7:00 AM	0	2	0	0	2	0	0	1	0	1	0	1	3	0	4	7
7:15 AM	0	3	0	0	3	0	0	0	0	0	0	2	1	0	3	6
7:30 AM	0	3	0	0	3	0	1	2	0	3	0	1	1	0	2	8
7:45 AM	0	2	1	1	3	0	0	1	0	1	0	3	0	0	3	7
Hourly Total	0	10	1	1	11	0	1	4	0	5	0	7	5	0	12	28
8:00 AM	0	2	0	0	2	0	0	2	0	2	0	1	1	0	2	6
8:15 AM	0	3	1	0	4	0	0	0	0	0	0	1	0	0	1	5
8:30 AM	0	5	3	0	8	0	0	1	0	1	0	2	0	0	2	11
8:45 AM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	2
Hourly Total	0	11	4	0	15	0	0	3	0	3	0	5	1	0	6	24
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2:30 PM	0	2	0	0	2	0	1	2	0	3	0	1	3	0	4	9
2:45 PM	0	2	0	0	2	0	0	1	0	1	0	2	0	0	2	5
Hourly Total	0	4	0	0	4	0	1	3	0	4	0	3	3	0	6	14
3:00 PM	0	1	0	0	1	0	0	2	0	2	0	3	2	0	5	8
3:15 PM	0	2	0	0	2	0	0	5	0	5	0	1	1	0	2	9
3:30 PM	0	0	1	0	1	0	0	3	0	3	0	2	3	0	5	9
3:45 PM	0	1	0	0	1	0	0	5	0	5	0	4	4	0	8	14
Hourly Total	0	4	1	0	5	0	0	15	0	15	0	10	10	0	20	40
4:00 PM	0	1	2	0	3	0	0	0	0	0	0	2	2	0	4	7
4:15 PM	0	0	1	1	1	0	1	4	0	5	0	1	2	0	3	9
4:30 PM	0	3	2	0	5	0	1	6	0	7	0	3	0	0	3	15
4:45 PM	0	0	0	0	0	0	1	4	0	5	0	3	2	0	5	10
Hourly Total	0	4	5	1	9	0	3	14	0	17	0	9	6	0	15	41
5:00 PM	0	2	0	0	2	0	2	3	0	5	0	1	3	0	4	11
5:15 PM	0	1	1	0	2	0	2	4	0	6	0	2	4	0	6	14
5:30 PM	0	2	0	0	2	0	0	4	0	4	0	1	2	0	3	9

5:45 PM	0	0	1	0	1	0	0	2	0	2	0	3	4	0	7	10
Hourly Total	0	5	2	0	7	0	4	13	0	17	0	7	13	0	20	44
Grand Total	1	47	16	2	64	0	13	69	0	82	0	55	55	0	110	256
Approach %	1.6	73.4	25.0	-	-	0.0	15.9	84.1	-	-	0.0	50.0	50.0	-	-	-
Total %	0.4	18.4	6.3	-	25.0	0.0	5.1	27.0	-	32.0	0.0	21.5	21.5	-	43.0	-
Lights	1	41	16	-	58	0	12	64	-	76	0	54	53	-	107	241
% Lights	100.0	87.2	100.0	-	90.6	-	92.3	92.8	-	92.7	-	98.2	96.4	-	97.3	94.1
Buses	0	3	0	-	3	0	1	3	-	4	0	0	0	-	0	7
% Buses	0.0	6.4	0.0	-	4.7	-	7.7	4.3	-	4.9	-	0.0	0.0	-	0.0	2.7
Single-Unit Trucks	0	2	0	-	2	0	0	0	-	0	0	0	0	-	0	2
% Single-Unit Trucks	0.0	4.3	0.0	-	3.1	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.8
Articulated Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Articulated Trucks	0.0	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Bicycles on Road	0	1	0	-	1	0	0	2	-	2	0	1	2	-	3	6
% Bicycles on Road	0.0	2.1	0.0	-	1.6	-	0.0	2.9	-	2.4	-	1.8	3.6	-	2.7	2.3
Pedestrians	-	-	-	2	-	-	-	-	0	-	-	-	-	0	-	-
% 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: McGrath Lane with Partlow Drive
Site Code:
Start Date: 03/17/2018

Turning Movement Peak Hour Data (12:00 PM)

Start Time	Partlow Drive Eastbound					McGrath Lane Northbound					McGrath Lane Southbound					
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	Int. Total
12:00 PM	0	2	1	0	3	0	0	3	0	3	0	1	2	0	3	9
12:15 PM	0	1	1	0	2	0	0	4	0	4	0	3	1	0	4	10
12:30 PM	0	1	0	0	1	0	1	1	0	2	0	3	4	0	7	10
12:45 PM	1	0	0	0	1	0	0	0	0	0	0	1	1	0	2	3
Total	1	4	2	0	7	0	1	8	0	9	0	8	8	0	16	32
Approach %	14.3	57.1	28.6	-	-	0.0	11.1	88.9	-	-	0.0	50.0	50.0	-	-	-
Total %	3.1	12.5	6.3	-	21.9	0.0	3.1	25.0	-	28.1	0.0	25.0	25.0	-	50.0	-
PHF	0.250	0.500	0.500	-	0.583	0.000	0.250	0.500	-	0.563	0.000	0.667	0.500	-	0.571	0.800
Lights	1	3	2	-	6	0	1	8	-	9	0	7	7	-	14	29
% Lights	100.0	75.0	100.0	-	85.7	-	100.0	100.0	-	100.0	-	87.5	87.5	-	87.5	90.6
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	0.0
Single-Unit Trucks	0	1	0	-	1	0	0	0	-	0	0	0	0	-	0	1
% Single-Unit Trucks	0.0	25.0	0.0	-	14.3	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	3.1
Articulated Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Articulated Trucks	0.0	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Bicycles on Road	0	0	0	-	0	0	0	0	-	0	0	1	1	-	2	2
% Bicycles on Road	0.0	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	12.5	12.5	-	12.5	6.3
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: McGrath Lane with Partlow Drive
Site Code:
Start Date: 03/17/2018

Turning Movement Peak Hour Data (7:00 AM)

Start Time	Partlow Drive Eastbound					McGrath Lane Northbound					McGrath Lane Southbound					
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	Int. Total
7:00 AM	0	2	0	0	2	0	0	1	0	1	0	1	3	0	4	7
7:15 AM	0	3	0	0	3	0	0	0	0	0	0	2	1	0	3	6
7:30 AM	0	3	0	0	3	0	1	2	0	3	0	1	1	0	2	8
7:45 AM	0	2	1	1	3	0	0	1	0	1	0	3	0	0	3	7
Total	0	10	1	1	11	0	1	4	0	5	0	7	5	0	12	28
Approach %	0.0	90.9	9.1	-	-	0.0	20.0	80.0	-	-	0.0	58.3	41.7	-	-	-
Total %	0.0	35.7	3.6	-	39.3	0.0	3.6	14.3	-	17.9	0.0	25.0	17.9	-	42.9	-
PHF	0.000	0.833	0.250	-	0.917	0.000	0.250	0.500	-	0.417	0.000	0.583	0.417	-	0.750	0.875
Lights	0	8	1	-	9	0	1	3	-	4	0	7	5	-	12	25
% Lights	-	80.0	100.0	-	81.8	-	100.0	75.0	-	80.0	-	100.0	100.0	-	100.0	89.3
Buses	0	1	0	-	1	0	0	1	-	1	0	0	0	-	0	2
% Buses	-	10.0	0.0	-	9.1	-	0.0	25.0	-	20.0	-	0.0	0.0	-	0.0	7.1
Single-Unit Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Single-Unit Trucks	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Articulated Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Articulated Trucks	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Bicycles on Road	0	1	0	-	1	0	0	0	-	0	0	0	0	-	0	1
% Bicycles on Road	-	10.0	0.0	-	9.1	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	3.6
Pedestrians	-	-	-	1	-	-	-	-	0	-	-	-	-	0	-	-
% 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: McGrath Lane with Partlow Drive
Site Code:
Start Date: 03/17/2018

Turning Movement Peak Hour Data (4:45 PM)

Start Time	Partlow Drive Eastbound					McGrath Lane Northbound					McGrath Lane Southbound					
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	Int. Total
4:45 PM	0	0	0	0	0	0	1	4	0	5	0	3	2	0	5	10
5:00 PM	0	2	0	0	2	0	2	3	0	5	0	1	3	0	4	11
5:15 PM	0	1	1	0	2	0	2	4	0	6	0	2	4	0	6	14
5:30 PM	0	2	0	0	2	0	0	4	0	4	0	1	2	0	3	9
Total	0	5	1	0	6	0	5	15	0	20	0	7	11	0	18	44
Approach %	0.0	83.3	16.7	-	-	0.0	25.0	75.0	-	-	0.0	38.9	61.1	-	-	-
Total %	0.0	11.4	2.3	-	13.6	0.0	11.4	34.1	-	45.5	0.0	15.9	25.0	-	40.9	-
PHF	0.000	0.625	0.250	-	0.750	0.000	0.625	0.938	-	0.833	0.000	0.583	0.688	-	0.750	0.786
Lights	0	5	1	-	6	0	5	15	-	20	0	7	11	-	18	44
% Lights	-	100.0	100.0	-	100.0	-	100.0	100.0	-	100.0	-	100.0	100.0	-	100.0	100.0
Buses	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% 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	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Single-Unit Trucks	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
Articulated Trucks	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0	0
% Articulated Trucks	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0
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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

LOCATION: Wagner E Of Walter LN
SPECIFIC LOCATION: Wagner E Of Walter LN
CITY/STATE: Naperville, IL

QC JOB #: 14654402
DIRECTION: EB/WB
DATE: Mar 21 2018 - Mar 22 2018

Start Time	Mon	Tue	Wed 21-Mar-18	Thu 22-Mar-18	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
12:00 AM			0	1		1			1	
12:15 AM			0	0		0			0	
12:30 AM			1	0		1			1	
12:45 AM			1	0		1			1	
1:00 AM			0	1		1			1	
1:15 AM			0	0		0			0	
1:30 AM			0	0		0			0	
1:45 AM			1	0		1			1	
2:00 AM			0	0		0			0	
2:15 AM			0	1		1			1	
2:30 AM			0	0		0			0	
2:45 AM			1	0		1			1	
3:00 AM			0	0		0			0	
3:15 AM			0	0		0			0	
3:30 AM			1	0		1			1	
3:45 AM			0	1		1			1	
4:00 AM			0	0		0			0	
4:15 AM			0	0		0			0	
4:30 AM			0	1		1			1	
4:45 AM			0	0		0			0	
5:00 AM			2	0		1			1	
5:15 AM			2	1		2			2	
5:30 AM			5	2		4			4	
5:45 AM			2	3		3			3	
Day Total										
% Weekday Average										
% Week Average										
AM Peak Volume										
PM Peak Volume										

Comments:

LOCATION: Wagner E Of Walter LN
SPECIFIC LOCATION: Wagner E Of Walter LN
CITY/STATE: Naperville, IL

QC JOB #: 14654402
DIRECTION: EB/WB
DATE: Mar 21 2018 - Mar 22 2018

Start Time	Mon	Tue	Wed 21-Mar-18	Thu 22-Mar-18	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
6:00 AM			10	3		7			7	
6:15 AM			1	10		6			6	
6:30 AM			**16**	**22**		**19**			**19**	
6:45 AM			10	12		11			11	
7:00 AM			9	8		9			9	
7:15 AM			11	12		12			12	
7:30 AM			13	11		12			12	
7:45 AM			5	8		7			7	
8:00 AM			11	7		9			9	
8:15 AM			8	8		8			8	
8:30 AM			9	13		11			11	
8:45 AM			8	7		8			8	
9:00 AM			8	9		9			9	
9:15 AM			5	4		5			5	
9:30 AM			10	2		6			6	
9:45 AM			7	6		7			7	
10:00 AM			8	9		9			9	
10:15 AM			7	7		7			7	
10:30 AM			5	9		7			7	
10:45 AM			10	10		10			10	
11:00 AM			10	6		8			8	
11:15 AM			5	2		4			4	
11:30 AM			15	8		12			12	
11:45 AM			10	5		8			8	
Day Total										
% Weekday Average										
% Week Average										
AM Peak Volume										
PM Peak Volume										

Comments:

LOCATION: Wagner E Of Walter LN
SPECIFIC LOCATION: Wagner E Of Walter LN
CITY/STATE: Naperville, IL

QC JOB #: 14654402
DIRECTION: EB/WB
DATE: Mar 21 2018 - Mar 22 2018

Start Time	Mon	Tue	Wed 21-Mar-18	Thu 22-Mar-18	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
12:00 PM			14	8		11			11	
12:15 PM			15	10		13			13	
12:30 PM			10	4		7			7	
12:45 PM			9	8		9			9	
1:00 PM			8	7		8			8	
1:15 PM			8	10		9			9	
1:30 PM			8	6		7			7	
1:45 PM			8	5		7			7	
2:00 PM			13	12		13			13	
2:15 PM			7	11		9			9	
2:30 PM			7	11		9			9	
2:45 PM			6	7		7			7	
3:00 PM			10	10		10			10	
3:15 PM			8	11		10			10	
3:30 PM			10	6		8			8	
3:45 PM			11	12		12			12	
4:00 PM			13	15		14			14	
4:15 PM			11	**18**		**15**			**15**	
4:30 PM			10	12		11			11	
4:45 PM			**17**	10		14			14	
5:00 PM			12	14		13			13	
5:15 PM			16	14		15			15	
5:30 PM			10	8		9			9	
5:45 PM			8	11		10			10	
Day Total										
% Weekday Average										
% Week Average										
AM Peak Volume										
PM Peak Volume										

Comments:

LOCATION: Wagner E Of Walter LN
SPECIFIC LOCATION: Wagner E Of Walter LN
CITY/STATE: Naperville, IL

QC JOB #: 14654402
DIRECTION: EB/WB
DATE: Mar 21 2018 - Mar 22 2018

Start Time	Mon	Tue	Wed 21-Mar-18	Thu 22-Mar-18	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
6:00 PM			13	12		13			13	
6:15 PM			11	14		13			13	
6:30 PM			6	15		11			11	
6:45 PM			15	10		13			13	
7:00 PM			8	10		9			9	
7:15 PM			13	10		12			12	
7:30 PM			7	9		8			8	
7:45 PM			9	7		8			8	
8:00 PM			8	4		6			6	
8:15 PM			5	8		7			7	
8:30 PM			10	3		7			7	
8:45 PM			4	3		4			4	
9:00 PM			7	4		6			6	
9:15 PM			7	6		7			7	
9:30 PM			5	4		5			5	
9:45 PM			6	2		4			4	
10:00 PM			3	4		4			4	
10:15 PM			3	3		3			3	
10:30 PM			0	2		1			1	
10:45 PM			0	0		0			0	
11:00 PM			1	1		1			1	
11:15 PM			1	2		2			2	
11:30 PM			2	1		2			2	
11:45 PM			0	1		1			1	
Day Total			620	584		628			628	
% Weekday Average			98.7%	93.0%						
% Week Average			98.7%	93.0%		100.0%				
AM Peak			6:30 AM	6:30 AM		6:30 AM			6:30 AM	
Volume			16	22		19			19	
PM Peak			4:45 PM	4:15 PM		4:15 PM			4:15 PM	
Volume			17	18		15			15	

Comments:

LOCATION: Wagner E Of Walter LN
SPECIFIC LOCATION: Wagner E Of Walter LN
CITY/STATE: Naperville, IL

QC JOB #: 14654401
DIRECTION: EB/WB
DATE: Mar 17 2018 - Mar 17 2018

Start Time	Mon	Tue	Wed	Thu	Fri	Average Weekday Hourly Traffic	Sat 17-Mar-18	Sun	Average Week Hourly Traffic	Average Week Profile
12:00 AM						**0**	1		1	
12:15 AM						0	1		1	
12:30 AM						0	0		0	
12:45 AM						0	0		0	
1:00 AM						0	0		0	
1:15 AM						0	0		0	
1:30 AM						0	1		1	
1:45 AM						0	1		1	
2:00 AM						0	0		0	
2:15 AM						0	1		1	
2:30 AM						0	2		2	
2:45 AM						0	0		0	
3:00 AM						0	0		0	
3:15 AM						0	0		0	
3:30 AM						0	0		0	
3:45 AM						0	0		0	
4:00 AM						0	0		0	
4:15 AM						0	2		2	
4:30 AM						0	1		1	
4:45 AM						0	0		0	
5:00 AM						0	0		0	
5:15 AM						0	0		0	
5:30 AM						0	1		1	
5:45 AM						0	1		1	
Day Total										
% Weekday Average										
% Week Average										
AM Peak Volume										
PM Peak Volume										

Comments:

LOCATION: Wagner E Of Walter LN
SPECIFIC LOCATION: Wagner E Of Walter LN
CITY/STATE: Naperville, IL

QC JOB #: 14654401
DIRECTION: EB/WB
DATE: Mar 17 2018 - Mar 17 2018

Start Time	Mon	Tue	Wed	Thu	Fri	Average Weekday Hourly Traffic	Sat 17-Mar-18	Sun	Average Week Hourly Traffic	Average Week Profile
6:00 AM						0	2		2	
6:15 AM						0	3		3	
6:30 AM						0	6		6	
6:45 AM						0	4		4	
7:00 AM						0	4		4	
7:15 AM						0	5		5	
7:30 AM						0	2		2	
7:45 AM						0	4		4	
8:00 AM						0	8		8	
8:15 AM						0	6		6	
8:30 AM						0	5		5	
8:45 AM						0	5		5	
9:00 AM						0	10		10	
9:15 AM						0	10		10	
9:30 AM						0	11		11	
9:45 AM						0	11		11	
10:00 AM						0	**14**		**14**	
10:15 AM						0	6		6	
10:30 AM						0	5		5	
10:45 AM						0	6		6	
11:00 AM						0	6		6	
11:15 AM						0	10		10	
11:30 AM						0	8		8	
11:45 AM						0	6		6	
Day Total										
% Weekday Average										
% Week Average										
AM Peak Volume										
PM Peak Volume										

Comments:

LOCATION: Wagner E Of Walter LN
SPECIFIC LOCATION: Wagner E Of Walter LN
CITY/STATE: Naperville, IL

QC JOB #: 14654401
DIRECTION: EB/WB
DATE: Mar 17 2018 - Mar 17 2018

Start Time	Mon	Tue	Wed	Thu	Fri	Average Weekday Hourly Traffic	Sat 17-Mar-18	Sun	Average Week Hourly Traffic	Average Week Profile
12:00 PM						**0**	7		7	
12:15 PM						0	6		6	
12:30 PM						0	5		5	
12:45 PM						0	13		13	
1:00 PM						0	5		5	
1:15 PM						0	13		13	
1:30 PM						0	8		8	
1:45 PM						0	13		13	
2:00 PM						0	6		6	
2:15 PM						0	5		5	
2:30 PM						0	6		6	
2:45 PM						0	7		7	
3:00 PM						0	12		12	
3:15 PM						0	9		9	
3:30 PM						0	10		10	
3:45 PM						0	6		6	
4:00 PM						0	11		11	
4:15 PM						0	7		7	
4:30 PM						0	9		9	
4:45 PM						0	8		8	
5:00 PM						0	7		7	
5:15 PM						0	10		10	
5:30 PM						0	7		7	
5:45 PM						0	11		11	
Day Total										
% Weekday Average										
% Week Average										
AM Peak Volume										
PM Peak Volume										

Comments:

LOCATION: Wagner E Of Walter LN
SPECIFIC LOCATION: Wagner E Of Walter LN
CITY/STATE: Naperville, IL

QC JOB #: 14654401
DIRECTION: EB/WB
DATE: Mar 17 2018 - Mar 17 2018

Start Time	Mon	Tue	Wed	Thu	Fri	Average Weekday Hourly Traffic	Sat 17-Mar-18	Sun	Average Week Hourly Traffic	Average Week Profile
6:00 PM						0	9		9	
6:15 PM						0	14		14	
6:30 PM						0	12		12	
6:45 PM						0	5		5	
7:00 PM						0	9		9	
7:15 PM						0	5		5	
7:30 PM						0	**15**		**15**	
7:45 PM						0	9		9	
8:00 PM						0	7		7	
8:15 PM						0	7		7	
8:30 PM						0	4		4	
8:45 PM						0	4		4	
9:00 PM						0	5		5	
9:15 PM						0	4		4	
9:30 PM						0	3		3	
9:45 PM						0	2		2	
10:00 PM						0	4		4	
10:15 PM						0	6		6	
10:30 PM						0	3		3	
10:45 PM						0	3		3	
11:00 PM						0	1		1	
11:15 PM						0	2		2	
11:30 PM						0	3		3	
11:45 PM						0	1		1	
Day Total						0	507		507	
% Weekday Average										
% Week Average						0.0%	100.0%			
AM Peak Volume						12:00 AM 0	10:00 AM 14		10:00 AM 14	
PM Peak Volume						12:00 PM 0	7:30 PM 15		7:30 PM 15	

Comments:

SUMMARY - Tube Count - Volume Data (Weekend)

LOCATION: Wagner E Of Walter LN
SPECIFIC LOCATION: Wagner E Of Walter LN
CITY/STATE: Naperville, IL

QC JOB #: 14654401
DIRECTION: EB/WB
DATE: Mar 17 2018 - Mar 17 2018

Start Time			Sat Sun 17-Mar-18	Average Weekend Hourly Traffic	Average Weekend Profile
12:00 AM			1	1	
12:15 AM			1	1	
12:30 AM			0	0	
12:45 AM			0	0	
1:00 AM			0	0	
1:15 AM			0	0	
1:30 AM			1	1	
1:45 AM			1	1	
2:00 AM			0	0	
2:15 AM			1	1	
2:30 AM			2	2	
2:45 AM			0	0	
3:00 AM			0	0	
3:15 AM			0	0	
3:30 AM			0	0	
3:45 AM			0	0	
4:00 AM			0	0	
4:15 AM			2	2	
4:30 AM			1	1	
4:45 AM			0	0	
5:00 AM			0	0	
5:15 AM			0	0	
5:30 AM			1	1	
5:45 AM			1	1	
Day Total					
% Weekday Average					
% Week Average					
AM Peak Volume					
PM Peak Volume					

Comments:

SUMMARY - Tube Count - Volume Data (Weekend)

LOCATION: Wagner E Of Walter LN
SPECIFIC LOCATION: Wagner E Of Walter LN
CITY/STATE: Naperville, IL

QC JOB #: 14654401
DIRECTION: EB/WB
DATE: Mar 17 2018 - Mar 17 2018

Start Time			Sat Sun 17-Mar-18	Average Weekend Hourly Traffic	Average Weekend Profile
6:00 AM			2	2	
6:15 AM			3	3	
6:30 AM			6	6	
6:45 AM			4	4	
7:00 AM			4	4	
7:15 AM			5	5	
7:30 AM			2	2	
7:45 AM			4	4	
8:00 AM			8	8	
8:15 AM			6	6	
8:30 AM			5	5	
8:45 AM			5	5	
9:00 AM			10	10	
9:15 AM			10	10	
9:30 AM			11	11	
9:45 AM			11	11	
10:00 AM			**14**	**14**	
10:15 AM			6	6	
10:30 AM			5	5	
10:45 AM			6	6	
11:00 AM			6	6	
11:15 AM			10	10	
11:30 AM			8	8	
11:45 AM			6	6	
Day Total					
% Weekday Average					
% Week Average					
AM Peak Volume					
PM Peak Volume					

Comments:

SUMMARY - Tube Count - Volume Data (Weekend)

LOCATION: Wagner E Of Walter LN
SPECIFIC LOCATION: Wagner E Of Walter LN
CITY/STATE: Naperville, IL

QC JOB #: 14654401
DIRECTION: EB/WB
DATE: Mar 17 2018 - Mar 17 2018

Start Time			Sat Sun 17-Mar-18	Average Weekend Hourly Traffic	Average Weekend Profile
12:00 PM			7	7	
12:15 PM			6	6	
12:30 PM			5	5	
12:45 PM			13	13	
1:00 PM			5	5	
1:15 PM			13	13	
1:30 PM			8	8	
1:45 PM			13	13	
2:00 PM			6	6	
2:15 PM			5	5	
2:30 PM			6	6	
2:45 PM			7	7	
3:00 PM			12	12	
3:15 PM			9	9	
3:30 PM			10	10	
3:45 PM			6	6	
4:00 PM			11	11	
4:15 PM			7	7	
4:30 PM			9	9	
4:45 PM			8	8	
5:00 PM			7	7	
5:15 PM			10	10	
5:30 PM			7	7	
5:45 PM			11	11	
Day Total					
% Weekday Average					
% Week Average					
AM Peak Volume					
PM Peak Volume					

Comments:

SUMMARY - Tube Count - Volume Data (Weekend)

LOCATION: Wagner E Of Walter LN
SPECIFIC LOCATION: Wagner E Of Walter LN
CITY/STATE: Naperville, IL

QC JOB #: 14654401
DIRECTION: EB/WB
DATE: Mar 17 2018 - Mar 17 2018

Start Time			Sat Sun 17-Mar-18	Average Weekend Hourly Traffic	Average Weekend Profile
6:00 PM			9	9	
6:15 PM			14	14	
6:30 PM			12	12	
6:45 PM			5	5	
7:00 PM			9	9	
7:15 PM			5	5	
7:30 PM			**15**	**15**	
7:45 PM			9	9	
8:00 PM			7	7	
8:15 PM			7	7	
8:30 PM			4	4	
8:45 PM			4	4	
9:00 PM			5	5	
9:15 PM			4	4	
9:30 PM			3	3	
9:45 PM			2	2	
10:00 PM			4	4	
10:15 PM			6	6	
10:30 PM			3	3	
10:45 PM			3	3	
11:00 PM			1	1	
11:15 PM			2	2	
11:30 PM			3	3	
11:45 PM			1	1	
Day Total			507	507	
% Weekday Average					
% Week Average			100.0%		
AM Peak Volume			10:00 AM 14	10:00 AM 14	
PM Peak Volume			7:30 PM 15	7:30 PM 15	

Comments:

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

Rosemont, Illinois, United States 60018
(847)518-9990 bmay@kloainc.com

Count Name: McGrath Lane 24-Hour Counts
Site Code:
Start Date: 03/17/2018

Direction (Southbound)

Start Time	All Vehicles (no classification)	Total
03/17/2018 12:00 AM	1	1
12:15 AM	0	0
12:30 AM	0	0
12:45 AM	0	0
1:00 AM	0	0
1:15 AM	0	0
1:30 AM	0	0
1:45 AM	1	1
2:00 AM	0	0
2:15 AM	0	0
2:30 AM	1	1
2:45 AM	0	0
3:00 AM	0	0
3:15 AM	0	0
3:30 AM	0	0
3:45 AM	0	0
4:00 AM	0	0
4:15 AM	0	0
4:30 AM	0	0
4:45 AM	0	0
5:00 AM	0	0
5:15 AM	0	0
5:30 AM	0	0
5:45 AM	0	0
6:00 AM	2	2
6:15 AM	1	1
6:30 AM	0	0
6:45 AM	2	2
7:00 AM	1	1
7:15 AM	1	1
7:30 AM	1	1
7:45 AM	2	2
8:00 AM	5	5
8:15 AM	1	1
8:30 AM	1	1
8:45 AM	2	2
9:00 AM	2	2
9:15 AM	2	2
9:30 AM	6	6

9:45 AM	2	2
10:00 AM	2	2
10:15 AM	2	2
10:30 AM	2	2
10:45 AM	5	5
11:00 AM	1	1
11:15 AM	3	3
11:30 AM	4	4
11:45 AM	5	5
12:00 PM	3	3
12:15 PM	4	4
12:30 PM	6	6
12:45 PM	2	2
1:00 PM	2	2
1:15 PM	1	1
1:30 PM	3	3
1:45 PM	8	8
2:00 PM	1	1
2:15 PM	3	3
2:30 PM	1	1
2:45 PM	5	5
3:00 PM	4	4
3:15 PM	4	4
3:30 PM	1	1
3:45 PM	3	3
4:00 PM	4	4
4:15 PM	2	2
4:30 PM	4	4
4:45 PM	4	4
5:00 PM	4	4
5:15 PM	2	2
5:30 PM	3	3
5:45 PM	3	3
6:00 PM	6	6
6:15 PM	7	7
6:30 PM	5	5
6:45 PM	1	1
7:00 PM	5	5
7:15 PM	5	5
7:30 PM	3	3
7:45 PM	6	6
8:00 PM	3	3
8:15 PM	3	3
8:30 PM	2	2
8:45 PM	3	3
9:00 PM	3	3
9:15 PM	1	1
9:30 PM	0	0
9:45 PM	2	2
10:00 PM	1	1
10:15 PM	1	1
10:30 PM	0	0

10:45 PM	2	2
11:00 PM	0	0
11:15 PM	1	1
11:30 PM	0	0
11:45 PM	1	1
03/21/2018 12:00 AM	1	1
12:15 AM	0	0
12:30 AM	0	0
12:45 AM	0	0
1:00 AM	0	0
1:15 AM	0	0
1:30 AM	0	0
1:45 AM	0	0
2:00 AM	0	0
2:15 AM	0	0
2:30 AM	0	0
2:45 AM	0	0
3:00 AM	0	0
3:15 AM	0	0
3:30 AM	0	0
3:45 AM	0	0
4:00 AM	1	1
4:15 AM	0	0
4:30 AM	1	1
4:45 AM	1	1
5:00 AM	1	1
5:15 AM	1	1
5:30 AM	1	1
5:45 AM	0	0
6:00 AM	4	4
6:15 AM	3	3
6:30 AM	0	0
6:45 AM	1	1
7:00 AM	4	4
7:15 AM	3	3
7:30 AM	2	2
7:45 AM	3	3
8:00 AM	2	2
8:15 AM	1	1
8:30 AM	2	2
8:45 AM	1	1
9:00 AM	6	6
9:15 AM	3	3
9:30 AM	3	3
9:45 AM	0	0
10:00 AM	3	3
10:15 AM	6	6
10:30 AM	2	2
10:45 AM	6	6
11:00 AM	1	1
11:15 AM	6	6
11:30 AM	3	3

11:45 AM	6	6
12:00 PM	1	1
12:15 PM	5	5
12:30 PM	3	3
12:45 PM	4	4
1:00 PM	5	5
1:15 PM	5	5
1:30 PM	3	3
1:45 PM	9	9
2:00 PM	9	9
2:15 PM	3	3
2:30 PM	4	4
2:45 PM	2	2
3:00 PM	6	6
3:15 PM	2	2
3:30 PM	5	5
3:45 PM	8	8
4:00 PM	4	4
4:15 PM	3	3
4:30 PM	3	3
4:45 PM	5	5
5:00 PM	4	4
5:15 PM	6	6
5:30 PM	3	3
5:45 PM	7	7
6:00 PM	9	9
6:15 PM	5	5
6:30 PM	5	5
6:45 PM	10	10
7:00 PM	0	0
7:15 PM	0	0
7:30 PM	0	0
7:45 PM	4	4
8:00 PM	4	4
8:15 PM	2	2
8:30 PM	3	3
8:45 PM	2	2
9:00 PM	3	3
9:15 PM	2	2
9:30 PM	1	1
9:45 PM	1	1
10:00 PM	3	3
10:15 PM	0	0
10:30 PM	0	0
10:45 PM	2	2
11:00 PM	0	0
11:15 PM	0	0
11:30 PM	2	2
11:45 PM	0	0
Total	441	441
Total %	100.0	100.0
AM Times	11:00 AM	11:00 AM

AM Peaks	16	16
PM Times	1:45 PM	1:45 PM
PM Peaks	25	25

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

Rosemont, Illinois, United States 60018
(847)518-9990 bmay@kloainc.com

Count Name: McGrath Lane 24-Hour Counts
Site Code:
Start Date: 03/17/2018

Direction (Northbound)

Start Time	All Vehicles (no classification)	Total
03/17/2018 12:00 AM	1	1
12:15 AM	2	2
12:30 AM	0	0
12:45 AM	0	0
1:00 AM	0	0
1:15 AM	0	0
1:30 AM	1	1
1:45 AM	0	0
2:00 AM	0	0
2:15 AM	0	0
2:30 AM	0	0
2:45 AM	0	0
3:00 AM	0	0
3:15 AM	0	0
3:30 AM	0	0
3:45 AM	0	0
4:00 AM	0	0
4:15 AM	0	0
4:30 AM	0	0
4:45 AM	0	0
5:00 AM	1	1
5:15 AM	0	0
5:30 AM	0	0
5:45 AM	1	1
6:00 AM	2	2
6:15 AM	3	3
6:30 AM	2	2
6:45 AM	2	2
7:00 AM	2	2
7:15 AM	1	1
7:30 AM	0	0
7:45 AM	1	1
8:00 AM	4	4
8:15 AM	0	0
8:30 AM	3	3
8:45 AM	3	3
9:00 AM	7	7
9:15 AM	2	2
9:30 AM	3	3

9:45 AM	5	5
10:00 AM	5	5
10:15 AM	0	0
10:30 AM	4	4
10:45 AM	3	3
11:00 AM	3	3
11:15 AM	7	7
11:30 AM	3	3
11:45 AM	1	1
12:00 PM	6	6
12:15 PM	5	5
12:30 PM	1	1
12:45 PM	0	0
1:00 PM	4	4
1:15 PM	2	2
1:30 PM	3	3
1:45 PM	3	3
2:00 PM	1	1
2:15 PM	3	3
2:30 PM	2	2
2:45 PM	6	6
3:00 PM	2	2
3:15 PM	5	5
3:30 PM	4	4
3:45 PM	2	2
4:00 PM	5	5
4:15 PM	5	5
4:30 PM	1	1
4:45 PM	1	1
5:00 PM	2	2
5:15 PM	5	5
5:30 PM	5	5
5:45 PM	5	5
6:00 PM	3	3
6:15 PM	1	1
6:30 PM	3	3
6:45 PM	1	1
7:00 PM	4	4
7:15 PM	6	6
7:30 PM	9	9
7:45 PM	1	1
8:00 PM	1	1
8:15 PM	1	1
8:30 PM	2	2
8:45 PM	3	3
9:00 PM	3	3
9:15 PM	4	4
9:30 PM	1	1
9:45 PM	1	1
10:00 PM	3	3
10:15 PM	1	1
10:30 PM	1	1

10:45 PM	3	3
11:00 PM	0	0
11:15 PM	2	2
11:30 PM	0	0
11:45 PM	1	1
03/21/2018 12:00 AM	0	0
12:15 AM	0	0
12:30 AM	0	0
12:45 AM	1	1
1:00 AM	0	0
1:15 AM	0	0
1:30 AM	0	0
1:45 AM	1	1
2:00 AM	0	0
2:15 AM	0	0
2:30 AM	0	0
2:45 AM	0	0
3:00 AM	0	0
3:15 AM	0	0
3:30 AM	0	0
3:45 AM	0	0
4:00 AM	0	0
4:15 AM	0	0
4:30 AM	0	0
4:45 AM	0	0
5:00 AM	2	2
5:15 AM	0	0
5:30 AM	2	2
5:45 AM	2	2
6:00 AM	3	3
6:15 AM	3	3
6:30 AM	11	11
6:45 AM	7	7
7:00 AM	3	3
7:15 AM	3	3
7:30 AM	4	4
7:45 AM	3	3
8:00 AM	4	4
8:15 AM	3	3
8:30 AM	6	6
8:45 AM	1	1
9:00 AM	5	5
9:15 AM	4	4
9:30 AM	1	1
9:45 AM	1	1
10:00 AM	3	3
10:15 AM	3	3
10:30 AM	6	6
10:45 AM	3	3
11:00 AM	3	3
11:15 AM	6	6
11:30 AM	10	10

11:45 AM	7	7
12:00 PM	9	9
12:15 PM	4	4
12:30 PM	6	6
12:45 PM	3	3
1:00 PM	3	3
1:15 PM	5	5
1:30 PM	2	2
1:45 PM	4	4
2:00 PM	4	4
2:15 PM	5	5
2:30 PM	4	4
2:45 PM	3	3
3:00 PM	3	3
3:15 PM	7	7
3:30 PM	3	3
3:45 PM	6	6
4:00 PM	1	1
4:15 PM	3	3
4:30 PM	8	8
4:45 PM	4	4
5:00 PM	5	5
5:15 PM	5	5
5:30 PM	6	6
5:45 PM	2	2
6:00 PM	2	2
6:15 PM	3	3
6:30 PM	2	2
6:45 PM	4	4
7:00 PM	4	4
7:15 PM	4	4
7:30 PM	6	6
7:45 PM	3	3
8:00 PM	3	3
8:15 PM	3	3
8:30 PM	4	4
8:45 PM	1	1
9:00 PM	1	1
9:15 PM	3	3
9:30 PM	2	2
9:45 PM	0	0
10:00 PM	1	1
10:15 PM	1	1
10:30 PM	2	2
10:45 PM	1	1
11:00 PM	1	1
11:15 PM	0	0
11:30 PM	0	0
11:45 PM	0	0
Total	472	472
Total %	100.0	100.0
AM Times	11:00 AM	11:00 AM

AM Peaks	26	26
PM Times	1:45 PM	1:45 PM
PM Peaks	17	17

Naperville, IL Weather: Cool and Dry 10/18/18
103rd St and Tower Ct 08:35:30
Wednesday Occtober 17, 2018

TURNS/TEAPAC[Ver 3.61.12] - 15-Minute Counts: All Vehicles - by Mvmt

Intersection # 4 103/tower

Begin	N-Approach			E-Approach			S-Approach			W-Approach			Int
Time	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	Total
700	0	0	0	0	65	0	2	0	1	1	43	0	112
715	0	0	0	0	52	1	0	0	0	2	42	0	97
730	0	0	0	0	47	0	0	0	1	0	50	0	98
745	0	0	0	0	53	0	3	0	0	2	34	0	92
800	0	0	0	0	48	1	3	0	2	1	48	0	103
815	0	0	0	0	55	0	0	0	0	0	44	0	99
830	0	0	0	0	42	2	2	0	1	1	35	0	83
845	0	0	0	0	68	3	1	0	1	0	58	0	131
1600	0	0	0	0	72	0	1	0	2	0	62	0	137
1615	0	0	0	0	64	0	0	0	1	0	52	0	117
1630	0	0	0	0	62	0	1	0	3	1	66	0	133
1645	0	0	0	0	72	0	1	0	1	2	72	0	148
1700	0	0	0	0	80	0	0	0	0	0	47	0	127
1715	0	0	0	0	77	0	0	0	0	0	76	0	153
1730	0	0	0	0	76	0	0	0	0	0	83	0	159
1745	0	0	0	0	74	0	0	0	0	0	70	0	144
Total	0	0	0	0	1007	7	14	0	13	10	882	0	1933

TURNS/TEAPAC[Ver 3.61.12] - 15-Minute Counts: All Vehicles - Totals

Intersection # 4 103/tower

Begin	Approach Totals				Exit Totals				Int
Time	N	E	S	W	N	E	S	W	Total
700	0	65	3	44	0	45	1	66	112
715	0	53	0	44	0	42	3	52	97
730	0	47	1	50	0	50	0	48	98
745	0	53	3	36	0	37	2	53	92
800	0	49	5	49	0	51	2	50	103
815	0	55	0	44	0	44	0	55	99
830	0	44	3	36	0	37	3	43	83
845	0	71	2	58	0	59	3	69	131
1600	0	72	3	62	0	63	0	74	137
1615	0	64	1	52	0	52	0	65	117
1630	0	62	4	67	0	67	1	65	133
1645	0	72	2	74	0	73	2	73	148
1700	0	80	0	47	0	47	0	80	127
1715	0	77	0	76	0	76	0	77	153
1730	0	76	0	83	0	83	0	76	159
1745	0	74	0	70	0	70	0	74	144
Total	0	1014	27	892	0	896	17	1020	1933

Naperville, IL Weather: Cool and Dry 10/18/18
103rd St and Tower Ct 08:35:30
Wednesday Occtober 17, 2018

TURNS/TEAPAC[Ver 3.61.12] - 15-Minute Flow Rates: by Movement

Intersection # 4 103/tower

Begin	N-Approach			E-Approach			S-Approach			W-Approach			Int
Time	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	Total
700	0	0	0	0	260	0	8	0	4	4	172	0	448
715	0	0	0	0	208	4	0	0	0	8	168	0	388
730	0	0	0	0	188	0	0	0	4	0	200	0	392
745	0	0	0	0	212	0	12	0	0	8	136	0	368
800	0	0	0	0	192	4	12	0	8	4	192	0	412
815	0	0	0	0	220	0	0	0	0	0	176	0	396
830	0	0	0	0	168	8	8	0	4	4	140	0	332
845	0	0	0	0	272	12	4	0	4	0	232	0	524
1600	0	0	0	0	288	0	4	0	8	0	248	0	548
1615	0	0	0	0	256	0	0	0	4	0	208	0	468
1630	0	0	0	0	248	0	4	0	12	4	264	0	532
1645	0	0	0	0	288	0	4	0	4	8	288	0	592
1700	0	0	0	0	320	0	0	0	0	0	188	0	508
1715	0	0	0	0	308	0	0	0	0	0	304	0	612
1730	0	0	0	0	304	0	0	0	0	0	332	0	636
1745	0	0	0	0	296	0	0	0	0	0	280	0	576

TURNS/TEAPAC[Ver 3.61.12] - 15-Minute Flow Rates: Appr/Exit Totals

Intersection # 4 103/tower

Begin	Approach Totals				Exit Totals				Int
Time	N	E	S	W	N	E	S	W	Total
700	0	260	12	176	0	180	4	264	448
715	0	212	0	176	0	168	12	208	388
730	0	188	4	200	0	200	0	192	392
745	0	212	12	144	0	148	8	212	368
800	0	196	20	196	0	204	8	200	412
815	0	220	0	176	0	176	0	220	396
830	0	176	12	144	0	148	12	172	332
845	0	284	8	232	0	236	12	276	524
1600	0	288	12	248	0	252	0	296	548
1615	0	256	4	208	0	208	0	260	468
1630	0	248	16	268	0	268	4	260	532
1645	0	288	8	296	0	292	8	292	592
1700	0	320	0	188	0	188	0	320	508
1715	0	308	0	304	0	304	0	308	612
1730	0	304	0	332	0	332	0	304	636
1745	0	296	0	280	0	280	0	296	576

Naperville, IL Weather: Cool and Dry 10/18/18
103rd St and Tower Ct 08:35:30
Wednesday Occtober 17, 2018

TURNS/TEAPAC[Ver 3.61.12] - 60-Minute Volumes: by Movement

Intersection # 4 103/tower

Begin	N-Approach			E-Approach			S-Approach			W-Approach			Int
Time	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	Total
700	0	0	0	0	217	1	5	0	2	5	169	0	399
715	0	0	0	0	200	2	6	0	3	5	174	0	390
730	0	0	0	0	203	1	6	0	3	3	176	0	392
745	0	0	0	0	198	3	8	0	3	4	161	0	377
800	0	0	0	0	213	6	6	0	4	2	185	0	416
815	0	0	0	0	165	5	3	0	2	1	137	0	313*
830	0	0	0	0	110	5	3	0	2	1	93	0	214*
845	0	0	0	0	68	3	1	0	1	0	58	0	131*
1600	0	0	0	0	270	0	3	0	7	3	252	0	535
1615	0	0	0	0	278	0	2	0	5	3	237	0	525
1630	0	0	0	0	291	0	2	0	4	3	261	0	561
1645	0	0	0	0	305	0	1	0	1	2	278	0	587
1700	0	0	0	0	307	0	0	0	0	0	276	0	583
1715	0	0	0	0	227	0	0	0	0	0	229	0	456*
1730	0	0	0	0	150	0	0	0	0	0	153	0	303*
1745	0	0	0	0	74	0	0	0	0	0	70	0	144*

TURNS/TEAPAC[Ver 3.61.12] - 60-Minute Volumes: Appr/Exit Totals

Intersection # 4 103/tower

Begin	Approach Totals				Exit Totals				Int
Time	N	E	S	W	N	E	S	W	Total
700	0	218	7	174	0	174	6	219	399
715	0	202	9	179	0	180	7	203	390
730	0	204	9	179	0	182	4	206	392
745	0	201	11	165	0	169	7	201	377
800	0	219	10	187	0	191	8	217	416
815	0	170	5	138	0	140	6	167	313*
830	0	115	5	94	0	96	6	112	214*
845	0	71	2	58	0	59	3	69	131*
1600	0	270	10	255	0	255	3	277	535
1615	0	278	7	240	0	239	3	283	525
1630	0	291	6	264	0	263	3	295	561
1645	0	305	2	280	0	279	2	306	587
1700	0	307	0	276	0	276	0	307	583
1715	0	227	0	229	0	229	0	227	456*
1730	0	150	0	153	0	153	0	150	303*
1745	0	74	0	70	0	70	0	74	144*

Naperville, IL Weather: Cool and Brief Light Rain 10/22/18
103rd St and Tower Ct 09:20:57
Saturday October 20, 2018

TURNS/TEAPAC[Ver 3.61.12] - 15-Minute Counts: All Vehicles - by Mvmt

Intersection # 5 103/tower/sat

Begin	N-Approach			E-Approach			S-Approach			W-Approach			Int
Time	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	Total
1200	0	0	0	0	56	0	0	0	0	0	53	0	109
1215	0	0	0	0	56	0	1	0	1	1	61	0	120
1230	0	0	0	0	61	0	1	0	1	1	60	0	124
1245	0	0	0	0	39	0	0	0	1	0	56	0	96
1300	0	0	0	0	51	0	0	0	0	1	43	0	95
1315	0	0	0	0	41	0	0	0	0	0	57	0	98
1330	0	0	0	0	50	0	0	0	2	2	38	0	92
1345	0	0	0	0	47	0	0	0	0	0	50	0	97
Total	0	0	0	0	401	0	2	0	5	5	418	0	831

TURNS/TEAPAC[Ver 3.61.12] - 15-Minute Counts: All Vehicles - Totals

Intersection # 5 103/tower/sat

Begin	Approach Totals				Exit Totals				Int
Time	N	E	S	W	N	E	S	W	Total
1200	0	56	0	53	0	53	0	56	109
1215	0	56	2	62	0	62	1	57	120
1230	0	61	2	61	0	61	1	62	124
1245	0	39	1	56	0	56	0	40	96
1300	0	51	0	44	0	43	1	51	95
1315	0	41	0	57	0	57	0	41	98
1330	0	50	2	40	0	38	2	52	92
1345	0	47	0	50	0	50	0	47	97
Total	0	401	7	423	0	420	5	406	831

TURNS/TEAPAC[Ver 3.61.12] - 15-Minute Flow Rates: by Movement

Intersection # 5 103/tower/sat

Begin	N-Approach			E-Approach			S-Approach			W-Approach			Int
Time	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	Total
1200	0	0	0	0	224	0	0	0	0	0	212	0	436
1215	0	0	0	0	224	0	4	0	4	4	244	0	480
1230	0	0	0	0	244	0	4	0	4	4	240	0	496
1245	0	0	0	0	156	0	0	0	4	0	224	0	384
1300	0	0	0	0	204	0	0	0	0	4	172	0	380
1315	0	0	0	0	164	0	0	0	0	0	228	0	392
1330	0	0	0	0	200	0	0	0	8	8	152	0	368
1345	0	0	0	0	188	0	0	0	0	0	200	0	388

Naperville, IL Weather: Cool and Brief Light Rain 10/22/18
103rd St and Tower Ct 09:20:57
Saturday October 20, 2018

TURNS/TEAPAC[Ver 3.61.12] - 15-Minute Flow Rates: Appr/Exit Totals

Intersection # 5 103/tower/sat

Begin	Approach Totals				Exit Totals				Int
Time	N	E	S	W	N	E	S	W	Total
1200	0	224	0	212	0	212	0	224	436
1215	0	224	8	248	0	248	4	228	480
1230	0	244	8	244	0	244	4	248	496
1245	0	156	4	224	0	224	0	160	384
1300	0	204	0	176	0	172	4	204	380
1315	0	164	0	228	0	228	0	164	392
1330	0	200	8	160	0	152	8	208	368
1345	0	188	0	200	0	200	0	188	388

TURNS/TEAPAC[Ver 3.61.12] - 60-Minute Volumes: by Movement

Intersection # 5 103/tower/sat

Begin	N-Approach			E-Approach			S-Approach			W-Approach			Int
Time	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	Total
1200	0	0	0	0	212	0	2	0	3	2	230	0	449
1215	0	0	0	0	207	0	2	0	3	3	220	0	435
1230	0	0	0	0	192	0	1	0	2	2	216	0	413
1245	0	0	0	0	181	0	0	0	3	3	194	0	381
1300	0	0	0	0	189	0	0	0	2	3	188	0	382
1315	0	0	0	0	138	0	0	0	2	2	145	0	287*
1330	0	0	0	0	97	0	0	0	2	2	88	0	189*
1345	0	0	0	0	47	0	0	0	0	0	50	0	97*

TURNS/TEAPAC[Ver 3.61.12] - 60-Minute Volumes: Appr/Exit Totals

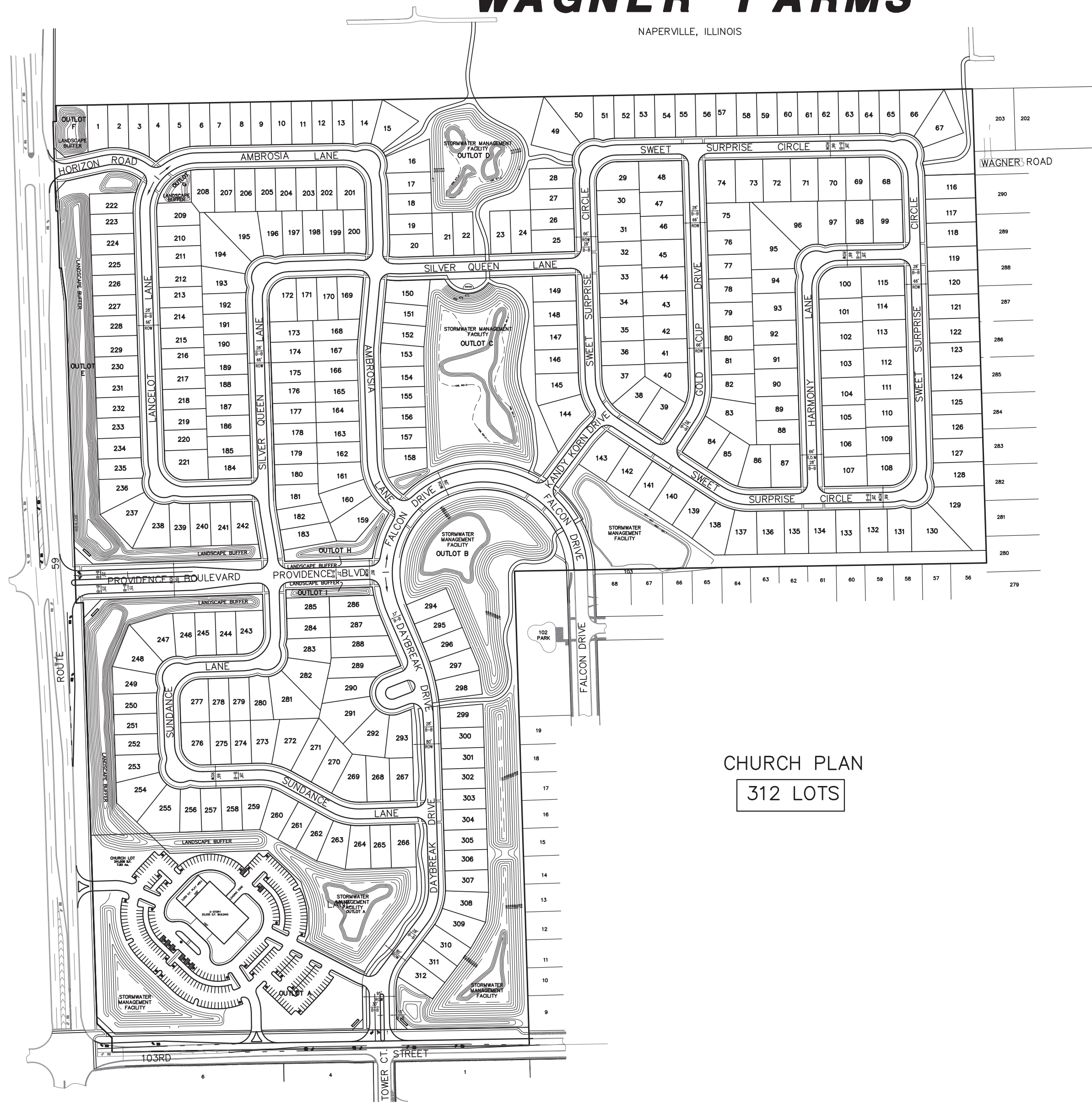
Intersection # 5 103/tower/sat

Begin	Approach Totals				Exit Totals				Int
Time	N	E	S	W	N	E	S	W	Total
1200	0	212	5	232	0	232	2	215	449
1215	0	207	5	223	0	222	3	210	435
1230	0	192	3	218	0	217	2	194	413
1245	0	181	3	197	0	194	3	184	381
1300	0	189	2	191	0	188	3	191	382
1315	0	138	2	147	0	145	2	140	287*
1330	0	97	2	90	0	88	2	99	189*
1345	0	47	0	50	0	50	0	47	97*

Site Plan

SITE PLAN
FOR
WAGNER FARMS

NAPERVILLE, ILLINOIS



N

150 75 0 150
SCALE: 1" = 150'

PREPARED FOR:
PULTE HOME COMPANY, LLC,
1900 E. GOLF ROAD, SUITE 300
SCHAUMBURG, IL 60173
(847) 230-5400

PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60502-9675
PH: 630.862.2100 FAX: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

DISC NO.: 402109 FILE NAME: PREOVR_Church Site
DRAWN BY: LAL FLD. BK. / PG. NO.: BK./PG.
COMPLETION DATE: 10-09-18 JOB NO.: 402.109
XREF : PROJECT MANAGER : CRM
REVISIONS:

SITE PLAN – CHURCH

CMAP 2040 Projections Letter

Chicago Metropolitan
Agency for Planning

233 South Wacker Drive
Suite 800
Chicago, Illinois 60606

312 454 0400
www.cmap.illinois.gov

April 3, 2018

Brendan S. May
Consultant
Kenig, Lindgren, O'Hara and Aboona, Inc.
9575 West Higgins Road
Suite 400
Rosemont, IL 60018

Subject: IL 59 @ 103rd Street
IDOT

Dear Mr. May:

In response to a request made on your behalf and dated April 3, 2018, we have developed year 2040 average daily traffic (ADT) projections for the subject location.

ROAD SEGMENT	Current ADT	Year 2040 ADT
IL 59	33,400	37,700
103rd Street west of IL 59	3,750	8,800
103rd Street east of IL 59	5,000	8,900

Traffic projections are developed using existing ADT data provided in the request letter and the results from the March 2018 CMAP Travel Demand Analysis. The regional travel model uses CMAP 2040 socioeconomic projections and assumes the implementation of the GO TO 2040 Comprehensive Regional Plan for the Northeastern Illinois area.

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

Sincerely,

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

cc: Quigley (IDOT)
S:\AdminGroups\ResearchAnalysis\2018cy_TrafficForecasts\Naperville\du-14-18\du-14-18.docx

Level of Service Criteria

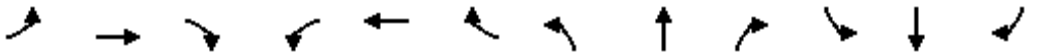
LEVEL OF SERVICE CRITERIA

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 Summary Sheets



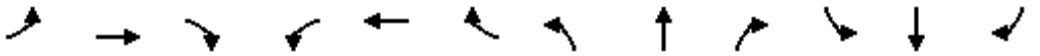
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	115	106	26	19	67	157	21	1980	16	57	823	57
Future Volume (vph)	115	106	26	19	67	157	21	1980	16	57	823	57
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	140		0	140		25	255		0	255		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	195			195			220			195		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor												
Frt		0.970			0.895			0.999			0.990	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1736	1758	0	1805	1669	0	1719	3467	0	1556	3292	0
Flt Permitted	0.267			0.658			0.950			0.950		
Satd. Flow (perm)	488	1758	0	1250	1669	0	1719	3467	0	1556	3292	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7			65			1			10	
Link Speed (mph)		35			40			45			45	
Link Distance (ft)		490			404			1570			1311	
Travel Time (s)		9.5			6.9			23.8			19.9	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	6%	0%	0%	4%	1%	5%	4%	6%	16%	9%	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)	135	156	0	22	264	0	25	2348	0	67	1035	0
Turn Type	pm+pt	NA		pm+pt	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8								
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	3.0	8.0		3.0	8.0		3.0	15.0		3.0	15.0	
Minimum Split (s)	6.5	14.0		6.5	14.0		7.5	21.0		7.5	21.0	
Total Split (s)	14.0	16.0		14.0	16.0		13.0	97.0		13.0	97.0	
Total Split (%)	10.0%	11.4%		10.0%	11.4%		9.3%	69.3%		9.3%	69.3%	
Yellow Time (s)	3.5	4.5		3.5	4.5		3.5	4.5		3.5	4.5	
All-Red Time (s)	0.0	1.5		0.0	1.5		1.0	1.5		1.0	1.5	
Lost Time Adjust (s)	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		4.5	6.0		4.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	
Act Effct Green (s)	26.0	17.2		19.6	10.1		7.3	91.2		8.3	96.4	
Actuated g/C Ratio	0.19	0.12		0.14	0.07		0.05	0.65		0.06	0.69	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.74	0.70		0.11	1.46		0.28	1.04		0.74	0.46	
Control Delay	74.6	74.0		48.2	267.9		71.4	54.8		100.3	15.2	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	74.6	74.0		48.2	267.9		71.4	54.8		100.3	15.2	
LOS	E	E		D	F		E	D		F	B	
Approach Delay		74.3			251.0			55.0			20.4	
Approach LOS		E			F			E			C	
Queue Length 50th (ft)	109	136		17	~273		22	~1215		62	273	
Queue Length 95th (ft)	#184	#268		40	#419		51	#1206		#129	354	
Internal Link Dist (ft)		410			324			1490			1231	
Turn Bay Length (ft)	140			140			255			255		
Base Capacity (vph)	183	222		247	181		104	2259		94	2270	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.74	0.70		0.09	1.46		0.24	1.04		0.71	0.46	

Intersection Summary

Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 66 (47%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 140
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.46
Intersection Signal Delay: 60.8 Intersection LOS: E
Intersection Capacity Utilization 88.1% ICU Level of Service E
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: IL Route 59 & 103rd Street



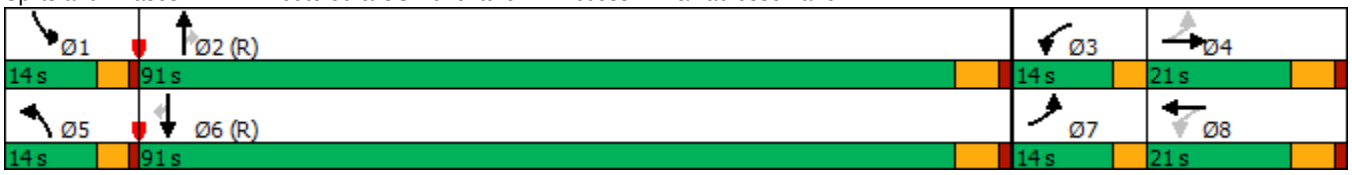
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	0	0	59	0	70	4	2033	91	52	937	2
Future Volume (vph)	2	0	0	59	0	70	4	2033	91	52	937	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	2000	1900	1900	2000	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	90		0	215		215	210		175
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (ft)	25			90			220			205		
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
Ped Bike Factor												
Frt					0.850				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	1900	0	1456	1599	0	1805	3654	1599	1805	3519	1615
Flt Permitted				0.784			0.950			0.950		
Satd. Flow (perm)	1900	1900	0	1201	1599	0	1805	3654	1599	1805	3519	1615
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					212				86			86
Link Speed (mph)		25			25			45			45	
Link Distance (ft)		250			389			1719			1002	
Travel Time (s)		6.8			10.6			26.0			15.2	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	24%	0%	1%	0%	4%	1%	0%	8%	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)	2	0	0	65	77	0	4	2234	100	57	1030	2
Turn Type	pm+pt			pm+pt	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8					2			6
Detector Phase	7	4		3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	3.0	8.0		3.0	8.0		3.0	15.0	15.0	3.0	15.0	15.0
Minimum Split (s)	6.5	14.0		6.5	14.0		7.5	21.0	21.0	7.5	21.0	21.0
Total Split (s)	14.0	21.0		14.0	21.0		14.0	91.0	91.0	14.0	91.0	91.0
Total Split (%)	10.0%	15.0%		10.0%	15.0%		10.0%	65.0%	65.0%	10.0%	65.0%	65.0%
Yellow Time (s)	3.5	4.5		3.5	4.5		3.5	4.5	4.5	3.5	4.5	4.5
All-Red Time (s)	0.0	1.5		0.0	1.5		1.0	1.5	1.5	1.0	1.5	1.5
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		4.5	6.0	6.0	4.5	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	C-Min	C-Min	None	C-Min	C-Min
Act Effct Green (s)	6.8			12.5	8.0		5.9	105.9	105.9	9.8	115.8	115.8
Actuated g/C Ratio	0.05			0.09	0.06		0.04	0.76	0.76	0.07	0.83	0.83

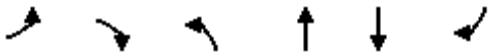
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.02			0.51	0.26		0.05	0.81	0.08	0.45	0.35	0.00
Control Delay	64.5			73.8	2.2		77.8	5.8	0.1	73.1	4.1	0.0
Queue Delay	0.0			0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	64.5			73.8	2.2		77.8	5.8	0.1	73.1	4.1	0.0
LOS	E			E	A		E	A	A	E	A	A
Approach Delay		64.5			35.0			5.7			7.7	
Approach LOS		E			C			A			A	
Queue Length 50th (ft)	2			58	0		3	117	0	51	74	0
Queue Length 95th (ft)	12			102	0		m3	m541	m0	96	223	0
Internal Link Dist (ft)		170			309			1639			922	
Turn Bay Length (ft)				90			215		215	210		175
Base Capacity (vph)	136			129	360		122	2762	1230	138	2910	1350
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	0.01			0.50	0.21		0.03	0.81	0.08	0.41	0.35	0.00

Intersection Summary

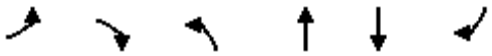
Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 134 (96%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.81
Intersection Signal Delay: 7.5 Intersection LOS: A
Intersection Capacity Utilization 73.3% ICU Level of Service D
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: IL Route 59 & US Adventure RV Access Drive/Lacrosse Lane





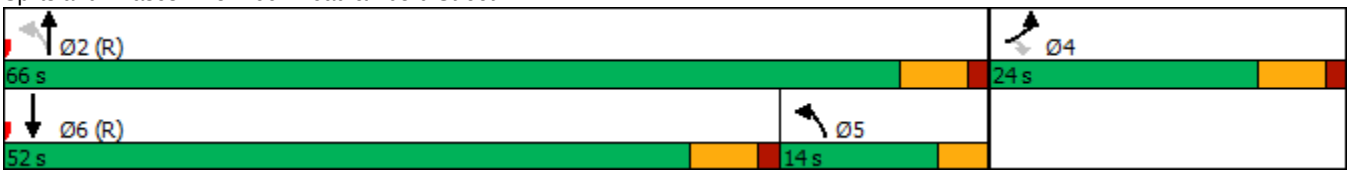
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	91	114	108	398	234	50
Future Volume (vph)	91	114	108	398	234	50
Ideal Flow (vphpl)	1900	1900	1900	2000	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	100	0	125			0
Storage Lanes	1	1	1			0
Taper Length (ft)	115		125			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt		0.850			0.976	
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1752	1495	1787	1961	1783	0
Flt Permitted	0.950		0.519			
Satd. Flow (perm)	1752	1495	976	1961	1783	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		148			17	
Link Speed (mph)	30			35	30	
Link Distance (ft)	283			1666	401	
Travel Time (s)	6.4			32.5	9.1	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.77	0.77	0.77	0.77	0.77	0.77
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	3%	8%	1%	2%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	118	148	140	517	369	0
Turn Type	Prot	Perm	pm+pt	NA	NA	
Protected Phases	4		5	2	6	
Permitted Phases		4	2			
Detector Phase	4	4	5	2	6	
Switch Phase						
Minimum Initial (s)	8.0	8.0	3.0	15.0	15.0	
Minimum Split (s)	24.0	24.0	9.5	24.0	24.0	
Total Split (s)	24.0	24.0	14.0	66.0	52.0	
Total Split (%)	26.7%	26.7%	15.6%	73.3%	57.8%	
Yellow Time (s)	4.5	4.5	3.5	4.5	4.5	
All-Red Time (s)	1.5	1.5	0.0	1.5	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	6.0	3.5	6.0	6.0	
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None	None	None	C-Min	C-Min	
Act Effct Green (s)	12.3	12.3	68.2	65.7	56.7	
Actuated g/C Ratio	0.14	0.14	0.76	0.73	0.63	

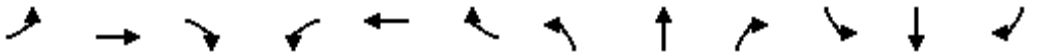


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
v/c Ratio	0.49	0.45	0.18	0.36	0.33	
Control Delay	42.4	10.4	4.2	5.7	8.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	42.4	10.4	4.2	5.7	8.9	
LOS	D	B	A	A	A	
Approach Delay	24.6			5.4	8.9	
Approach LOS	C			A	A	
Queue Length 50th (ft)	63	0	17	90	83	
Queue Length 95th (ft)	93	31	32	130	122	
Internal Link Dist (ft)	203			1586	321	
Turn Bay Length (ft)	100		125			
Base Capacity (vph)	350	417	888	1431	1129	
Starvation Cap Reductn	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	
Reduced v/c Ratio	0.34	0.35	0.16	0.36	0.33	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.49			
Intersection Signal Delay: 10.3		Intersection LOS: B	
Intersection Capacity Utilization 41.3%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 3: Book Road & 103rd Street





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	98	109	40	45	125	112	45	1286	39	159	1806	90
Future Volume (vph)	98	109	40	45	125	112	45	1286	39	159	1806	90
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)	140		0	140		0	255		0	255		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	195			195			220			195		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor												
Frt		0.959			0.929			0.996			0.993	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1787	1809	0	1805	1765	0	1805	3527	0	1787	3518	0
Flt Permitted	0.216			0.593			0.950			0.950		
Satd. Flow (perm)	406	1809	0	1127	1765	0	1805	3527	0	1787	3518	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		11			28			3			6	
Link Speed (mph)		35			40			45			45	
Link Distance (ft)		490			404			1570			1311	
Travel Time (s)		9.5			6.9			23.8			19.9	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	0%	0%	0%	0%	0%	2%	0%	1%	2%	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)	104	159	0	48	252	0	48	1409	0	169	2017	0
Turn Type	pm+pt	NA		pm+pt	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8								
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	3.0	8.0		3.0	8.0		3.0	15.0		3.0	15.0	
Minimum Split (s)	6.5	14.0		6.5	14.0		7.5	21.0		7.5	21.0	
Total Split (s)	14.0	29.0		14.0	29.0		14.0	73.0		24.0	83.0	
Total Split (%)	10.0%	20.7%		10.0%	20.7%		10.0%	52.1%		17.1%	59.3%	
Yellow Time (s)	3.5	4.5		3.5	4.5		3.5	4.5		3.5	4.5	
All-Red Time (s)	0.0	1.5		0.0	1.5		1.0	1.5		1.0	1.5	
Lost Time Adjust (s)	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		4.5	6.0		4.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	
Act Effct Green (s)	36.1	25.2		32.1	21.5		8.3	71.4		17.1	82.2	
Actuated g/C Ratio	0.26	0.18		0.23	0.15		0.06	0.51		0.12	0.59	

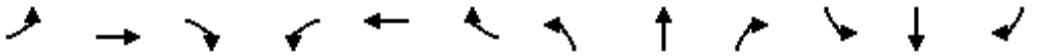
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.51	0.48		0.16	0.86		0.45	0.78		0.78	0.98	
Control Delay	48.4	53.8		38.9	77.2		76.6	32.8		77.5	42.5	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	48.4	53.8		38.9	77.2		76.6	32.8		77.5	42.5	
LOS	D	D		D	E		E	C		E	D	
Approach Delay		51.7			71.1			34.3			45.2	
Approach LOS		D			E			C			D	
Queue Length 50th (ft)	72	122		32	200		43	564		150	~1050	
Queue Length 95th (ft)	123	201		66	#336		87	676		m216	m#1171	
Internal Link Dist (ft)		410			324			1490			1231	
Turn Bay Length (ft)	140			140			255			255		
Base Capacity (vph)	208	334		328	313		122	1800		248	2068	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.50	0.48		0.15	0.81		0.39	0.78		0.68	0.98	

Intersection Summary

Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 42 (30%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.98
Intersection Signal Delay: 43.6 Intersection LOS: D
Intersection Capacity Utilization 92.1% ICU Level of Service F
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: IL Route 59 & 103rd Street



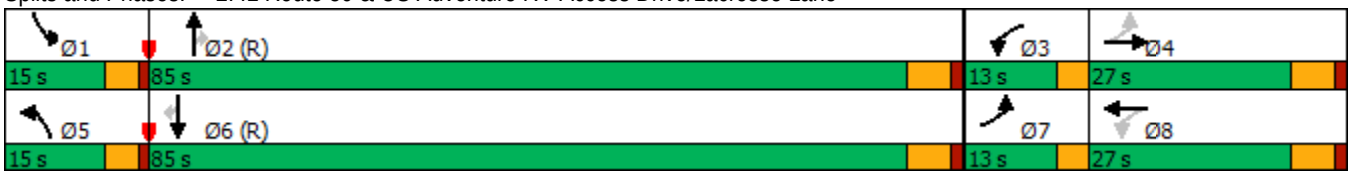
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	0	0	170	0	66	6	1319	95	105	1919	2
Future Volume (vph)	3	0	0	170	0	66	6	1319	95	105	1919	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	2000	1900	1900	2000	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	90		0	215		215	210		175
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (ft)	25			90			220			205		
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
Ped Bike Factor												
Frt					0.850				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	1900	0	1805	1615	0	1805	3725	1615	1805	3725	1077
Flt Permitted	0.000			0.950			0.950			0.950		
Satd. Flow (perm)	0	1900	0	1805	1615	0	1805	3725	1615	1805	3725	1077
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					249				86			86
Link Speed (mph)		25			25			45			45	
Link Distance (ft)		250			389			1719			1002	
Travel Time (s)		6.8			10.6			26.0			15.2	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	2%	50%
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)	3	0	0	175	68	0	6	1360	98	108	1978	2
Turn Type	pm+pt			pm+pt	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8					2			6
Detector Phase	7	4		3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	3.0	8.0		3.0	8.0		3.0	15.0	15.0	3.0	15.0	15.0
Minimum Split (s)	6.5	14.0		6.5	14.0		7.5	21.0	21.0	7.5	21.0	21.0
Total Split (s)	13.0	27.0		13.0	27.0		15.0	85.0	85.0	15.0	85.0	85.0
Total Split (%)	9.3%	19.3%		9.3%	19.3%		10.7%	60.7%	60.7%	10.7%	60.7%	60.7%
Yellow Time (s)	3.5	4.5		3.5	4.5		3.5	4.5	4.5	3.5	4.5	4.5
All-Red Time (s)	0.0	1.5		0.0	1.5		1.0	1.5	1.5	1.0	1.5	1.5
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		4.5	6.0	6.0	4.5	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	C-Min	C-Min	None	C-Min	C-Min
Act Effct Green (s)	5.9			12.5	8.0		6.1	99.1	99.1	14.4	115.7	115.7
Actuated g/C Ratio	0.04			0.09	0.06		0.04	0.71	0.71	0.10	0.83	0.83

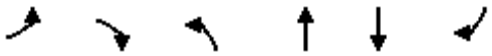
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.04			1.09	0.21		0.08	0.52	0.08	0.58	0.64	0.00
Control Delay	65.3			153.8	1.4		84.0	3.5	0.2	72.0	6.9	0.0
Queue Delay	0.0			0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	65.3			153.8	1.4		84.0	3.5	0.2	72.0	6.9	0.0
LOS	E			F	A		F	A	A	E	A	A
Approach Delay		65.3			111.2			3.6			10.3	
Approach LOS		E			F			A			B	
Queue Length 50th (ft)	3			~203	0		5	40	0	95	215	0
Queue Length 95th (ft)	13			236	0		m9	261	m2	156	636	0
Internal Link Dist (ft)		170			309			1639			922	
Turn Bay Length (ft)				90			215		215	210		175
Base Capacity (vph)	122			161	453		135	2636	1167	188	3077	904
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	0.02			1.09	0.15		0.04	0.52	0.08	0.57	0.64	0.00

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 113 (81%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.09			
Intersection Signal Delay: 14.2		Intersection LOS: B	
Intersection Capacity Utilization 83.6%		ICU Level of Service E	
Analysis Period (min) 15			

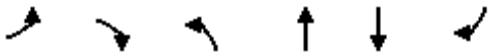
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: IL Route 59 & US Adventure RV Access Drive/Lacrosse Lane





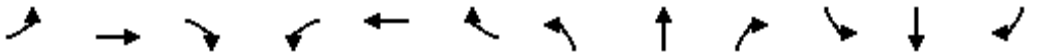
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	91	132	162	300	441	106
Future Volume (vph)	91	132	162	300	441	106
Ideal Flow (vphpl)	1900	1900	1900	2000	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	100	0	125			0
Storage Lanes	1	1	1			0
Taper Length (ft)	115		125			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt		0.850			0.974	
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1805	1583	1805	1980	1851	0
Flt Permitted	0.950		0.348			
Satd. Flow (perm)	1805	1583	661	1980	1851	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		147			19	
Link Speed (mph)	30			35	30	
Link Distance (ft)	283			1666	401	
Travel Time (s)	6.4			32.5	9.1	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	2%	0%	1%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	101	147	180	333	608	0
Turn Type	Prot	Perm	pm+pt	NA	NA	
Protected Phases	4		5	2	6	
Permitted Phases		4	2			
Detector Phase	4	4	5	2	6	
Switch Phase						
Minimum Initial (s)	8.0	8.0	3.0	15.0	15.0	
Minimum Split (s)	24.0	24.0	9.5	24.0	24.0	
Total Split (s)	21.0	21.0	18.0	89.0	71.0	
Total Split (%)	19.1%	19.1%	16.4%	80.9%	64.5%	
Yellow Time (s)	4.5	4.5	3.5	4.5	4.5	
All-Red Time (s)	1.5	1.5	0.0	1.5	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	6.0	3.5	6.0	6.0	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None	None	None	C-Min	C-Min	
Act Effct Green (s)	12.0	12.0	88.5	86.0	74.5	
Actuated g/C Ratio	0.11	0.11	0.80	0.78	0.68	



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
v/c Ratio	0.51	0.48	0.29	0.22	0.48	
Control Delay	54.9	12.8	3.8	3.8	10.4	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	54.9	12.8	3.8	3.8	10.4	
LOS	D	B	A	A	B	
Approach Delay	30.0			3.8	10.4	
Approach LOS	C			A	B	
Queue Length 50th (ft)	68	0	22	51	180	
Queue Length 95th (ft)	121	58	42	86	296	
Internal Link Dist (ft)	203			1586	321	
Turn Bay Length (ft)	100		125			
Base Capacity (vph)	246	342	682	1547	1259	
Starvation Cap Reductn	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	
Reduced v/c Ratio	0.41	0.43	0.26	0.22	0.48	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.51			
Intersection Signal Delay: 11.5		Intersection LOS: B	
Intersection Capacity Utilization 58.6%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 3: Book Road & 103rd Street



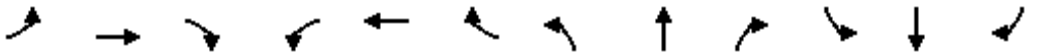
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	105	44	47	54	37	121	43	1461	49	108	1328	62
Future Volume (vph)	105	44	47	54	37	121	43	1461	49	108	1328	62
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	140		0	140		0	255		0	255		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	195			195			220			195		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor												
Frt		0.923			0.885			0.995			0.993	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	1736	0	1770	1670	0	1770	3558	0	1805	3551	0
Flt Permitted	0.386			0.695			0.950			0.950		
Satd. Flow (perm)	733	1736	0	1295	1670	0	1770	3558	0	1805	3551	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		45			126			5			6	
Link Speed (mph)		35			40			45			45	
Link Distance (ft)		490			404			1570			1311	
Travel Time (s)		9.5			6.9			23.8			19.9	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	2%	2%	3%	0%	2%	1%	0%	0%	1%	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)	109	95	0	56	165	0	45	1573	0	113	1448	0
Turn Type	pm+pt	NA		pm+pt	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8								
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	3.0	8.0		3.0	8.0		3.0	15.0		3.0	15.0	
Minimum Split (s)	6.5	14.0		6.5	14.0		7.5	21.0		7.5	21.0	
Total Split (s)	13.0	20.0		13.0	20.0		13.0	54.0		13.0	54.0	
Total Split (%)	13.0%	20.0%		13.0%	20.0%		13.0%	54.0%		13.0%	54.0%	
Yellow Time (s)	3.5	4.5		3.5	4.5		3.5	4.5		3.5	4.5	
All-Red Time (s)	0.0	1.5		0.0	1.5		1.0	1.5		1.0	1.5	
Lost Time Adjust (s)	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		4.5	6.0		4.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	
Act Effct Green (s)	23.0	13.0		20.3	10.1		7.6	51.1		10.0	57.8	
Actuated g/C Ratio	0.23	0.13		0.20	0.10		0.08	0.51		0.10	0.58	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.41	0.36		0.19	0.59		0.34	0.86		0.63	0.71	
Control Delay	34.1	27.2		29.4	21.5		50.4	28.6		60.4	15.6	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	34.1	27.2		29.4	21.5		50.4	28.6		60.4	15.6	
LOS	C	C		C	C		D	C		E	B	
Approach Delay		30.9			23.5			29.2			18.8	
Approach LOS		C			C			C			B	
Queue Length 50th (ft)	56	30		28	24		28	457		62	380	
Queue Length 95th (ft)	96	76		56	84		63	#640		m#166	398	
Internal Link Dist (ft)		410			324			1490			1231	
Turn Bay Length (ft)	140			140			255			255		
Base Capacity (vph)	271	296		330	342		152	1819		183	2053	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.40	0.32		0.17	0.48		0.30	0.86		0.62	0.71	

Intersection Summary

Area Type: Other
Cycle Length: 100
Actuated Cycle Length: 100
Offset: 86 (86%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.86
Intersection Signal Delay: 24.4 Intersection LOS: C
Intersection Capacity Utilization 80.2% ICU Level of Service D
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: IL Route 59 & 103rd Street



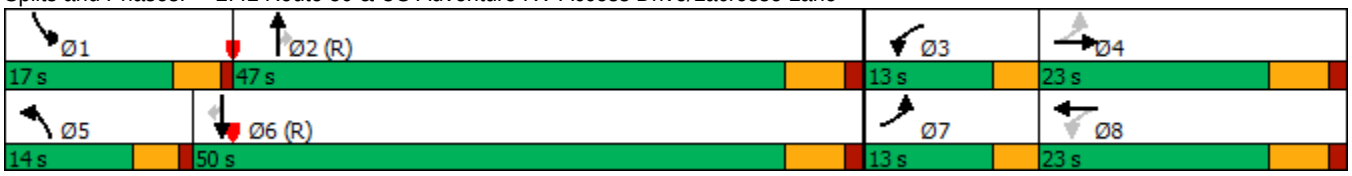
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	1	0	129	0	104	4	1575	100	100	1417	2
Future Volume (vph)	1	1	0	129	0	104	4	1575	100	100	1417	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	2000	1900	1900	2000	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	90		0	215		215	210		175
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (ft)	25			90			220			205		
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
Ped Bike Factor												
Frt					0.850				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	1900	0	1787	1615	0	1805	3762	1599	1805	3762	1615
Flt Permitted				0.784			0.950			0.950		
Satd. Flow (perm)	1900	1900	0	1475	1615	0	1805	3762	1599	1805	3762	1615
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					348				120			120
Link Speed (mph)		25			25			45			45	
Link Distance (ft)		250			389			1719			1002	
Travel Time (s)		6.8			10.6			26.0			15.2	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	1%	0%	0%	0%	1%	1%	0%	1%	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)	1	1	0	133	107	0	4	1624	103	103	1461	2
Turn Type	pm+pt	NA		pm+pt	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8					2			6
Detector Phase	7	4		3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	3.0	8.0		3.0	8.0		3.0	15.0	15.0	3.0	15.0	15.0
Minimum Split (s)	6.5	14.0		6.5	14.0		7.5	21.0	21.0	7.5	21.0	21.0
Total Split (s)	13.0	23.0		13.0	23.0		14.0	47.0	47.0	17.0	50.0	50.0
Total Split (%)	13.0%	23.0%		13.0%	23.0%		14.0%	47.0%	47.0%	17.0%	50.0%	50.0%
Yellow Time (s)	3.5	4.5		3.5	4.5		3.5	4.5	4.5	3.5	4.5	4.5
All-Red Time (s)	0.0	1.5		0.0	1.5		1.0	1.5	1.5	1.0	1.5	1.5
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		4.5	6.0	6.0	4.5	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	C-Min	C-Min	None	C-Min	C-Min
Act Effct Green (s)	7.7	8.0		13.1	8.7		5.8	64.2	64.2	11.0	75.2	75.2
Actuated g/C Ratio	0.08	0.08		0.13	0.09		0.06	0.64	0.64	0.11	0.75	0.75

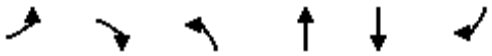
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.01	0.01		0.59	0.23		0.04	0.67	0.10	0.52	0.52	0.00
Control Delay	35.0	43.0		50.9	1.2		48.2	7.1	0.3	50.8	7.5	0.0
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.0	43.0		50.9	1.2		48.2	7.1	0.3	50.8	7.5	0.0
LOS	C	D		D	A		D	A	A	D	A	A
Approach Delay		39.0			28.7			6.8			10.3	
Approach LOS		D			C			A			B	
Queue Length 50th (ft)	1	1		83	0		3	84	0	63	122	0
Queue Length 95th (ft)	5	6		124	0		m4	#284	m0	112	410	0
Internal Link Dist (ft)		170			309			1639			922	
Turn Bay Length (ft)				90			215		215	210		175
Base Capacity (vph)	211	323		225	563		171	2414	1069	235	2828	1244
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	0.00	0.00		0.59	0.19		0.02	0.67	0.10	0.44	0.52	0.00

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 44 (44%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.67			
Intersection Signal Delay: 9.9		Intersection LOS: A	
Intersection Capacity Utilization 74.5%		ICU Level of Service D	
Analysis Period (min) 15			

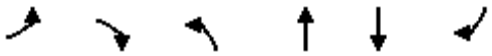
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: IL Route 59 & US Adventure RV Access Drive/Lacrosse Lane





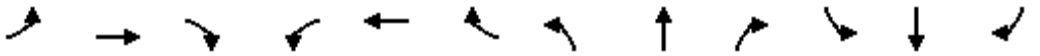
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	62	81	87	241	263	69
Future Volume (vph)	62	81	87	241	263	69
Ideal Flow (vphpl)	1900	1900	1900	2000	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	100	0	125			0
Storage Lanes	1	1	1			0
Taper Length (ft)	115		125			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt		0.850			0.972	
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1805	1615	1805	2000	1843	0
Flt Permitted	0.950		0.512			
Satd. Flow (perm)	1805	1615	973	2000	1843	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		85			28	
Link Speed (mph)	30			35	30	
Link Distance (ft)	283			1666	401	
Travel Time (s)	6.4			32.5	9.1	
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 (%)	0%	0%	0%	0%	0%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	65	85	92	254	350	0
Turn Type	Prot	Perm	pm+pt	NA	NA	
Protected Phases	4		5	2	6	
Permitted Phases		4	2			
Detector Phase	4	4	5	2	6	
Switch Phase						
Minimum Initial (s)	8.0	8.0	3.0	15.0	15.0	
Minimum Split (s)	14.0	14.0	6.5	21.0	21.0	
Total Split (s)	16.0	16.0	12.0	74.0	62.0	
Total Split (%)	17.8%	17.8%	13.3%	82.2%	68.9%	
Yellow Time (s)	4.5	4.5	3.5	4.5	4.5	
All-Red Time (s)	1.5	1.5	0.0	1.5	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	6.0	3.5	6.0	6.0	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None	None	None	C-Min	C-Min	
Act Effct Green (s)	9.9	9.9	73.4	72.1	63.9	
Actuated g/C Ratio	0.11	0.11	0.82	0.80	0.71	



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
v/c Ratio	0.33	0.34	0.11	0.16	0.27	
Control Delay	41.0	12.3	2.7	3.3	6.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	41.0	12.3	2.7	3.3	6.9	
LOS	D	B	A	A	A	
Approach Delay	24.8			3.1	6.9	
Approach LOS	C			A	A	
Queue Length 50th (ft)	35	0	9	32	69	
Queue Length 95th (ft)	72	41	21	60	129	
Internal Link Dist (ft)	203			1586	321	
Turn Bay Length (ft)	100		125			
Base Capacity (vph)	214	266	872	1618	1324	
Starvation Cap Reductn	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	
Reduced v/c Ratio	0.30	0.32	0.11	0.16	0.26	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.34			
Intersection Signal Delay: 8.5		Intersection LOS: A	
Intersection Capacity Utilization 42.9%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 3: Book Road & 103rd Street

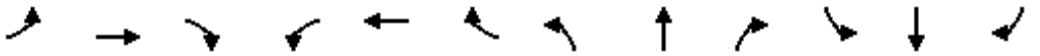


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	173	159	39	35	86	223	32	2069	25	82	860	86
Future Volume (vph)	173	159	39	35	86	223	32	2069	25	82	860	86
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	140		0	140		0	255		0	255		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	195			195			220			195		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor												
Frt		0.970			0.892			0.998			0.986	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1736	1758	0	1805	1664	0	1719	3463	0	1556	3285	0
Flt Permitted	0.282			0.374			0.950			0.950		
Satd. Flow (perm)	515	1758	0	711	1664	0	1719	3463	0	1556	3285	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7			72			2			15	
Link Speed (mph)		35			40			45			45	
Link Distance (ft)		490			404			1570			1311	
Travel Time (s)		9.5			6.9			23.8			19.9	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	6%	0%	0%	4%	1%	5%	4%	6%	16%	9%	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)	204	233	0	41	363	0	38	2463	0	96	1113	0
Turn Type	pm+pt	NA		pm+pt	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8								
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	3.0	8.0		3.0	8.0		3.0	15.0		3.0	15.0	
Minimum Split (s)	6.5	14.0		6.5	14.0		7.5	21.0		7.5	21.0	
Total Split (s)	14.0	16.0		14.0	16.0		13.0	97.0		13.0	97.0	
Total Split (%)	10.0%	11.4%		10.0%	11.4%		9.3%	69.3%		9.3%	69.3%	
Yellow Time (s)	3.5	4.5		3.5	4.5		3.5	4.5		3.5	4.5	
All-Red Time (s)	0.0	1.5		0.0	1.5		1.0	1.5		1.0	1.5	
Lost Time Adjust (s)	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		4.5	6.0		4.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	
Act Effct Green (s)	25.1	14.2		20.6	10.0		7.6	91.0		8.5	93.9	
Actuated g/C Ratio	0.18	0.10		0.15	0.07		0.05	0.65		0.06	0.67	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	1.11	1.26		0.25	1.96		0.41	1.09		1.02	0.50	
Control Delay	147.1	200.4		51.2	477.3		76.6	75.3		156.5	17.4	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	147.1	200.4		51.2	477.3		76.6	75.3		156.5	17.4	
LOS	F	F		D	F		E	E		F	B	
Approach Delay		175.6			434.0			75.4			28.4	
Approach LOS		F			F			E			C	
Queue Length 50th (ft)	~192	~283		31	~450		34	~1332		~90	314	
Queue Length 95th (ft)	#309	#452		62	#606		69	#1314		#194	393	
Internal Link Dist (ft)		410			324			1490			1231	
Turn Bay Length (ft)	140			140			255			255		
Base Capacity (vph)	184	185		198	185		104	2251		94	2207	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	1.11	1.26		0.21	1.96		0.37	1.09		1.02	0.50	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 66 (47%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 140			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.96			
Intersection Signal Delay: 104.3		Intersection LOS: F	
Intersection Capacity Utilization 107.4%		ICU Level of Service G	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 1: IL Route 59 & 103rd Street



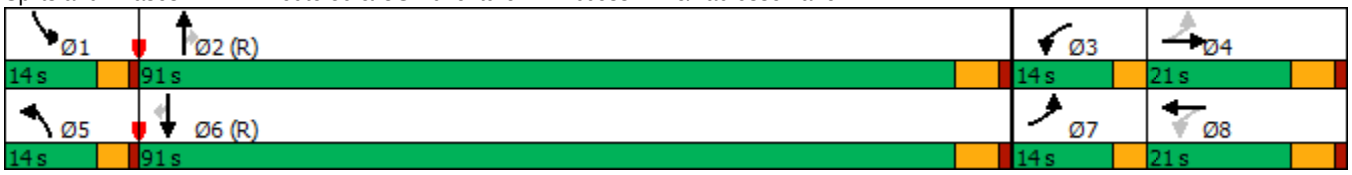
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	0	0	59	0	70	4	2246	91	52	1028	2
Future Volume (vph)	2	0	0	59	0	70	4	2246	91	52	1028	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	2000	1900	1900	2000	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	90		0	215		215	210		175
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (ft)	25			90			220			205		
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
Ped Bike Factor												
Frt					0.850				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	1900	0	1456	1599	0	1805	3654	1599	1805	3519	1615
Flt Permitted				0.784			0.950			0.950		
Satd. Flow (perm)	1900	1900	0	1201	1599	0	1805	3654	1599	1805	3519	1615
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					209				86			86
Link Speed (mph)		25			25			45			45	
Link Distance (ft)		250			389			1719			1002	
Travel Time (s)		6.8			10.6			26.0			15.2	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	24%	0%	1%	0%	4%	1%	0%	8%	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)	2	0	0	65	77	0	4	2468	100	57	1130	2
Turn Type	pm+pt			pm+pt	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8					2			6
Detector Phase	7	4		3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	3.0	8.0		3.0	8.0		3.0	15.0	15.0	3.0	15.0	15.0
Minimum Split (s)	6.5	14.0		6.5	14.0		7.5	21.0	21.0	7.5	21.0	21.0
Total Split (s)	14.0	21.0		14.0	21.0		14.0	91.0	91.0	14.0	91.0	91.0
Total Split (%)	10.0%	15.0%		10.0%	15.0%		10.0%	65.0%	65.0%	10.0%	65.0%	65.0%
Yellow Time (s)	3.5	4.5		3.5	4.5		3.5	4.5	4.5	3.5	4.5	4.5
All-Red Time (s)	0.0	1.5		0.0	1.5		1.0	1.5	1.5	1.0	1.5	1.5
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		4.5	6.0	6.0	4.5	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	C-Min	C-Min	None	C-Min	C-Min
Act Effct Green (s)	6.8			12.5	8.0		5.9	105.9	105.9	9.8	115.8	115.8
Actuated g/C Ratio	0.05			0.09	0.06		0.04	0.76	0.76	0.07	0.83	0.83

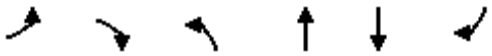
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.02			0.51	0.27		0.05	0.89	0.08	0.45	0.39	0.00
Control Delay	64.5			73.8	2.3		73.2	9.0	0.3	73.1	4.3	0.0
Queue Delay	0.0			0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	64.5			73.8	2.3		73.2	9.0	0.3	73.1	4.3	0.0
LOS	E			E	A		E	A	A	E	A	A
Approach Delay		64.5			35.0			8.8			7.6	
Approach LOS		E			D			A			A	
Queue Length 50th (ft)	2			58	0		3	172	1	51	85	0
Queue Length 95th (ft)	12			102	0		m3	m687	m0	96	254	0
Internal Link Dist (ft)		170			309			1639			922	
Turn Bay Length (ft)				90			215		215	210		175
Base Capacity (vph)	136			129	357		122	2762	1230	138	2910	1350
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	0.01			0.50	0.22		0.03	0.89	0.08	0.41	0.39	0.00

Intersection Summary

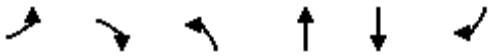
Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 134 (96%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 100
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.89
Intersection Signal Delay: 9.4 Intersection LOS: A
Intersection Capacity Utilization 78.9% ICU Level of Service D
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: IL Route 59 & US Adventure RV Access Drive/Lacrosse Lane





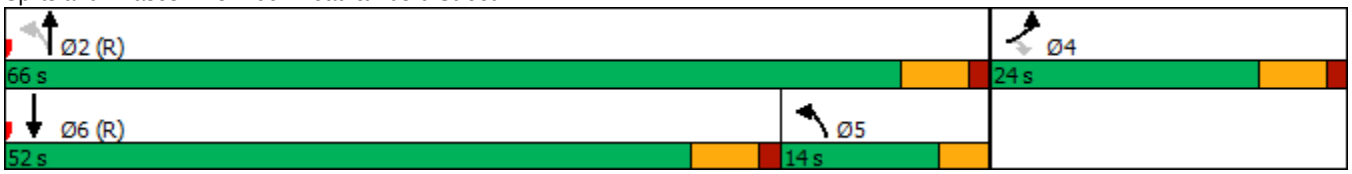
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	121	151	140	513	302	66
Future Volume (vph)	121	151	140	513	302	66
Ideal Flow (vphpl)	1900	1900	1900	2000	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	100	0	125			0
Storage Lanes	1	1	1			0
Taper Length (ft)	115		125			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt		0.850			0.976	
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1752	1495	1787	1961	1783	0
Flt Permitted	0.950		0.432			
Satd. Flow (perm)	1752	1495	813	1961	1783	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		196			18	
Link Speed (mph)	30			35	30	
Link Distance (ft)	283			1666	401	
Travel Time (s)	6.4			32.5	9.1	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.77	0.77	0.77	0.77	0.77	0.77
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	3%	8%	1%	2%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	157	196	182	666	478	0
Turn Type	Prot	Perm	pm+pt	NA	NA	
Protected Phases	4		5	2	6	
Permitted Phases		4	2			
Detector Phase	4	4	5	2	6	
Switch Phase						
Minimum Initial (s)	8.0	8.0	3.0	15.0	15.0	
Minimum Split (s)	24.0	24.0	9.5	24.0	24.0	
Total Split (s)	24.0	24.0	14.0	66.0	52.0	
Total Split (%)	26.7%	26.7%	15.6%	73.3%	57.8%	
Yellow Time (s)	4.5	4.5	3.5	4.5	4.5	
All-Red Time (s)	1.5	1.5	0.0	1.5	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	6.0	3.5	6.0	6.0	
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None	None	None	C-Min	C-Min	
Act Effct Green (s)	14.0	14.0	66.5	64.0	53.9	
Actuated g/C Ratio	0.16	0.16	0.74	0.71	0.60	

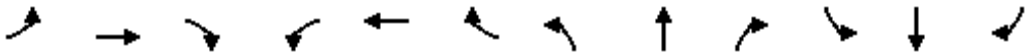


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
v/c Ratio	0.58	0.49	0.27	0.48	0.45	
Control Delay	43.4	9.5	5.8	7.6	12.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	43.4	9.5	5.8	7.6	12.2	
LOS	D	A	A	A	B	
Approach Delay	24.6			7.2	12.2	
Approach LOS	C			A	B	
Queue Length 50th (ft)	84	0	25	142	127	
Queue Length 95th (ft)	116	32	43	190	198	
Internal Link Dist (ft)	203			1586	321	
Turn Bay Length (ft)	100		125			
Base Capacity (vph)	350	455	749	1395	1074	
Starvation Cap Reductn	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	
Reduced v/c Ratio	0.45	0.43	0.24	0.48	0.45	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.58			
Intersection Signal Delay: 12.3		Intersection LOS: B	
Intersection Capacity Utilization 47.7%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 3: Book Road & 103rd Street





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	147	164	60	64	161	157	68	1344	60	225	1887	135
Future Volume (vph)	147	164	60	64	161	157	68	1344	60	225	1887	135
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)	140		0	140		0	255		0	255		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	195			195			220			195		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor												
Frt		0.960			0.926			0.994			0.990	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1787	1811	0	1805	1759	0	1805	3521	0	1787	3508	0
Flt Permitted	0.151			0.392			0.950			0.950		
Satd. Flow (perm)	284	1811	0	745	1759	0	1805	3521	0	1787	3508	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		11			30			4			8	
Link Speed (mph)		35			40			45			45	
Link Distance (ft)		490			404			1570			1311	
Travel Time (s)		9.5			6.9			23.8			19.9	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	0%	0%	0%	0%	0%	2%	0%	1%	2%	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)	156	238	0	68	338	0	72	1494	0	239	2151	0
Turn Type	pm+pt	NA		pm+pt	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8								
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	3.0	8.0		3.0	8.0		3.0	15.0		3.0	15.0	
Minimum Split (s)	6.5	14.0		6.5	14.0		7.5	21.0		7.5	21.0	
Total Split (s)	14.0	29.0		14.0	29.0		14.0	73.0		24.0	83.0	
Total Split (%)	10.0%	20.7%		10.0%	20.7%		10.0%	52.1%		17.1%	59.3%	
Yellow Time (s)	3.5	4.5		3.5	4.5		3.5	4.5		3.5	4.5	
All-Red Time (s)	0.0	1.5		0.0	1.5		1.0	1.5		1.0	1.5	
Lost Time Adjust (s)	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		4.5	6.0		4.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	
Act Effct Green (s)	37.4	26.5		34.4	23.0		8.9	67.0		19.5	79.8	
Actuated g/C Ratio	0.27	0.19		0.25	0.16		0.06	0.48		0.14	0.57	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.83	0.68		0.27	1.08		0.63	0.89		0.96	1.07	
Control Delay	74.5	62.1		40.6	121.8		87.5	40.6		98.8	70.8	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	74.5	62.1		40.6	121.8		87.5	40.6		98.8	70.8	
LOS	E	E		D	F		F	D		F	E	
Approach Delay		67.0			108.2			42.8			73.6	
Approach LOS		E			F			D			E	
Queue Length 50th (ft)	112	199		46	~318		65	633		221	~1193	
Queue Length 95th (ft)	#216	#326		87	#518		#128	744		m#376	m#1307	
Internal Link Dist (ft)		410			324			1490			1231	
Turn Bay Length (ft)	140			140			255			255		
Base Capacity (vph)	188	351		271	314		122	1687		248	2004	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.83	0.68		0.25	1.08		0.59	0.89		0.96	1.07	

Intersection Summary

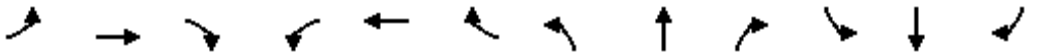
Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 42 (30%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 100
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.08
Intersection Signal Delay: 65.9 Intersection LOS: E
Intersection Capacity Utilization 103.5% 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.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: IL Route 59 & 103rd Street



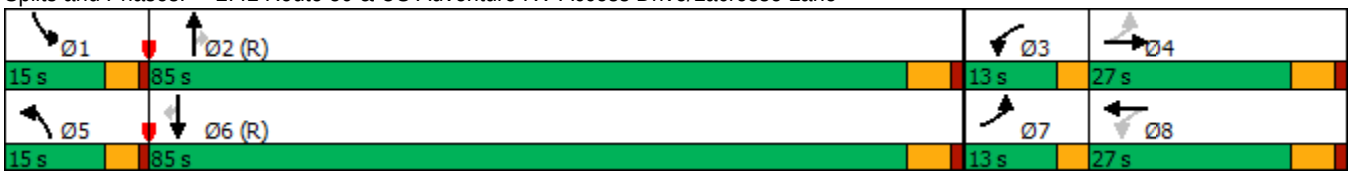
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	0	0	170	0	66	6	1471	95	105	2111	2
Future Volume (vph)	3	0	0	170	0	66	6	1471	95	105	2111	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	2000	1900	1900	2000	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	90		0	215		215	210		175
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (ft)	25			90			220			205		
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
Ped Bike Factor												
Frt					0.850				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	1900	0	1805	1615	0	1805	3725	1615	1805	3725	1077
Flt Permitted	0.000			0.950			0.950			0.950		
Satd. Flow (perm)	0	1900	0	1805	1615	0	1805	3725	1615	1805	3725	1077
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					238				86			86
Link Speed (mph)		25			25			45			45	
Link Distance (ft)		250			389			1719			1002	
Travel Time (s)		6.8			10.6			26.0			15.2	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	2%	50%
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)	3	0	0	175	68	0	6	1516	98	108	2176	2
Turn Type	pm+pt			pm+pt	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8					2			6
Detector Phase	7	4		3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	3.0	8.0		3.0	8.0		3.0	15.0	15.0	3.0	15.0	15.0
Minimum Split (s)	6.5	14.0		6.5	14.0		7.5	21.0	21.0	7.5	21.0	21.0
Total Split (s)	13.0	27.0		13.0	27.0		15.0	85.0	85.0	15.0	85.0	85.0
Total Split (%)	9.3%	19.3%		9.3%	19.3%		10.7%	60.7%	60.7%	10.7%	60.7%	60.7%
Yellow Time (s)	3.5	4.5		3.5	4.5		3.5	4.5	4.5	3.5	4.5	4.5
All-Red Time (s)	0.0	1.5		0.0	1.5		1.0	1.5	1.5	1.0	1.5	1.5
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		4.5	6.0	6.0	4.5	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	C-Min	C-Min	None	C-Min	C-Min
Act Effct Green (s)	5.9			12.5	8.0		6.1	99.1	99.1	14.4	115.7	115.7
Actuated g/C Ratio	0.04			0.09	0.06		0.04	0.71	0.71	0.10	0.83	0.83

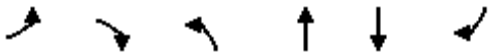
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.04			1.09	0.22		0.08	0.58	0.08	0.58	0.71	0.00
Control Delay	65.3			153.8	1.6		81.7	4.6	0.2	72.0	8.2	0.0
Queue Delay	0.0			0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	65.3			153.8	1.6		81.7	4.6	0.2	72.0	8.2	0.0
LOS	E			F	A		F	A	A	E	A	A
Approach Delay		65.3			111.2			4.6			11.2	
Approach LOS		E			F			A			B	
Queue Length 50th (ft)	3			~203	0		6	61	0	95	267	0
Queue Length 95th (ft)	13			236	0		m7	m356	m1	156	791	0
Internal Link Dist (ft)		170			309			1639			922	
Turn Bay Length (ft)				90			215		215	210		175
Base Capacity (vph)	122			161	444		135	2636	1167	188	3077	904
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	0.02			1.09	0.15		0.04	0.58	0.08	0.57	0.71	0.00

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 113 (81%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.09			
Intersection Signal Delay: 14.5		Intersection LOS: B	
Intersection Capacity Utilization 88.6%		ICU Level of Service E	
Analysis Period (min) 15			

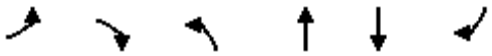
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: IL Route 59 & US Adventure RV Access Drive/Lacrosse Lane





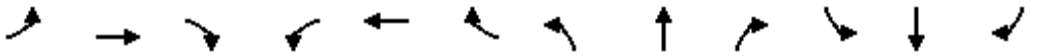
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	120	173	213	387	530	141
Future Volume (vph)	120	173	213	387	530	141
Ideal Flow (vphpl)	1900	1900	1900	2000	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	100	0	125			0
Storage Lanes	1	1	1			0
Taper Length (ft)	115		125			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt		0.850			0.972	
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1805	1583	1805	1980	1847	0
Flt Permitted	0.950		0.260			
Satd. Flow (perm)	1805	1583	494	1980	1847	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		192			21	
Link Speed (mph)	30			35	30	
Link Distance (ft)	283			1666	401	
Travel Time (s)	6.4			32.5	9.1	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	2%	0%	1%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	133	192	237	430	746	0
Turn Type	Prot	Perm	pm+pt	NA	NA	
Protected Phases	4		5	2	6	
Permitted Phases		4	2			
Detector Phase	4	4	5	2	6	
Switch Phase						
Minimum Initial (s)	8.0	8.0	3.0	15.0	15.0	
Minimum Split (s)	24.0	24.0	9.5	24.0	24.0	
Total Split (s)	21.0	21.0	18.0	89.0	71.0	
Total Split (%)	19.1%	19.1%	16.4%	80.9%	64.5%	
Yellow Time (s)	4.5	4.5	3.5	4.5	4.5	
All-Red Time (s)	1.5	1.5	0.0	1.5	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	6.0	3.5	6.0	6.0	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None	None	None	C-Min	C-Min	
Act Effct Green (s)	13.2	13.2	87.3	84.8	72.3	
Actuated g/C Ratio	0.12	0.12	0.79	0.77	0.66	



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
v/c Ratio	0.62	0.54	0.47	0.28	0.61	
Control Delay	58.4	12.2	6.1	4.4	13.8	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	58.4	12.2	6.1	4.4	13.8	
LOS	E	B	A	A	B	
Approach Delay	31.1			5.0	13.8	
Approach LOS	C			A	B	
Queue Length 50th (ft)	90	0	34	78	276	
Queue Length 95th (ft)	153	65	55	115	428	
Internal Link Dist (ft)	203			1586	321	
Turn Bay Length (ft)	100		125			
Base Capacity (vph)	246	381	564	1527	1221	
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	0.54	0.50	0.42	0.28	0.61	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.62			
Intersection Signal Delay: 13.7		Intersection LOS: B	
Intersection Capacity Utilization 68.3%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 3: Book Road & 103rd Street



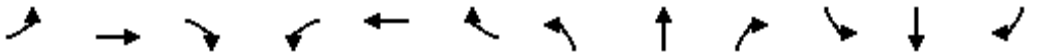
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	158	66	71	78	48	171	65	1527	72	157	1388	93
Future Volume (vph)	158	66	71	78	48	171	65	1527	72	157	1388	93
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	140		0	140		0	255		0	255		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	195			195			220			195		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor												
Frt		0.922			0.883			0.993			0.991	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	1734	0	1770	1667	0	1770	3551	0	1805	3544	0
Flt Permitted	0.284			0.666			0.950			0.950		
Satd. Flow (perm)	540	1734	0	1241	1667	0	1770	3551	0	1805	3544	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		45			149			6			9	
Link Speed (mph)		35			40			45			45	
Link Distance (ft)		490			404			1570			1311	
Travel Time (s)		9.5			6.9			23.8			19.9	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	2%	2%	3%	0%	2%	1%	0%	0%	1%	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)	165	143	0	81	228	0	68	1666	0	164	1543	0
Turn Type	pm+pt	NA		pm+pt	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8								
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	3.0	8.0		3.0	8.0		3.0	15.0		3.0	15.0	
Minimum Split (s)	6.5	14.0		6.5	14.0		7.5	21.0		7.5	21.0	
Total Split (s)	13.0	20.0		13.0	20.0		13.0	54.0		13.0	54.0	
Total Split (%)	13.0%	20.0%		13.0%	20.0%		13.0%	54.0%		13.0%	54.0%	
Yellow Time (s)	3.5	4.5		3.5	4.5		3.5	4.5		3.5	4.5	
All-Red Time (s)	0.0	1.5		0.0	1.5		1.0	1.5		1.0	1.5	
Lost Time Adjust (s)	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		4.5	6.0		4.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	
Act Effct Green (s)	24.2	14.1		22.0	11.2		7.9	48.0		11.5	53.6	
Actuated g/C Ratio	0.24	0.14		0.22	0.11		0.08	0.48		0.12	0.54	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.67	0.51		0.26	0.72		0.49	0.98		0.80	0.81	
Control Delay	43.2	34.5		29.6	28.7		55.8	42.9		70.0	20.5	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	43.2	34.5		29.6	28.7		55.8	42.9		70.0	20.5	
LOS	D	C		C	C		E	D		E	C	
Approach Delay		39.2			29.0			43.5			25.3	
Approach LOS		D			C			D			C	
Queue Length 50th (ft)	85	59		40	48		42	525		101	454	
Queue Length 95th (ft)	#140	120		75	125		86	#708		#254	#622	
Internal Link Dist (ft)		410			324			1490			1231	
Turn Bay Length (ft)	140			140			255			255		
Base Capacity (vph)	250	302		337	361		152	1707		206	1902	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.66	0.47		0.24	0.63		0.45	0.98		0.80	0.81	

Intersection Summary

Area Type: Other
Cycle Length: 100
Actuated Cycle Length: 100
Offset: 86 (86%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.98
Intersection Signal Delay: 34.4 Intersection LOS: C
Intersection Capacity Utilization 92.1% 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: IL Route 59 & 103rd Street



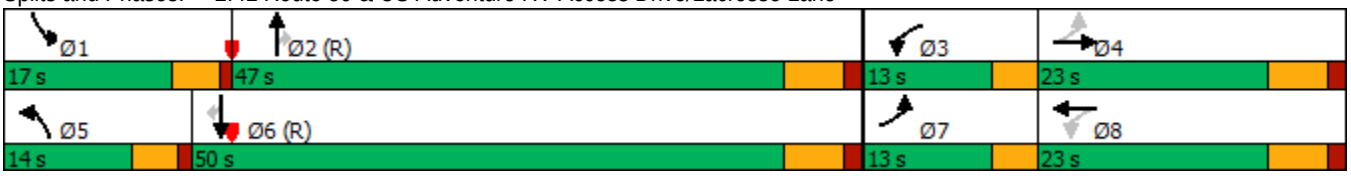
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	1	0	129	0	104	4	1744	100	100	1557	2
Future Volume (vph)	1	1	0	129	0	104	4	1744	100	100	1557	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	2000	1900	1900	2000	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	90		0	215		215	210		175
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (ft)	25			90			220			205		
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
Ped Bike Factor												
Frt					0.850				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	1900	0	1787	1615	0	1805	3762	1599	1805	3762	1615
Flt Permitted				0.784			0.950			0.950		
Satd. Flow (perm)	1900	1900	0	1475	1615	0	1805	3762	1599	1805	3762	1615
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					346				120			120
Link Speed (mph)		25			25			45			45	
Link Distance (ft)		250			389			1719			1002	
Travel Time (s)		6.8			10.6			26.0			15.2	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	1%	0%	0%	0%	1%	1%	0%	1%	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)	1	1	0	133	107	0	4	1798	103	103	1605	2
Turn Type	pm+pt	NA		pm+pt	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8					2			6
Detector Phase	7	4		3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	3.0	8.0		3.0	8.0		3.0	15.0	15.0	3.0	15.0	15.0
Minimum Split (s)	6.5	14.0		6.5	14.0		7.5	21.0	21.0	7.5	21.0	21.0
Total Split (s)	13.0	23.0		13.0	23.0		14.0	47.0	47.0	17.0	50.0	50.0
Total Split (%)	13.0%	23.0%		13.0%	23.0%		14.0%	47.0%	47.0%	17.0%	50.0%	50.0%
Yellow Time (s)	3.5	4.5		3.5	4.5		3.5	4.5	4.5	3.5	4.5	4.5
All-Red Time (s)	0.0	1.5		0.0	1.5		1.0	1.5	1.5	1.0	1.5	1.5
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		4.5	6.0	6.0	4.5	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	C-Min	C-Min	None	C-Min	C-Min
Act Effct Green (s)	7.7	8.0		13.1	8.7		5.8	64.2	64.2	11.0	75.2	75.2
Actuated g/C Ratio	0.08	0.08		0.13	0.09		0.06	0.64	0.64	0.11	0.75	0.75

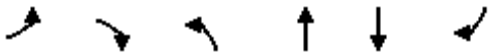
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.01	0.01		0.59	0.23		0.04	0.74	0.10	0.52	0.57	0.00
Control Delay	35.0	43.0		50.9	1.2		47.0	9.1	0.2	50.8	8.1	0.0
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.0	43.0		50.9	1.2		47.0	9.1	0.2	50.8	8.1	0.0
LOS	C	D		D	A		D	A	A	D	A	A
Approach Delay		39.0			28.7			8.7			10.7	
Approach LOS		D			C			A			B	
Queue Length 50th (ft)	1	1		83	0		2	131	1	63	143	0
Queue Length 95th (ft)	5	6		124	0		m0	m#671	m0	112	479	0
Internal Link Dist (ft)		170			309			1639			922	
Turn Bay Length (ft)				90			215		215	210		175
Base Capacity (vph)	211	323		225	561		171	2414	1069	235	2828	1244
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	0.00	0.00		0.59	0.19		0.02	0.74	0.10	0.44	0.57	0.00

Intersection Summary

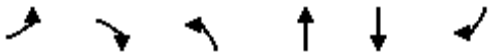
Area Type: Other
Cycle Length: 100
Actuated Cycle Length: 100
Offset: 44 (44%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 80
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.74
Intersection Signal Delay: 10.8 Intersection LOS: B
Intersection Capacity Utilization 78.9% ICU Level of Service D
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: IL Route 59 & US Adventure RV Access Drive/Lacrosse Lane





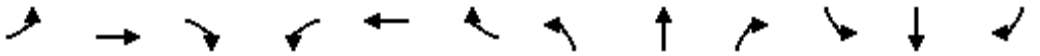
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	83	107	115	311	339	92
Future Volume (vph)	83	107	115	311	339	92
Ideal Flow (vphpl)	1900	1900	1900	2000	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	100	0	125			0
Storage Lanes	1	1	1			0
Taper Length (ft)	115		125			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt		0.850			0.971	
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1805	1615	1805	2000	1841	0
Flt Permitted	0.950		0.428			
Satd. Flow (perm)	1805	1615	813	2000	1841	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		113			29	
Link Speed (mph)	30			35	30	
Link Distance (ft)	283			1666	401	
Travel Time (s)	6.4			32.5	9.1	
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 (%)	0%	0%	0%	0%	0%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	87	113	121	327	454	0
Turn Type	Prot	Perm	pm+pt	NA	NA	
Protected Phases	4		5	2	6	
Permitted Phases		4	2			
Detector Phase	4	4	5	2	6	
Switch Phase						
Minimum Initial (s)	8.0	8.0	3.0	15.0	15.0	
Minimum Split (s)	14.0	14.0	6.5	21.0	21.0	
Total Split (s)	16.0	16.0	12.0	74.0	62.0	
Total Split (%)	17.8%	17.8%	13.3%	82.2%	68.9%	
Yellow Time (s)	4.5	4.5	3.5	4.5	4.5	
All-Red Time (s)	1.5	1.5	0.0	1.5	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	6.0	3.5	6.0	6.0	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None	None	None	C-Min	C-Min	
Act Effct Green (s)	10.8	10.8	69.7	67.2	56.7	
Actuated g/C Ratio	0.12	0.12	0.77	0.75	0.63	



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
v/c Ratio	0.40	0.39	0.17	0.22	0.39	
Control Delay	41.6	11.1	3.3	4.1	9.4	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	41.6	11.1	3.3	4.1	9.4	
LOS	D	B	A	A	A	
Approach Delay	24.4			3.9	9.4	
Approach LOS	C			A	A	
Queue Length 50th (ft)	47	0	13	45	104	
Queue Length 95th (ft)	89	46	30	85	192	
Internal Link Dist (ft)	203			1586	321	
Turn Bay Length (ft)	100		125			
Base Capacity (vph)	228	302	723	1524	1191	
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	0.37	0.17	0.21	0.38	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.40			
Intersection Signal Delay: 9.9		Intersection LOS: A	
Intersection Capacity Utilization 49.8%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 3: Book Road & 103rd Street



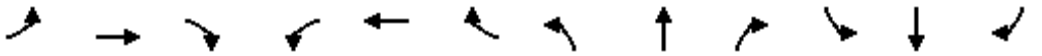
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	174	160	39	64	96	228	32	2079	30	84	874	86
Future Volume (vph)	174	160	39	64	96	228	32	2079	30	84	874	86
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	140		0	140		0	255		0	255		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	195			195			220			195		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor												
Frt		0.971			0.894			0.998			0.987	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1736	1760	0	1805	1667	0	1719	3463	0	1556	3288	0
Flt Permitted	0.360			0.400			0.950			0.950		
Satd. Flow (perm)	658	1760	0	760	1667	0	1719	3463	0	1556	3288	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7			66			2			15	
Link Speed (mph)		35			40			45			45	
Link Distance (ft)		490			404			1570			631	
Travel Time (s)		9.5			6.9			23.8			9.6	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	6%	0%	0%	4%	1%	5%	4%	6%	16%	9%	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)	205	234	0	75	381	0	38	2481	0	99	1129	0
Turn Type	pm+pt	NA		pm+pt	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8								
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	3.0	8.0		3.0	8.0		3.0	15.0		3.0	15.0	
Minimum Split (s)	6.5	14.0		6.5	14.0		7.5	21.0		7.5	21.0	
Total Split (s)	14.0	16.0		14.0	16.0		13.0	97.0		13.0	97.0	
Total Split (%)	10.0%	11.4%		10.0%	11.4%		9.3%	69.3%		9.3%	69.3%	
Yellow Time (s)	3.5	4.5		3.5	4.5		3.5	4.5		3.5	4.5	
All-Red Time (s)	0.0	1.5		0.0	1.5		1.0	1.5		1.0	1.5	
Lost Time Adjust (s)	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		4.5	6.0		4.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	
Act Effct Green (s)	24.1	11.1		21.9	10.0		7.6	91.0		8.5	93.9	
Actuated g/C Ratio	0.17	0.08		0.16	0.07		0.05	0.65		0.06	0.67	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	1.06	1.60		0.40	2.12		0.41	1.10		1.05	0.51	
Control Delay	132.5	339.4		54.8	544.9		76.6	78.6		165.0	17.0	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	132.5	339.4		54.8	544.9		76.6	78.6		165.0	17.0	
LOS	F	F		D	F		E	E		F	B	
Approach Delay		242.8			464.3			78.5			28.9	
Approach LOS		F			F			E			C	
Queue Length 50th (ft)	~190	~313		58	~495		34	~1350		~98	317	
Queue Length 95th (ft)	#285	#456		100	#651		69	#1331		#201	387	
Internal Link Dist (ft)		410			324			1490			551	
Turn Bay Length (ft)	140			140			255			255		
Base Capacity (vph)	193	146		203	180		104	2251		94	2209	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	1.06	1.60		0.37	2.12		0.37	1.10		1.05	0.51	

Intersection Summary

Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 66 (47%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 140
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 2.12
Intersection Signal Delay: 118.8 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: IL Route 59 & 103rd Street



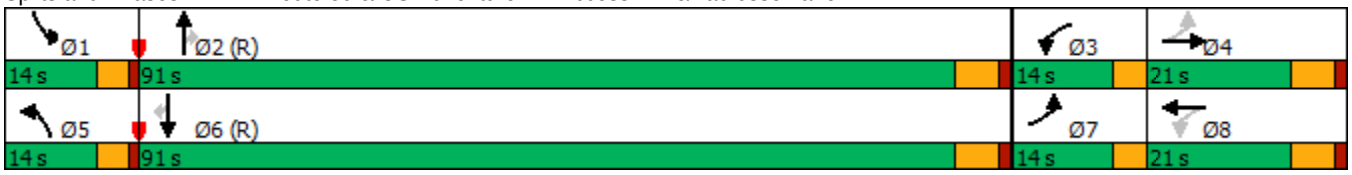
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	0	0	59	0	70	4	2332	91	52	1058	2
Future Volume (vph)	2	0	0	59	0	70	4	2332	91	52	1058	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	2000	1900	1900	2000	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	90		0	215		215	210		175
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (ft)	25			90			220			205		
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
Ped Bike Factor												
Frt					0.850				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	1900	0	1456	1599	0	1805	3654	1599	1805	3519	1615
Flt Permitted				0.784			0.950			0.950		
Satd. Flow (perm)	1900	1900	0	1201	1599	0	1805	3654	1599	1805	3519	1615
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					209				86			86
Link Speed (mph)		25			25			45			45	
Link Distance (ft)		250			389			1185			1002	
Travel Time (s)		6.8			10.6			18.0			15.2	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	24%	0%	1%	0%	4%	1%	0%	8%	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)	2	0	0	65	77	0	4	2563	100	57	1163	2
Turn Type	pm+pt			pm+pt	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8					2			6
Detector Phase	7	4		3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	3.0	8.0		3.0	8.0		3.0	15.0	15.0	3.0	15.0	15.0
Minimum Split (s)	6.5	14.0		6.5	14.0		7.5	21.0	21.0	7.5	21.0	21.0
Total Split (s)	14.0	21.0		14.0	21.0		14.0	91.0	91.0	14.0	91.0	91.0
Total Split (%)	10.0%	15.0%		10.0%	15.0%		10.0%	65.0%	65.0%	10.0%	65.0%	65.0%
Yellow Time (s)	3.5	4.5		3.5	4.5		3.5	4.5	4.5	3.5	4.5	4.5
All-Red Time (s)	0.0	1.5		0.0	1.5		1.0	1.5	1.5	1.0	1.5	1.5
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		4.5	6.0	6.0	4.5	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	C-Min	C-Min	None	C-Min	C-Min
Act Effct Green (s)	6.8			12.5	8.0		5.9	105.9	105.9	9.8	115.8	115.8
Actuated g/C Ratio	0.05			0.09	0.06		0.04	0.76	0.76	0.07	0.83	0.83

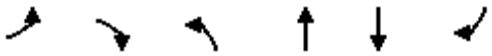
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.02			0.51	0.27		0.05	0.93	0.08	0.45	0.40	0.00
Control Delay	64.5			73.8	2.3		70.5	11.1	0.4	73.1	4.4	0.0
Queue Delay	0.0			0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	64.5			73.8	2.3		70.5	11.1	0.4	73.1	4.4	0.0
LOS	E			E	A		E	B	A	E	A	A
Approach Delay		64.5			35.0			10.8			7.6	
Approach LOS		E			D			B			A	
Queue Length 50th (ft)	2			58	0		4	421	1	51	88	0
Queue Length 95th (ft)	12			102	0		m6	m931	m1	96	264	0
Internal Link Dist (ft)		170			309			1105			922	
Turn Bay Length (ft)				90			215		215	210		175
Base Capacity (vph)	136			129	357		122	2762	1230	138	2910	1350
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	0.01			0.50	0.22		0.03	0.93	0.08	0.41	0.40	0.00

Intersection Summary

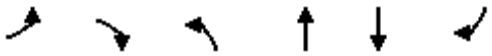
Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 134 (96%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.93
Intersection Signal Delay: 10.7 Intersection LOS: B
Intersection Capacity Utilization 81.2% ICU Level of Service D
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: IL Route 59 & US Adventure RV Access Drive/Lacrosse Lane





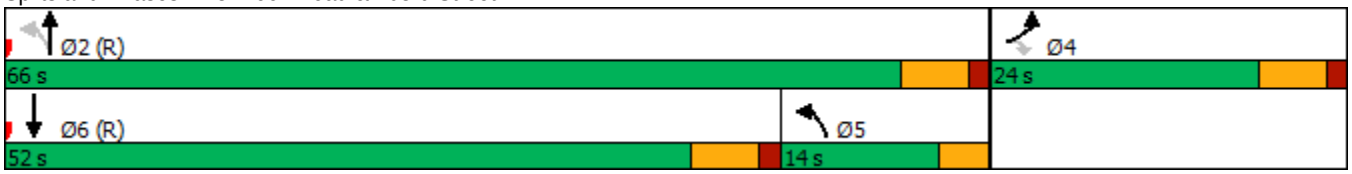
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	132	168	146	513	302	70
Future Volume (vph)	132	168	146	513	302	70
Ideal Flow (vphpl)	1900	1900	1900	2000	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	100	0	125			0
Storage Lanes	1	1	1			0
Taper Length (ft)	115		125			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt		0.850			0.975	
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1752	1495	1787	1961	1781	0
Flt Permitted	0.950		0.426			
Satd. Flow (perm)	1752	1495	801	1961	1781	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		218			19	
Link Speed (mph)	30			35	30	
Link Distance (ft)	283			1666	401	
Travel Time (s)	6.4			32.5	9.1	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.77	0.77	0.77	0.77	0.77	0.77
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	3%	8%	1%	2%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	171	218	190	666	483	0
Turn Type	Prot	Perm	pm+pt	NA	NA	
Protected Phases	4		5	2	6	
Permitted Phases		4	2			
Detector Phase	4	4	5	2	6	
Switch Phase						
Minimum Initial (s)	8.0	8.0	3.0	15.0	15.0	
Minimum Split (s)	24.0	24.0	9.5	24.0	24.0	
Total Split (s)	24.0	24.0	14.0	66.0	52.0	
Total Split (%)	26.7%	26.7%	15.6%	73.3%	57.8%	
Yellow Time (s)	4.5	4.5	3.5	4.5	4.5	
All-Red Time (s)	1.5	1.5	0.0	1.5	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	6.0	3.5	6.0	6.0	
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None	None	None	C-Min	C-Min	
Act Effct Green (s)	14.5	14.5	66.0	63.5	53.4	
Actuated g/C Ratio	0.16	0.16	0.73	0.71	0.59	

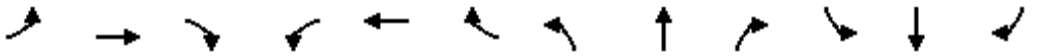


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
v/c Ratio	0.61	0.52	0.29	0.48	0.45	
Control Delay	44.0	9.3	6.2	7.8	12.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	44.0	9.3	6.2	7.8	12.5	
LOS	D	A	A	A	B	
Approach Delay	24.6			7.4	12.5	
Approach LOS	C			A	B	
Queue Length 50th (ft)	91	0	27	146	131	
Queue Length 95th (ft)	125	33	45	190	201	
Internal Link Dist (ft)	203			1586	321	
Turn Bay Length (ft)	100		125			
Base Capacity (vph)	350	473	736	1384	1063	
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	0.49	0.46	0.26	0.48	0.45	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.61			
Intersection Signal Delay: 12.7		Intersection LOS: B	
Intersection Capacity Utilization 48.9%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 3: Book Road & 103rd Street





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	149	171	60	85	167	160	68	1377	77	230	1897	135
Future Volume (vph)	149	171	60	85	167	160	68	1377	77	230	1897	135
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)	140		0	140		0	255		0	255		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	195			195			220			195		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor												
Frt		0.961			0.927			0.992			0.990	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1787	1812	0	1805	1761	0	1805	3515	0	1787	3508	0
Flt Permitted	0.167			0.307			0.950			0.950		
Satd. Flow (perm)	314	1812	0	583	1761	0	1805	3515	0	1787	3508	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		11			29			6			8	
Link Speed (mph)		35			40			45			45	
Link Distance (ft)		490			404			1570			673	
Travel Time (s)		9.5			6.9			23.8			10.2	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	0%	0%	0%	0%	0%	2%	0%	1%	2%	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)	159	246	0	90	348	0	72	1547	0	245	2162	0
Turn Type	pm+pt	NA		pm+pt	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8								
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	3.0	8.0		3.0	8.0		3.0	15.0		3.0	15.0	
Minimum Split (s)	6.5	14.0		6.5	14.0		7.5	21.0		7.5	21.0	
Total Split (s)	14.0	29.0		14.0	29.0		14.0	73.0		24.0	83.0	
Total Split (%)	10.0%	20.7%		10.0%	20.7%		10.0%	52.1%		17.1%	59.3%	
Yellow Time (s)	3.5	4.5		3.5	4.5		3.5	4.5		3.5	4.5	
All-Red Time (s)	0.0	1.5		0.0	1.5		1.0	1.5		1.0	1.5	
Lost Time Adjust (s)	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		4.5	6.0		4.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	
Act Effct Green (s)	37.0	24.0		35.0	23.0		8.9	67.0		19.5	79.8	
Actuated g/C Ratio	0.26	0.17		0.25	0.16		0.06	0.48		0.14	0.57	

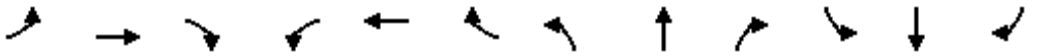
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.82	0.77		0.39	1.11		0.63	0.92		0.99	1.08	
Control Delay	73.0	70.1		43.5	132.4		87.5	43.7		103.6	72.2	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	73.0	70.1		43.5	132.4		87.5	43.7		103.6	72.2	
LOS	E	E		D	F		F	D		F	E	
Approach Delay		71.2			114.1			45.6			75.4	
Approach LOS		E			F			D			E	
Queue Length 50th (ft)	115	209		62	~339		65	673		226	~1204	
Queue Length 95th (ft)	#213	#343		109	#542		#128	#795		m#377	m#1318	
Internal Link Dist (ft)		410			324			1490			593	
Turn Bay Length (ft)	140			140			255			255		
Base Capacity (vph)	193	318		241	313		122	1685		248	2004	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.82	0.77		0.37	1.11		0.59	0.92		0.99	1.08	

Intersection Summary

Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 42 (30%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 100
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.11
Intersection Signal Delay: 68.6 Intersection LOS: E
Intersection Capacity Utilization 104.4% ICU Level of Service G
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: IL Route 59 & 103rd Street



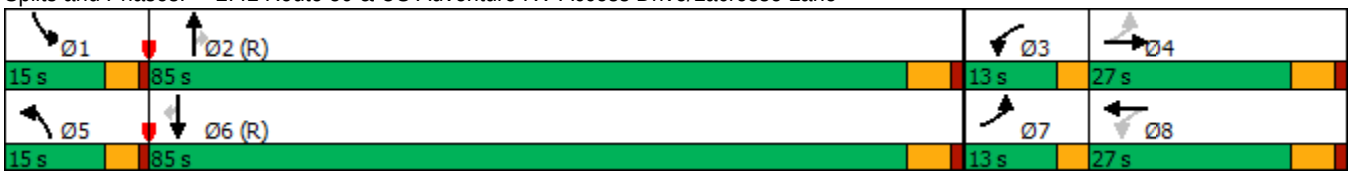
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	0	0	170	0	66	6	1533	95	105	2210	2
Future Volume (vph)	3	0	0	170	0	66	6	1533	95	105	2210	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	2000	1900	1900	2000	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	90		0	215		215	210		175
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (ft)	25			90			220			205		
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
Ped Bike Factor												
Frt					0.850				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	1900	0	1805	1615	0	1805	3725	1615	1805	3725	1077
Flt Permitted	0.000			0.950			0.950			0.950		
Satd. Flow (perm)	0	1900	0	1805	1615	0	1805	3725	1615	1805	3725	1077
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					234				86			86
Link Speed (mph)		25			25			45			45	
Link Distance (ft)		250			389			1175			1002	
Travel Time (s)		6.8			10.6			17.8			15.2	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	2%	50%
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)	3	0	0	175	68	0	6	1580	98	108	2278	2
Turn Type	pm+pt			pm+pt	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8					2			6
Detector Phase	7	4		3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	3.0	8.0		3.0	8.0		3.0	15.0	15.0	3.0	15.0	15.0
Minimum Split (s)	6.5	14.0		6.5	14.0		7.5	21.0	21.0	7.5	21.0	21.0
Total Split (s)	13.0	27.0		13.0	27.0		15.0	85.0	85.0	15.0	85.0	85.0
Total Split (%)	9.3%	19.3%		9.3%	19.3%		10.7%	60.7%	60.7%	10.7%	60.7%	60.7%
Yellow Time (s)	3.5	4.5		3.5	4.5		3.5	4.5	4.5	3.5	4.5	4.5
All-Red Time (s)	0.0	1.5		0.0	1.5		1.0	1.5	1.5	1.0	1.5	1.5
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		4.5	6.0	6.0	4.5	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	C-Min	C-Min	None	C-Min	C-Min
Act Effct Green (s)	5.9			12.5	8.0		6.1	99.1	99.1	14.4	115.7	115.7
Actuated g/C Ratio	0.04			0.09	0.06		0.04	0.71	0.71	0.10	0.83	0.83

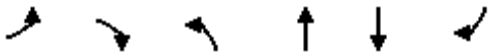
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.04			1.09	0.22		0.08	0.60	0.08	0.58	0.74	0.00
Control Delay	65.3			153.8	1.6		81.5	5.2	0.2	72.0	9.0	0.0
Queue Delay	0.0			0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	65.3			153.8	1.6		81.5	5.2	0.2	72.0	9.0	0.0
LOS	E			F	A		F	A	A	E	A	A
Approach Delay		65.3			111.2			5.1			11.8	
Approach LOS		E			F			A			B	
Queue Length 50th (ft)	3			~203	0		5	72	0	95	301	0
Queue Length 95th (ft)	13			236	0		m8	m432	m1	156	887	0
Internal Link Dist (ft)		170			309			1095			922	
Turn Bay Length (ft)				90			215		215	210		175
Base Capacity (vph)	122			161	441		135	2636	1167	188	3077	904
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	0.02			1.09	0.15		0.04	0.60	0.08	0.57	0.74	0.00

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 113 (81%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.09			
Intersection Signal Delay: 14.9		Intersection LOS: B	
Intersection Capacity Utilization 91.2%		ICU Level of Service F	
Analysis Period (min) 15			

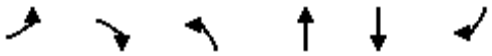
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: IL Route 59 & US Adventure RV Access Drive/Lacrosse Lane





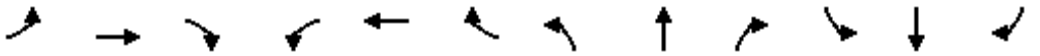
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	128	185	233	387	530	154
Future Volume (vph)	128	185	233	387	530	154
Ideal Flow (vphpl)	1900	1900	1900	2000	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	100	0	125			0
Storage Lanes	1	1	1			0
Taper Length (ft)	115		125			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt		0.850			0.970	
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1805	1583	1805	1980	1843	0
Flt Permitted	0.950		0.249			
Satd. Flow (perm)	1805	1583	473	1980	1843	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		206			23	
Link Speed (mph)	30			35	30	
Link Distance (ft)	283			1666	401	
Travel Time (s)	6.4			32.5	9.1	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	2%	0%	1%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	142	206	259	430	760	0
Turn Type	Prot	Perm	pm+pt	NA	NA	
Protected Phases	4		5	2	6	
Permitted Phases		4	2			
Detector Phase	4	4	5	2	6	
Switch Phase						
Minimum Initial (s)	8.0	8.0	3.0	15.0	15.0	
Minimum Split (s)	24.0	24.0	9.5	24.0	24.0	
Total Split (s)	21.0	21.0	18.0	89.0	71.0	
Total Split (%)	19.1%	19.1%	16.4%	80.9%	64.5%	
Yellow Time (s)	4.5	4.5	3.5	4.5	4.5	
All-Red Time (s)	1.5	1.5	0.0	1.5	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	6.0	3.5	6.0	6.0	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None	None	None	C-Min	C-Min	
Act Effct Green (s)	13.4	13.4	87.1	84.6	71.6	
Actuated g/C Ratio	0.12	0.12	0.79	0.77	0.65	



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
v/c Ratio	0.65	0.55	0.53	0.28	0.63	
Control Delay	59.6	12.0	7.1	4.5	14.6	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	59.6	12.0	7.1	4.5	14.6	
LOS	E	B	A	A	B	
Approach Delay	31.5			5.5	14.6	
Approach LOS	C			A	B	
Queue Length 50th (ft)	96	0	38	80	293	
Queue Length 95th (ft)	162	67	60	115	448	
Internal Link Dist (ft)	203			1586	321	
Turn Bay Length (ft)	100		125			
Base Capacity (vph)	246	393	550	1522	1207	
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	0.58	0.52	0.47	0.28	0.63	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.65			
Intersection Signal Delay: 14.4		Intersection LOS: B	
Intersection Capacity Utilization 70.6%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 3: Book Road & 103rd Street



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	159	73	71	101	54	175	65	1554	85	161	1400	93
Future Volume (vph)	159	73	71	101	54	175	65	1554	85	161	1400	93
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)	140		0	140		0	255		0	255		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	195			195			220			195		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor												
Frt		0.926			0.885			0.992			0.991	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	1742	0	1770	1670	0	1770	3547	0	1805	3544	0
Flt Permitted	0.278			0.662			0.950			0.950		
Satd. Flow (perm)	528	1742	0	1233	1670	0	1770	3547	0	1805	3544	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		41			136			8			9	
Link Speed (mph)		35			40			45			45	
Link Distance (ft)		490			404			1570			581	
Travel Time (s)		9.5			6.9			23.8			8.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	2%	2%	3%	0%	2%	1%	0%	0%	1%	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)	166	150	0	105	238	0	68	1708	0	168	1555	0
Turn Type	pm+pt	NA		pm+pt	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8								
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	3.0	8.0		3.0	8.0		3.0	15.0		3.0	15.0	
Minimum Split (s)	6.5	14.0		6.5	14.0		7.5	21.0		7.5	21.0	
Total Split (s)	13.0	20.0		13.0	20.0		13.0	54.0		13.0	54.0	
Total Split (%)	13.0%	20.0%		13.0%	20.0%		13.0%	54.0%		13.0%	54.0%	
Yellow Time (s)	3.5	4.5		3.5	4.5		3.5	4.5		3.5	4.5	
All-Red Time (s)	0.0	1.5		0.0	1.5		1.0	1.5		1.0	1.5	
Lost Time Adjust (s)	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		4.5	6.0		4.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	
Act Effct Green (s)	24.5	14.4		23.0	11.8		7.9	48.0		10.8	52.9	
Actuated g/C Ratio	0.24	0.14		0.23	0.12		0.08	0.48		0.11	0.53	

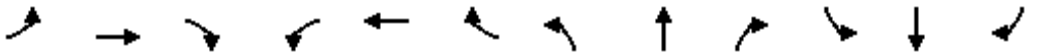
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.67	0.52		0.32	0.75		0.49	1.00		0.86	0.83	
Control Delay	43.1	36.5		30.3	33.9		55.8	48.8		79.8	21.7	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	43.1	36.5		30.3	33.9		55.8	48.8		79.8	21.7	
LOS	D	D		C	C		E	D		E	C	
Approach Delay		39.9			32.8			49.0			27.3	
Approach LOS		D			C			D			C	
Queue Length 50th (ft)	83	65		51	61		42	~552		107	472	
Queue Length 95th (ft)	#143	129		93	#144		86	#738		#262	#459	
Internal Link Dist (ft)		410			324			1490			501	
Turn Bay Length (ft)	140			140			255			255		
Base Capacity (vph)	250	301		344	350		152	1706		195	1880	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.66	0.50		0.31	0.68		0.45	1.00		0.86	0.83	

Intersection Summary

Area Type: Other
Cycle Length: 100
Actuated Cycle Length: 100
Offset: 86 (86%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.00
Intersection Signal Delay: 38.0 Intersection LOS: D
Intersection Capacity Utilization 94.1% ICU Level of Service F
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: IL Route 59 & 103rd Street



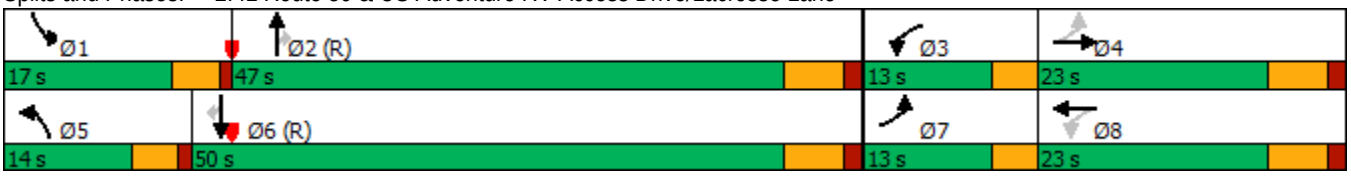
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	1	0	129	0	104	4	1814	100	100	1638	2
Future Volume (vph)	1	1	0	129	0	104	4	1814	100	100	1638	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	2000	1900	1900	2000	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	90		0	215		215	210		175
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (ft)	25			90			220			205		
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
Ped Bike Factor												
Frt					0.850				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	1900	0	1787	1615	0	1805	3762	1599	1805	3762	1615
Flt Permitted				0.784			0.950			0.950		
Satd. Flow (perm)	1900	1900	0	1475	1615	0	1805	3762	1599	1805	3762	1615
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					346				120			120
Link Speed (mph)		25			25			45			45	
Link Distance (ft)		250			389			1184			1002	
Travel Time (s)		6.8			10.6			17.9			15.2	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	1%	0%	0%	0%	1%	1%	0%	1%	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)	1	1	0	133	107	0	4	1870	103	103	1689	2
Turn Type	pm+pt	NA		pm+pt	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8					2			6
Detector Phase	7	4		3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	3.0	8.0		3.0	8.0		3.0	15.0	15.0	3.0	15.0	15.0
Minimum Split (s)	6.5	14.0		6.5	14.0		7.5	21.0	21.0	7.5	21.0	21.0
Total Split (s)	13.0	23.0		13.0	23.0		14.0	47.0	47.0	17.0	50.0	50.0
Total Split (%)	13.0%	23.0%		13.0%	23.0%		14.0%	47.0%	47.0%	17.0%	50.0%	50.0%
Yellow Time (s)	3.5	4.5		3.5	4.5		3.5	4.5	4.5	3.5	4.5	4.5
All-Red Time (s)	0.0	1.5		0.0	1.5		1.0	1.5	1.5	1.0	1.5	1.5
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		4.5	6.0	6.0	4.5	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	C-Min	C-Min	None	C-Min	C-Min
Act Effct Green (s)	7.7	8.0		13.1	8.7		5.8	64.2	64.2	11.0	75.2	75.2
Actuated g/C Ratio	0.08	0.08		0.13	0.09		0.06	0.64	0.64	0.11	0.75	0.75

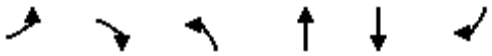
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.01	0.01		0.59	0.23		0.04	0.77	0.10	0.52	0.60	0.00
Control Delay	35.0	43.0		50.9	1.2		46.0	10.8	0.3	50.8	8.6	0.0
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.0	43.0		50.9	1.2		46.0	10.8	0.3	50.8	8.6	0.0
LOS	C	D		D	A		D	B	A	D	A	A
Approach Delay		39.0			28.7			10.3			11.0	
Approach LOS		D			C			B			B	
Queue Length 50th (ft)	1	1		83	0		3	170	0	63	157	0
Queue Length 95th (ft)	5	6		124	0		m0	m#710	m0	112	525	0
Internal Link Dist (ft)		170			309			1104			922	
Turn Bay Length (ft)				90			215		215	210		175
Base Capacity (vph)	211	323		225	561		171	2414	1069	235	2828	1244
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	0.00	0.00		0.59	0.19		0.02	0.77	0.10	0.44	0.60	0.00

Intersection Summary

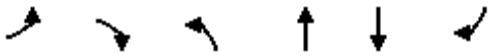
Area Type: Other
Cycle Length: 100
Actuated Cycle Length: 100
Offset: 44 (44%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 80
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.77
Intersection Signal Delay: 11.7 Intersection LOS: B
Intersection Capacity Utilization 80.7% ICU Level of Service D
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: IL Route 59 & US Adventure RV Access Drive/Lacrosse Lane





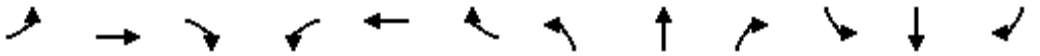
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	92	121	131	311	339	103
Future Volume (vph)	92	121	131	311	339	103
Ideal Flow (vphpl)	1900	1900	1900	2000	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	100	0	125			0
Storage Lanes	1	1	1			0
Taper Length (ft)	115		125			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt		0.850			0.969	
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1805	1615	1805	2000	1837	0
Flt Permitted	0.950		0.418			
Satd. Flow (perm)	1805	1615	794	2000	1837	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		127			32	
Link Speed (mph)	30			35	30	
Link Distance (ft)	283			1666	401	
Travel Time (s)	6.4			32.5	9.1	
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 (%)	0%	0%	0%	0%	0%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	97	127	138	327	465	0
Turn Type	Prot	Perm	pm+pt	NA	NA	
Protected Phases	4		5	2	6	
Permitted Phases		4	2			
Detector Phase	4	4	5	2	6	
Switch Phase						
Minimum Initial (s)	8.0	8.0	3.0	15.0	15.0	
Minimum Split (s)	14.0	14.0	6.5	21.0	21.0	
Total Split (s)	16.0	16.0	12.0	74.0	62.0	
Total Split (%)	17.8%	17.8%	13.3%	82.2%	68.9%	
Yellow Time (s)	4.5	4.5	3.5	4.5	4.5	
All-Red Time (s)	1.5	1.5	0.0	1.5	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	6.0	3.5	6.0	6.0	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None	None	None	C-Min	C-Min	
Act Effct Green (s)	11.2	11.2	69.3	66.8	56.0	
Actuated g/C Ratio	0.12	0.12	0.77	0.74	0.62	



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
v/c Ratio	0.43	0.41	0.20	0.22	0.40	
Control Delay	41.9	10.7	3.6	4.3	9.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	41.9	10.7	3.6	4.3	9.9	
LOS	D	B	A	A	A	
Approach Delay	24.2			4.1	9.9	
Approach LOS	C			A	A	
Queue Length 50th (ft)	52	0	15	46	110	
Queue Length 95th (ft)	96	47	34	87	204	
Internal Link Dist (ft)	203			1586	321	
Turn Bay Length (ft)	100		125			
Base Capacity (vph)	234	320	708	1522	1184	
Starvation Cap Reductn	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	
Reduced v/c Ratio	0.41	0.40	0.19	0.21	0.39	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.43			
Intersection Signal Delay: 10.3		Intersection LOS: B	
Intersection Capacity Utilization 51.4%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 3: Book Road & 103rd Street



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	174	160	39	64	96	228	32	2079	30	84	874	86
Future Volume (vph)	174	160	39	64	96	228	32	2079	30	84	874	86
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)	140		0	140		140	255		0	255		255
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	195			195			220			195		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor												
Frt		0.971				0.850		0.998			0.987	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1736	1760	0	1805	1827	1599	1719	3463	0	1556	3288	0
Flt Permitted	0.450			0.400			0.950			0.950		
Satd. Flow (perm)	822	1760	0	760	1827	1599	1719	3463	0	1556	3288	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7				51		2			15	
Link Speed (mph)		35			40			45			45	
Link Distance (ft)		490			404			1570			1311	
Travel Time (s)		9.5			6.9			23.8			19.9	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	6%	0%	0%	4%	1%	5%	4%	6%	16%	9%	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)	205	234	0	75	113	268	38	2481	0	99	1129	0
Turn Type	pm+pt	NA		pm+pt	NA	pm+ov	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8	1	5	2		1	6	
Permitted Phases	4			8		8						
Detector Phase	7	4		3	8	1	5	2		1	6	
Switch Phase												
Minimum Initial (s)	3.0	8.0		3.0	8.0	3.0	3.0	15.0		3.0	15.0	
Minimum Split (s)	6.5	14.0		6.5	14.0	7.5	7.5	21.0		7.5	21.0	
Total Split (s)	14.0	16.0		14.0	16.0	13.0	13.0	97.0		13.0	97.0	
Total Split (%)	10.0%	11.4%		10.0%	11.4%	9.3%	9.3%	69.3%		9.3%	69.3%	
Yellow Time (s)	3.5	4.5		3.5	4.5	3.5	3.5	4.5		3.5	4.5	
All-Red Time (s)	0.0	1.5		0.0	1.5	1.0	1.0	1.5		1.0	1.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.5	6.0		3.5	6.0	4.5	4.5	6.0		4.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag	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	C-Min		None	C-Min	
Act Effct Green (s)	24.1	11.1		21.9	10.0	24.5	7.6	91.0		8.5	93.9	
Actuated g/C Ratio	0.17	0.08		0.16	0.07	0.18	0.05	0.65		0.06	0.67	

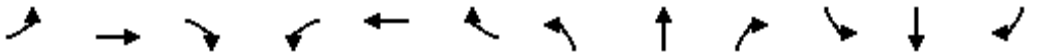
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.98	1.60		0.40	0.87	0.83	0.41	1.10		1.05	0.51	
Control Delay	110.9	339.4		54.8	113.6	67.2	76.6	78.6		164.1	17.4	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	110.9	339.4		54.8	113.6	67.2	76.6	78.6		164.1	17.4	
LOS	F	F		D	F	E	E	E		F	B	
Approach Delay		232.7			76.7			78.5			29.3	
Approach LOS		F			E			E			C	
Queue Length 50th (ft)	~174	~313		58	104	196	34	~1350		~97	322	
Queue Length 95th (ft)	#257	#456		100	#202	#306	69	#1331		#200	397	
Internal Link Dist (ft)		410			324			1490			1231	
Turn Bay Length (ft)	140			140		140	255			255		
Base Capacity (vph)	209	146		203	130	321	104	2251		94	2209	
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	0.98	1.60		0.37	0.87	0.83	0.37	1.10		1.05	0.51	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 66 (47%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 140			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.60			
Intersection Signal Delay: 79.9		Intersection LOS: E	
Intersection Capacity Utilization 96.5%		ICU Level of Service F	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: IL Route 59 & 103rd Street



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	149	171	60	85	167	160	68	1377	77	230	1897	135
Future Volume (vph)	149	171	60	85	167	160	68	1377	77	230	1897	135
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)	140		0	140		140	255		0	255		255
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	195			195			220			195		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor												
Frt		0.961				0.850		0.992			0.990	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1787	1812	0	1805	1900	1615	1805	3515	0	1787	3508	0
Flt Permitted	0.408			0.262			0.950			0.950		
Satd. Flow (perm)	768	1812	0	498	1900	1615	1805	3515	0	1787	3508	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		11				53		6			8	
Link Speed (mph)		35			40			45			45	
Link Distance (ft)		490			404			1570			1311	
Travel Time (s)		9.5			6.9			23.8			19.9	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	0%	0%	0%	0%	0%	2%	0%	1%	2%	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)	159	246	0	90	178	170	72	1547	0	245	2162	0
Turn Type	pm+pt	NA		pm+pt	NA	pm+ov	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8	1	5	2		1	6	
Permitted Phases	4			8		8						
Detector Phase	7	4		3	8	1	5	2		1	6	
Switch Phase												
Minimum Initial (s)	3.0	8.0		3.0	8.0	3.0	3.0	15.0		3.0	15.0	
Minimum Split (s)	6.5	14.0		6.5	14.0	7.5	7.5	21.0		7.5	21.0	
Total Split (s)	14.0	29.0		14.0	29.0	24.0	14.0	73.0		24.0	83.0	
Total Split (%)	10.0%	20.7%		10.0%	20.7%	17.1%	10.0%	52.1%		17.1%	59.3%	
Yellow Time (s)	3.5	4.5		3.5	4.5	3.5	3.5	4.5		3.5	4.5	
All-Red Time (s)	0.0	1.5		0.0	1.5	1.0	1.0	1.5		1.0	1.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.5	6.0		3.5	6.0	4.5	4.5	6.0		4.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag	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	C-Min		None	C-Min	
Act Effct Green (s)	34.6	21.6		32.9	20.8	47.5	8.9	68.0		20.7	82.1	
Actuated g/C Ratio	0.25	0.15		0.24	0.15	0.34	0.06	0.49		0.15	0.59	

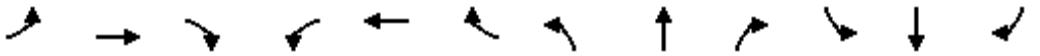
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.60	0.85		0.44	0.63	0.29	0.63	0.90		0.93	1.05	
Control Delay	51.6	80.7		45.7	66.1	24.1	87.5	41.8		88.7	60.2	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	51.6	80.7		45.7	66.1	24.1	87.5	41.8		88.7	60.2	
LOS	D	F		D	E	C	F	D		F	E	
Approach Delay		69.3			45.6			43.9			63.1	
Approach LOS		E			D			D			E	
Queue Length 50th (ft)	115	209		62	151	75	65	673		228	~1204	
Queue Length 95th (ft)	180	#343		109	232	137	#128	#795		m#377	m#1321	
Internal Link Dist (ft)		410			324			1490			1231	
Turn Bay Length (ft)	140			140		140	255			255		
Base Capacity (vph)	266	306		218	312	583	122	1711		264	2060	
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	0.60	0.80		0.41	0.57	0.29	0.59	0.90		0.93	1.05	

Intersection Summary

Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 42 (30%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.05
Intersection Signal Delay: 55.6 Intersection LOS: E
Intersection Capacity Utilization 94.9% ICU Level of Service F
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: IL Route 59 & 103rd Street



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	159	73	71	101	54	175	65	1554	85	161	1400	93
Future Volume (vph)	159	73	71	101	54	175	65	1554	85	161	1400	93
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)	140		0	140		140	255		0	255		225
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	195			195			220			195		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor												
Frt		0.926				0.850		0.992			0.991	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	1742	0	1770	1845	1615	1770	3547	0	1805	3544	0
Flt Permitted	0.586			0.662			0.950			0.950		
Satd. Flow (perm)	1113	1742	0	1233	1845	1615	1770	3547	0	1805	3544	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		41				71		8			9	
Link Speed (mph)		35			40			45			45	
Link Distance (ft)		490			404			1570			1311	
Travel Time (s)		9.5			6.9			23.8			19.9	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	2%	2%	3%	0%	2%	1%	0%	0%	1%	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)	166	150	0	105	56	182	68	1708	0	168	1555	0
Turn Type	pm+pt	NA		pm+pt	NA	pm+ov	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8	1	5	2		1	6	
Permitted Phases	4			8		8						
Detector Phase	7	4		3	8	1	5	2		1	6	
Switch Phase												
Minimum Initial (s)	3.0	8.0		3.0	8.0	3.0	3.0	15.0		3.0	15.0	
Minimum Split (s)	6.5	14.0		6.5	14.0	7.5	7.5	21.0		7.5	21.0	
Total Split (s)	13.0	20.0		13.0	20.0	13.0	13.0	54.0		13.0	54.0	
Total Split (%)	13.0%	20.0%		13.0%	20.0%	13.0%	13.0%	54.0%		13.0%	54.0%	
Yellow Time (s)	3.5	4.5		3.5	4.5	3.5	3.5	4.5		3.5	4.5	
All-Red Time (s)	0.0	1.5		0.0	1.5	1.0	1.0	1.5		1.0	1.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.5	6.0		3.5	6.0	4.5	4.5	6.0		4.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag	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	C-Min		None	C-Min	
Act Effct Green (s)	21.9	11.8		20.9	11.6	26.4	7.9	49.9		11.6	55.6	
Actuated g/C Ratio	0.22	0.12		0.21	0.12	0.26	0.08	0.50		0.12	0.56	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.53	0.62		0.35	0.26	0.38	0.49	0.96		0.81	0.79	
Control Delay	36.7	41.5		31.6	42.4	19.7	55.8	39.8		71.3	19.6	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	36.7	41.5		31.6	42.4	19.7	55.8	39.8		71.3	19.6	
LOS	D	D		C	D	B	E	D		E	B	
Approach Delay		39.0			27.1			40.4			24.6	
Approach LOS		D			C			D			C	
Queue Length 50th (ft)	84	66		51	33	54	42	~552		105	468	
Queue Length 95th (ft)	139	129		93	69	114	86	#738		#263	#441	
Internal Link Dist (ft)		410			324			1490			1231	
Turn Bay Length (ft)	140			140		140	255			255		
Base Capacity (vph)	311	279		316	258	478	152	1773		208	1973	
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	0.53	0.54		0.33	0.22	0.38	0.45	0.96		0.81	0.79	

Intersection Summary

Area Type: Other
Cycle Length: 100
Actuated Cycle Length: 100
Offset: 86 (86%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.96
Intersection Signal Delay: 32.7 Intersection LOS: C
Intersection Capacity Utilization 87.1% ICU Level of Service E
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: IL Route 59 & 103rd Street

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	50	42	54	2198	895	94
Future Vol, veh/h	50	42	54	2198	895	94
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	-	200	-	-	200
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	2	2	4	10	0
Mvmt Flow	59	49	64	2586	1053	111

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2474	527	1164	0	-	0
Stage 1	1053	-	-	-	-	-
Stage 2	1421	-	-	-	-	-
Critical Hdwy	6.8	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	~ 25	496	596	-	-	-
Stage 1	301	-	-	-	-	-
Stage 2	192	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 22	496	596	-	-	-
Mov Cap-2 Maneuver	88	-	-	-	-	-
Stage 1	269	-	-	-	-	-
Stage 2	192	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	63	0.3	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	596	-	88	496	-	-
HCM Lane V/C Ratio	0.107	-	0.668	0.1	-	-
HCM Control Delay (s)	11.8	-	105	13.1	-	-
HCM Lane LOS	B	-	F	B	-	-
HCM 95th %tile Q(veh)	0.4	-	3.2	0.3	-	-

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

Intersection	
Int Delay, s/veh	2.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	7	155	17	7	168	1	52	0	15	4	0	22
Future Vol, veh/h	7	155	17	7	168	1	52	0	15	4	0	22
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	79	79	79	79	79	79	79	79	79	79	79	79
Heavy Vehicles, %	0	8	6	14	0	100	2	0	0	0	0	0
Mvmt Flow	9	196	22	9	213	1	66	0	19	5	0	28

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	214	0	0	218	0	0	471	457	207	467	468	214
Stage 1	-	-	-	-	-	-	225	225	-	232	232	-
Stage 2	-	-	-	-	-	-	246	232	-	235	236	-
Critical Hdwy	4.1	-	-	4.24	-	-	7.12	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.326	-	-	3.518	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1368	-	-	1284	-	-	503	503	839	509	496	831
Stage 1	-	-	-	-	-	-	778	721	-	775	716	-
Stage 2	-	-	-	-	-	-	758	716	-	773	713	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1368	-	-	1284	-	-	480	495	839	491	488	831
Mov Cap-2 Maneuver	-	-	-	-	-	-	480	495	-	491	488	-
Stage 1	-	-	-	-	-	-	772	715	-	769	710	-
Stage 2	-	-	-	-	-	-	727	710	-	749	707	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	0.3	13.1	10
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	531	1368	-	-	1284	-	-	751
HCM Lane V/C Ratio	0.16	0.006	-	-	0.007	-	-	0.044
HCM Control Delay (s)	13.1	7.6	0	-	7.8	0	-	10
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.6	0	-	-	0	-	-	0.1

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	7	167	168	0	3	9
Future Vol, veh/h	7	167	168	0	3	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	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	81	81	81	81	81	81
Heavy Vehicles, %	17	8	2	0	0	0
Mvmt Flow	9	206	207	0	4	11

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	207	0	-	0	431	207
Stage 1	-	-	-	-	207	-
Stage 2	-	-	-	-	224	-
Critical Hdwy	4.27	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.353	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1280	-	-	-	585	839
Stage 1	-	-	-	-	832	-
Stage 2	-	-	-	-	818	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1280	-	-	-	580	839
Mov Cap-2 Maneuver	-	-	-	-	580	-
Stage 1	-	-	-	-	825	-
Stage 2	-	-	-	-	818	-

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	9.9
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1280	-	-	-	755
HCM Lane V/C Ratio	0.007	-	-	-	0.02
HCM Control Delay (s)	7.8	0	-	-	9.9
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	39	0	2	2	0	3	3	558	4	2	288	11
Future Vol, veh/h	39	0	2	2	0	3	3	558	4	2	288	11
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	80	80	80	80	80	80	80	80	80
Heavy Vehicles, %	3	0	0	0	0	0	67	1	0	0	4	0
Mvmt Flow	49	0	3	3	0	4	4	698	5	3	360	14

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1084	1084	367	1084	1089	701	374	0	0	703	0	0
Stage 1	373	373	-	709	709	-	-	-	-	-	-	-
Stage 2	711	711	-	375	380	-	-	-	-	-	-	-
Critical Hdwy	7.13	6.5	6.2	7.1	6.5	6.2	4.77	-	-	4.1	-	-
Critical Hdwy Stg 1	6.13	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.13	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.527	4	3.3	3.5	4	3.3	2.803	-	-	2.2	-	-
Pot Cap-1 Maneuver	194	219	683	196	217	442	902	-	-	904	-	-
Stage 1	646	622	-	428	440	-	-	-	-	-	-	-
Stage 2	422	439	-	650	617	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	191	217	683	194	215	442	902	-	-	904	-	-
Mov Cap-2 Maneuver	191	217	-	194	215	-	-	-	-	-	-	-
Stage 1	641	620	-	425	437	-	-	-	-	-	-	-
Stage 2	415	436	-	645	615	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	29.4	17.6	0	0.1
HCM LOS	D	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	902	-	-	198	292	904	-	-
HCM Lane V/C Ratio	0.004	-	-	0.259	0.021	0.003	-	-
HCM Control Delay (s)	9	0	-	29.4	17.6	9	0	-
HCM Lane LOS	A	A	-	D	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	1	0.1	0	-	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	174	5	1	241	2	5
Future Vol, veh/h	174	5	1	241	2	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	196	6	1	271	2	6

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	202	0	472	199
Stage 1	-	-	-	-	199	-
Stage 2	-	-	-	-	273	-
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	-	-	1370	-	551	842
Stage 1	-	-	-	-	835	-
Stage 2	-	-	-	-	773	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1370	-	550	842
Mov Cap-2 Maneuver	-	-	-	-	550	-
Stage 1	-	-	-	-	834	-
Stage 2	-	-	-	-	773	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	10
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	731	-	-	1370	-
HCM Lane V/C Ratio	0.011	-	-	0.001	-
HCM Control Delay (s)	10	-	-	7.6	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	10	1	1	4	7	5
Future Vol, veh/h	10	1	1	4	7	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	10	0	0	25	0	0
Mvmt Flow	11	1	1	5	8	6

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	18	11	14	0	-	0
Stage 1	11	-	-	-	-	-
Stage 2	7	-	-	-	-	-
Critical Hdwy	6.5	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.5	-	-	-	-	-
Critical Hdwy Stg 2	5.5	-	-	-	-	-
Follow-up Hdwy	3.59	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	979	1076	1617	-	-	-
Stage 1	991	-	-	-	-	-
Stage 2	996	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	978	1076	1617	-	-	-
Mov Cap-2 Maneuver	978	-	-	-	-	-
Stage 1	990	-	-	-	-	-
Stage 2	996	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.7	1.4	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1617	-	986	-	-
HCM Lane V/C Ratio	0.001	-	0.013	-	-
HCM Control Delay (s)	7.2	0	8.7	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	31	33	36	1460	2022	95
Future Vol, veh/h	31	33	36	1460	2022	95
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	-	200	-	-	200
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	2	2	0
Mvmt Flow	34	36	39	1587	2198	103

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	3070	1099	2301	0	-	0
Stage 1	2198	-	-	-	-	-
Stage 2	872	-	-	-	-	-
Critical Hdwy	6.8	6.9	4.1	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	~ 10	211	222	-	-	-
Stage 1	72	-	-	-	-	-
Stage 2	374	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 8	211	222	-	-	-
Mov Cap-2 Maneuver	48	-	-	-	-	-
Stage 1	59	-	-	-	-	-
Stage 2	374	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	100.7	0.6	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	222	-	48	211	-	-
HCM Lane V/C Ratio	0.176	-	0.702	0.17	-	-
HCM Control Delay (s)	24.7	-	180.8	25.5	-	-
HCM Lane LOS	C	-	F	D	-	-
HCM 95th %tile Q(veh)	0.6	-	2.8	0.6	-	-

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

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	34	227	45	16	237	6	27	1	9	2	0	17
Future Vol, veh/h	34	227	45	16	237	6	27	1	9	2	0	17
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	1	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	37	244	48	17	255	6	29	1	10	2	0	18

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	261	0	0	292	0	0	643	637	268	640	658	258
Stage 1	-	-	-	-	-	-	342	342	-	292	292	-
Stage 2	-	-	-	-	-	-	301	295	-	348	366	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1315	-	-	1281	-	-	389	398	776	391	387	786
Stage 1	-	-	-	-	-	-	677	642	-	720	675	-
Stage 2	-	-	-	-	-	-	712	673	-	672	626	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1315	-	-	1281	-	-	366	378	776	371	368	786
Mov Cap-2 Maneuver	-	-	-	-	-	-	366	378	-	371	368	-
Stage 1	-	-	-	-	-	-	654	620	-	696	664	-
Stage 2	-	-	-	-	-	-	684	662	-	640	605	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.9	0.5	14.5	10.3
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	420	1315	-	-	1281	-	-	703
HCM Lane V/C Ratio	0.095	0.028	-	-	0.013	-	-	0.029
HCM Control Delay (s)	14.5	7.8	0	-	7.8	0	-	10.3
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.3	0.1	-	-	0	-	-	0.1

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	19	219	251	5	8	8
Future Vol, veh/h	19	219	251	5	8	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	2	0	0	13	0
Mvmt Flow	21	238	273	5	9	9

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	278	0	-	0	556	276
Stage 1	-	-	-	-	276	-
Stage 2	-	-	-	-	280	-
Critical Hdwy	4.1	-	-	-	6.53	6.2
Critical Hdwy Stg 1	-	-	-	-	5.53	-
Critical Hdwy Stg 2	-	-	-	-	5.53	-
Follow-up Hdwy	2.2	-	-	-	3.617	3.3
Pot Cap-1 Maneuver	1296	-	-	-	474	768
Stage 1	-	-	-	-	746	-
Stage 2	-	-	-	-	743	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1296	-	-	-	465	768
Mov Cap-2 Maneuver	-	-	-	-	465	-
Stage 1	-	-	-	-	732	-
Stage 2	-	-	-	-	743	-

Approach	EB	WB	SB
HCM Control Delay, s	0.6	0	11.4
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1296	-	-	-	579
HCM Lane V/C Ratio	0.016	-	-	-	0.03
HCM Control Delay (s)	7.8	0	-	-	11.4
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	28	0	5	0	0	2	4	412	0	3	565	42
Future Vol, veh/h	28	0	5	0	0	2	4	412	0	3	565	42
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	87	87	87	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	0	0	0	0	1	0	0	1	5
Mvmt Flow	32	0	6	0	0	2	5	474	0	3	649	48

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1164	1163	673	1166	1187	474	697	0	0	474	0	0
Stage 1	679	679	-	484	484	-	-	-	-	-	-	-
Stage 2	485	484	-	682	703	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	173	196	459	172	190	595	909	-	-	1099	-	-
Stage 1	445	454	-	568	555	-	-	-	-	-	-	-
Stage 2	567	555	-	443	443	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	171	194	459	168	188	595	909	-	-	1099	-	-
Mov Cap-2 Maneuver	171	194	-	168	188	-	-	-	-	-	-	-
Stage 1	442	452	-	564	551	-	-	-	-	-	-	-
Stage 2	561	551	-	436	441	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	28.8	11.1	0.1	0
HCM LOS	D	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	909	-	-	189	595	1099	-	-
HCM Lane V/C Ratio	0.005	-	-	0.201	0.004	0.003	-	-
HCM Control Delay (s)	9	0	-	28.8	11.1	8.3	0	-
HCM Lane LOS	A	A	-	D	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.7	0	0	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	305	2	0	281	1	1
Future Vol, veh/h	305	2	0	281	1	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	332	2	0	305	1	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	334	0	638	333
Stage 1	-	-	-	-	333	-
Stage 2	-	-	-	-	305	-
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	-	-	1225	-	441	709
Stage 1	-	-	-	-	726	-
Stage 2	-	-	-	-	748	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1225	-	441	709
Mov Cap-2 Maneuver	-	-	-	-	441	-
Stage 1	-	-	-	-	726	-
Stage 2	-	-	-	-	748	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	11.6
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	544	-	-	1225	-
HCM Lane V/C Ratio	0.004	-	-	-	-
HCM Control Delay (s)	11.6	-	-	0	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	5	1	5	15	7	11
Future Vol, veh/h	5	1	5	15	7	11
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	79	79	79	79	79	79
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	6	1	6	19	9	14

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	47	16	23	0	-	0
Stage 1	16	-	-	-	-	-
Stage 2	31	-	-	-	-	-
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	968	1069	1605	-	-	-
Stage 1	1012	-	-	-	-	-
Stage 2	997	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	964	1069	1605	-	-	-
Mov Cap-2 Maneuver	964	-	-	-	-	-
Stage 1	1008	-	-	-	-	-
Stage 2	997	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.7	1.8	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1605	-	980	-	-
HCM Lane V/C Ratio	0.004	-	0.008	-	-
HCM Control Delay (s)	7.3	0	8.7	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	39	36	37	1650	1462	65
Future Vol, veh/h	39	36	37	1650	1462	65
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	-	200	-	-	200
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	0	0	0	1	1	0
Mvmt Flow	40	37	38	1701	1507	67

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2434	754	1574	0	-	0
Stage 1	1507	-	-	-	-	-
Stage 2	927	-	-	-	-	-
Critical Hdwy	6.8	6.9	4.1	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	~ 27	356	424	-	-	-
Stage 1	173	-	-	-	-	-
Stage 2	351	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 25	356	424	-	-	-
Mov Cap-2 Maneuver	105	-	-	-	-	-
Stage 1	157	-	-	-	-	-
Stage 2	351	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	38.6	0.3	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	424	-	105	356	-	-
HCM Lane V/C Ratio	0.09	-	0.383	0.104	-	-
HCM Control Delay (s)	14.3	-	59.1	16.3	-	-
HCM Lane LOS	B	-	F	C	-	-
HCM 95th %tile Q(veh)	0.3	-	1.6	0.3	-	-

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

Intersection	
Int Delay, s/veh	2.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	24	143	35	11	155	3	26	2	6	6	1	29
Future Vol, veh/h	24	143	35	11	155	3	26	2	6	6	1	29
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	4	0	0	0	1	0	0	0	0	0	0	3
Mvmt Flow	26	157	38	12	170	3	29	2	7	7	1	32

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	173	0	0	195	0	0	440	425	176	429	443	172
Stage 1	-	-	-	-	-	-	228	228	-	196	196	-
Stage 2	-	-	-	-	-	-	212	197	-	233	247	-
Critical Hdwy	4.14	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.236	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.327
Pot Cap-1 Maneuver	1392	-	-	1390	-	-	531	524	872	540	512	869
Stage 1	-	-	-	-	-	-	779	719	-	810	742	-
Stage 2	-	-	-	-	-	-	795	742	-	775	706	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1392	-	-	1390	-	-	499	508	872	522	496	869
Mov Cap-2 Maneuver	-	-	-	-	-	-	499	508	-	522	496	-
Stage 1	-	-	-	-	-	-	763	704	-	793	735	-
Stage 2	-	-	-	-	-	-	757	735	-	751	691	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.9	0.5	12.2	9.9
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	540	1392	-	-	1390	-	-	768
HCM Lane V/C Ratio	0.069	0.019	-	-	0.009	-	-	0.052
HCM Control Delay (s)	12.2	7.6	0	-	7.6	0	-	9.9
HCM Lane LOS	B	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.2	0.1	-	-	0	-	-	0.2

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	12	143	159	2	3	10
Future Vol, veh/h	12	143	159	2	3	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	0	1	1	0	0	0
Mvmt Flow	14	163	181	2	3	11

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	183	0	-	0	373	182
Stage 1	-	-	-	-	182	-
Stage 2	-	-	-	-	191	-
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	1404	-	-	-	632	866
Stage 1	-	-	-	-	854	-
Stage 2	-	-	-	-	846	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1404	-	-	-	625	866
Mov Cap-2 Maneuver	-	-	-	-	625	-
Stage 1	-	-	-	-	845	-
Stage 2	-	-	-	-	846	-

Approach	EB	WB	SB
HCM Control Delay, s	0.6	0	9.6
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1404	-	-	-	795
HCM Lane V/C Ratio	0.01	-	-	-	0.019
HCM Control Delay (s)	7.6	0	-	-	9.6
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	16	0	4	1	0	0	0	334	2	1	366	24
Future Vol, veh/h	16	0	4	1	0	0	0	334	2	1	366	24
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	6	0	25	0	0	0	0	1	0	0	1	8
Mvmt Flow	17	0	4	1	0	0	0	348	2	1	381	25

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	745	746	394	747	757	349	406	0	0	350	0	0
Stage 1	396	396	-	349	349	-	-	-	-	-	-	-
Stage 2	349	350	-	398	408	-	-	-	-	-	-	-
Critical Hdwy	7.16	6.5	6.45	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.16	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.16	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.554	4	3.525	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	325	344	608	332	339	699	1164	-	-	1220	-	-
Stage 1	621	607	-	671	637	-	-	-	-	-	-	-
Stage 2	659	636	-	632	600	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	325	344	608	329	339	699	1164	-	-	1220	-	-
Mov Cap-2 Maneuver	325	344	-	329	339	-	-	-	-	-	-	-
Stage 1	621	606	-	671	637	-	-	-	-	-	-	-
Stage 2	659	636	-	627	599	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	15.7	16	0	0
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1164	-	-	358	329	1220	-	-
HCM Lane V/C Ratio	-	-	-	0.058	0.003	0.001	-	-
HCM Control Delay (s)	0	-	-	15.7	16	8	0	-
HCM Lane LOS	A	-	-	C	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0	0	-	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	199	2	0	210	2	3
Future Vol, veh/h	199	2	0	210	2	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	219	2	0	231	2	3

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	221	0	451	220
Stage 1	-	-	-	-	220	-
Stage 2	-	-	-	-	231	-
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	-	-	1348	-	566	820
Stage 1	-	-	-	-	817	-
Stage 2	-	-	-	-	807	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1348	-	566	820
Mov Cap-2 Maneuver	-	-	-	-	566	-
Stage 1	-	-	-	-	817	-
Stage 2	-	-	-	-	807	-

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

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	695	-	-	1348	-
HCM Lane V/C Ratio	0.008	-	-	-	-
HCM Control Delay (s)	10.2	-	-	0	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	4	2	1	8	8	8
Future Vol, veh/h	4	2	1	8	8	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	25	0	0	0	0	0
Mvmt Flow	5	3	1	10	10	10

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	27	15	20	0	-	0
Stage 1	15	-	-	-	-	-
Stage 2	12	-	-	-	-	-
Critical Hdwy	6.65	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.65	-	-	-	-	-
Critical Hdwy Stg 2	5.65	-	-	-	-	-
Follow-up Hdwy	3.725	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	932	1070	1609	-	-	-
Stage 1	951	-	-	-	-	-
Stage 2	954	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	931	1070	1609	-	-	-
Mov Cap-2 Maneuver	931	-	-	-	-	-
Stage 1	950	-	-	-	-	-
Stage 2	954	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.7	0.8	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1609	-	973	-	-
HCM Lane V/C Ratio	0.001	-	0.008	-	-
HCM Control Delay (s)	7.2	0	8.7	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	2.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	50	42	54	2411	986	94
Future Vol, veh/h	50	42	54	2411	986	94
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	-	200	-	-	200
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	2	2	4	10	0
Mvmt Flow	59	49	64	2836	1160	111

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2706	580	1271	0	-	0
Stage 1	1160	-	-	-	-	-
Stage 2	1546	-	-	-	-	-
Critical Hdwy	6.8	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	~ 18	458	542	-	-	-
Stage 1	265	-	-	-	-	-
Stage 2	165	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 16	458	542	-	-	-
Mov Cap-2 Maneuver	70	-	-	-	-	-
Stage 1	234	-	-	-	-	-
Stage 2	165	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	95.7	0.3	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	542	-	70	458	-	-
HCM Lane V/C Ratio	0.117	-	0.84	0.108	-	-
HCM Control Delay (s)	12.5	-	164.5	13.8	-	-
HCM Lane LOS	B	-	F	B	-	-
HCM 95th %tile Q(veh)	0.4	-	4	0.4	-	-

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

Intersection	
Int Delay, s/veh	2.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	7	242	17	7	269	1	52	0	15	4	0	22
Future Vol, veh/h	7	242	17	7	269	1	52	0	15	4	0	22
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	79	79	79	79	79	79	79	79	79	79	79	79
Heavy Vehicles, %	0	8	6	14	0	100	2	0	0	0	0	0
Mvmt Flow	9	306	22	9	341	1	66	0	19	5	0	28

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	342	0	0	328	0	0	709	695	317	705	706	342
Stage 1	-	-	-	-	-	-	335	335	-	360	360	-
Stage 2	-	-	-	-	-	-	374	360	-	345	346	-
Critical Hdwy	4.1	-	-	4.24	-	-	7.12	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.326	-	-	3.518	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1228	-	-	1167	-	-	349	368	728	354	363	705
Stage 1	-	-	-	-	-	-	679	646	-	662	630	-
Stage 2	-	-	-	-	-	-	647	630	-	675	639	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1228	-	-	1167	-	-	331	361	728	340	356	705
Mov Cap-2 Maneuver	-	-	-	-	-	-	331	361	-	340	356	-
Stage 1	-	-	-	-	-	-	673	640	-	656	624	-
Stage 2	-	-	-	-	-	-	615	624	-	651	633	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.2	17.3	11.3
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	377	1228	-	-	1167	-	-	605
HCM Lane V/C Ratio	0.225	0.007	-	-	0.008	-	-	0.054
HCM Control Delay (s)	17.3	8	0	-	8.1	0	-	11.3
HCM Lane LOS	C	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.9	0	-	-	0	-	-	0.2

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	7	254	268	0	3	9
Future Vol, veh/h	7	254	268	0	3	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	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	81	81	81	81	81	81
Heavy Vehicles, %	17	8	2	0	0	0
Mvmt Flow	9	314	331	0	4	11

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	331	0	-	0	663	331
Stage 1	-	-	-	-	331	-
Stage 2	-	-	-	-	332	-
Critical Hdwy	4.27	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.353	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1149	-	-	-	429	715
Stage 1	-	-	-	-	732	-
Stage 2	-	-	-	-	731	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1149	-	-	-	425	715
Mov Cap-2 Maneuver	-	-	-	-	425	-
Stage 1	-	-	-	-	725	-
Stage 2	-	-	-	-	731	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	11
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1149	-	-	-	611
HCM Lane V/C Ratio	0.008	-	-	-	0.024
HCM Control Delay (s)	8.2	0	-	-	11
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	39	0	2	2	0	3	3	724	4	2	373	11
Future Vol, veh/h	39	0	2	2	0	3	3	724	4	2	373	11
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	80	80	80	80	80	80	80	80	80
Heavy Vehicles, %	3	0	0	0	0	0	67	1	0	0	4	0
Mvmt Flow	49	0	3	3	0	4	4	905	5	3	466	14

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1397	1397	473	1397	1402	908	480	0	0	910	0	0
Stage 1	479	479	-	916	916	-	-	-	-	-	-	-
Stage 2	918	918	-	481	486	-	-	-	-	-	-	-
Critical Hdwy	7.13	6.5	6.2	7.1	6.5	6.2	4.77	-	-	4.1	-	-
Critical Hdwy Stg 1	6.13	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.13	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.527	4	3.3	3.5	4	3.3	2.803	-	-	2.2	-	-
Pot Cap-1 Maneuver	118	142	595	120	141	336	815	-	-	757	-	-
Stage 1	566	558	-	329	354	-	-	-	-	-	-	-
Stage 2	324	353	-	570	554	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	115	140	595	118	139	336	815	-	-	757	-	-
Mov Cap-2 Maneuver	115	140	-	118	139	-	-	-	-	-	-	-
Stage 1	560	555	-	326	350	-	-	-	-	-	-	-
Stage 2	317	349	-	565	551	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	55.7	24.3	0	0.1
HCM LOS	F	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	815	-	-	120	193	757	-	-
HCM Lane V/C Ratio	0.005	-	-	0.427	0.032	0.003	-	-
HCM Control Delay (s)	9.4	0	-	55.7	24.3	9.8	0	-
HCM Lane LOS	A	A	-	F	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	1.8	0.1	0	-	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	261	5	1	342	2	5
Future Vol, veh/h	261	5	1	342	2	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	293	6	1	384	2	6

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	299	0	682	296
Stage 1	-	-	-	-	296	-
Stage 2	-	-	-	-	386	-
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	-	-	1262	-	415	743
Stage 1	-	-	-	-	755	-
Stage 2	-	-	-	-	687	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1262	-	415	743
Mov Cap-2 Maneuver	-	-	-	-	415	-
Stage 1	-	-	-	-	754	-
Stage 2	-	-	-	-	687	-

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

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	606	-	-	1262	-
HCM Lane V/C Ratio	0.013	-	-	0.001	-
HCM Control Delay (s)	11	-	-	7.9	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	10	1	1	4	7	5
Future Vol, veh/h	10	1	1	4	7	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	10	0	0	25	0	0
Mvmt Flow	11	1	1	5	8	6

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	18	11	14	0	-	0
Stage 1	11	-	-	-	-	-
Stage 2	7	-	-	-	-	-
Critical Hdwy	6.5	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.5	-	-	-	-	-
Critical Hdwy Stg 2	5.5	-	-	-	-	-
Follow-up Hdwy	3.59	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	979	1076	1617	-	-	-
Stage 1	991	-	-	-	-	-
Stage 2	996	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	978	1076	1617	-	-	-
Mov Cap-2 Maneuver	978	-	-	-	-	-
Stage 1	990	-	-	-	-	-
Stage 2	996	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.7	1.4	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1617	-	986	-	-
HCM Lane V/C Ratio	0.001	-	0.013	-	-
HCM Control Delay (s)	7.2	0	8.7	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	31	33	36	1612	2214	118
Future Vol, veh/h	31	33	36	1612	2214	118
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	-	200	-	-	200
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	2	2	0
Mvmt Flow	34	36	39	1752	2407	128

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	3361	1204	2535	0	-	0
Stage 1	2407	-	-	-	-	-
Stage 2	954	-	-	-	-	-
Critical Hdwy	6.8	6.9	4.1	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	~ 6	179	179	-	-	-
Stage 1	55	-	-	-	-	-
Stage 2	339	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 5	179	179	-	-	-
Mov Cap-2 Maneuver	35	-	-	-	-	-
Stage 1	43	-	-	-	-	-
Stage 2	339	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	166	0.7	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	179	-	35	179	-	-
HCM Lane V/C Ratio	0.219	-	0.963	0.2	-	-
HCM Control Delay (s)	30.7	-	$ 310.7	30.1	-	-
HCM Lane LOS	D	-	F	D	-	-
HCM 95th %tile Q(veh)	0.8	-	3.5	0.7	-	-

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

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	34	369	45	16	337	6	27	1	9	2	0	17
Future Vol, veh/h	34	369	45	16	337	6	27	1	9	2	0	17
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	1	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	37	397	48	17	362	6	29	1	10	2	0	18

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	368	0	0	445	0	0	903	897	421	900	918	365
Stage 1	-	-	-	-	-	-	495	495	-	399	399	-
Stage 2	-	-	-	-	-	-	408	402	-	501	519	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1202	-	-	1126	-	-	260	281	637	262	274	685
Stage 1	-	-	-	-	-	-	560	549	-	631	606	-
Stage 2	-	-	-	-	-	-	624	604	-	556	536	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1202	-	-	1126	-	-	242	264	637	245	258	685
Mov Cap-2 Maneuver	-	-	-	-	-	-	242	264	-	245	258	-
Stage 1	-	-	-	-	-	-	537	526	-	605	594	-
Stage 2	-	-	-	-	-	-	596	593	-	524	514	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.6	0.4	19.6	11.5
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	286	1202	-	-	1126	-	-	576
HCM Lane V/C Ratio	0.139	0.03	-	-	0.015	-	-	0.035
HCM Control Delay (s)	19.6	8.1	0	-	8.2	0	-	11.5
HCM Lane LOS	C	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.5	0.1	-	-	0	-	-	0.1

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	19	361	351	5	8	8
Future Vol, veh/h	19	361	351	5	8	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	2	0	0	13	0
Mvmt Flow	21	392	382	5	9	9

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	387	0	-	0	819	385
Stage 1	-	-	-	-	385	-
Stage 2	-	-	-	-	434	-
Critical Hdwy	4.1	-	-	-	6.53	6.2
Critical Hdwy Stg 1	-	-	-	-	5.53	-
Critical Hdwy Stg 2	-	-	-	-	5.53	-
Follow-up Hdwy	2.2	-	-	-	3.617	3.3
Pot Cap-1 Maneuver	1183	-	-	-	331	667
Stage 1	-	-	-	-	664	-
Stage 2	-	-	-	-	630	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1183	-	-	-	323	667
Mov Cap-2 Maneuver	-	-	-	-	323	-
Stage 1	-	-	-	-	649	-
Stage 2	-	-	-	-	630	-

Approach	EB	WB	SB
HCM Control Delay, s	0.4	0	13.6
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1183	-	-	-	435
HCM Lane V/C Ratio	0.017	-	-	-	0.04
HCM Control Delay (s)	8.1	0	-	-	13.6
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	28	0	5	0	0	2	4	534	0	3	733	42
Future Vol, veh/h	28	0	5	0	0	2	4	534	0	3	733	42
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	87	87	87	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	0	0	0	0	1	0	0	1	5
Mvmt Flow	32	0	6	0	0	2	5	614	0	3	843	48

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1498	1497	867	1500	1521	614	891	0	0	614	0	0
Stage 1	873	873	-	624	624	-	-	-	-	-	-	-
Stage 2	625	624	-	876	897	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	102	124	355	101	120	496	769	-	-	975	-	-
Stage 1	348	370	-	477	481	-	-	-	-	-	-	-
Stage 2	476	481	-	346	361	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	100	122	355	98	118	496	769	-	-	975	-	-
Mov Cap-2 Maneuver	100	122	-	98	118	-	-	-	-	-	-	-
Stage 1	345	368	-	472	476	-	-	-	-	-	-	-
Stage 2	469	476	-	338	359	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	52.8	12.3	0.1	0
HCM LOS	F	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	769	-	-	112	496	975	-	-
HCM Lane V/C Ratio	0.006	-	-	0.339	0.005	0.004	-	-
HCM Control Delay (s)	9.7	0	-	52.8	12.3	8.7	0	-
HCM Lane LOS	A	A	-	F	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	1.3	0	0	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	447	2	0	381	1	1
Future Vol, veh/h	447	2	0	381	1	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	486	2	0	414	1	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	488	0	901	487
Stage 1	-	-	-	-	487	-
Stage 2	-	-	-	-	414	-
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	-	-	1075	-	309	581
Stage 1	-	-	-	-	618	-
Stage 2	-	-	-	-	667	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1075	-	309	581
Mov Cap-2 Maneuver	-	-	-	-	309	-
Stage 1	-	-	-	-	618	-
Stage 2	-	-	-	-	667	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	14
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	403	-	-	1075	-
HCM Lane V/C Ratio	0.005	-	-	-	-
HCM Control Delay (s)	14	-	-	0	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	5	1	5	15	7	11
Future Vol, veh/h	5	1	5	15	7	11
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	79	79	79	79	79	79
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	6	1	6	19	9	14

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	47	16	23	0	-	0
Stage 1	16	-	-	-	-	-
Stage 2	31	-	-	-	-	-
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	968	1069	1605	-	-	-
Stage 1	1012	-	-	-	-	-
Stage 2	997	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	964	1069	1605	-	-	-
Mov Cap-2 Maneuver	964	-	-	-	-	-
Stage 1	1008	-	-	-	-	-
Stage 2	997	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.7	1.8	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1605	-	980	-	-
HCM Lane V/C Ratio	0.004	-	0.008	-	-
HCM Control Delay (s)	7.3	0	8.7	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	39	36	37	1819	1602	65
Future Vol, veh/h	39	36	37	1819	1602	65
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	-	200	-	-	200
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	0	0	0	1	1	0
Mvmt Flow	40	37	38	1875	1652	67

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2666	826	1719	0	-	0
Stage 1	1652	-	-	-	-	-
Stage 2	1014	-	-	-	-	-
Critical Hdwy	6.8	6.9	4.1	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	~ 19	319	373	-	-	-
Stage 1	144	-	-	-	-	-
Stage 2	316	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 17	319	373	-	-	-
Mov Cap-2 Maneuver	87	-	-	-	-	-
Stage 1	129	-	-	-	-	-
Stage 2	316	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	49	0.3	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	373	-	87	319	-	-
HCM Lane V/C Ratio	0.102	-	0.462	0.116	-	-
HCM Control Delay (s)	15.7	-	77.8	17.8	-	-
HCM Lane LOS	C	-	F	C	-	-
HCM 95th %tile Q(veh)	0.3	-	1.9	0.4	-	-

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

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	24	237	35	11	240	3	26	2	6	6	1	29
Future Vol, veh/h	24	237	35	11	240	3	26	2	6	6	1	29
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	4	0	0	0	1	0	0	0	0	0	0	3
Mvmt Flow	26	260	38	12	264	3	29	2	7	7	1	32

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	267	0	0	298	0	0	637	622	279	626	640	266
Stage 1	-	-	-	-	-	-	331	331	-	290	290	-
Stage 2	-	-	-	-	-	-	306	291	-	336	350	-
Critical Hdwy	4.14	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.236	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.327
Pot Cap-1 Maneuver	1285	-	-	1275	-	-	393	405	765	400	396	770
Stage 1	-	-	-	-	-	-	687	649	-	722	676	-
Stage 2	-	-	-	-	-	-	708	675	-	682	636	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1285	-	-	1275	-	-	366	391	765	384	382	770
Mov Cap-2 Maneuver	-	-	-	-	-	-	366	391	-	384	382	-
Stage 1	-	-	-	-	-	-	671	633	-	705	669	-
Stage 2	-	-	-	-	-	-	670	668	-	658	621	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.6	0.3	14.8	11
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	405	1285	-	-	1275	-	-	644
HCM Lane V/C Ratio	0.092	0.021	-	-	0.009	-	-	0.061
HCM Control Delay (s)	14.8	7.9	0	-	7.9	0	-	11
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.3	0.1	-	-	0	-	-	0.2

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	12	237	244	2	3	10
Future Vol, veh/h	12	237	244	2	3	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	0	1	1	0	0	0
Mvmt Flow	14	269	277	2	3	11

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	279	0	-	0	575	278
Stage 1	-	-	-	-	278	-
Stage 2	-	-	-	-	297	-
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	1295	-	-	-	483	766
Stage 1	-	-	-	-	774	-
Stage 2	-	-	-	-	758	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1295	-	-	-	477	766
Mov Cap-2 Maneuver	-	-	-	-	477	-
Stage 1	-	-	-	-	764	-
Stage 2	-	-	-	-	758	-

Approach	EB	WB	SB
HCM Control Delay, s	0.4	0	10.5
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1295	-	-	-	672
HCM Lane V/C Ratio	0.011	-	-	-	0.022
HCM Control Delay (s)	7.8	0	-	-	10.5
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	16	0	4	1	0	0	0	434	2	1	475	24
Future Vol, veh/h	16	0	4	1	0	0	0	434	2	1	475	24
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	6	0	25	0	0	0	0	1	0	0	1	8
Mvmt Flow	17	0	4	1	0	0	0	452	2	1	495	25

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	963	964	508	965	975	453	520	0	0	454	0	0
Stage 1	510	510	-	453	453	-	-	-	-	-	-	-
Stage 2	453	454	-	512	522	-	-	-	-	-	-	-
Critical Hdwy	7.16	6.5	6.45	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.16	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.16	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.554	4	3.525	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	231	257	522	236	253	611	1056	-	-	1117	-	-
Stage 1	539	541	-	590	573	-	-	-	-	-	-	-
Stage 2	579	573	-	548	534	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	231	257	522	234	253	611	1056	-	-	1117	-	-
Mov Cap-2 Maneuver	231	257	-	234	253	-	-	-	-	-	-	-
Stage 1	539	540	-	590	573	-	-	-	-	-	-	-
Stage 2	579	573	-	543	533	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	20	20.5	0	0
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1056	-	-	260	234	1117	-	-
HCM Lane V/C Ratio	-	-	-	0.08	0.004	0.001	-	-
HCM Control Delay (s)	0	-	-	20	20.5	8.2	0	-
HCM Lane LOS	A	-	-	C	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.3	0	0	-	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	293	2	0	295	2	3
Future Vol, veh/h	293	2	0	295	2	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	322	2	0	324	2	3

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	324	0	647	323
Stage 1	-	-	-	-	323	-
Stage 2	-	-	-	-	324	-
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	-	-	1236	-	436	718
Stage 1	-	-	-	-	734	-
Stage 2	-	-	-	-	733	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1236	-	436	718
Mov Cap-2 Maneuver	-	-	-	-	436	-
Stage 1	-	-	-	-	734	-
Stage 2	-	-	-	-	733	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	11.4
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	570	-	-	1236	-
HCM Lane V/C Ratio	0.01	-	-	-	-
HCM Control Delay (s)	11.4	-	-	0	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	4	2	1	8	8	8
Future Vol, veh/h	4	2	1	8	8	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	25	0	0	0	0	0
Mvmt Flow	5	3	1	10	10	10

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	27	15	20	0	-	0
Stage 1	15	-	-	-	-	-
Stage 2	12	-	-	-	-	-
Critical Hdwy	6.65	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.65	-	-	-	-	-
Critical Hdwy Stg 2	5.65	-	-	-	-	-
Follow-up Hdwy	3.725	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	932	1070	1609	-	-	-
Stage 1	951	-	-	-	-	-
Stage 2	954	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	931	1070	1609	-	-	-
Mov Cap-2 Maneuver	931	-	-	-	-	-
Stage 1	950	-	-	-	-	-
Stage 2	954	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.7	0.8	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1609	-	973	-	-
HCM Lane V/C Ratio	0.001	-	0.008	-	-
HCM Control Delay (s)	7.2	0	8.7	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	50	0	42	14	0	27	54	2422	5	10	988	94
Future Vol, veh/h	50	0	42	14	0	27	54	2422	5	10	988	94
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	200	-	215	200	-	200
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	0	2	2	2	2	2	2	4	2	2	10	0
Mvmt Flow	59	0	49	16	0	32	64	2849	6	12	1162	111

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2739	4169	581	3582	4274	1425	1273	0	0	2855	0	0
Stage 1	1186	1186	-	2977	2977	-	-	-	-	-	-	-
Stage 2	1553	2983	-	605	1297	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.5	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	~ 10	2	457	~ 2	2	125	541	-	-	129	-	-
Stage 1	204	260	-	~ 14	32	-	-	-	-	-	-	-
Stage 2	121	31	-	451	230	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 6	2	457	~ 2	2	125	541	-	-	129	-	-
Mov Cap-2 Maneuver	~ 47	13	-	~ 11	22	-	-	-	-	-	-	-
Stage 1	180	236	-	~ 12	28	-	-	-	-	-	-	-
Stage 2	80	27	-	365	209	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	198.4	$ 345	0.3	0.3
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	541	-	-	47	457	11	125	129	-	-
HCM Lane V/C Ratio	0.117	-	-	1.252	0.108	1.497	0.254	0.091	-	-
HCM Control Delay (s)	12.5	-	-	$ 353.5	13.8	$ 926.9	43.3	35.7	-	-
HCM Lane LOS	B	-	-	F	B	F	E	E	-	-
HCM 95th %tile Q(veh)	0.4	-	-	5.5	0.4	2.9	0.9	0.3	-	-

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

Intersection	
Int Delay, s/veh	3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	11	251	17	7	273	4	52	0	15	14	0	36
Future Vol, veh/h	11	251	17	7	273	4	52	0	15	14	0	36
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	79	79	79	79	79	79	79	79	79	79	79	79
Heavy Vehicles, %	0	8	6	14	0	100	2	0	0	0	0	0
Mvmt Flow	14	318	22	9	346	5	66	0	19	18	0	46

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	351	0	0	340	0	0	747	726	329	734	735	349
Stage 1	-	-	-	-	-	-	357	357	-	367	367	-
Stage 2	-	-	-	-	-	-	390	369	-	367	368	-
Critical Hdwy	4.1	-	-	4.24	-	-	7.12	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.326	-	-	3.518	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1219	-	-	1155	-	-	329	354	717	338	349	699
Stage 1	-	-	-	-	-	-	661	632	-	657	626	-
Stage 2	-	-	-	-	-	-	634	624	-	657	625	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1219	-	-	1155	-	-	302	346	717	323	341	699
Mov Cap-2 Maneuver	-	-	-	-	-	-	302	346	-	323	341	-
Stage 1	-	-	-	-	-	-	652	623	-	648	620	-
Stage 2	-	-	-	-	-	-	587	618	-	631	616	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	0.2	18.7	12.8
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	347	1219	-	-	1155	-	-	527
HCM Lane V/C Ratio	0.244	0.011	-	-	0.008	-	-	0.12
HCM Control Delay (s)	18.7	8	0	-	8.1	0	-	12.8
HCM Lane LOS	C	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.9	0	-	-	0	-	-	0.4

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	7	273	275	3	12	9
Future Vol, veh/h	7	273	275	3	12	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	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	81	81	81	81	81	81
Heavy Vehicles, %	17	8	2	0	0	0
Mvmt Flow	9	337	340	4	15	11

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	344	0	-	0	697	342
Stage 1	-	-	-	-	342	-
Stage 2	-	-	-	-	355	-
Critical Hdwy	4.27	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.353	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1136	-	-	-	410	705
Stage 1	-	-	-	-	724	-
Stage 2	-	-	-	-	714	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1136	-	-	-	406	705
Mov Cap-2 Maneuver	-	-	-	-	406	-
Stage 1	-	-	-	-	717	-
Stage 2	-	-	-	-	714	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	12.7
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1136	-	-	-	496
HCM Lane V/C Ratio	0.008	-	-	-	0.052
HCM Control Delay (s)	8.2	0	-	-	12.7
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.2

Intersection	
Int Delay, s/veh	2.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	45	0	2	2	0	3	3	735	4	2	377	15
Future Vol, veh/h	45	0	2	2	0	3	3	735	4	2	377	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	80	80	80	80	80	80	80	80	80
Heavy Vehicles, %	3	0	0	0	0	0	67	1	0	0	4	0
Mvmt Flow	56	0	3	3	0	4	4	919	5	3	471	19

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1419	1419	481	1418	1426	922	490	0	0	924	0	0
Stage 1	487	487	-	930	930	-	-	-	-	-	-	-
Stage 2	932	932	-	488	496	-	-	-	-	-	-	-
Critical Hdwy	7.13	6.5	6.2	7.1	6.5	6.2	4.77	-	-	4.1	-	-
Critical Hdwy Stg 1	6.13	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.13	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.527	4	3.3	3.5	4	3.3	2.803	-	-	2.2	-	-
Pot Cap-1 Maneuver	114	138	589	116	137	330	807	-	-	748	-	-
Stage 1	560	554	-	323	349	-	-	-	-	-	-	-
Stage 2	318	348	-	565	549	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	111	136	589	114	135	330	807	-	-	748	-	-
Mov Cap-2 Maneuver	111	136	-	114	135	-	-	-	-	-	-	-
Stage 1	554	551	-	320	346	-	-	-	-	-	-	-
Stage 2	311	345	-	559	546	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	65.2	24.8	0	0
HCM LOS	F	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	807	-	-	115	188	748	-	-
HCM Lane V/C Ratio	0.005	-	-	0.511	0.033	0.003	-	-
HCM Control Delay (s)	9.5	0	-	65.2	24.8	9.8	0	-
HCM Lane LOS	A	A	-	F	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	2.3	0.1	0	-	-

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	265	5	1	357	3	2	0	5	9	0	29
Future Vol, veh/h	4	265	5	1	357	3	2	0	5	9	0	29
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	185	-	-	185	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	298	6	1	401	3	2	0	6	10	0	33

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	404	0	0	304	0	0	730	715	301	717	717	403
Stage 1	-	-	-	-	-	-	309	309	-	405	405	-
Stage 2	-	-	-	-	-	-	421	406	-	312	312	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1155	-	-	1257	-	-	338	356	739	345	355	647
Stage 1	-	-	-	-	-	-	701	660	-	622	598	-
Stage 2	-	-	-	-	-	-	610	598	-	699	658	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1155	-	-	1257	-	-	320	355	739	341	354	647
Mov Cap-2 Maneuver	-	-	-	-	-	-	320	355	-	341	354	-
Stage 1	-	-	-	-	-	-	699	658	-	620	597	-
Stage 2	-	-	-	-	-	-	579	597	-	691	656	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0	11.8	12.1
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	538	1155	-	-	1257	-	-	341	647
HCM Lane V/C Ratio	0.015	0.004	-	-	0.001	-	-	0.03	0.05
HCM Control Delay (s)	11.8	8.1	-	-	7.9	-	-	15.9	10.9
HCM Lane LOS	B	A	-	-	A	-	-	C	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.1	0.2

Intersection	
Int Delay, s/veh	5.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	16	10	4	4	7	7
Future Vol, veh/h	16	10	4	4	7	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	10	0	0	25	0	0
Mvmt Flow	18	11	5	5	8	8

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	27	12	16	0	-	0
Stage 1	12	-	-	-	-	-
Stage 2	15	-	-	-	-	-
Critical Hdwy	6.5	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.5	-	-	-	-	-
Critical Hdwy Stg 2	5.5	-	-	-	-	-
Follow-up Hdwy	3.59	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	968	1074	1615	-	-	-
Stage 1	990	-	-	-	-	-
Stage 2	987	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	965	1074	1615	-	-	-
Mov Cap-2 Maneuver	965	-	-	-	-	-
Stage 1	987	-	-	-	-	-
Stage 2	987	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.7	3.6	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1615	-	1004	-	-
HCM Lane V/C Ratio	0.003	-	0.029	-	-
HCM Control Delay (s)	7.2	0	8.7	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	0.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	52	2495	4	18	1092
Future Vol, veh/h	0	52	2495	4	18	1092
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	-	135	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	57	2712	4	20	1187

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	1356	0	0	2716	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	4.14	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	0	139	-	-	147	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	139	-	-	147	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	47.6	0	0.5
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	139	147	-
HCM Lane V/C Ratio	-	-	0.407	0.133	-
HCM Control Delay (s)	-	-	47.6	33.2	-
HCM Lane LOS	-	-	E	D	-
HCM 95th %tile Q(veh)	-	-	1.8	0.4	-

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	2	2479	2	0	1044
Future Vol, veh/h	0	2	2479	2	0	1044
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	2	2609	2	0	1099

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	1306	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	150	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	150	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	29.3	0	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	150	-
HCM Lane V/C Ratio	-	-	0.014	-
HCM Control Delay (s)	-	-	29.3	-
HCM Lane LOS	-	-	D	-
HCM 95th %tile Q(veh)	-	-	0	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	274	387	1	0	1
Future Vol, veh/h	0	274	387	1	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	288	407	1	0	1

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	408
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.318
Pot Cap-1 Maneuver	0	-	-	-	0	643
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	643
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	10.6
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	643
HCM Lane V/C Ratio	-	-	-	0.002
HCM Control Delay (s)	-	-	-	10.6
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0

Intersection	
Int Delay, s/veh	6.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	31	0	33	10	0	18	36	1637	15	32	2219	118
Future Vol, veh/h	31	0	33	10	0	18	36	1637	15	32	2219	118
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	200	-	215	200	-	200
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	2	0	0	2	0
Mvmt Flow	34	0	36	11	0	20	39	1779	16	35	2412	128

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	3450	4355	1206	3133	4467	890	2540	0	0	1795	0	0
Stage 1	2482	2482	-	1857	1857	-	-	-	-	-	-	-
Stage 2	968	1873	-	1276	2610	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	~ 3	2	179	~ 5	1	290	179	-	-	349	-	-
Stage 1	~ 31	60	-	78	125	-	-	-	-	-	-	-
Stage 2	276	122	-	179	51	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 2	1	179	~ 3	1	290	179	-	-	349	-	-
Mov Cap-2 Maneuver	~ 20	26	-	35	6	-	-	-	-	-	-	-
Stage 1	~ 24	54	-	61	98	-	-	-	-	-	-	-
Stage 2	201	95	-	129	46	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	$ 373.6	64.9	0.7	0.2
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	179	-	-	20	179	35	290	349	-	-
HCM Lane V/C Ratio	0.219	-	-	1.685	0.2	0.311	0.067	0.1	-	-
HCM Control Delay (s)	30.7	-	-	$ 739.3	30.1	148.8	18.3	16.5	-	-
HCM Lane LOS	D	-	-	F	D	F	C	C	-	-
HCM 95th %tile Q(veh)	0.8	-	-	4.5	0.7	1	0.2	0.3	-	-

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

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	48	376	45	16	348	17	27	1	9	9	0	26
Future Vol, veh/h	48	376	45	16	348	17	27	1	9	9	0	26
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	1	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	52	404	48	17	374	18	29	1	10	10	0	28

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	392	0	0	452	0	0	963	958	428	955	973	383
Stage 1	-	-	-	-	-	-	532	532	-	417	417	-
Stage 2	-	-	-	-	-	-	431	426	-	538	556	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1178	-	-	1119	-	-	237	259	631	240	254	669
Stage 1	-	-	-	-	-	-	535	529	-	617	595	-
Stage 2	-	-	-	-	-	-	607	589	-	531	516	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1178	-	-	1119	-	-	214	239	631	222	234	669
Mov Cap-2 Maneuver	-	-	-	-	-	-	214	239	-	222	234	-
Stage 1	-	-	-	-	-	-	503	498	-	581	584	-
Stage 2	-	-	-	-	-	-	571	578	-	491	486	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.8	0.3	21.6	13.9
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	256	1178	-	-	1119	-	-	441
HCM Lane V/C Ratio	0.155	0.044	-	-	0.015	-	-	0.085
HCM Control Delay (s)	21.6	8.2	0	-	8.3	0	-	13.9
HCM Lane LOS	C	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.5	0.1	-	-	0	-	-	0.3

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	19	375	373	16	14	8
Future Vol, veh/h	19	375	373	16	14	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	2	0	0	13	0
Mvmt Flow	21	408	405	17	15	9

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	422	0	-	0	864	414
Stage 1	-	-	-	-	414	-
Stage 2	-	-	-	-	450	-
Critical Hdwy	4.1	-	-	-	6.53	6.2
Critical Hdwy Stg 1	-	-	-	-	5.53	-
Critical Hdwy Stg 2	-	-	-	-	5.53	-
Follow-up Hdwy	2.2	-	-	-	3.617	3.3
Pot Cap-1 Maneuver	1148	-	-	-	311	643
Stage 1	-	-	-	-	644	-
Stage 2	-	-	-	-	620	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1148	-	-	-	304	643
Mov Cap-2 Maneuver	-	-	-	-	304	-
Stage 1	-	-	-	-	629	-
Stage 2	-	-	-	-	620	-

Approach	EB	WB	SB
HCM Control Delay, s	0.4	0	15.2
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1148	-	-	-	376
HCM Lane V/C Ratio	0.018	-	-	-	0.064
HCM Control Delay (s)	8.2	0	-	-	15.2
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.2

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	32	0	5	0	0	2	4	542	0	3	746	49
Future Vol, veh/h	32	0	5	0	0	2	4	542	0	3	746	49
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	87	87	87	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	0	0	0	0	1	0	0	1	5
Mvmt Flow	37	0	6	0	0	2	5	623	0	3	857	56

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1525	1524	885	1527	1552	623	913	0	0	623	0	0
Stage 1	891	891	-	633	633	-	-	-	-	-	-	-
Stage 2	634	633	-	894	919	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	97	119	347	97	115	490	755	-	-	968	-	-
Stage 1	340	363	-	471	476	-	-	-	-	-	-	-
Stage 2	471	476	-	338	353	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	95	117	347	94	113	490	755	-	-	968	-	-
Mov Cap-2 Maneuver	95	117	-	94	113	-	-	-	-	-	-	-
Stage 1	337	361	-	466	471	-	-	-	-	-	-	-
Stage 2	464	471	-	330	351	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	60.9	12.4	0.1	0
HCM LOS	F	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	755	-	-	105	490	968	-	-
HCM Lane V/C Ratio	0.006	-	-	0.405	0.005	0.004	-	-
HCM Control Delay (s)	9.8	0	-	60.9	12.4	8.7	0	-
HCM Lane LOS	A	A	-	F	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	1.7	0	0	-	-

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	15	461	2	0	392	9	1	0	1	7	0	17
Future Vol, veh/h	15	461	2	0	392	9	1	0	1	7	0	17
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	185	-	-	185	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	16	501	2	0	426	10	1	0	1	8	0	18

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	436	0	0	503	0	0	974	970	502	966	966	431
Stage 1	-	-	-	-	-	-	534	534	-	431	431	-
Stage 2	-	-	-	-	-	-	440	436	-	535	535	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1124	-	-	1061	-	-	231	253	569	234	255	624
Stage 1	-	-	-	-	-	-	530	524	-	603	583	-
Stage 2	-	-	-	-	-	-	596	580	-	529	524	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1124	-	-	1061	-	-	222	249	569	231	251	624
Mov Cap-2 Maneuver	-	-	-	-	-	-	222	249	-	231	251	-
Stage 1	-	-	-	-	-	-	523	517	-	595	583	-
Stage 2	-	-	-	-	-	-	578	580	-	520	517	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	0	16.4	13.9
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	319	1124	-	-	1061	-	-	231	624
HCM Lane V/C Ratio	0.007	0.015	-	-	-	-	-	0.033	0.03
HCM Control Delay (s)	16.4	8.2	-	-	0	-	-	21.1	10.9
HCM Lane LOS	C	A	-	-	A	-	-	C	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.1	0.1

Intersection	
Int Delay, s/veh	4.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	9	7	16	15	7	8
Future Vol, veh/h	9	7	16	15	7	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	79	79	79	79	79	79
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	11	9	20	19	9	10

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	73	14	19	0	-	0
Stage 1	14	-	-	-	-	-
Stage 2	59	-	-	-	-	-
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	936	1072	1611	-	-	-
Stage 1	1014	-	-	-	-	-
Stage 2	969	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	924	1072	1611	-	-	-
Mov Cap-2 Maneuver	924	-	-	-	-	-
Stage 1	1001	-	-	-	-	-
Stage 2	969	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.7	3.7	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1611	-	983	-	-
HCM Lane V/C Ratio	0.013	-	0.021	-	-
HCM Control Delay (s)	7.3	0	8.7	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	0.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	34	1671	15	62	2369
Future Vol, veh/h	0	34	1671	15	62	2369
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	-	135	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	37	1816	16	67	2575

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	908	0	0	1832	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	4.14	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	0	278	-	-	329	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	278	-	-	329	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	19.9	0	0.5
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	278	329	-
HCM Lane V/C Ratio	-	-	0.133	0.205	-
HCM Control Delay (s)	-	-	19.9	18.7	-
HCM Lane LOS	-	-	C	C	-
HCM 95th %tile Q(veh)	-	-	0.5	0.8	-

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	7	1681	5	0	2262
Future Vol, veh/h	0	7	1681	5	0	2262
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	7	1769	5	0	2381

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	887	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	287	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	287	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	287	-
HCM Lane V/C Ratio	-	-	0.026	-
HCM Control Delay (s)	-	-	17.9	-
HCM Lane LOS	-	-	C	-
HCM 95th %tile Q(veh)	-	-	0.1	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	478	408	2	0	4
Future Vol, veh/h	0	478	408	2	0	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	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	0	503	429	2	0	4

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	430
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.318
Pot Cap-1 Maneuver	0	-	-	-	0	625
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	625
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	10.8
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	625
HCM Lane V/C Ratio	-	-	-	0.007
HCM Control Delay (s)	-	-	-	10.8
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0

Intersection	
Int Delay, s/veh	2.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	39	0	36	12	0	20	37	1840	11	26	1606	65
Future Vol, veh/h	39	0	36	12	0	20	37	1840	11	26	1606	65
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	200	-	215	200	-	200
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	100	97	97	97	97	97	97
Heavy Vehicles, %	0	0	0	0	0	0	0	1	0	0	1	0
Mvmt Flow	40	0	37	12	0	20	38	1897	11	27	1656	67

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2735	3694	828	2855	3750	949	1723	0	0	1908	0	0
Stage 1	1710	1710	-	1973	1973	-	-	-	-	-	-	-
Stage 2	1025	1984	-	882	1777	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	~ 10	5	318	~ 8	4	265	372	-	-	316	-	-
Stage 1	96	147	-	66	109	-	-	-	-	-	-	-
Stage 2	255	108	-	312	137	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 8	4	318	~ 6	3	265	372	-	-	316	-	-
Mov Cap-2 Maneuver	57	44	-	44	43	-	-	-	-	-	-	-
Stage 1	86	135	-	59	98	-	-	-	-	-	-	-
Stage 2	212	97	-	252	125	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	90.8	56.6	0.3	0.3
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	372	-	-	57	318	44	265	316	-	-
HCM Lane V/C Ratio	0.103	-	-	0.705	0.117	0.281	0.075	0.085	-	-
HCM Control Delay (s)	15.8	-	-	158.2	17.8	116.2	19.7	17.4	-	-
HCM Lane LOS	C	-	-	F	C	F	C	C	-	-
HCM 95th %tile Q(veh)	0.3	-	-	3	0.4	0.9	0.2	0.3	-	-

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

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	36	245	35	11	249	12	26	2	6	14	0	39
Future Vol, veh/h	36	245	35	11	249	12	26	2	6	14	0	39
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	4	0	0	0	1	0	0	0	0	0	0	3
Mvmt Flow	40	269	38	12	274	13	29	2	7	15	0	43

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	287	0	0	307	0	0	694	679	288	678	692	281
Stage 1	-	-	-	-	-	-	368	368	-	305	305	-
Stage 2	-	-	-	-	-	-	326	311	-	373	387	-
Critical Hdwy	4.14	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.236	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.327
Pot Cap-1 Maneuver	1264	-	-	1265	-	-	360	376	756	369	370	755
Stage 1	-	-	-	-	-	-	656	625	-	709	666	-
Stage 2	-	-	-	-	-	-	691	662	-	652	613	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1264	-	-	1265	-	-	327	358	756	351	352	755
Mov Cap-2 Maneuver	-	-	-	-	-	-	327	358	-	351	352	-
Stage 1	-	-	-	-	-	-	631	601	-	682	659	-
Stage 2	-	-	-	-	-	-	645	655	-	619	590	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.9	0.3	16	11.9
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	365	1264	-	-	1265	-	-	579
HCM Lane V/C Ratio	0.102	0.031	-	-	0.01	-	-	0.101
HCM Control Delay (s)	16	7.9	0	-	7.9	0	-	11.9
HCM Lane LOS	C	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.3	0.1	-	-	0	-	-	0.3

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	12	253	262	11	10	10
Future Vol, veh/h	12	253	262	11	10	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	0	1	1	0	0	0
Mvmt Flow	14	288	298	13	11	11

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	311	0	-	0	621	305
Stage 1	-	-	-	-	305	-
Stage 2	-	-	-	-	316	-
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	1261	-	-	-	454	740
Stage 1	-	-	-	-	752	-
Stage 2	-	-	-	-	744	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1261	-	-	-	448	740
Mov Cap-2 Maneuver	-	-	-	-	448	-
Stage 1	-	-	-	-	742	-
Stage 2	-	-	-	-	744	-

Approach	EB	WB	SB
HCM Control Delay, s	0.4	0	11.7
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1261	-	-	-	558
HCM Lane V/C Ratio	0.011	-	-	-	0.041
HCM Control Delay (s)	7.9	0	-	-	11.7
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	21	0	4	1	0	0	0	443	2	1	486	29
Future Vol, veh/h	21	0	4	1	0	0	0	443	2	1	486	29
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	6	0	25	0	0	0	0	1	0	0	1	8
Mvmt Flow	22	0	4	1	0	0	0	461	2	1	506	30

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	985	986	521	987	1000	462	536	0	0	463	0	0
Stage 1	523	523	-	462	462	-	-	-	-	-	-	-
Stage 2	462	463	-	525	538	-	-	-	-	-	-	-
Critical Hdwy	7.16	6.5	6.45	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.16	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.16	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.554	4	3.525	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	223	250	513	228	245	604	1042	-	-	1109	-	-
Stage 1	530	534	-	584	568	-	-	-	-	-	-	-
Stage 2	572	568	-	540	526	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	223	250	513	226	245	604	1042	-	-	1109	-	-
Mov Cap-2 Maneuver	223	250	-	226	245	-	-	-	-	-	-	-
Stage 1	530	533	-	584	568	-	-	-	-	-	-	-
Stage 2	572	568	-	535	525	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	21.4	21	0	0
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1042	-	-	245	226	1109	-	-
HCM Lane V/C Ratio	-	-	-	0.106	0.005	0.001	-	-
HCM Control Delay (s)	0	-	-	21.4	21	8.2	0	-
HCM Lane LOS	A	-	-	C	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.4	0	0	-	-

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	12	305	2	0	308	6	2	0	3	8	0	20
Future Vol, veh/h	12	305	2	0	308	6	2	0	3	8	0	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	185	-	-	185	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	13	335	2	0	338	7	2	0	3	9	0	22

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	345	0	0	337	0	0	715	707	336	706	705	342
Stage 1	-	-	-	-	-	-	362	362	-	342	342	-
Stage 2	-	-	-	-	-	-	353	345	-	364	363	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1214	-	-	1222	-	-	346	360	706	351	361	701
Stage 1	-	-	-	-	-	-	657	625	-	673	638	-
Stage 2	-	-	-	-	-	-	664	636	-	655	625	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1214	-	-	1222	-	-	333	356	706	346	357	701
Mov Cap-2 Maneuver	-	-	-	-	-	-	333	356	-	346	357	-
Stage 1	-	-	-	-	-	-	650	618	-	666	638	-
Stage 2	-	-	-	-	-	-	643	636	-	645	618	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	0	12.5	11.8
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	488	1214	-	-	1222	-	-	346	701
HCM Lane V/C Ratio	0.011	0.011	-	-	-	-	-	0.025	0.031
HCM Control Delay (s)	12.5	8	-	-	0	-	-	15.7	10.3
HCM Lane LOS	B	A	-	-	A	-	-	C	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.1	0.1

Intersection	
Int Delay, s/veh	4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	9	9	10	8	8	13
Future Vol, veh/h	9	9	10	8	8	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	25	0	0	0	0	0
Mvmt Flow	11	11	13	10	10	16

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	54	18	26	0	-	0
Stage 1	18	-	-	-	-	-
Stage 2	36	-	-	-	-	-
Critical Hdwy	6.65	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.65	-	-	-	-	-
Critical Hdwy Stg 2	5.65	-	-	-	-	-
Follow-up Hdwy	3.725	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	899	1066	1601	-	-	-
Stage 1	948	-	-	-	-	-
Stage 2	930	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	892	1066	1601	-	-	-
Mov Cap-2 Maneuver	892	-	-	-	-	-
Stage 1	940	-	-	-	-	-
Stage 2	930	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.8	4	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1601	-	971	-	-
HCM Lane V/C Ratio	0.008	-	0.023	-	-
HCM Control Delay (s)	7.3	0	8.8	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	0.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	39	1889	10	51	1697
Future Vol, veh/h	0	39	1889	10	51	1697
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	-	135	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	42	2053	11	55	1845

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	1027	0	0	2064	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	4.14	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	0	232	-	-	267	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	232	-	-	267	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	24	0	0.6
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	232	267	-
HCM Lane V/C Ratio	-	-	0.183	0.208	-
HCM Control Delay (s)	-	-	24	22	-
HCM Lane LOS	-	-	C	C	-
HCM 95th %tile Q(veh)	-	-	0.7	0.8	-

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	7	1881	7	0	1654
Future Vol, veh/h	0	7	1881	7	0	1654
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	8	2045	8	0	1798

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	1027	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	232	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	232	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	21	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	232	-
HCM Lane V/C Ratio	-	-	0.033	-
HCM Control Delay (s)	-	-	21	-
HCM Lane LOS	-	-	C	-
HCM 95th %tile Q(veh)	-	-	0.1	-

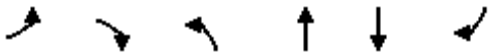
Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	319	327	3	0	3
Future Vol, veh/h	0	319	327	3	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	347	355	3	0	3

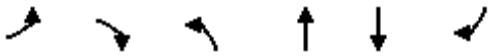
Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	357
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.318
Pot Cap-1 Maneuver	0	-	-	-	0	687
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	687
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	10.3
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	687
HCM Lane V/C Ratio	-	-	-	0.005
HCM Control Delay (s)	-	-	-	10.3
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0



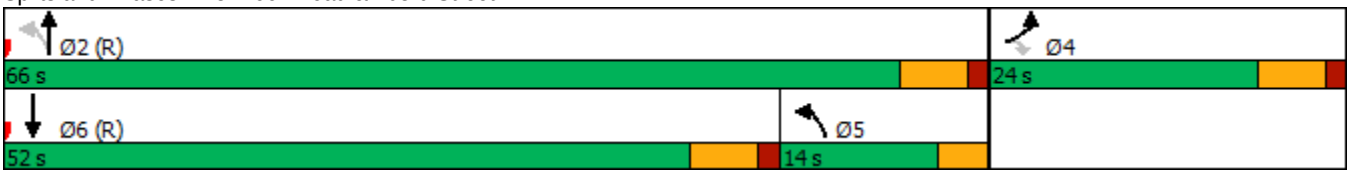
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	127	160	144	515	311	68
Future Volume (vph)	127	160	144	515	311	68
Ideal Flow (vphpl)	1900	1900	1900	2000	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	100	0	125			0
Storage Lanes	1	1	1			0
Taper Length (ft)	115		125			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt		0.850			0.976	
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1752	1495	1787	1961	1783	0
Flt Permitted	0.950		0.420			
Satd. Flow (perm)	1752	1495	790	1961	1783	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		208			18	
Link Speed (mph)	30			35	30	
Link Distance (ft)	283			1666	401	
Travel Time (s)	6.4			32.5	9.1	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.77	0.77	0.77	0.77	0.77	0.77
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	3%	8%	1%	2%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	165	208	187	669	492	0
Turn Type	Prot	Perm	pm+pt	NA	NA	
Protected Phases	4		5	2	6	
Permitted Phases		4	2			
Detector Phase	4	4	5	2	6	
Switch Phase						
Minimum Initial (s)	8.0	8.0	3.0	15.0	15.0	
Minimum Split (s)	24.0	24.0	9.5	24.0	24.0	
Total Split (s)	24.0	24.0	14.0	66.0	52.0	
Total Split (%)	26.7%	26.7%	15.6%	73.3%	57.8%	
Yellow Time (s)	4.5	4.5	3.5	4.5	4.5	
All-Red Time (s)	1.5	1.5	0.0	1.5	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	6.0	3.5	6.0	6.0	
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None	None	None	C-Min	C-Min	
Act Effct Green (s)	14.3	14.3	66.2	63.7	53.5	
Actuated g/C Ratio	0.16	0.16	0.74	0.71	0.59	

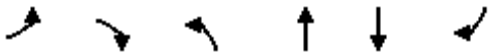


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
v/c Ratio	0.60	0.51	0.29	0.48	0.46	
Control Delay	43.7	9.4	6.1	7.7	12.6	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	43.7	9.4	6.1	7.7	12.6	
LOS	D	A	A	A	B	
Approach Delay	24.6			7.4	12.6	
Approach LOS	C			A	B	
Queue Length 50th (ft)	88	0	26	146	133	
Queue Length 95th (ft)	121	33	44	190	206	
Internal Link Dist (ft)	203			1586	321	
Turn Bay Length (ft)	100		125			
Base Capacity (vph)	350	465	730	1388	1066	
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	0.47	0.45	0.26	0.48	0.46	

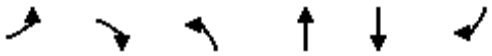
Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.60			
Intersection Signal Delay: 12.6		Intersection LOS: B	
Intersection Capacity Utilization 48.8%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 3: Book Road & 103rd Street





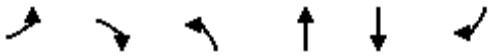
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	124	179	227	393	536	148
Future Volume (vph)	124	179	227	393	536	148
Ideal Flow (vphpl)	1900	1900	1900	2000	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	100	0	125			0
Storage Lanes	1	1	1			0
Taper Length (ft)	115		125			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt		0.850			0.971	
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1805	1583	1805	1980	1845	0
Flt Permitted	0.950		0.250			
Satd. Flow (perm)	1805	1583	475	1980	1845	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		199			22	
Link Speed (mph)	30			35	30	
Link Distance (ft)	283			1666	401	
Travel Time (s)	6.4			32.5	9.1	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	2%	0%	1%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	138	199	252	437	760	0
Turn Type	Prot	Perm	pm+pt	NA	NA	
Protected Phases	4		5	2	6	
Permitted Phases		4	2			
Detector Phase	4	4	5	2	6	
Switch Phase						
Minimum Initial (s)	8.0	8.0	3.0	15.0	15.0	
Minimum Split (s)	24.0	24.0	9.5	24.0	24.0	
Total Split (s)	21.0	21.0	18.0	89.0	71.0	
Total Split (%)	19.1%	19.1%	16.4%	80.9%	64.5%	
Yellow Time (s)	4.5	4.5	3.5	4.5	4.5	
All-Red Time (s)	1.5	1.5	0.0	1.5	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	6.0	3.5	6.0	6.0	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None	None	None	C-Min	C-Min	
Act Effct Green (s)	13.3	13.3	87.2	84.7	71.8	
Actuated g/C Ratio	0.12	0.12	0.79	0.77	0.65	



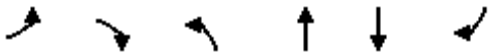
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
v/c Ratio	0.63	0.54	0.52	0.29	0.63	
Control Delay	59.1	12.1	6.8	4.5	14.4	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	59.1	12.1	6.8	4.5	14.4	
LOS	E	B	A	A	B	
Approach Delay	31.3			5.3	14.4	
Approach LOS	C			A	B	
Queue Length 50th (ft)	93	0	37	80	291	
Queue Length 95th (ft)	158	66	58	117	446	
Internal Link Dist (ft)	203			1586	321	
Turn Bay Length (ft)	100		125			
Base Capacity (vph)	246	387	551	1524	1212	
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	0.56	0.51	0.46	0.29	0.63	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.63			
Intersection Signal Delay: 14.1		Intersection LOS: B	
Intersection Capacity Utilization 70.0%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 3: Book Road & 103rd Street



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	88	114	126	316	346	97
Future Volume (vph)	88	114	126	316	346	97
Ideal Flow (vphpl)	1900	1900	1900	2000	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	100	0	125			0
Storage Lanes	1	1	1			0
Taper Length (ft)	115		125			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt		0.850			0.970	
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1805	1615	1805	2000	1839	0
Flt Permitted	0.950		0.418			
Satd. Flow (perm)	1805	1615	794	2000	1839	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		120			30	
Link Speed (mph)	30			35	30	
Link Distance (ft)	283			1666	401	
Travel Time (s)	6.4			32.5	9.1	
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 (%)	0%	0%	0%	0%	0%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	93	120	133	333	466	0
Turn Type	Prot	Perm	pm+pt	NA	NA	
Protected Phases	4		5	2	6	
Permitted Phases		4	2			
Detector Phase	4	4	5	2	6	
Switch Phase						
Minimum Initial (s)	8.0	8.0	3.0	15.0	15.0	
Minimum Split (s)	14.0	14.0	6.5	21.0	21.0	
Total Split (s)	16.0	16.0	12.0	74.0	62.0	
Total Split (%)	17.8%	17.8%	13.3%	82.2%	68.9%	
Yellow Time (s)	4.5	4.5	3.5	4.5	4.5	
All-Red Time (s)	1.5	1.5	0.0	1.5	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	6.0	3.5	6.0	6.0	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None	None	None	C-Min	C-Min	
Act Effct Green (s)	11.1	11.1	69.4	66.9	56.2	
Actuated g/C Ratio	0.12	0.12	0.77	0.74	0.62	



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
v/c Ratio	0.42	0.40	0.19	0.22	0.40	
Control Delay	41.7	10.9	3.5	4.3	9.7	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	41.7	10.9	3.5	4.3	9.7	
LOS	D	B	A	A	A	
Approach Delay	24.3			4.1	9.7	
Approach LOS	C			A	A	
Queue Length 50th (ft)	50	0	14	47	110	
Queue Length 95th (ft)	93	46	33	88	203	
Internal Link Dist (ft)	203			1586	321	
Turn Bay Length (ft)	100		125			
Base Capacity (vph)	232	312	709	1522	1186	
Starvation Cap Reductn	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	
Reduced v/c Ratio	0.40	0.38	0.19	0.22	0.39	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.42			
Intersection Signal Delay: 10.1		Intersection LOS: B	
Intersection Capacity Utilization 51.1%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 3: Book Road & 103rd Street

Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	10	248	17	7	273	2	52	0	15	9	0	35
Future Vol, veh/h	10	248	17	7	273	2	52	0	15	9	0	35
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	79	79	79	79	79	79	79	79	79	79	79	79
Heavy Vehicles, %	0	8	6	14	0	100	2	0	0	0	0	0
Mvmt Flow	13	314	22	9	346	3	66	0	19	11	0	44

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	349	0	0	336	0	0	739	718	325	727	728	348
Stage 1	-	-	-	-	-	-	351	351	-	366	366	-
Stage 2	-	-	-	-	-	-	388	367	-	361	362	-
Critical Hdwy	4.1	-	-	4.24	-	-	7.12	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.326	-	-	3.518	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1221	-	-	1159	-	-	333	357	721	342	353	700
Stage 1	-	-	-	-	-	-	666	636	-	657	626	-
Stage 2	-	-	-	-	-	-	636	626	-	662	629	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1221	-	-	1159	-	-	306	349	721	327	345	700
Mov Cap-2 Maneuver	-	-	-	-	-	-	306	349	-	327	345	-
Stage 1	-	-	-	-	-	-	657	628	-	648	620	-
Stage 2	-	-	-	-	-	-	590	620	-	636	621	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	0.2	18.5	12
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	351	1221	-	-	1159	-	-	568
HCM Lane V/C Ratio	0.242	0.01	-	-	0.008	-	-	0.098
HCM Control Delay (s)	18.5	8	0	-	8.1	0	-	12
HCM Lane LOS	C	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.9	0	-	-	0	-	-	0.3

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	8	264	272	2	8	10
Future Vol, veh/h	8	264	272	2	8	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	81	81	81	81	81	81
Heavy Vehicles, %	17	8	2	0	0	0
Mvmt Flow	10	326	336	2	10	12

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	338	0	-	0	683	337
Stage 1	-	-	-	-	337	-
Stage 2	-	-	-	-	346	-
Critical Hdwy	4.27	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.353	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1142	-	-	-	418	710
Stage 1	-	-	-	-	728	-
Stage 2	-	-	-	-	721	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1142	-	-	-	413	710
Mov Cap-2 Maneuver	-	-	-	-	413	-
Stage 1	-	-	-	-	720	-
Stage 2	-	-	-	-	721	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	12
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1142	-	-	-	538
HCM Lane V/C Ratio	0.009	-	-	-	0.041
HCM Control Delay (s)	8.2	0	-	-	12
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	3.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	50	0	10	2	0	3	5	730	4	2	375	15
Future Vol, veh/h	50	0	10	2	0	3	5	730	4	2	375	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	80	80	80	80	80	80	80	80	80
Heavy Vehicles, %	3	0	0	0	0	0	67	1	0	0	4	0
Mvmt Flow	63	0	13	3	0	4	6	913	5	3	469	19

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1415	1415	479	1419	1422	916	488	0	0	918	0	0
Stage 1	485	485	-	928	928	-	-	-	-	-	-	-
Stage 2	930	930	-	491	494	-	-	-	-	-	-	-
Critical Hdwy	7.13	6.5	6.2	7.1	6.5	6.2	4.77	-	-	4.1	-	-
Critical Hdwy Stg 1	6.13	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.13	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.527	4	3.3	3.5	4	3.3	2.803	-	-	2.2	-	-
Pot Cap-1 Maneuver	114	139	591	115	137	333	809	-	-	752	-	-
Stage 1	561	555	-	324	349	-	-	-	-	-	-	-
Stage 2	319	349	-	563	550	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	111	136	591	111	134	333	809	-	-	752	-	-
Mov Cap-2 Maneuver	111	136	-	111	134	-	-	-	-	-	-	-
Stage 1	553	552	-	319	344	-	-	-	-	-	-	-
Stage 2	311	344	-	548	547	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	66.8	25.1	0.1	0.1
HCM LOS	F	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	809	-	-	128	185	752	-	-
HCM Lane V/C Ratio	0.008	-	-	0.586	0.034	0.003	-	-
HCM Control Delay (s)	9.5	0	-	66.8	25.1	9.8	0	-
HCM Lane LOS	A	A	-	F	D	A	A	-
HCM 95th %tile Q(veh)	0	-	-	2.9	0.1	0	-	-

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	265	5	1	357	2	2	0	5	5	0	29
Future Vol, veh/h	4	265	5	1	357	2	2	0	5	5	0	29
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	185	-	-	185	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	298	6	1	401	2	2	0	6	6	0	33

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	403	0	0	304	0	0	730	714	301	716	716	402
Stage 1	-	-	-	-	-	-	309	309	-	404	404	-
Stage 2	-	-	-	-	-	-	421	405	-	312	312	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1156	-	-	1257	-	-	338	357	739	345	356	648
Stage 1	-	-	-	-	-	-	701	660	-	623	599	-
Stage 2	-	-	-	-	-	-	610	598	-	699	658	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1156	-	-	1257	-	-	320	356	739	341	355	648
Mov Cap-2 Maneuver	-	-	-	-	-	-	320	356	-	341	355	-
Stage 1	-	-	-	-	-	-	699	658	-	621	598	-
Stage 2	-	-	-	-	-	-	579	597	-	691	656	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0	11.8	11.6
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	538	1156	-	-	1257	-	-	341	648
HCM Lane V/C Ratio	0.015	0.004	-	-	0.001	-	-	0.016	0.05
HCM Control Delay (s)	11.8	8.1	-	-	7.9	-	-	15.7	10.9
HCM Lane LOS	B	A	-	-	A	-	-	C	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.1	0.2

Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	10	2	2	6	13	5
Future Vol, veh/h	10	2	2	6	13	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	10	0	0	25	0	0
Mvmt Flow	11	2	2	7	15	6

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	29	18	21	0	-	0
Stage 1	18	-	-	-	-	-
Stage 2	11	-	-	-	-	-
Critical Hdwy	6.5	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.5	-	-	-	-	-
Critical Hdwy Stg 2	5.5	-	-	-	-	-
Follow-up Hdwy	3.59	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	965	1066	1608	-	-	-
Stage 1	984	-	-	-	-	-
Stage 2	991	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	964	1066	1608	-	-	-
Mov Cap-2 Maneuver	964	-	-	-	-	-
Stage 1	983	-	-	-	-	-
Stage 2	991	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.7	1.8	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1608	-	980	-	-
HCM Lane V/C Ratio	0.001	-	0.014	-	-
HCM Control Delay (s)	7.2	0	8.7	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	47	373	45	16	346	12	27	1	9	6	0	25
Future Vol, veh/h	47	373	45	16	346	12	27	1	9	6	0	25
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	1	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	51	401	48	17	372	13	29	1	10	6	0	27

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	385	0	0	449	0	0	953	946	425	946	964	379
Stage 1	-	-	-	-	-	-	527	527	-	413	413	-
Stage 2	-	-	-	-	-	-	426	419	-	533	551	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1185	-	-	1122	-	-	241	264	634	243	257	672
Stage 1	-	-	-	-	-	-	538	532	-	620	597	-
Stage 2	-	-	-	-	-	-	610	593	-	534	519	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1185	-	-	1122	-	-	218	244	634	225	237	672
Mov Cap-2 Maneuver	-	-	-	-	-	-	218	244	-	225	237	-
Stage 1	-	-	-	-	-	-	507	501	-	584	586	-
Stage 2	-	-	-	-	-	-	574	582	-	494	489	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.8	0.4	21.3	13
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	260	1185	-	-	1122	-	-	485
HCM Lane V/C Ratio	0.153	0.043	-	-	0.015	-	-	0.069
HCM Control Delay (s)	21.3	8.2	0	-	8.3	0	-	13
HCM Lane LOS	C	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.5	0.1	-	-	0	-	-	0.2

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	20	368	365	12	11	9
Future Vol, veh/h	20	368	365	12	11	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	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	2	0	0	13	0
Mvmt Flow	22	400	397	13	12	10

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	410	0	-	0	848	404
Stage 1	-	-	-	-	404	-
Stage 2	-	-	-	-	444	-
Critical Hdwy	4.1	-	-	-	6.53	6.2
Critical Hdwy Stg 1	-	-	-	-	5.53	-
Critical Hdwy Stg 2	-	-	-	-	5.53	-
Follow-up Hdwy	2.2	-	-	-	3.617	3.3
Pot Cap-1 Maneuver	1160	-	-	-	318	651
Stage 1	-	-	-	-	651	-
Stage 2	-	-	-	-	624	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1160	-	-	-	310	651
Mov Cap-2 Maneuver	-	-	-	-	310	-
Stage 1	-	-	-	-	635	-
Stage 2	-	-	-	-	624	-

Approach	EB	WB	SB
HCM Control Delay, s	0.4	0	14.4
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1160	-	-	-	406
HCM Lane V/C Ratio	0.019	-	-	-	0.054
HCM Control Delay (s)	8.2	0	-	-	14.4
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.2

Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	36	0	11	0	0	2	10	538	0	3	740	55
Future Vol, veh/h	36	0	11	0	0	2	10	538	0	3	740	55
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	87	87	87	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	0	0	0	0	1	0	0	1	5
Mvmt Flow	41	0	13	0	0	2	11	618	0	3	851	63

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1530	1529	883	1535	1560	618	914	0	0	618	0	0
Stage 1	889	889	-	640	640	-	-	-	-	-	-	-
Stage 2	641	640	-	895	920	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	97	118	348	96	113	493	754	-	-	972	-	-
Stage 1	341	364	-	467	473	-	-	-	-	-	-	-
Stage 2	466	473	-	338	352	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	94	115	348	91	110	493	754	-	-	972	-	-
Mov Cap-2 Maneuver	94	115	-	91	110	-	-	-	-	-	-	-
Stage 1	333	362	-	457	463	-	-	-	-	-	-	-
Stage 2	454	463	-	324	350	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	63.1	12.3	0.2	0
HCM LOS	F	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	754	-	-	113	493	972	-	-
HCM Lane V/C Ratio	0.015	-	-	0.478	0.005	0.004	-	-
HCM Control Delay (s)	9.8	0	-	63.1	12.3	8.7	0	-
HCM Lane LOS	A	A	-	F	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	2.1	0	0	-	-

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	15	461	2	0	392	6	1	0	1	3	0	17
Future Vol, veh/h	15	461	2	0	392	6	1	0	1	3	0	17
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	185	-	-	185	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	16	501	2	0	426	7	1	0	1	3	0	18

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	433	0	0	503	0	0	973	967	502	965	965	430
Stage 1	-	-	-	-	-	-	534	534	-	430	430	-
Stage 2	-	-	-	-	-	-	439	433	-	535	535	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1127	-	-	1061	-	-	231	254	569	234	255	625
Stage 1	-	-	-	-	-	-	530	524	-	603	583	-
Stage 2	-	-	-	-	-	-	597	582	-	529	524	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1127	-	-	1061	-	-	222	250	569	231	251	625
Mov Cap-2 Maneuver	-	-	-	-	-	-	222	250	-	231	251	-
Stage 1	-	-	-	-	-	-	523	517	-	595	583	-
Stage 2	-	-	-	-	-	-	579	582	-	520	517	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	0	16.4	12.4
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	319	1127	-	-	1061	-	-	231	625
HCM Lane V/C Ratio	0.007	0.014	-	-	-	-	-	0.014	0.03
HCM Control Delay (s)	16.4	8.2	-	-	0	-	-	20.8	10.9
HCM Lane LOS	C	A	-	-	A	-	-	C	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0	0.1

Intersection	
Int Delay, s/veh	4.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	9	7	16	15	7	8
Future Vol, veh/h	9	7	16	15	7	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	79	79	79	79	79	79
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	11	9	20	19	9	10

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	73	14	19	0	-	0
Stage 1	14	-	-	-	-	-
Stage 2	59	-	-	-	-	-
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	936	1072	1611	-	-	-
Stage 1	1014	-	-	-	-	-
Stage 2	969	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	924	1072	1611	-	-	-
Mov Cap-2 Maneuver	924	-	-	-	-	-
Stage 1	1001	-	-	-	-	-
Stage 2	969	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.7	3.7	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1611	-	983	-	-
HCM Lane V/C Ratio	0.013	-	0.021	-	-
HCM Control Delay (s)	7.3	0	8.7	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	35	242	35	11	248	7	26	2	6	10	0	38
Future Vol, veh/h	35	242	35	11	248	7	26	2	6	10	0	38
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	4	0	0	0	1	0	0	0	0	0	0	3
Mvmt Flow	38	266	38	12	273	8	29	2	7	11	0	42

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	281	0	0	304	0	0	683	666	285	667	681	277
Stage 1	-	-	-	-	-	-	361	361	-	301	301	-
Stage 2	-	-	-	-	-	-	322	305	-	366	380	-
Critical Hdwy	4.14	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.236	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.327
Pot Cap-1 Maneuver	1270	-	-	1268	-	-	366	383	759	375	375	759
Stage 1	-	-	-	-	-	-	662	629	-	712	669	-
Stage 2	-	-	-	-	-	-	694	666	-	657	617	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1270	-	-	1268	-	-	333	365	759	357	357	759
Mov Cap-2 Maneuver	-	-	-	-	-	-	333	365	-	357	357	-
Stage 1	-	-	-	-	-	-	638	606	-	686	662	-
Stage 2	-	-	-	-	-	-	649	659	-	626	595	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.9	0.3	15.8	11.4
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	372	1270	-	-	1268	-	-	615
HCM Lane V/C Ratio	0.1	0.03	-	-	0.01	-	-	0.086
HCM Control Delay (s)	15.8	7.9	0	-	7.9	0	-	11.4
HCM Lane LOS	C	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.3	0.1	-	-	0	-	-	0.3

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	13	245	255	7	7	11
Future Vol, veh/h	13	245	255	7	7	11
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	0	1	1	0	0	0
Mvmt Flow	15	278	290	8	8	13

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	298	0	-	0	602	294
Stage 1	-	-	-	-	294	-
Stage 2	-	-	-	-	308	-
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	1275	-	-	-	466	750
Stage 1	-	-	-	-	761	-
Stage 2	-	-	-	-	750	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1275	-	-	-	459	750
Mov Cap-2 Maneuver	-	-	-	-	459	-
Stage 1	-	-	-	-	750	-
Stage 2	-	-	-	-	750	-

Approach	EB	WB	SB
HCM Control Delay, s	0.4	0	11.2
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1275	-	-	-	602
HCM Lane V/C Ratio	0.012	-	-	-	0.034
HCM Control Delay (s)	7.9	0	-	-	11.2
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	25	0	11	1	0	0	5	439	2	1	480	35
Future Vol, veh/h	25	0	11	1	0	0	5	439	2	1	480	35
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	6	0	25	0	0	0	0	1	0	0	1	8
Mvmt Flow	26	0	11	1	0	0	5	457	2	1	500	36

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	988	989	518	994	1006	458	536	0	0	459	0	0
Stage 1	520	520	-	468	468	-	-	-	-	-	-	-
Stage 2	468	469	-	526	538	-	-	-	-	-	-	-
Critical Hdwy	7.16	6.5	6.45	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.16	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.16	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.554	4	3.525	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	222	249	515	226	243	607	1042	-	-	1113	-	-
Stage 1	532	535	-	579	565	-	-	-	-	-	-	-
Stage 2	568	564	-	539	526	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	221	247	515	220	241	607	1042	-	-	1113	-	-
Mov Cap-2 Maneuver	221	247	-	220	241	-	-	-	-	-	-	-
Stage 1	529	534	-	576	562	-	-	-	-	-	-	-
Stage 2	565	561	-	526	525	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	20.6	21.4	0.1	0
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1042	-	-	268	220	1113	-	-
HCM Lane V/C Ratio	0.005	-	-	0.14	0.005	0.001	-	-
HCM Control Delay (s)	8.5	0	-	20.6	21.4	8.2	0	-
HCM Lane LOS	A	A	-	C	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.5	0	0	-	-

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	12	305	2	0	308	4	2	0	3	4	0	20
Future Vol, veh/h	12	305	2	0	308	4	2	0	3	4	0	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	185	-	-	185	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	13	335	2	0	338	4	2	0	3	4	0	22

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	342	0	0	337	0	0	713	704	336	704	703	340
Stage 1	-	-	-	-	-	-	362	362	-	340	340	-
Stage 2	-	-	-	-	-	-	351	342	-	364	363	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1217	-	-	1222	-	-	347	361	706	352	362	702
Stage 1	-	-	-	-	-	-	657	625	-	675	639	-
Stage 2	-	-	-	-	-	-	666	638	-	655	625	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1217	-	-	1222	-	-	333	357	706	347	358	702
Mov Cap-2 Maneuver	-	-	-	-	-	-	333	357	-	347	358	-
Stage 1	-	-	-	-	-	-	650	618	-	668	639	-
Stage 2	-	-	-	-	-	-	645	638	-	645	618	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	0	12.5	11.2
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	488	1217	-	-	1222	-	-	347	702
HCM Lane V/C Ratio	0.011	0.011	-	-	-	-	-	0.013	0.031
HCM Control Delay (s)	12.5	8	-	-	0	-	-	15.5	10.3
HCM Lane LOS	B	A	-	-	A	-	-	C	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0	0.1

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	4	3	2	13	12	8
Future Vol, veh/h	4	3	2	13	12	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	25	0	0	0	0	0
Mvmt Flow	5	4	3	16	15	10

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	42	20	25	0	-	0
Stage 1	20	-	-	-	-	-
Stage 2	22	-	-	-	-	-
Critical Hdwy	6.65	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.65	-	-	-	-	-
Critical Hdwy Stg 2	5.65	-	-	-	-	-
Follow-up Hdwy	3.725	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	914	1064	1603	-	-	-
Stage 1	946	-	-	-	-	-
Stage 2	944	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	912	1064	1603	-	-	-
Mov Cap-2 Maneuver	912	-	-	-	-	-
Stage 1	944	-	-	-	-	-
Stage 2	944	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.7	1	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1603	-	971	-	-
HCM Lane V/C Ratio	0.002	-	0.009	-	-
HCM Control Delay (s)	7.2	0	8.7	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

SRA Traffic Signal Warrant Tables

Table A

RAW HOURLY TURNING MOVEMENT DATA - IL ROUTE 59 WITH ROLLINGRIDGE ROAD

	Eastbound			Westbound			Northbound			Southbound		
Time	L	T	R	L	T	R	L	T	R	L	T	R
6:00 AM	39	0	17	0	0	0	13	1788	0	0	596	51
7:00 AM	63	0	62	0	0	0	38	2241	0	0	960	113
8:00 AM	43	0	53	0	0	0	63	1657	0	0	845	64
9:00 AM	52	0	40	0	0	0	43	1369	0	0	836	72
10:00 AM	45	0	43	0	0	0	40	1157	0	0	851	62
11:00 AM	60	0	40	0	0	0	35	1097	0	0	1028	57
12:00 PM	63	0	40	0	0	0	30	1191	0	0	1119	66
1:00 PM	43	0	33	0	0	0	27	1130	0	0	1173	79
2:00 PM	40	0	40	0	0	0	34	1136	0	0	1541	99
3:00 PM	56	0	55	0	0	0	49	1254	0	0	1718	86
4:00 PM	36	0	56	0	0	0	49	1367	0	0	1727	125
5:00 PM	33	0	56	0	0	0	41	1469	0	0	1891	108
6:00 PM	19	0	42	0	0	0	38	1249	0	0	1709	115

Table B

EASTBOUND RIGHT TURN REDUCTIONS

Time	Raw Eastbound Right-Turn	70% Eastbound Approach Volume	35% Eastbound Approach Volume	Right-Turn Percent Reduction	Right-Turn Reduction	Adjusted Eastbound Right-
6:00 AM	17	39	20	20%	-3	14
7:00 AM	62	88	44	40%	-25	37
8:00 AM	53	67	34	40%	-21	32
9:00 AM	40	64	32	40%	-16	24
10:00 AM	43	62	31	40%	-17	26
11:00 AM	40	70	35	40%	-16	24
12:00 PM	40	72	36	40%	-16	24
1:00 PM	33	53	27	40%	-13	20
2:00 PM	40	56	28	40%	-16	24
3:00 PM	55	78	39	40%	-22	33
4:00 PM	56	64	32	40%	-22	34
5:00 PM	56	62	31	40%	-22	34
6:00 PM	42	43	21	40%	-17	25

Note the following regarding single lane approaches:

When right-turning volume is greater than 70 percent of the approach volume, right-turning movements should be reduced by 60 percent

When right-turning volume is between 70 percent and 35 percent of the approach volume, right-turning movements should be reduced by 40 percent

When right-turning volume is less than 35 percent of the approach volume, right-turning movements should be reduced by 20 percent

Table C

ADJSUTED HOURLY TURNING MOVEMENT DATA - IL ROUTE 59 WITH ROLLINGRIDGE ROAD

	Eastbound			Westbound			Northbound			Southbound		
Time	L	T	R	L	T	R	L	T	R	L	T	R
6:00 AM	39	0	14	0	0	0	13	1788	0	0	596	51
7:00 AM	63	0	37	0	0	0	38	2241	0	0	960	113
8:00 AM	43	0	32	0	0	0	63	1657	0	0	845	64
9:00 AM	52	0	24	0	0	0	43	1369	0	0	836	72
10:00 AM	45	0	26	0	0	0	40	1157	0	0	851	62
11:00 AM	60	0	24	0	0	0	35	1097	0	0	1028	57
12:00 PM	63	0	24	0	0	0	30	1191	0	0	1119	66
1:00 PM	43	0	20	0	0	0	27	1130	0	0	1173	79
2:00 PM	40	0	24	0	0	0	34	1136	0	0	1541	99
3:00 PM	56	0	33	0	0	0	49	1254	0	0	1718	86
4:00 PM	36	0	34	0	0	0	49	1367	0	0	1727	125
5:00 PM	33	0	34	0	0	0	41	1469	0	0	1891	108
6:00 PM	19	0	25	0	0	0	38	1249	0	0	1709	115