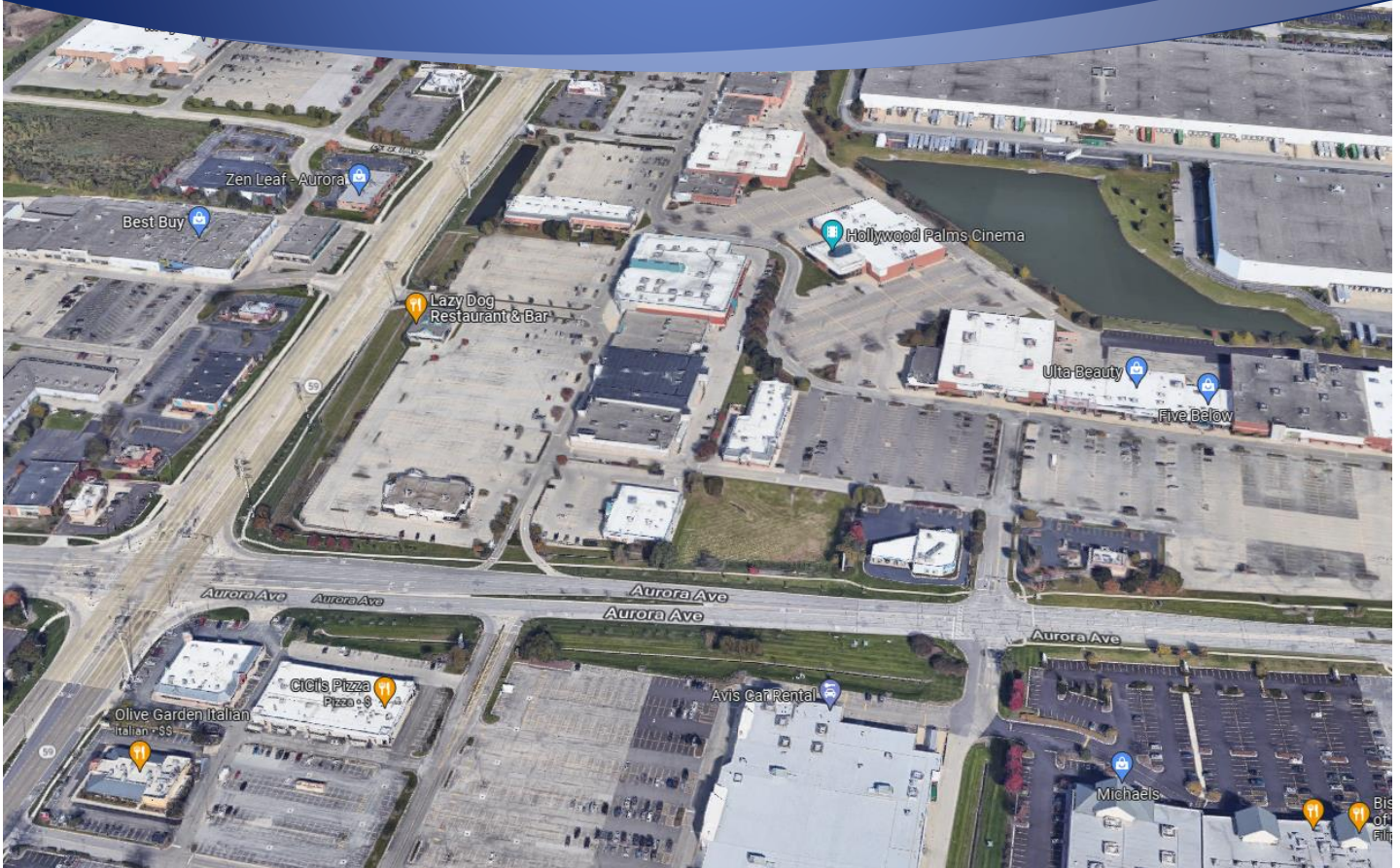


# Traffic Impact Study Proposed Block 59 Retail Development

Naperville, Illinois



Prepared For:

**BRIXMOR**<sup>®</sup>  
Property Group

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

December 2, 2022

# 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 retail development to be located in the northeast quadrant of the intersection of Illinois Route 59 (IL 59) with Aurora Avenue in Naperville, Illinois. The site, which is currently occupied by the Heritage Square shopping center, will be redeveloped into the Block 59 retail development. As proposed, the redevelopment will consist of adding to the site eleven restaurants, two entertainment/dining entities, one financial business, and one retail tenant across nine new buildings as well as utilizing existing structures.

Access to the site will continue to be provided by the eleven existing access drives serving the Heritage Square shopping center and the Westridge Court shopping center, including the signalized intersections of IL 59 with the Meijer access drive and Aurora Avenue with the Westridge Court access drive.

The purpose of this study was to examine existing traffic conditions to establish a base condition, assess the impact that the proposed development would have on traffic conditions in the area, and determine the roadway and traffic control improvements needed to mitigate this development’s impact based on projected traffic conditions. The sections of this report present the following:

- Existing roadway conditions
- A description of the proposed development
- Directional distribution of development-generated traffic
- Vehicle trip generation for the proposed development
- Regional growth in traffic and background development traffic for no-build conditions
- Future transportation conditions including access to and from the development

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

1. Year 2022 Base Conditions – Analyzes the capacity of the existing roadway system using Year 2022 base peak hour traffic volumes in the surrounding area.
2. Year 2028 No-Build Conditions – Analyzes the capacity of the existing roadway system using the Year 2022 base traffic volumes increased by an ambient growth factor (growth not attributable to any particular development) and the traffic projected to be generated by vacant space within the shopping center.
3. Year 2028 Total Projected Conditions – The total projected traffic volumes includes the Year 2022 base traffic volumes increased by a regional growth factor, traffic from planned background developments in the immediate area, the traffic projected to be generated by vacant space within the shopping center, and the traffic estimated to be generated by the proposed subject development.

## 2. Existing Conditions

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

### Site Location

The site is located in the northeast quadrant of the intersection of Illinois Route 59 (IL 59) with Aurora Avenue in Naperville, Illinois. The site currently contains the Heritage Square shopping center, which provides approximately 212,000 square feet of retail space. Flanking the Heritage Square to the north, northeast, and east is the Westridge Court shopping center, which provides approximately 471,000 square feet of retail space. The shopping centers are bounded by Jefferson Avenue to the north and Fort Hill Drive to the east. The two shopping centers have cross-access provided at two points. Access to the shopping centers is provided via three access drives on IL 59, three access drives on Aurora Avenue, two access drives on Jefferson Avenue to the north, and two access drives on Fort Hill Drive to the east. Uses surrounding the shopping centers are primarily commercial. Interstate 88 is located approximately 2.85 miles to the north along IL 59. **Figure 1** shows the location of the site in relation to the area roadway system. **Figure 2** shows an aerial view of the site.

### Existing Roadway Characteristics

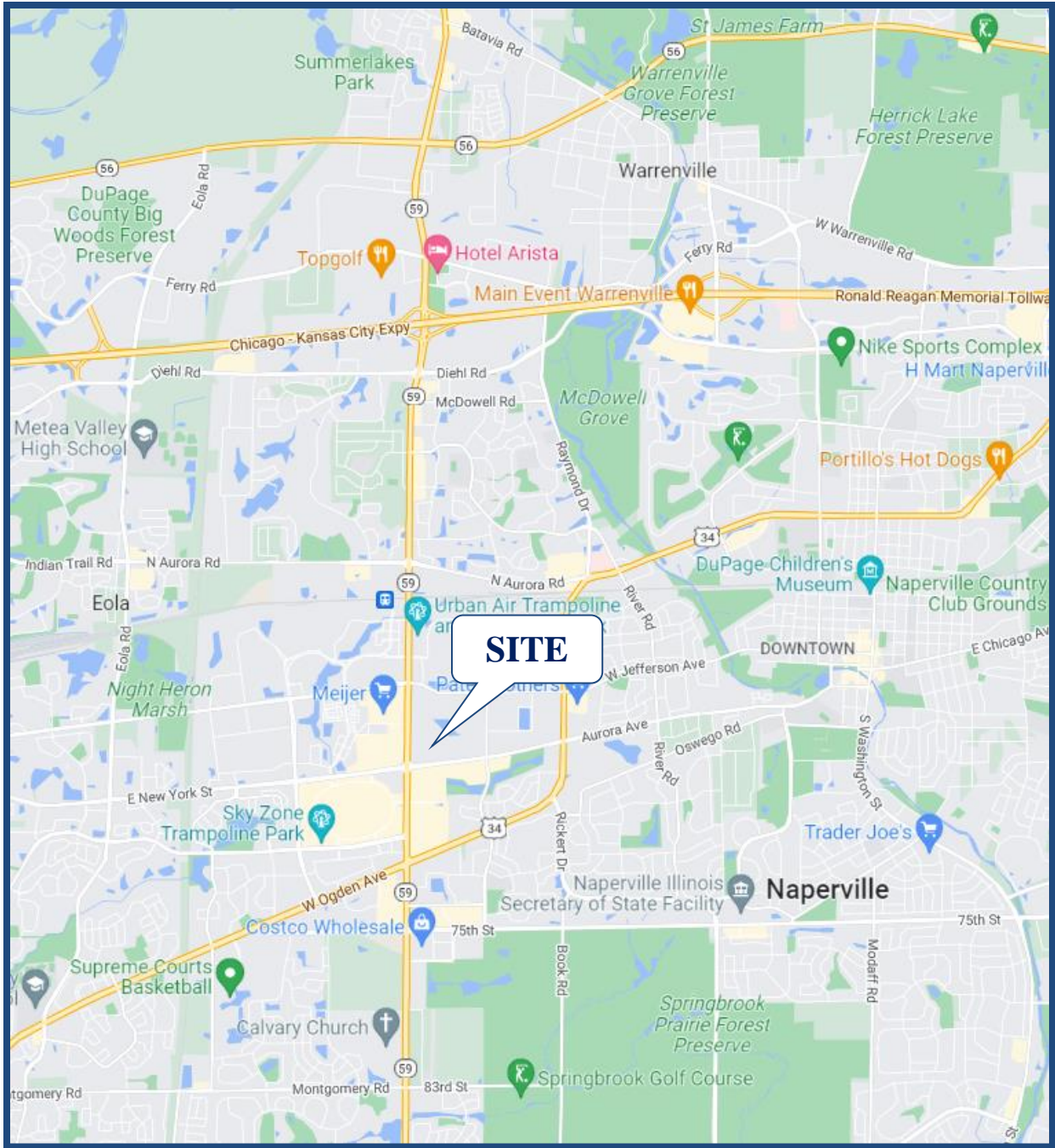
The characteristics of the existing roadways that surround the proposed development are described below and illustrated in **Figure 3**.

*IL 59 with Aurora Avenue* is a signalized intersection located at the southwest corner of the development site. Aurora Avenue provides dual left-turn lanes, three through lanes, and a right-turn lane on the eastbound and westbound approaches. IL 59 provides dual left-turn lanes, three through lanes, and a right-turn lane on the northbound approach and a U-turn/left-turn lane, an exclusive left-turn lane, three through lanes, and a right-turn lane on the southbound approach. The traffic signal is fully actuated and is coordinated in the northbound and southbound directions with the master controller located at IL 59 with Ogden Avenue (U.S. Route 34) to the south. Standard-style crosswalks are provided on the north, south, and east legs. A high-visibility crosswalk is provided on the west leg.

IL 59 is a Strategic Regional Arterial (SRA 109) and carries an annual average daily traffic (AADT) volume of 55,300 vehicles (IDOT 2019). Aurora Avenue carries an AADT volume of 15,800 vehicles east of IL 59 (IDOT 2016) and 19,400 vehicles (IDOT 2016) west of IL 59.

IL 59 is under the jurisdiction of the Illinois Department of Transportation (IDOT) and Aurora Avenue is under the jurisdiction of the City of Naperville east of IL 59 and the City of Aurora west of IL 59. IL 59 has a posted speed limit of 40 miles per hour. East of IL 59, Aurora Avenue has a posted speed limit of 40 miles per hour and west of IL 59, Aurora Avenue has a posted speed limit of 45 miles per hour.

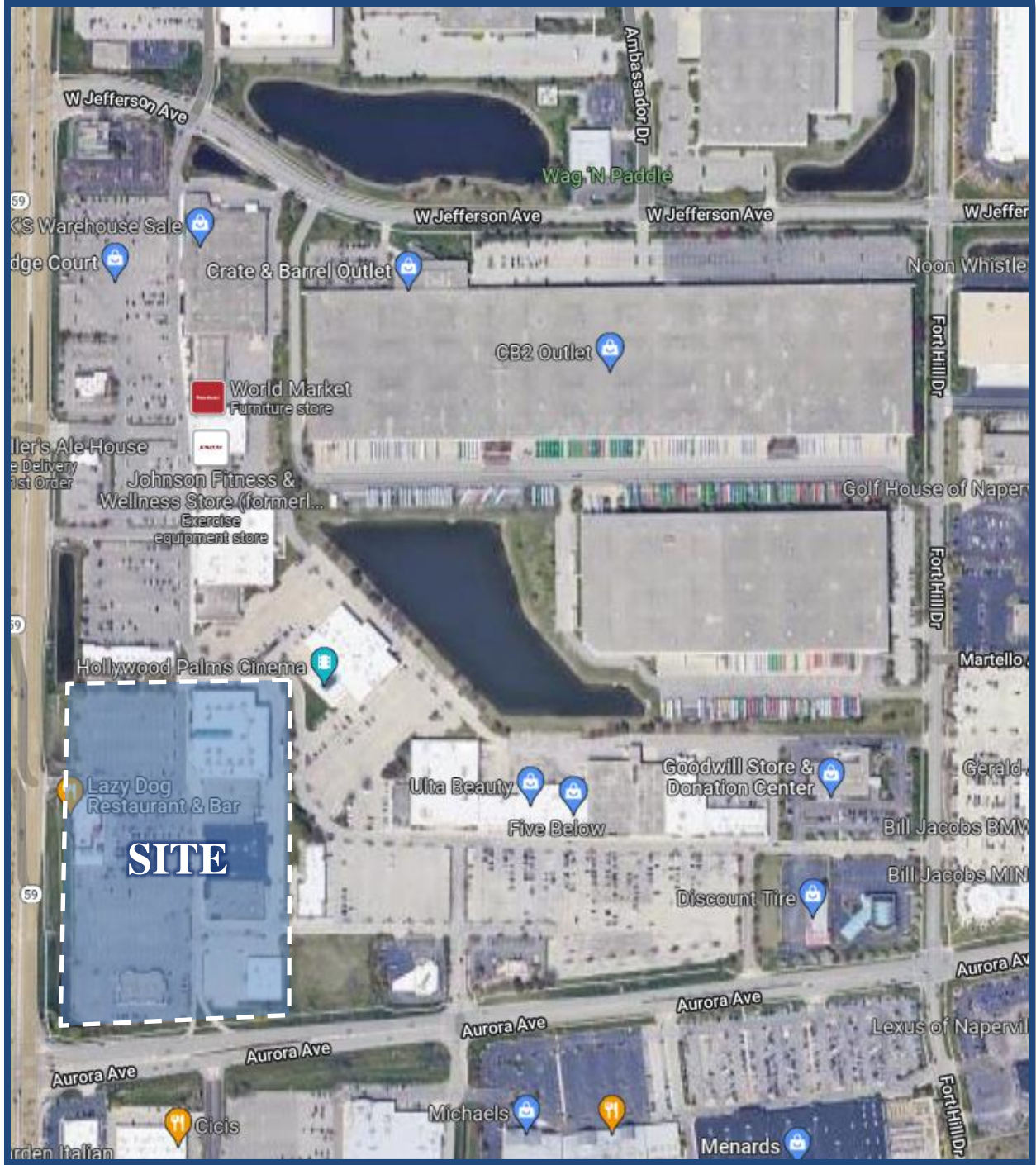




Site Location

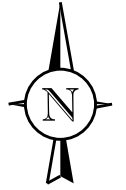
Figure 1



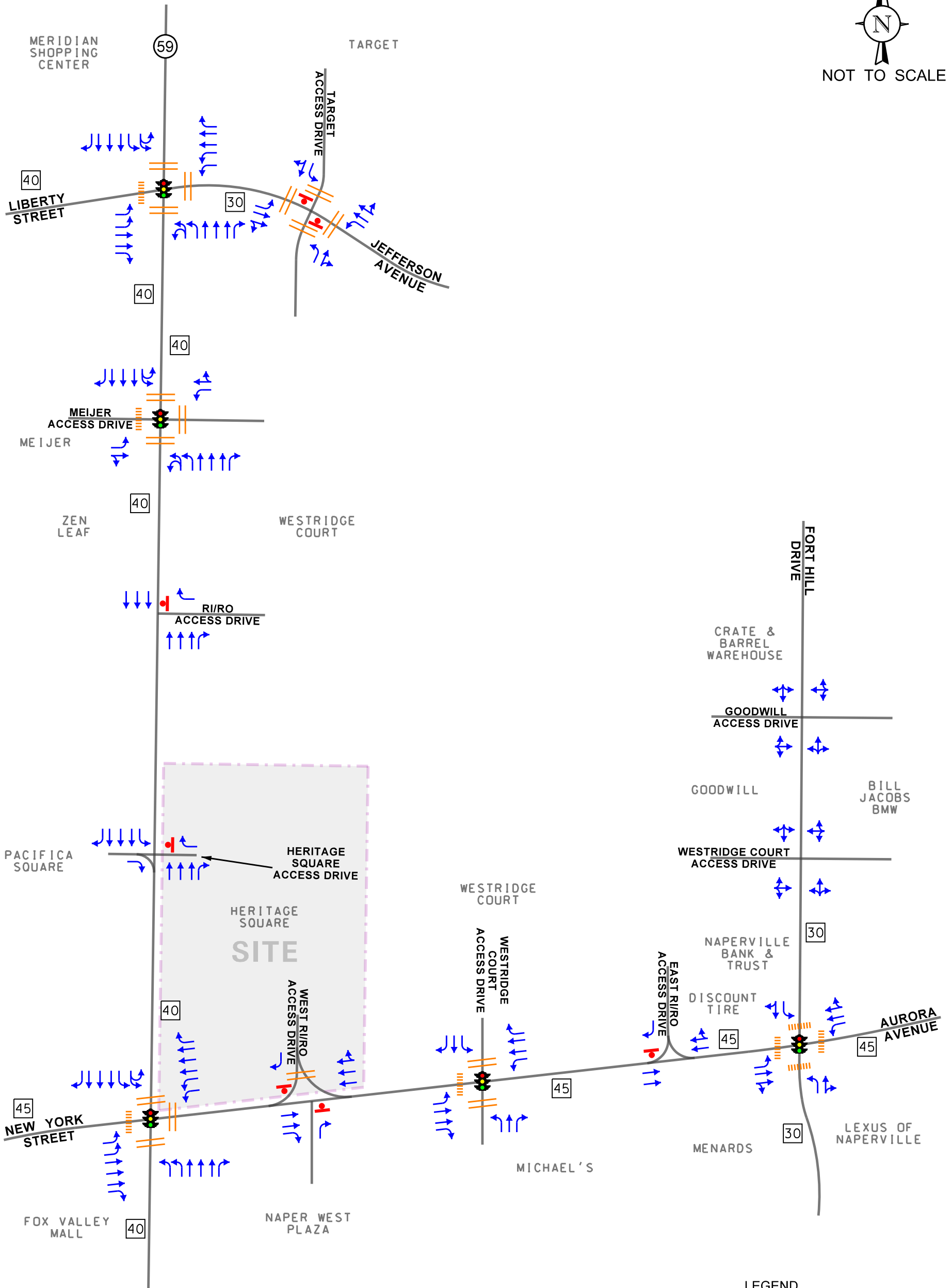


**Aerial View of Site**

**Figure 2**



NOT TO SCALE



- LEGEND**
- TRAVEL LANE
  - TRAFFIC SIGNAL
  - STOP SIGN
  - SPEED LIMIT
  - STANDARD CROSSWALK
  - HIGH VISIBILITY CROSSWALK

*IL 59 with Jefferson Avenue/Liberty Street* is a signalized intersection located at the northwest corner of the shopping center complex. Jefferson Avenue is the east leg of the intersection and Liberty Street is the west leg. IL 59 provides a combined U-turn/left-turn lane, a left-turn lane, three through lanes, and a right-turn lane on the northbound and southbound approaches. Jefferson Avenue provides dual left-turn lanes, two through lanes, and a right-turn lane on the eastbound and westbound approaches. The traffic signal is fully actuated, coordinated in the northbound and southbound directions with the intersection of IL 59 with Aurora Avenue. Standard-style crosswalks are provided on the north, south, and east legs. A high-visibility crosswalk is provided on the west leg. Jefferson Avenue carries an AADT volume of 9,100 vehicles (IDOT 2016) east of IL 59 and 9,650 vehicles (IDOT 2019) west of IL 59. Jefferson Avenue is under the jurisdiction of the City of Naperville east of IL 59 and the City of Aurora west of IL 59. Jefferson Avenue has a posted speed limit of 30 miles per hour east of IL 59 and 40 miles per hour west of IL 59.

*Aurora Avenue with Fort Hill Drive* is a signalized intersection located at the southeast corner of the shopping center complex. Aurora Avenue provides a left-turn lane, a through lane, and a combined through/right-turn lane on the eastbound and westbound approaches. Fort Hill Drive provides a left-turn lane and a combined through/right-turn lane on the northbound and southbound approaches. The traffic signal is fully actuated, coordinated in the eastbound and westbound directions with the intersection of Aurora Avenue with IL 59. High-visibility crosswalks are provided on all legs of the intersection. Aurora Avenue and Fort Hill Drive are under the jurisdiction of the City of Naperville. Aurora Avenue has a posted speed limit of 45 miles per hour and Fort Hill Drive has a posted speed limit of 30 miles per hour.

## Existing Access System

The characteristics of the existing access system that serves the shopping center is described below and illustrated in Figure 3.

*Illinois Route 59 (IL 59) with the Meijer access drive* is a signalized access intersection located approximately 945 feet south of Jefferson Avenue serving the IL 59 retail side of Westridge Court. This access drive provides one inbound lane and two outbound lanes striped for a left-turn lane and a combined through/right-turn lane. At this access drive, IL 59 provides a combined U-turn/left-turn lane, three through lanes, and a right-turn lane on the northbound and southbound approaches serving the access drives. The northbound approach provides an additional left-turn lane. The traffic signal is fully actuated, coordinated in the northbound and southbound directions with the signalized intersections of IL 59 with Aurora Avenue and Jefferson Avenue. Standard-style crosswalks are provided on the north, south, and east legs. A high-visibility crosswalk is provided on the west leg. The Meijer access drive traffic signal provides protected/permissive left-turn phases onto IL 59.

*Aurora Avenue with the Westridge Court access drive* is a signalized access intersection located approximately 1,305 feet east of IL 59 serving the Aurora Avenue retail side of Westridge Court and the commercial developments located on the south side of Aurora Avenue. This access drive provides one inbound lane and three outbound lanes striped for a left-turn lane, a through lane, and a right-turn lane. At this access drive, Aurora Avenue provides a left-turn lane, two through lanes, and a right-turn lane on the eastbound and westbound approaches.



The traffic signal is fully actuated, coordinated in the eastbound and westbound directions with the intersections of Aurora Avenue with IL 59 and Fort Hill Drive. Standard-style crosswalks are provided on the north and south legs and a high-visibility crosswalk is provided on the west leg. Protected/permissive left-turn phases are provided for all legs of the intersection.

*IL 59 with the Heritage Square access drive* is an unsignalized three-quarter access intersection located approximately 875 feet north of Aurora Avenue serving the Heritage Square shopping center to the east and Pacifica Square shopping center to the west. This access drive provides one inbound lane and one outbound lane and is restricted to right-turn in, right-turn out, and left-turn in movements on both approaches. IL 59 provides a southbound left-turn lane, a southbound right-turn lane, and a northbound right-turn lane onto the access drive. IL 59 provides three northbound lanes and three southbound through lanes at this intersection.

*IL 59 with the right-in/right-out access drive* is an unsignalized access intersection located approximately 1,595 feet north of Aurora Avenue serving the Westridge Court shopping center. This access drive provides one inbound lane and one outbound lane that is restricted to right-turn movements only via the raised median along IL 59. Outbound movements from the access drive are under stop sign control. IL 59 provides a right-turn lane into the access drive and three northbound through lanes at this intersection.

*Aurora Avenue with the west right-in/right-out access drive* is an unsignalized access intersection located approximately 575 feet east of IL 59 serving the Heritage Square shopping center to the north and Naper West Plaza shopping center to the south. This access drive provides one inbound lane and one outbound lane that is restricted to right-turn movements only via channelizing islands and the center landscaped median along Aurora Avenue. Outbound movements are under stop sign control. Aurora Avenue provides a combined through/right-turn lane and two through lanes on the westbound approach at this intersection. A standard-style crosswalk is provided on the north leg of the intersection.

*Aurora Avenue with the east right-in/right-out access drive* is an unsignalized access intersection located approximately 525 feet west of Fort Hill Drive serving the Westridge Court shopping center. This access drive provides one inbound lane and one outbound lane that is restricted to right-turn movements only via a channelizing island and the center landscaped median along Aurora Avenue. Outbound movements are under stop sign control. Aurora Avenue provides a combined through/right-turn lane and a through lane on the westbound approach at this intersection.

*Jefferson Avenue with the Target access drive* is an unsignalized access intersection located approximately 480 feet east of IL 59 serving the Westridge Court shopping center to the south and Target to the north. Jefferson Avenue provides a left-turn lane, a through lane, and a combined through/right-turn lane on the eastbound and westbound approaches. The Target access drive provides a left-turn lane and a combined through/right-turn lane on the northbound and southbound approaches that are stop sign controlled. Standard-style crosswalks are provided on all legs of the intersection.

*Fort Hill Drive with the Westridge Court access drive* is an unsignalized access intersection located approximately 340 feet north of Aurora Avenue serving the Westridge Court shopping center to the west and Bill Jacobs BMW to the east. Combined left-turn/through/right-turn lanes are provided on all approaches.

*Fort Hill Drive with the Goodwill access drive* is an unsignalized access intersection located approximately 655 feet north of Aurora Avenue serving Goodwill to the west and Bill Jacobs BMW to the east. Combined left-turn/through/right-turn lanes are provided on all approaches.

## Existing Traffic Volumes

In order to determine current traffic conditions within the study area, KLOA, Inc. conducted traffic counts on Thursday, January 6, 2022 during the morning (7:00 to 9:00 A.M.) and evening (4:00 to 6:00 P.M.) peak periods and on Saturday, January 8, 2022 during the Saturday midday (11:00 A.M. to 2:00 P.M.) peak period at the following twelve intersections:

- Illinois Route 59 with Aurora Avenue
- Illinois Route 59 with Jefferson Avenue
- Illinois Route 59 with the Meijer access drive
- Aurora Avenue with Fort Hill Drive
- Aurora Avenue with the Westridge Court access drive
- Illinois Route 59 with the Heritage Square access drive
- Illinois Route 59 with the right-in/right-out access drive
- Aurora Avenue with the west right-in/right-out access drive
- Aurora Avenue with the east right-in/right-out access drive
- Jefferson Avenue with the Target access drive
- Fort Hill Drive with the Westridge Court access drive
- Fort Hill Drive with the Goodwill access drive

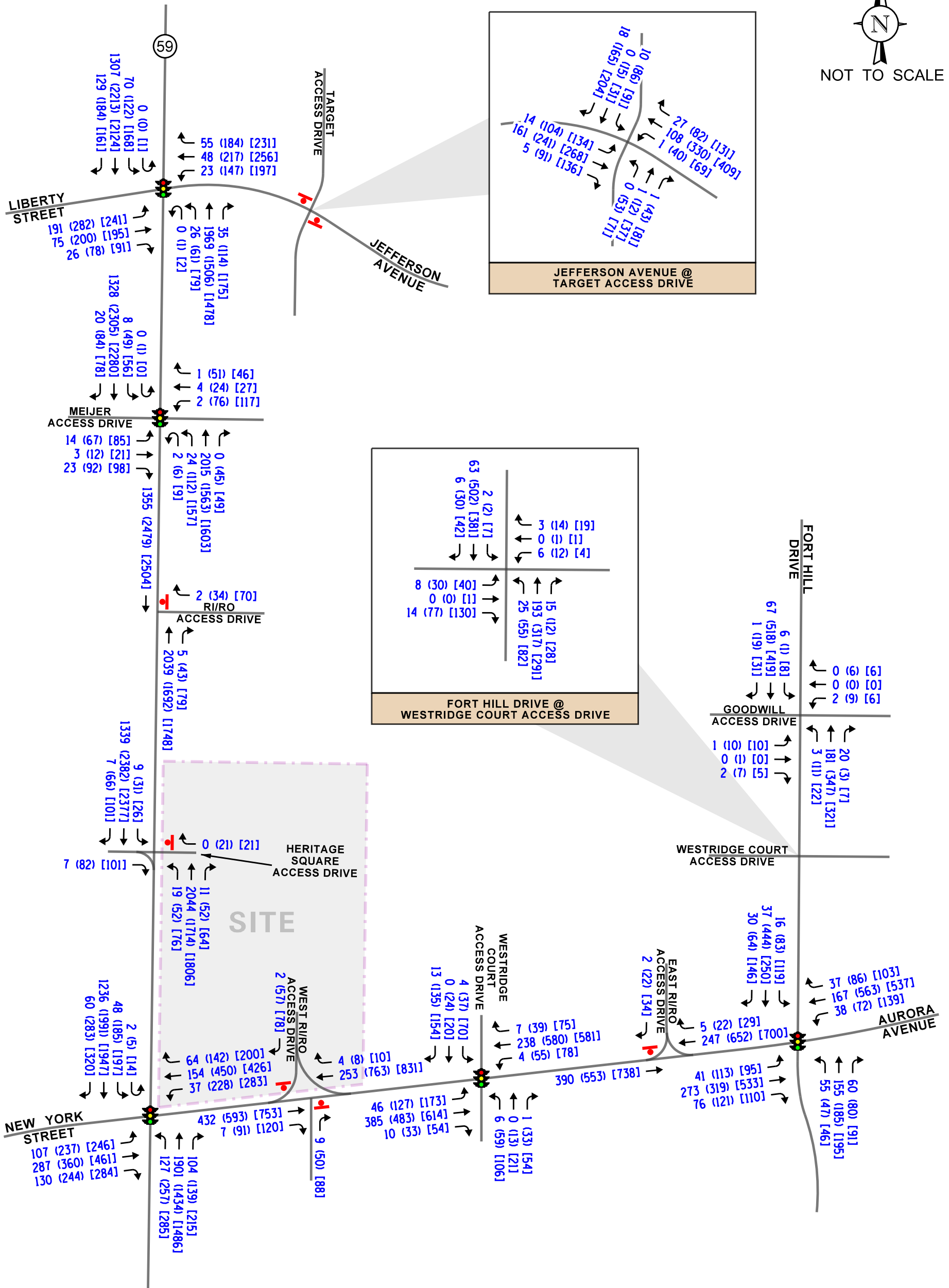
The results of the traffic counts show that the peak hours of traffic generally occur between 7:30 and 8:30 A.M. during the weekday morning peak period, between 4:30 and 5:30 P.M. during the weekday evening peak period, and between 1:00 and 2:00 P.M. during the Saturday midday peak period. These three respective peak hours will be used for the traffic capacity analyses and are presented later in this report.

In order to ensure that the traffic volumes in the area generally reflect normal or typical traffic conditions, the 2022 traffic counts along IL 59 and Aurora Avenue were compared to the 2019 two-way traffic counts on the IDOT T Count Database System (TCDS) website that were increased to reflect 2022 volumes with an annual growth rate to be discussed later. Based on the comparison, through traffic volumes along IL 59 were increased by 50 percent during the weekday morning peak hour and by 15 percent during the weekday evening and Saturday midday peak hours. The comparison determined that the 2022 traffic volumes along Aurora Avenue were consistent with the IDOT traffic volumes and therefore no adjustments were applied.

The Year 2022 base peak hour vehicle traffic volumes are shown in **Figure 4**. Copies of the traffic count summary sheets are included in the Appendix.



NOT TO SCALE



**LEGEND**

- 00 - AM PEAK HOUR (7:30-8:30 AM)
- (00) - PM PEAK HOUR (4:30-5:30 PM)
- [000] - SATURDAY MIDDAY PEAK HOUR (1:00-2:00 PM)



## Crash Data Analysis

KLOA, Inc. obtained crash data<sup>1</sup> from IDOT for the most recent past five years available (2016 to 2020) for the following signalized intersections:

- Illinois Route 59 with Aurora Avenue
- Illinois Route 59 with Jefferson Avenue
- Illinois Route 59 with the Meijer access drive
- Aurora Avenue with Fort Hill Drive
- Aurora Avenue with the Westridge Court access drive

**Tables 1** through **5** summarize the crash data. A review of the crash data indicated that one fatality was reported during the survey period in 2018 at the intersection of Aurora Avenue with Fort Hill Drive, which involved a motorcycle and a passenger vehicle. This crash occurred in the late evening.

Table 1  
IL 59 WITH AURORA AVENUE – CRASH SUMMARY

Year	Type of Crash Frequency						Total
	Angle	Object	Rear End	Sideswipe	Turning	Other	
2016	0	1	20	1	6	0	28
2017	2	1	14	3	1	0	21
2018	1	1	27	1	3	0	33
2019	1	0	19	4	8	1	33
2020	0	0	9	2	9	0	20
<b>Total</b>	<b>4</b>	<b>3</b>	<b>89</b>	<b>11</b>	<b>27</b>	<b>1</b>	<b>135</b>
<b>Average/Year</b>	<b>&lt;1.0</b>	<b>&lt;1.0</b>	<b>17.8</b>	<b>2.2</b>	<b>5.4</b>	<b>&lt;1.0</b>	<b>27.0</b>

<sup>1</sup> 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. The author is responsible for any data analyses and conclusions drawn.

Table 2

IL 59 WITH JEFFERSON AVENUE – CRASH SUMMARY

Year	Type of Crash Frequency						
	Angle	Object	Rear End	Sideswipe	Turning	Other	Total
2016	4	1	6	1	3	0	15
2017	0	0	6	2	4	0	12
2018	1	0	7	1	7	0	16
2019	0	0	3	0	4	0	7
2020	<u>0</u>	<u>0</u>	<u>10</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>10</u>
<b>Total</b>	<b>5</b>	<b>1</b>	<b>32</b>	<b>4</b>	<b>18</b>	<b>0</b>	<b>60</b>
<b>Average/Year</b>	<b>1.0</b>	<b>&lt;1.0</b>	<b>6.4</b>	<b>&lt;1.0</b>	<b>3.6</b>	<b>0.0</b>	<b>12.0</b>

Table 3

IL 59 WITH MEIJER ACCESS DRIVE – CRASH SUMMARY

Year	Type of Crash Frequency						
	Angle	Object	Rear End	Sideswipe	Turning	Other	Total
2016	1	1	1	0	0	0	3
2017	0	0	1	1	1	1	4
2018	0	0	0	0	1	0	1
2019	0	0	4	1	0	0	5
2020	<u>1</u>	<u>0</u>	<u>1</u>	<u>0</u>	<u>1</u>	<u>1</u>	<u>4</u>
<b>Total</b>	<b>2</b>	<b>1</b>	<b>7</b>	<b>2</b>	<b>3</b>	<b>2</b>	<b>17</b>
<b>Average/Year</b>	<b>&lt;1.0</b>	<b>&lt;1.0</b>	<b>1.4</b>	<b>&lt;1.0</b>	<b>&lt;1.0</b>	<b>&lt;1.0</b>	<b>3.4</b>

Table 4

AURORA AVENUE WITH FORT HILL DRIVE – CRASH SUMMARY

Year	Type of Crash Frequency						
	Angle	Object	Rear End	Sideswipe	Turning	Other	Total
2016	0	0	2	0	2	0	4
2017	0	0	2	0	5	0	7
2018	1	0	2	0	5	0	8
2019	2	0	4	0	1	0	7
2020	<u>0</u>	<u>0</u>	<u>1</u>	<u>0</u>	<u>5</u>	<u>0</u>	<u>6</u>
<b>Total</b>	<b>3</b>	<b>0</b>	<b>11</b>	<b>0</b>	<b>18</b>	<b>0</b>	<b>32</b>
<b>Average/Year</b>	<b>&lt;1.0</b>	<b>0.0</b>	<b>2.2</b>	<b>0.0</b>	<b>3.6</b>	<b>0.0</b>	<b>6.4</b>

Table 5

AURORA AVENUE WITH WESTRIDGE COURT ACCESS DRIVE – CRASH SUMMARY

Year	Type of Crash Frequency						
	Angle	Object	Rear End	Sideswipe	Turning	Other	Total
2016	1	0	0	0	1	0	2
2017	1	0	0	0	1	0	2
2018	0	0	0	0	0	0	0
2019	0	0	0	0	0	0	0
2020	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
<b>Total</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>4</b>
<b>Average/Year</b>	<b>&lt;1.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>&lt;1.0</b>	<b>0.0</b>	<b>&lt;1.0</b>



### 3. Traffic Characteristics of the Proposed Development

To properly evaluate future traffic conditions, 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

The proposed plans call for redeveloping the Heritage Square shopping center and portions of the Westridge Court shopping center into a lifestyle center retail development to be known as Block 59, which will include restaurants, entertainment, and retail. The Walter E. Smithe and retail strip containing Party City will be eliminated, as will a portion of the smaller retail strip fronting Zone 12. The Lazy Dog Restaurant & Bar (8,213 square feet) will remain and become part of Block 59, as will the building currently containing Burn Boot Camp (12,272 square feet). The Hollywood Palms Cinema (49,972 square feet, approximately 980 seats) will remain within Westridge Court. Additionally, the western portion of the main building facing Aurora Avenue will remain within Westridge Court but will be redeveloped in conjunction with Block 59. Based on the proposed plans, the following uses are included within the proposed development:

- Tenants A and H will be restaurants that will each have an adjacent drop-off valet drive and provide a total of approximately 20,000 square feet of space. These will be contained in new buildings.
- Tenants B, C, D, F, I, and J will be restaurants that will provide a total of approximately 52,150 square feet of space. These will be contained in new buildings.
- Tenant E will be an approximately 2,400 square-foot restaurant. This will be contained in a new building.
- Tenants K and L will be restaurants with drive-through lanes and will provide a total of approximately 5,900 square feet of space. These will be new buildings.
- Tenant M will be an approximately 12,272 square-foot financial business. This will be contained in the existing building currently containing Burn Boot Camp.
- Tenants O and P will be restaurant/entertainment facilities that will be located in the existing building of the Westridge Court shopping center that fronts Aurora Avenue. The area to be occupied by tenants O and P currently contains Chicago Wrap and a vacant storefront area. The space currently containing Chicago Wrap is planned to be eliminated. The total size of the two restaurant/entertainment facilities will be approximately 50,670 square feet.

Access to the site will continue to be provided by the existing access drives serving the Heritage Square shopping center and the Westridge Court shopping center as previously described. However, the west right-in/right-out access drive on Aurora Avenue will be modified so that the existing landscaped island channelizing the right-turn movements provides smaller turning radii.

The proposed Block 59 development will require the modification of the parking lots within the Heritage Square and Westridge Court shopping centers, which will result in a net loss of 187 parking spaces between the two shopping centers. The property line for the Heritage Square shopping center will be adjusted for Block 59. Block 59 is proposed to provide 716 parking spaces. The property line for the Westridge Court shopping center will be adjusted for the development of Block 59. Westridge Court is proposed to provide 2,642 parking spaces with the reconfiguration of the parking lots and property line, resulting in an increase of 57 parking spaces from the existing 2,585 parking spaces provided. The total parking spaces within the Westridge Court shopping center (excluding the outlot uses) and Block 59 will be reduced from 3,558 parking spaces to 3,358 parking spaces, resulting in the loss of 187 parking spaces.

A copy of the proposed Block 59 site plan and a copy of the proposed property plan are included in the Appendix.

### Directional Distribution

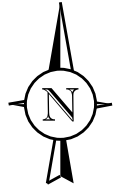
The directions from which patrons of the proposed Block 59 development will approach and depart were estimated based on existing travel patterns, as determined from the traffic counts. **Figure 5** illustrates the directional distribution of traffic projected to be generated by the proposed development.

### Peak Hour Traffic Volumes

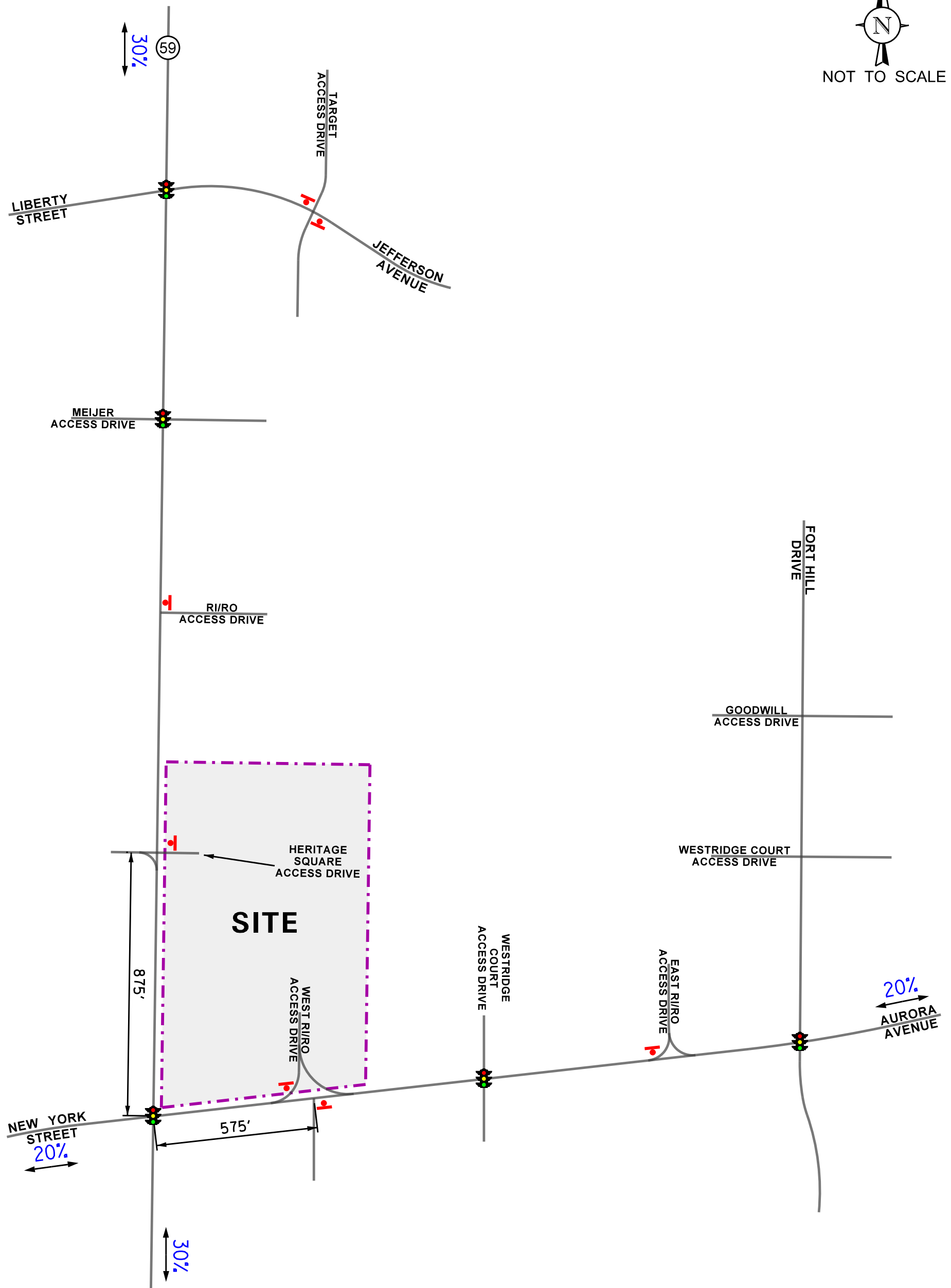
The volume of traffic estimated to be generated by the proposed Block 59 development was based on trip generation rates published by the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 11<sup>th</sup> Edition. The estimates of vehicle traffic to be generated by the proposed development is based upon the proposed land use types and sizes. As Tenants O and P of the proposed development are to be combination entertainment/restaurants, approximately 25 percent of each tenant area was assumed to be restaurant space and the remaining 75 percent was assumed to be entertainment space. Furthermore, a 10 percent interaction reduction was applied to the total trips projected to be generated by the new development to account for interaction within Block 59 and the Westridge Court shopping center.

Additionally, many trips generated by the proposed development will be pass-by vehicle trips. Pass-by vehicle trips consist of vehicles already on the adjacent roadway (i.e. IL 59) en route to another destination (e.g. work to home) and are not considered new vehicle trips to the roadway system. Therefore, a pass-by vehicle trip reduction of 50 percent was applied to the fast-casual, high-turnover, and fast-food restaurant uses. This percentage is the average of the pass-by rates for the restaurant uses.

**Table 6** summarizes the estimated peak hour and daily vehicle trip generation for the proposed development. Tenants G and Q are existing uses that will remain in operation and are not factored into the new trip or pass-by totals.



NOT TO SCALE



**LEGEND**

- 00% - PERCENT DISTRIBUTION
- 00' - DISTANCE IN FEET

Table 6

## PROJECTED PEAK HOUR SITE-GENERATED TRAFFIC VOLUMES

ITE Land-Use Code	Type/Size	Weekday Morning Peak Hour			Weekday Evening Peak Hour			Weekend Midday Peak Hour			Daily Two-Way Trips		
		In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total
931	[A] Fine Dining Restaurant (10,000 SF)	--	--	--	52	26	78	63	44	107	419	419	838
932	[B] High-Turnover (Sit-Down) Restaurant (10,000 SF)	1	1	2	55	36	91	57	55	112	536	536	1,072
932	[C] High-Turnover (Sit-Down) Restaurant (10,000 SF)	1	1	2	55	36	91	57	55	112	536	536	1,072
932	[D] High-Turnover (Sit-Down) Restaurant (10,000 SF)	1	1	2	55	36	91	57	55	112	536	536	1,072
930	[E] Fast Casual Restaurant (2,400 s.f.)	1	2	3	16	14	30	43	35	78	117	117	234
932	[F] High-Turnover (Sit-Down) Restaurant (11,150 SF)	1	1	2	61	40	101	64	61	125	601	601	1,202
932	[G, Lazy Dog] High-Turnover (Sit-Down) Restaurant (8,213 SF) [Existing Use]	1	1	2	45	29	74	47	45	92	440	440	880
931	[H] Fine Dining Restaurant (10,000 SF)	--	--	--	52	26	78	63	44	107	419	419	838
932	[I] High-Turnover (Sit-Down) Restaurant (7,000 SF)	1	1	2	38	25	63	40	38	78	375	375	750
932	[J] High-Turnover (Sit-Down) Restaurant (4,000 SF)	1	1	2	22	14	36	23	22	45	215	215	430
934	[K] Fast Food Restaurant With Drive-Through (3,500 SF)	79	77	156	60	56	116	98	95	193	818	818	1,636
934	[L] Fast Food Restaurant With Drive-Through (2,400 SF)	55	52	107	41	38	79	68	65	133	561	561	1,122
710	[M] General Office Building (12,272 SF)	24	4	28	5	24	29	4	3	7	94	94	188
822	[N] Strip Retail Plaza (<40k) (11,561 SF)	16	11	27	38	38	76	39	37	76	360	360	720
	[O] Entertainment/Dining Venue (30,000 SF)	--	--	--	85	64	149	94	90	184	881	881	1,762
932	25% High-Turnover (Sit-Down) Restaurant (7,500 SF)	--	--	--	41	27	68	43	41	84	402	402	804
435	75% Multipurpose Recreational Facility (22,500 SF)	--	--	--	44	37	81	51	49	100	479	479	958
	[P] Entertainment/Dining Venue (20,670 SF)	--	--	--	59	43	102	63	63	126	606	606	1,212
932	25% High-Turnover (Sit-Down) Restaurant (5,168 SF)	--	--	--	29	18	47	29	29	58	279	279	558
435	75% Multipurpose Recreational Facility (15,502 SF)	--	--	--	30	25	55	34	34	68	327	327	654
445	[Q] Cinema (49,972 SF) [Existing Use]	--	--	--	290	19	309	199	67	266	1,953	1,953	3,906
<b>Development Subtotal<sup>(1)</sup>:</b>		<b>165</b>	<b>141</b>	<b>306</b>	<b>656</b>	<b>478</b>	<b>1134</b>	<b>794</b>	<b>725</b>	<b>1519</b>	<b>6714</b>	<b>6714</b>	<b>13428</b>
<i>-10% Interaction</i>		<i>-16</i>	<i>-16</i>	<i>-32</i>	<i>-57</i>	<i>-57</i>	<i>-114</i>	<i>-76</i>	<i>-76</i>	<i>-152</i>	<i>-672</i>	<i>-672</i>	<i>-1344</i>
<i>-50% Pass-By<sup>(2)</sup></i>		<i>-70</i>	<i>-70</i>	<i>-140</i>	<i>-175</i>	<i>-175</i>	<i>-350</i>	<i>-247</i>	<i>-247</i>	<i>-494</i>	<i>-2148</i>	<i>-2148</i>	<i>-4296</i>
<b>Total New Vehicle Trips:</b>		<b>79</b>	<b>55</b>	<b>134</b>	<b>424</b>	<b>246</b>	<b>670</b>	<b>471</b>	<b>402</b>	<b>873</b>	<b>3894</b>	<b>3894</b>	<b>7788</b>

1 – Development subtotal does not include existing uses that will remain in use in projected conditions.

2 – Pass-by applied to Fast Casual, Fast Food, and High-Turnover, except the two High-Turnover entertainment restaurants.



## 4. Projected Traffic Conditions

The total projected traffic volumes include the Year 2022 base 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 Block 59 development were assigned to the roadway system in accordance with the previously described directional distribution (Figure 5). The new traffic assignment for the Block 59 development is illustrated in **Figure 6** and the pass-by traffic assignment for the Block 59 development is illustrated in **Figure 7**. The pass-by rate of 50 percent that is applied to the fast-casual, fast-food, and high-turnover restaurants is an average of the pass-by rates of the three restaurant types as stated by ITE within the *Trip Generation Manual* Appendices.

### Background (No-Build) Traffic Conditions

The Year 2022 base traffic volumes were increased by a regional growth factor to account for the increase in existing traffic related to regional growth in the area (i.e., not attributable to any particular planned development). Based on AADT projections provided by CMAP in a letter dated April 4, 2022, the Year 2022 traffic volumes are projected to increase by a compound annual growth rate of 0.5 percent per year. As such, the Year 2022 base traffic volumes were increased by a total of three percent over six years (buildout year plus five years) to project Year 2028 traffic volumes. It should be noted that this background growth was only applied to the through traffic along IL 59, Aurora Avenue, Jefferson Avenue, and Fort Mill Drive. A copy of the CMAP letter is included in the Appendix.

**Figure 8** shows the Year 2028 background (no-build) traffic volumes, which do not include the traffic estimated to be generated by the subject development and assumes no occupancy changes in the current shopping centers.

### Year 2028 Total Projected Traffic Conditions

The Year 2028 total projected traffic volumes include the Year 2028 base (no-build) traffic volumes (Figure 8) plus the traffic estimated to be generated by the proposed subject development (Figures 6 and 7) as well as the full occupancy of the Westridge Court shopping center. **Table 7** outlines the estimated trip generation for this vacant space based on information published in the ITE *Trip Generation Manual*, 11<sup>th</sup> Edition. **Figure 9** shows the traffic assignment for the estimated trip generation for the currently vacant spaces within the Westridge Court shopping center that will not be included in the Block 59 development traffic volumes. **Figure 10** shows the Year 2028 total projected traffic volumes.

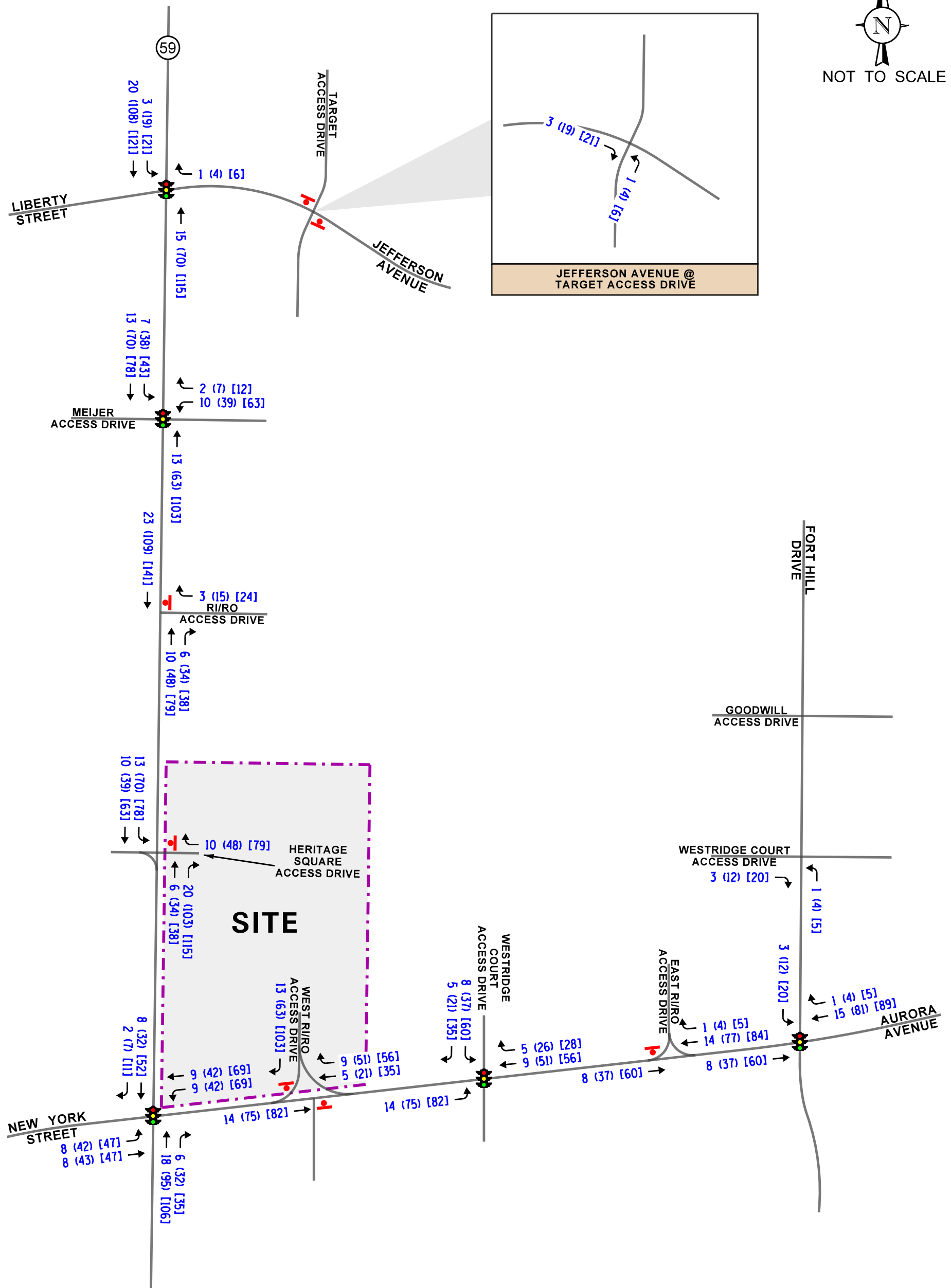
Table 7

PROJECTED PEAK HOUR SITE-GENERATED TRAFFIC VOLUMES – VACANT SPACE

ITE Land-Use Code	Type/Size	Weekday Morning Peak Hour			Weekday Evening Peak Hour			Saturday Midday Peak Hour			Daily Two-Way Trips		
		In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total
820	Shopping Center (36,640 s.f.)	19	12	31	60	65	125	84	77	161	678	678	1356
	<i>-10% Interaction</i>	<i>-2</i>	<i>-1</i>	<i>-3</i>	<i>-6</i>	<i>-7</i>	<i>-13</i>	<i>-8</i>	<i>-8</i>	<i>-16</i>	<i>-68</i>	<i>-68</i>	<i>-136</i>
	<b>Total New Vehicle Trips:</b>	<b>17</b>	<b>11</b>	<b>28</b>	<b>54</b>	<b>58</b>	<b>112</b>	<b>76</b>	<b>69</b>	<b>145</b>	<b>610</b>	<b>610</b>	<b>1220</b>

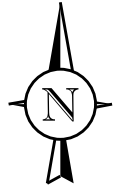


NOT TO SCALE

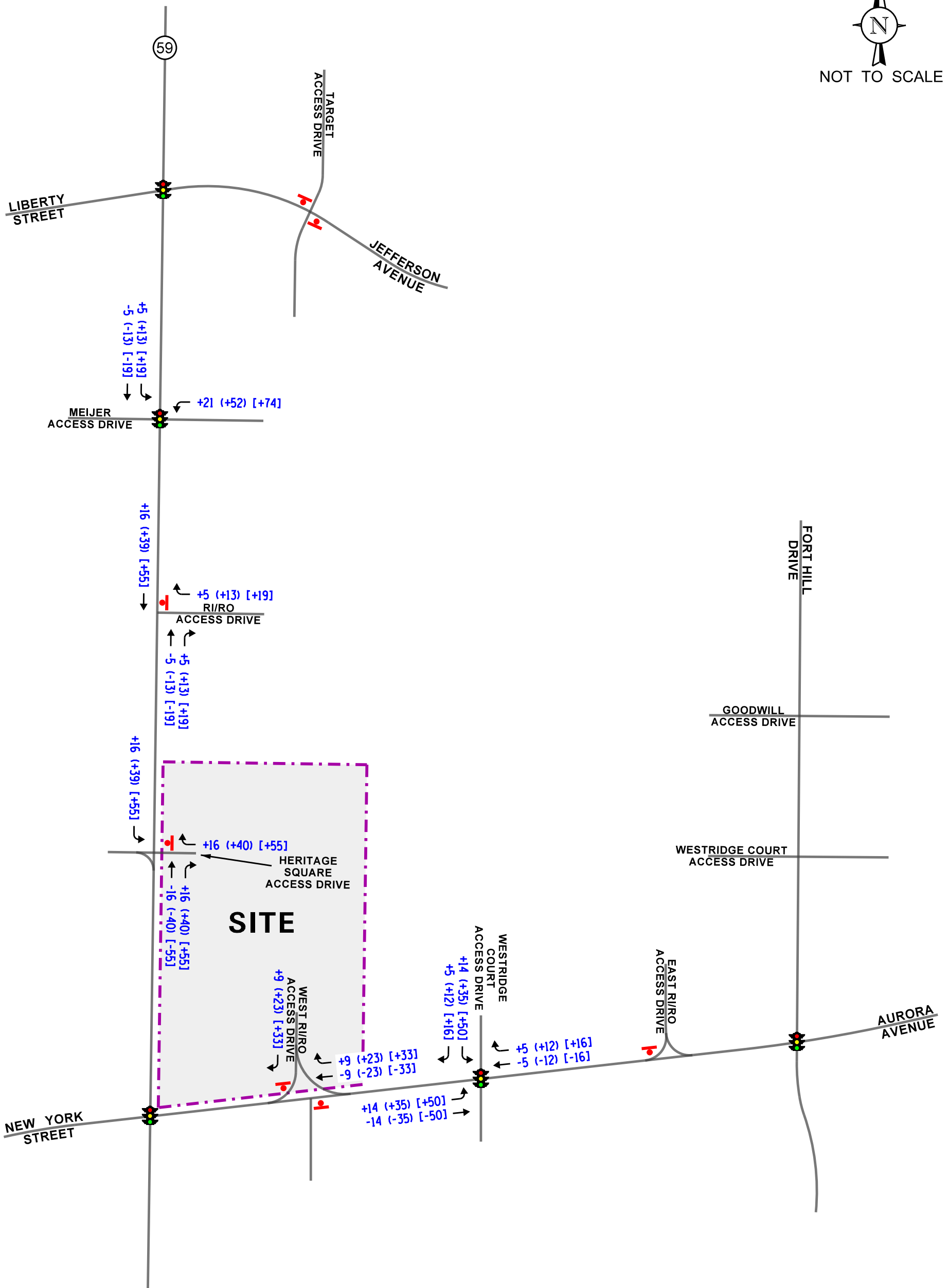


**LEGEND**

- 00 - AM PEAK HOUR (7:30-8:30 AM)
- (00) - PM PEAK HOUR (4:30-5:30 PM)
- [00] - SATURDAY MIDDAY PEAK HOUR (1:00-2:00 PM)



NOT TO SCALE



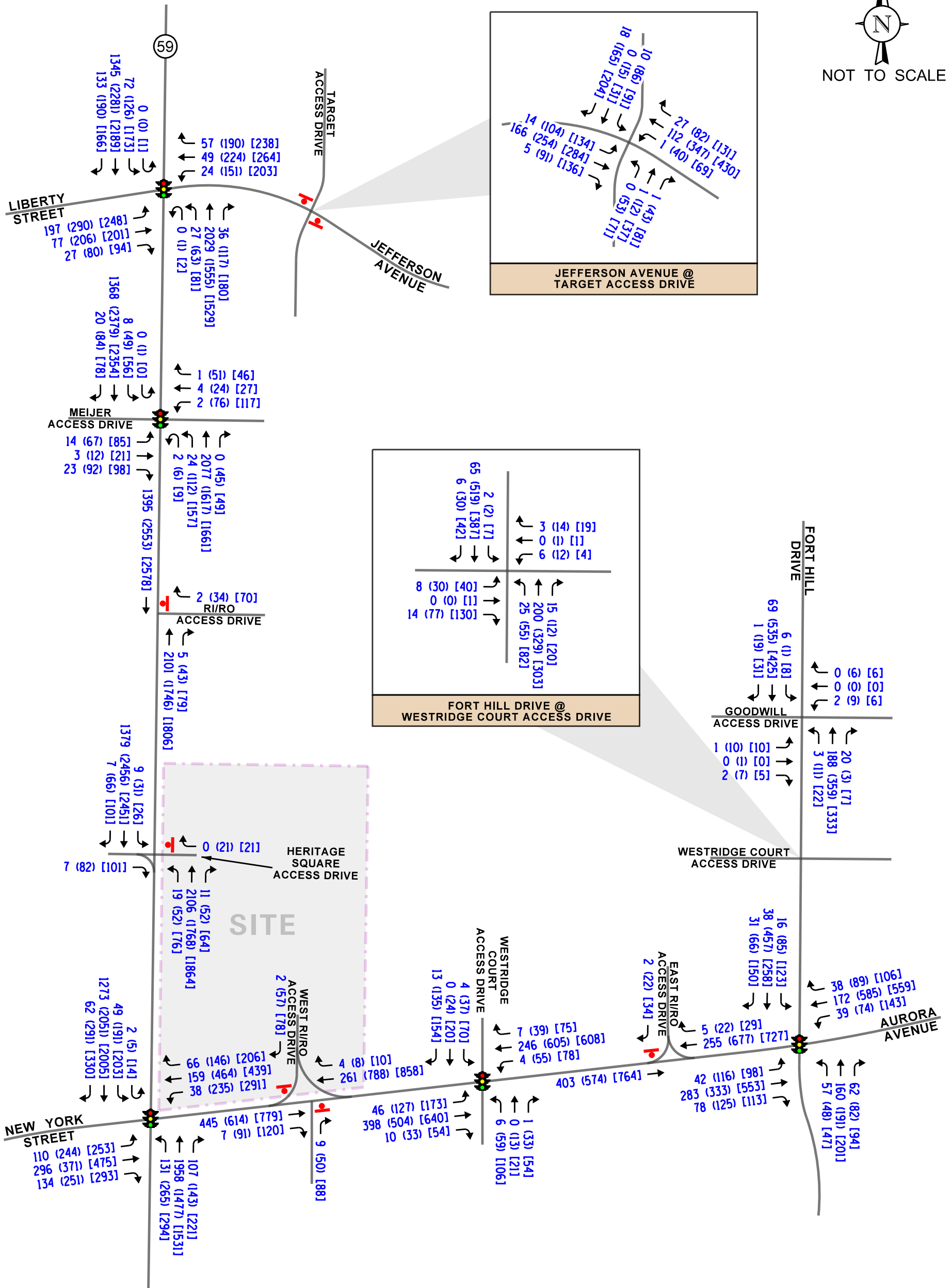
**LEGEND**

- 00 - AM PEAK HOUR (7:30-8:30 AM)
- 000 - PM PEAK HOUR (4:30-5:30 PM)
- 0000 - SATURDAY MIDDAY PEAK HOUR (1:00-2:00 PM)



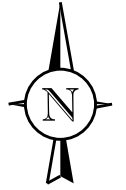


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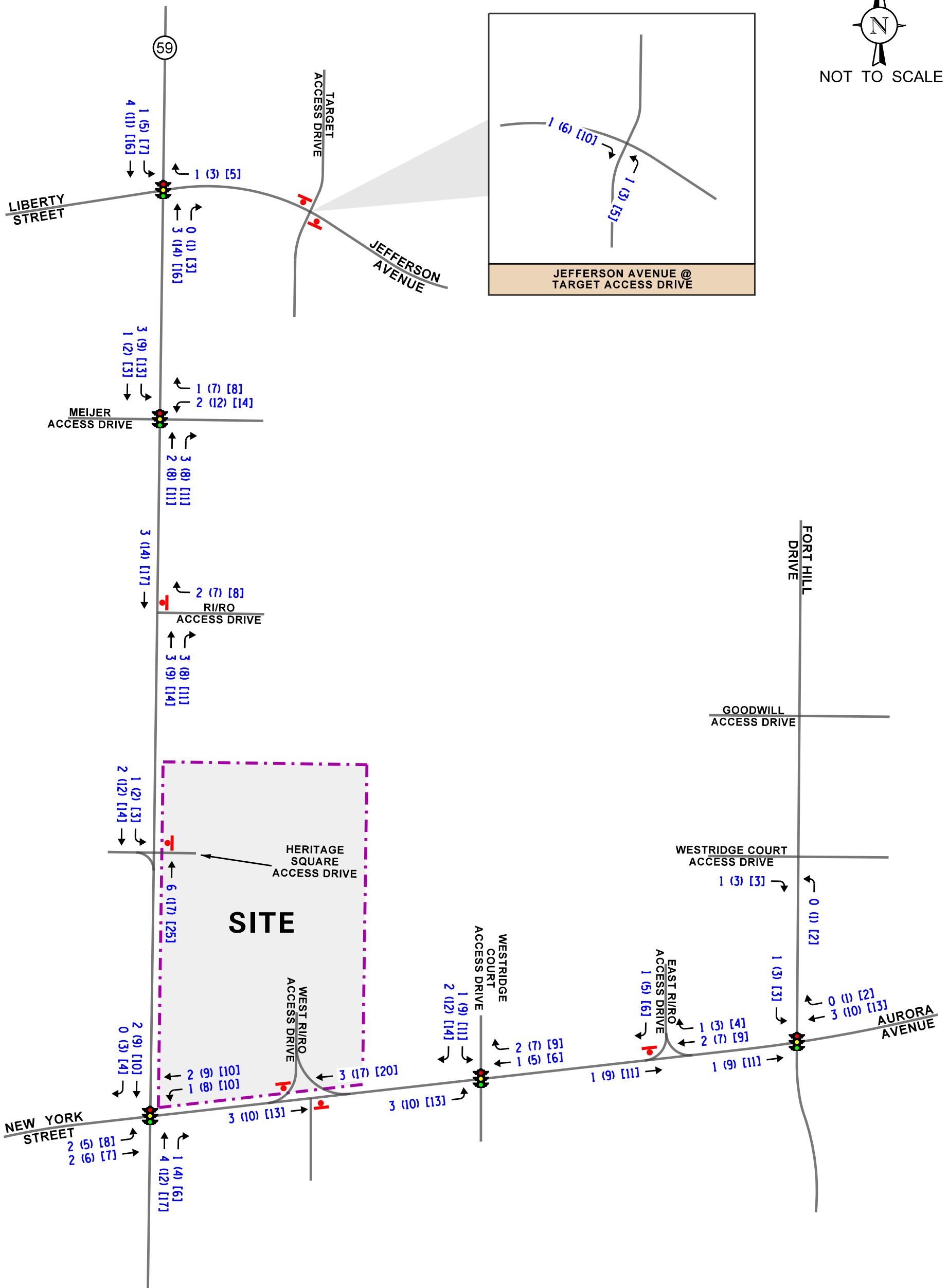


LEGEND

- 00 - AM PEAK HOUR (7:30-8:30 AM)
- (00) - PM PEAK HOUR (4:30-5:30 PM)
- [000] - SATURDAY MIDDAY PEAK HOUR (1:00-2:00 PM)



NOT TO SCALE

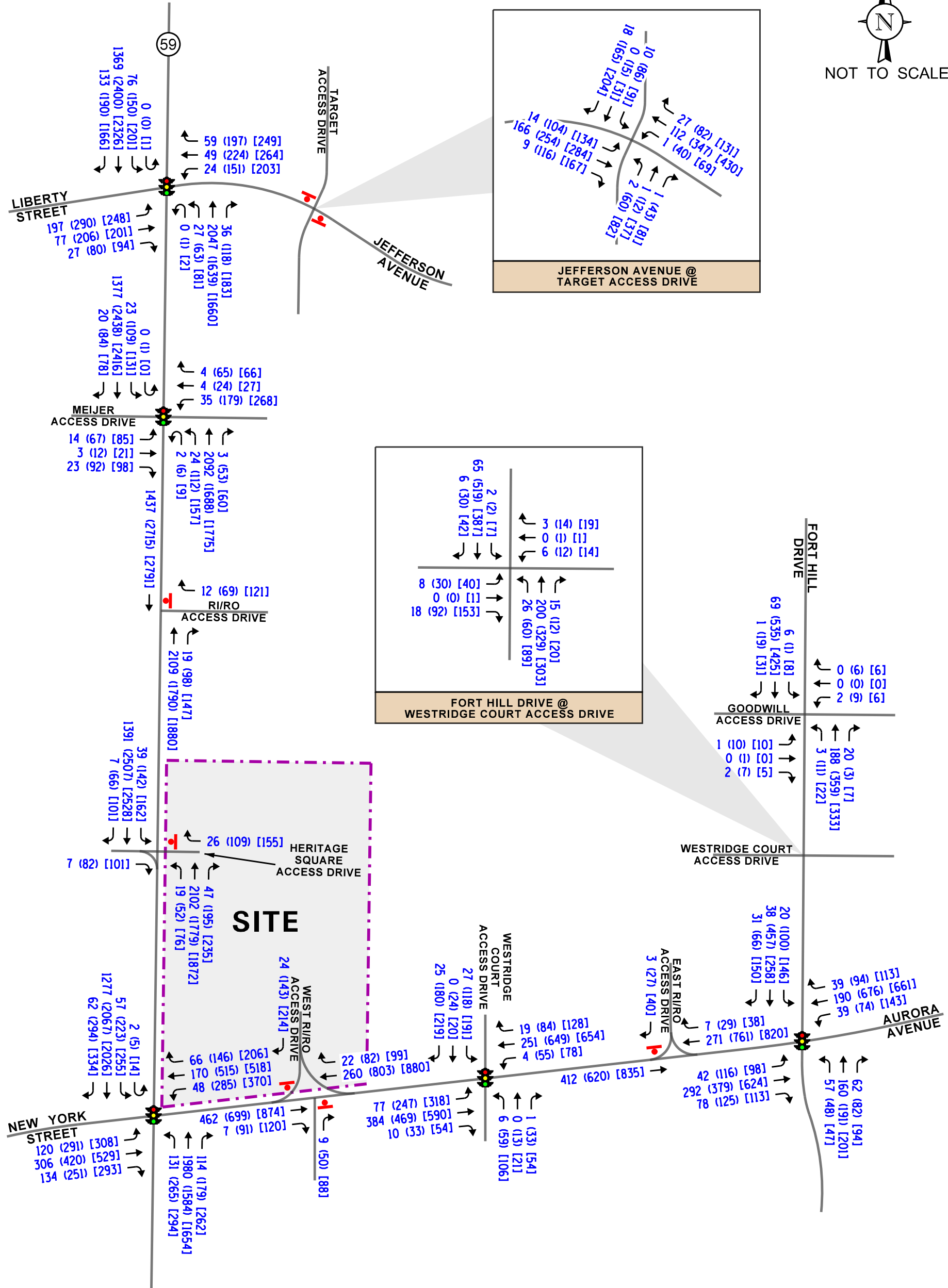


**LEGEND**

- 00 - AM PEAK HOUR (7:30-8:30 AM)
- (00) - PM PEAK HOUR (4:30-5:30 PM)
- [00] - SATURDAY MIDDAY PEAK HOUR (1:00-2:00 PM)



NOT TO SCALE



**LEGEND**

- 00 - AM PEAK HOUR (7:30-8:30 AM)
- (00) - PM PEAK HOUR (4:30-5:30 PM)
- [000] - SATURDAY MIDDAY PEAK HOUR (1:00-2:00 PM)

BLOCK 59  
NAPERVILLE, ILLINOIS

YEAR 2028 TOTAL PROJECTED TRAFFIC VOLUMES



## 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 drives are projected to operate and whether any roadway improvements or modifications are required.

### Traffic Analyses

Capacity analyses were performed for the included intersections in the study area for the weekday morning, weekday evening, and Saturday midday peak hours for the base (Year 2022), no-build (Year 2028), and total projected (Year 2028) conditions.

The traffic analyses were performed using the methodologies outlined in the Transportation Research Board's *Highway Capacity Manual (HCM)*, 6<sup>th</sup> Edition and using Synchro/SimTraffic 11 analysis software. The capacity analyses for the signalized intersections were analyzed using existing signal cycle lengths, offsets, and phasings to determine the average overall vehicle delay, volume-to-capacity ratios, and levels of service.

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

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

A summary of the traffic analysis results showing the LOS and delay (measured in seconds) for the signalized intersections for the base (Year 2022), no-build (Year 2028), and future (Year 2028) conditions is shown in **Tables 8** through **12**. The unsignalized intersections are presented in **Tables 13** through **15**. A copy of the capacity analysis reports is included in the Appendix. A discussion of each of the intersections follows.



Table 8  
CAPACITY ANALYSIS RESULTS – IL 59 WITH AURORA AVENUE

	Peak Hour	Eastbound			Westbound			Northbound			Southbound			Overall
		L	T	R	L	T	R	L	T	R	L	T	R	
Year 2022 Base Conditions	Weekday Morning	E	E	D	E	E	E	E	B	A	D	C	B	C 28.1
		68.4	57.1	47.1	66.8	61.9	69.1	68.7	17.4	7.4	53.6	22.2	16.1	
	E – 56.9			E – 64.4			B – 19.9			C – 23.1				
	Weekday Evening	E	D	D	E	D	E	E	C	B	F	B	A	C 34.5
		69.1	53.0	47.0	63.0	51.8	57.9	78.3	25.7	11.3	86.2	17.8	6.8	
	E – 55.8			E – 56.0			C – 32.0			C – 21.8				
Saturday Midday	E	D	D	E	D	E	E	C	B	E	C	B	D 39.3	
	67.7	54.7	46.7	62.7	51.1	67.0	72.2	27.8	12.5	69.4	29.6	15.8		
E – 55.6			E – 58.2			C – 32.5			C – 31.2					
Year 2028 No-Build Conditions	Weekday Morning	E	E	D	E	E	E	E	B	A	D	C	B	C 28.5
		68.5	57.2	47.1	66.8	62.0	69.6	69.0	17.9	7.5	53.4	22.5	16.0	
	E – 57.0			E – 64.6			C – 20.4			C – 23.4				
	Weekday Evening	E	D	D	E	D	E	E	C	B	F	B	A	C 34.8
		69.3	53.2	47.5	62.8	51.7	58.2	79.9	26.3	11.4	86.5	18.1	6.7	
	E – 56.1			E – 55.9			C – 32.7			C – 22.1				
Saturday Midday	E	D	D	E	D	E	E	C	B	E	C	B	D 39.8	
	67.8	54.9	47.2	62.5	50.8	67.7	72.9	28.6	12.7	69.0	30.6	16.1		
E – 55.9			E – 58.2			C – 33.2			C – 32.0					
Year 2028 Projected Conditions	Weekday Morning	E	E	D	E	E	E	E	B	A	D	C	B	C 28.9
		68.5	57.6	47.4	66.2	60.4	67.8	69.0	18.5	7.5	53.5	22.1	15.7	
	E – 57.5			E – 63.1			C – 20.9			C – 23.1				
	Weekday Evening	E	D	D	E	D	E	F	C	B	F	B	A	D 36.8
		71.8	55.0	48.5	63.5	51.6	57.5	80.7	28.0	11.5	86.5	19.9	6.6	
	E – 58.4			E – 56.1			C – 33.5			C – 24.3				
Saturday Midday	E	E	D	E	D	E	E	C	B	E	C	B	D 41.8	
	69.0	57.8	48.9	72.7	49.5	68.1	72.9	31.2	13.1	68.0	31.2	14.7		
E – 58.6			E – 60.9			C – 34.6			C – 32.8					

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

Table 9

CAPACITY ANALYSIS RESULTS – IL 59 WITH JEFFERSON AVENUE/LIBERTY STREET

	Peak Hour	Eastbound			Westbound			Northbound			Southbound			Overall
		L	T	R	L	T	R	L	T	R	L	T	R	
Year 2022 Base Conditions	Weekday Morning	E	D	D	E	E	D	F	A	A	E	B	A	B 15.2
		71.6	57.4	45.7	66.1	63.3	52.9	96.8	6.1	1.0	68.3	10.3	3.4	
	E – 65.6			E – 59.3			A – 7.2			B – 12.4				
	Weekday Evening	E	E	D	E	E	E	F	A	A	E	C	A	C 27.4
		75.1	55.3	41.8	73.0	64.6	55.0	81.4	6.1	3.7	71.4	22.9	5.9	
	E – 63.4			E – 63.6			A – 8.7			C – 24.0				
Saturday Midday	E	E	D	E	E	D	F	A	A	E	C	A	C 28.4	
	68.1	55.3	41.9	71.4	62.0	51.0	96.2	6.2	2.3	68.5	23.9	6.7		
E – 58.8			E – 61.0			A – 10.0			C – 25.9					
Year 2028 No-Build Conditions	Weekday Morning	E	E	D	E	E	D	F	A	A	E	B	A	B 15.4
		72.2	57.4	45.7	66.1	63.4	53.1	96.9	6.4	1.0	68.4	10.5	3.4	
	E – 66.0			E – 59.4			A – 7.4			B – 12.6				
	Weekday Evening	E	E	D	E	E	E	F	A	A	E	C	A	C 27.8
		75.9	55.1	41.6	73.4	64.4	55.1	81.6	5.8	3.5	71.7	24.0	6.0	
	E – 63.7			E – 63.7			A – 8.5			C – 25.0				
Saturday Midday	E	E	D	E	E	D	F	A	A	E	C	A	C 28.9	
	68.1	55.1	41.7	71.9	62.3	51.2	96.6	6.4	2.3	68.4	25.0	6.8		
E – 58.7			E – 61.3			B – 10.2			C – 26.8					
Year 2028 Projected Conditions	Weekday Morning	E	E	D	E	E	D	F	A	A	E	B	A	B 14.2
		72.2	57.4	45.7	66.1	63.4	53.1	98.1	4.0	0.3	68.5	10.6	3.4	
	E – 66.0			E – 59.3			A – 5.1			B – 12.8				
	Weekday Evening	E	E	D	E	E	E	F	A	A	E	C	A	C 28.1
		75.9	55.1	41.6	73.4	64.4	55.4	80.6	5.3	3.2	74.7	25.4	6.0	
	E – 63.7			E – 63.7			A – 7.8			C – 26.8				
Saturday Midday	E	E	D	E	E	D	F	A	A	E	C	A	C 29.0	
	68.1	55.1	41.7	71.9	62.3	50.8	90.0	6.1	2.4	68.6	26.6	6.8		
E – 58.7			E – 61.0			A – 9.4			C – 28.5					

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



Table 10  
CAPACITY ANALYSIS RESULTS – IL 59 WITH MEIJER ACCESS DRIVE

	Peak Hour	Eastbound		Westbound		Northbound			Southbound			Overall
		L	T/R	L	T/R	L	T	R	L	T	R	
Year 2022 Base Conditions	Weekday Morning	E 55.4	E 65.9	D 55.0	E 62.2	F 89.1	A 1.2	--	E 61.2	A 3.8	A 1.4	A 3.8
		E – 62.1		E – 60.1		A – 2.3			A – 4.1			
	Weekday Evening	D 45.9	E 78.3	D 47.0	E 66.6	E 56.7	C 33.6	A 9.7	F 99+	A 6.4	A 1.8	C 22.9
		E – 65.6		E – 56.8		C – 34.6			A – 9.6			
	Saturday Midday	D 43.8	E 77.1	D 47.5	E 60.5	D 55.0	C 22.1	B 12.5	E 72.7	B 15.5	A 4.6	C 23.3
		E – 63.2		D – 52.5		C – 24.9			B – 16.4			
Year 2028 No-Build Conditions	Weekday Morning	E 55.4	E 65.9	D 55.0	E 62.2	F 89.0	A 1.2	--	E 62.4	A 3.8	A 1.4	A 3.8
		E – 62.1		E – 60.1		A – 2.3			A – 4.1			
	Weekday Evening	D 45.9	E 78.3	D 47.0	E 66.6	E 56.1	C 34.6	A 9.9	F 99+	A 6.5	A 1.8	C 23.1
		E – 65.6		E – 56.8		D – 35.4			A – 9.5			
	Saturday Midday	D 43.8	E 77.1	D 47.5	E 60.5	D 55.0	C 22.2	B 12.2	E 71.5	B 16.3	A 4.5	C 23.6
		E – 63.2		D – 52.5		C – 24.9			B – 17.2			
Year 2028 Projected Conditions	Weekday Morning	D 49.4	E 67.0	E 60.6	E 63.1	F 94.0	A 3.7	A 0.7	E 70.3	A 5.4	A 1.4	A 6.7
		E – 60.7		E – 61.0		A – 4.8			A – 6.4			
	Weekday Evening	D 45.4	E 79.7	E 59.1	E 66.4	E 56.5	D 35.5	A 9.5	F 99+	A 6.7	A 1.8	D 35.1
		E – 66.2		E – 61.5		D – 36.1			C – 29.6			
	Saturday Midday	D 43.5	E 77.1	F 99+	E 62.5	E 57.7	C 27.3	B 13.5	F 82.4	B 18.4	A 4.9	C 30.9
		E – 63.1		F – 91.8		C – 29.4			C – 21.2			
Letter denotes Level of Service    L – Left Turn    R – Right Turn Delay is measured in seconds.    T – Through												

Table 11

CAPACITY ANALYSIS RESULTS – AURORA AVENUE WITH FORT HILL DRIVE

	Peak Hour	Eastbound		Westbound		Northbound		Southbound		Overall
		L	T/R	L	T/R	L	T/R	L	T/R	
Year 2022 Base Conditions	Weekday Morning	A 9.4	B 13.2	A 9.4	B 13.1	C 24.9	D 43.4	C 22.7	C 23.3	C 20.9
		B – 12.8		B – 12.5		D – 39.7		C – 23.2		
	Weekday Evening	C 20.1	C 24.9	B 18.1	C 30.8	C 20.4	C 34.0	C 20.0	D 54.4	C 33.9
		C – 23.9		C – 29.5		C – 32.0		D – 49.6		
	Saturday Midday	B 16.0	C 26.4	B 17.1	C 25.5	C 22.8	D 45.1	C 26.3	D 48.6	C 31.1
		C – 25.0		C – 24.0		D – 42.0		D – 43.5		
Year 2028 No-Build Conditions	Weekday Morning	A 9.6	B 13.5	A 9.6	B 13.4	C 24.7	D 44.0	C 22.4	C 23.0	C 21.3
		B – 13.1		B – 12.8		D – 40.1		C – 22.9		
	Weekday Evening	C 20.8	C 25.6	B 18.3	C 31.8	C 20.7	C 33.8	B 19.9	D 54.9	C 34.4
		C – 24.6		C – 30.5		C – 31.8		D – 50.0		
	Saturday Midday	B 16.5	C 27.5	B 17.9	C 26.6	C 22.7	D 44.5	C 26.0	D 47.8	C 31.5
		C – 26.1		C – 25.0		D – 41.6		D – 42.7		
Year 2028 Projected Conditions	Weekday Morning	A 9.7	B 13.8	A 9.8	B 13.8	C 24.6	D 44.0	C 22.9	C 22.8	C 21.2
		B – 13.3		B – 13.2		D – 40.1		C – 22.8		
	Weekday Evening	C 21.9	C 26.5	B 18.3	C 33.3	C 20.9	C 34.8	C 20.6	E 55.6	D 35.1
		C – 25.6		C – 32.0		C – 32.7		D – 50.0		
	Saturday Midday	B 16.4	C 27.5	B 17.9	C 27.4	C 23.8	D 46.4	C 28.8	D 49.9	C 32.1
		C – 26.2		C – 25.9		D – 43.4		D – 44.3		
Letter denotes Level of Service    L – Left Turn    R – Right Turn Delay is measured in seconds.    T – Through										



Table 12

CAPACITY ANALYSIS RESULTS – AURORA AVENUE WITH WESTRIDGE COURT ACCESS DRIVE

	Peak Hour	Eastbound			Westbound			Northbound			Southbound			Overall
		L	T	R	L	T	R	L	T	R	L	T	R	
Year 2022 Base Conditions	Weekday Morning	A	A	A	A	A	A	E	--	A	E	--	A	A 2.2
		0.5	1.4	0.2	0.5	1.4	0.0	67.0		0.0	65.8		0.1	
	A – 1.3			A – 1.4			E – 57.4			B – 14.7				
	Weekday Evening	A	B	A	A	A	A	E	E	A	D	E	B	B 13.8
		8.7	13.8	3.1	4.5	8.7	0.1	56.4	60.8	6.2	50.1	64.7	11.3	
	B – 12.3			A – 7.9			D – 40.8			C – 25.2				
Saturday Midday	B	C	A	A	B	A	E	E	B	D	E	B	B 18.7	
	14.7	21.0	8.7	5.6	11.1	2.7	55.6	61.0	12.4	51.5	64.3	10.7		
B – 18.9			A – 9.6			D – 43.3			C – 26.8					
Year 2028 No-Build Conditions	Weekday Morning	A	A	A	A	A	A	E	--	A	E	--	A	A 2.3
		0.5	1.6	0.3	0.5	1.4	0.0	67.0		0.0	65.8		0.1	
	A – 1.5			A – 1.4			E – 57.4			B – 14.7				
	Weekday Evening	A	B	A	A	A	A	E	E	A	D	E	B	B 13.4
		8.4	12.8	2.9	4.5	8.8	0.1	56.4	60.8	6.2	50.1	64.7	11.3	
	B – 11.5			A – 8.0			D – 40.9			C – 25.2				
Saturday Midday	B	C	A	A	B	A	E	E	B	D	E	B	B 18.5	
	14.5	20.6	8.0	5.7	11.2	2.7	55.6	61.1	12.4	51.5	64.3	10.7		
B – 18.6			A – 9.8			D – 43.4			C – 26.8					
Year 2028 Projected Conditions	Weekday Morning	A	A	A	A	A	A	E	--	A	E	--	A	A 4.8
		0.6	2.0	0.5	1.2	3.1	0.1	64.3		0.0	69.7		0.1	
	A – 1.8			A – 2.9			E – 55.1			D – 36.1				
	Weekday Evening	C	B	A	A	B	A	D	E	A	E	E	A	B 17.5
		20.6	14.8	2.7	5.7	12.5	3.4	53.4	63.6	6.7	55.7	60.5	8.0	
	B – 16.2			B – 11.0			D – 39.7			C – 29.5				
Saturday Midday	C	C	A	A	B	A	D	E	B	E	E	A	C 23.3	
	27.8	23.3	8.7	8.5	18.5	4.2	48.1	64.5	13.6	55.4	55.4	6.5		
C – 23.9			B – 15.4			D – 39.7			C – 30.5					
Letter denotes Level of Service    L – Left Turn    R – Right Turn Delay is measured in seconds.    T – Through    -- denotes no value to compute at this time														



Table 13

CAPACITY ANALYSIS RESULTS – YEAR 2022 BASE CONDITIONS – UNSIGNALIZED

Intersection	Weekday Morning Peak Hour		Weekday Evening Peak Hour		Saturday Midday Peak Hour	
	LOS	Delay	LOS	Delay	LOS	Delay
<b>Illinois Route 59 with Heritage Square Access Drive<sup>1</sup></b>						
• Eastbound Approach	B	10.9	C	18.0	C	18.3
• Westbound Approach	A	0.0	B	12.1	B	12.4
• Northbound Left Turn	A	9.7	B	14.0	B	14.1
• Southbound Left Turn	B	11.7	B	10.7	B	10.9
<b>Illinois Route 59 with Right-In/Right-Out Access Drive<sup>1</sup></b>						
• Westbound Approach	B	13.0	B	12.3	B	12.9
<b>Aurora Avenue with West Right-In/Right-Out Access Drive<sup>1</sup></b>						
• Southbound Approach	A	9.1	B	10.2	B	10.5
<b>Aurora Avenue with East Right-In/Right-Out Access Drive<sup>1</sup></b>						
• Southbound Approach	A	8.5	A	9.5	A	9.7
<b>Jefferson Avenue with Target Access Drive<sup>1</sup></b>						
• Northbound Approach	A	9.7	B	14.3	D	27.1
• Southbound Approach	A	9.3	B	13.6	C	21.6
• Eastbound Left Turn	A	7.6	A	8.5	A	9.3
• Westbound Left Turn	A	7.5	A	7.7	A	8.0
<b>Fort Hill Drive with Westridge Court Access Drive<sup>1</sup></b>						
• Eastbound Approach	B	10.1	C	20.4	C	22.2
• Northbound Left Turn	A	7.5	A	8.8	A	8.6
<b>Fort Hill Drive with Goodwill Access Drive<sup>1</sup></b>						
• Eastbound Approach	A	9.3	D	28.9	C	19.6
• Northbound Left Turn	A	7.4	A	9.2	A	8.6
LOS = Level of Service			1 – Two-way stop control			
Delay is measured in seconds.						

Table 14

## CAPACITY ANALYSIS RESULTS – NO-BUILD CONDITIONS – UNSIGNALIZED

Intersection	Weekday Morning Peak Hour		Weekday Evening Peak Hour		Saturday Midday Peak Hour	
	LOS	Delay	LOS	Delay	LOS	Delay
<b>Illinois Route 59 with Heritage Square Access Drive<sup>1</sup></b>						
• Eastbound Approach	E	11.1	C	19.0	C	19.2
• Westbound Approach	A	0.0	B	12.4	B	12.7
• Northbound Left Turn	A	9.9	B	14.6	B	14.6
• Southbound Left Turn	B	12.0	B	10.9	B	11.1
<b>Illinois Route 59 with Right-In/Right-Out Access Drive<sup>1</sup></b>						
• Westbound Approach	B	13.3	B	12.3	B	13.3
<b>Aurora Avenue with West Right-In/Right-Out Access Drive<sup>1</sup></b>						
• Southbound Approach	A	9.1	B	10.2	B	10.5
<b>Aurora Avenue with East Right-In/Right-Out Access Drive<sup>1</sup></b>						
• Southbound Approach	A	8.6	A	9.5	A	9.7
<b>Jefferson Avenue with Target Access Drive<sup>1</sup></b>						
• Northbound Approach	A	9.7	B	14.6	D	28.8
• Southbound Approach	A	9.3	B	13.9	C	22.6
• Eastbound Left Turn	A	7.6	A	8.6	A	9.4
• Westbound Left Turn	A	7.5	A	7.7	A	8.1
<b>Fort Hill Drive with Westridge Court Access Drive<sup>1</sup></b>						
• Eastbound Approach	B	10.1	C	21.4	C	23.8
• Northbound Left Turn	A	7.5	A	8.9	A	8.7
<b>Fort Hill Drive with Goodwill Access Drive<sup>1</sup></b>						
• Eastbound Approach	A	9.3	D	31.0	C	20.7
• Northbound Left Turn	A	7.4	A	9.3	A	8.6
LOS = Level of Service			1 – Two-way stop control			
Delay is measured in seconds.						

Table 15

## CAPACITY ANALYSIS RESULTS - PROJECTED CONDITIONS – UNSIGNALIZED

Intersection	Weekday Morning Peak Hour		Weekday Evening Peak Hour		Saturday Midday Peak Hour	
	LOS	Delay	LOS	Delay	LOS	Delay
<b>Illinois Route 59 with Heritage Square Access Drive<sup>1</sup></b>						
• Eastbound Approach	B	11.1	C	19.0	C	20.3
• Westbound Approach	B	13.9	B	14.1	C	16.0
• Northbound Left Turn	A	9.9	B	14.6	C	15.3
• Southbound Left Turn	B	12.4	B	12.6	C	16.0
<b>Illinois Route 59 with Right-In/Right-Out Access Drive<sup>1</sup></b>						
• Westbound Approach	B	13.6	B	13.2	B	14.6
<b>Aurora Avenue with West Right-In/Right-Out Access Drive<sup>1</sup></b>						
• Southbound Approach	A	9.2	B	11.0	B	12.1
<b>Aurora Avenue with East Right-In/Right-Out Access Drive<sup>1</sup></b>						
• Southbound Approach	A	8.6	A	9.8	B	10.1
<b>Jefferson Avenue with Target Access Drive<sup>1</sup></b>						
• Northbound Approach	A	9.9	C	15.1	D	32.9
• Southbound Approach	A	9.3	B	13.9	C	22.9
• Eastbound Left Turn	A	7.6	A	8.6	A	9.4
• Westbound Left Turn	A	7.5	A	7.8	A	8.2
<b>Fort Hill Drive with Westridge Court Access Drive<sup>1</sup></b>						
• Eastbound Approach	B	10.0	C	21.8	D	25.4
• Northbound Left Turn	A	7.5	A	8.9	A	8.7
<b>Fort Hill Drive with Goodwill Access Drive<sup>1</sup></b>						
• Eastbound Approach	A	9.3	D	31.0	C	20.7
• Northbound Left Turn	A	7.4	A	9.3	A	8.6
LOS = Level of Service			1 – Two-way stop control			
Delay is measured in seconds.						

## Discussion and Recommendations

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

### *IL 59 with Aurora Avenue*

The results of the capacity analyses indicate that overall, this signalized intersection currently operates overall at Level of Service (LOS) C during the weekday morning and weekday evening peak hours and at LOS D during the Saturday midday peak hour. The eastbound and westbound approaches operate at LOS E during all three peak hours. The northbound and southbound approaches currently operate at LOS C or better during the three peak hours. Under Year 2028 no-build conditions, the intersection is projected to continue operating overall at the existing levels of service during the peak hours. The eastbound and westbound approaches are projected to continue operating at their existing levels of service during the peak hours. The northbound and southbound approaches are projected to operate at LOS C during all three peak hours.

Under Year 2028 total projected conditions, the intersection is projected to operate overall at LOS C during the weekday morning peak hour and at LOS D during the weekday evening and Saturday midday peak hours. The eastbound and westbound approaches are projected to continue operating at their existing levels of service. The northbound and southbound approaches are projected to operate at LOS C during all three peak hours.

It should be noted that the operation of Aurora Avenue approaches under existing, no-build and total projected conditions is expected due to the limited green time given to the eastbound and westbound approaches. This is common for the signalized intersection of a roadway intersecting a major arterial route such as IL 59, which is classified as a Strategic Regional Arterial route by IDOT, as the intersections approaches receive limited green time to maintain the flow of traffic along the main route.

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

### *IL 59 with Jefferson Avenue/Liberty Street*

The results of the capacity analyses indicate that overall, this signalized intersection currently operates at LOS B during the weekday morning peak hour, at LOS C during the weekday evening and Saturday midday peak hours. The eastbound and westbound approaches operate at LOS E during all three peak hours and the northbound and southbound approaches operate at LOS C or better during the three peak hours.

Under Year 2028 no-build conditions, the intersection is projected to continue operating overall at the existing levels of service during the peak hours. The eastbound and westbound approaches are projected to continue operating at their existing levels of service during the peak hours and the northbound and southbound approaches are projected to operate at LOS C or better during all three peak hours.



Under Year 2028 total projected conditions, the intersection is projected to continue operating overall at the current levels of service during peak hours. The eastbound and westbound approaches are projected to continue operating at their existing levels of service and the northbound and southbound approaches are projected to continue operating at LOS C or better during the peak hours.

As previously indicated, the LOS E for the Jefferson Avenue/Liberty Street approaches is common for a minor roadway intersecting a major arterial roadway such as IL 59 as the minor roadway receives limited green time.

Overall, 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 59 with Meijer Access Drive*

The results of the capacity analyses indicate that overall, this signalized intersection currently operates overall at LOS A during the weekday morning peak hour and at LOS C during the weekday evening and Saturday midday peak hours. The eastbound approach operates at LOS E during all three peak hours and the westbound approach operates at LOS E during the weekday morning and weekday evening peak hours and at LOS D during the Saturday midday peak hour. The northbound and southbound approaches operate at LOS C or better during the three peak hours. Under Year 2028 no-build conditions, the intersection is projected to continue operating overall at the existing levels of service during the peak hours. The eastbound and westbound approaches are projected to continue operating at their current levels of service during the peak hours. The northbound and southbound approaches are projected to continue operating at LOS C or better during all three peak hours, with the exception of the northbound approach during the weekday evening peak hour, which is projected to operate at LOS D.

Under Year 2028 total projected conditions, the intersection is projected to operate overall at LOS A during the weekday morning peak hour, at LOS D during the weekday evening peak hour, and at LOS C during the Saturday midday peak hour. The eastbound and westbound approaches are projected to operate at LOS E during the peak hours, with the exception of the westbound approach during the Saturday midday peak hour, which is projected to operate at LOS F. The northbound and southbound approaches are projected to operate at LOS D or better during all three peak hours.

As previously indicated, the LOS E and LOS F on the eastbound and westbound approaches of the access drive is expected due to the limited green time given to the eastbound and westbound approaches. This is common for a minor roadway or access drive intersecting a major arterial roadway such as IL 59 due to the limited green time allocated to the minor street approaches.

The 95<sup>th</sup> percentile queue for the westbound approach during the Saturday midday peak hour is projected to be approximately 340 feet, which will extend beyond the left-turn lane storage provided. As such, the westbound approach should be monitored in the future and if the projected traffic volumes are realized, consideration should be given to reallocating additional green time to the westbound approach or to restriping the westbound approach to provide maximum left-turn storage available.

### *Aurora Avenue with Fort Hill Drive*

This signalized intersection currently operates overall at LOS C during the weekday morning, weekday evening, and Saturday midday peak hours. The eastbound and westbound approaches operate at LOS C or better during all three peak hours. The northbound and southbound approaches operate at LOS D or better during the three peak hours. Under Year 2028 no-build conditions, the intersection is projected to continue operating overall at the current levels of service during the peak hours. The eastbound and westbound approaches are projected to continue operating at their current levels of service during the peak hours. The northbound and southbound approaches are projected to continue operating at LOS D or better during all three peak hours.

Under Year 2028 total projected conditions, the intersection is projected to operate at LOS C during the weekday morning peak hour and Saturday midday peak hour and at LOS D during the weekday evening peak hour. The eastbound and westbound approaches are projected to continue operating at LOS C or better during the peak hours. The northbound and southbound approaches are projected to operate at LOS D or better during all three peak hours. 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.

### *Aurora Avenue with Westridge Court Access Drive*

This signalized intersection currently operates overall at LOS A during the weekday morning peak hour and at LOS B during the weekday evening and Saturday midday peak hours. The eastbound and westbound approaches operate at LOS B or better during all three peak hours. The northbound and southbound approaches operate at LOS E or better during the three peak hours. Under Year 2028 no-build conditions, the intersection is projected to continue operating overall at the current levels of service during the peak hours. The eastbound and westbound approaches are projected to continue operating at their current levels of service during the peak hours. The northbound and southbound approaches are projected to continue operating at LOS E or better during all three peak hours.

Under Year 2028 total projected conditions, the intersection is projected to operate at LOS A during the weekday morning peak hour, at LOS B during the weekday evening peak hour, and at LOS C during the Saturday midday peak hour. The eastbound and westbound approaches are projected to operate at LOS C or better during the three peak hours. With the increase in traffic generated by the development, the northbound and southbound approaches are projected to more efficiently utilize its allocated green time during the peak hours. As such, under projected conditions, the northbound approach is projected to continue operating at the current levels of service during the peak hours.

The southbound approach is 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. The 95<sup>th</sup> percentile queue for the eastbound left turn lane during the Saturday midday peak hour is projected to be approximately 320 feet, approximately 50 feet longer than the provided storage length of 270 feet. As such, it is recommended that the turn lane storage for the eastbound approach be monitored in the future to determine if additional left-turn storage is required to accommodate the left-turn demand. Any increase in left-turn lane storage can be accommodated within the existing landscaped median along Aurora Avenue.

The access drive is currently striped to provide a southbound left-turn lane with approximately 85 feet of storage and approximately 80 feet of taper. The access drive at its narrowest point is approximately 40 feet wide; this can accommodate four 10-foot-wide lanes. During the weekday evening and Saturday midday peak hours the 95<sup>th</sup> percentile queue is expected to exceed the allotted storage space for the left-turn lane. As such, it is recommended that the outbound lanes be restriped to provide a left-turn lane with no taper to increase the available left-turn storage available.

#### *IL 59 with Heritage Court Access Drive*

The westbound approach from the site currently operates at LOS B or better during the weekday morning, weekday evening, and Saturday midday peak hours. The southbound left-turn into the site currently operates at LOS B during the three peak hours. Under Year 2028 no-build conditions, the westbound approach is projected to continue operating at LOS B or better during the peak hours. The southbound left-turn is projected to continue operating at LOS B during the three peak hours. Under Year 2028 total projected conditions, the westbound approach is projected to operate at LOS B during the weekday morning and weekday evening peak hours and at LOS C during the Saturday midday peak hour. The southbound left turn is projected to operate at LOS B during the weekday morning and evening peak hours and at LOS C during the Saturday midday peak hour. As such, this access drive will be adequate in accommodating the traffic projected to be generated by the proposed development and no roadway or traffic control improvements are needed at the access drive.

#### *IL 59 with Right-In/Right-Out Access Drive*

The westbound approach from the site currently operates at LOS B during the weekday morning, weekday evening, and Saturday midday peak hours. Under Year 2028 no-build conditions, the westbound approach is projected to continue operating at LOS B during the peak hours. Under Year 2028 total projected conditions, the westbound approach is projected to operate at LOS B during the peak hours. As such, this access drive will be adequate in accommodating the traffic projected to be generated by the proposed development and no roadway or traffic control improvements are needed at the access drive.

#### *Aurora Avenue with West Right-In/Right-Out Access Drive*

The southbound approach from the site currently operates at LOS B or better during the weekday morning, weekday evening, and Saturday midday peak hours. Under Year 2028 no-build conditions, the southbound approach is projected to continue operating at LOS B or better during the peak hours. Under Year 2028 total projected conditions, the southbound approach is projected to operate at LOS A during the weekday morning peak hour and at LOS B during the weekday evening and Saturday midday peak hours. As such, this access drive will be adequate in accommodating the traffic projected to be generated by the proposed development and no roadway or traffic control improvements are needed at the access drive.

### *Aurora Avenue with East Right-In/Right-Out Access Drive*

The southbound approach from the site currently operates at LOS A during the weekday morning, weekday evening, and Saturday midday peak hours. Under Year 2028 no-build conditions, the southbound approach is projected to continue operating at LOS A during the peak hours. Under Year 2028 total projected conditions, the southbound approach is projected to operate at LOS A during the weekday morning and weekday evening peak hours and at LOS B during the Saturday midday peak hour. As such, this access drive will be adequate in accommodating the traffic projected to be generated by the proposed development and no roadway or traffic control improvements are needed at the access drive.

### *Jefferson Avenue with Target Access Drive*

The northbound approach currently operates at LOS A during the weekday morning peak hour, at LOS B during the weekday evening peak hour, and at LOS D during the Saturday midday peak hour. The southbound approach currently operates at LOS C or better during the three peak hours. The eastbound and westbound left turns currently operate at LOS A during all three peak hours. Under Year 2028 no-build conditions, the approaches and critical movements are projected to continue operating at the current levels of service. Under Year 2028 total projected conditions, the northbound approach is projected to operate at LOS A during the weekday morning peak hour, at LOS C during the weekday evening peak hour, and at LOS D during the Saturday midday peak hour. The southbound approach is projected to operate at LOS C or better during the three peak hours. The eastbound and westbound left turns are projected to operate at LOS A during the peak hours. As such, this access drive will be adequate in accommodating the traffic projected to be generated by the proposed development and no roadway or traffic control improvements are needed.

### *Fort Hill Drive with Westridge Court Access Drive*

The eastbound approach currently operates at LOS B during the weekday morning peak hour and at LOS C during the weekday evening and Saturday midday peak hours. The northbound left turn currently operates at LOS A during the three peak hours. Under Year 2028 no-build and total conditions, the eastbound approach and northbound left turn are projected to operate at an acceptable LOS D or better during the peak hours. As such, this access drive will be adequate in accommodating the traffic projected to be generated by the proposed development and no roadway or traffic control improvements are needed at the access drive.

### *Fort Hill Drive with Goodwill Access Drive*

The eastbound approach currently operates at LOS A during the weekday morning peak hour, at LOS D during the weekday evening peak hour, and at LOS C during the Saturday midday peak hour. The northbound left turn currently operates at LOS A during the three peak hours. Under Year 2028 no-build and total conditions, the eastbound approach and northbound left turn are projected to operate at an acceptable LOS D or better during the peak hours. As such, this access drive will be adequate in accommodating the traffic projected to be generated by the proposed development and no roadway or traffic control improvements are needed at the access drive.

## On-Site Circulation and Drive-Through Stacking

Under the proposed plans, the Block 59 development will be served internally via the existing and new drive aisles. The existing drive aisles run along the fronts of the retail strips of the Westridge Court shopping center. With the removal of the Heritage Square retail strip, the drive aisle that served the retail fronts of that development will be aligned to run north-south from Aurora Avenue to the east-west drive aisle originating from IL 59. The drive aisle serving the northeast side of the Block 59 development will be aligned to provide more direct access between the two sides of the Westridge Court shopping center.

Where internal drive aisles intersect, there should be traffic control. In these instances, the drive aisle with the more continuous route shall take precedence and the minor intersecting aisle shall be under stop sign control. An example of this type of traffic control is shown where the drive aisle originating at Aurora Avenue intersects with the drive aisle originating from IL 59 on the west side of the Block 59 restaurant building cluster in the center of the site. The IL 59 drive aisle ends at the Aurora Avenue drive aisle and should therefore have all eastbound movements be under stop sign control.

The Block 59 development will continue to provide two-way drive aisles that will allow vehicles to flow efficiently around the site. There are numerous cross-access points throughout the site that will allow for flexible circulation.

The proposed fast-food restaurants at the northwest corner of the Block 59 development will both provide a drive-through lane. The 3,500 square foot restaurant at the far northwest corner of the development will have a drive-through lane with a by-pass lane and will provide stacking for approximately 15 vehicles. The 2,400 square-foot restaurant will have a drive-through lane that will provide stacking for approximately eight vehicles. Drive-through circulation for both restaurants will be counterclockwise.

Vehicles wishing to enter the drive-throughs will follow posted signage leading to the entrance of each respective buildings' drive-through and proceed to the ordering board and further on to the pick-up window. At the exit of each drive-through, "Do Not Enter" signs should be posted facing away from the drive-through to enforce the one-way traffic flow. Additionally, exiting movements from the drive-throughs should be under stop sign control.



## 6. Conclusion

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

- The proposed development-generated traffic will be consistent and compatible with traffic patterns and volumes in the area.
- The proposed restaurant uses typically attract a significant amount of their traffic from the existing traffic on the adjacent roadway network en route to another destination (pass- by trips). As such, the net new development-generated traffic will be reduced.
- The existing access system serving the shopping center will continue to be adequate in accommodating the development-generated traffic, will ensure efficient and flexible access is provided, and will disperse the site-generated traffic onto the surrounding roadway network.
- The outbound lanes at the signalized intersections should be restriped to provide left-turn lanes without taper to provide maximum left-turn storage.

# Appendix

Traffic Count Summary Sheets

Site Plan

Property Plan

CMAP 2050 Projections Letter

Level of Service Criteria

Capacity Analysis Summary Sheets

# Traffic Count Summary Sheets



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Count Name: IL-59 with Aurora Ave  
Site Code:  
Start Date: 01/06/2022  
Page No: 1

### Turning Movement Data

Start Time	E New York St Eastbound						Aurora Ave Westbound						IL-59 Northbound						IL-59 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	U-Turn	Left	Thru	Right	Peds	App. Total	Int. Total
7:00 AM	0	31	66	34	0	131	0	5	31	18	0	54	0	20	289	16	0	325	0	15	151	8	0	174	0	15	151	8	0	174	684
7:15 AM	0	27	72	25	0	124	0	9	35	10	0	54	0	27	333	17	0	377	0	14	161	9	0	184	0	14	161	9	0	184	739
7:30 AM	0	23	82	32	0	137	0	8	43	16	0	67	0	38	353	22	0	413	0	6	206	14	0	226	0	6	206	14	0	226	843
7:45 AM	1	28	76	42	0	147	0	11	47	16	0	74	0	32	348	26	0	406	1	7	228	19	0	255	1	7	228	19	0	255	882
Hourly Total	1	109	296	133	0	539	0	33	156	60	0	249	0	117	1323	81	0	1521	1	42	746	50	0	839	1	42	746	50	0	839	3148
8:00 AM	0	30	75	30	0	135	0	10	40	14	0	64	0	26	272	28	0	326	0	17	177	14	0	208	0	17	177	14	0	208	733
8:15 AM	0	25	54	26	0	105	0	8	24	18	0	50	0	31	294	28	0	353	0	18	213	13	0	244	0	18	213	13	0	244	752
8:30 AM	0	38	60	36	0	134	0	15	36	13	0	64	0	28	257	24	0	309	0	17	182	17	0	216	0	17	182	17	0	216	723
8:45 AM	0	26	69	36	0	131	1	7	36	27	0	71	0	35	253	35	0	323	0	21	243	28	0	292	0	21	243	28	0	292	817
Hourly Total	0	119	258	128	0	505	1	40	136	72	0	249	0	120	1076	115	0	1311	0	73	815	72	0	960	0	73	815	72	0	960	3025
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	0	57	91	74	0	222	1	59	128	29	0	217	0	59	292	31	0	382	0	56	407	57	0	520	0	56	407	57	0	520	1341
4:15 PM	1	49	87	69	0	206	0	46	82	35	0	163	0	67	358	39	0	464	2	35	462	78	0	577	2	35	462	78	0	577	1410
4:30 PM	0	65	89	59	0	213	1	52	112	32	0	197	0	53	303	43	0	399	1	49	408	61	0	519	1	49	408	61	0	519	1328
4:45 PM	0	50	84	55	0	189	1	59	93	28	0	181	0	69	335	43	0	447	3	59	487	88	0	637	3	59	487	88	0	637	1454
Hourly Total	1	221	351	257	0	830	3	216	415	124	0	758	0	248	1288	156	0	1692	6	199	1764	284	0	2253	6	199	1764	284	0	2253	5533
5:00 PM	1	62	88	67	0	218	0	73	122	28	0	223	0	74	306	29	0	409	0	32	402	68	0	502	0	32	402	68	0	502	1352
5:15 PM	0	59	99	63	0	221	0	42	123	54	0	219	2	59	303	24	0	388	0	45	434	66	0	545	0	45	434	66	0	545	1373
5:30 PM	0	74	96	64	0	234	0	65	107	33	0	205	0	65	328	32	0	425	0	35	431	53	0	519	0	35	431	53	0	519	1383
5:45 PM	0	56	103	63	0	222	0	33	110	40	0	183	1	63	315	42	0	421	2	51	398	73	0	524	2	51	398	73	0	524	1350
Hourly Total	1	251	386	257	0	895	0	213	462	155	0	830	3	261	1252	127	0	1643	2	163	1665	260	0	2090	2	163	1665	260	0	2090	5458
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 AM	0	61	90	56	0	207	0	63	87	40	2	190	0	44	299	39	0	382	0	45	336	48	2	429	0	45	336	48	2	429	1208
11:15 AM	0	57	81	58	0	196	0	53	85	54	0	192	1	50	335	62	0	448	1	54	350	67	0	472	1	54	350	67	0	472	1308
11:30 AM	0	70	96	55	0	221	0	47	101	33	0	181	0	60	390	56	0	506	0	44	341	48	0	433	0	44	341	48	0	433	1341
11:45 AM	0	57	134	66	0	257	0	58	109	25	0	192	2	71	298	55	0	426	0	57	328	64	0	449	0	57	328	64	0	449	1324
Hourly Total	0	245	401	235	0	881	0	221	382	152	2	755	3	225	1322	212	0	1762	1	200	1355	227	2	1783	1	200	1355	227	2	1783	5181
12:00 PM	0	64	135	70	0	269	1	71	90	56	0	218	0	59	371	38	0	468	0	48	431	69	0	548	0	48	431	69	0	548	1503
12:15 PM	0	94	100	62	1	256	1	68	104	57	0	230	0	60	350	52	0	462	0	55	433	69	0	467	0	55	433	69	0	467	1415
12:30 PM	0	79	118	72	0	269	1	47	109	48	0	205	3	105	354	51	0	513	0	66	411	94	0	571	0	66	411	94	0	571	1558
12:45 PM	2	102	113	54	1	271	3	56	102	27	0	188	1	72	352	54	1	479	3	45	400	78	0	526	3	45	400	78	0	526	1464
Hourly Total	2	339	466	258	2	1065	6	242	405	188	0	841	4	296	1427	195	1	1922	3	214	1585	310	0	2112	3	214	1585	310	0	2112	5940
1:00 PM	0	63	111	68	0	242	0	81	106	56	0	243	0	76	287	55	0	418	5	67	404	73	0	549	5	67	404	73	0	549	1452
1:15 PM	0	65	114	75	0	254	4	77	94	44	0	219	1	57	354	49	0	461	2	38	450	84	0	574	2	38	450	84	0	574	1508
1:30 PM	0	47	110	78	0	235	0	65	132	51	0	248	1	75	276	53	0	405	2	55	415	94	0	566	2	55	415	94	0	566	1454

1:45 PM	0	71	126	63	0	260	1	55	94	49	0	199	1	74	375	58	0	508	3	37	424	69	0	533	1500
Hourly Total	0	246	461	284	0	991	5	278	426	200	0	909	3	282	1292	215	0	1792	12	197	1693	320	0	2222	5914
Grand Total	5	1530	2619	1552	2	5706	15	1243	2382	951	2	4591	13	1549	8980	1101	1	11643	25	1088	9623	1523	2	12259	34199
Approach %	0.1	26.8	45.9	27.2	-	-	0.3	27.1	51.9	20.7	-	-	0.1	13.3	77.1	9.5	-	-	0.2	8.9	78.5	12.4	-	-	-
Total %	0.0	4.5	7.7	4.5	-	16.7	0.0	3.6	7.0	2.8	-	13.4	0.0	4.5	26.3	3.2	-	34.0	0.1	3.2	28.1	4.5	-	35.8	-
Lights	5	1513	2598	1533	-	5649	15	1229	2363	931	-	4538	13	1527	8688	1096	-	11324	25	1075	9329	1516	-	11945	33456
% Lights	100.0	98.9	99.2	98.8	-	99.0	100.0	98.9	99.2	97.9	-	98.8	100.0	98.6	96.7	99.5	-	97.3	100.0	98.8	96.9	99.5	-	97.4	97.8
Buses	0	2	1	0	-	3	0	4	1	0	-	5	0	0	19	0	-	19	0	0	17	1	-	18	45
% Buses	0.0	0.1	0.0	0.0	-	0.1	0.0	0.3	0.0	0.0	-	0.1	0.0	0.0	0.2	0.0	-	0.2	0.0	0.0	0.2	0.1	-	0.1	0.1
Single-Unit Trucks	0	11	15	9	-	35	0	6	12	13	-	31	0	9	104	1	-	114	0	8	119	6	-	133	313
% Single-Unit Trucks	0.0	0.7	0.6	0.6	-	0.6	0.0	0.5	0.5	1.4	-	0.7	0.0	0.6	1.2	0.1	-	1.0	0.0	0.7	1.2	0.4	-	1.1	0.9
Articulated Trucks	0	4	5	10	-	19	0	4	6	7	-	17	0	13	169	4	-	186	0	5	158	0	-	163	385
% Articulated Trucks	0.0	0.3	0.2	0.6	-	0.3	0.0	0.3	0.3	0.7	-	0.4	0.0	0.8	1.9	0.4	-	1.6	0.0	0.5	1.6	0.0	-	1.3	1.1
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	0.0	-	0.0	0.0
Pedestrians	-	-	-	-	2	-	-	-	-	-	2	-	-	-	-	-	1	-	-	-	-	-	-	2	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	-	100.0	-





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Count Name: IL-59 with Aurora Ave  
Site Code:  
Start Date: 01/06/2022  
Page No: 3

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

Start Time	E New York St Eastbound							Aurora Ave Westbound							IL-59 Northbound							IL-59 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				
	7:30 AM	0	23	82	32	0	137	0	8	43	16	0	67	0	38	353	22	0	413	0	6	206	14	0	226			
7:45 AM	1	28	76	42	0	147	0	11	47	16	0	74	0	32	348	26	0	406	1	7	228	19	0	255				
8:00 AM	0	30	75	30	0	135	0	10	40	14	0	64	0	26	272	28	0	326	0	17	177	14	0	208				
8:15 AM	0	25	54	26	0	105	0	8	24	18	0	50	0	31	294	28	0	353	0	18	213	13	0	244				
Total	1	106	287	130	0	524	0	37	154	64	0	255	0	127	1267	104	0	1498	1	48	824	60	0	933				
Approach %	0.2	20.2	54.8	24.8	-	-	0.0	14.5	60.4	25.1	-	-	0.0	8.5	84.6	6.9	-	-	0.1	5.1	88.3	6.4	-	-				
Total %	0.0	3.3	8.9	4.0	-	16.3	0.0	1.2	4.8	2.0	-	7.9	0.0	4.0	39.5	3.2	-	46.7	0.0	1.5	25.7	1.9	-	29.1				
PHF	0.250	0.883	0.875	0.774	-	0.891	0.000	0.841	0.819	0.889	-	0.861	0.000	0.836	0.897	0.929	-	0.907	0.250	0.667	0.904	0.789	-	0.915				
% Lights	1	102	281	126	-	510	0	34	149	61	-	244	0	122	1195	103	-	1420	1	46	754	58	-	859				
% Lights	100.0	96.2	97.9	96.9	-	97.3	-	91.9	96.8	95.3	-	95.7	-	96.1	94.3	99.0	-	94.8	100.0	95.8	91.5	96.7	-	92.1				
Buses	0	0	0	0	-	0	0	1	0	0	-	1	0	0	8	0	-	8	0	0	5	0	-	5				
% Buses	0.0	0.0	0.0	0.0	-	0.0	-	2.7	0.0	0.0	-	0.4	-	0.0	0.6	0.0	-	0.5	0.0	0.0	0.6	0.0	-	0.5				
Single-Unit Trucks	0	4	4	2	-	10	0	2	2	2	-	6	0	3	20	1	-	24	0	1	38	2	-	41				
% Single-Unit Trucks	0.0	3.8	1.4	1.5	-	1.9	-	5.4	1.3	3.1	-	2.4	-	2.4	1.6	1.0	-	1.6	0.0	2.1	4.6	3.3	-	4.4				
Articulated Trucks	0	0	2	2	-	4	0	0	3	1	-	4	0	2	44	0	-	46	0	1	27	0	-	28				
% Articulated Trucks	0.0	0.0	0.7	1.5	-	0.8	-	0.0	1.9	1.6	-	1.6	-	1.6	3.5	0.0	-	3.1	0.0	2.1	3.3	0.0	-	3.0				
Bicycles on Road	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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				



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Count Name: IL-59 with Aurora Ave  
Site Code:  
Start Date: 01/06/2022  
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### Turning Movement Peak Hour Data (4:30 PM)

Start Time	E New York St										Aurora Ave										IL-59															
	Eastbound					Westbound					Northbound					Southbound					Northbound					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	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total
4:30 PM	0	65	89	59	0	213	1	52	112	32	0	197	0	53	303	43	0	399	1	49	408	61	0	519	3	59	487	88	0	637	1328					
4:45 PM	0	50	84	55	0	189	1	59	93	28	0	181	0	69	335	43	0	447	3	59	487	88	0	637	1454											
5:00 PM	1	62	88	67	0	218	0	73	122	28	0	223	0	74	306	29	0	409	0	32	402	68	0	502	1352											
5:15 PM	0	59	99	63	0	221	0	42	123	54	0	219	2	59	303	24	0	388	0	45	434	66	0	545	1373											
Total	1	236	360	244	0	841	2	226	450	142	0	820	2	255	1247	139	0	1643	4	185	1731	283	0	2203	5507											
Approach %	0.1	28.1	42.8	29.0	-	-	0.2	27.6	54.9	17.3	-	-	0.1	15.5	75.9	8.5	-	-	0.2	8.4	78.6	12.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total %	0.0	4.3	6.5	4.4	-	15.3	0.0	4.1	8.2	2.6	-	14.9	0.0	4.6	22.6	2.5	-	29.8	0.1	3.4	31.4	5.1	-	40.0	0.333	0.784	0.889	0.804	-	0.865	0.947					
PHF	0.250	0.908	0.909	0.910	-	0.951	0.500	0.774	0.915	0.657	-	0.919	0.250	0.861	0.931	0.808	-	0.919	0.333	0.784	0.889	0.804	-	0.865	0.947											
Lights	1	234	358	242	-	835	2	223	450	140	-	815	2	254	1215	138	-	1609	4	183	1695	283	-	2165	5424											
% Lights	100.0	99.2	99.4	99.2	-	99.3	100.0	98.7	100.0	98.6	-	99.4	100.0	99.6	97.4	99.3	-	97.9	100.0	98.9	97.9	100.0	-	98.3	98.5											
Buses	0	1	0	0	-	1	0	1	0	0	-	1	0	0	2	0	-	2	0	0	2	0	-	2	6											
% Buses	0.0	0.4	0.0	0.0	-	0.1	0.0	0.4	0.0	0.0	-	0.1	0.0	0.0	0.2	0.0	-	0.1	0.0	0.0	0.1	0.0	-	0.1	0.1											
Single-Unit Trucks	0	1	2	1	-	4	0	1	0	0	-	1	0	1	17	0	-	18	0	2	11	0	-	13	36											
% Single-Unit Trucks	0.0	0.4	0.6	0.4	-	0.5	0.0	0.4	0.0	0.0	-	0.1	0.0	0.4	1.4	0.0	-	1.1	0.0	1.1	0.6	0.0	-	0.6	0.7											
Articulated Trucks	0	0	0	1	-	1	0	1	0	2	-	3	0	0	13	1	-	14	0	0	23	0	-	23	41											
% Articulated Trucks	0.0	0.0	0.0	0.4	-	0.1	0.0	0.4	0.0	1.4	-	0.4	0.0	0.0	1.0	0.7	-	0.9	0.0	0.0	1.3	0.0	-	1.0	0.7											
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	0.0	-	0.0	0.0											
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-											
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-											





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Count Name: IL-59 with W Jefferson Ave  
Site Code:  
Start Date: 01/06/2022  
Page No: 1

### Turning Movement Data

Start Time	Liberty St Eastbound						W Jefferson Ave Westbound						IL-59 Northbound						IL-59 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	31	8	3	0	42	0	4	10	14	0	28	0	2	311	6	0	319	0	16	157	33	0	206	595
7:15 AM	0	51	18	5	0	74	0	1	13	17	0	31	0	4	364	6	0	374	0	13	158	32	0	203	682
7:30 AM	0	43	21	5	0	69	0	4	5	4	0	13	0	3	393	12	0	408	0	11	213	34	0	258	748
7:45 AM	0	56	19	6	0	81	0	8	12	20	0	40	0	8	349	11	0	368	0	23	209	35	0	267	756
Hourly Total	0	181	66	19	0	266	0	17	40	55	0	112	0	17	1417	35	0	1469	0	63	737	134	0	934	2781
8:00 AM	0	52	15	9	0	76	0	7	20	16	0	43	0	9	339	4	0	352	0	20	229	33	0	282	753
8:15 AM	0	40	20	6	0	66	0	4	11	15	0	30	0	6	342	8	0	356	0	16	191	27	1	234	686
8:30 AM	0	35	17	5	0	57	0	9	12	14	0	35	1	6	334	13	0	354	0	17	220	29	0	266	712
8:45 AM	0	40	16	13	0	69	0	11	19	18	0	48	1	5	278	14	0	298	1	21	231	37	0	290	705
Hourly Total	0	167	68	33	0	268	0	31	62	63	0	156	2	26	1293	39	0	1360	1	74	871	126	1	1072	2856
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	0	54	50	17	0	121	0	43	55	40	0	138	0	11	316	26	0	353	0	25	516	45	0	586	1198
4:15 PM	1	67	35	33	0	136	0	25	52	40	0	117	0	8	382	28	0	418	0	26	482	39	0	547	1218
4:30 PM	0	76	49	26	0	151	0	38	65	57	0	160	0	16	318	22	0	356	0	35	459	40	0	534	1201
4:45 PM	0	59	36	19	0	114	0	28	40	42	0	110	0	15	355	36	1	406	0	21	577	39	0	637	1267
Hourly Total	1	256	170	95	0	522	0	134	212	179	0	525	0	50	1371	112	1	1533	0	107	2034	163	0	2304	4884
5:00 PM	1	79	70	17	0	167	0	42	56	36	0	134	1	14	320	21	1	356	0	32	431	49	0	512	1169
5:15 PM	0	67	45	16	0	128	0	39	56	49	0	144	0	16	396	35	0	447	0	34	468	56	0	558	1277
5:30 PM	1	64	37	25	0	127	0	40	33	31	0	104	0	22	383	27	0	432	0	30	466	47	0	543	1206
5:45 PM	1	60	51	22	0	134	0	30	53	33	0	116	0	15	334	21	0	370	0	32	463	55	0	550	1170
Hourly Total	3	270	203	80	0	556	0	151	198	149	0	498	1	67	1433	104	1	1605	0	128	1828	207	0	2163	4822
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 AM	0	60	41	23	0	124	0	28	36	38	0	102	0	18	315	19	0	352	0	29	418	38	0	485	1063
11:15 AM	0	54	30	26	0	110	0	32	29	33	0	94	0	16	332	32	0	380	0	41	408	39	0	488	1072
11:30 AM	0	54	50	18	0	122	0	39	43	53	0	135	0	23	398	34	0	455	1	35	388	42	0	466	1178
11:45 AM	2	74	50	24	0	150	0	35	53	50	0	138	0	17	343	35	0	395	1	39	402	31	0	473	1156
Hourly Total	2	242	171	91	0	506	0	134	161	174	0	469	0	74	1388	120	0	1582	2	144	1616	150	0	1912	4469
12:00 PM	0	65	50	14	0	129	0	41	37	38	0	116	0	14	406	37	0	457	0	46	453	43	0	542	1244
12:15 PM	1	78	58	14	0	151	0	36	56	57	0	149	0	16	393	38	0	447	1	47	431	55	0	534	1281
12:30 PM	0	54	51	13	0	118	0	49	37	39	0	125	0	26	438	39	0	503	0	44	471	36	0	551	1297
12:45 PM	2	65	69	13	0	149	0	49	60	49	0	158	1	15	399	34	0	449	0	35	455	40	0	530	1286
Hourly Total	3	262	228	54	0	547	0	175	190	183	0	548	1	71	1636	148	0	1856	1	172	1810	174	0	2157	5108
1:00 PM	0	59	47	28	0	134	0	37	37	48	0	122	0	27	428	43	0	498	0	38	441	43	0	522	1276
1:15 PM	1	76	58	24	0	159	0	45	49	57	0	151	1	13	396	46	0	456	0	48	433	36	0	517	1283
1:30 PM	0	43	46	26	0	115	0	60	93	74	0	227	1	20	383	38	0	442	1	53	464	33	0	551	1335

1:45 PM	0	62	44	13	0	119	0	55	77	52	0	184	0	19	406	48	0	473	0	29	418	49	0	496	1272
Hourly Total	1	240	195	91	0	527	0	197	256	231	0	684	0	79	1613	175	0	1869	1	168	1756	161	0	2086	5166
Grand Total	10	1618	1101	463	0	3192	0	839	1119	1034	0	2992	6	384	10151	733	2	11274	5	856	10652	1115	1	12628	30086
Approach %	0.3	50.7	34.5	14.5	-	-	0.0	28.0	37.4	34.6	-	-	0.1	3.4	90.0	6.5	-	-	0.0	6.8	84.4	8.8	-	-	-
Total %	0.0	5.4	3.7	1.5	-	10.6	0.0	2.8	3.7	3.4	-	9.9	0.0	1.3	33.7	2.4	-	37.5	0.0	2.8	35.4	3.7	-	42.0	-
Lights	8	1543	1088	439	-	3078	0	831	1100	985	-	2916	6	372	9837	723	-	10938	5	805	10365	1023	-	12198	29130
% Lights	80.0	95.4	98.8	94.8	-	96.4	-	99.0	98.3	95.3	-	97.5	100.0	96.9	96.9	98.6	-	97.0	100.0	94.0	97.3	91.7	-	96.6	96.8
Buses	0	0	0	1	-	1	0	1	1	0	0	2	0	0	26	0	0	26	0	0	13	0	-	13	42
% Buses	0.0	0.0	0.0	0.2	-	0.0	-	0.1	0.1	0.0	-	0.1	0.0	0.0	0.3	0.0	-	0.2	0.0	0.0	0.1	0.0	-	0.1	0.1
Single-Unit Trucks	2	23	9	5	-	39	0	4	15	21	-	40	0	2	132	3	-	137	0	23	127	25	-	175	391
% Single-Unit Trucks	20.0	1.4	0.8	1.1	-	1.2	-	0.5	1.3	2.0	-	1.3	0.0	0.5	1.3	0.4	-	1.2	0.0	2.7	1.2	2.2	-	1.4	1.3
Articulated Trucks	0	52	4	18	-	74	0	3	3	28	-	34	0	10	156	7	-	173	0	28	147	67	-	242	523
% Articulated Trucks	0.0	3.2	0.4	3.9	-	2.3	-	0.4	0.3	2.7	-	1.1	0.0	2.6	1.5	1.0	-	1.5	0.0	3.3	1.4	6.0	-	1.9	1.7
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
% 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	-	0.0	0.0
Pedestrians	-	-	-	-	0	-	-	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	1	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-



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Count Name: IL-59 with W Jefferson Ave  
Site Code:  
Start Date: 01/06/2022  
Page No: 3

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

Start Time	W Jefferson Ave										IL-59														
	Liberty St Eastbound					Westbound					Northbound					Southbound									
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	Int. Total
7:30 AM	0	43	21	5	0	69	0	4	5	4	0	13	0	3	393	12	0	408	0	11	213	34	0	258	748
7:45 AM	0	56	19	6	0	81	0	8	12	20	0	40	0	8	349	11	0	368	0	23	209	35	0	267	756
8:00 AM	0	52	15	9	0	76	0	7	20	16	0	43	0	9	339	4	0	352	0	20	229	33	0	282	753
8:15 AM	0	40	20	6	0	66	0	4	11	15	0	30	0	6	342	8	0	356	0	16	191	27	1	234	686
Total	0	191	75	26	0	292	0	23	48	55	0	126	0	26	1423	35	0	1484	0	70	842	129	1	1041	2943
Approach %	0.0	65.4	25.7	8.9	-	-	0.0	18.3	38.1	43.7	-	-	0.0	1.8	95.9	2.4	-	-	0.0	6.7	80.9	12.4	-	-	-
Total %	0.0	6.5	2.5	0.9	-	9.9	0.0	0.8	1.6	1.9	-	4.3	0.0	0.9	48.4	1.2	-	50.4	0.0	2.4	28.6	4.4	-	-	35.4
PHF	0.000	0.853	0.893	0.722	-	0.901	0.000	0.719	0.600	0.688	-	0.733	0.000	0.722	0.905	0.729	-	0.909	0.000	0.761	0.919	0.921	-	-	0.923
% Lights	0	177	72	18	-	267	0	21	46	46	-	113	0	24	1346	32	-	1402	0	60	782	105	-	947	2729
% Lights	-	92.7	96.0	69.2	-	91.4	-	91.3	95.8	83.6	-	89.7	-	92.3	94.6	91.4	-	94.5	-	85.7	92.9	81.4	-	91.0	92.7
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	9	0	0	7	0	0	0	7
% Buses	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.6	0.0	-	0.6	-	0.0	0.8	0.0	-	0.7	0.5
Single-Unit Trucks	0	8	1	0	-	9	0	1	2	5	-	8	0	0	27	1	-	28	0	5	31	11	-	47	92
% Single-Unit Trucks	-	4.2	1.3	0.0	-	3.1	-	4.3	4.2	9.1	-	6.3	-	0.0	1.9	2.9	-	1.9	-	7.1	3.7	8.5	-	4.5	3.1
Articulated Trucks	0	6	2	8	-	16	0	1	0	4	-	5	0	2	41	2	-	45	0	5	22	13	-	40	106
% Articulated Trucks	-	3.1	2.7	30.8	-	5.5	-	4.3	0.0	7.3	-	4.0	-	7.7	2.9	5.7	-	3.0	-	7.1	2.6	10.1	-	3.8	3.6
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
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-





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Count Name: IL-59 with W Jefferson Ave  
Site Code:  
Start Date: 01/06/2022  
Page No: 4

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

Start Time	W Jefferson Ave										IL-59														
	Liberty St Eastbound					Westbound					Northbound					Southbound									
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	Int. Total
4:30 PM	0	76	49	26	0	151	0	38	65	57	0	160	0	16	318	22	0	356	0	35	459	40	0	534	1201
4:45 PM	0	59	36	19	0	114	0	28	40	42	0	110	0	15	355	36	1	406	0	21	577	39	0	637	1267
5:00 PM	1	79	70	17	0	167	0	42	56	36	0	134	1	14	320	21	1	356	0	32	431	49	0	512	1169
5:15 PM	0	67	45	16	0	128	0	39	56	49	0	144	0	16	396	35	0	447	0	34	468	56	0	558	1277
Total	1	281	200	78	0	560	0	147	217	184	0	548	1	61	1389	114	2	1565	0	122	1935	184	0	2241	4914
Approach %	0.2	50.2	35.7	13.9	-	-	0.0	26.8	39.6	33.6	-	-	0.1	3.9	88.8	7.3	-	-	0.0	5.4	86.3	8.2	-	-	-
Total %	0.0	5.7	4.1	1.6	-	11.4	0.0	3.0	4.4	3.7	-	11.2	0.0	1.2	28.3	2.3	-	31.8	0.0	2.5	39.4	3.7	-	45.6	-
PHF	0.250	0.889	0.714	0.750	-	0.838	0.000	0.875	0.835	0.807	-	0.856	0.250	0.953	0.877	0.792	-	0.875	0.000	0.871	0.838	0.821	-	0.880	0.962
% Lights	1	265	196	78	-	540	0	146	213	173	-	532	1	60	1356	114	-	1531	0	115	1898	169	-	2182	4785
% Lights	100.0	94.3	98.0	100.0	-	96.4	-	99.3	98.2	94.0	-	97.1	100.0	98.4	97.6	100.0	-	97.8	-	94.3	98.1	91.8	-	97.4	97.4
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	0	3	0	-	3	0	0	1	0	-	1	4
% Buses	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0	0.0	0.2	0.0	-	0.2	-	0.0	0.1	0.0	-	0.0	0.1
Single-Unit Trucks	0	3	2	0	-	5	0	0	3	3	-	6	0	0	16	0	-	16	0	3	12	2	-	17	44
% Single-Unit Trucks	0.0	1.1	1.0	0.0	-	0.9	-	0.0	1.4	1.6	-	1.1	0.0	0.0	1.2	0.0	-	1.0	-	2.5	0.6	1.1	-	0.8	0.9
Articulated Trucks	0	13	2	0	-	15	0	1	1	8	-	10	0	1	14	0	-	15	0	4	24	13	-	41	81
% Articulated Trucks	0.0	4.6	1.0	0.0	-	2.7	-	0.7	0.5	4.3	-	1.8	0.0	1.6	1.0	0.0	-	1.0	-	3.3	1.2	7.1	-	1.8	1.6
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	0.0
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-



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Count Name: IL-59 with W Jefferson Ave  
Site Code:  
Start Date: 01/06/2022  
Page No: 5

### Turning Movement Peak Hour Data (1:00 PM)

Start Time	W Jefferson Ave										IL-59														
	Liberty St Eastbound					Westbound					Northbound					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
1:00 PM	0	59	47	28	0	134	0	37	37	48	0	122	0	27	428	43	0	498	0	38	441	43	0	522	1276
1:15 PM	1	76	58	24	0	159	0	45	49	57	0	151	1	13	396	46	0	456	0	48	433	36	0	517	1283
1:30 PM	0	43	46	26	0	115	0	60	93	74	0	227	1	20	383	38	0	442	1	53	464	33	0	551	1335
1:45 PM	0	62	44	13	0	119	0	55	77	52	0	184	0	19	406	48	0	473	0	29	418	49	0	496	1272
Total	1	240	195	91	0	527	0	197	256	231	0	684	2	79	1613	175	0	1869	1	168	1756	161	0	2086	5166
Approach %	0.2	45.5	37.0	17.3	-	-	0.0	28.8	37.4	33.8	-	-	0.1	4.2	86.3	9.4	-	-	0.0	8.1	84.2	7.7	-	-	-
Total %	0.0	4.6	3.8	1.8	-	10.2	0.0	3.8	5.0	4.5	-	13.2	0.0	1.5	31.2	3.4	-	36.2	0.0	3.3	34.0	3.1	-	40.4	-
PHF	0.250	0.789	0.841	0.813	-	0.829	0.000	0.821	0.688	0.780	-	0.753	0.500	0.731	0.942	0.911	-	0.938	0.250	0.792	0.946	0.821	-	0.946	0.967
Lights	1	235	195	90	-	521	0	196	255	229	-	680	2	79	1590	175	-	1846	1	166	1739	157	-	2063	5110
% Lights	100.0	97.9	100.0	98.9	-	98.9	-	99.5	99.6	99.1	-	99.4	100.0	100.0	98.6	100.0	-	98.8	100.0	98.8	99.0	97.5	-	98.9	98.9
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	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	0.1	0.0	-	0.1	0.0	0.0	0.0	0.0	-	0.0	0.0
Single-Unit Trucks	0	1	0	0	-	1	0	1	1	1	-	3	0	0	11	0	-	11	0	0	9	2	-	11	26
% Single-Unit Trucks	0.0	0.4	0.0	0.0	-	0.2	-	0.5	0.4	0.4	-	0.4	0.0	0.0	0.7	0.0	-	0.6	0.0	0.0	0.5	1.2	-	0.5	0.5
Articulated Trucks	0	4	0	1	-	5	0	0	0	1	-	1	0	0	11	0	-	11	0	2	8	2	-	12	29
% Articulated Trucks	0.0	1.7	0.0	1.1	-	0.9	-	0.0	0.0	0.4	-	0.1	0.0	0.0	0.7	0.0	-	0.6	0.0	1.2	0.5	1.2	-	0.6	0.6
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% 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	-	0.0	0.0
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Count Name: IL-59 with Meijer Intersection  
Site Code:  
Start Date: 01/06/2022  
Page No: 1

### Turning Movement Data

Start Time	Meijer Access Eastbound						Shopping Center Access Drive Westbound						IL-59 Northbound						IL-59 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
7:00 AM	0	2	0	4	0	6	0	1	1	0	0	2	0	4	358	2	0	364	0	2	168	5	0	175
7:15 AM	0	1	0	3	0	4	0	0	0	1	0	1	0	2	337	1	0	340	0	0	222	6	0	228
7:30 AM	0	3	2	7	0	12	0	1	0	0	0	1	0	5	382	0	0	387	0	2	218	5	0	225
7:45 AM	0	3	1	2	0	6	0	0	2	0	0	2	1	5	324	0	0	330	0	4	256	7	0	267
Hourly Total	0	9	3	16	0	28	0	2	3	1	0	6	1	16	1401	3	0	1421	0	8	864	23	0	895
8:00 AM	0	3	0	10	0	13	0	0	0	1	1	1	0	8	337	0	0	345	0	1	212	4	0	217
8:15 AM	0	5	0	4	0	9	0	1	2	0	0	3	0	6	375	0	0	381	0	1	245	4	0	250
8:30 AM	0	6	1	11	0	18	0	0	0	0	0	0	1	4	309	1	0	315	0	3	217	9	0	229
8:45 AM	0	4	0	3	0	7	0	0	1	0	0	1	0	12	261	0	0	273	0	0	265	6	1	271
Hourly Total	0	18	1	28	0	47	0	1	3	1	1	5	1	30	1282	1	0	1314	0	5	939	23	1	967
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	0	16	3	29	0	48	0	9	7	5	0	21	2	13	318	15	0	348	0	8	532	27	0	567
4:15 PM	0	26	3	22	0	51	0	19	10	11	0	40	1	35	333	3	0	372	0	16	450	11	0	477
4:30 PM	0	15	4	21	0	40	0	15	8	14	0	37	1	23	341	12	0	377	0	5	560	18	0	583
4:45 PM	0	10	4	27	0	41	0	16	7	7	0	30	1	37	318	15	0	371	1	17	511	22	0	551
Hourly Total	0	67	14	99	0	180	0	59	32	37	0	128	5	108	1310	45	0	1468	1	46	2053	78	0	2178
5:00 PM	0	21	2	22	0	45	0	19	2	13	0	34	3	28	349	10	0	390	0	14	487	18	0	519
5:15 PM	0	21	2	22	0	45	0	26	7	17	0	50	0	24	332	8	0	364	0	13	513	26	0	552
5:30 PM	0	15	4	21	0	40	0	17	7	10	0	34	2	39	332	12	0	385	1	17	495	16	0	529
5:45 PM	0	21	4	22	0	47	0	20	6	7	0	33	0	28	299	9	0	336	0	20	486	10	0	516
Hourly Total	0	78	12	87	0	177	0	82	22	47	0	151	5	119	1312	39	0	1475	1	64	1981	70	0	2116
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 AM	0	12	3	19	0	34	0	12	1	9	0	22	1	33	336	8	0	378	0	11	434	22	0	467
11:15 AM	0	17	4	25	0	46	0	20	7	7	0	34	4	34	347	11	0	396	0	16	392	17	0	425
11:30 AM	0	16	5	22	0	43	0	21	8	8	0	37	4	31	455	16	0	506	1	18	399	17	0	435
11:45 AM	0	30	5	23	0	58	0	26	9	6	0	41	0	31	331	14	0	376	1	14	424	17	0	456
Hourly Total	0	75	17	89	0	181	0	79	25	30	0	134	9	129	1469	49	0	1656	2	59	1649	73	0	1783
12:00 PM	0	17	10	32	0	59	0	20	7	11	0	38	2	49	420	15	1	486	0	19	492	13	0	524
12:15 PM	0	25	6	23	1	54	0	22	14	7	0	43	6	42	431	23	0	502	0	17	501	28	0	546
12:30 PM	0	25	5	29	0	59	0	30	9	14	0	53	3	42	403	10	0	458	0	20	472	21	0	513
12:45 PM	0	18	8	24	0	50	0	28	5	19	0	52	0	36	458	10	0	504	0	17	483	22	0	522
Hourly Total	0	85	29	108	1	222	0	100	35	51	0	186	11	169	1712	58	1	1950	0	73	1948	84	0	2105
1:00 PM	0	23	6	25	0	54	0	34	7	10	0	51	3	39	355	10	0	407	0	18	446	16	0	480
1:15 PM	0	24	5	28	0	57	0	33	11	14	0	58	0	34	433	15	0	482	0	18	494	20	0	532
1:30 PM	0	19	5	18	0	42	0	32	6	10	0	48	2	30	331	13	0	376	0	6	422	18	0	446

1:45 PM	0	19	5	27	0	51	0	18	3	12	0	33	3	54	439	11	0	507	0	14	400	24	0	438	1029
Hourly Total	0	85	21	98	0	204	0	117	27	46	0	190	8	157	1558	49	0	1772	0	56	1762	78	0	1896	4062
Grand Total	0	417	97	525	1	1039	0	440	147	213	1	800	40	728	10044	244	1	11056	4	311	11196	429	1	11940	24835
Approach %	0.0	40.1	9.3	50.5	-	-	0.0	55.0	18.4	26.6	-	-	0.4	6.6	90.8	2.2	-	-	0.0	2.6	93.8	3.6	-	-	-
Total %	0.0	1.7	0.4	2.1	-	4.2	0.0	1.8	0.6	0.9	-	3.2	0.2	2.9	40.4	1.0	-	44.5	0.0	1.3	45.1	1.7	-	48.1	-
Lights	0	414	96	523	-	1033	0	438	147	211	-	796	40	721	9728	243	-	10732	4	311	10865	423	-	11603	24164
% Lights	-	99.3	99.0	99.6	-	99.4	-	99.5	100.0	99.1	-	99.5	100.0	99.0	96.9	99.6	-	97.1	100.0	100.0	97.0	98.6	-	97.2	97.3
Buses	0	0	0	1	-	1	0	0	0	0	-	0	0	0	15	0	-	15	0	0	16	1	-	17	33
% Buses	-	0.0	0.0	0.2	-	0.1	-	0.0	0.0	0.0	-	0.0	0.0	0.0	0.1	0.0	-	0.1	0.0	0.0	0.1	0.2	-	0.1	0.1
Single-Unit Trucks	0	2	1	1	-	4	0	2	0	1	-	3	0	4	130	1	-	135	0	0	140	3	-	143	285
% Single-Unit Trucks	-	0.5	1.0	0.2	-	0.4	-	0.5	0.0	0.5	-	0.4	0.0	0.5	1.3	0.4	-	1.2	0.0	0.0	1.3	0.7	-	1.2	1.1
Articulated Trucks	0	1	0	0	-	1	0	0	0	1	-	1	0	3	169	0	-	172	0	0	175	1	-	176	350
% Articulated Trucks	-	0.2	0.0	0.0	-	0.1	-	0.0	0.0	0.5	-	0.1	0.0	0.4	1.7	0.0	-	1.6	0.0	0.0	1.6	0.2	-	1.5	1.4
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	2	0	-	2	0	0	0	1	-	1	3
% 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	0.2	-	0.0	0.0
Pedestrians	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	1	-	-	-	-	-	1	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-



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Count Name: IL-59 with Meijer Intersection  
Site Code:  
Start Date: 01/06/2022  
Page No: 3

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

Start Time	Meijer Access Eastbound						Shopping Center Access Drive Westbound						IL-59 Northbound						IL-59 Southbound						
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	Int. Total
7:30 AM	0	3	2	7	0	12	0	1	0	0	0	1	0	5	382	0	0	0	0	2	218	5	0	225	625
7:45 AM	0	3	1	2	0	6	0	0	2	0	0	2	1	5	324	0	0	0	0	4	256	7	0	267	605
8:00 AM	0	3	0	10	0	13	0	0	0	1	1	1	0	8	337	0	0	0	0	1	212	4	0	217	576
8:15 AM	0	5	0	4	0	9	0	1	2	0	0	3	0	6	375	0	0	0	0	1	245	4	0	250	643
Total	0	14	3	23	0	40	0	2	4	1	1	7	1	24	1418	0	0	0	0	8	931	20	0	959	2449
Approach %	0.0	35.0	7.5	57.5	-	-	0.0	28.6	57.1	14.3	-	-	0.1	1.7	98.3	0.0	-	-	0.0	0.8	97.1	2.1	-	-	-
Total %	0.0	0.6	0.1	0.9	-	1.6	0.0	0.1	0.2	0.0	-	0.3	0.0	1.0	57.9	0.0	-	58.9	0.0	0.3	38.0	0.8	-	39.2	-
PHF	0.000	0.700	0.375	0.575	-	0.769	0.000	0.500	0.500	0.250	-	0.583	0.250	0.750	0.928	0.000	-	0.932	0.000	0.500	0.909	0.714	-	0.898	0.952
% Lights	0	13	3	22	-	38	0	2	4	0	-	6	1	24	1344	0	-	1369	0	8	867	18	-	893	2306
% Lights	-	92.9	100.0	95.7	-	95.0	-	100.0	100.0	0.0	-	85.7	100.0	100.0	94.8	-	-	94.9	-	100.0	93.1	90.0	-	93.1	94.2
Buses	0	0	0	1	-	1	0	0	0	0	-	0	0	0	3	0	-	3	0	0	4	1	-	5	9
% Buses	-	0.0	0.0	4.3	-	2.5	-	0.0	0.0	0.0	-	0.0	0.0	0.0	0.2	-	-	0.2	-	0.0	0.4	5.0	-	0.5	0.4
Single-Unit Trucks	0	1	0	0	-	1	0	0	0	0	-	0	0	0	31	0	-	31	0	0	34	0	-	34	66
% Single-Unit Trucks	-	7.1	0.0	0.0	-	2.5	-	0.0	0.0	0.0	-	0.0	0.0	0.0	2.2	-	-	2.1	-	0.0	3.7	0.0	-	3.5	2.7
Articulated Trucks	0	0	0	0	-	0	0	0	0	1	-	1	0	0	40	0	-	40	0	0	26	1	-	27	68
% Articulated Trucks	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	100.0	-	14.3	0.0	0.0	2.8	-	-	2.8	-	0.0	2.8	5.0	-	2.8	2.8
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	-	-	-	-	-	1	-	-	-	-	-	-	1	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-









				100.0		100.0				% Pedestrians
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Count Name: Aurora Ave with Split Intersection  
Site Code:  
Start Date: 01/06/2022  
Page No: 1

### Turning Movement Data

Start Time	Aurora Ave Eastbound					Aurora Ave Westbound					Napier West Access Northbound					Shopping Center Access Southbound					Int. Total		
	U-Turn	Left	Thru	Right	App. Total	U-Turn	Left	Thru	Right	App. Total	U-Turn	Left	Thru	Right	App. Total	U-Turn	Left	Thru	Right	App. Total		Peds	
7:00 AM	0	3	90	1	94	0	1	32	3	36	0	1	0	0	1	0	0	0	13	0	13	0	144
7:15 AM	0	6	103	2	111	0	3	45	2	50	0	5	0	0	5	0	6	0	7	0	13	0	179
7:30 AM	0	5	108	1	114	0	0	54	2	56	0	0	0	0	0	0	1	0	6	0	7	0	177
7:45 AM	0	10	106	0	116	0	1	73	1	75	0	0	0	0	0	0	1	0	3	1	4	0	195
Hourly Total	0	24	407	4	435	0	5	204	8	217	0	6	0	0	6	0	8	0	29	1	37	0	695
8:00 AM	0	19	99	2	120	0	2	57	0	59	0	4	0	0	4	0	0	0	0	0	0	0	183
8:15 AM	1	11	79	7	98	0	1	58	4	63	0	2	0	1	3	0	2	0	4	0	6	0	170
8:30 AM	0	13	78	3	94	0	3	55	6	64	0	0	0	0	0	0	0	0	7	0	7	0	165
8:45 AM	0	21	104	1	126	0	6	66	3	75	0	4	0	3	7	0	0	0	5	0	5	0	213
Hourly Total	1	64	360	13	438	0	12	236	13	261	0	10	0	4	14	0	2	0	16	0	18	0	731
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	0	32	123	14	169	0	16	175	10	201	0	14	1	2	17	0	6	1	30	0	37	0	424
4:15 PM	0	37	109	8	154	0	6	135	17	158	0	11	2	8	21	0	9	7	31	0	47	0	380
4:30 PM	0	29	123	14	166	0	14	157	13	184	0	10	3	3	16	0	4	5	37	0	46	0	412
4:45 PM	1	38	130	9	178	0	12	149	5	166	0	10	5	7	22	0	11	5	33	0	49	0	415
Hourly Total	1	136	485	45	667	0	48	616	45	709	0	45	11	20	76	0	30	18	131	0	179	0	1631
5:00 PM	2	22	118	4	146	0	11	151	10	172	0	14	1	12	27	0	7	7	32	0	46	0	391
5:15 PM	1	34	123	6	164	0	18	156	11	185	0	25	4	11	40	0	15	7	33	0	55	0	444
5:30 PM	1	36	117	9	163	0	11	143	11	165	0	17	2	9	28	0	17	7	36	0	60	0	416
5:45 PM	0	37	142	7	186	0	14	116	16	146	0	18	3	3	24	0	10	2	26	0	38	0	394
Hourly Total	4	129	500	26	659	0	54	566	48	668	0	74	10	35	119	0	49	23	127	0	199	0	1645
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 AM	0	40	113	15	168	0	13	140	13	166	0	11	4	8	23	0	4	1	31	0	36	0	393
11:15 AM	0	47	131	15	193	0	19	126	12	157	0	31	7	9	47	0	13	6	31	0	50	0	447
11:30 AM	0	44	141	13	198	0	25	136	15	176	0	17	5	9	31	0	20	8	28	0	56	0	461
11:45 AM	0	36	164	17	217	0	22	147	25	194	0	19	4	8	31	0	27	2	27	0	56	0	498
Hourly Total	0	167	549	60	776	0	79	549	65	693	0	78	20	34	132	0	64	17	117	0	198	0	1799
12:00 PM	0	41	147	18	206	0	19	149	21	189	0	21	5	9	35	0	13	9	38	0	60	0	490
12:15 PM	0	50	143	21	214	0	21	129	22	172	0	34	6	7	47	0	16	5	33	0	54	0	487
12:30 PM	0	40	159	15	214	0	15	135	10	160	0	33	1	14	48	0	20	10	34	0	64	0	486
12:45 PM	0	39	161	16	216	0	24	140	3	167	0	21	6	8	35	0	30	8	36	0	74	0	492
Hourly Total	0	170	610	70	850	0	79	553	56	688	0	109	18	38	165	0	79	32	141	0	252	0	1955
1:00 PM	0	42	162	14	218	0	20	153	26	199	0	34	6	16	56	0	21	6	38	0	65	0	538
1:15 PM	0	45	148	15	208	0	11	141	15	167	0	24	6	15	45	0	16	5	47	0	68	0	488
1:30 PM	1	39	145	9	194	0	21	170	21	212	0	25	4	12	41	0	15	4	37	0	56	0	503

1:45 PM	1	45	168	16	0	230	0	26	157	13	0	196	0	23	5	11	0	39	0	18	5	32	0	55	520
Hourly Total	2	171	623	54	1	850	0	78	621	75	0	774	0	106	21	54	0	181	0	70	20	154	0	244	2049
Grand Total	8	861	3534	272	1	4675	0	355	3345	310	0	4010	0	428	80	185	0	693	0	302	110	715	1	1127	10505
Approach %	0.2	18.4	75.6	5.8	-	-	0.0	8.9	83.4	7.7	-	-	0.0	61.8	11.5	26.7	-	-	0.0	26.8	9.8	63.4	-	-	-
Total %	0.1	8.2	33.6	2.6	-	44.5	0.0	3.4	31.8	3.0	-	38.2	0.0	4.1	0.8	1.8	-	6.6	0.0	2.9	1.0	6.8	-	10.7	-
Lights	8	860	3484	269	-	4621	0	341	3303	306	-	3950	0	424	79	184	-	687	0	301	108	709	-	1118	10376
% Lights	100.0	99.9	98.6	98.9	-	98.8	-	96.1	98.7	98.7	-	98.5	-	99.1	98.8	99.5	-	99.1	-	99.7	98.2	99.2	-	99.2	98.8
Buses	0	0	15	0	-	15	0	13	4	0	0	17	0	0	0	0	-	0	0	0	0	2	-	2	34
% Buses	0.0	0.0	0.4	0.0	-	0.3	-	3.7	0.1	0.0	-	0.4	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.3	-	0.2	0.3
Single-Unit Trucks	0	0	22	2	-	24	0	1	26	2	-	29	0	3	1	1	-	5	0	1	2	2	-	5	63
% Single-Unit Trucks	0.0	0.0	0.6	0.7	-	0.5	-	0.3	0.8	0.6	-	0.7	-	0.7	1.3	0.5	-	0.7	-	0.3	1.8	0.3	-	0.4	0.6
Articulated Trucks	0	1	13	1	-	15	0	0	12	2	-	14	0	1	0	0	-	1	0	0	0	2	-	2	32
% Articulated Trucks	0.0	0.1	0.4	0.4	-	0.3	-	0.0	0.4	0.6	-	0.3	-	0.2	0.0	0.0	-	0.1	-	0.0	0.0	0.3	-	0.2	0.3
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
% 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	-	-	-	-	1	-	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-



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Count Name: Aurora Ave with Split Intersection  
Site Code:  
Start Date: 01/06/2022  
Page No: 3

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

Start Time	Aurora Ave Eastbound					Aurora Ave Westbound					Napier West Access Northbound					Shopping Center Access 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	
7:30 AM	0	5	108	1	0	114	0	0	54	2	0	56	0	0	0	0	0	0	0	1	0	0	6	0	7	177
7:45 AM	0	10	106	0	0	116	0	1	73	1	0	75	0	0	0	0	0	0	0	1	0	0	3	1	4	195
8:00 AM	0	19	99	2	0	120	0	2	57	0	0	59	0	4	0	0	0	0	0	0	0	0	0	0	0	183
8:15 AM	1	11	79	7	0	98	0	1	58	4	0	63	0	2	0	1	0	0	0	2	0	4	0	0	6	170
Total	1	45	392	10	0	448	0	4	242	7	0	253	0	6	0	1	0	0	0	4	0	13	1	17	725	
Approach %	0.2	10.0	87.5	2.2	-	-	0.0	1.6	95.7	2.8	-	-	0.0	85.7	0.0	14.3	-	-	0.0	23.5	0.0	76.5	-	-	-	-
Total %	0.1	6.2	54.1	1.4	-	61.8	0.0	0.6	33.4	1.0	-	34.9	0.0	0.8	0.0	0.1	-	-	0.0	0.6	0.0	1.8	-	-	2.3	-
PHF	0.250	0.592	0.907	0.357	-	0.933	0.000	0.500	0.829	0.438	-	0.843	0.000	0.375	0.000	0.250	-	-	0.000	0.500	0.000	0.542	-	-	0.607	0.929
% Lights	1	45	380	9	-	435	0	2	230	6	-	238	0	4	0	1	-	-	0	3	0	12	-	-	15	693
% Lights	100.0	100.0	96.9	90.0	-	97.1	-	50.0	95.0	85.7	-	94.1	-	66.7	-	100.0	-	-	0	75.0	0.0	92.3	-	-	88.2	95.6
Buses	0	0	3	0	-	3	0	2	2	0	-	4	0	0	0	0	-	-	0	0	0	0	-	-	0	7
% Buses	0.0	0.0	0.8	0.0	-	0.7	-	50.0	0.8	0.0	-	1.6	-	0.0	-	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	1.0
Single-Unit Trucks	0	0	6	1	-	7	0	0	7	0	-	7	0	1	0	0	-	-	0	1	0	0	-	-	1	16
% Single-Unit Trucks	0.0	0.0	1.5	10.0	-	1.6	-	0.0	2.9	0.0	-	2.8	-	16.7	-	0.0	-	-	0	25.0	-	0.0	-	-	5.9	2.2
Articulated Trucks	0	0	3	0	-	3	0	0	3	1	-	4	0	1	0	0	-	-	0	0	0	1	-	-	1	9
% Articulated Trucks	0.0	0.0	0.8	0.0	-	0.7	-	0.0	1.2	14.3	-	1.6	-	16.7	-	0.0	-	-	0	0.0	-	7.7	-	-	5.9	1.2
Bicycles on Road	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
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-













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

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

Count Name: IL-59 with South Shopping Center  
Access  
Site Code:  
Start Date: 01/06/2022  
Page No: 3

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

Start Time	West Shopping Center Access Drive							Shopping Center Access Drive							IL-59											
	Eastbound				Westbound			Northbound				Southbound			Northbound				Southbound							
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	Int. Total	
7:30 AM	0	0	0	1	0	1	0	0	0	0	0	0	0	7	403	1	0	0	411	1	1	243	3	0	248	660
7:45 AM	0	0	0	2	0	2	0	0	0	0	0	0	2	2	369	3	0	376	1	2	248	1	0	252	630	
8:00 AM	0	0	0	1	0	1	0	0	0	1	0	0	0	5	348	3	0	356	0	1	214	1	0	216	573	
8:15 AM	0	0	0	3	0	3	0	0	0	0	0	0	1	2	347	4	0	354	0	3	247	2	0	252	609	
Total	0	0	0	7	0	7	0	0	0	1	0	0	3	16	1467	11	0	1497	2	7	952	7	0	968	2472	
Approach %	0.0	0.0	0.0	100.0	-	-	0.0	0.0	0.0	0.0	-	-	0.2	1.1	98.0	0.7	-	-	0.2	0.7	98.3	0.7	-	-	-	
Total %	0.0	0.0	0.0	0.3	-	0.3	0.0	0.0	0.0	0.0	-	0.0	0.1	0.6	59.3	0.4	-	60.6	0.1	0.3	38.5	0.3	-	-	39.2	
PHF	0.000	0.000	0.000	0.583	-	0.583	0.000	0.000	0.000	0.000	-	0.000	0.375	0.571	0.910	0.688	-	0.911	0.500	0.583	0.960	0.583	-	-	0.960	
Lights	0	0	0	7	-	7	0	0	0	0	-	0	3	16	1392	11	-	1422	1	7	885	7	-	900	2329	
% Lights	-	-	-	100.0	-	100.0	-	-	-	-	-	-	100.0	100.0	94.9	100.0	-	95.0	50.0	100.0	93.0	100.0	-	93.0	94.2	
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	0	9	0	-	9	0	0	6	0	-	6	15	
% Buses	-	-	-	0.0	-	0.0	-	-	-	-	-	-	0.0	0.0	0.6	0.0	-	0.6	0.0	0.0	0.6	0.0	-	0.6	0.6	
Single-Unit Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	25	0	-	25	0	0	34	0	-	34	59	
% Single-Unit Trucks	-	-	-	0.0	-	0.0	-	-	-	-	-	-	0.0	0.0	1.7	0.0	-	1.7	0.0	0.0	3.6	0.0	-	3.5	2.4	
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	41	0	-	41	1	0	27	0	-	28	69	
% Articulated Trucks	-	-	-	0.0	-	0.0	-	-	-	-	-	-	0.0	0.0	2.8	0.0	-	2.7	50.0	0.0	2.8	0.0	-	2.9	2.8	
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	-	-	-	-	1	-	-	-	-	-	-	1	-	-	-	-	-	0	-	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	



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Count Name: IL-59 with South Shopping Center  
Access  
Site Code:  
Start Date: 01/06/2022  
Page No: 4

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

Start Time	Shopping Center Access Drive										IL-59																				
	West Shopping Center Access Drive					Eastbound					Westbound					Northbound					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	U-Turn	Left	Thru	Right	Peds	App. Total	Int. Total
4:30 PM	0	0	0	26	0	26	0	0	0	0	3	3	0	18	405	13	0	436	1	7	521	18	0	547	1	6	536	18	0	561	1012
4:45 PM	0	0	0	26	0	26	0	0	0	7	7	2	9	399	11	0	421	1	3	472	8	0	484	1	11	475	22	0	509	973	
5:00 PM	0	0	0	17	0	17	0	0	0	3	3	1	9	403	17	0	430	1	11	419	11	0	443	4	27	2004	66	0	2101	3934	
5:15 PM	0	0	0	13	0	13	0	0	0	8	8	2	11	419	11	0	443	1	11	419	11	0	443	4	27	2004	66	0	2101	3934	
Total	0	0	0	82	0	82	0	0	0	21	21	5	47	1626	52	0	1730	4	27	2004	66	0	2101	4	27	2004	66	0	2101	3934	
Approach %	0.0	0.0	0.0	100.0	-	-	0.0	0.0	0.0	100.0	-	-	0.3	2.7	94.0	3.0	-	-	0.2	1.3	95.4	3.1	-	-	0.1	0.7	50.9	1.7	-	53.4	-
Total %	0.0	0.0	0.0	2.1	-	2.1	0.0	0.0	0.0	0.5	-	0.5	0.1	1.2	41.3	1.3	-	44.0	0.1	0.7	50.9	1.7	-	53.4	1.000	0.614	0.935	0.750	-	0.936	0.969
PHF	0.000	0.000	0.000	0.788	-	0.788	0.000	0.000	0.000	0.656	-	0.656	0.625	0.653	0.970	0.765	-	0.976	1.000	0.614	0.935	0.750	-	0.936	4	27	1967	65	-	2063	3857
Lights	0	0	0	82	-	82	0	0	0	21	-	21	5	47	1587	52	-	1691	4	27	1967	65	-	2063	100.0	100.0	98.2	98.5	-	98.2	98.0
% Lights	-	-	-	100.0	-	100.0	-	-	-	100.0	-	100.0	100.0	100.0	97.6	100.0	-	97.7	100.0	100.0	98.2	98.5	-	98.2	100.0	100.0	98.2	98.5	-	98.2	98.0
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	0	3	0	-	3	0	0	2	0	-	2	0	0	2	0	-	2	5
% Buses	-	-	-	0.0	-	0.0	-	-	-	0.0	-	0.0	0.0	0.0	0.2	0.0	-	0.2	0.0	0.0	0.1	0.0	-	0.1	0.0	0.0	0.1	0.0	-	0.1	0.1
Single-Unit Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	22	0	-	22	0	0	13	1	-	14	0	0	13	1	-	14	36
% Single-Unit Trucks	-	-	-	0.0	-	0.0	-	-	-	0.0	-	0.0	0.0	0.0	1.4	0.0	-	1.3	0.0	0.0	0.6	1.5	-	0.7	0.0	0.0	0.6	1.5	-	0.7	0.9
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	14	0	-	14	0	0	22	0	-	22	0	0	22	0	-	22	36
% Articulated Trucks	-	-	-	0.0	-	0.0	-	-	-	0.0	-	0.0	0.0	0.0	0.9	0.0	-	0.8	0.0	0.0	1.1	0.0	-	1.0	0.0	0.0	1.1	0.0	-	1.0	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	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	-	0.0	0.0
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Count Name: IL-59 with South Shopping Center  
Access  
Site Code:  
Start Date: 01/06/2022  
Page No: 1

### Turning Movement Data

Start Time	West Shopping Center Access Drive Eastbound						Shopping Center Access Drive Westbound						IL-59 Northbound						IL-59 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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
11:00 AM	0	1	0	19	0	20	0	0	0	3	0	3	2	13	366	20	0	401	1	8	354	21	0	384	808				
11:15 AM	0	0	0	21	0	21	0	0	0	3	0	3	2	16	428	17	0	463	1	8	358	24	0	391	878				
11:30 AM	0	1	0	22	0	23	0	0	0	1	0	1	0	14	464	12	0	490	1	6	350	20	0	377	891				
11:45 AM	0	0	0	20	1	20	0	1	0	5	0	6	1	15	433	25	0	474	1	5	360	30	0	396	896				
Hourly Total	0	2	0	82	1	84	0	1	0	12	0	13	5	58	1691	74	0	1828	4	27	1422	95	0	1548	3473				
12:00 PM	0	0	0	22	0	22	0	0	0	1	0	1	0	14	457	16	0	487	0	18	512	22	0	552	1062				
12:15 PM	0	0	0	18	0	18	0	0	0	4	0	4	1	13	519	21	0	554	1	16	452	21	0	490	1066				
12:30 PM	0	0	0	32	0	32	0	0	0	9	0	9	2	16	393	15	0	426	0	9	491	27	0	527	994				
12:45 PM	0	0	0	26	0	26	0	0	0	7	0	7	0	15	414	16	0	445	0	10	454	23	0	487	965				
Hourly Total	0	0	0	98	0	98	0	0	0	21	0	21	3	58	1783	68	0	1912	1	53	1909	93	0	2056	4087				
1:00 PM	0	0	0	23	0	23	1	0	0	5	0	6	0	20	457	10	0	487	1	6	483	20	0	510	1026				
1:15 PM	0	0	0	27	0	27	0	0	0	2	0	2	0	15	509	17	0	541	0	6	513	30	0	549	1119				
1:30 PM	0	0	0	31	0	31	0	2	0	7	0	9	1	16	435	18	0	470	0	7	497	25	0	529	1039				









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Count Name: IL-59 with North Shopping Center  
Access  
Site Code:  
Start Date: 01/06/2022  
Page No: 1

### Turning Movement Data

Start Time	Shopping Center Access Drive Westbound					IL-59 Northbound					IL-59 Southbound					
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Thru	Left	Peds	App. Total	Int. Total
7:00 AM	0	0	1	0	1	0	348	1	0	349	0	166	0	0	166	516
7:15 AM	0	0	2	0	2	0	388	0	0	388	0	200	0	0	200	590
7:30 AM	0	0	1	0	1	0	395	0	0	395	0	219	0	0	219	615
7:45 AM	0	0	1	0	1	0	395	1	0	396	0	256	0	0	256	653
Hourly Total	0	0	5	0	5	0	1526	2	0	1528	0	841	0	0	841	2374
8:00 AM	0	0	0	1	0	0	343	2	0	345	0	204	0	0	204	549
8:15 AM	0	0	0	0	0	0	351	2	0	353	0	213	0	0	213	566
8:30 AM	0	0	4	0	4	0	317	2	0	319	0	223	0	0	223	546
8:45 AM	0	0	1	0	1	0	326	1	0	327	0	254	0	0	254	582
Hourly Total	0	0	5	1	5	0	1337	7	0	1344	0	894	0	0	894	2243
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	0	0	6	0	6	0	394	8	0	402	0	515	0	0	515	923
4:15 PM	0	0	7	0	7	0	387	14	0	401	0	453	0	0	453	861
4:30 PM	0	0	5	0	5	0	381	14	0	395	0	525	0	0	525	925
4:45 PM	0	0	11	0	11	0	402	10	0	412	0	540	0	0	540	963
Hourly Total	0	0	29	0	29	0	1564	46	0	1610	0	2033	0	0	2033	3672
5:00 PM	0	0	6	0	6	0	393	5	0	398	0	475	0	0	475	879
5:15 PM	0	0	12	0	12	0	428	14	0	442	0	468	0	0	468	922
5:30 PM	0	0	7	0	7	0	431	11	0	442	0	446	0	0	446	895
5:45 PM	0	0	6	0	6	0	419	6	0	425	0	463	0	0	463	894
Hourly Total	0	0	31	0	31	0	1671	36	0	1707	0	1852	0	0	1852	3590
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 AM	0	0	5	0	5	0	354	18	0	372	0	412	0	0	412	789
11:15 AM	0	0	6	0	6	0	392	24	0	416	0	439	0	0	439	861
11:30 AM	0	0	12	0	12	0	460	14	0	474	0	393	0	0	393	879
11:45 AM	0	0	9	0	9	0	397	19	0	416	0	461	0	0	461	886
Hourly Total	0	0	32	0	32	0	1603	75	0	1678	0	1705	0	0	1705	3415
12:00 PM	0	0	13	0	13	0	462	24	0	486	0	492	0	0	492	991
12:15 PM	0	0	25	0	25	0	468	29	0	497	0	492	0	0	492	1014
12:30 PM	0	0	16	0	16	0	456	24	0	480	0	482	0	0	482	978
12:45 PM	0	0	12	0	12	0	505	26	0	531	0	502	0	0	502	1045
Hourly Total	0	0	66	0	66	0	1891	103	0	1994	0	1968	0	0	1968	4028
1:00 PM	0	0	22	0	22	0	457	17	0	474	0	516	0	0	516	1012
1:15 PM	0	0	18	0	18	0	493	24	0	517	0	564	0	0	564	1099
1:30 PM	0	0	16	0	16	0	431	18	0	449	0	546	0	0	546	1011
1:45 PM	0	0	14	0	14	0	528	20	0	548	0	477	0	0	477	1039









**Study Name** Aurora Ave with West Shopping Center Access  
**Start Date** Thursday, January 06, 2022 7:00 AM  
**End Date** Saturday, January 08, 2022 2:00 PM  
**Site Code**

### Report Summary

Time Period	Eastbound					Westbound					Northbound					Southbound					Southeastbound					Crosswalk				
	U	HL	L	T	R	I	O	U	L	T	BR	R	I	O	U	L	T	R	HR	BL	BR	HR	I	O	Total	EB	WB	SEB	Totals	
<b>Peak 1</b>																														
Specified Period																														
7:30 AM - 8:30 AM																														
One Hour Peak																														
7:30 AM - 8:30 AM																														
Lights	0	0	0	355	7	362	244	0	0	0	242	0	4	246	362	0	0	0	7	7	78%	100%	0	0	0	617	0	0	0	98%
%	0%	0%	0%	97%	100%	98%	58%	0%	0%	0%	94%	0%	100%	98%	97%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Buses	0	0	0	3	0	1	1	0	0	1	0	0	0	1	5	0	0	0	2	2	22%	0%	0	0	0	6	0	0	0	0%
%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Single-Unit Truc	0	0	0	6	0	6	9	0	0	9	0	0	0	0	6	0	0	0	0	0	0%	0%	0	0	0	15	0	0	0	0%
%	0%	0%	0%	2%	0%	2%	3%	0%	0%	4%	0%	0%	0%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Triculated Truc	0	0	0	2	0	2	5	0	0	5	0	0	0	0	2	0	0	0	0	0	0%	0%	0	0	0	7	0	0	0	0%
%	0%	0%	0%	1%	0%	1%	2%	0%	0%	2%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Tricycles on Roa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0%	0%	0	0	0	0	0	0	0	0%
%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
<b>Total</b>																														
	0	0	0	366	7	373	259	0	0	257	0	4	261	375	0	0	0	9	9	0.75	0.44	0	0	0	645	0	0	1	100%	
PHF	0	0	0	0.86	0.44	0.85	0.91	0	0	0.92	0	0.25	0.93	0.88	0	0	0	0.75	0.7	0.1%	2%	0	0	0	0.92	0	0	0	0.92	
Approach %																														
<b>Peak 2</b>																														
Specified Period																														
4:30 PM - 5:30 PM																														
One Hour Peak																														
4:30 PM - 5:30 PM																														
Lights	0	0	0	605	89	694	876	0	0	819	0	8	827	652	0	0	0	47	47	78%	98%	0	0	0	1625	0	0	0	99%	
%	0%	0%	0%	99%	98%	99%	100%	0%	0%	100%	0%	100%	100%	99%	0%	0%	0%	94%	94%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Buses	0	0	0	0	0	1	1	0	0	1	0	0	1	1	0	0	0	1	1	2%	0%	0	0	0	2	0	0	0	0%	
%	0%	0%	0%	0%	0%	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 Truc	0	0	0	2	2	4	0	0	0	0	0	0	0	4	0	0	0	2	2	2%	0%	0	0	0	6	0	0	0	0%	
%	0%	0%	0%	0%	2%	1%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	4%	4%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Triculated Truc	0	0	0	2	0	2	3	0	0	3	0	0	0	3	0	0	0	0	0	0%	0%	0	0	0	5	0	0	0	0%	
%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Tricycles on Roa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0%	0%	0	0	0	0	0	0	0	0%	
%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
<b>Total</b>																														
	0	0	0	609	91	700	880	0	0	823	0	8	831	659	0	0	0	50	50	0.91	0.88	0	0	0	1638	0	0	0	0.94	
PHF	0	0	0	0.91	0.88	0.91	0.89	0	0	0.89	0	0.4	0.89	0.88	0	0	0	0.83	0.83	0%	0%	0	0	0	0.94	0	0	0	0.94	
Approach %																														

**Study Name** Aurora Ave with West Shopping Center Access  
**Start Date** Thursday, January 06, 2022 7:00 AM  
**End Date** Saturday, January 08, 2022 2:00 PM  
**Site Code**

### Report Summary

Time Period	Eastbound					Westbound					Northbound					Southbound					Southeastbound					Crosswalk									
	U	HL	L	T	R	O	U	L	T	R	BL	T	R	I	O	U	L	T	R	HR	BL	BR	HR	I	O	Total	EB	WB	NR	SR	SEB	Electric	Total		
<b>Peak 1</b>	0	0	0	726	119	845	980	0	0	903	0	10	913	811	0	0	85	119	0	0	0	0	0	0	0	0	77	0	1920	0	0	0	0	0	0
Specified Period	0	0	0	100%	99%	100%	99%	0	0	100%	0	100%	100%	100%	0	0	97%	99%	0	0	0	0	0	0	0	0	99%	0	99%	0	0	0	0	0%	0%
1:00 PM - 2:00 PM	0	0	0	0	0	0	1	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	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	0
One Hour Peak	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM - 2:00 PM	0	0	0	1	1	2	4	0	0	3	0	3	4	0	0	0	3	1	0	0	0	0	0	0	0	0	1	0	9	0	0	0	0	0	0
Single-Unit Truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	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 Truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
icycles on Roa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PHF	0	0	0	0.94	0.94	0.97	0.93	0	0	0.97	0	0.5	0.9	0.92	0	0	0.79	0.94	0	0	0	0	0	0	0	0	0.78	0	0.97	0	0	0	0	0	0
Approach %						44%	51%			44%		45%	42%			3%	6%									4%									
<b>Total</b>	0	0	0	727	120	847	985	0	0	907	0	10	917	815	0	0	88	120	0	0	0	0	0	0	0	0	78	0	1930	0	0	0	0	0	0
Approach %						44%	51%			44%		45%	42%			3%	6%									4%									





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Count Name: Aurora Ave with East Shopping  
Center Ave  
Site Code:  
Start Date: 01/06/2022  
Page No: 1

### Turning Movement Data

Start Time	Aurora Ave Eastbound					Aurora Ave Westbound					Shopping Center Access Southbound					
	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Right	Peds	App. Total	Int. Total
7:00 AM	0	0	91	0	91	0	40	2	0	42	0	0	1	0	1	134
7:15 AM	0	0	108	0	108	0	45	1	0	46	0	0	0	0	0	154
7:30 AM	0	0	95	0	95	0	59	0	0	59	0	0	0	0	0	154
7:45 AM	0	0	106	0	106	0	72	2	0	74	0	0	1	1	1	181
Hourly Total	0	0	400	0	400	0	216	5	0	221	0	0	2	1	2	623
8:00 AM	0	0	83	0	83	0	61	0	1	61	0	0	0	1	0	144
8:15 AM	0	0	77	0	77	0	59	3	0	62	0	0	1	0	1	140
8:30 AM	0	0	73	0	73	0	66	0	0	66	0	0	3	0	3	142
8:45 AM	0	0	94	0	94	0	74	1	0	75	0	0	4	0	4	173
Hourly Total	0	0	327	0	327	0	260	4	1	264	0	0	8	1	8	599
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	0	0	120	0	120	0	194	12	0	206	0	0	5	0	5	331
4:15 PM	0	0	126	0	126	0	161	4	0	165	0	0	6	0	6	297
4:30 PM	0	0	106	0	106	0	161	5	0	166	0	0	6	0	6	278
4:45 PM	0	0	141	0	141	0	176	8	0	184	0	0	5	0	5	330
Hourly Total	0	0	493	0	493	0	692	29	0	721	0	0	22	0	22	1236
5:00 PM	0	0	145	0	145	0	156	6	0	162	0	0	5	0	5	312
5:15 PM	0	0	151	0	151	0	196	3	0	199	0	0	6	0	6	356
5:30 PM	0	0	147	1	147	0	155	9	0	164	0	0	4	0	4	315
5:45 PM	0	0	145	0	145	0	148	6	0	154	0	0	4	0	4	303
Hourly Total	0	0	588	1	588	0	655	24	0	679	0	0	19	0	19	1286
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 AM	0	0	110	0	110	0	155	7	0	162	0	0	7	0	7	279
11:15 AM	0	0	138	0	138	0	158	7	0	165	0	0	4	0	4	307
11:30 AM	0	0	157	0	157	0	164	12	0	176	0	0	10	0	10	343
11:45 AM	0	0	162	0	162	0	182	4	0	186	0	0	2	0	2	350
Hourly Total	0	0	567	0	567	0	659	30	0	689	0	0	23	0	23	1279
12:00 PM	0	0	175	0	175	0	202	5	0	207	0	0	4	0	4	386
12:15 PM	0	0	159	0	159	0	180	3	0	183	0	0	14	0	14	356
12:30 PM	0	0	180	0	180	0	176	7	0	183	0	0	4	0	4	367
12:45 PM	0	0	202	0	202	0	179	9	0	188	0	0	4	0	4	394
Hourly Total	0	0	716	0	716	0	737	24	0	761	0	0	26	0	26	1503
1:00 PM	0	0	201	0	201	0	202	7	0	209	0	0	13	0	13	423
1:15 PM	0	0	166	0	166	0	167	7	0	174	0	0	3	0	3	343
1:30 PM	0	0	165	0	165	0	214	9	0	223	0	0	8	0	8	396
1:45 PM	0	0	183	0	183	0	191	6	0	197	0	0	10	0	10	390

Hourly Total	0	0	715	0	715	0	774	29	0	803	0	0	34	0	34	1552
Grand Total	0	0	3806	1	3806	0	3993	145	1	4138	0	0	134	2	134	8078
Approach %	0.0	0.0	100.0	-	-	0.0	96.5	3.5	-	-	0.0	0.0	100.0	-	-	-
Total %	0.0	0.0	47.1	-	47.1	0.0	49.4	1.8	-	51.2	0.0	0.0	1.7	-	1.7	-
Lights	0	0	3746	-	3746	0	3934	145	-	4079	0	0	134	-	134	7959
% Lights	-	-	98.4	-	98.4	-	98.5	100.0	-	98.6	-	-	100.0	-	100.0	98.5
Buses	0	0	7	-	7	0	18	0	-	18	0	0	0	-	0	25
% Buses	-	-	0.2	-	0.2	-	0.5	0.0	-	0.4	-	-	0.0	-	0.0	0.3
Single-Unit Trucks	0	0	41	-	41	0	26	0	-	26	0	0	0	-	0	67
% Single-Unit Trucks	-	-	1.1	-	1.1	-	0.7	0.0	-	0.6	-	-	0.0	-	0.0	0.8
Articulated Trucks	0	0	12	-	12	0	15	0	-	15	0	0	0	-	0	27
% Articulated Trucks	-	-	0.3	-	0.3	-	0.4	0.0	-	0.4	-	-	0.0	-	0.0	0.3
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
Pedestrians	-	-	-	1	-	-	-	-	1	-	-	-	-	2	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	100.0	-	-	-	-	100.0	-	-



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Count Name: Aurora Ave with East Shopping  
Center Ave  
Site Code:  
Start Date: 01/06/2022  
Page No: 3

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

Start Time	Aurora Ave Eastbound				Aurora Ave Westbound				Shopping Center Access Southbound					
	U-Turn	Left	Thru	App. Total	U-Turn	Thru	Right	App. Total	U-Turn	Left	Right	Peds	App. Total	Int. Total
7:30 AM	0	0	95	95	0	59	0	59	0	0	0	0	0	154
7:45 AM	0	0	106	106	0	72	2	74	0	0	1	1	1	181
8:00 AM	0	0	83	83	0	61	0	61	0	0	0	1	0	144
8:15 AM	0	0	77	77	0	59	3	62	0	0	1	0	1	140
Total	0	0	361	361	0	251	5	256	0	0	2	2	2	619
Approach %	0.0	0.0	100.0	-	0.0	98.0	2.0	-	0.0	0.0	100.0	-	-	-
Total %	0.0	0.0	58.3	58.3	0.0	40.5	0.8	41.4	0.0	0.0	0.3	-	0.3	-
PHF	0.000	0.000	0.851	0.851	0.000	0.872	0.417	0.865	0.000	0.000	0.500	-	0.500	0.855
Lights	0	0	349	349	0	235	5	240	0	0	2	-	2	591
% Lights	-	-	96.7	96.7	-	93.6	100.0	93.8	-	-	100.0	-	100.0	95.5
Buses	0	0	1	1	0	5	0	5	0	0	0	-	0	6
% Buses	-	-	0.3	0.3	-	2.0	0.0	2.0	-	-	0.0	-	0.0	1.0
Single-Unit Trucks	0	0	7	7	0	7	0	7	0	0	0	-	0	14
% Single-Unit Trucks	-	-	1.9	1.9	-	2.8	0.0	2.7	-	-	0.0	-	0.0	2.3
Articulated Trucks	0	0	4	4	0	4	0	4	0	0	0	-	0	8
% Articulated Trucks	-	-	1.1	1.1	-	1.6	0.0	1.6	-	-	0.0	-	0.0	1.3
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
Pedestrians	-	-	-	-	-	-	-	-	-	-	-	1	2	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	100.0	100.0	-







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Count Name: W Jefferson Ave with Shopping  
Center Access  
Site Code:  
Start Date: 01/06/2022  
Page No: 1

### Turning Movement Data

Start Time	W Jefferson Ave Eastbound					W Jefferson Ave Westbound					Shopping Center Access Northbound					Target Access Drive Southbound															
	U-Turn	Left	Thru	Right	App. Total	U-Turn	Left	Thru	Right	App. Total	U-Turn	Left	Thru	Right	App. Total	U-Turn	Left	Thru	Right	App. Total	U-Turn	Left	Thru	Right	App. Total	Int. Total					
7:00 AM	0	1	28	2	0	31	0	0	28	1	0	29	0	1	1	1	0	3	0	3	0	1	0	4	0	2	0	2	0	4	67
7:15 AM	0	2	42	0	0	44	0	0	23	3	0	26	0	0	0	0	0	0	0	2	0	0	0	0	0	4	0	3	0	7	74
7:30 AM	0	2	40	0	0	42	0	0	19	6	0	25	0	0	1	1	0	2	0	4	0	0	0	0	0	1	0	7	0	8	76
7:45 AM	0	4	51	1	0	56	0	1	40	9	0	50	0	0	0	0	0	0	0	1	0	0	0	0	0	10	0	13	0	23	114
Hourly Total	0	9	161	3	0	173	0	1	110	19	0	130	0	1	2	2	0	5	0	10	0	13	0	23	0	3	0	4	0	7	84
8:00 AM	0	1	37	1	0	39	0	0	33	5	0	38	0	0	0	0	0	0	0	3	0	0	0	0	0	2	0	4	0	6	85
8:15 AM	0	7	34	3	0	44	0	0	28	7	0	35	0	0	0	0	0	0	0	3	2	9	0	14	0	10	1	9	0	20	118
8:30 AM	1	4	39	2	0	46	0	0	27	10	0	37	0	3	2	0	0	5	0	3	2	9	0	14	0	18	3	26	0	47	389
8:45 AM	0	13	45	3	0	61	0	1	28	7	0	36	0	0	0	1	0	1	0	10	1	9	0	20	0	18	3	26	0	47	389
Hourly Total	1	25	155	9	0	190	0	1	116	29	0	146	0	3	2	1	0	6	0	18	3	26	0	47	0	18	3	26	0	47	389
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	0	29	51	19	0	99	0	7	94	18	0	119	0	11	8	4	0	23	0	14	3	43	0	60	0	11	9	28	0	48	272
4:15 PM	0	22	52	12	0	86	0	5	83	21	0	109	0	14	8	7	0	29	0	11	9	28	0	48	0	25	3	48	0	76	314
4:30 PM	0	28	58	16	0	102	0	11	91	14	0	116	0	14	1	5	0	20	0	22	2	37	1	61	0	22	2	37	1	61	291
4:45 PM	0	25	57	19	1	101	0	8	75	18	0	101	0	12	7	9	0	28	0	22	2	37	1	61	0	22	2	37	1	61	291
Hourly Total	0	104	218	66	1	388	0	31	343	71	0	445	0	51	24	25	0	100	0	72	17	156	1	245	0	72	17	156	1	245	1178
5:00 PM	1	22	62	31	0	116	0	7	89	22	0	118	0	16	0	11	0	27	0	20	3	48	0	71	0	20	3	48	0	71	332
5:15 PM	1	27	58	25	0	111	0	14	82	28	0	124	0	11	4	18	0	33	0	19	7	32	0	58	0	19	7	32	0	58	326
5:30 PM	0	22	53	24	0	99	0	11	56	19	0	86	0	14	5	15	0	34	0	13	6	37	0	56	0	13	6	37	0	56	275
5:45 PM	2	19	53	31	0	105	0	9	73	16	2	98	0	29	4	9	0	42	0	16	4	30	0	50	0	16	4	30	0	50	295
Hourly Total	4	90	226	111	0	431	0	41	300	85	2	426	0	70	13	53	0	136	0	68	20	147	0	235	0	68	20	147	0	235	1228
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:00 AM	0	22	63	20	0	105	0	12	81	21	0	114	0	9	4	11	0	24	0	17	4	28	0	49	0	17	4	28	0	49	292
11:15 AM	0	30	64	15	0	109	0	18	66	16	0	100	0	9	5	17	0	31	0	24	7	29	0	60	0	24	7	29	0	60	300
11:30 AM	3	32	54	27	0	116	0	7	96	19	0	122	0	17	6	10	0	33	0	17	10	28	0	55	0	17	10	28	0	55	326
11:45 AM	1	33	61	24	0	119	0	15	68	21	0	104	0	15	7	11	0	33	0	14	7	38	0	59	0	14	7	38	0	59	315
Hourly Total	4	117	242	86	0	449	0	52	311	77	0	440	0	50	22	49	0	121	0	72	28	123	0	223	0	72	28	123	0	223	1233
12:00 PM	0	33	81	25	0	139	0	13	73	26	0	112	0	17	5	11	0	33	0	13	9	43	0	65	0	13	9	43	0	65	349
12:15 PM	0	35	67	51	0	153	0	14	84	28	0	126	0	18	11	10	0	39	0	23	11	39	0	73	0	23	11	39	0	73	391
12:30 PM	0	29	71	38	0	138	0	20	65	18	0	103	0	24	9	21	0	54	0	19	3	41	0	63	0	19	3	41	0	63	358
12:45 PM	0	32	65	33	0	130	0	20	79	24	0	123	0	24	7	11	0	42	0	12	11	43	0	66	0	12	11	43	0	66	361
Hourly Total	0	129	284	147	0	560	0	67	301	96	0	464	0	83	32	53	0	168	0	67	34	166	0	267	0	67	34	166	0	267	1459
1:00 PM	0	25	59	37	0	121	0	19	73	34	0	126	0	26	10	22	0	58	0	30	8	43	0	81	0	30	8	43	0	81	386
1:15 PM	1	30	87	39	0	157	0	17	90	25	0	132	0	14	10	20	0	44	0	22	7	50	0	79	0	22	7	50	0	79	412
1:30 PM	0	35	67	27	0	129	0	13	165	32	0	210	0	17	12	16	0	45	0	19	6	60	0	85	0	19	6	60	0	85	469

1:45 PM	0	43	59	33	0	135	0	20	97	40	0	157	0	14	5	23	0	42	0	20	10	51	0	81	415
Hourly Total	1	133	272	136	0	542	0	69	425	131	0	625	0	71	37	81	0	189	0	91	31	204	0	326	1682
Grand Total	10	607	1558	558	1	2733	0	262	1906	508	2	2676	0	329	132	264	0	725	0	398	133	835	1	1366	7500
Approach %	0.4	22.2	57.0	20.4	-	-	0.0	9.8	71.2	19.0	-	-	0.0	45.4	18.2	36.4	-	-	0.0	29.1	9.7	61.1	-	-	-
Total %	0.1	8.1	20.8	7.4	-	36.4	0.0	3.5	25.4	6.8	-	35.7	0.0	4.4	1.8	3.5	-	9.7	0.0	5.3	1.8	11.1	-	18.2	-
Lights	8	605	1485	557	-	2655	0	262	1832	501	-	2595	0	327	132	264	-	723	0	395	132	832	-	1359	7332
% Lights	80.0	99.7	95.3	99.8	-	97.1	-	100.0	96.1	98.6	-	97.0	-	99.4	100.0	100.0	-	99.7	-	99.2	99.2	99.6	-	99.5	97.8
Buses	0	0	0	0	-	0	0	0	0	1	-	1	0	0	0	0	-	0	0	0	0	0	-	0	1
% Buses	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.2	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Single-Unit Trucks	2	1	32	1	-	36	0	0	37	4	-	41	0	2	0	0	-	2	0	2	1	2	-	5	84
% Single-Unit Trucks	20.0	0.2	2.1	0.2	-	1.3	-	0.0	1.9	0.8	-	1.5	-	0.6	0.0	0.0	-	0.3	-	0.5	0.8	0.2	-	0.4	1.1
Articulated Trucks	0	1	41	0	-	42	0	0	37	1	-	38	0	0	0	0	-	0	0	0	0	1	-	1	81
% Articulated Trucks	0.0	0.2	2.6	0.0	-	1.5	-	0.0	1.9	0.2	-	1.4	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.1	-	0.1	1.1
Bicycles on Road	0	0	0	0	-	0	0	0	0	1	-	1	0	0	0	0	-	0	0	1	0	0	-	1	2
% Bicycles on Road	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.2	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.3	0.0	0.0	-	0.1	0.0
Pedestrians	-	-	-	-	1	-	-	-	-	-	2	-	-	-	-	-	-	0	-	-	-	-	-	1	-
% Pedestrians	-	-	-	-	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 kpachowicz@kloainc.com

Count Name: W Jefferson Ave with Shopping  
Center Access  
Site Code:  
Start Date: 01/06/2022  
Page No: 3

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

Start Time	W Jefferson Ave Eastbound					W Jefferson Ave Westbound					Shopping Center Access Northbound					Target Access Drive Southbound					Int. Total	
	U-Turn	Left	Thru	Right	App. Total	U-Turn	Left	Thru	Right	App. Total	U-Turn	Left	Thru	Right	App. Total	U-Turn	Left	Thru	Right	App. Total		Peds
7:30 AM	0	2	40	0	42	0	0	19	6	25	0	0	1	1	2	0	4	0	3	7	0	76
7:45 AM	0	4	51	1	56	0	1	40	9	50	0	0	0	0	0	0	1	0	7	0	8	114
8:00 AM	0	1	37	1	39	0	0	33	5	38	0	0	0	0	0	0	3	0	4	0	7	84
8:15 AM	0	7	34	3	44	0	0	28	7	35	0	0	0	0	0	0	2	0	4	0	6	85
Total	0	14	162	5	181	0	1	120	27	148	0	0	1	1	2	0	10	0	18	0	28	359
Approach %	0.0	7.7	89.5	2.8	-	0.0	0.7	81.1	18.2	-	0.0	0.0	50.0	50.0	-	0.0	35.7	0.0	64.3	-	-	-
Total %	0.0	3.9	45.1	1.4	50.4	0.0	0.3	33.4	7.5	41.2	0.0	0.0	0.3	0.3	-	0.0	2.8	0.0	5.0	-	7.8	-
PHF	0.000	0.500	0.794	0.417	0.808	0.000	0.250	0.750	0.750	0.740	0.000	0.000	0.250	0.250	-	0.000	0.625	0.000	0.643	-	0.875	0.787
% Lights	0	14	143	5	162	0	1	107	26	134	0	0	1	1	2	0	10	0	17	-	27	325
% Buses	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	-	0	1
% Single-Unit Trucks	0	0	9	0	9	0	0	9	0	9	0	0	0	0	0	0	0	0	0	-	0	18
% Articulated Trucks	0	0	10	0	10	0	0	4	0	4	0	0	0	0	0	0	0	0	1	-	1	15
% Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5.6	-	3.6	4.2
% Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	0	0



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Count Name: W Jefferson Ave with Shopping  
Center Access  
Site Code:  
Start Date: 01/06/2022  
Page No: 4

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

Start Time	W Jefferson Ave Eastbound					W Jefferson Ave Westbound					Shopping Center Access Northbound					Target Access Drive Southbound					Int. Total					
	U-Turn	Left	Thru	Right	App. Total	U-Turn	Left	Thru	Right	App. Total	U-Turn	Left	Thru	Right	App. Total	U-Turn	Left	Thru	Right	App. Total		U-Turn	Left	Thru	Right	App. Total
4:30 PM	0	28	58	16	102	0	11	91	14	116	0	14	1	5	20	0	25	3	48	76	0	25	3	48	76	314
4:45 PM	0	25	57	19	101	0	8	75	18	101	0	12	7	9	28	0	22	2	37	61	0	22	2	37	61	291
5:00 PM	1	22	62	31	116	0	7	89	22	118	0	16	0	11	27	0	20	3	48	71	0	20	3	48	71	332
5:15 PM	1	27	58	25	111	0	14	82	28	124	0	11	4	18	33	0	19	7	32	58	0	19	7	32	58	326
Total	2	102	235	91	430	0	40	337	82	459	0	53	12	43	108	0	86	15	165	266	0	86	15	165	266	1263
Approach %	0.5	23.7	54.7	21.2	-	0.0	8.7	73.4	17.9	-	0.0	49.1	11.1	39.8	-	0.0	32.3	5.6	62.0	-	0.0	32.3	5.6	62.0	-	-
Total %	0.2	8.1	18.6	7.2	34.0	0.0	3.2	26.7	6.5	36.3	0.0	4.2	1.0	3.4	8.6	0.0	6.8	1.2	13.1	21.1	0.0	6.8	1.2	13.1	21.1	-
PHF	0.500	0.911	0.948	0.734	0.927	0.000	0.714	0.926	0.732	0.925	0.000	0.828	0.429	0.597	0.818	0.000	0.860	0.536	0.859	0.875	0.000	0.860	0.536	0.859	0.875	0.951
Lights	2	101	226	91	420	0	40	319	80	439	0	53	12	43	108	0	86	14	165	265	0	86	14	165	265	1232
% Lights	100.0	99.0	96.2	100.0	97.7	-	100.0	94.7	97.6	95.6	-	100.0	100.0	100.0	100.0	-	100.0	93.3	100.0	99.6	-	100.0	93.3	100.0	99.6	97.5
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
% 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	0.0	0.0	0.0	0.0	0.0	0.0
Single-Unit Trucks	0	1	4	0	5	0	0	6	2	8	0	0	0	0	0	0	0	1	0	1	0	0	1	0	1	14
% Single-Unit Trucks	0.0	1.0	1.7	0.0	1.2	-	0.0	1.8	2.4	1.7	-	0.0	0.0	0.0	0.0	-	0.0	6.7	0.0	0.4	-	0.0	6.7	0.0	0.4	1.1
Articulated Trucks	0	0	5	0	5	0	0	12	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17
% Articulated Trucks	0.0	0.0	2.1	0.0	1.2	-	0.0	3.6	0.0	2.6	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	1.3
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
% 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	0.0	0.0	0.0	0.0
Pedestrians	-	-	-	-	1	-	-	-	-	0	-	-	-	-	0	-	-	-	-	1	-	-	-	-	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	-



Naperville, IL Weather: Cold and Dry  
 Fort Hill Dr and Goodwill and Car Dealer South Access  
 Thursday January 6, 2022

01/07/22  
 13:45:37

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

Intersection # 6 forthill/goodwill/car/south													
Begin Time	N-Approach			E-Approach			S-Approach			W-Approach			Int Total
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
700	4	0	1	0	0	0	1	0	2	3	0	1	12
715	1	0	0	1	0	0	1	0	2	3	0	2	10
730	1	0	0	0	0	1	1	0	8	2	0	1	14
745	2	0	0	0	0	0	4	0	7	5	0	3	21
800	2	0	0	0	0	1	4	0	3	5	0	0	15
815	1	0	2	3	0	4	6	0	7	2	0	4	29
830	4	0	0	1	0	1	4	0	12	6	0	1	29
845	5	0	0	1	0	2	5	0	11	7	0	4	35
1600	13	0	0	2	1	5	3	0	13	22	0	5	64
1615	6	0	0	6	0	2	6	0	18	24	0	9	71
1630	3	0	0	4	0	1	2	0	19	18	0	5	52
1645	6	0	1	4	1	3	5	0	9	20	0	9	58
1700	9	0	0	2	0	6	2	0	13	22	0	6	60
1715	12	0	1	4	0	2	3	0	14	17	0	10	63
1730	4	0	0	0	0	4	4	0	11	27	0	6	56
1745	7	0	2	1	0	3	4	0	4	23	0	6	50
Total	80	0	7	29	2	35	55	0	153	206	0	72	639

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

Intersection # 6 forthill/goodwill/car/south										
Begin Time	Approach Totals				Exit Totals				Int Total	
	N	E	S	W	N	E	S	W		
700	5	0	3	4	1	2	3	6	12	
715	1	1	3	5	3	1	3	3	10	
730	1	1	9	3	1	1	3	9	14	
745	2	0	11	8	3	4	5	9	21	
800	2	1	7	5	0	4	6	5	15	
815	3	7	13	6	7	8	6	8	29	
830	4	2	16	7	2	4	7	16	29	
845	5	3	16	11	5	5	9	16	35	
1600	13	8	16	27	7	3	27	27	64	
1615	6	8	24	33	15	6	26	24	71	
1630	3	5	21	23	9	2	19	22	52	
1645	7	8	14	29	13	6	23	16	58	
1700	9	8	15	28	8	2	28	22	60	
1715	13	6	17	27	14	4	19	26	63	
1730	4	4	15	33	6	4	31	15	56	
1745	9	4	8	29	7	6	26	11	50	
Total	87	66	208	278	101	62	241	235	639	

Naperville, IL Weather: Cold and Dry  
 Fort Hill Dr and Goodwill and Car Dealer South Access  
 Thursday January 6, 2022

01/07/22  
 13:45:37

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

Intersection # 6 forthill/goodwill/car/south

Begin Time	N-Approach			E-Approach			S-Approach			W-Approach			Int Total
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
700	16	0	4	0	0	0	4	0	8	12	0	4	48
715	4	0	0	4	0	0	4	0	8	12	0	8	40
730	4	0	0	0	0	4	4	0	32	8	0	4	56
745	8	0	0	0	0	0	16	0	28	20	0	12	84
800	8	0	0	0	0	4	16	0	12	20	0	0	60
815	4	0	8	12	0	16	24	0	28	8	0	16	116
830	16	0	0	4	0	4	16	0	48	24	0	4	116
845	20	0	0	4	0	8	20	0	44	28	0	16	140
1600	52	0	0	8	4	20	12	0	52	88	0	20	256
1615	24	0	0	24	0	8	24	0	72	96	0	36	284
1630	12	0	0	16	0	4	8	0	76	72	0	20	208
1645	24	0	4	16	4	12	20	0	36	80	0	36	232
1700	36	0	0	8	0	24	8	0	52	88	0	24	240
1715	48	0	4	16	0	8	12	0	56	68	0	40	252
1730	16	0	0	0	0	16	16	0	44	108	0	24	224
1745	28	0	8	4	0	12	16	0	16	92	0	24	200

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

Intersection # 6 forthill/goodwill/car/south

Begin Time	Approach Totals				Exit Totals				Int Total
	N	E	S	W	N	E	S	W	
700	20	0	12	16	4	8	12	24	48
715	4	4	12	20	12	4	12	12	40
730	4	4	36	12	4	4	12	36	56
745	8	0	44	32	12	16	20	36	84
800	8	4	28	20	0	16	24	20	60
815	12	28	52	24	28	32	24	32	116
830	16	8	64	28	8	16	28	64	116
845	20	12	64	44	20	20	36	64	140
1600	52	32	64	108	28	12	108	108	256
1615	24	32	96	132	60	24	104	96	284
1630	12	20	84	92	36	8	76	88	208
1645	28	32	56	116	52	24	92	64	232
1700	36	32	60	112	32	8	112	88	240
1715	52	24	68	108	56	16	76	104	252
1730	16	16	60	132	24	16	124	60	224
1745	36	16	32	116	28	24	104	44	200

Naperville, IL Weather: Cold and Dry  
 Fort Hill Dr and Goodwill and Car Dealer South Access  
 Thursday January 6, 2022

01/07/22  
 13:45:37

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

Intersection # 6 forthill/goodwill/car/south													
Begin Time	N-Approach			E-Approach			S-Approach			W-Approach			Int Total
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
700	8	0	1	1	0	1	7	0	19	13	0	7	57
715	6	0	0	1	0	2	10	0	20	15	0	6	60
730	6	0	2	3	0	6	15	0	25	14	0	8	79
745	9	0	2	4	0	6	18	0	29	18	0	8	94
800	12	0	2	5	0	8	19	0	33	20	0	9	108
815	10	0	2	5	0	7	15	0	30	15	0	9	93*
830	9	0	0	2	0	3	9	0	23	13	0	5	64*
845	5	0	0	1	0	2	5	0	11	7	0	4	35*
1600	28	0	1	16	2	11	16	0	59	84	0	28	245
1615	24	0	1	16	1	12	15	0	59	84	0	29	241
1630	30	0	2	14	1	12	12	0	55	77	0	30	233
1645	31	0	2	10	1	15	14	0	47	86	0	31	237
1700	32	0	3	7	0	15	13	0	42	89	0	28	229
1715	23	0	3	5	0	9	11	0	29	67	0	22	169*
1730	11	0	2	1	0	7	8	0	15	50	0	12	106*
1745	7	0	2	1	0	3	4	0	4	23	0	6	50*

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

Intersection # 6 forthill/goodwill/car/south													
Begin Time	Approach Totals				Exit Totals				Int Total				
	N	E	S	W	N	E	S	W					
700	9	2	26	20	8	8	14	27	57				
715	6	3	30	21	7	10	17	26	60				
730	8	9	40	22	11	17	20	31	79				
745	11	10	47	26	12	20	24	38	94				
800	14	13	52	29	14	21	28	45	108				
815	12	12	45	24	14	17	22	40	93*				
830	9	5	32	18	7	9	16	32	64*				
845	5	3	16	11	5	5	9	16	35*				
1600	29	29	75	112	44	17	95	89	245				
1615	25	29	74	113	45	16	96	84	241				
1630	32	27	67	107	44	14	89	86	233				
1645	33	26	61	117	41	16	101	79	237				
1700	35	22	55	117	35	16	104	74	229				
1715	26	14	40	89	27	14	76	52	169*				
1730	13	8	23	62	13	10	57	26	106*				
1745	9	4	8	29	7	6	26	11	50*				

Naperville, IL Weather: Cold and Dry  
 Fort Hill Dr and Goodwill and Car Dealer South Access  
 Saturday January 8, 2022

01/10/22  
 13:35:03

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

Intersection # 7 foothill/goodwill/south/sat

Begin Time	N-Approach			E-Approach			S-Approach			W-Approach			Int Total
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
1100	6	0	1	2	0	5	1	0	25	25	1	11	77
1115	12	0	3	2	0	5	5	0	20	31	2	7	87
1130	8	0	2	4	0	6	8	0	26	33	0	10	97
1145	12	0	2	4	0	8	7	0	27	34	0	6	100
1200	8	0	2	3	2	3	5	0	26	42	0	8	99
1215	15	0	0	7	0	4	4	0	31	25	0	11	97
1230	8	0	3	2	0	3	8	0	26	30	0	9	89
1245	8	0	0	3	1	5	5	0	24	43	0	14	103
1300	7	0	3	6	0	2	6	0	20	31	0	9	84
1315	10	0	1	3	0	5	4	0	16	35	0	13	87
1330	13	0	1	7	1	3	5	0	22	26	1	5	84
1345	12	0	2	3	0	4	5	0	24	38	0	13	101
Total	119	0	20	46	4	53	63	0	287	393	4	116	1105

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

Intersection # 7 foothill/goodwill/south/sat

Begin Time	Approach Totals				Exit Totals				Int Total
	N	E	S	W	N	E	S	W	
1100	7	7	26	37	13	3	30	31	77
1115	15	7	25	40	9	10	36	32	87
1130	10	10	34	43	14	10	39	34	97
1145	14	12	34	40	10	9	42	39	100
1200	10	8	31	50	11	7	45	36	99
1215	15	11	35	36	18	4	29	46	97
1230	11	5	34	39	11	11	33	34	89
1245	8	9	29	57	17	5	48	33	103
1300	10	8	26	40	15	9	33	27	84
1315	11	8	20	48	16	5	40	26	87
1330	14	11	27	32	12	7	29	36	84
1345	14	7	29	51	16	7	42	36	101
Total	139	103	350	513	162	87	446	410	1105



Naperville, IL Weather: Cold and Dry  
 Fort Hill Dr and Goodwill and Car Dealer South Access  
 Saturday January 8, 2022

01/10/22  
 13:35:03

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

Intersection # 7 foothill/goodwill/south/sat

Begin Time	N-Approach			E-Approach			S-Approach			W-Approach			Int Total
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
1100	24	0	4	8	0	20	4	0	100	100	4	44	308
1115	48	0	12	8	0	20	20	0	80	124	8	28	348
1130	32	0	8	16	0	24	32	0	104	132	0	40	388
1145	48	0	8	16	0	32	28	0	108	136	0	24	400
1200	32	0	8	12	8	12	20	0	104	168	0	32	396
1215	60	0	0	28	0	16	16	0	124	100	0	44	388
1230	32	0	12	8	0	12	32	0	104	120	0	36	356
1245	32	0	0	12	4	20	20	0	96	172	0	56	412
1300	28	0	12	24	0	8	24	0	80	124	0	36	336
1315	40	0	4	12	0	20	16	0	64	140	0	52	348
1330	52	0	4	28	4	12	20	0	88	104	4	20	336
1345	48	0	8	12	0	16	20	0	96	152	0	52	404

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

Intersection # 7 foothill/goodwill/south/sat

Begin Time	Approach Totals				Exit Totals				Int Total
	N	E	S	W	N	E	S	W	
1100	28	28	104	148	52	12	120	124	308
1115	60	28	100	160	36	40	144	128	348
1130	40	40	136	172	56	40	156	136	388
1145	56	48	136	160	40	36	168	156	400
1200	40	32	124	200	44	28	180	144	396
1215	60	44	140	144	72	16	116	184	388
1230	44	20	136	156	44	44	132	136	356
1245	32	36	116	228	68	20	192	132	412
1300	40	32	104	160	60	36	132	108	336
1315	44	32	80	192	64	20	160	104	348
1330	56	44	108	128	48	28	116	144	336
1345	56	28	116	204	64	28	168	144	404

Naperville, IL Weather: Cold and Dry  
 Fort Hill Dr and Goodwill and Car Dealer South Access  
 Saturday January 8, 2022

01/10/22  
 13:35:03

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

Intersection # 7 foothill/goodwill/south/sat

Begin Time	N-Approach			E-Approach			S-Approach			W-Approach			Int Total
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
1100	38	0	8	12	0	24	21	0	98	123	3	34	361
1115	40	0	9	13	2	22	25	0	99	140	2	31	383
1130	43	0	6	18	2	21	24	0	110	134	0	35	393
1145	43	0	7	16	2	18	24	0	110	131	0	34	385
1200	39	0	5	15	3	15	22	0	107	140	0	42	388
1215	38	0	6	18	1	14	23	0	101	129	0	43	373
1230	33	0	7	14	1	15	23	0	86	139	0	45	363
1245	38	0	5	19	2	15	20	0	82	135	1	41	358
1300	42	0	7	19	1	14	20	0	82	130	1	40	356
1315	35	0	4	13	1	12	14	0	62	99	1	31	272*
1330	25	0	3	10	1	7	10	0	46	64	1	18	185*
1345	12	0	2	3	0	4	5	0	24	38	0	13	101*

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

Intersection # 7 foothill/goodwill/south/sat

Begin Time	Approach Totals				Exit Totals				Int Total
	N	E	S	W	N	E	S	W	
1100	46	36	119	160	46	32	147	136	361
1115	49	37	124	173	44	36	162	141	383
1130	49	41	134	169	53	30	155	155	393
1145	50	36	134	165	50	31	149	155	385
1200	44	33	129	182	57	27	155	149	388
1215	44	33	124	172	61	29	143	140	373
1230	40	30	109	184	59	30	154	120	363
1245	43	36	102	177	60	26	150	122	358
1300	49	34	102	171	59	28	144	125	356
1315	39	26	76	131	44	19	111	98	272*
1330	28	18	56	83	28	14	71	72	185*
1345	14	7	29	51	16	7	42	36	101*

Naperville, IL Weather: Cold and Dry  
 Fort Hill Dr and Goodwill and Car Dealer North Access  
 Thursday January 6, 2022

01/07/22  
 12:03:45

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

Intersection # 5 forthill/goodwill/cardeal

Begin Time	N-Approach			E-Approach			S-Approach			W-Approach			Int Total
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
700	0	0	1	0	0	0	0	0	0	1	0	0	2
715	0	0	2	0	0	0	4	0	0	0	0	0	6
730	1	0	1	0	0	1	7	0	0	0	0	0	10
745	0	0	3	0	0	0	7	0	0	1	0	0	11
800	0	0	0	0	0	1	5	0	1	1	0	0	8
815	0	0	2	0	0	0	1	0	2	0	0	1	6
830	0	0	0	0	0	3	5	0	0	0	0	0	8
845	3	0	3	0	0	0	4	0	3	1	1	3	18
1600	3	0	1	2	0	6	0	0	4	3	0	4	23
1615	3	0	2	0	0	0	1	0	4	3	0	5	18
1630	6	0	1	1	0	1	1	0	3	0	0	1	14
1645	4	0	0	1	0	1	0	0	1	1	1	1	10
1700	5	0	0	4	0	6	1	0	3	1	0	3	23
1715	4	0	0	0	0	1	1	0	4	5	0	5	20
1730	2	0	1	1	0	3	0	0	2	1	0	2	12
1745	3	0	0	1	0	1	1	0	2	1	0	0	9
Total	34	0	17	10	0	24	38	0	29	19	2	25	198

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

Intersection # 5 forthill/goodwill/cardeal

Begin Time	Approach Totals				Exit Totals				Int Total
	N	E	S	W	N	E	S	W	
700	1	0	0	1	0	1	1	0	2
715	2	0	4	0	0	6	0	0	6
730	2	1	7	0	0	8	1	1	10
745	3	0	7	1	0	10	1	0	11
800	0	1	6	1	0	5	2	1	8
815	2	0	3	1	1	3	0	2	6
830	0	3	5	0	0	5	3	0	8
845	6	0	7	5	3	8	1	6	18
1600	4	8	4	7	6	1	9	7	23
1615	5	0	5	8	5	3	3	7	18
1630	7	2	4	1	2	2	1	9	14
1645	4	2	1	3	2	1	2	5	10
1700	5	10	4	4	7	1	7	8	23
1715	4	1	5	10	5	1	6	8	20
1730	3	4	2	3	3	1	4	4	12
1745	3	2	3	1	1	1	2	5	9
Total	51	34	67	46	35	57	43	63	198

Naperville, IL Weather: Cold and Dry  
 Fort Hill Dr and Goodwill and Car Dealer North Access  
 Thursday January 6, 2022

01/07/22  
 12:03:45

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

Intersection # 5 forthill/goodwill/cardeal

Begin Time	N-Approach			E-Approach			S-Approach			W-Approach			Int Total
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
700	0	0	4	0	0	0	0	0	0	4	0	0	8
715	0	0	8	0	0	0	16	0	0	0	0	0	24
730	4	0	4	0	0	4	28	0	0	0	0	0	40
745	0	0	12	0	0	0	28	0	0	4	0	0	44
800	0	0	0	0	0	4	20	0	4	4	0	0	32
815	0	0	8	0	0	0	4	0	8	0	0	4	24
830	0	0	0	0	0	12	20	0	0	0	0	0	32
845	12	0	12	0	0	0	16	0	12	4	4	12	72
1600	12	0	4	8	0	24	0	0	16	12	0	16	92
1615	12	0	8	0	0	0	4	0	16	12	0	20	72
1630	24	0	4	4	0	4	4	0	12	0	0	4	56
1645	16	0	0	4	0	4	0	0	4	4	4	4	40
1700	20	0	0	16	0	24	4	0	12	4	0	12	92
1715	16	0	0	0	0	4	4	0	16	20	0	20	80
1730	8	0	4	4	0	12	0	0	8	4	0	8	48
1745	12	0	0	4	0	4	4	0	8	4	0	0	36

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

Intersection # 5 forthill/goodwill/cardeal

Begin Time	Approach Totals				Exit Totals				Int Total
	N	E	S	W	N	E	S	W	
700	4	0	0	4	0	4	4	0	8
715	8	0	16	0	0	24	0	0	24
730	8	4	28	0	0	32	4	4	40
745	12	0	28	4	0	40	4	0	44
800	0	4	24	4	0	20	8	4	32
815	8	0	12	4	4	12	0	8	24
830	0	12	20	0	0	20	12	0	32
845	24	0	28	20	12	32	4	24	72
1600	16	32	16	28	24	4	36	28	92
1615	20	0	20	32	20	12	12	28	72
1630	28	8	16	4	8	8	4	36	56
1645	16	8	4	12	8	4	8	20	40
1700	20	40	16	16	28	4	28	32	92
1715	16	4	20	40	20	4	24	32	80
1730	12	16	8	12	12	4	16	16	48
1745	12	8	12	4	4	4	8	20	36

Naperville, IL Weather: Cold and Dry  
 Fort Hill Dr and Goodwill and Car Dealer North Access  
 Thursday January 6, 2022

01/07/22  
 12:03:45

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

Intersection # 5 forthill/goodwill/cardeal

Begin Time	N-Approach			E-Approach			S-Approach			W-Approach			Int Total
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
700	1	0	7	0	0	1	18	0	0	2	0	0	29
715	1	0	6	0	0	2	23	0	1	2	0	0	35
730	1	0	6	0	0	2	20	0	3	2	0	1	35
745	0	0	5	0	0	4	18	0	3	2	0	1	33
800	3	0	5	0	0	4	15	0	6	2	1	4	40
815	3	0	5	0	0	3	10	0	5	1	1	4	32*
830	3	0	3	0	0	3	9	0	3	1	1	3	26*
845	3	0	3	0	0	0	4	0	3	1	1	3	18*
1600	16	0	4	4	0	8	2	0	12	7	1	11	65
1615	18	0	3	6	0	8	3	0	11	5	1	10	65
1630	19	0	1	6	0	9	3	0	11	7	1	10	67
1645	15	0	1	6	0	11	2	0	10	8	1	11	65
1700	14	0	1	6	0	11	3	0	11	8	0	10	64
1715	9	0	1	2	0	5	2	0	8	7	0	7	41*
1730	5	0	1	2	0	4	1	0	4	2	0	2	21*
1745	3	0	0	1	0	1	1	0	2	1	0	0	9*

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

Intersection # 5 forthill/goodwill/cardeal

Begin Time	Approach Totals				Exit Totals				Int Total
	N	E	S	W	N	E	S	W	
700	8	1	18	2	0	25	3	1	29
715	7	2	24	2	0	29	4	2	35
730	7	2	23	3	1	26	4	4	35
745	5	4	21	3	1	23	6	3	33
800	8	4	21	7	4	21	6	9	40
815	8	3	15	6	4	16	4	8	32*
830	6	3	12	5	3	13	4	6	26*
845	6	0	7	5	3	8	1	6	18*
1600	20	12	14	19	15	7	15	28	65
1615	21	14	14	16	16	7	13	29	65
1630	20	15	14	18	16	5	16	30	67
1645	16	17	12	20	17	4	19	25	65
1700	15	17	14	18	16	4	19	25	64
1715	10	7	10	14	9	3	12	17	41*
1730	6	6	5	4	4	2	6	9	21*
1745	3	2	3	1	1	1	2	5	9*

Naperville, IL Weather: Cold and Dry  
 Fort Hill Dr and Goodwill and Car Dealer North Access  
 Saturday January 8, 2022

01/10/22  
 13:39:00

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

Intersection # 8 forthill/goodwill/north/sat

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=====
Begin      N-Approach      E-Approach      S-Approach      W-Approach      Int
Time      RT   TH   LT      RT   TH   LT      RT   TH   LT      RT   TH   LT      Total
=====
1100       7    0    1       0    0    1       1    0    8       0    0    4       22
1115       6    0    1       1    0    3       0    0    4       3    0    2       20
1130       5    0    1       0    0    0       0    0    7       1    0    2       16
1145      11    0    1       1    0    1       0    0    7       0    0    6       27
1200      11    0    1       1    0    4       0    0    4       2    0    5       28
1215       9    0    0       1    0    1       1    0    6       2    0    2       22
1230       4    0    1       1    0    1       0    0    9       2    0    3       21
1245       9    0    1       1    0    0       1    0    8       0    0    2       22
1300      10    0    1       0    0    3       2    0    7       3    0    3       29
1315       9    0    4       1    0    0       1    0    2       0    0    0       17
1330       3    0    2       2    0    2       1    0    5       0    0    7       22
1345       9    0    1       3    0    1       3    0    8       2    0    0       27
=====
Total      93    0   15      12    0   17      10    0   75      15    0   36      273
=====
  
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URNS/TEAPAC[Ver 3.61.12] - 15-Minute Counts: All Vehicles - Totals

Intersection # 8 forthill/goodwill/north/sat

```

=====
Begin      Approach Totals      Exit Totals      Int
Time      N     E     S     W      N     E     S     W      Total
=====
1100       8     1     9     4      4     2     1    15      22
1115       7     4     4     5      3     1     6    10      20
1130       6     0     7     3      2     1     1    12      16
1145      12     2     7     6      7     1     1    18      27
1200      12     5     4     7      6     1     6    15      28
1215       9     2     7     4      3     1     3    15      22
1230       5     2     9     5      4     1     3    13      21
1245      10     1     9     2      3     2     0    17      22
1300      11     3     9     6      3     3     6    17      29
1315      13     1     3     0      1     5     0    11      17
1330       5     4     6     7      9     3     2     8      22
1345      10     4    11     2      3     4     3    17      27
=====
Total     108    29    85    51      48    25    32   168      273
=====
  
```

Naperville, IL Weather: Cold and Dry  
 Fort Hill Dr and Goodwill and Car Dealer North Access  
 Saturday January 8, 2022

01/10/22  
 13:39:00

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

Intersection # 8 forthill/goodwill/north/sat  
 =====

Begin Time	N-Approach			E-Approach			S-Approach			W-Approach			Int Total
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
1100	28	0	4	0	0	4	4	0	32	0	0	16	88
1115	24	0	4	4	0	12	0	0	16	12	0	8	80
1130	20	0	4	0	0	0	0	0	28	4	0	8	64
1145	44	0	4	4	0	4	0	0	28	0	0	24	108
1200	44	0	4	4	0	16	0	0	16	8	0	20	112
1215	36	0	0	4	0	4	4	0	24	8	0	8	88
1230	16	0	4	4	0	4	0	0	36	8	0	12	84
1245	36	0	4	4	0	0	4	0	32	0	0	8	88
1300	40	0	4	0	0	12	8	0	28	12	0	12	116
1315	36	0	16	4	0	0	4	0	8	0	0	0	68
1330	12	0	8	8	0	8	4	0	20	0	0	28	88
1345	36	0	4	12	0	4	12	0	32	8	0	0	108

=====

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

Intersection # 8 forthill/goodwill/north/sat  
 =====

Begin Time	Approach Totals				Exit Totals				Int Total
	N	E	S	W	N	E	S	W	
1100	32	4	36	16	16	8	4	60	88
1115	28	16	16	20	12	4	24	40	80
1130	24	0	28	12	8	4	4	48	64
1145	48	8	28	24	28	4	4	72	108
1200	48	20	16	28	24	4	24	60	112
1215	36	8	28	16	12	4	12	60	88
1230	20	8	36	20	16	4	12	52	84
1245	40	4	36	8	12	8	0	68	88
1300	44	12	36	24	12	12	24	68	116
1315	52	4	12	0	4	20	0	44	68
1330	20	16	24	28	36	12	8	32	88
1345	40	16	44	8	12	16	12	68	108

=====

Naperville, IL Weather: Cold and Dry  
 Fort Hill Dr and Goodwill and Car Dealer North Access  
 Saturday January 8, 2022

01/10/22  
 13:39:00

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

Intersection # 8 forthill/goodwill/north/sat

Begin Time	N-Approach			E-Approach			S-Approach			W-Approach			Int Total
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
1100	29	0	4	2	0	5	1	0	26	4	0	14	85
1115	33	0	4	3	0	8	0	0	22	6	0	15	91
1130	36	0	3	3	0	6	1	0	24	5	0	15	93
1145	35	0	3	4	0	7	1	0	26	6	0	16	98
1200	33	0	3	4	0	6	2	0	27	6	0	12	93
1215	32	0	3	3	0	5	4	0	30	7	0	10	94
1230	32	0	7	3	0	4	4	0	26	5	0	8	89
1245	31	0	8	4	0	5	5	0	22	3	0	12	90
1300	31	0	8	6	0	6	7	0	22	5	0	10	95
1315	21	0	7	6	0	3	5	0	15	2	0	7	66*
1330	12	0	3	5	0	3	4	0	13	2	0	7	49*
1345	9	0	1	3	0	1	3	0	8	2	0	0	27*

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

Intersection # 8 forthill/goodwill/north/sat

Begin Time	Approach Totals				Exit Totals				Int Total
	N	E	S	W	N	E	S	W	
1100	33	7	27	18	16	5	9	55	85
1115	37	11	22	21	18	4	14	55	91
1130	39	9	25	20	18	4	11	60	93
1145	38	11	27	22	20	4	13	61	98
1200	36	10	29	18	16	5	12	60	93
1215	35	8	34	17	13	7	12	62	94
1230	39	7	30	13	11	11	9	58	89
1245	39	9	27	15	16	13	8	53	90
1300	39	12	29	15	16	15	11	53	95
1315	28	9	20	9	13	12	5	36	66*
1330	15	8	17	9	12	7	5	25	49*
1345	10	4	11	2	3	4	3	17	27*



# Site Plan

### PUD Development Summary

<b>Total Maximum Building Area</b>	<b>100,935 sf</b>
A	10,000 sf
B	10,000 sf
C	10,000 sf
D	10,000 sf
E	2,400 sf
F	11,150 sf
H	10,000 sf
I	7,000 sf
J	4,000 sf
K	3,500 sf
L	2,400 sf
M	12,272 sf
Lazy Dog	8,213 sf
<b>Building Outside of PUD Boundary:</b>	
N	11,561 sf
O	30,000 sf
P	20,670 sf
Cinema	49,972 sf

EXG. PROP LINE  
PUD BOUNDARY

ROUTE 59  
(55,000 VPD)



Existing Interception Stoplight

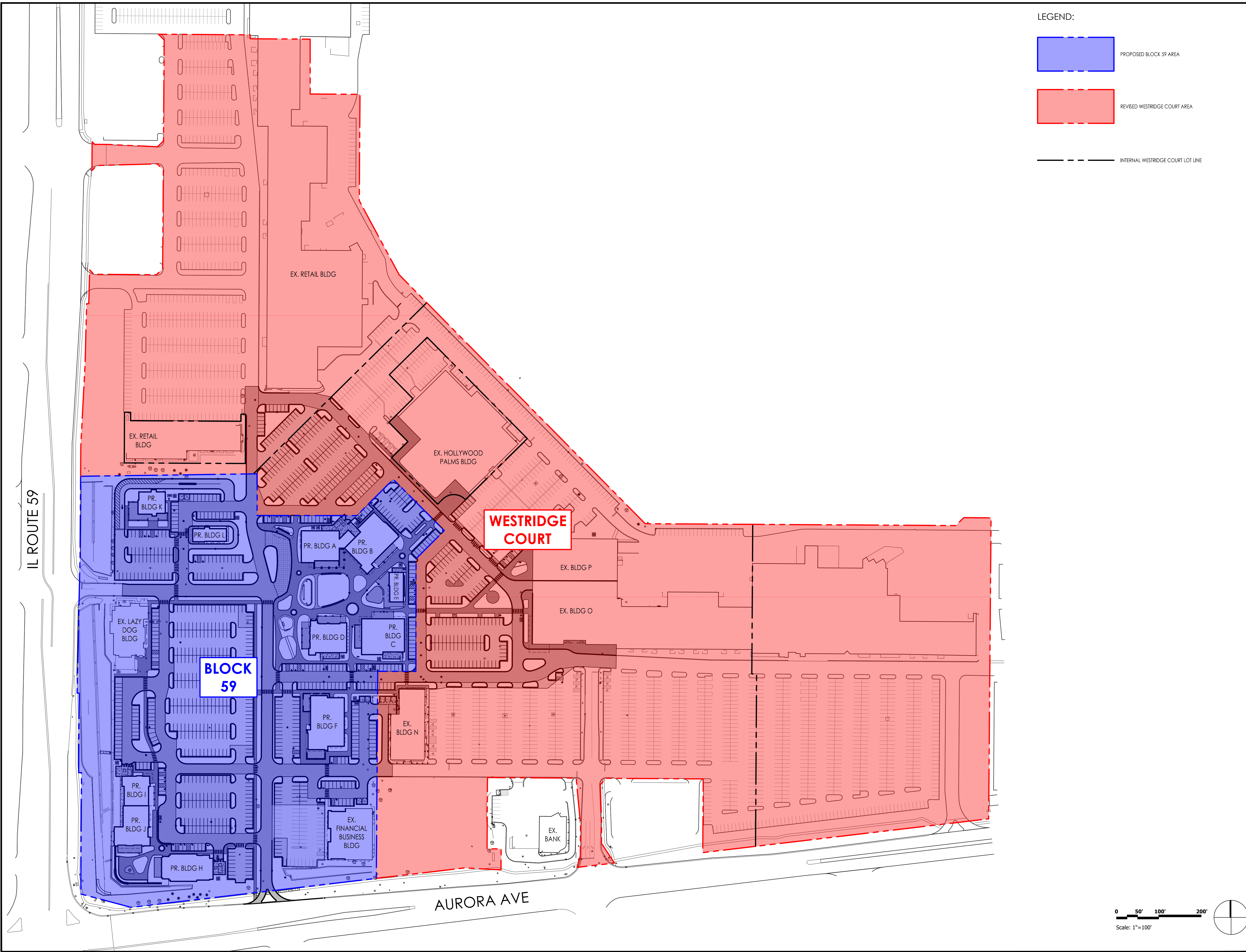
Existing Signalized Access

AURORA AVENUE  
(20,000 VPD)

# Property Plan



User: jamar@nphk File: J:\2021\21\_Brick\_C02 Block 59 - Naperville\09 DESIGN DRAWINGS\03 SHEETS\SITE LOT EXHIBITS - LOCAL.dwg Time: Jun 10, 2022 - 1:33pm



LEGEND:

- PROPOSED BLOCK 59 AREA
- REVISED WESTRIDGE COURT AREA
- INTERNAL WESTRIDGE COURT LOT LINE

# NELSON

Nelco Architecture, Inc.  
a licensed affiliate  
Illinois Design Firm Registration Number: 184003435  
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Vince Duet  
T: 215.825.6620 E: vduet@nelsonww.com

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The Engineering Studio  
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TGRWA Structural Engineers  
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Consultant:			
Description:	No:	By:	Date:
FOR REVIEW	0	RTM	06.10.2022



Client: **Brixmor**  
Property Group  
Block 59  
404 S. State Route 59  
Naperville, IL 60540  
Project Title & Address:

**OVERALL PROPERTY LIMITS EXHIBIT**  
Sheet Title:

Seal:  
Proj. No: 21.0004060.000 Approved By: VPD

Sheet Number: **C1.0**

ALL DIMENSIONS AND CONDITIONS MUST BE CHECKED AND VERIFIED ON SITE BY THE CONTRACTOR AND SUB-CONTRACTORS PRIOR TO PERFORMING THE WORK. THE PROJECT MANAGER SHALL BE NOTIFIED IN WRITING OF ANY DISCREPANCIES PRIOR TO PROCEEDING WITH THE WORK.  
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# CMAP 2050 Projections Letter





Chicago Metropolitan Agency for Planning

433 West Van Buren Street  
Suite 450  
Chicago, IL 60607  
312-454-0400  
cmap.illinois.gov

April 4, 2022

Kelly Pachowicz  
Consultant  
Kenig, Lindgren, O’Hara and Aboona, Inc.  
9575 West Higgins Road  
Suite 400  
Rosemont, IL 60048

**Subject: IL 59 @ Aurora Avenue**  
IDOT

Dear Mr. Pachowicz:

In response to a request made on your behalf and dated April 4, 2022, we have developed year 2050 average daily traffic (ADT) projections for the subject location.

ROAD SEGMENT	Current ADT	Year 2050 ADT
IL 59, from Aurora Ave to Ogden Ave	55,300	58,900
Aurora Ave west of IL 59	19,400	23,700
Aurora Ave east of IL 59	15,800	19,300
Jefferson Ave west of IL 59	9,650	11,800
Jefferson Ave east of IL 59	9,100	11,100

Traffic projections are developed using existing ADT data provided in the request letter and the results from the December 2021 CMAP Travel Demand Analysis. The regional travel model uses CMAP 2050 socioeconomic projections and assumes the implementation of the ON TO 2050 Comprehensive Regional Plan for the Northeastern Illinois area. The provision of this data in support of your request does not constitute a CMAP endorsement of the proposed development or any subsequent developments.

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

Sincerely,

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

cc: Rios (IDOT)  
\\2022\_ForecastTraffic\Naperville\du-18-22\du-18-22.docx

## Level of Service Criteria

LEVEL OF SERVICE CRITERIA

<b>Signalized Intersections</b>		
<b>Level of Service</b>	<b>Interpretation</b>	<b>Average Control Delay (seconds per vehicle)</b>
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
<b>Unsignalized Intersections</b>		
<b>Level of Service</b>	<b>Average Total Delay (SEC/VEH)</b>	
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  
Year 2022 Base Weekday Morning Peak Hour

Lanes, Volumes, Timings  
1: IL 59 & Aurora Avenue

10/03/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations	 	  		  	  		 	  			 	  
Traffic Volume (vph)	107	287	130	37	154	64	127	1901	104	2	48	1236
Future Volume (vph)	107	287	130	37	154	64	127	1901	104	2	48	1236
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	2000	1900	1900	1900	2000
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%				0%
Storage Length (ft)	265		205	320		210	190		395		325	
Storage Lanes	2		1	2		1	2		1		2	
Taper Length (ft)	270			300			300				300	
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00	0.91	0.97	0.91
Ped Bike Factor												
Frt			0.850			0.850			0.850			
Flt Protected	0.950			0.950			0.950				0.950	
Satd. Flow (prot)	3367	5353	1568	3242	5301	1538	3367	5151	1599	0	3372	5056
Flt Permitted	0.950			0.950			0.950				0.950	
Satd. Flow (perm)	3367	5353	1568	3242	5301	1538	3367	5151	1599	0	3372	5056
Right Turn on Red			No			No			No			
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			40				40
Link Distance (ft)		654			559			897				856
Travel Time (s)		9.9			8.5			15.3				14.6
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 (%)	4%	2%	3%	8%	3%	5%	4%	6%	1%	0%	4%	8%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%				0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	118	315	143	41	169	70	140	2089	114	0	55	1358
Turn Type	Prot	NA	pt+ov	Prot	NA	Prot	Prot	NA	pt+ov	Prot	Prot	NA
Protected Phases	7	4	4 5	3	8	8	5	2	2 3	1	1	6
Permitted Phases												
Detector Phase	7	4	4 5	3	8	8	5	2	2 3	1	1	6
Switch Phase												
Minimum Initial (s)	3.0	8.0		3.0	8.0	8.0	3.0	15.0		3.0	3.0	15.0
Minimum Split (s)	9.5	24.0		9.5	24.0	24.0	9.5	24.0		9.5	9.5	24.0
Total Split (s)	17.0	26.0		13.0	22.0	22.0	17.0	88.0		13.0	13.0	84.0
Total Split (%)	12.1%	18.6%		9.3%	15.7%	15.7%	12.1%	62.9%		9.3%	9.3%	60.0%
Yellow Time (s)	3.0	4.5		3.0	4.5	4.5	3.0	4.5		3.0	3.0	4.5
All-Red Time (s)	0.0	1.5		0.0	1.5	1.5	0.0	1.5		0.0	0.0	1.5
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	3.0	6.0		3.0	6.0	6.0	3.0	6.0		3.0	3.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag		Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None		None	None	None	None	C-Min		None	None	C-Min
Act Effct Green (s)	10.3	18.9	33.0	7.2	15.9	15.9	11.1	89.9	100.2		7.7	84.8
Actuated g/C Ratio	0.07	0.14	0.24	0.05	0.11	0.11	0.08	0.64	0.72		0.06	0.61

Lanes, Volumes, Timings  
 1: IL 59 & Aurora Avenue

10/03/2022

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	60
Future Volume (vph)	60
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	210
Storage Lanes	1
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1568
Flt Permitted	
Satd. Flow (perm)	1568
Right Turn on Red	No
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.91
Growth Factor	100%
Heavy Vehicles (%)	3%
Bus Blockages (#/hr)	0
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	66
Turn Type	pt+ov
Protected Phases	6 7
Permitted Phases	
Detector Phase	6 7
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	
Act Effct Green (s)	98.0
Actuated g/C Ratio	0.70

Lanes, Volumes, Timings  
1: IL 59 & Aurora Avenue

10/03/2022

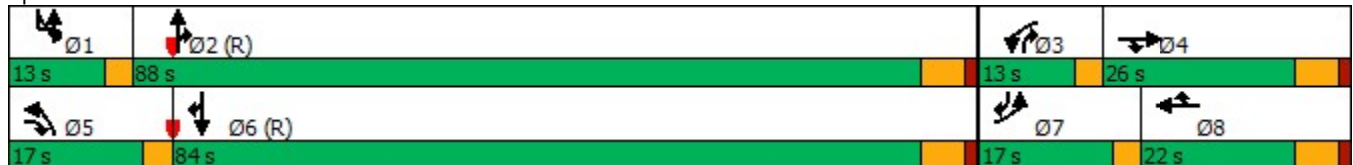


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
v/c Ratio	0.48	0.44	0.39	0.25	0.28	0.40	0.52	0.63	0.10		0.30	0.44
Control Delay	68.4	57.1	47.1	66.8	61.9	69.1	68.7	17.4	7.4		53.6	22.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Total Delay	68.4	57.1	47.1	66.8	61.9	69.1	68.7	17.4	7.4		53.6	22.2
LOS	E	E	D	E	E	E	E	B	A		D	C
Approach Delay		56.9			64.4			19.9				23.1
Approach LOS		E			E			B				C
Queue Length 50th (ft)	54	96	108	18	54	62	64	428	32		25	347
Queue Length 95th (ft)	86	130	170	39	80	118	98	513	57		47	393
Internal Link Dist (ft)		574			479			817				776
Turn Bay Length (ft)	265		205	320		210	190		395		325	
Base Capacity (vph)	336	795	393	231	646	187	336	3308	1175		240	3061
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0		0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0		0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0		0	0
Reduced v/c Ratio	0.35	0.40	0.36	0.18	0.26	0.37	0.42	0.63	0.10		0.23	0.44

Intersection Summary

Area Type:	Other
Cycle Length:	140
Actuated Cycle Length:	140
Offset:	35 (25%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle:	80
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.63
Intersection Signal Delay:	28.1
Intersection LOS:	C
Intersection Capacity Utilization	64.9%
ICU Level of Service	C
Analysis Period (min)	15

Splits and Phases: 1: IL 59 & Aurora Avenue



Lanes, Volumes, Timings  
1: IL 59 & Aurora Avenue

10/03/2022



Lane Group	SBR
v/c Ratio	0.06
Control Delay	16.1
Queue Delay	0.0
Total Delay	16.1
LOS	B
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	35
Queue Length 95th (ft)	70
Internal Link Dist (ft)	
Turn Bay Length (ft)	210
Base Capacity (vph)	1139
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.06
Intersection Summary	

Lanes, Volumes, Timings  
2: IL 59 & Liberty Street/Jefferson Avenue

10/03/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖↗	↑↑	↖	↖↗	↑↑	↖	↖↗	↑↑↑	↖	↖↗	↑↑↑	↖
Traffic Volume (vph)	191	75	26	23	48	55	26	1969	35	70	1307	129
Future Volume (vph)	191	75	26	23	48	55	26	1969	35	70	1307	129
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	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)	240		250	130		145	300		185	200		210
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	115			120			290			275		
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Ped Bike Factor												
Flt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3273	3654	1233	3213	3654	1392	3242	5200	1482	3072	5103	1357
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3273	3654	1233	3213	3654	1392	3242	5200	1482	3072	5103	1357
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		40			30			40			40	
Link Distance (ft)		553			478			968			552	
Travel Time (s)		9.4			10.9			16.5			9.4	
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 (%)	7%	4%	31%	9%	4%	16%	8%	5%	9%	14%	7%	19%
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)	197	77	27	24	49	57	27	2030	36	72	1347	133
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	7	4	5!	3	8	1!	5	2	3	1	6	7
Permitted Phases			4			8			2			6
Detector Phase	7	4	5	3	8	1	5	2	3	1	6	7
Switch Phase												
Minimum Initial (s)	3.0	8.0	3.0	3.0	8.0	3.0	3.0	15.0	3.0	3.0	15.0	3.0
Minimum Split (s)	9.5	24.0	9.5	9.5	24.0	9.5	9.5	24.0	9.5	9.5	24.0	9.5
Total Split (s)	17.0	24.0	12.0	14.0	21.0	12.0	12.0	90.0	14.0	12.0	90.0	17.0
Total Split (%)	12.1%	17.1%	8.6%	10.0%	15.0%	8.6%	8.6%	64.3%	10.0%	8.6%	64.3%	12.1%
Yellow Time (s)	3.0	4.5	3.0	3.0	4.5	3.0	3.0	4.5	3.0	3.0	4.5	3.0
All-Red Time (s)	0.0	1.5	0.0	0.0	1.5	0.0	0.0	1.5	0.0	0.0	1.5	0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	6.0	3.0	3.0	6.0	3.0	3.0	6.0	3.0	3.0	6.0	3.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Min	None	None	C-Min	None
Act Effct Green (s)	13.0	14.8	27.4	6.5	9.4	21.2	6.7	93.7	106.3	8.7	97.4	117.1
Actuated g/C Ratio	0.09	0.11	0.20	0.05	0.07	0.15	0.05	0.67	0.76	0.06	0.70	0.84

Lanes, Volumes, Timings  
 2: IL 59 & Liberty Street/Jefferson Avenue

10/03/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.65	0.20	0.11	0.16	0.20	0.27	0.18	0.58	0.03	0.38	0.38	0.12
Control Delay	71.6	57.4	45.7	66.1	63.3	52.9	96.8	6.1	1.0	68.3	10.3	3.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	71.6	57.4	45.7	66.1	63.3	52.9	96.8	6.1	1.0	68.3	10.3	3.4
LOS	E	E	D	E	E	D	F	A	A	E	B	A
Approach Delay		65.6			59.3			7.2			12.4	
Approach LOS		E			E			A			B	
Queue Length 50th (ft)	90	33	20	10	22	45	12	399	3	32	193	22
Queue Length 95th (ft)	132	60	47	27	44	86	m28	138	1	59	240	42
Internal Link Dist (ft)		473			398			888			472	
Turn Bay Length (ft)	240		250	130		145	300		185	200		210
Base Capacity (vph)	327	469	262	252	391	220	208	3481	1172	209	3551	1138
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.60	0.16	0.10	0.10	0.13	0.26	0.13	0.58	0.03	0.34	0.38	0.12

Intersection Summary

Area Type: Other  
 Cycle Length: 140  
 Actuated Cycle Length: 140  
 Offset: 90 (64%), Referenced to phase 2:NBT and 6:SBT, Start of Green  
 Natural Cycle: 80  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.65  
 Intersection Signal Delay: 15.2 Intersection LOS: B  
 Intersection Capacity Utilization 58.3% ICU Level of Service B  
 Analysis Period (min) 15  
 m Volume for 95th percentile queue is metered by upstream signal.  
 ! Phase conflict between lane groups.

Splits and Phases: 2: IL 59 & Liberty Street/Jefferson Avenue

Ø1	Ø2 (R)	Ø3	Ø4
12 s	90 s	14 s	24 s
Ø5	Ø6 (R)	Ø7	Ø8
12 s	90 s	17 s	21 s

Lanes, Volumes, Timings  
3: IL 59 & Meijer Access Drive

10/03/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	14	3	23	2	4	1	2	24	2015	0	8	1328
Future Volume (vph)	14	3	23	2	4	1	2	24	2015	0	8	1328
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	2000	1900	1900	2000
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	45		0		430		0	300	
Storage Lanes	1		0	1		0		2		1	1	
Taper Length (ft)	25			105				290			190	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.97	0.91	1.00	1.00	0.91
Ped Bike Factor												
Frt		0.867			0.970							
Flt Protected	0.950			0.950				0.950			0.950	
Satd. Flow (prot)	1687	1591	0	1805	1628	0	0	3502	5200	1863	1805	5103
Flt Permitted	0.784							0.950			0.950	
Satd. Flow (perm)	1392	1591	0	1900	1628	0	0	3502	5200	1863	1805	5103
Right Turn on Red			No			No				No		
Satd. Flow (RTOR)												
Link Speed (mph)		25			25				40			40
Link Distance (ft)		348			383				286			968
Travel Time (s)		9.5			10.4				4.9			16.5
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.92	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	7%	0%	4%	0%	0%	66%	0%	0%	5%	2%	0%	7%
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)	15	27	0	2	5	0	0	27	2121	0	8	1398
Turn Type	pm+pt	NA		pm+pt	NA		Prot	Prot	NA	pm+ov	Prot	NA
Protected Phases	7	4		3	8		5	5	2	3	1	6
Permitted Phases	4			8						2		
Detector Phase	7	4		3	8		5	5	2	3	1	6
Switch Phase												
Minimum Initial (s)	3.0	8.0		3.0	8.0		3.0	3.0	15.0	3.0	3.0	15.0
Minimum Split (s)	9.5	24.0		9.5	24.0		9.5	9.5	24.0	9.5	9.5	24.0
Total Split (s)	12.0	17.0		12.0	17.0		13.0	13.0	98.0	12.0	13.0	98.0
Total Split (%)	8.6%	12.1%		8.6%	12.1%		9.3%	9.3%	70.0%	8.6%	9.3%	70.0%
Yellow Time (s)	3.0	4.5		3.0	4.5		3.0	3.0	4.5	3.0	3.0	4.5
All-Red Time (s)	0.0	1.5		0.0	1.5		0.0	0.0	1.5	0.0	0.0	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)	3.0	6.0		3.0	6.0			3.0	6.0	3.0	3.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	None	C-Max	None	None	C-Max
Act Effct Green (s)	12.4	10.0		8.5	8.6			6.6	122.2		6.2	118.2
Actuated g/C Ratio	0.09	0.07		0.06	0.06			0.05	0.87		0.04	0.84



Lanes, Volumes, Timings  
 3: IL 59 & Meijer Access Drive

10/03/2022

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	20
Future Volume (vph)	20
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	420
Storage Lanes	1
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1468
Flt Permitted	
Satd. Flow (perm)	1468
Right Turn on Red	No
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.95
Growth Factor	100%
Heavy Vehicles (%)	10%
Bus Blockages (#/hr)	0
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	21
Turn Type	pm+ov
Protected Phases	7
Permitted Phases	6
Detector Phase	7
Switch Phase	
Minimum Initial (s)	3.0
Minimum Split (s)	9.5
Total Split (s)	12.0
Total Split (%)	8.6%
Yellow Time (s)	3.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	3.0
Lead/Lag	Lead
Lead-Lag Optimize?	Yes
Recall Mode	None
Act Effct Green (s)	128.8
Actuated g/C Ratio	0.92

Lanes, Volumes, Timings  
 3: IL 59 & Meijer Access Drive

10/03/2022

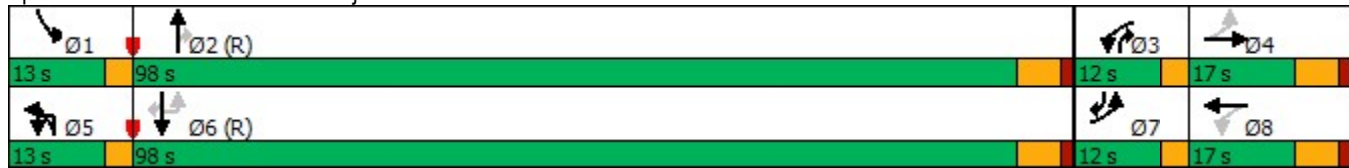


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
v/c Ratio	0.11	0.24		0.02	0.05			0.16	0.47		0.10	0.32
Control Delay	55.4	65.9		55.0	62.2			89.1	1.2		62.1	3.8
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Delay	55.4	65.9		55.0	62.2			89.1	1.2		62.1	3.8
LOS	E	E		D	E			F	A		E	A
Approach Delay		62.1			60.1				2.3			4.1
Approach LOS		E			E				A			A
Queue Length 50th (ft)	13	24		2	4			13	25		7	101
Queue Length 95th (ft)	33	55		10	19			m0	32		m21	125
Internal Link Dist (ft)		268			303				206			888
Turn Bay Length (ft)				45				430			300	
Base Capacity (vph)	160	129		153	127			250	4540		128	4310
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	0.09	0.21		0.01	0.04			0.11	0.47		0.06	0.32

Intersection Summary

Area Type: Other  
 Cycle Length: 140  
 Actuated Cycle Length: 140  
 Offset: 69 (49%), Referenced to phase 2:NBT and 6:SBTU, Start of Green  
 Natural Cycle: 80  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.47  
 Intersection Signal Delay: 3.8  
 Intersection Capacity Utilization 54.4%  
 Analysis Period (min) 15  
 Intersection LOS: A  
 ICU Level of Service A  
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: IL 59 & Meijer Access Drive



Lanes, Volumes, Timings  
3: IL 59 & Meijer Access Drive

10/03/2022



Lane Group	SBR
v/c Ratio	0.02
Control Delay	1.4
Queue Delay	0.0
Total Delay	1.4
LOS	A
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	1
Queue Length 95th (ft)	6
Internal Link Dist (ft)	
Turn Bay Length (ft)	420
Base Capacity (vph)	1352
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.02
Intersection Summary	

Lanes, Volumes, Timings  
4: Fort Hill Drive & Aurora Avenue

10/03/2022

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	41	273	76	38	167	37	55	155	60	16	37	30
Future Volume (vph)	41	273	76	38	167	37	55	155	60	16	37	30
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	110		0	105		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	145			140			85			95		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Fr <sub>t</sub>		0.967			0.973			0.958			0.933	
Fl <sub>t</sub> Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1719	3375	0	1752	3383	0	1805	1758	0	1444	1703	0
Fl <sub>t</sub> Permitted	0.581			0.501			0.581			0.467		
Satd. Flow (perm)	1051	3375	0	924	3383	0	1104	1758	0	710	1703	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		38			28			20			37	
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		558			536			509			341	
Travel Time (s)		8.5			8.1			11.6			7.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	3%	5%	3%	4%	3%	0%	3%	5%	25%	5%	3%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	51	431	0	47	252	0	68	265	0	20	83	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2			6			4			8		
Detector Phase	5	2		1	6		7	4		3	8	
Switch Phase												
Minimum Initial (s)	3.0	15.0		3.0	15.0		3.0	8.0		3.0	8.0	
Minimum Split (s)	9.5	35.0		9.5	36.0		9.5	42.0		9.5	38.0	
Total Split (s)	15.0	39.0		13.0	37.0		13.0	35.0		13.0	35.0	
Total Split (%)	15.0%	39.0%		13.0%	37.0%		13.0%	35.0%		13.0%	35.0%	
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		0.0	1.5		0.0	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		3.5	6.0		3.5	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	C-Min		None	C-Min		None	None		None	None	
Act Effct Green (s)	63.5	56.5		62.6	54.5		27.0	20.7		23.1	15.2	
Actuated g/C Ratio	0.64	0.56		0.63	0.54		0.27	0.21		0.23	0.15	

Lanes, Volumes, Timings  
4: Fort Hill Drive & Aurora Avenue

10/03/2022

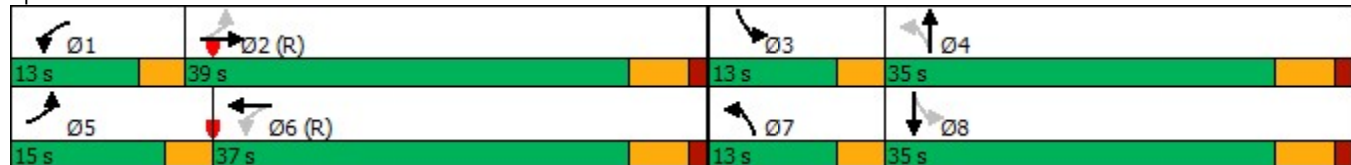


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.07	0.22		0.07	0.14		0.19	0.70		0.09	0.29	
Control Delay	9.4	13.2		9.4	13.1		24.9	43.4		22.7	23.3	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	9.4	13.2		9.4	13.1		24.9	43.4		22.7	23.3	
LOS	A	B		A	B		C	D		C	C	
Approach Delay		12.8			12.5			39.7			23.2	
Approach LOS		B			B			D			C	
Queue Length 50th (ft)	9	60		8	32		35	145		10	28	
Queue Length 95th (ft)	30	114		29	68		48	187		20	53	
Internal Link Dist (ft)		478			456			429			261	
Turn Bay Length (ft)	140			140			110			105		
Base Capacity (vph)	764	1924		675	1857		366	524		249	520	
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	0.07	0.22		0.07	0.14		0.19	0.51		0.08	0.16	

Intersection Summary

Area Type:	Other
Cycle Length:	100
Actuated Cycle Length:	100
Offset:	30 (30%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle:	100
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.70
Intersection Signal Delay:	20.9
Intersection LOS:	C
Intersection Capacity Utilization	42.5%
ICU Level of Service	A
Analysis Period (min)	15

Splits and Phases: 4: Fort Hill Drive & Aurora Avenue



Lanes, Volumes, Timings  
5: Westridge Court Access Drive & Aurora Avenue

10/03/2022

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	46	385	10	4	238	7	6	0	1	4	0	13
Future Volume (vph)	46	385	10	4	238	7	6	0	1	4	0	13
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	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)	270		0	185		160	0		0	85		0
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	190			140			25			80		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3689	1468	1203	3619	1417	1357	1961	1615	1444	1961	1495
Flt Permitted	0.577			0.509			0.950			0.950		
Satd. Flow (perm)	1096	3689	1468	645	3619	1417	1357	1961	1615	1444	1961	1495
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			82			82			511			672
Link Speed (mph)		45			45			25				25
Link Distance (ft)		734			866			285				265
Travel Time (s)		11.1			13.1			7.8				7.2
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	3%	10%	50%	5%	14%	33%	2%	0%	25%	2%	8%
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)	49	414	11	4	256	8	6	0	1	4	0	14
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt		pm+ov	pm+pt		pm+ov
Protected Phases	5	2		1	6		7	4	1	3	8	5
Permitted Phases	2		2	6		6	4		4	8		8
Detector Phase	5	2	2	1	6	6	7	4	1	3	8	5
Switch Phase												
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0	15.0	5.0	8.0	5.0	5.0	8.0	5.0
Minimum Split (s)	9.5	42.5	42.5	9.5	33.5	33.5	9.5	49.5	9.5	9.5	22.5	9.5
Total Split (s)	15.0	87.0	87.0	15.0	87.0	87.0	15.0	23.0	15.0	15.0	23.0	15.0
Total Split (%)	10.7%	62.1%	62.1%	10.7%	62.1%	62.1%	10.7%	16.4%	10.7%	10.7%	16.4%	10.7%
Yellow Time (s)	3.5	4.5	4.5	3.5	4.5	4.5	3.5	4.5	3.5	3.5	4.5	3.5
All-Red Time (s)	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	0.0	0.0	2.0	0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	6.5	6.5	3.5	6.5	6.5	3.5	6.5	3.5	3.5	6.5	3.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None	None	None
Act Effct Green (s)	133.7	134.6	134.6	131.3	125.2	125.2	6.3		5.5	6.2		5.7
Actuated g/C Ratio	0.96	0.96	0.96	0.94	0.89	0.89	0.04		0.04	0.04		0.04

Lanes, Volumes, Timings  
 5: Westridge Court Access Drive & Aurora Avenue

10/03/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.05	0.12	0.01	0.01	0.08	0.01	0.10		0.00	0.06		0.02
Control Delay	0.5	1.4	0.2	0.5	1.4	0.0	67.0		0.0	65.8		0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0
Total Delay	0.5	1.4	0.2	0.5	1.4	0.0	67.0		0.0	65.8		0.1
LOS	A	A	A	A	A	A	E		A	E		A
Approach Delay		1.3			1.4			57.4				14.7
Approach LOS		A			A			E				B
Queue Length 50th (ft)	0	5	0	0	9	0	5		0	4		0
Queue Length 95th (ft)	1	8	m0	1	30	0	21		0	17		0
Internal Link Dist (ft)		654			786			205				185
Turn Bay Length (ft)	270			185		160				85		
Base Capacity (vph)	1109	3547	1415	664	3236	1276	111		601	118		739
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	0.04	0.12	0.01	0.01	0.08	0.01	0.05		0.00	0.03		0.02

Intersection Summary

Area Type: Other  
 Cycle Length: 140  
 Actuated Cycle Length: 140  
 Offset: 106 (76%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green  
 Natural Cycle: 115  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.12  
 Intersection Signal Delay: 2.2 Intersection LOS: A  
 Intersection Capacity Utilization 37.5% ICU Level of Service A  
 Analysis Period (min) 15  
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: Westridge Court Access Drive & Aurora Avenue



HCM 6th TWSC  
6: IL 59 & Heritage Square Access Drive

10/03/2022

Intersection												
Int Delay, s/veh	0.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations			↗			↗	↘	↑↑↑	↗	↘	↑↑↑	↗
Traffic Vol, veh/h	0	0	7	0	0	0	19	2044	11	9	1339	7
Future Vol, veh/h	0	0	7	0	0	0	19	2044	11	9	1339	7
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	-	-	0	255	-	170	365	-	150
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	2	0	2	2	2	0	5	0	11	7	0
Mvmt Flow	0	0	7	0	0	0	20	2174	12	10	1424	7

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	-	-	712	-	-	1087	1431	0	0	2186	0	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	7.1	-	-	7.14	5.3	-	-	5.52	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.9	-	-	3.92	3.1	-	-	3.21	-	-
Pot Cap-1 Maneuver	0	0	*620	0	0	*450	*780	-	-	*550	-	-
Stage 1	0	0	-	0	0	-	-	-	-	-	-	-
Stage 2	0	0	-	0	0	-	-	-	-	-	-	-
Platoon blocked, %			1			1	1	-	-	1	-	-
Mov Cap-1 Maneuver	-	-	*620	-	-	*450	*780	-	-	*550	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB		WB		NB			SB		
HCM Control Delay, s	10.9		0		0.1			0.1		
HCM LOS	B		A							

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	* 780	-	-	620	-	* 550	-	-
HCM Lane V/C Ratio	0.026	-	-	0.012	-	0.017	-	-
HCM Control Delay (s)	9.7	-	-	10.9	0	11.7	-	-
HCM Lane LOS	A	-	-	B	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0	-	0.1	-	-

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



HCM 6th TWSC  
7: IL 59 & Right-In/Right-Out

10/03/2022

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↑	↑↑↑	↑		↑↑↑
Traffic Vol, veh/h	0	2	2039	5	0	1355
Future Vol, veh/h	0	2	2039	5	0	1355
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	-	140	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	0	5	20	2	7
Mvmt Flow	0	2	2241	5	0	1489

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	-	1121	0	0	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	7.1	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	3.9	-	-	-
Pot Cap-1 Maneuver	0	*453	-	-	0
Stage 1	0	-	-	-	0
Stage 2	0	-	-	-	0
Platoon blocked, %		1	-	-	-
Mov Cap-1 Maneuver	-	*453	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBT
Capacity (veh/h)	-	-	453
HCM Lane V/C Ratio	-	-	0.005
HCM Control Delay (s)	-	-	13
HCM Lane LOS	-	-	B
HCM 95th %tile Q(veh)	-	-	0

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

HCM 6th TWSC  
 8: Aurora Avenue & West Right-In/Right-Out

10/03/2022

Intersection												
Int Delay, s/veh	0.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑		↑↑↑				↑			↑
Traffic Vol, veh/h	0	432	7	0	253	4	0	0	9	0	0	2
Future Vol, veh/h	0	432	7	0	253	4	0	0	9	0	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	Free	-	-	None	-	-	Stop
Storage Length	-	-	0	-	-	-	-	-	0	-	-	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	3	0	2	6	0	2	2	22	2	2	0
Mvmt Flow	0	470	8	0	275	4	0	0	10	0	0	2

Major/Minor	Major1		Major2		Minor1		Minor2					
Conflicting Flow All	-	0	0	-	-	0	-	-	235	-	-	138
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	7.34	-	-	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.52	-	-	3.9
Pot Cap-1 Maneuver	0	-	-	0	-	0	0	0	*873	0	0	*881
Stage 1	0	-	-	0	-	0	0	0	-	0	0	-
Stage 2	0	-	-	0	-	0	0	0	-	0	0	-
Platoon blocked, %		-	-	-	-	-	-	-	1			1
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	*873	-	-	*881
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	9.2	9.1
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	SBLn1
Capacity (veh/h)	873	-	-	-	881
HCM Lane V/C Ratio	0.011	-	-	-	0.002
HCM Control Delay (s)	9.2	-	-	-	9.1
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

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

HCM 6th TWSC  
 9: Aurora Avenue & East Right-In/Right-Out

10/03/2022

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑			↑
Traffic Vol, veh/h	0	390	247	5	0	2
Future Vol, veh/h	0	390	247	5	0	2
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	85	85	85	85	85	85
Heavy Vehicles, %	2	3	6	0	2	0
Mvmt Flow	0	459	291	6	0	2

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	-	0	- 0 - 149
Stage 1	-	-	- - -
Stage 2	-	-	- - -
Critical Hdwy	-	-	- - 6.9
Critical Hdwy Stg 1	-	-	- - -
Critical Hdwy Stg 2	-	-	- - -
Follow-up Hdwy	-	-	- - 3.3
Pot Cap-1 Maneuver	0	-	- - 0 *1021
Stage 1	0	-	- - 0 -
Stage 2	0	-	- - 0 -
Platoon blocked, %	-	-	- - 1
Mov Cap-1 Maneuver	-	-	- - *1021
Mov Cap-2 Maneuver	-	-	- - -
Stage 1	-	-	- - -
Stage 2	-	-	- - -

Approach	EB	WB	SB
HCM Control Delay, s	0	0	8.5
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	1021
HCM Lane V/C Ratio	-	-	-	0.002
HCM Control Delay (s)	-	-	-	8.5
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	0

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

HCM 6th TWSC  
 10: Jefferson Avenue & Target Access Drive

10/03/2022

Intersection												
Int Delay, s/veh	1.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↖↗		↖	↖↗		↖	↗		↖	↗	
Traffic Vol, veh/h	14	161	5	1	108	27	0	1	1	10	0	18
Future Vol, veh/h	14	161	5	1	108	27	0	1	1	10	0	18
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	90	-	-	150	-	-	70	-	-	30	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	79	79	79	79	79	79	79	79	79	79	79	79
Heavy Vehicles, %	0	12	0	0	11	4	2	0	0	0	2	6
Mvmt Flow	18	204	6	1	137	34	0	1	1	13	0	23

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	171	0	0	210	0	0	314	416	105	295	402	86
Stage 1	-	-	-	-	-	-	243	243	-	156	156	-
Stage 2	-	-	-	-	-	-	71	173	-	139	246	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.54	6.5	6.9	7.5	6.54	7.02
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.5	-	6.5	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.5	-	6.5	5.54	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.52	4	3.3	3.5	4.02	3.36
Pot Cap-1 Maneuver	1418	-	-	1468	-	-	728	596	*1038	*757	602	943
Stage 1	-	-	-	-	-	-	846	773	-	*836	768	-
Stage 2	-	-	-	-	-	-	931	760	-	*979	766	-
Platoon blocked, %		-	-	1	-	-	1	1	1	1	1	
Mov Cap-1 Maneuver	1418	-	-	1468	-	-	703	587	*1038	*747	594	943
Mov Cap-2 Maneuver	-	-	-	-	-	-	712	611	-	*734	618	-
Stage 1	-	-	-	-	-	-	835	763	-	*825	767	-
Stage 2	-	-	-	-	-	-	908	759	-	*963	756	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.6			0.1			9.7			9.3		
HCM LOS							A			A		

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	-	769	1418	-	-	1468	-	-	734	943
HCM Lane V/C Ratio	-	0.003	0.012	-	-	0.001	-	-	0.017	0.024
HCM Control Delay (s)		0	9.7	7.6	-	-	7.5	-	10	8.9
HCM Lane LOS		A	A	A	-	-	A	-	B	A
HCM 95th %tile Q(veh)		-	0	0	-	-	0	-	0.1	0.1

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

HCM 6th TWSC  
 11: Fort Hill Drive & Westridge Court Access Drive

10/03/2022

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	8	0	14	6	0	3	25	193	15	2	63	6
Future Vol, veh/h	8	0	14	6	0	3	25	193	15	2	63	6
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	68	68	68	68	68	68	68	68	68	68	68	68
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	12	0	21	9	0	4	37	284	22	3	93	9

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	475	484	98	483	477	295	102	0	0	306	0	0
Stage 1	104	104	-	369	369	-	-	-	-	-	-	-
Stage 2	371	380	-	114	108	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	546	509	958	539	514	811	1490	-	-	1268	-	-
Stage 1	902	809	-	695	639	-	-	-	-	-	-	-
Stage 2	693	631	-	891	806	-	-	-	-	-	-	-
Platoon blocked, %	1	1		1	1	1		-	-	1	-	-
Mov Cap-1 Maneuver	529	492	958	514	497	811	1490	-	-	1268	-	-
Mov Cap-2 Maneuver	529	492	-	514	497	-	-	-	-	-	-	-
Stage 1	875	807	-	674	620	-	-	-	-	-	-	-
Stage 2	669	612	-	869	804	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	10.1		11.3		0.8		0.2	
HCM LOS	B		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1490	-	-	740	585	1268	-	-
HCM Lane V/C Ratio	0.025	-	-	0.044	0.023	0.002	-	-
HCM Control Delay (s)	7.5	0	-	10.1	11.3	7.8	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.1	0.1	0	-	-

HCM 6th TWSC  
12: Fort Hill Drive & Goodwill Access Drive

10/03/2022

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	1	0	2	2	0	0	3	181	20	6	67	1
Future Vol, veh/h	1	0	2	2	0	0	3	181	20	6	67	1
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	0	3	3	0	0	4	226	25	8	84	1

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	348	360	85	349	348	239	85	0	0	251	0	0
Stage 1	101	101	-	247	247	-	-	-	-	-	-	-
Stage 2	247	259	-	102	101	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	680	611	974	678	621	880	1512	-	-	1336	-	-
Stage 1	905	811	-	824	733	-	-	-	-	-	-	-
Stage 2	824	723	-	904	811	-	-	-	-	-	-	-
Platoon blocked, %	1	1		1	1	1		-	-	1	-	-
Mov Cap-1 Maneuver	675	605	974	672	616	880	1512	-	-	1336	-	-
Mov Cap-2 Maneuver	675	605	-	672	616	-	-	-	-	-	-	-
Stage 1	902	806	-	821	731	-	-	-	-	-	-	-
Stage 2	821	721	-	896	806	-	-	-	-	-	-	-








































Approach	EB		WB		NB		SB	
HCM Control Delay, s	9.3		10.4		0.1		0.6	
HCM LOS	A		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1512	-	-	849	672	1336	-	-
HCM Lane V/C Ratio	0.002	-	-	0.004	0.004	0.006	-	-
HCM Control Delay (s)	7.4	0	-	9.3	10.4	7.7	0	-
HCM Lane LOS	A	A	-	A	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-

Capacity Analysis Summary Sheets  
Year 2022 Weekday Evening Peak Hour

Lanes, Volumes, Timings  
1: IL 59 & Aurora Avenue

10/03/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations	 	  	 	  	  	 	 	  	 		 	  
Traffic Volume (vph)	237	360	244	228	450	142	257	1434	139	5	185	1991
Future Volume (vph)	237	360	244	228	450	142	257	1434	139	5	185	1991
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	2000	1900	1900	1900	2000
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%				0%
Storage Length (ft)	265		205	320		210	190		395		325	
Storage Lanes	2		1	2		1	2		1		2	
Taper Length (ft)	270			300			300				300	
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00	0.91	0.97	0.91
Ped Bike Factor												
Frt			0.850			0.850			0.850			
Flt Protected	0.950			0.950			0.950				0.950	
Satd. Flow (prot)	3467	5406	1599	3467	5460	1599	3502	5301	1599	0	3468	5353
Flt Permitted	0.950			0.950			0.950				0.950	
Satd. Flow (perm)	3467	5406	1599	3467	5460	1599	3502	5301	1599	0	3468	5353
Right Turn on Red			No			No			No			
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			40				40
Link Distance (ft)		654			559			897				856
Travel Time (s)		9.9			8.5			15.3				14.6
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	1%	0%	1%	0%	3%	1%	0%	1%	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)	249	379	257	240	474	149	271	1509	146	0	200	2096
Turn Type	Prot	NA	pt+ov	Prot	NA	Prot	Prot	NA	pt+ov	Prot	Prot	NA
Protected Phases	7	4	4 5	3	8	8	5	2	2 3	1	1	6
Permitted Phases												
Detector Phase	7	4	4 5	3	8	8	5	2	2 3	1	1	6
Switch Phase												
Minimum Initial (s)	3.0	8.0		3.0	8.0	8.0	3.0	15.0		3.0	3.0	15.0
Minimum Split (s)	9.5	24.0		9.5	24.0	24.0	9.5	24.0		9.5	9.5	24.0
Total Split (s)	21.0	29.0		21.0	29.0	29.0	17.0	73.0		17.0	17.0	73.0
Total Split (%)	15.0%	20.7%		15.0%	20.7%	20.7%	12.1%	52.1%		12.1%	12.1%	52.1%
Yellow Time (s)	3.0	4.5		3.0	4.5	4.5	3.0	4.5		3.0	3.0	4.5
All-Red Time (s)	0.0	1.5		0.0	1.5	1.5	0.0	1.5		0.0	0.0	1.5
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	3.0	6.0		3.0	6.0	6.0	3.0	6.0		3.0	3.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag		Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None		None	None	None	None	C-Min		None	None	C-Min
Act Effct Green (s)	15.0	24.1	40.9	14.8	23.9	23.9	13.8	70.5	88.3		12.6	69.4
Actuated g/C Ratio	0.11	0.17	0.29	0.11	0.17	0.17	0.10	0.50	0.63		0.09	0.50



# Lanes, Volumes, Timings

## 1: IL 59 & Aurora Avenue

10/03/2022

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	283
Future Volume (vph)	283
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	210
Storage Lanes	1
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1615
Flt Permitted	
Satd. Flow (perm)	1615
Right Turn on Red	No
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.95
Growth Factor	100%
Heavy Vehicles (%)	0%
Bus Blockages (#/hr)	0
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	298
Turn Type	pt+ov
Protected Phases	6 7
Permitted Phases	
Detector Phase	6 7
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	
Act Effct Green (s)	87.4
Actuated g/C Ratio	0.62

Lanes, Volumes, Timings  
1: IL 59 & Aurora Avenue

10/03/2022

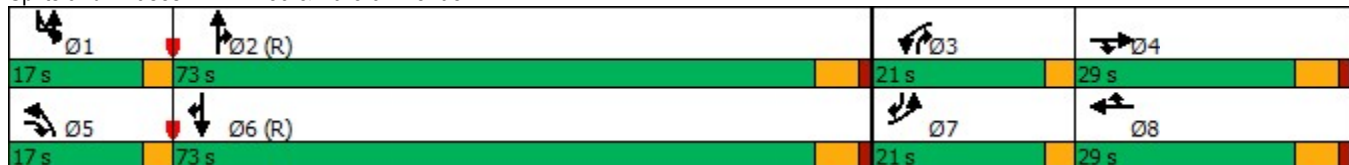


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
v/c Ratio	0.67	0.41	0.55	0.66	0.51	0.55	0.79	0.57	0.14		0.64	0.79
Control Delay	69.1	53.0	47.0	63.0	51.8	57.9	78.3	25.7	11.3		86.2	17.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Total Delay	69.1	53.0	47.0	63.0	51.8	57.9	78.3	25.7	11.3		86.2	17.8
LOS	E	D	D	E	D	E	E	C	B		F	B
Approach Delay		55.8			56.0			32.0				21.8
Approach LOS		E			E			C				C
Queue Length 50th (ft)	113	112	194	110	145	124	126	356	54		85	626
Queue Length 95th (ft)	158	150	295	154	190	206	#187	408	82		m130	540
Internal Link Dist (ft)		574			479			817				776
Turn Bay Length (ft)	265		205	320		210	190		395		325	
Base Capacity (vph)	445	948	462	445	950	278	353	2669	1045		346	2651
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0		0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0		0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0		0	0
Reduced v/c Ratio	0.56	0.40	0.56	0.54	0.50	0.54	0.77	0.57	0.14		0.58	0.79

Intersection Summary

Area Type: Other  
 Cycle Length: 140  
 Actuated Cycle Length: 140  
 Offset: 127 (91%), Referenced to phase 2:NBT and 6:SBT, Start of Green  
 Natural Cycle: 90  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.79  
 Intersection Signal Delay: 34.5 Intersection LOS: C  
 Intersection Capacity Utilization 75.6% 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 59 & Aurora Avenue



Lanes, Volumes, Timings  
1: IL 59 & Aurora Avenue

10/03/2022



Lane Group	SBR
v/c Ratio	0.30
Control Delay	6.8
Queue Delay	0.0
Total Delay	6.8
LOS	A
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	95
Queue Length 95th (ft)	110
Internal Link Dist (ft)	
Turn Bay Length (ft)	210
Base Capacity (vph)	1042
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.29
Intersection Summary	

Lanes, Volumes, Timings  
2: IL 59 & Liberty Street/Jefferson Avenue

10/03/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	282	200	78	147	217	184	1	61	1506	114	122	2213
Future Volume (vph)	282	200	78	147	217	184	1	61	1506	114	122	2213
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	1900	2000	1900	1900	2000
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%				0%			0%
Storage Length (ft)	240		250	130		145		300		185	200	
Storage Lanes	2		1	2		1		2		1	2	
Taper Length (ft)	115			120				290			275	
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.91	0.97	0.91	1.00	0.97	0.91
Ped Bike Factor												
Frt			0.850			0.850				0.850		
Flt Protected	0.950			0.950				0.950			0.950	
Satd. Flow (prot)	3303	3725	1615	3467	3725	1524	0	3434	5353	1615	3303	5353
Flt Permitted	0.950			0.950				0.950			0.950	
Satd. Flow (perm)	3303	3725	1615	3467	3725	1524	0	3434	5353	1615	3303	5353
Right Turn on Red			No			No				No		
Satd. Flow (RTOR)												
Link Speed (mph)		40			30				40			40
Link Distance (ft)		553			478				968			552
Travel Time (s)		9.4			10.9				16.5			9.4
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 (%)	6%	2%	0%	1%	2%	6%	0%	2%	2%	0%	6%	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)	294	208	81	153	226	192	0	65	1569	119	127	2305
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	Prot	NA	pm+ov	Prot	NA
Protected Phases	7	4	5!	3	8	1!	5!	5	2	3	1	6
Permitted Phases			4			8				2		
Detector Phase	7	4	5	3	8	1	5	5	2	3	1	6
Switch Phase												
Minimum Initial (s)	3.0	8.0	3.0	3.0	8.0	3.0	3.0	3.0	15.0	3.0	3.0	15.0
Minimum Split (s)	9.5	24.0	9.5	9.5	24.0	9.5	9.5	9.5	24.0	9.5	9.5	24.0
Total Split (s)	20.0	29.0	13.0	14.0	23.0	14.0	13.0	13.0	83.0	14.0	14.0	84.0
Total Split (%)	14.3%	20.7%	9.3%	10.0%	16.4%	10.0%	9.3%	9.3%	59.3%	10.0%	10.0%	60.0%
Yellow Time (s)	3.0	4.5	3.0	3.0	4.5	3.0	3.0	3.0	4.5	3.0	3.0	4.5
All-Red Time (s)	0.0	1.5	0.0	0.0	1.5	0.0	0.0	0.0	1.5	0.0	0.0	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	6.0	3.0	3.0	6.0	3.0		3.0	6.0	3.0	3.0	6.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	C-Min	None	None	C-Min
Act Effct Green (s)	16.0	20.9	34.9	10.3	15.2	31.2		8.0	80.9	97.2	10.0	82.8
Actuated g/C Ratio	0.11	0.15	0.25	0.07	0.11	0.22		0.06	0.58	0.69	0.07	0.59

Lanes, Volumes, Timings  
 2: IL 59 & Liberty Street/Jefferson Avenue

10/03/2022

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	184
Future Volume (vph)	184
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	210
Storage Lanes	1
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1495
Flt Permitted	
Satd. Flow (perm)	1495
Right Turn on Red	No
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.96
Growth Factor	100%
Heavy Vehicles (%)	8%
Bus Blockages (#/hr)	0
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	192
Turn Type	pm+ov
Protected Phases	7
Permitted Phases	6
Detector Phase	7
Switch Phase	
Minimum Initial (s)	3.0
Minimum Split (s)	9.5
Total Split (s)	20.0
Total Split (%)	14.3%
Yellow Time (s)	3.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	3.0
Lead/Lag	Lead
Lead-Lag Optimize?	Yes
Recall Mode	None
Act Effct Green (s)	104.8
Actuated g/C Ratio	0.75

Lanes, Volumes, Timings  
 2: IL 59 & Liberty Street/Jefferson Avenue

10/03/2022

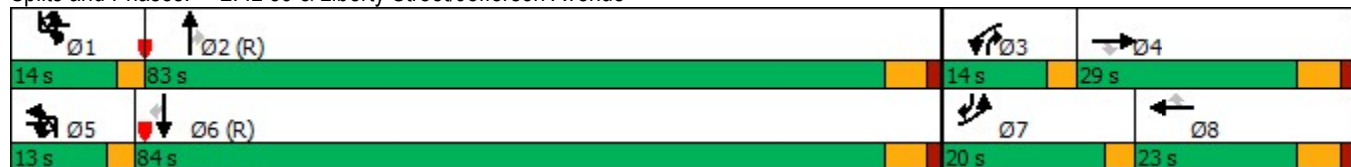


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
v/c Ratio	0.78	0.38	0.20	0.60	0.56	0.57		0.33	0.51	0.11	0.54	0.73
Control Delay	75.1	55.3	41.8	73.0	64.6	55.0		81.4	6.1	3.7	71.4	22.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Delay	75.1	55.3	41.8	73.0	64.6	55.0		81.4	6.1	3.7	71.4	22.9
LOS	E	E	D	E	E	E		F	A	A	E	C
Approach Delay		63.4			63.6				8.7			24.0
Approach LOS		E			E				A			C
Queue Length 50th (ft)	135	90	58	70	104	155		31	68	13	58	542
Queue Length 95th (ft)	187	130	101	108	147	235		57	65	18	93	636
Internal Link Dist (ft)		473			398				888			472
Turn Bay Length (ft)	240		250	130		145		300		185	200	
Base Capacity (vph)	401	611	424	272	452	350		245	3091	1128	259	3166
Starvation Cap Reductn	0	0	0	0	0	0		0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0		0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0		0	0	0	0	0
Reduced v/c Ratio	0.73	0.34	0.19	0.56	0.50	0.55		0.27	0.51	0.11	0.49	0.73

Intersection Summary

Area Type: Other  
 Cycle Length: 140  
 Actuated Cycle Length: 140  
 Offset: 74 (53%), Referenced to phase 2:NBT and 6:SBT, Start of Green  
 Natural Cycle: 90  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.78  
 Intersection Signal Delay: 27.4  
 Intersection Capacity Utilization 75.3%  
 Analysis Period (min) 15  
 ! Phase conflict between lane groups.

Splits and Phases: 2: IL 59 & Liberty Street/Jefferson Avenue



Lanes, Volumes, Timings  
2: IL 59 & Liberty Street/Jefferson Avenue

10/03/2022



Lane Group	SBR
v/c Ratio	0.17
Control Delay	5.9
Queue Delay	0.0
Total Delay	5.9
LOS	A
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	45
Queue Length 95th (ft)	78
Internal Link Dist (ft)	
Turn Bay Length (ft)	210
Base Capacity (vph)	1130
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.17
Intersection Summary	

Lanes, Volumes, Timings  
3: IL 59 & Meijer Access Drive

10/03/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	67	12	92	76	24	51	6	112	1563	45	1	49
Future Volume (vph)	67	12	92	76	24	51	6	112	1563	45	1	49
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	2000	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%				0%			
Storage Length (ft)	0		0	45		0		430		0		300
Storage Lanes	1		0	1		0		2		1		1
Taper Length (ft)	25			105				290				190
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.97	0.91	1.00	0.91	1.00
Ped Bike Factor												
Frt		0.867			0.898					0.850		
Flt Protected	0.950			0.950				0.950				0.950
Satd. Flow (prot)	1805	1647	0	1805	1706	0	0	3469	5301	1615	0	1805
Flt Permitted	0.706			0.573				0.950				0.317
Satd. Flow (perm)	1341	1647	0	1089	1706	0	0	3469	5301	1615	0	602
Right Turn on Red			No			No				No		
Satd. Flow (RTOR)												
Link Speed (mph)		25			25				40			
Link Distance (ft)		348			383				286			
Travel Time (s)		9.5			10.4				4.9			
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%	1%	3%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%				0%			
Shared Lane Traffic (%)												
Lane Group Flow (vph)	69	107	0	78	78	0	0	121	1611	46	0	52
Turn Type	pm+pt	NA		pm+pt	NA		Prot	Prot	NA	pm+ov	Perm	Prot
Protected Phases	7	4		3	8		5	5	2	3		1
Permitted Phases	4			8						2	6	
Detector Phase	7	4		3	8		5	5	2	3	6	1
Switch Phase												
Minimum Initial (s)	3.0	8.0		3.0	8.0		3.0	3.0	15.0	3.0	15.0	3.0
Minimum Split (s)	9.5	24.0		9.5	24.0		9.5	9.5	24.0	9.5	24.0	9.5
Total Split (s)	15.0	21.0		15.0	21.0		14.0	14.0	90.0	15.0	90.0	14.0
Total Split (%)	10.7%	15.0%		10.7%	15.0%		10.0%	10.0%	64.3%	10.7%	64.3%	10.0%
Yellow Time (s)	3.0	4.5		3.0	4.5		3.0	3.0	4.5	3.0	4.5	3.0
All-Red Time (s)	0.0	1.5		0.0	1.5		0.0	0.0	1.5	0.0	1.5	0.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0	0.0		0.0
Total Lost Time (s)	3.0	6.0		3.0	6.0			3.0	6.0	3.0		3.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lead	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	None	C-Max	None	C-Max	None
Act Effct Green (s)	26.7	14.2		27.6	14.6			9.7	85.2	101.2		12.6
Actuated g/C Ratio	0.19	0.10		0.20	0.10			0.07	0.61	0.72		0.09



Lanes, Volumes, Timings  
 3: IL 59 & Meijer Access Drive

10/03/2022



Lane Group	SBT	SBR
Lane Configurations	↑↑↑↑	↑
Traffic Volume (vph)	2305	84
Future Volume (vph)	2305	84
Ideal Flow (vphpl)	2000	1900
Lane Width (ft)	12	12
Grade (%)	0%	
Storage Length (ft)		420
Storage Lanes		1
Taper Length (ft)		
Lane Util. Factor	0.91	1.00
Ped Bike Factor		
Frt		0.850
Flt Protected		
Satd. Flow (prot)	5353	1615
Flt Permitted		
Satd. Flow (perm)	5353	1615
Right Turn on Red		No
Satd. Flow (RTOR)		
Link Speed (mph)	40	
Link Distance (ft)	968	
Travel Time (s)	16.5	
Confl. Peds. (#/hr)		
Confl. Bikes (#/hr)		
Peak Hour Factor	0.97	0.97
Growth Factor	100%	100%
Heavy Vehicles (%)	2%	0%
Bus Blockages (#/hr)	0	0
Parking (#/hr)		
Mid-Block Traffic (%)	0%	
Shared Lane Traffic (%)		
Lane Group Flow (vph)	2376	87
Turn Type	NA	pm+ov
Protected Phases	6	7
Permitted Phases		6
Detector Phase	6	7
Switch Phase		
Minimum Initial (s)	15.0	3.0
Minimum Split (s)	24.0	9.5
Total Split (s)	90.0	15.0
Total Split (%)	64.3%	10.7%
Yellow Time (s)	4.5	3.0
All-Red Time (s)	1.5	0.0
Lost Time Adjust (s)	0.0	0.0
Total Lost Time (s)	6.0	3.0
Lead/Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes
Recall Mode	C-Max	None
Act Effct Green (s)	88.1	103.6
Actuated g/C Ratio	0.63	0.74

Lanes, Volumes, Timings  
3: IL 59 & Meijer Access Drive

10/03/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
v/c Ratio	0.24	0.64		0.29	0.44			0.50	0.50	0.04		0.96
Control Delay	45.9	78.3		47.0	66.6			56.7	33.6	9.7		168.7
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0	0.0		0.0
Total Delay	45.9	78.3		47.0	66.6			56.7	33.6	9.7		168.7
LOS	D	E		D	E			E	C	A		F
Approach Delay		65.6			56.8				34.6			
Approach LOS		E			E				C			
Queue Length 50th (ft)	51	94		57	67			56	496	15		~53
Queue Length 95th (ft)	93	161		104	123			90	550	m30		m#97
Internal Link Dist (ft)		268			303				206			
Turn Bay Length (ft)				45				430				300
Base Capacity (vph)	314	179		286	189			272	3227	1190		54
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	0.22	0.60		0.27	0.41			0.44	0.50	0.04		0.96

Intersection Summary

Area Type: Other  
 Cycle Length: 140  
 Actuated Cycle Length: 140  
 Offset: 77 (55%), Referenced to phase 2:NBT and 6:SBTU, Start of Green  
 Natural Cycle: 90  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.96  
 Intersection Signal Delay: 22.9 Intersection LOS: C  
 Intersection Capacity Utilization 69.9% ICU Level of Service C  
 Analysis Period (min) 15  
 ~ Volume exceeds capacity, queue is theoretically infinite.  
 Queue shown is maximum after two cycles.  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.  
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: IL 59 & Meijer Access Drive



Lanes, Volumes, Timings  
 3: IL 59 & Meijer Access Drive

10/03/2022



Lane Group	SBT	SBR
v/c Ratio	0.71	0.07
Control Delay	6.4	1.8
Queue Delay	0.0	0.0
Total Delay	6.4	1.8
LOS	A	A
Approach Delay	9.6	
Approach LOS	A	
Queue Length 50th (ft)	113	5
Queue Length 95th (ft)	118	m6
Internal Link Dist (ft)	888	
Turn Bay Length (ft)		420
Base Capacity (vph)	3368	1223
Starvation Cap Reductn	36	0
Spillback Cap Reductn	0	0
Storage Cap Reductn	0	0
Reduced v/c Ratio	0.71	0.07

Intersection Summary

Lanes, Volumes, Timings  
4: Fort Hill Drive & Aurora Avenue

10/03/2022

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	113	319	121	72	563	86	47	185	80	83	444	64
Future Volume (vph)	113	319	121	72	563	86	47	185	80	83	444	64
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	110		0	105		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	145			140			85			95		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Fr <sub>t</sub>		0.959			0.980			0.955			0.981	
Fl <sub>t</sub> Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3453	0	1805	3507	0	1805	1797	0	1787	1825	0
Fl <sub>t</sub> Permitted	0.271			0.451			0.145			0.420		
Satd. Flow (perm)	505	3453	0	857	3507	0	276	1797	0	790	1825	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		44			15			19				6
Link Speed (mph)		45			45			30				30
Link Distance (ft)		558			536			509				341
Travel Time (s)		8.5			8.1			11.6				7.8
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	0%	1%	0%	1%	0%	0%	1%	1%	1%	2%	3%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%				0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	119	463	0	76	684	0	49	279	0	87	534	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2			6			4			8		
Detector Phase	5	2		1	6		7	4		3	8	
Switch Phase												
Minimum Initial (s)	3.0	15.0		3.0	15.0		3.0	8.0		3.0	8.0	
Minimum Split (s)	9.5	35.0		9.5	36.0		9.5	42.0		9.5	38.0	
Total Split (s)	14.0	37.0		23.0	46.0		16.0	44.0		16.0	44.0	
Total Split (%)	11.7%	30.8%		19.2%	38.3%		13.3%	36.7%		13.3%	36.7%	
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		0.0	1.5		0.0	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		3.5	6.0		3.5	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	C-Min		None	C-Min		None	None		None	None	
Act Effct Green (s)	59.5	49.1		57.0	46.3		47.0	36.7		49.6	39.6	
Actuated g/C Ratio	0.50	0.41		0.48	0.39		0.39	0.31		0.41	0.33	

Lanes, Volumes, Timings  
4: Fort Hill Drive & Aurora Avenue

10/03/2022

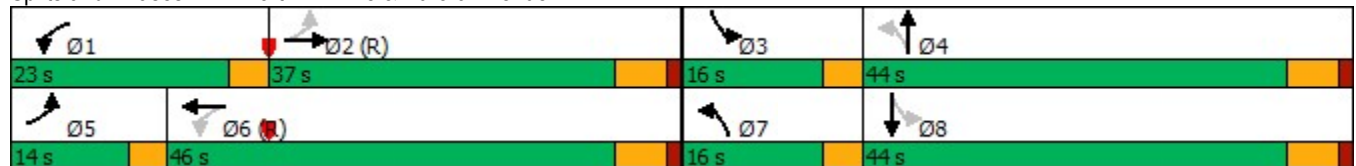


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.34	0.32		0.16	0.50		0.24	0.50		0.22	0.88	
Control Delay	20.1	24.9		18.1	30.8		20.4	34.0		20.0	54.4	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	20.1	24.9		18.1	30.8		20.4	34.0		20.0	54.4	
LOS	C	C		B	C		C	C		C	D	
Approach Delay		23.9			29.5			32.0			49.6	
Approach LOS		C			C			C			D	
Queue Length 50th (ft)	51	124		31	221		20	154		37	372	
Queue Length 95th (ft)	88	177		61	287		43	242		67	#571	
Internal Link Dist (ft)		478			456			429			261	
Turn Bay Length (ft)	140			140			110			105		
Base Capacity (vph)	363	1438		593	1370		276	608		442	621	
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	0.33	0.32		0.13	0.50		0.18	0.46		0.20	0.86	

Intersection Summary

Area Type: Other  
 Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 54 (45%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green  
 Natural Cycle: 100  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.88  
 Intersection Signal Delay: 33.9  
 Intersection LOS: C  
 Intersection Capacity Utilization 71.8%  
 ICU Level of Service C  
 Analysis Period (min) 15  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

Splits and Phases: 4: Fort Hill Drive & Aurora Avenue



Lanes, Volumes, Timings  
5: Westridge Court Access Drive & Aurora Avenue

10/03/2022

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	127	483	33	55	580	39	56	13	33	37	24	135
Future Volume (vph)	127	483	33	55	580	39	56	13	33	37	24	135
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	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)	270		0	185		160	0		0	85		0
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	190			140			25			80		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3762	1568	1736	3762	1615	1805	2000	1615	1805	1923	1599
Flt Permitted	0.394			0.462			0.784			0.526		
Satd. Flow (perm)	749	3762	1568	844	3762	1615	1490	2000	1615	999	1923	1599
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			82			82			55			144
Link Speed (mph)		45			45			25				25
Link Distance (ft)		734			866			285				265
Travel Time (s)		11.1			13.1			7.8				7.2
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 (%)	0%	1%	3%	4%	1%	0%	0%	0%	0%	0%	4%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%				0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	135	514	35	59	617	41	60	14	35	39	26	144
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov
Protected Phases	5	2		1	6		7	4	1	3	8	5
Permitted Phases	2		2	6		6	4		4	8		8
Detector Phase	5	2	2	1	6	6	7	4	1	3	8	5
Switch Phase												
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0	15.0	5.0	8.0	5.0	5.0	8.0	5.0
Minimum Split (s)	9.5	42.5	42.5	9.5	33.5	33.5	9.5	49.5	9.5	9.5	22.5	9.5
Total Split (s)	24.0	70.0	70.0	24.0	70.0	70.0	18.0	28.0	24.0	18.0	28.0	24.0
Total Split (%)	17.1%	50.0%	50.0%	17.1%	50.0%	50.0%	12.9%	20.0%	17.1%	12.9%	20.0%	17.1%
Yellow Time (s)	3.5	4.5	4.5	3.5	4.5	4.5	3.5	4.5	3.5	3.5	4.5	3.5
All-Red Time (s)	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	0.0	0.0	2.0	0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	6.5	6.5	3.5	6.5	6.5	3.5	6.5	3.5	3.5	6.5	3.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None	None	None
Act Effct Green (s)	113.6	105.1	105.1	110.3	100.7	100.7	16.0	10.0	14.3	17.5	9.5	18.0
Actuated g/C Ratio	0.81	0.75	0.75	0.79	0.72	0.72	0.11	0.07	0.10	0.12	0.07	0.13

Lanes, Volumes, Timings  
 5: Westridge Court Access Drive & Aurora Avenue

10/03/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.20	0.18	0.03	0.08	0.23	0.03	0.31	0.10	0.16	0.20	0.20	0.44
Control Delay	8.7	13.8	3.1	4.5	8.7	0.1	56.4	60.8	6.2	50.1	64.7	11.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	8.7	13.8	3.1	4.5	8.7	0.1	56.4	60.8	6.2	50.1	64.7	11.3
LOS	A	B	A	A	A	A	E	E	A	D	E	B
Approach Delay		12.3			7.9			40.8			25.2	
Approach LOS		B			A			D			C	
Queue Length 50th (ft)	56	173	1	11	112	0	53	12	0	30	23	0
Queue Length 95th (ft)	75	132	m6	26	165	1	86	35	16	61	54	58
Internal Link Dist (ft)		654			786			205			185	
Turn Bay Length (ft)	270			185		160				85		
Base Capacity (vph)	770	2824	1197	824	2706	1184	249	307	369	255	295	462
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.18	0.18	0.03	0.07	0.23	0.03	0.24	0.05	0.09	0.15	0.09	0.31

Intersection Summary

Area Type: Other  
 Cycle Length: 140  
 Actuated Cycle Length: 140  
 Offset: 73 (52%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green  
 Natural Cycle: 115  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.44  
 Intersection Signal Delay: 13.8 Intersection LOS: B  
 Intersection Capacity Utilization 46.2% ICU Level of Service A  
 Analysis Period (min) 15  
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: Westridge Court Access Drive & Aurora Avenue



HCM 6th TWSC  
6: IL 59 & Heritage Square Access Drive

10/03/2022

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	0	0	82	0	0	21	52	1714	52	31	2382	66
Future Vol, veh/h	0	0	82	0	0	21	52	1714	52	31	2382	66
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	-	-	0	255	-	170	365	-	150
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	2	2	0	2	2	0	0	2	0	0	2	2
Mvmt Flow	0	0	85	0	0	22	54	1767	54	32	2456	68

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	-	-	1228	-	-	884	2524	0	0	1821	0	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	7.1	-	-	7.1	5.3	-	-	5.3	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.9	-	-	3.9	3.1	-	-	3.1	-	-
Pot Cap-1 Maneuver	0	0	*360	0	0	*527	*453	-	-	*663	-	-
Stage 1	0	0	-	0	0	-	-	-	-	-	-	-
Stage 2	0	0	-	0	0	-	-	-	-	-	-	-
Platoon blocked, %			1			1	1	-	-	1	-	-
Mov Cap-1 Maneuver	-	-	*360	-	-	*527	*453	-	-	*663	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	18	12.1	0.4	0.1
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	*453	-	-	360	527	*663	-	-
HCM Lane V/C Ratio	0.118	-	-	0.235	0.041	0.048	-	-
HCM Control Delay (s)	14	-	-	18	12.1	10.7	-	-
HCM Lane LOS	B	-	-	C	B	B	-	-
HCM 95th %tile Q(veh)	0.4	-	-	0.9	0.1	0.2	-	-

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



HCM 6th TWSC  
7: IL 59 & Right-In/Right-Out

10/03/2022

Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗	↗↗↗	↗		↗↗↗
Traffic Vol, veh/h	0	34	1692	43	0	2479
Future Vol, veh/h	0	34	1692	43	0	2479
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	-	140	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	0	2	0	0	2
Mvmt Flow	0	35	1763	45	0	2582

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	-	882	0	0	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	7.1	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	3.9	-	-	-
Pot Cap-1 Maneuver	0	*527	-	-	0
Stage 1	0	-	-	-	0
Stage 2	0	-	-	-	0
Platoon blocked, %	-	1	-	-	-
Mov Cap-1 Maneuver	-	*527	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.3	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBT
Capacity (veh/h)	-	-	527
HCM Lane V/C Ratio	-	-	0.067
HCM Control Delay (s)	-	-	12.3
HCM Lane LOS	-	-	B
HCM 95th %tile Q(veh)	-	-	0.2

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

HCM 6th TWSC  
 8: Aurora Avenue & West Right-In/Right-Out

10/03/2022

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	0	593	91	0	763	8	0	0	50	0	0	57
Future Vol, veh/h	0	593	91	0	763	8	0	0	50	0	0	57
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	-	-	Free	-	-	None	-	-	Stop
Storage Length	-	-	0	-	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	1	2	2	0	0	2	2	6	2	2	0
Mvmt Flow	0	631	97	0	812	9	0	0	53	0	0	61

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	-	-	316	-	-	406
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	7.02	-	-	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.36	-	-	3.9
Pot Cap-1 Maneuver	0	-	-	0	-	0	0	0	*850	0	0	*751
Stage 1	0	-	-	0	-	0	0	0	-	0	0	-
Stage 2	0	-	-	0	-	0	0	0	-	0	0	-
Platoon blocked, %	-	-	-	-	-	-	-	-	1	-	-	1
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	*850	-	-	*751
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	0		0		9.5		10.2	
HCM LOS					A		B	

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	SBLn1
Capacity (veh/h)	850	-	-	-	751
HCM Lane V/C Ratio	0.063	-	-	-	0.081
HCM Control Delay (s)	9.5	-	-	-	10.2
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.2	-	-	-	0.3

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

HCM 6th TWSC  
 9: Aurora Avenue & East Right-In/Right-Out

10/03/2022

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑			↑
Traffic Vol, veh/h	0	553	652	22	0	22
Future Vol, veh/h	0	553	652	22	0	22
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	90	90	90	90	90	90
Heavy Vehicles, %	2	1	1	0	2	0
Mvmt Flow	0	614	724	24	0	24

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

Approach	EB	WB	SB
HCM Control Delay, s	0	0	9.5
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	827
HCM Lane V/C Ratio	-	-	-	0.03
HCM Control Delay (s)	-	-	-	9.5
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	0.1

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

HCM 6th TWSC  
 10: Jefferson Avenue & Target Access Drive

10/03/2022

Intersection												
Int Delay, s/veh	5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↖↗		↖	↖↗		↖	↗		↖	↗	
Traffic Vol, veh/h	104	241	91	40	330	82	53	12	43	86	15	165
Future Vol, veh/h	104	241	91	40	330	82	53	12	43	86	15	165
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	90	-	-	150	-	-	70	-	-	30	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	1	4	0	0	5	2	0	0	0	0	7	0
Mvmt Flow	109	254	96	42	347	86	56	13	45	91	16	174

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	433	0	0	350	0	0	786	1037	175	826	1042	217
Stage 1	-	-	-	-	-	-	520	520	-	474	474	-
Stage 2	-	-	-	-	-	-	266	517	-	352	568	-
Critical Hdwy	4.12	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.64	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.64	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.64	-
Follow-up Hdwy	2.21	-	-	2.2	-	-	3.5	4	3.3	3.5	4.07	3.3
Pot Cap-1 Maneuver	1130	-	-	1380	-	-	372	274	*993	345	261	794
Stage 1	-	-	-	-	-	-	646	623	-	545	544	-
Stage 2	-	-	-	-	-	-	722	537	-	827	575	-
Platoon blocked, %		-	-	1	-	-	1	1	1	1	1	
Mov Cap-1 Maneuver	1130	-	-	1380	-	-	254	241	*993	290	229	794
Mov Cap-2 Maneuver	-	-	-	-	-	-	333	322	-	384	333	-
Stage 1	-	-	-	-	-	-	584	563	-	493	528	-
Stage 2	-	-	-	-	-	-	531	521	-	697	520	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	2			0.7			14.3			13.6		
HCM LOS							B			B		

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	333	683	1130	-	-	1380	-	-	384	712
HCM Lane V/C Ratio	0.168	0.085	0.097	-	-	0.031	-	-	0.236	0.266
HCM Control Delay (s)	18	10.8	8.5	-	-	7.7	-	-	17.2	11.9
HCM Lane LOS	C	B	A	-	-	A	-	-	C	B
HCM 95th %tile Q(veh)	0.6	0.3	0.3	-	-	0.1	-	-	0.9	1.1

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

HCM 6th TWSC  
 11: Fort Hill Drive & Westridge Court Access Drive

10/03/2022

Intersection												
Int Delay, s/veh	3.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	30	0	77	12	1	14	55	317	12	2	502	30
Future Vol, veh/h	30	0	77	12	1	14	55	317	12	2	502	30
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	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	32	0	83	13	1	15	59	341	13	2	540	32

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1034	1032	556	1068	1042	348	572	0	0	354	0	0
Stage 1	560	560	-	466	466	-	-	-	-	-	-	-
Stage 2	474	472	-	602	576	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	201	216	531	187	211	*816	1001	-	-	*1221	-	-
Stage 1	513	511	-	661	596	-	-	-	-	-	-	-
Stage 2	652	591	-	486	502	-	-	-	-	-	-	-
Platoon blocked, %	1	1		1	1	1		-	-	1	-	-
Mov Cap-1 Maneuver	185	200	531	149	196	*816	1001	-	-	*1221	-	-
Mov Cap-2 Maneuver	185	200	-	149	196	-	-	-	-	-	-	-
Stage 1	476	510	-	612	552	-	-	-	-	-	-	-
Stage 2	592	548	-	409	501	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	20.4		20.4		1.3		0	
HCM LOS	C		C					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1001	-	-	348	263	*1221	-	-
HCM Lane V/C Ratio	0.059	-	-	0.331	0.11	0.002	-	-
HCM Control Delay (s)	8.8	0	-	20.4	20.4	8	0	-
HCM Lane LOS	A	A	-	C	C	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	1.4	0.4	0	-	-

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

HCM 6th TWSC  
12: Fort Hill Drive & Goodwill Access Drive

10/03/2022

Intersection												
Int Delay, s/veh	1.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	1	7	9	0	6	11	347	3	1	518	19
Future Vol, veh/h	10	1	7	9	0	6	11	347	3	1	518	19
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	73	73	73	73	73	73	73	73	73	73	73	73
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	14	1	10	12	0	8	15	475	4	1	710	26

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1236	1234	723	1238	1245	477	736	0	0	479	0	0
Stage 1	725	725	-	507	507	-	-	-	-	-	-	-
Stage 2	511	509	-	731	738	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	130	147	426	130	144	700	870	-	-	1089	-	-
Stage 1	416	430	-	631	570	-	-	-	-	-	-	-
Stage 2	627	569	-	413	424	-	-	-	-	-	-	-
Platoon blocked, %	1	1		1	1	1		-	-	1	-	-
Mov Cap-1 Maneuver	126	143	426	123	140	700	870	-	-	1089	-	-
Mov Cap-2 Maneuver	126	143	-	123	140	-	-	-	-	-	-	-
Stage 1	406	429	-	616	557	-	-	-	-	-	-	-
Stage 2	605	555	-	402	423	-	-	-	-	-	-	-






































Approach	EB		WB		NB		SB	
HCM Control Delay, s	28.9		27		0.3		0	
HCM LOS	D		D					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	870	-	-	175	184	1089	-	-
HCM Lane V/C Ratio	0.017	-	-	0.141	0.112	0.001	-	-
HCM Control Delay (s)	9.2	0	-	28.9	27	8.3	0	-
HCM Lane LOS	A	A	-	D	D	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.5	0.4	0	-	-

Capacity Analysis Summary Sheets  
Year 2022 Saturday Midday Peak Hour

Lanes, Volumes, Timings  
1: IL 59 & Aurora Avenue

10/03/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations	 	  		  	  		 	  			  	  
Traffic Volume (vph)	246	461	284	283	426	200	285	1486	215	14	197	1947
Future Volume (vph)	246	461	284	283	426	200	285	1486	215	14	197	1947
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	2000	1900	1900	1900	2000
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%				0%
Storage Length (ft)	265		205	320		210	190		395		325	
Storage Lanes	2		1	2		1	2		1		2	
Taper Length (ft)	270			300			300				300	
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00	0.91	0.97	0.91
Ped Bike Factor												
Frt			0.850			0.850			0.850			
Flt Protected	0.950			0.950			0.950				0.950	
Satd. Flow (prot)	3467	5460	1615	3502	5460	1583	3502	5406	1615	0	3469	5406
Flt Permitted	0.950			0.950			0.950				0.950	
Satd. Flow (perm)	3467	5460	1615	3502	5460	1583	3502	5406	1615	0	3469	5406
Right Turn on Red			No			No			No			
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			40				40
Link Distance (ft)		654			559			897				856
Travel Time (s)		9.9			8.5			15.3				14.6
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	0%	0%	0%	0%	2%	0%	1%	0%	0%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%				0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	251	470	290	289	435	204	291	1516	219	0	215	1987
Turn Type	Prot	NA	pt+ov	Prot	NA	Prot	Prot	NA	pt+ov	Prot	Prot	NA
Protected Phases	7	4	4 5	3	8	8	5	2	2 3	1	1	6
Permitted Phases												
Detector Phase	7	4	4 5	3	8	8	5	2	2 3	1	1	6
Switch Phase												
Minimum Initial (s)	3.0	8.0		3.0	8.0	8.0	3.0	15.0		3.0	3.0	15.0
Minimum Split (s)	9.5	24.0		9.5	24.0	24.0	9.5	24.0		9.5	9.5	24.0
Total Split (s)	23.0	28.0		23.0	28.0	28.0	20.0	69.0		20.0	20.0	69.0
Total Split (%)	16.4%	20.0%		16.4%	20.0%	20.0%	14.3%	49.3%		14.3%	14.3%	49.3%
Yellow Time (s)	3.0	4.5		3.0	4.5	4.5	3.0	4.5		3.0	3.0	4.5
All-Red Time (s)	0.0	1.5		0.0	1.5	1.5	0.0	1.5		0.0	0.0	1.5
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	3.0	6.0		3.0	6.0	6.0	3.0	6.0		3.0	3.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag		Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None		None	None	None	None	C-Min		None	None	C-Min
Act Effct Green (s)	15.5	24.2	42.9	16.5	25.2	25.2	15.7	67.4	87.0		13.8	65.6
Actuated g/C Ratio	0.11	0.17	0.31	0.12	0.18	0.18	0.11	0.48	0.62		0.10	0.47



Lanes, Volumes, Timings  
1: IL 59 & Aurora Avenue

10/03/2022

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	320
Future Volume (vph)	320
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	210
Storage Lanes	1
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1615
Flt Permitted	
Satd. Flow (perm)	1615
Right Turn on Red	No
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.98
Growth Factor	100%
Heavy Vehicles (%)	0%
Bus Blockages (#/hr)	0
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	327
Turn Type	pt+ov
Protected Phases	6 7
Permitted Phases	
Detector Phase	6 7
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	
Act Effct Green (s)	84.1
Actuated g/C Ratio	0.60

Lanes, Volumes, Timings  
1: IL 59 & Aurora Avenue

10/03/2022

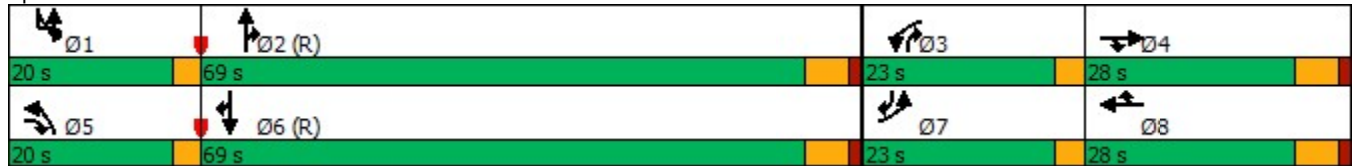


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
v/c Ratio	0.66	0.50	0.59	0.70	0.44	0.72	0.74	0.58	0.22		0.63	0.78
Control Delay	67.7	54.7	46.7	62.7	51.1	67.0	72.2	27.8	12.5		69.4	29.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Total Delay	67.7	54.7	46.7	62.7	51.1	67.0	72.2	27.8	12.5		69.4	29.6
LOS	E	D	D	E	D	E	E	C	B		E	C
Approach Delay		55.6			58.2			32.5				31.2
Approach LOS		E			E			C				C
Queue Length 50th (ft)	114	142	218	134	132	177	132	364	85		91	671
Queue Length 95th (ft)	156	187	327	163	178	#320	184	431	127		m116	722
Internal Link Dist (ft)		574			479			817				776
Turn Bay Length (ft)	265		205	320		210	190		395		325	
Base Capacity (vph)	495	943	509	500	984	285	425	2604	1043		421	2532
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0		0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0		0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0		0	0
Reduced v/c Ratio	0.51	0.50	0.57	0.58	0.44	0.72	0.68	0.58	0.21		0.51	0.78

Intersection Summary

Area Type: Other  
 Cycle Length: 140  
 Actuated Cycle Length: 140  
 Offset: 92 (66%), Referenced to phase 2:NBT and 6:SBT, Start of Green  
 Natural Cycle: 90  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.78  
 Intersection Signal Delay: 39.3 Intersection LOS: D  
 Intersection Capacity Utilization 77.1% ICU Level of Service D  
 Analysis Period (min) 15  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.  
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: IL 59 & Aurora Avenue



Lanes, Volumes, Timings  
1: IL 59 & Aurora Avenue































10/03/2022



Lane Group	SBR
v/c Ratio	0.34
Control Delay	15.8
Queue Delay	0.0
Total Delay	15.8
LOS	B
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	213
Queue Length 95th (ft)	m252
Internal Link Dist (ft)	
Turn Bay Length (ft)	210
Base Capacity (vph)	1021
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.32
Intersection Summary	

Lanes, Volumes, Timings  
2: IL 59 & Liberty Street/Jefferson Avenue

10/03/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations	 	 		 	 			 	  			 
Traffic Volume (vph)	241	195	91	197	256	231	2	79	1478	175	1	168
Future Volume (vph)	241	195	91	197	256	231	2	79	1478	175	1	168
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	1900	2000	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%				0%			
Storage Length (ft)	240		250	130		145		300		185		200
Storage Lanes	2		1	2		1		2		1		2
Taper Length (ft)	115			120				290				275
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.91	0.97	0.91	1.00	0.91	0.97
Ped Bike Factor												
Frt			0.850			0.850				0.850		
Flt Protected	0.950			0.950				0.950				0.950
Satd. Flow (prot)	3433	3800	1599	3467	3800	1599	0	3502	5406	1615	0	3467
Flt Permitted	0.950			0.950				0.950				0.950
Satd. Flow (perm)	3433	3800	1599	3467	3800	1599	0	3502	5406	1615	0	3467
Right Turn on Red			No			No				No		
Satd. Flow (RTOR)												
Link Speed (mph)		40			30				40			
Link Distance (ft)		553			478				968			
Travel Time (s)		9.4			10.9				16.5			
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 (%)	2%	0%	1%	1%	0%	1%	0%	0%	1%	0%	0%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%				0%			
Shared Lane Traffic (%)												
Lane Group Flow (vph)	248	201	94	203	264	238	0	83	1524	180	0	174
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	Prot	NA	pm+ov	Prot	Prot
Protected Phases	7	4	5!	3	8	1!	5!	5	2	3	1!	1
Permitted Phases			4			8				2		
Detector Phase	7	4	5	3	8	1	5	5	2	3	1	1
Switch Phase												
Minimum Initial (s)	3.0	8.0	3.0	3.0	8.0	3.0	3.0	3.0	15.0	3.0	3.0	3.0
Minimum Split (s)	9.5	24.0	9.5	9.5	24.0	9.5	9.5	9.5	24.0	9.5	9.5	9.5
Total Split (s)	24.0	32.0	15.0	17.0	25.0	20.0	15.0	15.0	71.0	17.0	20.0	20.0
Total Split (%)	17.1%	22.9%	10.7%	12.1%	17.9%	14.3%	10.7%	10.7%	50.7%	12.1%	14.3%	14.3%
Yellow Time (s)	3.0	4.5	3.0	3.0	4.5	3.0	3.0	3.0	4.5	3.0	3.0	3.0
All-Red Time (s)	0.0	1.5	0.0	0.0	1.5	0.0	0.0	0.0	1.5	0.0	0.0	0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0		0.0
Total Lost Time (s)	3.0	6.0	3.0	3.0	6.0	3.0		3.0	6.0	3.0		3.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lead	Lag	Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	C-Min	None	None	None
Act Effct Green (s)	15.4	20.1	34.8	12.7	17.4	35.7		8.7	76.9	95.6		12.3
Actuated g/C Ratio	0.11	0.14	0.25	0.09	0.12	0.26		0.06	0.55	0.68		0.09

Lanes, Volumes, Timings  
 2: IL 59 & Liberty Street/Jefferson Avenue

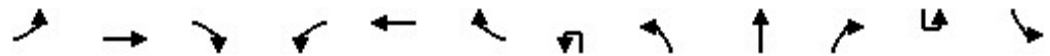
10/03/2022



Lane Group	SBT	SBR
Lane Configurations	↑↑↑↑	↑
Traffic Volume (vph)	2124	161
Future Volume (vph)	2124	161
Ideal Flow (vphpl)	2000	1900
Lane Width (ft)	12	12
Grade (%)	0%	
Storage Length (ft)		210
Storage Lanes		1
Taper Length (ft)		
Lane Util. Factor	0.91	1.00
Ped Bike Factor		
Frt		0.850
Flt Protected		
Satd. Flow (prot)	5406	1583
Flt Permitted		
Satd. Flow (perm)	5406	1583
Right Turn on Red		No
Satd. Flow (RTOR)		
Link Speed (mph)	40	
Link Distance (ft)	552	
Travel Time (s)	9.4	
Confl. Peds. (#/hr)		
Confl. Bikes (#/hr)		
Peak Hour Factor	0.97	0.97
Growth Factor	100%	100%
Heavy Vehicles (%)	1%	2%
Bus Blockages (#/hr)	0	0
Parking (#/hr)		
Mid-Block Traffic (%)	0%	
Shared Lane Traffic (%)		
Lane Group Flow (vph)	2190	166
Turn Type	NA	pm+ov
Protected Phases	6	7
Permitted Phases		6
Detector Phase	6	7
Switch Phase		
Minimum Initial (s)	15.0	3.0
Minimum Split (s)	24.0	9.5
Total Split (s)	76.0	24.0
Total Split (%)	54.3%	17.1%
Yellow Time (s)	4.5	3.0
All-Red Time (s)	1.5	0.0
Lost Time Adjust (s)	0.0	0.0
Total Lost Time (s)	6.0	3.0
Lead/Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes
Recall Mode	C-Min	None
Act Effct Green (s)	80.5	101.9
Actuated g/C Ratio	0.58	0.73

Lanes, Volumes, Timings  
2: IL 59 & Liberty Street/Jefferson Avenue

10/03/2022

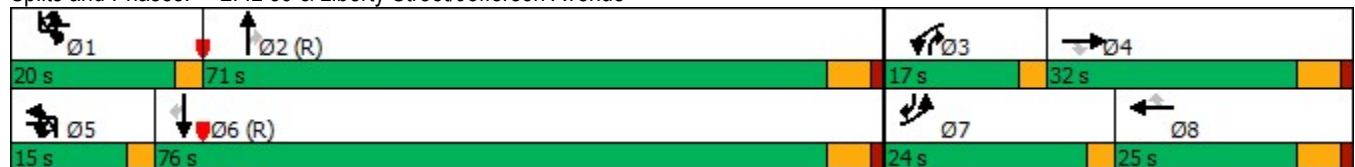


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
v/c Ratio	0.66	0.37	0.24	0.65	0.56	0.58		0.38	0.51	0.16		0.57
Control Delay	68.1	55.3	41.9	71.4	62.0	51.0		96.2	6.2	2.3		68.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0		0.0
Total Delay	68.1	55.3	41.9	71.4	62.0	51.0		96.2	6.2	2.3		68.5
LOS	E	E	D	E	E	D		F	A	A		E
Approach Delay		58.8			61.0				10.0			
Approach LOS		E			E				A			
Queue Length 50th (ft)	113	88	69	92	120	190		41	48	9		79
Queue Length 95th (ft)	155	122	111	136	164	265		71	82	15		117
Internal Link Dist (ft)		473			398				888			
Turn Bay Length (ft)	240		250	130		145		300		185		200
Base Capacity (vph)	514	705	435	346	530	461		300	2969	1117		420
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	0.48	0.29	0.22	0.59	0.50	0.52		0.28	0.51	0.16		0.41

Intersection Summary

Area Type: Other  
 Cycle Length: 140  
 Actuated Cycle Length: 140  
 Offset: 41 (29%), Referenced to phase 2:NBT and 6:SBT, Start of Green  
 Natural Cycle: 90  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.70  
 Intersection Signal Delay: 28.4  
 Intersection Capacity Utilization 72.6%  
 Analysis Period (min) 15  
 Intersection LOS: C  
 ICU Level of Service C  
 ! Phase conflict between lane groups.

Splits and Phases: 2: IL 59 & Liberty Street/Jefferson Avenue



Lanes, Volumes, Timings  
 2: IL 59 & Liberty Street/Jefferson Avenue

10/03/2022



Lane Group	SBT	SBR
v/c Ratio	0.70	0.14
Control Delay	23.9	6.7
Queue Delay	0.0	0.0
Total Delay	23.9	6.7
LOS	C	A
Approach Delay	25.9	
Approach LOS	C	
Queue Length 50th (ft)	505	42
Queue Length 95th (ft)	652	76
Internal Link Dist (ft)	472	
Turn Bay Length (ft)		210
Base Capacity (vph)	3109	1215
Starvation Cap Reductn	0	0
Spillback Cap Reductn	0	0
Storage Cap Reductn	0	0
Reduced v/c Ratio	0.70	0.14

Intersection Summary

Lanes, Volumes, Timings  
3: IL 59 & Meijer Access Drive

10/03/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	85	21	98	117	27	46	9	157	1603	49	56	2280
Future Volume (vph)	85	21	98	117	27	46	9	157	1603	49	56	2280
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	2000	1900	1900	2000
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	45		0		430		0	300	
Storage Lanes	1		0	1		0		2		1	1	
Taper Length (ft)	25			105				290			190	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.97	0.91	1.00	1.00	0.91
Ped Bike Factor												
Frt		0.876			0.906					0.850		
Flt Protected	0.950			0.950				0.950			0.950	
Satd. Flow (prot)	1805	1664	0	1805	1721	0	0	3502	5406	1615	1805	5406
Flt Permitted	0.704			0.471				0.950			0.950	
Satd. Flow (perm)	1338	1664	0	895	1721	0	0	3502	5406	1615	1805	5406
Right Turn on Red			No			No				No		
Satd. Flow (RTOR)												
Link Speed (mph)		25			25				40			40
Link Distance (ft)		348			383				286			968
Travel Time (s)		9.5			10.4				4.9			16.5
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%				0%			0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	94	132	0	130	81	0	0	184	1781	54	62	2533
Turn Type	pm+pt	NA		pm+pt	NA		Prot	Prot	NA	pm+ov	Prot	NA
Protected Phases	7	4		3	8		5	5	2	3	1	6
Permitted Phases	4			8						2		
Detector Phase	7	4		3	8		5	5	2	3	1	6
Switch Phase												
Minimum Initial (s)	3.0	8.0		3.0	8.0		3.0	3.0	15.0	3.0	3.0	15.0
Minimum Split (s)	9.5	24.0		9.5	24.0		9.5	9.5	24.0	9.5	9.5	24.0
Total Split (s)	15.0	24.0		16.0	25.0		17.0	17.0	80.0	16.0	20.0	83.0
Total Split (%)	10.7%	17.1%		11.4%	17.9%		12.1%	12.1%	57.1%	11.4%	14.3%	59.3%
Yellow Time (s)	3.0	4.5		3.0	4.5		3.0	3.0	4.5	3.0	3.0	4.5
All-Red Time (s)	0.0	1.5		0.0	1.5		0.0	0.0	1.5	0.0	0.0	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)	3.0	6.0		3.0	6.0			3.0	6.0	3.0	3.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	None	C-Max	None	None	C-Max
Act Effct Green (s)	29.8	16.4		32.9	17.9			12.2	85.4	103.3	10.2	81.5
Actuated g/C Ratio	0.21	0.12		0.24	0.13			0.09	0.61	0.74	0.07	0.58



Lanes, Volumes, Timings  
 3: IL 59 & Meijer Access Drive

10/03/2022

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	78
Future Volume (vph)	78
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	420
Storage Lanes	1
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1615
Flt Permitted	
Satd. Flow (perm)	1615
Right Turn on Red	No
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.90
Growth Factor	100%
Heavy Vehicles (%)	0%
Bus Blockages (#/hr)	0
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	87
Turn Type	pm+ov
Protected Phases	7
Permitted Phases	6
Detector Phase	7
Switch Phase	
Minimum Initial (s)	3.0
Minimum Split (s)	9.5
Total Split (s)	15.0
Total Split (%)	10.7%
Yellow Time (s)	3.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	3.0
Lead/Lag	Lead
Lead-Lag Optimize?	Yes
Recall Mode	None
Act Effct Green (s)	97.9
Actuated g/C Ratio	0.70

# Lanes, Volumes, Timings

## 3: IL 59 & Meijer Access Drive

10/03/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
v/c Ratio	0.29	0.68		0.45	0.37			0.60	0.54	0.05	0.47	0.81
Control Delay	43.8	77.1		47.5	60.5			55.0	22.1	12.5	72.7	15.5
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0	0.0	0.0	0.0
Total Delay	43.8	77.1		47.5	60.5			55.0	22.1	12.5	72.7	15.5
LOS	D	E		D	E			D	C	B	E	B
Approach Delay		63.2			52.5				24.9			16.4
Approach LOS		E			D				C			B
Queue Length 50th (ft)	67	116		94	67			80	474	29	59	257
Queue Length 95th (ft)	117	188		154	122			m109	520	m52	m87	347
Internal Link Dist (ft)		268			303				206			888
Turn Bay Length (ft)				45				430			300	
Base Capacity (vph)	339	213		297	235			350	3296	1203	219	3145
Starvation Cap Reductn	0	0		0	0			0	0	0	0	7
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	0.28	0.62		0.44	0.34			0.53	0.54	0.04	0.28	0.81

### Intersection Summary

Area Type: Other

Cycle Length: 140

Actuated Cycle Length: 140

Offset: 25 (18%), Referenced to phase 2:NBT and 6:SBTU, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.81

Intersection Signal Delay: 23.3

Intersection LOS: C

Intersection Capacity Utilization 73.1%

ICU Level of Service D

Analysis Period (min) 15

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

### Splits and Phases: 3: IL 59 & Meijer Access Drive

Ø1 20 s	Ø2 (R) 80 s	Ø3 16 s	Ø4 24 s
Ø5 17 s	Ø6 (R) 83 s	Ø7 15 s	Ø8 25 s

# Lanes, Volumes, Timings

## 3: IL 59 & Meijer Access Drive

10/03/2022



Lane Group	SBR
v/c Ratio	0.08
Control Delay	4.6
Queue Delay	0.0
Total Delay	4.6
LOS	A
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	14
Queue Length 95th (ft)	m19
Internal Link Dist (ft)	
Turn Bay Length (ft)	420
Base Capacity (vph)	1147
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.08
Intersection Summary	

Lanes, Volumes, Timings  
4: Fort Hill Drive & Aurora Avenue

10/03/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	95	533	110	139	537	103	46	195	91	119	250	146
Future Volume (vph)	95	533	110	139	537	103	46	195	91	119	250	146
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	110		0	105		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	145			140			85			95		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Fr <sub>t</sub>		0.974			0.976			0.952				0.945
Fl <sub>t</sub> Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3475	0	1805	3494	0	1805	1809	0	1770	1796	0
Fl <sub>t</sub> Permitted	0.321			0.301			0.249			0.306		
Satd. Flow (perm)	610	3475	0	572	3494	0	473	1809	0	570	1796	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		24			22			19			23	
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		558			536			509			341	
Travel Time (s)		8.5			8.1			11.6			7.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	1%	2%	0%	1%	0%	0%	0%	0%	2%	0%	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)	100	677	0	146	673	0	48	301	0	125	417	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2			6			4			8		
Detector Phase	5	2		1	6		7	4		3	8	
Switch Phase												
Minimum Initial (s)	3.0	15.0		3.0	15.0		3.0	8.0		3.0	8.0	
Minimum Split (s)	9.5	35.0		9.5	36.0		9.5	42.0		9.5	38.0	
Total Split (s)	14.0	54.0		14.0	54.0		18.0	37.0		15.0	34.0	
Total Split (%)	11.7%	45.0%		11.7%	45.0%		15.0%	30.8%		12.5%	28.3%	
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		0.0	1.5		0.0	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		3.5	6.0		3.5	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	C-Min		None	C-Min		None	None		None	None	
Act Effct Green (s)	62.4	51.3		64.7	52.5		39.2	29.2		45.7	34.2	
Actuated g/C Ratio	0.52	0.43		0.54	0.44		0.33	0.24		0.38	0.28	

Lanes, Volumes, Timings  
 4: Fort Hill Drive & Aurora Avenue

10/03/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.25	0.45		0.36	0.44		0.20	0.66		0.38	0.79	
Control Delay	16.0	26.4		17.1	25.5		22.8	45.1		26.3	48.6	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	16.0	26.4		17.1	25.5		22.8	45.1		26.3	48.6	
LOS	B	C		B	C		C	D		C	D	
Approach Delay		25.0			24.0			42.0			43.5	
Approach LOS		C			C			D			D	
Queue Length 50th (ft)	37	196		55	190		22	191		61	279	
Queue Length 95th (ft)	71	268		99	266		44	285		97	391	
Internal Link Dist (ft)		478			456			429			261	
Turn Bay Length (ft)	140			140			110			105		
Base Capacity (vph)	431	1554		423	1580		339	498		339	528	
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	0.23	0.44		0.35	0.43		0.14	0.60		0.37	0.79	

Intersection Summary

Area Type:	Other
Cycle Length:	120
Actuated Cycle Length:	120
Offset:	64 (53%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle:	100
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.79
Intersection Signal Delay:	31.1
Intersection LOS:	C
Intersection Capacity Utilization	68.0%
ICU Level of Service	C
Analysis Period (min)	15

Splits and Phases: 4: Fort Hill Drive & Aurora Avenue



Lanes, Volumes, Timings  
5: Westridge Court Access Drive & Aurora Avenue

10/03/2022

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	173	614	54	78	581	75	106	21	54	70	20	154
Future Volume (vph)	173	614	54	78	581	75	106	21	54	70	20	154
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	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)	270		0	185		160	0		0	85		0
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	190			140			25			80		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3800	1615	1752	3762	1615	1805	1905	1583	1805	1905	1599
Flt Permitted	0.392			0.396			0.470			0.743		
Satd. Flow (perm)	745	3800	1615	730	3762	1615	893	1905	1583	1412	1905	1599
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			82			82			57			162
Link Speed (mph)		45			45			25				25
Link Distance (ft)		734			866			285				265
Travel Time (s)		11.1			13.1			7.8				7.2
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	3%	1%	0%	0%	5%	2%	0%	5%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%				0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	182	646	57	82	612	79	112	22	57	74	21	162
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov
Protected Phases	5	2		1	6		7	4	1	3	8	5
Permitted Phases	2		2	6		6	4		4	8		8
Detector Phase	5	2	2	1	6	6	7	4	1	3	8	5
Switch Phase												
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0	15.0	5.0	8.0	5.0	5.0	8.0	5.0
Minimum Split (s)	9.5	42.5	42.5	9.5	33.5	33.5	9.5	49.5	9.5	9.5	22.5	9.5
Total Split (s)	24.0	70.0	70.0	24.0	70.0	70.0	18.0	28.0	24.0	18.0	28.0	24.0
Total Split (%)	17.1%	50.0%	50.0%	17.1%	50.0%	50.0%	12.9%	20.0%	17.1%	12.9%	20.0%	17.1%
Yellow Time (s)	3.5	4.5	4.5	3.5	4.5	4.5	3.5	4.5	3.5	3.5	4.5	3.5
All-Red Time (s)	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	0.0	0.0	2.0	0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	6.5	6.5	3.5	6.5	6.5	3.5	6.5	3.5	3.5	6.5	3.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None	None	None
Act Effct Green (s)	108.0	95.8	95.8	103.9	93.7	93.7	23.2	11.0	21.7	18.8	9.2	19.2
Actuated g/C Ratio	0.77	0.68	0.68	0.74	0.67	0.67	0.17	0.08	0.16	0.13	0.07	0.14

Lanes, Volumes, Timings  
 5: Westridge Court Access Drive & Aurora Avenue

10/03/2022

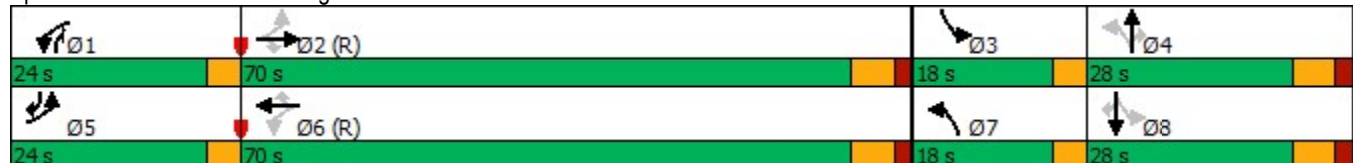


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.28	0.25	0.05	0.14	0.24	0.07	0.47	0.15	0.19	0.34	0.17	0.45
Control Delay	14.7	21.0	8.7	5.6	11.1	2.7	55.6	61.0	12.4	51.5	64.3	10.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	14.7	21.0	8.7	5.6	11.1	2.7	55.6	61.0	12.4	51.5	64.3	10.7
LOS	B	C	A	A	B	A	E	E	B	D	E	B
Approach Delay		18.9			9.6			43.3			26.8	
Approach LOS		B			A			D			C	
Queue Length 50th (ft)	116	269	9	18	121	0	88	19	0	57	18	0
Queue Length 95th (ft)	132	192	11	39	185	22	137	47	38	97	47	60
Internal Link Dist (ft)		654			786			205			185	
Turn Bay Length (ft)	270			185		160				85		
Base Capacity (vph)	737	2599	1130	720	2516	1107	255	292	438	265	292	473
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.25	0.25	0.05	0.11	0.24	0.07	0.44	0.08	0.13	0.28	0.07	0.34

Intersection Summary

Area Type:	Other
Cycle Length:	140
Actuated Cycle Length:	140
Offset:	27 (19%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle:	115
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.47
Intersection Signal Delay:	18.7
Intersection LOS:	B
Intersection Capacity Utilization:	51.5%
ICU Level of Service:	A
Analysis Period (min):	15

Splits and Phases: 5: Westridge Court Access Drive & Aurora Avenue



HCM 6th TWSC  
6: IL 59 & Heritage Square Access Drive

10/03/2022

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	0	0	101	0	0	21	76	1806	64	26	2377	101
Future Vol, veh/h	0	0	101	0	0	21	76	1806	64	26	2377	101
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	-	-	0	255	-	170	365	-	150
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	1	0	2	0	0	2	0	0	1	0
Mvmt Flow	0	0	106	0	0	22	80	1901	67	27	2502	106

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	-	-	1251	-	-	951	2608	0	0	1968	0	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	7.12	-	-	7.1	5.3	-	-	5.3	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.91	-	-	3.9	3.1	-	-	3.1	-	-
Pot Cap-1 Maneuver	0	0	*377	0	0	*509	*476	-	-	*640	-	-
Stage 1	0	0	-	0	0	-	-	-	-	-	-	-
Stage 2	0	0	-	0	0	-	-	-	-	-	-	-
Platoon blocked, %			1			1	1	-	-	1	-	-
Mov Cap-1 Maneuver	-	-	*377	-	-	*509	*476	-	-	*640	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB		WB		NB			SB		
HCM Control Delay, s	18.3		12.4		0.6			0.1		
HCM LOS	C		B							

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	* 476	-	-	377	509	* 640	-	-
HCM Lane V/C Ratio	0.168	-	-	0.282	0.043	0.043	-	-
HCM Control Delay (s)	14.1	-	-	18.3	12.4	10.9	-	-
HCM Lane LOS	B	-	-	C	B	B	-	-
HCM 95th %tile Q(veh)	0.6	-	-	1.1	0.1	0.1	-	-

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



HCM 6th TWSC  
7: IL 59 & Right-In/Right-Out

10/03/2022

Intersection						
Int Delay, s/veh	0.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↑	↑↑↑	↑		↑↑↑
Traffic Vol, veh/h	0	70	1748	79	0	2504
Future Vol, veh/h	0	70	1748	79	0	2504
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	-	140	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	0	1	0	0	1
Mvmt Flow	0	74	1840	83	0	2636

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	-	920	0	0	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	7.1	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	3.9	-	-	-
Pot Cap-1 Maneuver	0	*527	-	-	0
Stage 1	0	-	-	-	0
Stage 2	0	-	-	-	0
Platoon blocked, %		1	-	-	-
Mov Cap-1 Maneuver	-	*527	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.9	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBT
Capacity (veh/h)	-	-	527
HCM Lane V/C Ratio	-	-	0.14
HCM Control Delay (s)	-	-	12.9
HCM Lane LOS	-	-	B
HCM 95th %tile Q(veh)	-	-	0.5

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

HCM 6th TWSC  
8: Aurora Avenue & West Right-In/Right-Out

10/03/2022

Intersection												
Int Delay, s/veh	0.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑		↑↑↑				↑			↑
Traffic Vol, veh/h	0	753	120	0	831	10	0	0	88	0	0	78
Future Vol, veh/h	0	753	120	0	831	10	0	0	88	0	0	78
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	-	-	Free	-	-	None	-	-	Stop
Storage Length	-	-	0	-	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	2	0	1	2	0	0	2	2	3	2	2	1
Mvmt Flow	0	776	124	0	857	10	0	0	91	0	0	80

Major/Minor	Major1		Major2		Minor1		Minor2					
Conflicting Flow All	-	0	0	-	-	0	-	-	388	-	-	429
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	6.96	-	-	7.12
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.33	-	-	3.91
Pot Cap-1 Maneuver	0	-	-	0	-	0	0	0	*769	0	0	*730
Stage 1	0	-	-	0	-	0	0	0	-	0	0	-
Stage 2	0	-	-	0	-	0	0	0	-	0	0	-
Platoon blocked, %		-	-		-				1			1
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	*769	-	-	*730
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	10.3	10.5
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	SBLn1
Capacity (veh/h)	769	-	-	-	730
HCM Lane V/C Ratio	0.118	-	-	-	0.11
HCM Control Delay (s)	10.3	-	-	-	10.5
HCM Lane LOS	B	-	-	-	B
HCM 95th %tile Q(veh)	0.4	-	-	-	0.4

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

HCM 6th TWSC  
 9: Aurora Avenue & East Right-In/Right-Out

10/03/2022

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑			↑
Traffic Vol, veh/h	0	738	700	29	0	34
Future Vol, veh/h	0	738	700	29	0	34
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	1	1	0	2	0
Mvmt Flow	0	802	761	32	0	37

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	-	0	-	0	397
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	3.3
Pot Cap-1 Maneuver	0	-	-	-	*802
Stage 1	0	-	-	-	0
Stage 2	0	-	-	-	0
Platoon blocked, %	-	-	-	-	1
Mov Cap-1 Maneuver	-	-	-	-	*802
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	9.7
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	802
HCM Lane V/C Ratio	-	-	-	0.046
HCM Control Delay (s)	-	-	-	9.7
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	0.1

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

HCM 6th TWSC  
 10: Jefferson Avenue & Target Access Drive

10/03/2022

Intersection												
Int Delay, s/veh	8.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↖↗		↖	↖↗		↖	↗		↖	↗	
Traffic Vol, veh/h	134	268	136	69	409	131	71	37	81	91	31	204
Future Vol, veh/h	134	268	136	69	409	131	71	37	81	91	31	204
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	90	-	-	150	-	-	70	-	-	30	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	1	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	149	298	151	77	454	146	79	41	90	101	34	227

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	600	0	0	449	0	0	1070	1426	225	1149	1428	300
Stage 1	-	-	-	-	-	-	672	672	-	681	681	-
Stage 2	-	-	-	-	-	-	398	754	-	468	747	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
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	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	987	-	-	1261	-	-	222	154	*993	192	153	702
Stage 1	-	-	-	-	-	-	516	526	-	411	453	-
Stage 2	-	-	-	-	-	-	605	420	-	698	484	-
Platoon blocked, %		-	-	1	-	-	1	1	1	1	1	
Mov Cap-1 Maneuver	987	-	-	1261	-	-	113	123	*993	124	122	702
Mov Cap-2 Maneuver	-	-	-	-	-	-	168	193	-	229	225	-
Stage 1	-	-	-	-	-	-	438	447	-	349	425	-
Stage 2	-	-	-	-	-	-	353	394	-	490	411	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	2.3			0.9			27.1			21.6		
HCM LOS							D			C		

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	168	432	987	-	-	1261	-	-	229	549
HCM Lane V/C Ratio	0.47	0.303	0.151	-	-	0.061	-	-	0.442	0.476
HCM Control Delay (s)	44.1	16.9	9.3	-	-	8	-	-	32.6	17.4
HCM Lane LOS	E	C	A	-	-	A	-	-	D	C
HCM 95th %tile Q(veh)	2.2	1.3	0.5	-	-	0.2	-	-	2.1	2.5

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

HCM 6th TWSC  
 11: Fort Hill Drive & Westridge Court Access Drive

10/03/2022

Intersection												
Int Delay, s/veh	5.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	40	1	130	14	1	19	82	291	20	7	371	42
Future Vol, veh/h	40	1	130	14	1	19	82	291	20	7	371	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	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	45	1	148	16	1	22	93	331	23	8	422	48

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1002	1002	446	1066	1015	343	470	0	0	354	0	0
Stage 1	462	462	-	529	529	-	-	-	-	-	-	-
Stage 2	540	540	-	537	486	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	215	228	612	189	224	832	1092	-	-	1235	-	-
Stage 1	580	565	-	586	544	-	-	-	-	-	-	-
Stage 2	575	536	-	528	551	-	-	-	-	-	-	-
Platoon blocked, %	1	1		1	1	1		-	-	1	-	-
Mov Cap-1 Maneuver	190	202	612	130	198	832	1092	-	-	1235	-	-
Mov Cap-2 Maneuver	190	202	-	130	198	-	-	-	-	-	-	-
Stage 1	519	560	-	523	486	-	-	-	-	-	-	-
Stage 2	500	479	-	396	546	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	22.2		21.9		1.8		0.1	
HCM LOS	C		C					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1092	-	-	400	251	1235	-
HCM Lane V/C Ratio	0.085	-	-	0.486	0.154	0.006	-
HCM Control Delay (s)	8.6	0	-	22.2	21.9	7.9	0
HCM Lane LOS	A	A	-	C	C	A	A
HCM 95th %tile Q(veh)	0.3	-	-	2.6	0.5	0	-

HCM 6th TWSC  
12: Fort Hill Drive & Goodwill Access Drive

10/03/2022

Intersection												
Int Delay, s/veh	0.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	0	5	6	0	6	22	321	7	8	409	31
Future Vol, veh/h	10	0	5	6	0	6	22	321	7	8	409	31
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	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	12	0	6	7	0	7	27	391	9	10	499	38

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	991	992	518	991	1007	396	537	0	0	400	0	0
Stage 1	538	538	-	450	450	-	-	-	-	-	-	-
Stage 2	453	454	-	541	557	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	220	232	558	220	226	783	1031	-	-	1183	-	-
Stage 1	527	522	-	678	609	-	-	-	-	-	-	-
Stage 2	675	605	-	525	512	-	-	-	-	-	-	-
Platoon blocked, %	1	1		1	1	1		-	-	1	-	-
Mov Cap-1 Maneuver	210	221	558	210	215	783	1031	-	-	1183	-	-
Mov Cap-2 Maneuver	210	221	-	210	215	-	-	-	-	-	-	-
Stage 1	509	516	-	655	588	-	-	-	-	-	-	-
Stage 2	646	584	-	513	506	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	19.6		16.4		0.5		0.1	
HCM LOS	C		C					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1031	-	-	265	331	1183	-	-
HCM Lane V/C Ratio	0.026	-	-	0.069	0.044	0.008	-	-
HCM Control Delay (s)	8.6	0	-	19.6	16.4	8.1	0	-
HCM Lane LOS	A	A	-	C	C	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.2	0.1	0	-	-

Capacity Analysis Summary Sheets  
Year 2028 No-Build Weekday Morning Peak Hour

Lanes, Volumes, Timings  
1: IL 59 & Aurora Avenue

10/03/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations	↖↗	↑↑↑	↖	↖↗	↑↑↑	↖	↖↗	↑↑↑	↖		↖↗	↑↑↑
Traffic Volume (vph)	110	296	134	38	159	66	131	1958	107	2	49	1273
Future Volume (vph)	110	296	134	38	159	66	131	1958	107	2	49	1273
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	2000	1900	1900	1900	2000
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%				0%
Storage Length (ft)	265		205	320		210	190		395		325	
Storage Lanes	2		1	2		1	2		1		2	
Taper Length (ft)	270			300			300				300	
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00	0.91	0.97	0.91
Ped Bike Factor												
Frt			0.850			0.850			0.850			
Flt Protected	0.950			0.950			0.950				0.950	
Satd. Flow (prot)	3367	5353	1568	3242	5301	1538	3367	5151	1599	0	3372	5056
Flt Permitted	0.950			0.950			0.950				0.950	
Satd. Flow (perm)	3367	5353	1568	3242	5301	1538	3367	5151	1599	0	3372	5056
Right Turn on Red			No			No			No			
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			40				40
Link Distance (ft)		654			559			897				856
Travel Time (s)		9.9			8.5			15.3				14.6
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 (%)	4%	2%	3%	8%	3%	5%	4%	6%	1%	0%	4%	8%
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)	121	325	147	42	175	73	144	2152	118	0	56	1399
Turn Type	Prot	NA	pt+ov	Prot	NA	Prot	Prot	NA	pt+ov	Prot	Prot	NA
Protected Phases	7	4	4 5	3	8	8	5	2	2 3	1	1	6
Permitted Phases												
Detector Phase	7	4	4 5	3	8	8	5	2	2 3	1	1	6
Switch Phase												
Minimum Initial (s)	3.0	8.0		3.0	8.0	8.0	3.0	15.0		3.0	3.0	15.0
Minimum Split (s)	9.5	24.0		9.5	24.0	24.0	9.5	24.0		9.5	9.5	24.0
Total Split (s)	17.0	26.0		13.0	22.0	22.0	17.0	88.0		13.0	13.0	84.0
Total Split (%)	12.1%	18.6%		9.3%	15.7%	15.7%	12.1%	62.9%		9.3%	9.3%	60.0%
Yellow Time (s)	3.0	4.5		3.0	4.5	4.5	3.0	4.5		3.0	3.0	4.5
All-Red Time (s)	0.0	1.5		0.0	1.5	1.5	0.0	1.5		0.0	0.0	1.5
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	3.0	6.0		3.0	6.0	6.0	3.0	6.0		3.0	3.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag		Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None		None	None	None	None	C-Min		None	None	C-Min
Act Effct Green (s)	10.4	19.0	33.2	7.2	15.9	15.9	11.2	89.8	100.0		7.7	84.5
Actuated g/C Ratio	0.07	0.14	0.24	0.05	0.11	0.11	0.08	0.64	0.71		0.06	0.60



Lanes, Volumes, Timings  
1: IL 59 & Aurora Avenue

10/03/2022

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	62
Future Volume (vph)	62
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	210
Storage Lanes	1
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1568
Flt Permitted	
Satd. Flow (perm)	1568
Right Turn on Red	No
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.91
Growth Factor	100%
Heavy Vehicles (%)	3%
Bus Blockages (#/hr)	0
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	68
Turn Type	pt+ov
Protected Phases	6 7
Permitted Phases	
Detector Phase	6 7
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	
Act Effct Green (s)	97.9
Actuated g/C Ratio	0.70

Lanes, Volumes, Timings  
1: IL 59 & Aurora Avenue

10/03/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
v/c Ratio	0.49	0.45	0.40	0.25	0.29	0.42	0.54	0.65	0.10		0.30	0.46
Control Delay	68.5	57.2	47.1	66.8	62.0	69.6	69.0	17.9	7.5		53.4	22.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Total Delay	68.5	57.2	47.1	66.8	62.0	69.6	69.0	17.9	7.5		53.4	22.5
LOS	E	E	D	E	E	E	E	B	A		D	C
Approach Delay		57.0			64.6			20.4				23.4
Approach LOS		E			E			C				C
Queue Length 50th (ft)	55	99	111	19	56	65	65	453	34		25	364
Queue Length 95th (ft)	88	133	173	39	83	119	101	541	59		48	404
Internal Link Dist (ft)		574			479			817				776
Turn Bay Length (ft)	265		205	320		210	190		395		325	
Base Capacity (vph)	336	798	394	231	645	187	336	3302	1173		240	3052
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0		0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0		0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0		0	0
Reduced v/c Ratio	0.36	0.41	0.37	0.18	0.27	0.39	0.43	0.65	0.10		0.23	0.46

Intersection Summary

Area Type:	Other
Cycle Length:	140
Actuated Cycle Length:	140
Offset:	35 (25%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle:	80
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.65
Intersection Signal Delay:	28.5
Intersection LOS:	C
Intersection Capacity Utilization	65.9%
ICU Level of Service	C
Analysis Period (min)	15

Splits and Phases: 1: IL 59 & Aurora Avenue

Ø1 13 s	Ø2 (R) 88 s	Ø3 13 s	Ø4 26 s
Ø5 17 s	Ø6 (R) 84 s	Ø7 17 s	Ø8 22 s

Lanes, Volumes, Timings  
1: IL 59 & Aurora Avenue

























10/03/2022



Lane Group	SBR
v/c Ratio	0.06
Control Delay	16.0
Queue Delay	0.0
Total Delay	16.0
LOS	B
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	36
Queue Length 95th (ft)	72
Internal Link Dist (ft)	
Turn Bay Length (ft)	210
Base Capacity (vph)	1137
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.06
Intersection Summary	

Lanes, Volumes, Timings  
 2: IL 59 & Liberty Street/Jefferson Avenue

10/03/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	197	77	27	24	49	57	27	2029	36	72	1345	133
Future Volume (vph)	197	77	27	24	49	57	27	2029	36	72	1345	133
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	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)	240		250	130		145	300		185	200		210
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	115			120			290			275		
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Ped Bike Factor												
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3273	3654	1233	3213	3654	1392	3242	5200	1482	3072	5103	1357
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3273	3654	1233	3213	3654	1392	3242	5200	1482	3072	5103	1357
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		40			30			40			40	
Link Distance (ft)		553			478			968			552	
Travel Time (s)		9.4			10.9			16.5			9.4	
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 (%)	7%	4%	31%	9%	4%	16%	8%	5%	9%	14%	7%	19%
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)	203	79	28	25	51	59	28	2092	37	74	1387	137
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	7	4	5!	3	8	1!	5	2	3	1	6	7
Permitted Phases			4			8			2			6
Detector Phase	7	4	5	3	8	1	5	2	3	1	6	7
Switch Phase												
Minimum Initial (s)	3.0	8.0	3.0	3.0	8.0	3.0	3.0	15.0	3.0	3.0	15.0	3.0
Minimum Split (s)	9.5	24.0	9.5	9.5	24.0	9.5	9.5	24.0	9.5	9.5	24.0	9.5
Total Split (s)	17.0	24.0	12.0	14.0	21.0	12.0	12.0	90.0	14.0	12.0	90.0	17.0
Total Split (%)	12.1%	17.1%	8.6%	10.0%	15.0%	8.6%	8.6%	64.3%	10.0%	8.6%	64.3%	12.1%
Yellow Time (s)	3.0	4.5	3.0	3.0	4.5	3.0	3.0	4.5	3.0	3.0	4.5	3.0
All-Red Time (s)	0.0	1.5	0.0	0.0	1.5	0.0	0.0	1.5	0.0	0.0	1.5	0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	6.0	3.0	3.0	6.0	3.0	3.0	6.0	3.0	3.0	6.0	3.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Min	None	None	C-Min	None
Act Effct Green (s)	13.1	14.8	27.5	6.6	9.4	21.3	6.7	93.5	106.1	8.8	97.3	117.0
Actuated g/C Ratio	0.09	0.11	0.20	0.05	0.07	0.15	0.05	0.67	0.76	0.06	0.70	0.84

Lanes, Volumes, Timings  
 2: IL 59 & Liberty Street/Jefferson Avenue

10/03/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.66	0.20	0.12	0.17	0.21	0.28	0.18	0.60	0.03	0.39	0.39	0.12
Control Delay	72.2	57.4	45.7	66.1	63.4	53.1	96.9	6.4	1.0	68.4	10.5	3.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	72.2	57.4	45.7	66.1	63.4	53.1	96.9	6.4	1.0	68.4	10.5	3.4
LOS	E	E	D	E	E	D	F	A	A	E	B	A
Approach Delay		66.0			59.4			7.4			12.6	
Approach LOS		E			E			A			B	
Queue Length 50th (ft)	92	34	21	11	23	47	13	421	3	34	202	23
Queue Length 95th (ft)	136	61	49	27	46	89	m28	157	m1	60	250	44
Internal Link Dist (ft)		473			398			888			472	
Turn Bay Length (ft)	240		250	130		145	300		185	200		210
Base Capacity (vph)	327	469	262	252	391	220	208	3474	1170	210	3547	1137
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.62	0.17	0.11	0.10	0.13	0.27	0.13	0.60	0.03	0.35	0.39	0.12

Intersection Summary

Area Type: Other  
 Cycle Length: 140  
 Actuated Cycle Length: 140  
 Offset: 90 (64%), Referenced to phase 2:NBT and 6:SBT, Start of Green  
 Natural Cycle: 90  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.66  
 Intersection Signal Delay: 15.4 Intersection LOS: B  
 Intersection Capacity Utilization 59.5% ICU Level of Service B  
 Analysis Period (min) 15  
 m Volume for 95th percentile queue is metered by upstream signal.  
 ! Phase conflict between lane groups.

Splits and Phases: 2: IL 59 & Liberty Street/Jefferson Avenue

Ø1	Ø2 (R)	Ø3	Ø4
12 s	90 s	14 s	24 s
Ø5	Ø6 (R)	Ø7	Ø8
12 s	90 s	17 s	21 s

Lanes, Volumes, Timings  
3: IL 59 & Meijer Access Drive

10/03/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	14	3	23	2	4	1	2	24	2077	0	8	1368
Future Volume (vph)	14	3	23	2	4	1	2	24	2077	0	8	1368
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	2000	1900	1900	2000
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	45		0		430		0	300	
Storage Lanes	1		0	1		0		2		1	1	
Taper Length (ft)	25			105				290			190	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.97	0.91	1.00	1.00	0.91
Ped Bike Factor												
Frt		0.867			0.970							
Flt Protected	0.950			0.950				0.950			0.950	
Satd. Flow (prot)	1687	1591	0	1805	1628	0	0	3502	5200	1863	1805	5103
Flt Permitted	0.784							0.950			0.950	
Satd. Flow (perm)	1392	1591	0	1900	1628	0	0	3502	5200	1863	1805	5103
Right Turn on Red			No			No				No		
Satd. Flow (RTOR)												
Link Speed (mph)		25			25				40			40
Link Distance (ft)		348			383				286			968
Travel Time (s)		9.5			10.4				4.9			16.5
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.92	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	7%	0%	4%	0%	0%	66%	0%	0%	5%	2%	0%	7%
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)	15	27	0	2	5	0	0	27	2186	0	8	1440
Turn Type	pm+pt	NA		pm+pt	NA		Prot	Prot	NA	pm+ov	Prot	NA
Protected Phases	7	4		3	8		5	5	2	3	1	6
Permitted Phases	4			8						2		
Detector Phase	7	4		3	8		5	5	2	3	1	6
Switch Phase												
Minimum Initial (s)	3.0	8.0		3.0	8.0		3.0	3.0	15.0	3.0	3.0	15.0
Minimum Split (s)	9.5	24.0		9.5	24.0		9.5	9.5	24.0	9.5	9.5	24.0
Total Split (s)	12.0	17.0		12.0	17.0		13.0	13.0	98.0	12.0	13.0	98.0
Total Split (%)	8.6%	12.1%		8.6%	12.1%		9.3%	9.3%	70.0%	8.6%	9.3%	70.0%
Yellow Time (s)	3.0	4.5		3.0	4.5		3.0	3.0	4.5	3.0	3.0	4.5
All-Red Time (s)	0.0	1.5		0.0	1.5		0.0	0.0	1.5	0.0	0.0	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)	3.0	6.0		3.0	6.0			3.0	6.0	3.0	3.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	None	C-Max	None	None	C-Max
Act Effct Green (s)	12.4	10.0		8.5	8.6			6.6	122.2		6.2	118.2
Actuated g/C Ratio	0.09	0.07		0.06	0.06			0.05	0.87		0.04	0.84

### Lanes, Volumes, Timings 3: IL 59 & Meijer Access Drive

10/03/2022

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	20
Future Volume (vph)	20
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	420
Storage Lanes	1
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1468
Flt Permitted	
Satd. Flow (perm)	1468
Right Turn on Red	No
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.95
Growth Factor	100%
Heavy Vehicles (%)	10%
Bus Blockages (#/hr)	0
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	21
Turn Type	pm+ov
Protected Phases	7
Permitted Phases	6
Detector Phase	7
Switch Phase	
Minimum Initial (s)	3.0
Minimum Split (s)	9.5
Total Split (s)	12.0
Total Split (%)	8.6%
Yellow Time (s)	3.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	3.0
Lead/Lag	Lead
Lead-Lag Optimize?	Yes
Recall Mode	None
Act Effct Green (s)	128.8
Actuated g/C Ratio	0.92

Lanes, Volumes, Timings  
 3: IL 59 & Meijer Access Drive

10/03/2022

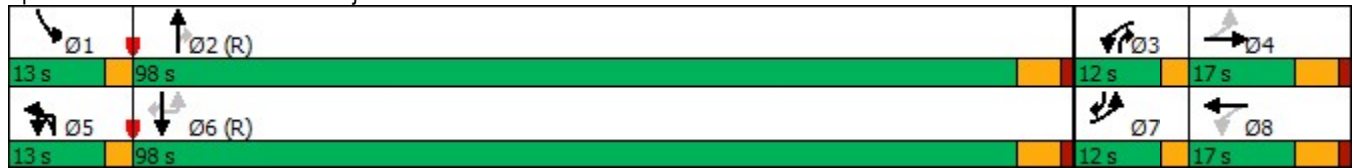


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
v/c Ratio	0.11	0.24		0.02	0.05			0.16	0.48		0.10	0.33
Control Delay	55.4	65.9		55.0	62.2			89.0	1.2		62.4	3.8
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Delay	55.4	65.9		55.0	62.2			89.0	1.2		62.4	3.8
LOS	E	E		D	E			F	A		E	A
Approach Delay		62.1			60.1				2.3			4.1
Approach LOS		E			E				A			A
Queue Length 50th (ft)	13	24		2	4			13	26		7	104
Queue Length 95th (ft)	33	55		10	19			m0	34		m20	128
Internal Link Dist (ft)		268			303				206			888
Turn Bay Length (ft)				45				430			300	
Base Capacity (vph)	160	129		153	127			250	4540		128	4310
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	0.09	0.21		0.01	0.04			0.11	0.48		0.06	0.33

Intersection Summary

Area Type: Other  
 Cycle Length: 140  
 Actuated Cycle Length: 140  
 Offset: 69 (49%), Referenced to phase 2:NBT and 6:SBTU, Start of Green  
 Natural Cycle: 80  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.48  
 Intersection Signal Delay: 3.8  
 Intersection Capacity Utilization 55.6%  
 Analysis Period (min) 15  
 Intersection LOS: A  
 ICU Level of Service B  
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: IL 59 & Meijer Access Drive





# Lanes, Volumes, Timings

## 3: IL 59 & Meijer Access Drive

10/03/2022



Lane Group	SBR
v/c Ratio	0.02
Control Delay	1.4
Queue Delay	0.0
Total Delay	1.4
LOS	A
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	1
Queue Length 95th (ft)	6
Internal Link Dist (ft)	
Turn Bay Length (ft)	420
Base Capacity (vph)	1352
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.02
Intersection Summary	

Lanes, Volumes, Timings  
4: Fort Hill Drive & Aurora Avenue

10/03/2022

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	42	283	78	39	172	38	57	160	62	16	38	31
Future Volume (vph)	42	283	78	39	172	38	57	160	62	16	38	31
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	110		0	105		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	145			140			85			95		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.968			0.973			0.958				0.933
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1719	3379	0	1752	3383	0	1805	1758	0	1444	1703	0
Flt Permitted	0.577			0.494			0.581			0.446		
Satd. Flow (perm)	1044	3379	0	911	3383	0	1104	1758	0	678	1703	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		37			28			20				38
Link Speed (mph)		45			45			30				30
Link Distance (ft)		558			536			509				341
Travel Time (s)		8.5			8.1			11.6				7.8
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	3%	5%	3%	4%	3%	0%	3%	5%	25%	5%	3%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%				0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	52	445	0	48	259	0	70	275	0	20	85	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2			6			4			8		
Detector Phase	5	2		1	6		7	4		3	8	
Switch Phase												
Minimum Initial (s)	3.0	15.0		3.0	15.0		3.0	8.0		3.0	8.0	
Minimum Split (s)	9.5	35.0		9.5	36.0		9.5	42.0		9.5	38.0	
Total Split (s)	15.0	39.0		13.0	37.0		13.0	35.0		13.0	35.0	
Total Split (%)	15.0%	39.0%		13.0%	37.0%		13.0%	35.0%		13.0%	35.0%	
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		0.0	1.5		0.0	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		3.5	6.0		3.5	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	C-Min		None	C-Min		None	None		None	None	
Act Effct Green (s)	63.1	56.1		62.2	54.2		27.3	21.0		23.5	15.6	
Actuated g/C Ratio	0.63	0.56		0.62	0.54		0.27	0.21		0.24	0.16	

Lanes, Volumes, Timings  
 4: Fort Hill Drive & Aurora Avenue

10/03/2022

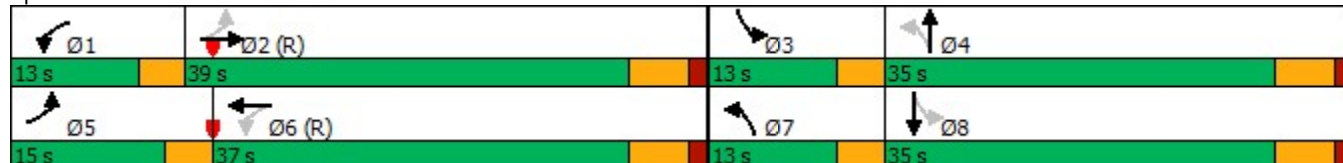


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.07	0.23		0.08	0.14		0.20	0.71		0.10	0.29	
Control Delay	9.6	13.5		9.6	13.4		24.7	44.0		22.4	23.0	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	9.6	13.5		9.6	13.4		24.7	44.0		22.4	23.0	
LOS	A	B		A	B		C	D		C	C	
Approach Delay		13.1			12.8			40.1			22.9	
Approach LOS		B			B			D			C	
Queue Length 50th (ft)	9	62		8	33		36	152		10	29	
Queue Length 95th (ft)	31	120		29	71		49	193		20	53	
Internal Link Dist (ft)		478			456			429			261	
Turn Bay Length (ft)	140			140			110			105		
Base Capacity (vph)	757	1913		665	1844		370	524		246	520	
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	0.07	0.23		0.07	0.14		0.19	0.52		0.08	0.16	

Intersection Summary

























Area Type:	Other
Cycle Length:	100
Actuated Cycle Length:	100
Offset:	30 (30%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle:	100
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.71
Intersection Signal Delay:	21.3
Intersection LOS:	C
Intersection Capacity Utilization:	42.5%
ICU Level of Service:	A
Analysis Period (min):	15

Splits and Phases: 4: Fort Hill Drive & Aurora Avenue



Lanes, Volumes, Timings  
5: Westridge Court Access Drive & Aurora Avenue

10/03/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	46	398	10	4	246	7	6	0	1	4	0	13
Future Volume (vph)	46	398	10	4	246	7	6	0	1	4	0	13
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	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)	270		0	185		160	0		0	85		0
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	190			140			25			80		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3689	1468	1203	3619	1417	1357	1961	1615	1444	1961	1495
Flt Permitted	0.572			0.503			0.950			0.950		
Satd. Flow (perm)	1087	3689	1468	637	3619	1417	1357	1961	1615	1444	1961	1495
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			82			82			499			661
Link Speed (mph)		45			45			25				25
Link Distance (ft)		734			866			285				265
Travel Time (s)		11.1			13.1			7.8				7.2
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	3%	10%	50%	5%	14%	33%	2%	0%	25%	2%	8%
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)	49	428	11	4	265	8	6	0	1	4	0	14
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt		pm+ov	pm+pt		pm+ov
Protected Phases	5	2		1	6		7	4	1	3	8	5
Permitted Phases	2		2	6		6	4		4	8		8
Detector Phase	5	2	2	1	6	6	7	4	1	3	8	5
Switch Phase												
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0	15.0	5.0	8.0	5.0	5.0	8.0	5.0
Minimum Split (s)	9.5	42.5	42.5	9.5	33.5	33.5	9.5	49.5	9.5	9.5	22.5	9.5
Total Split (s)	15.0	87.0	87.0	15.0	87.0	87.0	15.0	23.0	15.0	15.0	23.0	15.0
Total Split (%)	10.7%	62.1%	62.1%	10.7%	62.1%	62.1%	10.7%	16.4%	10.7%	10.7%	16.4%	10.7%
Yellow Time (s)	3.5	4.5	4.5	3.5	4.5	4.5	3.5	4.5	3.5	3.5	4.5	3.5
All-Red Time (s)	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	0.0	0.0	2.0	0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	6.5	6.5	3.5	6.5	6.5	3.5	6.5	3.5	3.5	6.5	3.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None	None	None
Act Effct Green (s)	133.7	134.6	134.6	131.3	125.2	125.2	6.3		5.5	6.2		5.7
Actuated g/C Ratio	0.96	0.96	0.96	0.94	0.89	0.89	0.04		0.04	0.04		0.04

Lanes, Volumes, Timings  
5: Westridge Court Access Drive & Aurora Avenue

10/03/2022

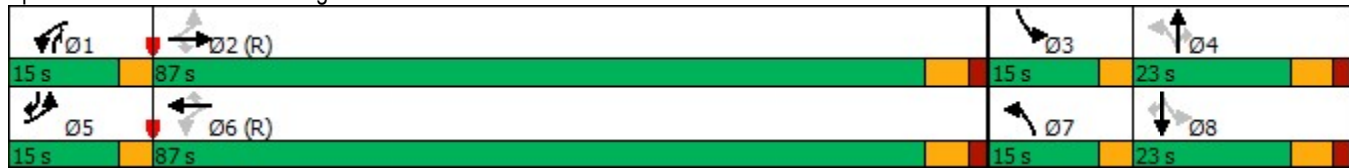


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.05	0.12	0.01	0.01	0.08	0.01	0.10		0.00	0.06		0.02
Control Delay	0.5	1.6	0.3	0.5	1.4	0.0	67.0		0.0	65.8		0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0
Total Delay	0.5	1.6	0.3	0.5	1.4	0.0	67.0		0.0	65.8		0.1
LOS	A	A	A	A	A	A	E		A	E		A
Approach Delay		1.5			1.4			57.4				14.7
Approach LOS		A			A			E				B
Queue Length 50th (ft)	0	6	0	0	10	0	5		0	4		0
Queue Length 95th (ft)	2	175	m0	1	31	0	21		0	17		0
Internal Link Dist (ft)		654			786			205				185
Turn Bay Length (ft)	270			185		160				85		
Base Capacity (vph)	1101	3547	1415	657	3236	1276	111		590	118		729
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	0.04	0.12	0.01	0.01	0.08	0.01	0.05		0.00	0.03		0.02

Intersection Summary

Area Type: Other  
 Cycle Length: 140  
 Actuated Cycle Length: 140  
 Offset: 106 (76%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green  
 Natural Cycle: 115  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.12  
 Intersection Signal Delay: 2.3 Intersection LOS: A  
 Intersection Capacity Utilization 37.5% ICU Level of Service A  
 Analysis Period (min) 15  
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: Westridge Court Access Drive & Aurora Avenue



HCM 6th TWSC  
6: IL 59 & Heritage Square Access Drive

10/03/2022

Intersection												
Int Delay, s/veh	0.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations			↗			↗	↘	↑↑↑	↗	↘	↑↑↑	↗
Traffic Vol, veh/h	0	0	7	0	0	0	19	2106	11	9	1379	7
Future Vol, veh/h	0	0	7	0	0	0	19	2106	11	9	1379	7
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	-	-	0	255	-	170	365	-	150
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	2	0	2	2	2	0	5	0	11	7	0
Mvmt Flow	0	0	7	0	0	0	20	2240	12	10	1467	7

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	-	-	734	-	-	1120	1474	0	0	2252	0	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	7.1	-	-	7.14	5.3	-	-	5.52	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.9	-	-	3.92	3.1	-	-	3.21	-	-
Pot Cap-1 Maneuver	0	0	*602	0	0	*432	*757	-	-	*527	-	-
Stage 1	0	0	-	0	0	-	-	-	-	-	-	-
Stage 2	0	0	-	0	0	-	-	-	-	-	-	-
Platoon blocked, %			1			1	1	-	-	1	-	-
Mov Cap-1 Maneuver	-	-	*602	-	-	*432	*757	-	-	*527	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	* 757	-	-	602	-	* 527	-	-
HCM Lane V/C Ratio	0.027	-	-	0.012	-	0.018	-	-
HCM Control Delay (s)	9.9	-	-	11.1	0	12	-	-
HCM Lane LOS	A	-	-	B	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0	-	0.1	-	-

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

HCM 6th TWSC  
7: IL 59 & Right-In/Right-Out

10/03/2022

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↑	↑↑↑	↑		↑↑↑
Traffic Vol, veh/h	0	2	2101	5	0	1395
Future Vol, veh/h	0	2	2101	5	0	1395
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	-	140	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	0	5	20	2	7
Mvmt Flow	0	2	2309	5	0	1533

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	-	1155	0	0	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	7.1	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	3.9	-	-	-
Pot Cap-1 Maneuver	0	*434	-	-	0
Stage 1	0	-	-	-	0
Stage 2	0	-	-	-	0
Platoon blocked, %	-	1	-	-	-
Mov Cap-1 Maneuver	-	*434	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBT
Capacity (veh/h)	-	-	434
HCM Lane V/C Ratio	-	-	0.005
HCM Control Delay (s)	-	-	13.3
HCM Lane LOS	-	-	B
HCM 95th %tile Q(veh)	-	-	0

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

HCM 6th TWSC  
 8: Aurora Avenue & West Right-In/Right-Out

10/03/2022

Intersection												
Int Delay, s/veh	0.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑		↑↑↑				↑			↑
Traffic Vol, veh/h	0	445	7	0	261	4	0	0	9	0	0	2
Future Vol, veh/h	0	445	7	0	261	4	0	0	9	0	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	Free	-	-	None	-	-	Stop
Storage Length	-	-	0	-	-	-	-	-	0	-	-	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	3	0	2	6	0	2	2	22	2	2	0
Mvmt Flow	0	484	8	0	284	4	0	0	10	0	0	2

Major/Minor	Major1		Major2		Minor1		Minor2					
Conflicting Flow All	-	0	0	-	-	0	-	-	242	-	-	142
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	7.34	-	-	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.52	-	-	3.9
Pot Cap-1 Maneuver	0	-	-	0	-	0	0	0	*852	0	0	*881
Stage 1	0	-	-	0	-	0	0	0	-	0	0	-
Stage 2	0	-	-	0	-	0	0	0	-	0	0	-
Platoon blocked, %		-	-	-	-	-	-	-	1			1
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	*852	-	-	*881
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	9.3	9.1
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	SBLn1
Capacity (veh/h)	852	-	-	-	881
HCM Lane V/C Ratio	0.011	-	-	-	0.002
HCM Control Delay (s)	9.3	-	-	-	9.1
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

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



HCM 6th TWSC  
 9: Aurora Avenue & East Right-In/Right-Out

10/03/2022

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑			↑
Traffic Vol, veh/h	0	403	255	5	0	2
Future Vol, veh/h	0	403	255	5	0	2
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	85	85	85	85	85	85
Heavy Vehicles, %	2	3	6	0	2	0
Mvmt Flow	0	474	300	6	0	2

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	-	0	-	0	153
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	3.3
Pot Cap-1 Maneuver	0	-	-	-	*991
Stage 1	0	-	-	-	0
Stage 2	0	-	-	-	0
Platoon blocked, %	-	-	-	-	1
Mov Cap-1 Maneuver	-	-	-	-	*991
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	8.6
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	991
HCM Lane V/C Ratio	-	-	-	0.002
HCM Control Delay (s)	-	-	-	8.6
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	0

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

HCM 6th TWSC  
 10: Jefferson Avenue & Target Access Drive

10/03/2022

Intersection												
Int Delay, s/veh	1.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↖↗		↖	↖↗		↖	↗		↖	↗	
Traffic Vol, veh/h	14	166	5	1	112	27	0	1	1	10	0	18
Future Vol, veh/h	14	166	5	1	112	27	0	1	1	10	0	18
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	90	-	-	150	-	-	70	-	-	30	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	79	79	79	79	79	79	79	79	79	79	79	79
Heavy Vehicles, %	0	12	0	0	11	4	2	0	0	0	2	6
Mvmt Flow	18	210	6	1	142	34	0	1	1	13	0	23

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	176	0	0	216	0	0	322	427	108	303	413	88
Stage 1	-	-	-	-	-	-	249	249	-	161	161	-
Stage 2	-	-	-	-	-	-	73	178	-	142	252	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.54	6.5	6.9	7.5	6.54	7.02
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.5	-	6.5	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.5	-	6.5	5.54	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.52	4	3.3	3.5	4.02	3.36
Pot Cap-1 Maneuver	1412	-	-	1461	-	-	718	587	*1038	747	594	940
Stage 1	-	-	-	-	-	-	838	768	-	831	764	-
Stage 2	-	-	-	-	-	-	928	756	-	979	761	-
Platoon blocked, %		-	-	1	-	-	1	1	1	1	1	
Mov Cap-1 Maneuver	1412	-	-	1461	-	-	694	579	*1038	737	585	940
Mov Cap-2 Maneuver	-	-	-	-	-	-	706	605	-	728	612	-
Stage 1	-	-	-	-	-	-	828	758	-	820	763	-
Stage 2	-	-	-	-	-	-	905	755	-	964	751	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.6			0.1			9.7			9.3		
HCM LOS							A			A		

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	-	764	1412	-	-	1461	-	-	728	940
HCM Lane V/C Ratio	-	0.003	0.013	-	-	0.001	-	-	0.017	0.024
HCM Control Delay (s)		0	9.7	7.6	-	-	7.5	-	10	8.9
HCM Lane LOS		A	A	A	-	-	A	-	B	A
HCM 95th %tile Q(veh)		-	0	0	-	-	0	-	0.1	0.1

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

HCM 6th TWSC  
 11: Fort Hill Drive & Westridge Court Access Drive

10/03/2022

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	8	0	14	6	0	3	25	200	15	2	65	6
Future Vol, veh/h	8	0	14	6	0	3	25	200	15	2	65	6
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	68	68	68	68	68	68	68	68	68	68	68	68
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	12	0	21	9	0	4	37	294	22	3	96	9

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	488	497	101	496	490	305	105	0	0	316	0	0
Stage 1	107	107	-	379	379	-	-	-	-	-	-	-
Stage 2	381	390	-	117	111	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	548	508	954	541	513	820	1486	-	-	1262	-	-
Stage 1	898	807	-	699	638	-	-	-	-	-	-	-
Stage 2	697	630	-	888	804	-	-	-	-	-	-	-
Platoon blocked, %	1	1		1	1	1		-	-	1	-	-
Mov Cap-1 Maneuver	532	492	954	516	497	820	1486	-	-	1262	-	-
Mov Cap-2 Maneuver	532	492	-	516	497	-	-	-	-	-	-	-
Stage 1	871	805	-	678	619	-	-	-	-	-	-	-
Stage 2	672	611	-	866	802	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	10.1		11.3		0.8		0.2	
HCM LOS	B		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1486	-	-	740	589	1262	-	-
HCM Lane V/C Ratio	0.025	-	-	0.044	0.022	0.002	-	-
HCM Control Delay (s)	7.5	0	-	10.1	11.3	7.9	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.1	0.1	0	-	-

HCM 6th TWSC  
 12: Fort Hill Drive & Goodwill Access Drive

10/03/2022

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	1	0	2	2	0	0	3	188	20	6	69	1
Future Vol, veh/h	1	0	2	2	0	0	3	188	20	6	69	1
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	0	3	3	0	0	4	235	25	8	86	1

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	359	371	87	360	359	248	87	0	0	260	0	0
Stage 1	103	103	-	256	256	-	-	-	-	-	-	-
Stage 2	256	268	-	104	103	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	667	601	971	666	612	868	1509	-	-	1325	-	-
Stage 1	903	810	-	813	725	-	-	-	-	-	-	-
Stage 2	813	716	-	902	810	-	-	-	-	-	-	-
Platoon blocked, %	1	1		1	1	1		-	-	1	-	-
Mov Cap-1 Maneuver	662	596	971	660	606	868	1509	-	-	1325	-	-
Mov Cap-2 Maneuver	662	596	-	660	606	-	-	-	-	-	-	-
Stage 1	900	805	-	811	723	-	-	-	-	-	-	-
Stage 2	811	714	-	894	805	-	-	-	-	-	-	-



































Approach	EB		WB		NB		SB	
HCM Control Delay, s	9.3		10.5		0.1		0.6	
HCM LOS	A		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1509	-	-	840	660	1325	-	-
HCM Lane V/C Ratio	0.002	-	-	0.004	0.004	0.006	-	-
HCM Control Delay (s)	7.4	0	-	9.3	10.5	7.7	0	-
HCM Lane LOS	A	A	-	A	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-

Capacity Analysis Summary Sheets  
Year 2028 No-Build Weekday Evening Peak Hour

Lanes, Volumes, Timings  
1: IL 59 & Aurora Avenue

10/04/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations	 	  		 	  		 	  			 	 
Traffic Volume (vph)	244	371	251	235	464	146	265	1477	143	5	191	2051
Future Volume (vph)	244	371	251	235	464	146	265	1477	143	5	191	2051
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	2000	1900	1900	1900	2000
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%				0%
Storage Length (ft)	265		205	320		210	190		395		325	
Storage Lanes	2		1	2		1	2		1		2	
Taper Length (ft)	270			300			300				300	
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00	0.91	0.97	0.91
Ped Bike Factor												
Frt			0.850			0.850			0.850			
Flt Protected	0.950			0.950			0.950				0.950	
Satd. Flow (prot)	3467	5406	1599	3467	5460	1599	3502	5301	1599	0	3468	5353
Flt Permitted	0.950			0.950			0.950				0.950	
Satd. Flow (perm)	3467	5406	1599	3467	5460	1599	3502	5301	1599	0	3468	5353
Right Turn on Red			No			No			No			
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			40				40
Link Distance (ft)		654			559			897				856
Travel Time (s)		9.9			8.5			15.3				14.6
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	1%	0%	1%	0%	3%	1%	0%	1%	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)	257	391	264	247	488	154	279	1555	151	0	206	2159
Turn Type	Prot	NA	pt+ov	Prot	NA	Prot	Prot	NA	pt+ov	Prot	Prot	NA
Protected Phases	7	4	4 5	3	8	8	5	2	2 3	1	1	6
Permitted Phases												
Detector Phase	7	4	4 5	3	8	8	5	2	2 3	1	1	6
Switch Phase												
Minimum Initial (s)	3.0	8.0		3.0	8.0	8.0	3.0	15.0		3.0	3.0	15.0
Minimum Split (s)	9.5	24.0		9.5	24.0	24.0	9.5	24.0		9.5	9.5	24.0
Total Split (s)	21.0	29.0		21.0	29.0	29.0	17.0	73.0		17.0	17.0	73.0
Total Split (%)	15.0%	20.7%		15.0%	20.7%	20.7%	12.1%	52.1%		12.1%	12.1%	52.1%
Yellow Time (s)	3.0	4.5		3.0	4.5	4.5	3.0	4.5		3.0	3.0	4.5
All-Red Time (s)	0.0	1.5		0.0	1.5	1.5	0.0	1.5		0.0	0.0	1.5
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	3.0	6.0		3.0	6.0	6.0	3.0	6.0		3.0	3.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag		Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None		None	None	None	None	C-Min		None	None	C-Min
Act Effct Green (s)	15.3	24.1	41.0	15.0	23.9	23.9	13.8	70.2	88.1		12.7	69.1
Actuated g/C Ratio	0.11	0.17	0.29	0.11	0.17	0.17	0.10	0.50	0.63		0.09	0.49

Lanes, Volumes, Timings  
1: IL 59 & Aurora Avenue

10/04/2022

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	291
Future Volume (vph)	291
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	210
Storage Lanes	1
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1615
Flt Permitted	
Satd. Flow (perm)	1615
Right Turn on Red	No
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.95
Growth Factor	100%
Heavy Vehicles (%)	0%
Bus Blockages (#/hr)	0
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	306
Turn Type	pt+ov
Protected Phases	6 7
Permitted Phases	
Detector Phase	6 7
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	
Act Effct Green (s)	87.3
Actuated g/C Ratio	0.62

Lanes, Volumes, Timings  
1: IL 59 & Aurora Avenue

10/04/2022



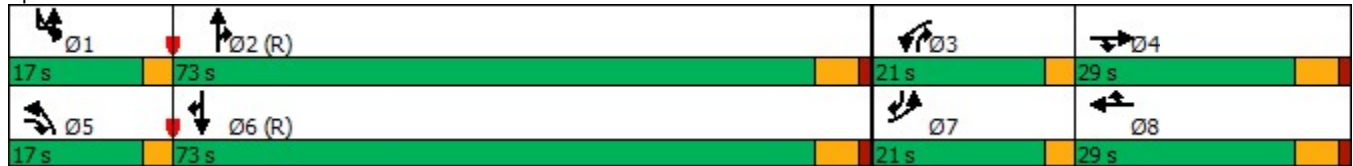
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
v/c Ratio	0.68	0.42	0.57	0.67	0.52	0.57	0.81	0.59	0.15		0.66	0.82
Control Delay	69.3	53.2	47.5	62.8	51.7	58.2	79.9	26.3	11.4		86.5	18.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Total Delay	69.3	53.2	47.5	62.8	51.7	58.2	79.9	26.3	11.4		86.5	18.1
LOS	E	D	D	E	D	E	E	C	B		F	B
Approach Delay		56.1			55.9			32.7				22.1
Approach LOS		E			E			C				C
Queue Length 50th (ft)	117	116	200	113	150	129	130	372	56		90	656
Queue Length 95th (ft)	162	155	303	142	195	212	#195	425	85		m130	554
Internal Link Dist (ft)		574			479			817				776
Turn Bay Length (ft)	265		205	320		210	190		395		325	
Base Capacity (vph)	445	947	462	445	948	277	353	2656	1041		346	2640
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0		0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0		0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0		0	0
Reduced v/c Ratio	0.58	0.41	0.57	0.56	0.51	0.56	0.79	0.59	0.15		0.60	0.82

Intersection Summary

Area Type: Other  
 Cycle Length: 140  
 Actuated Cycle Length: 140  
 Offset: 127 (91%), Referenced to phase 2:NBT and 6:SBT, Start of Green  
 Natural Cycle: 90  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.82  
 Intersection Signal Delay: 34.8  
 Intersection Capacity Utilization 77.4%  
 Analysis Period (min) 15  
 Intersection LOS: C  
 ICU Level of Service D

# 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 59 & Aurora Avenue





Lanes, Volumes, Timings  
1: IL 59 & Aurora Avenue

10/04/2022



Lane Group	SBR
v/c Ratio	0.30
Control Delay	6.7
Queue Delay	0.0
Total Delay	6.7
LOS	A
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	89
Queue Length 95th (ft)	111
Internal Link Dist (ft)	
Turn Bay Length (ft)	210
Base Capacity (vph)	1039
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.29
Intersection Summary	

Lanes, Volumes, Timings  
2: IL 59 & Liberty Street/Jefferson Avenue

10/04/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	290	206	80	151	224	190	1	63	1555	117	126	2281
Future Volume (vph)	290	206	80	151	224	190	1	63	1555	117	126	2281
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	1900	2000	1900	1900	2000
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%				0%			0%
Storage Length (ft)	240		250	130		145		300		185	200	
Storage Lanes	2		1	2		1		2		1	2	
Taper Length (ft)	115			120				290			275	
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.91	0.97	0.91	1.00	0.97	0.91
Ped Bike Factor												
Frt			0.850			0.850				0.850		
Flt Protected	0.950			0.950				0.950			0.950	
Satd. Flow (prot)	3303	3725	1615	3467	3725	1524	0	3434	5353	1615	3303	5353
Flt Permitted	0.950			0.950				0.950			0.950	
Satd. Flow (perm)	3303	3725	1615	3467	3725	1524	0	3434	5353	1615	3303	5353
Right Turn on Red			No			No				No		
Satd. Flow (RTOR)												
Link Speed (mph)		40			30				40			40
Link Distance (ft)		553			478				968			552
Travel Time (s)		9.4			10.9				16.5			9.4
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 (%)	6%	2%	0%	1%	2%	6%	0%	2%	2%	0%	6%	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)	302	215	83	157	233	198	0	67	1620	122	131	2376
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	Prot	NA	pm+ov	Prot	NA
Protected Phases	7	4	5!	3	8	1!	5!	5	2	3	1	6
Permitted Phases			4			8				2		
Detector Phase	7	4	5	3	8	1	5	5	2	3	1	6
Switch Phase												
Minimum Initial (s)	3.0	8.0	3.0	3.0	8.0	3.0	3.0	3.0	15.0	3.0	3.0	15.0
Minimum Split (s)	9.5	24.0	9.5	9.5	24.0	9.5	9.5	9.5	24.0	9.5	9.5	24.0
Total Split (s)	20.0	29.0	13.0	14.0	23.0	14.0	13.0	13.0	83.0	14.0	14.0	84.0
Total Split (%)	14.3%	20.7%	9.3%	10.0%	16.4%	10.0%	9.3%	9.3%	59.3%	10.0%	10.0%	60.0%
Yellow Time (s)	3.0	4.5	3.0	3.0	4.5	3.0	3.0	3.0	4.5	3.0	3.0	4.5
All-Red Time (s)	0.0	1.5	0.0	0.0	1.5	0.0	0.0	0.0	1.5	0.0	0.0	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	6.0	3.0	3.0	6.0	3.0		3.0	6.0	3.0	3.0	6.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	C-Min	None	None	C-Min
Act Effct Green (s)	16.1	21.3	35.3	10.4	15.5	31.6		8.1	80.3	96.7	10.1	82.3
Actuated g/C Ratio	0.12	0.15	0.25	0.07	0.11	0.23		0.06	0.57	0.69	0.07	0.59

Lanes, Volumes, Timings  
 2: IL 59 & Liberty Street/Jefferson Avenue

10/04/2022

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	190
Future Volume (vph)	190
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	210
Storage Lanes	1
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1495
Flt Permitted	
Satd. Flow (perm)	1495
Right Turn on Red	No
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.96
Growth Factor	100%
Heavy Vehicles (%)	8%
Bus Blockages (#/hr)	0
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	198
Turn Type	pm+ov
Protected Phases	7
Permitted Phases	6
Detector Phase	7
Switch Phase	
Minimum Initial (s)	3.0
Minimum Split (s)	9.5
Total Split (s)	20.0
Total Split (%)	14.3%
Yellow Time (s)	3.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	3.0
Lead/Lag	Lead
Lead-Lag Optimize?	Yes
Recall Mode	None
Act Effct Green (s)	104.4
Actuated g/C Ratio	0.75

Lanes, Volumes, Timings  
 2: IL 59 & Liberty Street/Jefferson Avenue

10/04/2022

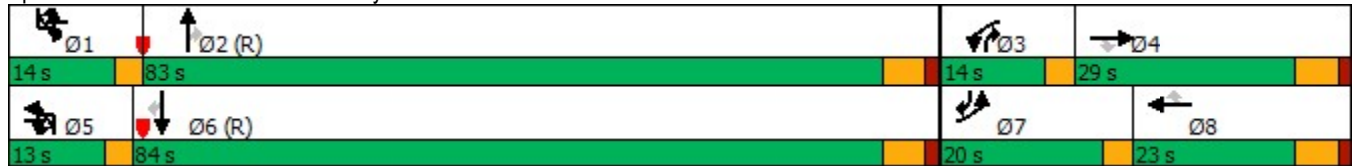


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
v/c Ratio	0.79	0.38	0.20	0.61	0.57	0.58		0.34	0.53	0.11	0.55	0.76
Control Delay	75.9	55.1	41.6	73.4	64.4	55.1		81.6	5.8	3.5	71.7	24.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Delay	75.9	55.1	41.6	73.4	64.4	55.1		81.6	5.8	3.5	71.7	24.0
LOS	E	E	D	E	E	E		F	A	A	E	C
Approach Delay		63.7			63.7				8.5			25.0
Approach LOS		E			E				A			C
Queue Length 50th (ft)	139	92	59	72	106	159		32	66	13	60	586
Queue Length 95th (ft)	#192	133	104	111	151	243		58	65	18	95	671
Internal Link Dist (ft)		473			398				888			472
Turn Bay Length (ft)	240		250	130		145		300		185	200	
Base Capacity (vph)	401	611	429	272	452	353		245	3070	1122	259	3146
Starvation Cap Reductn	0	0	0	0	0	0		0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0		0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0		0	0	0	0	0
Reduced v/c Ratio	0.75	0.35	0.19	0.58	0.52	0.56		0.27	0.53	0.11	0.51	0.76

Intersection Summary

Area Type: Other  
 Cycle Length: 140  
 Actuated Cycle Length: 140  
 Offset: 74 (53%), Referenced to phase 2:NBT and 6:SBT, Start of Green  
 Natural Cycle: 90  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.79  
 Intersection Signal Delay: 27.8 Intersection LOS: C  
 Intersection Capacity Utilization 76.8% ICU Level of Service D  
 Analysis Period (min) 15  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.  
 ! Phase conflict between lane groups.

Splits and Phases: 2: IL 59 & Liberty Street/Jefferson Avenue



Lanes, Volumes, Timings  
2: IL 59 & Liberty Street/Jefferson Avenue

10/04/2022



Lane Group	SBR
v/c Ratio	0.18
Control Delay	6.0
Queue Delay	0.0
Total Delay	6.0
LOS	A
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	49
Queue Length 95th (ft)	80
Internal Link Dist (ft)	
Turn Bay Length (ft)	210
Base Capacity (vph)	1124
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.18
Intersection Summary	

Lanes, Volumes, Timings  
3: IL 59 & Meijer Access Drive

10/04/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	67	12	92	76	24	51	6	112	1617	45	1	49
Future Volume (vph)	67	12	92	76	24	51	6	112	1617	45	1	49
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	2000	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%				0%			
Storage Length (ft)	0		0	45		0		430		0		300
Storage Lanes	1		0	1		0		2		1		1
Taper Length (ft)	25			105				290				190
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.97	0.91	1.00	0.91	1.00
Ped Bike Factor												
Frt		0.867			0.898					0.850		
Flt Protected	0.950			0.950				0.950				0.950
Satd. Flow (prot)	1805	1647	0	1805	1706	0	0	3469	5301	1615	0	1805
Flt Permitted	0.706			0.573				0.950				0.317
Satd. Flow (perm)	1341	1647	0	1089	1706	0	0	3469	5301	1615	0	602
Right Turn on Red			No			No				No		
Satd. Flow (RTOR)												
Link Speed (mph)		25			25				40			
Link Distance (ft)		348			383				286			
Travel Time (s)		9.5			10.4				4.9			
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%	1%	3%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%				0%			
Shared Lane Traffic (%)												
Lane Group Flow (vph)	69	107	0	78	78	0	0	121	1667	46	0	52
Turn Type	pm+pt	NA		pm+pt	NA		Prot	Prot	NA	pm+ov	Perm	Prot
Protected Phases	7	4		3	8		5	5	2	3		1
Permitted Phases	4			8						2	6	
Detector Phase	7	4		3	8		5	5	2	3	6	1
Switch Phase												
Minimum Initial (s)	3.0	8.0		3.0	8.0		3.0	3.0	15.0	3.0	15.0	3.0
Minimum Split (s)	9.5	24.0		9.5	24.0		9.5	9.5	24.0	9.5	24.0	9.5
Total Split (s)	15.0	21.0		15.0	21.0		14.0	14.0	90.0	15.0	90.0	14.0
Total Split (%)	10.7%	15.0%		10.7%	15.0%		10.0%	10.0%	64.3%	10.7%	64.3%	10.0%
Yellow Time (s)	3.0	4.5		3.0	4.5		3.0	3.0	4.5	3.0	4.5	3.0
All-Red Time (s)	0.0	1.5		0.0	1.5		0.0	0.0	1.5	0.0	1.5	0.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0	0.0		0.0
Total Lost Time (s)	3.0	6.0		3.0	6.0			3.0	6.0	3.0		3.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lead	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	None	C-Max	None	C-Max	None
Act Effct Green (s)	26.7	14.2		27.6	14.6			9.7	85.2	101.2		12.6
Actuated g/C Ratio	0.19	0.10		0.20	0.10			0.07	0.61	0.72		0.09

Lanes, Volumes, Timings  
 3: IL 59 & Meijer Access Drive

10/04/2022



Lane Group	SBT	SBR
Lane Configurations	↑↑↑↑	↑
Traffic Volume (vph)	2379	84
Future Volume (vph)	2379	84
Ideal Flow (vphpl)	2000	1900
Lane Width (ft)	12	12
Grade (%)	0%	
Storage Length (ft)		420
Storage Lanes		1
Taper Length (ft)		
Lane Util. Factor	0.91	1.00
Ped Bike Factor		
Frt		0.850
Flt Protected		
Satd. Flow (prot)	5353	1615
Flt Permitted		
Satd. Flow (perm)	5353	1615
Right Turn on Red		No
Satd. Flow (RTOR)		
Link Speed (mph)	40	
Link Distance (ft)	968	
Travel Time (s)	16.5	
Confl. Peds. (#/hr)		
Confl. Bikes (#/hr)		
Peak Hour Factor	0.97	0.97
Growth Factor	100%	100%
Heavy Vehicles (%)	2%	0%
Bus Blockages (#/hr)	0	0
Parking (#/hr)		
Mid-Block Traffic (%)	0%	
Shared Lane Traffic (%)		
Lane Group Flow (vph)	2453	87
Turn Type	NA	pm+ov
Protected Phases	6	7
Permitted Phases		6
Detector Phase	6	7
Switch Phase		
Minimum Initial (s)	15.0	3.0
Minimum Split (s)	24.0	9.5
Total Split (s)	90.0	15.0
Total Split (%)	64.3%	10.7%
Yellow Time (s)	4.5	3.0
All-Red Time (s)	1.5	0.0
Lost Time Adjust (s)	0.0	0.0
Total Lost Time (s)	6.0	3.0
Lead/Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes
Recall Mode	C-Max	None
Act Effct Green (s)	88.1	103.6
Actuated g/C Ratio	0.63	0.74

Lanes, Volumes, Timings  
 3: IL 59 & Meijer Access Drive

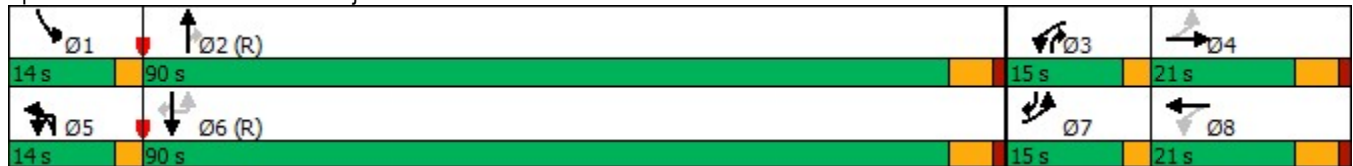
10/04/2022

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
v/c Ratio	0.24	0.64		0.29	0.44			0.50	0.52	0.04		0.96
Control Delay	45.9	78.3		47.0	66.6			56.1	34.6	9.9		166.2
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0	0.0		0.0
Total Delay	45.9	78.3		47.0	66.6			56.1	34.6	9.9		166.2
LOS	D	E		D	E			E	C	A		F
Approach Delay		65.6			56.8				35.4			
Approach LOS		E			E				D			
Queue Length 50th (ft)	51	94		57	67			56	517	16		~53
Queue Length 95th (ft)	93	161		104	123			90	569	m30		m#92
Internal Link Dist (ft)		268			303				206			
Turn Bay Length (ft)				45				430				300
Base Capacity (vph)	314	179		286	189			272	3227	1190		54
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	0.22	0.60		0.27	0.41			0.44	0.52	0.04		0.96

Intersection Summary

Area Type: Other  
 Cycle Length: 140  
 Actuated Cycle Length: 140  
 Offset: 77 (55%), Referenced to phase 2:NBT and 6:SBTU, Start of Green  
 Natural Cycle: 90  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.96  
 Intersection Signal Delay: 23.1 Intersection LOS: C  
 Intersection Capacity Utilization 71.2% ICU Level of Service C  
 Analysis Period (min) 15  
 ~ Volume exceeds capacity, queue is theoretically infinite.  
 Queue shown is maximum after two cycles.  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.  
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: IL 59 & Meijer Access Drive





Lanes, Volumes, Timings  
 3: IL 59 & Meijer Access Drive

10/04/2022



Lane Group	SBT	SBR
v/c Ratio	0.73	0.07
Control Delay	6.4	1.8
Queue Delay	0.0	0.0
Total Delay	6.5	1.8
LOS	A	A
Approach Delay	9.5	
Approach LOS	A	
Queue Length 50th (ft)	116	5
Queue Length 95th (ft)	121	m6
Internal Link Dist (ft)	888	
Turn Bay Length (ft)		420
Base Capacity (vph)	3368	1223
Starvation Cap Reductn	35	0
Spillback Cap Reductn	0	0
Storage Cap Reductn	0	0
Reduced v/c Ratio	0.74	0.07
Intersection Summary		

Lanes, Volumes, Timings  
4: Fort Hill Drive & Aurora Avenue

10/04/2022

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	116	333	125	74	585	89	48	191	82	85	457	66
Future Volume (vph)	116	333	125	74	585	89	48	191	82	85	457	66
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	110		0	105		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	145			140			85			95		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.959			0.980			0.955			0.981	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3453	0	1805	3507	0	1805	1797	0	1787	1825	0
Flt Permitted	0.252			0.434			0.138			0.417		
Satd. Flow (perm)	469	3453	0	825	3507	0	262	1797	0	784	1825	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		44			15			19				6
Link Speed (mph)		45			45			30				30
Link Distance (ft)		558			536			509				341
Travel Time (s)		8.5			8.1			11.6				7.8
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	0%	1%	0%	1%	0%	0%	1%	1%	1%	2%	3%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%				0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	122	483	0	78	710	0	51	287	0	89	550	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2			6			4			8		
Detector Phase	5	2		1	6		7	4		3	8	
Switch Phase												
Minimum Initial (s)	3.0	15.0		3.0	15.0		3.0	8.0		3.0	8.0	
Minimum Split (s)	9.5	35.0		9.5	36.0		9.5	42.0		9.5	38.0	
Total Split (s)	14.0	37.0		23.0	46.0		16.0	44.0		16.0	44.0	
Total Split (%)	11.7%	30.8%		19.2%	38.3%		13.3%	36.7%		13.3%	36.7%	
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		0.0	1.5		0.0	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		3.5	6.0		3.5	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	C-Min		None	C-Min		None	None		None	None	
Act Effct Green (s)	58.6	48.1		56.1	45.3		47.9	37.6		50.5	40.5	
Actuated g/C Ratio	0.49	0.40		0.47	0.38		0.40	0.31		0.42	0.34	

Lanes, Volumes, Timings  
4: Fort Hill Drive & Aurora Avenue

10/04/2022

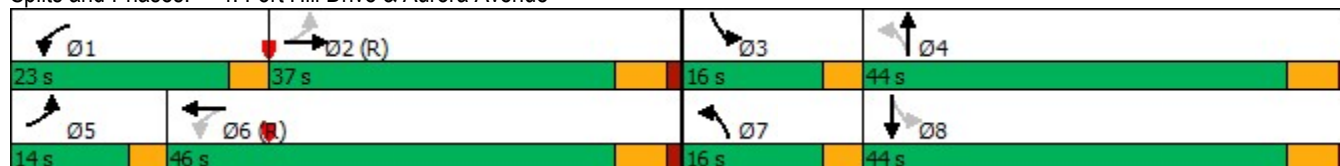


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.37	0.34		0.17	0.53		0.25	0.50		0.22	0.89	
Control Delay	20.8	25.6		18.3	31.8		20.7	33.8		19.9	54.9	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	20.8	25.6		18.3	31.8		20.7	33.8		19.9	54.9	
LOS	C	C		B	C		C	C		B	D	
Approach Delay		24.6			30.5			31.8			50.0	
Approach LOS		C			C			C			D	
Queue Length 50th (ft)	53	134		33	237		21	157		37	381	
Queue Length 95th (ft)	90	186		62	300		44	251		69	#600	
Internal Link Dist (ft)		478			456			429			261	
Turn Bay Length (ft)	140			140			110			105		
Base Capacity (vph)	344	1410		575	1336		273	613		446	627	
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	0.35	0.34		0.14	0.53		0.19	0.47		0.20	0.88	

Intersection Summary

Area Type: Other  
 Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 54 (45%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green  
 Natural Cycle: 100  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.89  
 Intersection Signal Delay: 34.4  
 Intersection LOS: C  
 Intersection Capacity Utilization 73.5%  
 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.

Splits and Phases: 4: Fort Hill Drive & Aurora Avenue



Lanes, Volumes, Timings  
 5: Westridge Court Access Drive & Aurora Avenue

10/04/2022

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	127	504	33	55	605	39	56	13	33	37	24	135
Future Volume (vph)	127	504	33	55	605	39	56	13	33	37	24	135
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	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)	270		0	185		160	0		0	85		0
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	190			140			25			80		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3762	1568	1736	3762	1615	1805	2000	1615	1805	1923	1599
Flt Permitted	0.382			0.453			0.784			0.526		
Satd. Flow (perm)	726	3762	1568	828	3762	1615	1490	2000	1615	999	1923	1599
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			82			82			55			144
Link Speed (mph)		45			45			25				25
Link Distance (ft)		734			866			285				265
Travel Time (s)		11.1			13.1			7.8				7.2
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 (%)	0%	1%	3%	4%	1%	0%	0%	0%	0%	0%	4%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%				0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	135	536	35	59	644	41	60	14	35	39	26	144
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov
Protected Phases	5	2		1	6		7	4	1	3	8	5
Permitted Phases	2		2	6		6	4		4	8		8
Detector Phase	5	2	2	1	6	6	7	4	1	3	8	5
Switch Phase												
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0	15.0	5.0	8.0	5.0	5.0	8.0	5.0
Minimum Split (s)	9.5	42.5	42.5	9.5	33.5	33.5	9.5	49.5	9.5	9.5	22.5	9.5
Total Split (s)	24.0	70.0	70.0	24.0	70.0	70.0	18.0	28.0	24.0	18.0	28.0	24.0
Total Split (%)	17.1%	50.0%	50.0%	17.1%	50.0%	50.0%	12.9%	20.0%	17.1%	12.9%	20.0%	17.1%
Yellow Time (s)	3.5	4.5	4.5	3.5	4.5	4.5	3.5	4.5	3.5	3.5	4.5	3.5
All-Red Time (s)	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	0.0	0.0	2.0	0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	6.5	6.5	3.5	6.5	6.5	3.5	6.5	3.5	3.5	6.5	3.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None	None	None
Act Effct Green (s)	113.6	105.1	105.1	110.3	100.7	100.7	16.0	10.0	14.3	17.6	9.5	18.0
Actuated g/C Ratio	0.81	0.75	0.75	0.79	0.72	0.72	0.11	0.07	0.10	0.13	0.07	0.13

Lanes, Volumes, Timings  
 5: Westridge Court Access Drive & Aurora Avenue

10/04/2022

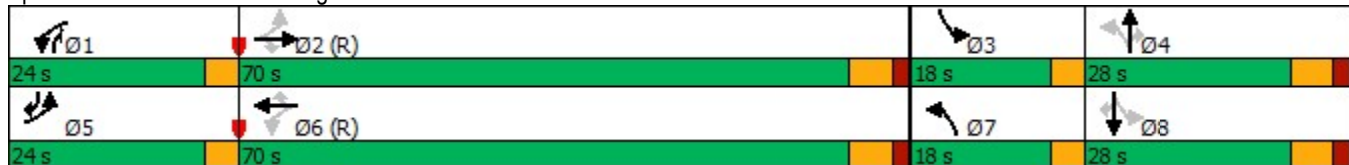


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.21	0.19	0.03	0.08	0.24	0.03	0.31	0.10	0.16	0.20	0.20	0.44
Control Delay	8.4	12.8	2.9	4.5	8.8	0.1	56.4	60.8	6.2	50.1	64.7	11.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	8.4	12.8	2.9	4.5	8.8	0.1	56.4	60.8	6.2	50.1	64.7	11.3
LOS	A	B	A	A	A	A	E	E	A	D	E	B
Approach Delay		11.5			8.0			40.9			25.2	
Approach LOS		B			A			D			C	
Queue Length 50th (ft)	56	166	1	11	117	0	53	12	0	30	23	0
Queue Length 95th (ft)	73	134	m6	26	173	1	86	35	16	61	54	58
Internal Link Dist (ft)		654			786			205			185	
Turn Bay Length (ft)	270			185		160				85		
Base Capacity (vph)	755	2824	1197	813	2706	1184	249	307	369	255	295	462
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.18	0.19	0.03	0.07	0.24	0.03	0.24	0.05	0.09	0.15	0.09	0.31

Intersection Summary

Area Type: Other  
 Cycle Length: 140  
 Actuated Cycle Length: 140  
 Offset: 73 (52%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green  
 Natural Cycle: 115  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.44  
 Intersection Signal Delay: 13.4 Intersection LOS: B  
 Intersection Capacity Utilization 46.9% ICU Level of Service A  
 Analysis Period (min) 15  
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: Westridge Court Access Drive & Aurora Avenue



HCM 6th TWSC  
6: IL 59 & Heritage Square Access Drive

10/04/2022

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	0	0	82	0	0	21	52	1768	52	31	2456	66
Future Vol, veh/h	0	0	82	0	0	21	52	1768	52	31	2456	66
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	-	-	0	255	-	170	365	-	150
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	2	2	0	2	2	0	0	2	0	0	2	2
Mvmt Flow	0	0	85	0	0	22	54	1823	54	32	2532	68

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	-	-	1266	-	-	912	2600	0	0	1877	0	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	7.1	-	-	7.1	5.3	-	-	5.3	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.9	-	-	3.9	3.1	-	-	3.1	-	-
Pot Cap-1 Maneuver	0	0	*341	0	0	*509	*429	-	-	*640	-	-
Stage 1	0	0	-	0	0	-	-	-	-	-	-	-
Stage 2	0	0	-	0	0	-	-	-	-	-	-	-
Platoon blocked, %			1			1	1	-	-	1	-	-
Mov Cap-1 Maneuver	-	-	*341	-	-	*509	*429	-	-	*640	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	19	12.4	0.4	0.1
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	* 429	-	-	341	509	* 640	-	-
HCM Lane V/C Ratio	0.125	-	-	0.248	0.043	0.05	-	-
HCM Control Delay (s)	14.6	-	-	19	12.4	10.9	-	-
HCM Lane LOS	B	-	-	C	B	B	-	-
HCM 95th %tile Q(veh)	0.4	-	-	1	0.1	0.2	-	-

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

HCM 6th TWSC  
7: IL 59 & Right-In/Right-Out

10/04/2022

Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗	↗↗↗	↗		↗↗↗
Traffic Vol, veh/h	0	34	1746	43	0	2553
Future Vol, veh/h	0	34	1746	43	0	2553
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	-	140	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	0	2	0	0	2
Mvmt Flow	0	35	1819	45	0	2659

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	-	910	0	0	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	7.1	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	3.9	-	-	-
Pot Cap-1 Maneuver	0	*527	-	-	0
Stage 1	0	-	-	-	0
Stage 2	0	-	-	-	0
Platoon blocked, %	-	1	-	-	-
Mov Cap-1 Maneuver	-	*527	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.3	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBT
Capacity (veh/h)	-	-	527
HCM Lane V/C Ratio	-	-	0.067
HCM Control Delay (s)	-	-	12.3
HCM Lane LOS	-	-	B
HCM 95th %tile Q(veh)	-	-	0.2

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

HCM 6th TWSC  
 8: Aurora Avenue & West Right-In/Right-Out

10/04/2022

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	0	614	91	0	788	8	0	0	50	0	0	57
Future Vol, veh/h	0	614	91	0	788	8	0	0	50	0	0	57
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	-	-	Free	-	-	None	-	-	Stop
Storage Length	-	-	0	-	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	1	2	2	0	0	2	2	6	2	2	0
Mvmt Flow	0	653	97	0	838	9	0	0	53	0	0	61

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	-	-	327	-	-	419
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	7.02	-	-	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.36	-	-	3.9
Pot Cap-1 Maneuver	0	-	-	0	-	0	0	0	*828	0	0	*751
Stage 1	0	-	-	0	-	0	0	0	-	0	0	-
Stage 2	0	-	-	0	-	0	0	0	-	0	0	-
Platoon blocked, %		-	-		-				1			1
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	*828	-	-	*751
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	9.6	10.2
HCM LOS			A	B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	SBLn1
Capacity (veh/h)	828	-	-	-	751
HCM Lane V/C Ratio	0.064	-	-	-	0.081
HCM Control Delay (s)	9.6	-	-	-	10.2
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.2	-	-	-	0.3

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



HCM 6th TWSC  
 9: Aurora Avenue & East Right-In/Right-Out

10/04/2022

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑			↑
Traffic Vol, veh/h	0	574	677	22	0	22
Future Vol, veh/h	0	574	677	22	0	22
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	90	90	90	90	90	90
Heavy Vehicles, %	2	1	1	0	2	0
Mvmt Flow	0	638	752	24	0	24

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

Approach	EB	WB	SB
HCM Control Delay, s	0	0	9.5
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	827
HCM Lane V/C Ratio	-	-	-	0.03
HCM Control Delay (s)	-	-	-	9.5
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	0.1

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

HCM 6th TWSC  
 10: Jefferson Avenue & Target Access Drive

10/04/2022

Intersection												
Int Delay, s/veh	5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↖↗		↖	↖↗		↖	↗		↖	↗	
Traffic Vol, veh/h	104	254	91	40	347	82	53	12	43	86	15	165
Future Vol, veh/h	104	254	91	40	347	82	53	12	43	86	15	165
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	90	-	-	150	-	-	70	-	-	30	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	1	4	0	0	5	2	0	0	0	0	7	0
Mvmt Flow	109	267	96	42	365	86	56	13	45	91	16	174

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	451	0	0	363	0	0	808	1068	182	850	1073	226
Stage 1	-	-	-	-	-	-	533	533	-	492	492	-
Stage 2	-	-	-	-	-	-	275	535	-	358	581	-
Critical Hdwy	4.12	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.64	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.64	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.64	-
Follow-up Hdwy	2.21	-	-	2.2	-	-	3.5	4	3.3	3.5	4.07	3.3
Pot Cap-1 Maneuver	1113	-	-	1364	-	-	357	263	*993	331	249	783
Stage 1	-	-	-	-	-	-	634	613	-	532	534	-
Stage 2	-	-	-	-	-	-	713	527	-	820	566	-
Platoon blocked, %		-	-	1	-	-	1	1	1	1	1	
Mov Cap-1 Maneuver	1113	-	-	1364	-	-	242	229	*993	277	218	783
Mov Cap-2 Maneuver	-	-	-	-	-	-	323	312	-	372	324	-
Stage 1	-	-	-	-	-	-	572	553	-	480	517	-
Stage 2	-	-	-	-	-	-	521	511	-	689	511	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	2			0.7			14.6			13.9		
HCM LOS							B			B		

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	323	673	1113	-	-	1364	-	-	372	700
HCM Lane V/C Ratio	0.173	0.086	0.098	-	-	0.031	-	-	0.243	0.271
HCM Control Delay (s)	18.5	10.9	8.6	-	-	7.7	-	-	17.8	12
HCM Lane LOS	C	B	A	-	-	A	-	-	C	B
HCM 95th %tile Q(veh)	0.6	0.3	0.3	-	-	0.1	-	-	0.9	1.1

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

HCM 6th TWSC  
 11: Fort Hill Drive & Westridge Court Access Drive

10/04/2022

Intersection												
Int Delay, s/veh	3.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	30	0	77	12	1	14	55	329	12	2	519	30
Future Vol, veh/h	30	0	77	12	1	14	55	329	12	2	519	30
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	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	32	0	83	13	1	15	59	354	13	2	558	32

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1065	1063	574	1099	1073	361	590	0	0	367	0	0
Stage 1	578	578	-	479	479	-	-	-	-	-	-	-
Stage 2	487	485	-	620	594	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	189	204	518	176	200	*816	985	-	-	*1221	-	-
Stage 1	501	501	-	647	585	-	-	-	-	-	-	-
Stage 2	639	581	-	476	493	-	-	-	-	-	-	-
Platoon blocked, %	1	1		1	1	1		-	-	1	-	-
Mov Cap-1 Maneuver	174	188	518	139	185	*816	985	-	-	*1221	-	-
Mov Cap-2 Maneuver	174	188	-	139	185	-	-	-	-	-	-	-
Stage 1	463	500	-	599	542	-	-	-	-	-	-	-
Stage 2	579	537	-	399	492	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	21.4		21.4		1.2		0	
HCM LOS	C		C					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	985	-	-	333	248	*1221	-	-
HCM Lane V/C Ratio	0.06	-	-	0.346	0.117	0.002	-	-
HCM Control Delay (s)	8.9	0	-	21.4	21.4	8	0	-
HCM Lane LOS	A	A	-	C	C	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	1.5	0.4	0	-	-

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

HCM 6th TWSC  
 12: Fort Hill Drive & Goodwill Access Drive

10/04/2022

Intersection												
Int Delay, s/veh	1.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	1	7	9	0	6	11	359	3	1	535	19
Future Vol, veh/h	10	1	7	9	0	6	11	359	3	1	535	19
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	73	73	73	73	73	73	73	73	73	73	73	73
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	14	1	10	12	0	8	15	492	4	1	733	26

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1276	1274	746	1278	1285	494	759	0	0	496	0	0
Stage 1	748	748	-	524	524	-	-	-	-	-	-	-
Stage 2	528	526	-	754	761	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	119	137	413	119	134	680	852	-	-	1068	-	-
Stage 1	404	420	-	613	557	-	-	-	-	-	-	-
Stage 2	609	556	-	401	414	-	-	-	-	-	-	-
Platoon blocked, %	1	1		1	1	1		-	-	1	-	-
Mov Cap-1 Maneuver	116	133	413	113	131	680	852	-	-	1068	-	-
Mov Cap-2 Maneuver	116	133	-	113	131	-	-	-	-	-	-	-
Stage 1	394	419	-	599	544	-	-	-	-	-	-	-
Stage 2	587	542	-	390	413	-	-	-	-	-	-	-






































Approach	EB		WB		NB		SB	
HCM Control Delay, s	31		29.1		0.3		0	
HCM LOS	D		D					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	852	-	-	163	170	1068	-	-
HCM Lane V/C Ratio	0.018	-	-	0.151	0.121	0.001	-	-
HCM Control Delay (s)	9.3	0	-	31	29.1	8.4	0	-
HCM Lane LOS	A	A	-	D	D	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.5	0.4	0	-	-

Capacity Analysis Summary Sheets  
Year 2028 No-Build Saturday Midday Peak Hour

Lanes, Volumes, Timings  
1: IL 59 & Aurora Avenue

10/04/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations	 	  	 	  	  	 	  	  	 		 	
Traffic Volume (vph)	253	475	293	291	439	206	294	1531	221	14	203	2005
Future Volume (vph)	253	475	293	291	439	206	294	1531	221	14	203	2005
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	2000	1900	1900	1900	2000
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%				0%
Storage Length (ft)	265		205	320		210	190		395		325	
Storage Lanes	2		1	2		1	2		1		2	
Taper Length (ft)	270			300			300				300	
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00	0.91	0.97	0.91
Ped Bike Factor												
Frt			0.850			0.850			0.850			
Flt Protected	0.950			0.950			0.950				0.950	
Satd. Flow (prot)	3467	5460	1615	3502	5460	1583	3502	5406	1615	0	3469	5406
Flt Permitted	0.950			0.950			0.950				0.950	
Satd. Flow (perm)	3467	5460	1615	3502	5460	1583	3502	5406	1615	0	3469	5406
Right Turn on Red			No			No			No			
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			40				40
Link Distance (ft)		654			559			897				856
Travel Time (s)		9.9			8.5			15.3				14.6
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	0%	0%	0%	0%	2%	0%	1%	0%	0%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%				0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	258	485	299	297	448	210	300	1562	226	0	221	2046
Turn Type	Prot	NA	pt+ov	Prot	NA	Prot	Prot	NA	pt+ov	Prot	Prot	NA
Protected Phases	7	4	4 5	3	8	8	5	2	2 3	1	1	6
Permitted Phases												
Detector Phase	7	4	4 5	3	8	8	5	2	2 3	1	1	6
Switch Phase												
Minimum Initial (s)	3.0	8.0		3.0	8.0	8.0	3.0	15.0		3.0	3.0	15.0
Minimum Split (s)	9.5	24.0		9.5	24.0	24.0	9.5	24.0		9.5	9.5	24.0
Total Split (s)	23.0	28.0		23.0	28.0	28.0	20.0	69.0		20.0	20.0	69.0
Total Split (%)	16.4%	20.0%		16.4%	20.0%	20.0%	14.3%	49.3%		14.3%	14.3%	49.3%
Yellow Time (s)	3.0	4.5		3.0	4.5	4.5	3.0	4.5		3.0	3.0	4.5
All-Red Time (s)	0.0	1.5		0.0	1.5	1.5	0.0	1.5		0.0	0.0	1.5
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	3.0	6.0		3.0	6.0	6.0	3.0	6.0		3.0	3.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag		Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None		None	None	None	None	C-Min		None	None	C-Min
Act Effct Green (s)	15.7	24.3	43.1	16.8	25.4	25.4	15.8	66.9	86.7		14.0	65.1
Actuated g/C Ratio	0.11	0.17	0.31	0.12	0.18	0.18	0.11	0.48	0.62		0.10	0.46

Lanes, Volumes, Timings  
1: IL 59 & Aurora Avenue

10/04/2022

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	330
Future Volume (vph)	330
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	210
Storage Lanes	1
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1615
Flt Permitted	
Satd. Flow (perm)	1615
Right Turn on Red	No
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.98
Growth Factor	100%
Heavy Vehicles (%)	0%
Bus Blockages (#/hr)	0
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	337
Turn Type	pt+ov
Protected Phases	6 7
Permitted Phases	
Detector Phase	6 7
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	
Act Effct Green (s)	83.8
Actuated g/C Ratio	0.60

Lanes, Volumes, Timings  
1: IL 59 & Aurora Avenue

10/04/2022

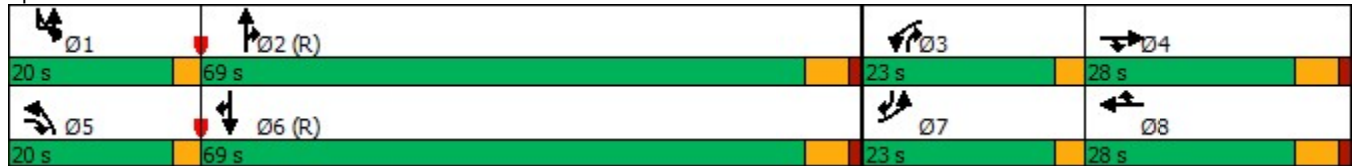


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
v/c Ratio	0.66	0.51	0.60	0.71	0.45	0.73	0.76	0.60	0.23		0.64	0.81
Control Delay	67.8	54.9	47.2	62.5	50.8	67.7	72.9	28.6	12.7		69.0	30.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Total Delay	67.8	54.9	47.2	62.5	50.8	67.7	72.9	28.6	12.7		69.0	30.6
LOS	E	D	D	E	D	E	E	C	B		E	C
Approach Delay		55.9			58.2			33.2				32.0
Approach LOS		E			E			C				C
Queue Length 50th (ft)	118	147	227	137	136	184	137	381	88		94	693
Queue Length 95th (ft)	160	193	339	162	183	#331	189	449	131		m113	748
Internal Link Dist (ft)		574			479			817				776
Turn Bay Length (ft)	265		205	320		210	190		395		325	
Base Capacity (vph)	495	947	510	500	989	286	425	2583	1037		421	2512
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0		0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0		0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0		0	0
Reduced v/c Ratio	0.52	0.51	0.59	0.59	0.45	0.73	0.71	0.60	0.22		0.52	0.81

Intersection Summary

Area Type: Other  
 Cycle Length: 140  
 Actuated Cycle Length: 140  
 Offset: 92 (66%), 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: 39.8      Intersection LOS: D  
 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: 1: IL 59 & Aurora Avenue





Lanes, Volumes, Timings  
1: IL 59 & Aurora Avenue

10/04/2022



Lane Group	SBR
v/c Ratio	0.35
Control Delay	16.1
Queue Delay	0.0
Total Delay	16.1
LOS	B
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	216
Queue Length 95th (ft)	m258
Internal Link Dist (ft)	
Turn Bay Length (ft)	210
Base Capacity (vph)	1016
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.33
Intersection Summary	

Lanes, Volumes, Timings  
 2: IL 59 & Liberty Street/Jefferson Avenue

10/04/2022

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	248	201	94	203	264	238	2	81	1529	180	1	173
Future Volume (vph)	248	201	94	203	264	238	2	81	1529	180	1	173
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	1900	2000	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%				0%			
Storage Length (ft)	240		250	130		145		300		185		200
Storage Lanes	2		1	2		1		2		1		2
Taper Length (ft)	115			120				290				275
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.91	0.97	0.91	1.00	0.91	0.97
Ped Bike Factor												
Frt			0.850			0.850				0.850		
Flt Protected	0.950			0.950				0.950				0.950
Satd. Flow (prot)	3433	3800	1599	3467	3800	1599	0	3502	5406	1615	0	3467
Flt Permitted	0.950			0.950				0.950				0.950
Satd. Flow (perm)	3433	3800	1599	3467	3800	1599	0	3502	5406	1615	0	3467
Right Turn on Red			No			No				No		
Satd. Flow (RTOR)												
Link Speed (mph)		40			30				40			
Link Distance (ft)		553			478				968			
Travel Time (s)		9.4			10.9				16.5			
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 (%)	2%	0%	1%	1%	0%	1%	0%	0%	1%	0%	0%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%				0%			
Shared Lane Traffic (%)												
Lane Group Flow (vph)	256	207	97	209	272	245	0	86	1576	186	0	179
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	Prot	NA	pm+ov	Prot	Prot
Protected Phases	7	4	5!	3	8	1!	5!	5	2	3	1!	1
Permitted Phases			4			8				2		
Detector Phase	7	4	5	3	8	1	5	5	2	3	1	1
Switch Phase												
Minimum Initial (s)	3.0	8.0	3.0	3.0	8.0	3.0	3.0	3.0	15.0	3.0	3.0	3.0
Minimum Split (s)	9.5	24.0	9.5	9.5	24.0	9.5	9.5	9.5	24.0	9.5	9.5	9.5
Total Split (s)	24.0	32.0	15.0	17.0	25.0	20.0	15.0	15.0	71.0	17.0	20.0	20.0
Total Split (%)	17.1%	22.9%	10.7%	12.1%	17.9%	14.3%	10.7%	10.7%	50.7%	12.1%	14.3%	14.3%
Yellow Time (s)	3.0	4.5	3.0	3.0	4.5	3.0	3.0	3.0	4.5	3.0	3.0	3.0
All-Red Time (s)	0.0	1.5	0.0	0.0	1.5	0.0	0.0	0.0	1.5	0.0	0.0	0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0		0.0
Total Lost Time (s)	3.0	6.0	3.0	3.0	6.0	3.0		3.0	6.0	3.0		3.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lead	Lag	Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	C-Min	None	None	None
Act Effct Green (s)	15.7	20.4	35.2	12.8	17.5	36.1		8.8	76.3	95.0		12.5
Actuated g/C Ratio	0.11	0.15	0.25	0.09	0.12	0.26		0.06	0.54	0.68		0.09

Lanes, Volumes, Timings  
 2: IL 59 & Liberty Street/Jefferson Avenue

10/04/2022



Lane Group	SBT	SBR
Lane Configurations	↑↑↑↑	↑
Traffic Volume (vph)	2189	166
Future Volume (vph)	2189	166
Ideal Flow (vphpl)	2000	1900
Lane Width (ft)	12	12
Grade (%)	0%	
Storage Length (ft)		210
Storage Lanes		1
Taper Length (ft)		
Lane Util. Factor	0.91	1.00
Ped Bike Factor		
Frt		0.850
Flt Protected		
Satd. Flow (prot)	5406	1583
Flt Permitted		
Satd. Flow (perm)	5406	1583
Right Turn on Red		No
Satd. Flow (RTOR)		
Link Speed (mph)	40	
Link Distance (ft)	552	
Travel Time (s)	9.4	
Confl. Peds. (#/hr)		
Confl. Bikes (#/hr)		
Peak Hour Factor	0.97	0.97
Growth Factor	100%	100%
Heavy Vehicles (%)	1%	2%
Bus Blockages (#/hr)	0	0
Parking (#/hr)		
Mid-Block Traffic (%)	0%	
Shared Lane Traffic (%)		
Lane Group Flow (vph)	2257	171
Turn Type	NA	pm+ov
Protected Phases	6	7
Permitted Phases		6
Detector Phase	6	7
Switch Phase		
Minimum Initial (s)	15.0	3.0
Minimum Split (s)	24.0	9.5
Total Split (s)	76.0	24.0
Total Split (%)	54.3%	17.1%
Yellow Time (s)	4.5	3.0
All-Red Time (s)	1.5	0.0
Lost Time Adjust (s)	0.0	0.0
Total Lost Time (s)	6.0	3.0
Lead/Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes
Recall Mode	C-Min	None
Act Effct Green (s)	80.0	101.7
Actuated g/C Ratio	0.57	0.73

Lanes, Volumes, Timings  
 2: IL 59 & Liberty Street/Jefferson Avenue

10/04/2022

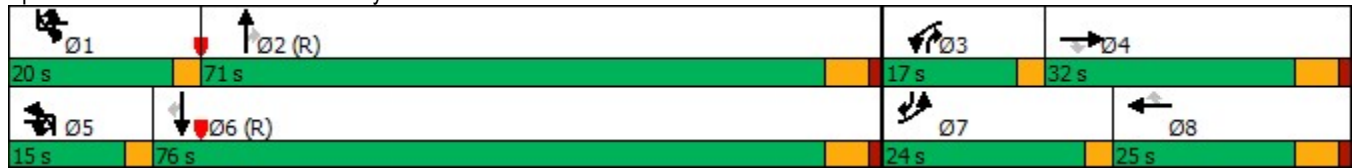


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
v/c Ratio	0.67	0.37	0.24	0.66	0.57	0.60		0.39	0.54	0.17		0.58
Control Delay	68.1	55.1	41.7	71.9	62.3	51.2		96.6	6.4	2.3		68.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0		0.0
Total Delay	68.1	55.1	41.7	71.9	62.3	51.2		96.6	6.4	2.3		68.4
LOS	E	E	D	E	E	D		F	A	A		E
Approach Delay		58.7			61.3				10.2			
Approach LOS		E			E				B			
Queue Length 50th (ft)	117	91	71	95	124	196		43	48	8		81
Queue Length 95th (ft)	159	125	113	139	170	273		73	97	15		119
Internal Link Dist (ft)		473			398				888			
Turn Bay Length (ft)	240		250	130		145		300		185		200
Base Capacity (vph)	514	705	438	346	530	462		300	2944	1110		420
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	0.50	0.29	0.22	0.60	0.51	0.53		0.29	0.54	0.17		0.43

Intersection Summary

Area Type: Other  
 Cycle Length: 140  
 Actuated Cycle Length: 140  
 Offset: 41 (29%), Referenced to phase 2:NBT and 6:SBT, Start of Green  
 Natural Cycle: 90  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.73  
 Intersection Signal Delay: 28.9 Intersection LOS: C  
 Intersection Capacity Utilization 74.2% ICU Level of Service D  
 Analysis Period (min) 15  
 ! Phase conflict between lane groups.

Splits and Phases: 2: IL 59 & Liberty Street/Jefferson Avenue



Lanes, Volumes, Timings  
 2: IL 59 & Liberty Street/Jefferson Avenue

10/04/2022



Lane Group	SBT	SBR
v/c Ratio	0.73	0.15
Control Delay	25.0	6.8
Queue Delay	0.0	0.0
Total Delay	25.0	6.8
LOS	C	A
Approach Delay	26.8	
Approach LOS	C	
Queue Length 50th (ft)	536	44
Queue Length 95th (ft)	687	78
Internal Link Dist (ft)	472	
Turn Bay Length (ft)		210
Base Capacity (vph)	3088	1209
Starvation Cap Reductn	0	0
Spillback Cap Reductn	0	0
Storage Cap Reductn	0	0
Reduced v/c Ratio	0.73	0.14

Intersection Summary

Lanes, Volumes, Timings  
3: IL 59 & Meijer Access Drive

10/04/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	85	21	98	117	27	46	9	157	1661	49	56	2354
Future Volume (vph)	85	21	98	117	27	46	9	157	1661	49	56	2354
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	2000	1900	1900	2000
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	45		0		430		0	300	
Storage Lanes	1		0	1		0		2		1	1	
Taper Length (ft)	25			105				290			190	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.97	0.91	1.00	1.00	0.91
Ped Bike Factor												
Frt		0.876			0.906					0.850		
Flt Protected	0.950			0.950				0.950			0.950	
Satd. Flow (prot)	1805	1664	0	1805	1721	0	0	3502	5406	1615	1805	5406
Flt Permitted	0.704			0.471				0.950			0.950	
Satd. Flow (perm)	1338	1664	0	895	1721	0	0	3502	5406	1615	1805	5406
Right Turn on Red			No			No				No		
Satd. Flow (RTOR)												
Link Speed (mph)		25			25				40			40
Link Distance (ft)		348			383				286			968
Travel Time (s)		9.5			10.4				4.9			16.5
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%				0%			0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	94	132	0	130	81	0	0	184	1846	54	62	2616
Turn Type	pm+pt	NA		pm+pt	NA		Prot	Prot	NA	pm+ov	Prot	NA
Protected Phases	7	4		3	8		5	5	2	3	1	6
Permitted Phases	4			8						2		
Detector Phase	7	4		3	8		5	5	2	3	1	6
Switch Phase												
Minimum Initial (s)	3.0	8.0		3.0	8.0		3.0	3.0	15.0	3.0	3.0	15.0
Minimum Split (s)	9.5	24.0		9.5	24.0		9.5	9.5	24.0	9.5	9.5	24.0
Total Split (s)	15.0	24.0		16.0	25.0		17.0	17.0	80.0	16.0	20.0	83.0
Total Split (%)	10.7%	17.1%		11.4%	17.9%		12.1%	12.1%	57.1%	11.4%	14.3%	59.3%
Yellow Time (s)	3.0	4.5		3.0	4.5		3.0	3.0	4.5	3.0	3.0	4.5
All-Red Time (s)	0.0	1.5		0.0	1.5		0.0	0.0	1.5	0.0	0.0	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)	3.0	6.0		3.0	6.0			3.0	6.0	3.0	3.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	None	C-Max	None	None	C-Max
Act Effct Green (s)	29.8	16.4		32.9	17.9			12.2	85.4	103.3	10.2	81.5
Actuated g/C Ratio	0.21	0.12		0.24	0.13			0.09	0.61	0.74	0.07	0.58

# Lanes, Volumes, Timings

## 3: IL 59 & Meijer Access Drive

10/04/2022

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	78
Future Volume (vph)	78
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	420
Storage Lanes	1
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1615
Flt Permitted	
Satd. Flow (perm)	1615
Right Turn on Red	No
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.90
Growth Factor	100%
Heavy Vehicles (%)	0%
Bus Blockages (#/hr)	0
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	87
Turn Type	pm+ov
Protected Phases	7
Permitted Phases	6
Detector Phase	7
Switch Phase	
Minimum Initial (s)	3.0
Minimum Split (s)	9.5
Total Split (s)	15.0
Total Split (%)	10.7%
Yellow Time (s)	3.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	3.0
Lead/Lag	Lead
Lead-Lag Optimize?	Yes
Recall Mode	None
Act Effct Green (s)	97.9
Actuated g/C Ratio	0.70

Lanes, Volumes, Timings  
3: IL 59 & Meijer Access Drive

10/04/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
v/c Ratio	0.29	0.68		0.45	0.37			0.60	0.56	0.05	0.47	0.83
Control Delay	43.8	77.1		47.5	60.5			55.0	22.2	12.2	71.5	16.3
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0	0.0	0.0	0.0
Total Delay	43.8	77.1		47.5	60.5			55.0	22.2	12.2	71.5	16.3
LOS	D	E		D	E			D	C	B	E	B
Approach Delay		63.2			52.5				24.9			17.2
Approach LOS		E			D				C			B
Queue Length 50th (ft)	67	116		94	67			78	494	29	59	266
Queue Length 95th (ft)	117	188		154	122			m110	552	m49	m83	379
Internal Link Dist (ft)		268			303				206			888
Turn Bay Length (ft)				45				430			300	
Base Capacity (vph)	339	213		297	235			350	3296	1203	219	3145
Starvation Cap Reductn	0	0		0	0			0	0	0	0	6
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	0.28	0.62		0.44	0.34			0.53	0.56	0.04	0.28	0.83

Intersection Summary

Area Type: Other  
 Cycle Length: 140  
 Actuated Cycle Length: 140  
 Offset: 25 (18%), Referenced to phase 2:NBT and 6:SBTU, Start of Green  
 Natural Cycle: 90  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.83  
 Intersection Signal Delay: 23.6  
 Intersection Capacity Utilization 74.4%  
 Analysis Period (min) 15  
 Intersection LOS: C  
 ICU Level of Service D  
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: IL 59 & Meijer Access Drive

Ø1 20 s	Ø2 (R) 80 s	Ø3 16 s	Ø4 24 s
Ø5 17 s	Ø6 (R) 83 s	Ø7 15 s	Ø8 25 s



Lanes, Volumes, Timings  
3: IL 59 & Meijer Access Drive

10/04/2022



Lane Group	SBR
v/c Ratio	0.08
Control Delay	4.5
Queue Delay	0.0
Total Delay	4.5
LOS	A
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	14
Queue Length 95th (ft)	m19
Internal Link Dist (ft)	
Turn Bay Length (ft)	420
Base Capacity (vph)	1147
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.08
Intersection Summary	

Lanes, Volumes, Timings  
4: Fort Hill Drive & Aurora Avenue

10/04/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	98	553	113	143	559	106	47	201	94	123	258	150
Future Volume (vph)	98	553	113	143	559	106	47	201	94	123	258	150
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	110		0	105		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	145			140			85			95		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Fr <sub>t</sub>		0.975			0.976			0.952				0.945
Fl <sub>t</sub> Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3479	0	1805	3494	0	1805	1809	0	1770	1796	0
Fl <sub>t</sub> Permitted	0.301			0.282			0.247			0.306		
Satd. Flow (perm)	572	3479	0	536	3494	0	469	1809	0	570	1796	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		24			22			19			23	
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		558			536			509			341	
Travel Time (s)		8.5			8.1			11.6			7.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	1%	2%	0%	1%	0%	0%	0%	0%	2%	0%	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)	103	701	0	151	700	0	49	311	0	129	430	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2			6			4			8		
Detector Phase	5	2		1	6		7	4		3	8	
Switch Phase												
Minimum Initial (s)	3.0	15.0		3.0	15.0		3.0	8.0		3.0	8.0	
Minimum Split (s)	9.5	35.0		9.5	36.0		9.5	42.0		9.5	38.0	
Total Split (s)	14.0	54.0		14.0	54.0		18.0	37.0		15.0	34.0	
Total Split (%)	11.7%	45.0%		11.7%	45.0%		15.0%	30.8%		12.5%	28.3%	
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		0.0	1.5		0.0	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		3.5	6.0		3.5	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	C-Min		None	C-Min		None	None		None	None	
Act Effct Green (s)	61.0	49.8		63.4	51.0		40.4	30.4		47.1	35.5	
Actuated g/C Ratio	0.51	0.42		0.53	0.42		0.34	0.25		0.39	0.30	

Lanes, Volumes, Timings  
4: Fort Hill Drive & Aurora Avenue

10/04/2022

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.27	0.48		0.39	0.47		0.20	0.66		0.39	0.79	
Control Delay	16.5	27.5		17.9	26.6		22.7	44.5		26.0	47.8	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	16.5	27.5		17.9	26.6		22.7	44.5		26.0	47.8	
LOS	B	C		B	C		C	D		C	D	
Approach Delay		26.1			25.0			41.6			42.7	
Approach LOS		C			C			D			D	
Queue Length 50th (ft)	39	210		59	204		22	196		62	286	
Queue Length 95th (ft)	71	274		99	273		46	303		102	414	
Internal Link Dist (ft)		478			456			429			261	
Turn Bay Length (ft)	140			140			110			105		
Base Capacity (vph)	407	1519		402	1537		342	503		346	547	
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	0.25	0.46		0.38	0.46		0.14	0.62		0.37	0.79	

Intersection Summary

Area Type:	Other
Cycle Length:	120
Actuated Cycle Length:	120
Offset:	64 (53%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle:	100
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.79
Intersection Signal Delay:	31.5
Intersection LOS:	C
Intersection Capacity Utilization	69.5%
ICU Level of Service	C
Analysis Period (min)	15

Splits and Phases: 4: Fort Hill Drive & Aurora Avenue



Lanes, Volumes, Timings  
 5: Westridge Court Access Drive & Aurora Avenue

10/04/2022

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	173	640	54	78	608	75	106	21	54	70	20	154
Future Volume (vph)	173	640	54	78	608	75	106	21	54	70	20	154
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	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)	270		0	185		160	0		0	85		0
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	190			140			25			80		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3800	1615	1752	3762	1615	1805	1905	1583	1805	1905	1599
Flt Permitted	0.379			0.383			0.470			0.743		
Satd. Flow (perm)	720	3800	1615	707	3762	1615	893	1905	1583	1412	1905	1599
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			82			82			57			162
Link Speed (mph)		45			45			25				25
Link Distance (ft)		734			866			285				265
Travel Time (s)		11.1			13.1			7.8				7.2
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	3%	1%	0%	0%	5%	2%	0%	5%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%				0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	182	674	57	82	640	79	112	22	57	74	21	162
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov
Protected Phases	5	2		1	6		7	4	1	3	8	5
Permitted Phases	2		2	6		6	4		4	8		8
Detector Phase	5	2	2	1	6	6	7	4	1	3	8	5
Switch Phase												
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0	15.0	5.0	8.0	5.0	5.0	8.0	5.0
Minimum Split (s)	9.5	42.5	42.5	9.5	33.5	33.5	9.5	49.5	9.5	9.5	22.5	9.5
Total Split (s)	24.0	70.0	70.0	24.0	70.0	70.0	18.0	28.0	24.0	18.0	28.0	24.0
Total Split (%)	17.1%	50.0%	50.0%	17.1%	50.0%	50.0%	12.9%	20.0%	17.1%	12.9%	20.0%	17.1%
Yellow Time (s)	3.5	4.5	4.5	3.5	4.5	4.5	3.5	4.5	3.5	3.5	4.5	3.5
All-Red Time (s)	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	0.0	0.0	2.0	0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	6.5	6.5	3.5	6.5	6.5	3.5	6.5	3.5	3.5	6.5	3.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None	None	None
Act Effct Green (s)	108.0	95.8	95.8	103.9	93.7	93.7	23.2	10.9	21.7	18.8	9.2	19.2
Actuated g/C Ratio	0.77	0.68	0.68	0.74	0.67	0.67	0.17	0.08	0.16	0.13	0.07	0.14

Lanes, Volumes, Timings  
 5: Westridge Court Access Drive & Aurora Avenue

10/04/2022

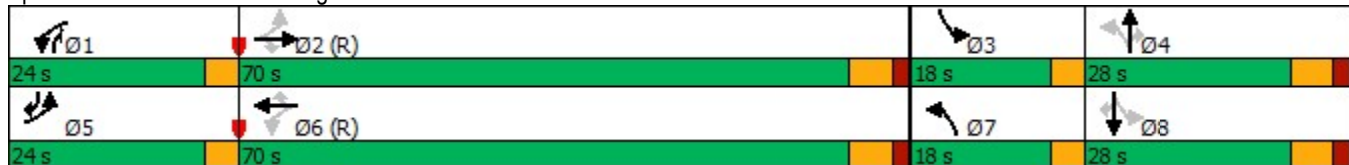


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.29	0.26	0.05	0.14	0.25	0.07	0.47	0.15	0.19	0.33	0.17	0.45
Control Delay	14.5	20.6	8.0	5.7	11.2	2.7	55.6	61.1	12.4	51.5	64.3	10.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	14.5	20.6	8.0	5.7	11.2	2.7	55.6	61.1	12.4	51.5	64.3	10.7
LOS	B	C	A	A	B	A	E	E	B	D	E	B
Approach Delay		18.6			9.8			43.4			26.8	
Approach LOS		B			A			D			C	
Queue Length 50th (ft)	111	283	9	18	127	0	88	19	0	57	18	0
Queue Length 95th (ft)	131	194	11	39	195	22	137	47	38	97	47	60
Internal Link Dist (ft)		654			786			205			185	
Turn Bay Length (ft)	270			185		160				85		
Base Capacity (vph)	721	2599	1130	706	2517	1107	254	292	438	265	292	473
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.25	0.26	0.05	0.12	0.25	0.07	0.44	0.08	0.13	0.28	0.07	0.34

Intersection Summary

Area Type:	Other
Cycle Length:	140
Actuated Cycle Length:	140
Offset:	27 (19%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle:	115
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.47
Intersection Signal Delay:	18.5
Intersection LOS:	B
Intersection Capacity Utilization:	52.3%
ICU Level of Service:	A
Analysis Period (min):	15

Splits and Phases: 5: Westridge Court Access Drive & Aurora Avenue



HCM 6th TWSC  
6: IL 59 & Heritage Square Access Drive

10/04/2022

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	0	0	101	0	0	21	76	1864	64	26	2451	101
Future Vol, veh/h	0	0	101	0	0	21	76	1864	64	26	2451	101
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	-	-	0	255	-	170	365	-	150
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	1	0	2	0	0	2	0	0	1	0
Mvmt Flow	0	0	106	0	0	22	80	1962	67	27	2580	106

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	-	-	1290	-	-	981	2686	0	0	2029	0	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	7.12	-	-	7.1	5.3	-	-	5.3	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.91	-	-	3.9	3.1	-	-	3.1	-	-
Pot Cap-1 Maneuver	0	0	*359	0	0	*490	*453	-	-	*616	-	-
Stage 1	0	0	-	0	0	-	-	-	-	-	-	-
Stage 2	0	0	-	0	0	-	-	-	-	-	-	-
Platoon blocked, %			1			1	1	-	-	1	-	-
Mov Cap-1 Maneuver	-	-	*359	-	-	*490	*453	-	-	*616	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB		WB		NB			SB		
HCM Control Delay, s	19.2		12.7		0.6			0.1		
HCM LOS	C		B							

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	*453	-	-	359	490	*616	-	-
HCM Lane V/C Ratio	0.177	-	-	0.296	0.045	0.044	-	-
HCM Control Delay (s)	14.6	-	-	19.2	12.7	11.1	-	-
HCM Lane LOS	B	-	-	C	B	B	-	-
HCM 95th %tile Q(veh)	0.6	-	-	1.2	0.1	0.1	-	-

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

HCM 6th TWSC  
7: IL 59 & Right-In/Right-Out

10/04/2022

Intersection						
Int Delay, s/veh	0.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗	↗↗↗	↗		↗↗↗
Traffic Vol, veh/h	0	70	1806	79	0	2578
Future Vol, veh/h	0	70	1806	79	0	2578
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	-	140	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	0	1	0	0	1
Mvmt Flow	0	74	1901	83	0	2714

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	-	951	0	0	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	7.1	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	3.9	-	-	-
Pot Cap-1 Maneuver	0	*509	-	-	0
Stage 1	0	-	-	-	0
Stage 2	0	-	-	-	0
Platoon blocked, %	-	1	-	-	-
Mov Cap-1 Maneuver	-	*509	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBT
Capacity (veh/h)	-	-	509
HCM Lane V/C Ratio	-	-	0.145
HCM Control Delay (s)	-	-	13.3
HCM Lane LOS	-	-	B
HCM 95th %tile Q(veh)	-	-	0.5

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

HCM 6th TWSC  
 8: Aurora Avenue & West Right-In/Right-Out

10/04/2022

Intersection												
Int Delay, s/veh	0.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑		↑↑↑				↑			↑
Traffic Vol, veh/h	0	779	120	0	858	10	0	0	88	0	0	78
Future Vol, veh/h	0	779	120	0	858	10	0	0	88	0	0	78
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	-	-	Free	-	-	None	-	-	Stop
Storage Length	-	-	0	-	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	2	0	1	2	0	0	2	2	3	2	2	1
Mvmt Flow	0	803	124	0	885	10	0	0	91	0	0	80

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	-	-	402	-	-	443
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	6.96	-	-	7.12
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.33	-	-	3.91
Pot Cap-1 Maneuver	0	-	-	0	-	0	0	0	*769	0	0	*730
Stage 1	0	-	-	0	-	0	0	0	-	0	0	-
Stage 2	0	-	-	0	-	0	0	0	-	0	0	-
Platoon blocked, %		-	-		-				1			1
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	*769	-	-	*730
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	0		0		10.3		10.5	
HCM LOS					B		B	

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	SBLn1
Capacity (veh/h)	769	-	-	-	730
HCM Lane V/C Ratio	0.118	-	-	-	0.11
HCM Control Delay (s)	10.3	-	-	-	10.5
HCM Lane LOS	B	-	-	-	B
HCM 95th %tile Q(veh)	0.4	-	-	-	0.4

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



HCM 6th TWSC  
 9: Aurora Avenue & East Right-In/Right-Out

10/04/2022

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑			↑
Traffic Vol, veh/h	0	764	727	29	0	34
Future Vol, veh/h	0	764	727	29	0	34
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	1	1	0	2	0
Mvmt Flow	0	830	790	32	0	37

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	-	0	- 0 - 411
Stage 1	-	-	- - -
Stage 2	-	-	- - -
Critical Hdwy	-	-	- - 6.9
Critical Hdwy Stg 1	-	-	- - -
Critical Hdwy Stg 2	-	-	- - -
Follow-up Hdwy	-	-	- - 3.3
Pot Cap-1 Maneuver	0	-	- 0 *802
Stage 1	0	-	- 0 -
Stage 2	0	-	- 0 -
Platoon blocked, %	-	-	- - 1
Mov Cap-1 Maneuver	-	-	- - *802
Mov Cap-2 Maneuver	-	-	- - -
Stage 1	-	-	- - -
Stage 2	-	-	- - -

Approach	EB	WB	SB
HCM Control Delay, s	0	0	9.7
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	802
HCM Lane V/C Ratio	-	-	-	0.046
HCM Control Delay (s)	-	-	-	9.7
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	0.1

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

HCM 6th TWSC  
 10: Jefferson Avenue & Target Access Drive

10/04/2022

Intersection												
Int Delay, s/veh	8.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↵	↵↶		↵	↵↶		↵	↶		↵	↶	
Traffic Vol, veh/h	134	284	136	69	430	131	71	37	81	91	31	204
Future Vol, veh/h	134	284	136	69	430	131	71	37	81	91	31	204
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	90	-	-	150	-	-	70	-	-	30	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	1	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	149	316	151	77	478	146	79	41	90	101	34	227

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	624	0	0	467	0	0	1100	1468	234	1182	1470	312
Stage 1	-	-	-	-	-	-	690	690	-	705	705	-
Stage 2	-	-	-	-	-	-	410	778	-	477	765	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
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	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	967	-	-	1240	-	-	211	144	*993	180	144	690
Stage 1	-	-	-	-	-	-	503	516	-	398	442	-
Stage 2	-	-	-	-	-	-	595	410	-	688	474	-
Platoon blocked, %		-	-	1	-	-	1	1	1	1	1	
Mov Cap-1 Maneuver	967	-	-	1240	-	-	105	114	*993	115	114	690
Mov Cap-2 Maneuver	-	-	-	-	-	-	160	185	-	219	217	-
Stage 1	-	-	-	-	-	-	426	436	-	337	415	-
Stage 2	-	-	-	-	-	-	344	385	-	480	401	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	2.3			0.9			28.8			22.6		
HCM LOS							D			C		

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	160	419	967	-	-	1240	-	-	219	536
HCM Lane V/C Ratio	0.493	0.313	0.154	-	-	0.062	-	-	0.462	0.487
HCM Control Delay (s)	47.6	17.5	9.4	-	-	8.1	-	-	34.8	17.9
HCM Lane LOS	E	C	A	-	-	A	-	-	D	C
HCM 95th %tile Q(veh)	2.4	1.3	0.5	-	-	0.2	-	-	2.2	2.6

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

HCM 6th TWSC  
 11: Fort Hill Drive & Westridge Court Access Drive

10/04/2022

Intersection												
Int Delay, s/veh	5.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	40	1	130	14	1	19	82	303	20	7	387	42
Future Vol, veh/h	40	1	130	14	1	19	82	303	20	7	387	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	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	45	1	148	16	1	22	93	344	23	8	440	48

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1033	1033	464	1097	1046	356	488	0	0	367	0	0
Stage 1	480	480	-	542	542	-	-	-	-	-	-	-
Stage 2	553	553	-	555	504	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	202	217	598	178	212	815	1075	-	-	1218	-	-
Stage 1	567	554	-	574	534	-	-	-	-	-	-	-
Stage 2	564	527	-	516	541	-	-	-	-	-	-	-
Platoon blocked, %	1	1		1	1	1		-	-	1	-	-
Mov Cap-1 Maneuver	178	191	598	121	187	815	1075	-	-	1218	-	-
Mov Cap-2 Maneuver	178	191	-	121	187	-	-	-	-	-	-	-
Stage 1	505	549	-	511	476	-	-	-	-	-	-	-
Stage 2	488	470	-	384	536	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	23.8		23.2		1.8		0.1	
HCM LOS	C		C					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1075	-	-	382	236	1218	-	-
HCM Lane V/C Ratio	0.087	-	-	0.509	0.164	0.007	-	-
HCM Control Delay (s)	8.7	0	-	23.8	23.2	8	0	-
HCM Lane LOS	A	A	-	C	C	A	A	-
HCM 95th %tile Q(veh)	0.3	-	-	2.8	0.6	0	-	-

HCM 6th TWSC  
12: Fort Hill Drive & Goodwill Access Drive

10/04/2022

Intersection												
Int Delay, s/veh	0.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	0	5	6	0	6	22	333	7	8	425	31
Future Vol, veh/h	10	0	5	6	0	6	22	333	7	8	425	31
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	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	12	0	6	7	0	7	27	406	9	10	518	38

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1025	1026	537	1025	1041	411	556	0	0	415	0	0
Stage 1	557	557	-	465	465	-	-	-	-	-	-	-
Stage 2	468	469	-	560	576	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	205	218	544	205	212	764	1015	-	-	1163	-	-
Stage 1	515	512	-	661	597	-	-	-	-	-	-	-
Stage 2	658	594	-	513	502	-	-	-	-	-	-	-
Platoon blocked, %	1	1		1	1	1		-	-	1	-	-
Mov Cap-1 Maneuver	195	208	544	195	202	764	1015	-	-	1163	-	-
Mov Cap-2 Maneuver	195	208	-	195	202	-	-	-	-	-	-	-
Stage 1	497	505	-	638	576	-	-	-	-	-	-	-
Stage 2	629	573	-	501	495	-	-	-	-	-	-	-




































Approach	EB		WB		NB		SB	
HCM Control Delay, s	20.7		17.1		0.5		0.1	
HCM LOS	C		C					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1015	-	-	248	311	1163	-	-
HCM Lane V/C Ratio	0.026	-	-	0.074	0.047	0.008	-	-
HCM Control Delay (s)	8.6	0	-	20.7	17.1	8.1	0	-
HCM Lane LOS	A	A	-	C	C	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.2	0.1	0	-	-

Capacity Analysis Summary Sheets  
Year 2028 Total Projected Weekday Morning Peak Hour

Lanes, Volumes, Timings  
1: IL 59 & Aurora Avenue

10/05/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations	 	  		  	  		 	  			 	 
Traffic Volume (vph)	120	306	134	48	170	66	131	1980	114	2	57	1277
Future Volume (vph)	120	306	134	48	170	66	131	1980	114	2	57	1277
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	2000	1900	1900	1900	2000
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%				0%
Storage Length (ft)	265		205	320		210	190		395		325	
Storage Lanes	2		1	2		1	2		1		2	
Taper Length (ft)	270			300			300				300	
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00	0.91	0.97	0.91
Ped Bike Factor												
Frt			0.850			0.850			0.850			
Flt Protected	0.950			0.950			0.950				0.950	
Satd. Flow (prot)	3367	5353	1568	3242	5301	1538	3367	5151	1599	0	3371	5056
Flt Permitted	0.950			0.950			0.950				0.950	
Satd. Flow (perm)	3367	5353	1568	3242	5301	1538	3367	5151	1599	0	3371	5056
Right Turn on Red			No			No			No			
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			40				40
Link Distance (ft)		654			559			897				856
Travel Time (s)		9.9			8.5			15.3				14.6
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 (%)	4%	2%	3%	8%	3%	5%	4%	6%	1%	0%	4%	8%
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)	132	336	147	53	187	73	144	2176	125	0	65	1403
Turn Type	Prot	NA	pt+ov	Prot	NA	Prot	Prot	NA	pt+ov	Prot	Prot	NA
Protected Phases	7	4	4 5	3	8	8	5	2	2 3	1	1	6
Permitted Phases												
Detector Phase	7	4	4 5	3	8	8	5	2	2 3	1	1	6
Switch Phase												
Minimum Initial (s)	3.0	8.0		3.0	8.0	8.0	3.0	15.0		3.0	3.0	15.0
Minimum Split (s)	9.5	24.0		9.5	24.0	24.0	9.5	24.0		9.5	9.5	24.0
Total Split (s)	17.0	26.0		13.0	22.0	22.0	17.0	88.0		13.0	13.0	84.0
Total Split (%)	12.1%	18.6%		9.3%	15.7%	15.7%	12.1%	62.9%		9.3%	9.3%	60.0%
Yellow Time (s)	3.0	4.5		3.0	4.5	4.5	3.0	4.5		3.0	3.0	4.5
All-Red Time (s)	0.0	1.5		0.0	1.5	1.5	0.0	1.5		0.0	0.0	1.5
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	3.0	6.0		3.0	6.0	6.0	3.0	6.0		3.0	3.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag		Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None		None	None	None	None	C-Min		None	None	C-Min
Act Effct Green (s)	10.8	19.0	33.2	7.7	15.9	15.9	11.2	89.0	99.7		8.0	84.1
Actuated g/C Ratio	0.08	0.14	0.24	0.06	0.11	0.11	0.08	0.64	0.71		0.06	0.60

Lanes, Volumes, Timings  
 1: IL 59 & Aurora Avenue

10/05/2022

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	62
Future Volume (vph)	62
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	210
Storage Lanes	1
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1568
Flt Permitted	
Satd. Flow (perm)	1568
Right Turn on Red	No
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.91
Growth Factor	100%
Heavy Vehicles (%)	3%
Bus Blockages (#/hr)	0
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	68
Turn Type	pt+ov
Protected Phases	6 7
Permitted Phases	
Detector Phase	6 7
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	
Act Effct Green (s)	97.9
Actuated g/C Ratio	0.70

Lanes, Volumes, Timings  
1: IL 59 & Aurora Avenue

10/05/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
v/c Ratio	0.51	0.46	0.40	0.30	0.31	0.42	0.54	0.66	0.11		0.34	0.46
Control Delay	68.5	57.6	47.4	66.2	60.4	67.8	69.0	18.5	7.5		53.5	22.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Total Delay	68.5	57.6	47.4	66.2	60.4	67.8	69.0	18.5	7.5		53.5	22.1
LOS	E	E	D	E	E	E	E	B	A		D	C
Approach Delay		57.5			63.1			20.9				23.1
Approach LOS		E			E			C				C
Queue Length 50th (ft)	60	102	111	24	59	64	65	471	36		29	357
Queue Length 95th (ft)	93	138	175	47	89	119	101	553	61		53	398
Internal Link Dist (ft)		574			479			817				776
Turn Bay Length (ft)	265		205	320		210	190		395		325	
Base Capacity (vph)	336	788	394	231	637	184	336	3275	1165		240	3036
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0		0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0		0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0		0	0
Reduced v/c Ratio	0.39	0.43	0.37	0.23	0.29	0.40	0.43	0.66	0.11		0.27	0.46

Intersection Summary

Area Type:	Other
Cycle Length:	140
Actuated Cycle Length:	140
Offset:	35 (25%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle:	80
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.66
Intersection Signal Delay:	28.9
Intersection LOS:	C
Intersection Capacity Utilization	66.4%
ICU Level of Service	C
Analysis Period (min)	15

Splits and Phases: 1: IL 59 & Aurora Avenue

Ø1 13 s	Ø2 (R) 88 s	Ø3 13 s	Ø4 26 s
Ø5 17 s	Ø6 (R) 84 s	Ø7 17 s	Ø8 22 s



Lanes, Volumes, Timings  
1: IL 59 & Aurora Avenue

























10/05/2022



Lane Group	SBR
v/c Ratio	0.06
Control Delay	15.7
Queue Delay	0.0
Total Delay	15.7
LOS	B
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	36
Queue Length 95th (ft)	71
Internal Link Dist (ft)	
Turn Bay Length (ft)	210
Base Capacity (vph)	1132
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.06
Intersection Summary	

Lanes, Volumes, Timings  
2: IL 59 & Liberty Street/Jefferson Avenue

10/05/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	197	77	27	24	49	59	27	2047	36	76	1369	133
Future Volume (vph)	197	77	27	24	49	59	27	2047	36	76	1369	133
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	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)	240		250	130		145	300		185	200		210
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	115			120			290			275		
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Ped Bike Factor												
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3273	3654	1233	3213	3654	1392	3242	5200	1482	3072	5103	1357
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3273	3654	1233	3213	3654	1392	3242	5200	1482	3072	5103	1357
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		40			30			40			40	
Link Distance (ft)		553			478			968			552	
Travel Time (s)		9.4			10.9			16.5			9.4	
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 (%)	7%	4%	31%	9%	4%	16%	8%	5%	9%	14%	7%	19%
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)	203	79	28	25	51	61	28	2110	37	78	1411	137
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	7	4	5!	3	8	1!	5	2	3	1	6	7
Permitted Phases			4			8			2		6	6
Detector Phase	7	4	5	3	8	1	5	2	3	1	6	7
Switch Phase												
Minimum Initial (s)	3.0	8.0	3.0	3.0	8.0	3.0	3.0	15.0	3.0	3.0	15.0	3.0
Minimum Split (s)	9.5	24.0	9.5	9.5	24.0	9.5	9.5	24.0	9.5	9.5	24.0	9.5
Total Split (s)	17.0	24.0	12.0	14.0	21.0	12.0	12.0	90.0	14.0	12.0	90.0	17.0
Total Split (%)	12.1%	17.1%	8.6%	10.0%	15.0%	8.6%	8.6%	64.3%	10.0%	8.6%	64.3%	12.1%
Yellow Time (s)	3.0	4.5	3.0	3.0	4.5	3.0	3.0	4.5	3.0	3.0	4.5	3.0
All-Red Time (s)	0.0	1.5	0.0	0.0	1.5	0.0	0.0	1.5	0.0	0.0	1.5	0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	6.0	3.0	3.0	6.0	3.0	3.0	6.0	3.0	3.0	6.0	3.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Min	None	None	C-Min	None
Act Effct Green (s)	13.1	14.8	27.5	6.6	9.4	21.5	6.7	93.4	106.0	8.9	97.3	117.0
Actuated g/C Ratio	0.09	0.11	0.20	0.05	0.07	0.15	0.05	0.67	0.76	0.06	0.70	0.84

Lanes, Volumes, Timings  
2: IL 59 & Liberty Street/Jefferson Avenue

10/05/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.66	0.20	0.12	0.17	0.21	0.29	0.18	0.61	0.03	0.40	0.40	0.12
Control Delay	72.2	57.4	45.7	66.1	63.4	53.1	98.1	4.0	0.3	68.5	10.6	3.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	72.2	57.4	45.7	66.1	63.4	53.1	98.1	4.0	0.3	68.5	10.6	3.4
LOS	E	E	D	E	E	D	F	A	A	E	B	A
Approach Delay		66.0			59.3			5.1			12.8	
Approach LOS		E			E			A			B	
Queue Length 50th (ft)	92	34	21	11	23	49	13	4	0	36	208	23
Queue Length 95th (ft)	136	61	49	27	46	90	m25	13	m0	62	256	44
Internal Link Dist (ft)		473			398			888			472	
Turn Bay Length (ft)	240		250	130		145	300		185	200		210
Base Capacity (vph)	327	469	262	252	391	221	208	3467	1168	212	3547	1137
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.62	0.17	0.11	0.10	0.13	0.28	0.13	0.61	0.03	0.37	0.40	0.12

Intersection Summary

Area Type: Other  
 Cycle Length: 140  
 Actuated Cycle Length: 140  
 Offset: 90 (64%), Referenced to phase 2:NBT and 6:SBT, Start of Green  
 Natural Cycle: 90  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.66  
 Intersection Signal Delay: 14.2  
 Intersection Capacity Utilization 59.9%  
 Analysis Period (min) 15  
 m Volume for 95th percentile queue is metered by upstream signal.  
 ! Phase conflict between lane groups.

Splits and Phases: 2: IL 59 & Liberty Street/Jefferson Avenue

Ø1	Ø2 (R)	Ø3	Ø4
12 s	90 s	14 s	24 s
Ø5	Ø6 (R)	Ø7	Ø8
12 s	90 s	17 s	21 s

# Lanes, Volumes, Timings

## 3: IL 59 & Meijer Access Drive

10/05/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	14	3	23	35	4	4	2	24	2092	3	23	1377
Future Volume (vph)	14	3	23	35	4	4	2	24	2092	3	23	1377
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	2000	1900	1900	2000
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	45		0		430		0	300	
Storage Lanes	1		0	1		0		2		1	1	
Taper Length (ft)	25			105				290			190	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.97	0.91	1.00	1.00	0.91
Ped Bike Factor												
Frt		0.867			0.925					0.850		
Flt Protected	0.950			0.950				0.950			0.950	
Satd. Flow (prot)	1687	1591	0	1805	1321	0	0	3502	5200	1583	1805	5103
Flt Permitted	0.571							0.950			0.950	
Satd. Flow (perm)	1014	1591	0	1900	1321	0	0	3502	5200	1583	1805	5103
Right Turn on Red			No			No				No		
Satd. Flow (RTOR)												
Link Speed (mph)		25			25				40			40
Link Distance (ft)		348			383				286			968
Travel Time (s)		9.5			10.4				4.9			16.5
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.92	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	7%	0%	4%	0%	0%	66%	0%	0%	5%	2%	0%	7%
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)	15	27	0	37	8	0	0	27	2202	3	24	1449
Turn Type	pm+pt	NA		pm+pt	NA		Prot	Prot	NA	pm+ov	Prot	NA
Protected Phases	7	4		3	8		5	5	2	3	1	6
Permitted Phases	4			8						2		
Detector Phase	7	4		3	8		5	5	2	3	1	6
Switch Phase												
Minimum Initial (s)	3.0	8.0		3.0	8.0		3.0	3.0	15.0	3.0	3.0	15.0
Minimum Split (s)	9.5	24.0		9.5	24.0		9.5	9.5	24.0	9.5	9.5	24.0
Total Split (s)	12.0	17.0		12.0	17.0		13.0	13.0	98.0	12.0	13.0	98.0
Total Split (%)	8.6%	12.1%		8.6%	12.1%		9.3%	9.3%	70.0%	8.6%	9.3%	70.0%
Yellow Time (s)	3.0	4.5		3.0	4.5		3.0	3.0	4.5	3.0	3.0	4.5
All-Red Time (s)	0.0	1.5		0.0	1.5		0.0	0.0	1.5	0.0	0.0	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)	3.0	6.0		3.0	6.0			3.0	6.0	3.0	3.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	None	C-Max	None	None	C-Max
Act Effct Green (s)	16.7	9.6		11.5	9.0			6.6	108.6	121.4	7.4	109.3
Actuated g/C Ratio	0.12	0.07		0.08	0.06			0.05	0.78	0.87	0.05	0.78

# Lanes, Volumes, Timings

## 3: IL 59 & Meijer Access Drive

10/05/2022

Lane Group	SBR
▲▲▲ Configurations	▲
Traffic Volume (vph)	20
Future Volume (vph)	20
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	420
Storage Lanes	1
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1468
Flt Permitted	
Satd. Flow (perm)	1468
Right Turn on Red	No
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.95
Growth Factor	100%
Heavy Vehicles (%)	10%
Bus Blockages (#/hr)	0
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	21
Turn Type	pm+ov
Protected Phases	7
Permitted Phases	6
Detector Phase	7
Switch Phase	
Minimum Initial (s)	3.0
Minimum Split (s)	9.5
Total Split (s)	12.0
Total Split (%)	8.6%
Yellow Time (s)	3.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	3.0
Lead/Lag	Lead
Lead-Lag Optimize?	Yes
Recall Mode	None
Act Effct Green (s)	126.9
Actuated g/C Ratio	0.91

Lanes, Volumes, Timings  
 3: IL 59 & Meijer Access Drive

10/05/2022

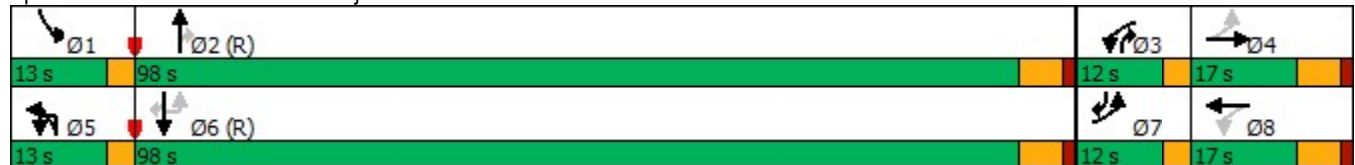


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
v/c Ratio	0.08	0.25		0.24	0.09			0.16	0.55	0.00	0.25	0.36
Control Delay	49.4	67.0		60.6	63.1			94.0	3.7	0.7	70.3	5.4
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0	0.0	0.0	0.0
Total Delay	49.4	67.0		60.6	63.1			94.0	3.7	0.7	70.3	5.4
LOS	D	E		E	E			F	A	A	E	A
Approach Delay		60.7			61.0				4.8			6.4
Approach LOS		E			E				A			A
Queue Length 50th (ft)	12	24		33	7			13	98	0	22	116
Queue Length 95th (ft)	32	56		62	25			m21	192	m0	56	131
Internal Link Dist (ft)		268			303				206			888
Turn Bay Length (ft)				45				430			300	
Base Capacity (vph)	205	125		163	105			250	4032	1374	128	3985
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	0.07	0.22		0.23	0.08			0.11	0.55	0.00	0.19	0.36

Intersection Summary

Area Type: Other  
 Cycle Length: 140  
 Actuated Cycle Length: 140  
 Offset: 69 (49%), Referenced to phase 2:NBT and 6:SBTU, Start of Green  
 Natural Cycle: 80  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.55  
 Intersection Signal Delay: 6.7  
 Intersection Capacity Utilization 57.0%  
 Analysis Period (min) 15  
 Intersection LOS: A  
 ICU Level of Service B  
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: IL 59 & Meijer Access Drive



# Lanes, Volumes, Timings

## 3: IL 59 & Meijer Access Drive

10/05/2022



Lane Group	SBR
v/c Ratio	0.02
Control Delay	1.4
Queue Delay	0.0
Total Delay	1.4
LOS	A
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	0
Queue Length 95th (ft)	m6
Internal Link Dist (ft)	
Turn Bay Length (ft)	420
Base Capacity (vph)	1339
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.02
Intersection Summary	

Lanes, Volumes, Timings  
4: Fort Hill Drive & Aurora Avenue

10/05/2022

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	42	292	78	39	190	39	57	160	62	20	38	31
Future Volume (vph)	42	292	78	39	190	39	57	160	62	20	38	31
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	110		0	105		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	145			140			85			95		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.968			0.975			0.958			0.933	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1719	3379	0	1752	3390	0	1805	1758	0	1444	1703	0
Flt Permitted	0.564			0.489			0.583			0.440		
Satd. Flow (perm)	1021	3379	0	902	3390	0	1108	1758	0	669	1703	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		36			25			20			38	
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		558			536			509			341	
Travel Time (s)		8.5			8.1			11.6			7.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	3%	5%	3%	4%	3%	0%	3%	5%	25%	5%	3%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	52	456	0	48	283	0	70	275	0	25	85	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2			6			4			8		
Detector Phase	5	2		1	6		7	4		3	8	
Switch Phase												
Minimum Initial (s)	3.0	15.0		3.0	15.0		3.0	8.0		3.0	8.0	
Minimum Split (s)	9.5	35.0		9.5	36.0		9.5	42.0		9.5	38.0	
Total Split (s)	15.0	39.0		13.0	37.0		13.0	35.0		13.0	35.0	
Total Split (%)	15.0%	39.0%		13.0%	37.0%		13.0%	35.0%		13.0%	35.0%	
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		0.0	1.5		0.0	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		3.5	6.0		3.5	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	C-Min		None	C-Min		None	None		None	None	
Act Effct Green (s)	63.0	56.0		62.1	54.0		27.3	21.0		23.8	15.7	
Actuated g/C Ratio	0.63	0.56		0.62	0.54		0.27	0.21		0.24	0.16	



Lanes, Volumes, Timings  
4: Fort Hill Drive & Aurora Avenue

10/05/2022

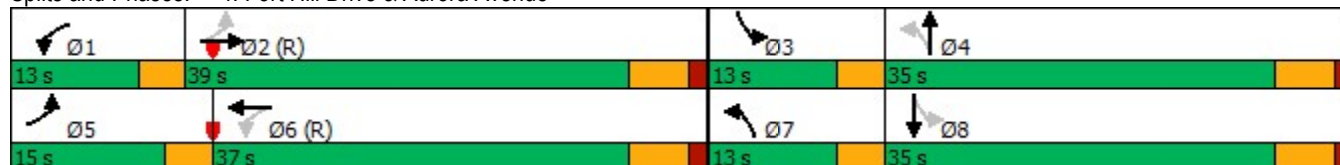


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.08	0.24		0.08	0.15		0.19	0.71		0.12	0.28	
Control Delay	9.7	13.8		9.8	13.8		24.6	44.0		22.9	22.8	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	9.7	13.8		9.8	13.8		24.6	44.0		22.9	22.8	
LOS	A	B		A	B		C	D		C	C	
Approach Delay		13.3			13.2			40.1			22.8	
Approach LOS		B			B			D			C	
Queue Length 50th (ft)	9	64		8	37		36	152		12	29	
Queue Length 95th (ft)	32	124		30	79		48	193		23	53	
Internal Link Dist (ft)		478			456			429			261	
Turn Bay Length (ft)	140			140			110			105		
Base Capacity (vph)	743	1908		658	1842		370	524		246	520	
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	0.07	0.24		0.07	0.15		0.19	0.52		0.10	0.16	

Intersection Summary

Area Type:	Other
Cycle Length:	100
Actuated Cycle Length:	100
Offset:	30 (30%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle:	100
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.71
Intersection Signal Delay:	21.2
Intersection LOS:	C
Intersection Capacity Utilization	45.8%
ICU Level of Service	A
Analysis Period (min)	15

Splits and Phases: 4: Fort Hill Drive & Aurora Avenue



Lanes, Volumes, Timings  
 5: Westridge Court Access Drive & Aurora Avenue

10/05/2022

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	77	384	10	4	251	19	6	0	1	27	0	25
Future Volume (vph)	77	384	10	4	251	19	6	0	1	27	0	25
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	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)	270		0	185		160	0		0	85		0
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	190			140			25			80		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3689	1468	1203	3619	1417	1357	1961	1615	1444	1961	1495
Flt Permitted	0.567			0.510			0.000			0.950		
Satd. Flow (perm)	1077	3689	1468	646	3619	1417	0	1961	1615	1444	1961	1495
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			82			82			496			647
Link Speed (mph)		45			45			25				25
Link Distance (ft)		734			866			285				265
Travel Time (s)		11.1			13.1			7.8				7.2
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	3%	10%	50%	5%	14%	33%	2%	0%	25%	2%	8%
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)	83	413	11	4	270	20	6	0	1	29	0	27
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt		pm+ov	pm+pt		pm+ov
Protected Phases	5	2		1	6		7	4	1	3	8	5
Permitted Phases	2		2	6		6	4		4	8		8
Detector Phase	5	2	2	1	6	6	7	4	1	3	8	5
Switch Phase												
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0	15.0	5.0	8.0	5.0	5.0	8.0	5.0
Minimum Split (s)	9.5	42.5	42.5	9.5	33.5	33.5	9.5	49.5	9.5	9.5	22.5	9.5
Total Split (s)	15.0	87.0	87.0	15.0	87.0	87.0	15.0	23.0	15.0	15.0	23.0	15.0
Total Split (%)	10.7%	62.1%	62.1%	10.7%	62.1%	62.1%	10.7%	16.4%	10.7%	10.7%	16.4%	10.7%
Yellow Time (s)	3.5	4.5	4.5	3.5	4.5	4.5	3.5	4.5	3.5	3.5	4.5	3.5
All-Red Time (s)	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	0.0	0.0	2.0	0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	6.5	6.5	3.5	6.5	6.5	3.5	6.5	3.5	3.5	6.5	3.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None	None	None
Act Effct Green (s)	127.2	125.4	125.4	123.5	115.0	115.0	7.1		5.6	9.2		12.0
Actuated g/C Ratio	0.91	0.90	0.90	0.88	0.82	0.82	0.05		0.04	0.07		0.09

Lanes, Volumes, Timings  
 5: Westridge Court Access Drive & Aurora Avenue

10/05/2022

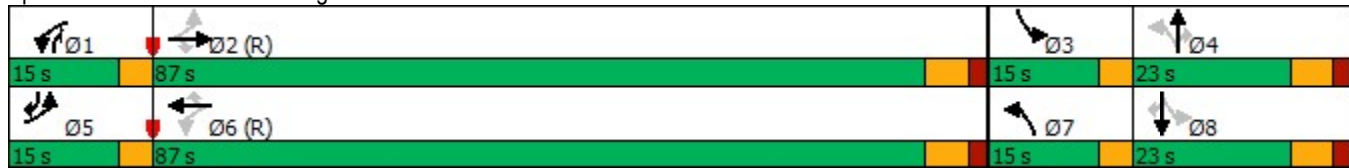


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.08	0.12	0.01	0.01	0.09	0.02	0.09		0.00	0.31		0.04
Control Delay	0.6	2.0	0.5	1.2	3.1	0.1	64.3		0.0	69.7		0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0
Total Delay	0.6	2.0	0.5	1.2	3.1	0.1	64.3		0.0	69.7		0.1
LOS	A	A	A	A	A	A	E		A	E		A
Approach Delay		1.8			2.9			55.1				36.1
Approach LOS		A			A			E				D
Queue Length 50th (ft)	2	5	0	0	26	0	5		0	25		0
Queue Length 95th (ft)	3	170	m1	2	38	0	20		0	60		0
Internal Link Dist (ft)		654			786			205				185
Turn Bay Length (ft)	270			185		160				85		
Base Capacity (vph)	1041	3304	1324	634	2972	1178	111		587	118		751
Starvation Cap Reductn	0	0	0	0	0	0	0		0	0		0
Spillback Cap Reductn	0	0	0	0	0	0	0		0	0		0
Storage Cap Reductn	0	0	0	0	0	0	0		0	0		0
Reduced v/c Ratio	0.08	0.13	0.01	0.01	0.09	0.02	0.05		0.00	0.25		0.04

Intersection Summary

Area Type: Other  
 Cycle Length: 140  
 Actuated Cycle Length: 140  
 Offset: 106 (76%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green  
 Natural Cycle: 115  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.31  
 Intersection Signal Delay: 4.8 Intersection LOS: A  
 Intersection Capacity Utilization 39.1% ICU Level of Service A  
 Analysis Period (min) 15  
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: Westridge Court Access Drive & Aurora Avenue



HCM 6th TWSC  
6: IL 59 & Heritage Square Access Drive

10/05/2022

Intersection												
Int Delay, s/veh	0.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations			↗			↗	↘	↑↑↑	↗	↘	↑↑↑	↗
Traffic Vol, veh/h	0	0	7	0	0	26	19	2102	47	39	1391	7
Future Vol, veh/h	0	0	7	0	0	26	19	2102	47	39	1391	7
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	-	-	0	255	-	170	365	-	150
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	2	0	2	2	2	0	5	0	11	7	0
Mvmt Flow	0	0	7	0	0	28	20	2236	50	41	1480	7

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	-	-	740	-	-	1118	1487	0	0	2286	0	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	7.1	-	-	7.14	5.3	-	-	5.52	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.9	-	-	3.92	3.1	-	-	3.21	-	-
Pot Cap-1 Maneuver	0	0	*602	0	0	*432	*757	-	-	*527	-	-
Stage 1	0	0	-	0	0	-	-	-	-	-	-	-
Stage 2	0	0	-	0	0	-	-	-	-	-	-	-
Platoon blocked, %			1			1	1	-	-	1	-	-
Mov Cap-1 Maneuver	-	-	*602	-	-	*432	*757	-	-	*527	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB		WB		NB			SB		
HCM Control Delay, s	11.1		13.9		0.1			0.3		
HCM LOS	B		B							

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	* 757	-	-	602	432	* 527	-	-
HCM Lane V/C Ratio	0.027	-	-	0.012	0.064	0.079	-	-
HCM Control Delay (s)	9.9	-	-	11.1	13.9	12.4	-	-
HCM Lane LOS	A	-	-	B	B	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0	0.2	0.3	-	-

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

HCM 6th TWSC  
7: IL 59 & Right-In/Right-Out

10/05/2022

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↑	↑↑↑	↑		↑↑↑
Traffic Vol, veh/h	0	12	2109	19	0	1437
Future Vol, veh/h	0	12	2109	19	0	1437
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	-	140	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	0	5	20	2	7
Mvmt Flow	0	13	2318	21	0	1579

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	-	1159	0	0	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	7.1	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	3.9	-	-	-
Pot Cap-1 Maneuver	0	*434	-	-	0
Stage 1	0	-	-	-	0
Stage 2	0	-	-	-	0
Platoon blocked, %	-	1	-	-	-
Mov Cap-1 Maneuver	-	*434	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBT
Capacity (veh/h)	-	-	434
HCM Lane V/C Ratio	-	-	0.03
HCM Control Delay (s)	-	-	13.6
HCM Lane LOS	-	-	B
HCM 95th %tile Q(veh)	-	-	0.1

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

HCM 6th TWSC  
 8: Aurora Avenue & West Right-In/Right-Out

10/05/2022

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	0	462	7	0	260	22	0	0	9	0	0	24
Future Vol, veh/h	0	462	7	0	260	22	0	0	9	0	0	24
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	-	-	Free	-	-	None	-	-	Stop
Storage Length	-	-	0	-	-	-	-	-	0	-	-	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	3	0	2	6	0	2	2	22	2	2	0
Mvmt Flow	0	502	8	0	283	24	0	0	10	0	0	26

Major/Minor	Major1		Major2		Minor1			Minor2				
Conflicting Flow All	-	0	0	-	-	0	-	-	251	-	-	142
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	7.34	-	-	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.52	-	-	3.9
Pot Cap-1 Maneuver	0	-	-	0	-	0	0	0	*852	0	0	*881
Stage 1	0	-	-	0	-	0	0	0	-	0	0	-
Stage 2	0	-	-	0	-	0	0	0	-	0	0	-
Platoon blocked, %		-	-	-	-	-	-	-	1			1
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	*852	-	-	*881
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	9.3	9.2
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	SBLn1
Capacity (veh/h)	852	-	-	-	881
HCM Lane V/C Ratio	0.011	-	-	-	0.03
HCM Control Delay (s)	9.3	-	-	-	9.2
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

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

HCM 6th TWSC  
 9: Aurora Avenue & East Right-In/Right-Out

10/05/2022

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑			↑
Traffic Vol, veh/h	0	412	271	7	0	3
Future Vol, veh/h	0	412	271	7	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	85	85	85	85	85	85
Heavy Vehicles, %	2	3	6	0	2	0
Mvmt Flow	0	485	319	8	0	4

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

Approach	EB	WB	SB
HCM Control Delay, s	0	0	8.6
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	991
HCM Lane V/C Ratio	-	-	-	0.004
HCM Control Delay (s)	-	-	-	8.6
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	0

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

HCM 6th TWSC  
 10: Jefferson Avenue & Target Access Drive

10/05/2022

Intersection												
Int Delay, s/veh	1.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↖↗		↖	↖↗		↖	↗		↖	↗	
Traffic Vol, veh/h	14	166	9	1	112	27	2	1	1	10	0	18
Future Vol, veh/h	14	166	9	1	112	27	2	1	1	10	0	18
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	90	-	-	150	-	-	70	-	-	30	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	79	79	79	79	79	79	79	79	79	79	79	79
Heavy Vehicles, %	0	12	0	0	11	4	2	0	0	0	2	6
Mvmt Flow	18	210	11	1	142	34	3	1	1	13	0	23

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	176	0	0	221	0	0	325	430	111	303	418	88
Stage 1	-	-	-	-	-	-	252	252	-	161	161	-
Stage 2	-	-	-	-	-	-	73	178	-	142	257	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.54	6.5	6.9	7.5	6.54	7.02
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.5	-	6.5	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.5	-	6.5	5.54	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.52	4	3.3	3.5	4.02	3.36
Pot Cap-1 Maneuver	1412	-	-	1454	-	-	715	585	*1038	747	590	940
Stage 1	-	-	-	-	-	-	835	766	-	831	764	-
Stage 2	-	-	-	-	-	-	928	756	-	979	757	-
Platoon blocked, %		-	-	1	-	-	1	1	1	1	1	
Mov Cap-1 Maneuver	1412	-	-	1454	-	-	690	577	*1038	737	582	940
Mov Cap-2 Maneuver	-	-	-	-	-	-	703	604	-	728	610	-
Stage 1	-	-	-	-	-	-	824	756	-	820	763	-
Stage 2	-	-	-	-	-	-	905	755	-	964	748	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.6			0.1			9.9			9.3		
HCM LOS							A			A		

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	703	764	1412	-	-	1454	-	-	728	940
HCM Lane V/C Ratio	0.004	0.003	0.013	-	-	0.001	-	-	0.017	0.024
HCM Control Delay (s)	10.1	9.7	7.6	-	-	7.5	-	-	10	8.9
HCM Lane LOS		B	A	A	-	A	-	-	B	A
HCM 95th %tile Q(veh)		0	0	0	-	0	-	-	0.1	0.1

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



HCM 6th TWSC  
 11: Fort Hill Drive & Westridge Court Access Drive

10/05/2022

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	8	0	18	6	0	3	26	200	15	2	65	6
Future Vol, veh/h	8	0	18	6	0	3	26	200	15	2	65	6
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	68	68	68	68	68	68	68	68	68	68	68	68
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	12	0	26	9	0	4	38	294	22	3	96	9

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	490	499	101	501	492	305	105	0	0	316	0	0
Stage 1	107	107	-	381	381	-	-	-	-	-	-	-
Stage 2	383	392	-	120	111	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	546	507	954	536	512	820	1486	-	-	1262	-	-
Stage 1	898	807	-	697	636	-	-	-	-	-	-	-
Stage 2	695	628	-	884	804	-	-	-	-	-	-	-
Platoon blocked, %	1	1		1	1	1		-	-	1	-	-
Mov Cap-1 Maneuver	529	489	954	507	494	820	1486	-	-	1262	-	-
Mov Cap-2 Maneuver	529	489	-	507	494	-	-	-	-	-	-	-
Stage 1	870	805	-	675	617	-	-	-	-	-	-	-
Stage 2	670	608	-	857	802	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	10		11.3		0.8		0.2	
HCM LOS	B		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1486	-	-	765	581	1262	-	-
HCM Lane V/C Ratio	0.026	-	-	0.05	0.023	0.002	-	-
HCM Control Delay (s)	7.5	0	-	10	11.3	7.9	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.2	0.1	0	-	-

HCM 6th TWSC  
 12: Fort Hill Drive & Goodwill Access Drive

10/05/2022

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	1	0	2	2	0	0	3	188	20	6	69	1
Future Vol, veh/h	1	0	2	2	0	0	3	188	20	6	69	1
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	0	3	3	0	0	4	235	25	8	86	1

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	359	371	87	360	359	248	87	0	0	260	0	0
Stage 1	103	103	-	256	256	-	-	-	-	-	-	-
Stage 2	256	268	-	104	103	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	667	601	971	666	612	868	1509	-	-	1325	-	-
Stage 1	903	810	-	813	725	-	-	-	-	-	-	-
Stage 2	813	716	-	902	810	-	-	-	-	-	-	-
Platoon blocked, %	1	1		1	1	1		-	-	1	-	-
Mov Cap-1 Maneuver	662	596	971	660	606	868	1509	-	-	1325	-	-
Mov Cap-2 Maneuver	662	596	-	660	606	-	-	-	-	-	-	-
Stage 1	900	805	-	811	723	-	-	-	-	-	-	-
Stage 2	811	714	-	894	805	-	-	-	-	-	-	-





































Approach	EB		WB		NB		SB	
HCM Control Delay, s	9.3		10.5		0.1		0.6	
HCM LOS	A		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1509	-	-	840	660	1325	-	-
HCM Lane V/C Ratio	0.002	-	-	0.004	0.004	0.006	-	-
HCM Control Delay (s)	7.4	0	-	9.3	10.5	7.7	0	-
HCM Lane LOS	A	A	-	A	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-

Capacity Analysis Summary Sheets  
Year 2028 Total Projected Weekday Evening Peak Hour

Lanes, Volumes, Timings  
1: IL 59 & Aurora Avenue

10/05/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations	 	  		  	  		 	  			 	  
Traffic Volume (vph)	291	420	251	285	515	146	265	1584	179	5	223	2067
Future Volume (vph)	291	420	251	285	515	146	265	1584	179	5	223	2067
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	2000	1900	1900	1900	2000
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%				0%
Storage Length (ft)	265		205	320		210	190		395		325	
Storage Lanes	2		1	2		1	2		1		2	
Taper Length (ft)	270			300			300				300	
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00	0.91	0.97	0.91
Ped Bike Factor												
Frt			0.850			0.850			0.850			
Flt Protected	0.950			0.950			0.950				0.950	
Satd. Flow (prot)	3467	5406	1599	3467	5460	1599	3502	5301	1599	0	3468	5353
Flt Permitted	0.950			0.950			0.950				0.950	
Satd. Flow (perm)	3467	5406	1599	3467	5460	1599	3502	5301	1599	0	3468	5353
Right Turn on Red			No			No			No			
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			40				40
Link Distance (ft)		654			559			897				856
Travel Time (s)		9.9			8.5			15.3				14.6
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	1%	0%	1%	0%	3%	1%	0%	1%	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)	306	442	264	300	542	154	279	1667	188	0	240	2176
Turn Type	Prot	NA	pt+ov	Prot	NA	Prot	Prot	NA	pt+ov	Prot	Prot	NA
Protected Phases	7	4	4 5	3	8	8	5	2	2 3	1	1	6
Permitted Phases												
Detector Phase	7	4	4 5	3	8	8	5	2	2 3	1	1	6
Switch Phase												
Minimum Initial (s)	3.0	8.0		3.0	8.0	8.0	3.0	15.0		3.0	3.0	15.0
Minimum Split (s)	9.5	24.0		9.5	24.0	24.0	9.5	24.0		9.5	9.5	24.0
Total Split (s)	21.0	29.0		21.0	29.0	29.0	17.0	73.0		17.0	17.0	73.0
Total Split (%)	15.0%	20.7%		15.0%	20.7%	20.7%	12.1%	52.1%		12.1%	12.1%	52.1%
Yellow Time (s)	3.0	4.5		3.0	4.5	4.5	3.0	4.5		3.0	3.0	4.5
All-Red Time (s)	0.0	1.5		0.0	1.5	1.5	0.0	1.5		0.0	0.0	1.5
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	3.0	6.0		3.0	6.0	6.0	3.0	6.0		3.0	3.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag		Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None		None	None	None	None	C-Min		None	None	C-Min
Act Effct Green (s)	16.5	23.4	40.1	16.3	23.3	23.3	13.7	69.0	88.3		13.2	68.5
Actuated g/C Ratio	0.12	0.17	0.29	0.12	0.17	0.17	0.10	0.49	0.63		0.09	0.49

Lanes, Volumes, Timings  
1: IL 59 & Aurora Avenue

10/05/2022

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	294
Future Volume (vph)	294
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	210
Storage Lanes	1
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1615
Flt Permitted	
Satd. Flow (perm)	1615
Right Turn on Red	No
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.95
Growth Factor	100%
Heavy Vehicles (%)	0%
Bus Blockages (#/hr)	0
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	309
Turn Type	pt+ov
Protected Phases	6 7
Permitted Phases	
Detector Phase	6 7
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	
Act Effct Green (s)	88.0
Actuated g/C Ratio	0.63

Lanes, Volumes, Timings  
1: IL 59 & Aurora Avenue

10/05/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
v/c Ratio	0.75	0.49	0.58	0.74	0.60	0.58	0.82	0.64	0.19		0.73	0.83
Control Delay	71.8	55.0	48.5	63.5	51.6	57.5	80.7	28.0	11.5		86.5	19.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Total Delay	71.8	55.0	48.5	63.5	51.6	57.5	80.7	28.0	11.5		86.5	19.9
LOS	E	D	D	E	D	E	F	C	B		F	B
Approach Delay		58.4			56.1			33.5				24.3
Approach LOS		E			E			C				C
Queue Length 50th (ft)	139	135	205	138	170	132	130	414	69		106	636
Queue Length 95th (ft)	191	174	303	152	215	211	#195	467	105		m151	539
Internal Link Dist (ft)		574			479			817				776
Turn Bay Length (ft)	265		205	320		210	190		395		325	
Base Capacity (vph)	445	913	450	445	918	268	350	2612	1028		346	2620
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0		0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0		0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0		0	0
Reduced v/c Ratio	0.69	0.48	0.59	0.67	0.59	0.57	0.80	0.64	0.18		0.69	0.83

Intersection Summary

Area Type: Other  
 Cycle Length: 140  
 Actuated Cycle Length: 140  
 Offset: 127 (91%), Referenced to phase 2:NBT and 6:SBT, Start of Green  
 Natural Cycle: 90  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.83  
 Intersection Signal Delay: 36.8      Intersection LOS: D  
 Intersection Capacity Utilization 79.9%      ICU Level of Service D  
 Analysis Period (min) 15  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.  
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: IL 59 & Aurora Avenue

Ø1	Ø2 (R)	Ø3	Ø4
17 s	73 s	21 s	29 s
Ø5	Ø6 (R)	Ø7	Ø8
17 s	73 s	21 s	29 s

Lanes, Volumes, Timings  
1: IL 59 & Aurora Avenue

10/05/2022



Lane Group	SBR
v/c Ratio	0.30
Control Delay	6.6
Queue Delay	0.0
Total Delay	6.6
LOS	A
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	82
Queue Length 95th (ft)	m114
Internal Link Dist (ft)	
Turn Bay Length (ft)	210
Base Capacity (vph)	1033
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.30
Intersection Summary	

Lanes, Volumes, Timings  
2: IL 59 & Liberty Street/Jefferson Avenue

10/05/2022

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	290	206	80	151	224	197	1	63	1639	118	150	2400
Future Volume (vph)	290	206	80	151	224	197	1	63	1639	118	150	2400
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	1900	2000	1900	1900	2000
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%				0%			0%
Storage Length (ft)	240		250	130		145		300		185	200	
Storage Lanes	2		1	2		1		2		1	2	
Taper Length (ft)	115			120				290			275	
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.91	0.97	0.91	1.00	0.97	0.91
Ped Bike Factor												
Frt			0.850			0.850				0.850		
Flt Protected	0.950			0.950				0.950			0.950	
Satd. Flow (prot)	3303	3725	1615	3467	3725	1524	0	3434	5353	1615	3303	5353
Flt Permitted	0.950			0.950				0.950			0.950	
Satd. Flow (perm)	3303	3725	1615	3467	3725	1524	0	3434	5353	1615	3303	5353
Right Turn on Red			No			No				No		
Satd. Flow (RTOR)												
Link Speed (mph)		40			30				40			40
Link Distance (ft)		553			478				968			552
Travel Time (s)		9.4			10.9				16.5			9.4
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 (%)	6%	2%	0%	1%	2%	6%	0%	2%	2%	0%	6%	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)	302	215	83	157	233	205	0	67	1707	123	156	2500
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	Prot	NA	pm+ov	Prot	NA
Protected Phases	7	4	5!	3	8	1!	5!	5	2	3	1	6
Permitted Phases			4			8				2		
Detector Phase	7	4	5	3	8	1	5	5	2	3	1	6
Switch Phase												
Minimum Initial (s)	3.0	8.0	3.0	3.0	8.0	3.0	3.0	3.0	15.0	3.0	3.0	15.0
Minimum Split (s)	9.5	24.0	9.5	9.5	24.0	9.5	9.5	9.5	24.0	9.5	9.5	24.0
Total Split (s)	20.0	29.0	13.0	14.0	23.0	14.0	13.0	13.0	83.0	14.0	14.0	84.0
Total Split (%)	14.3%	20.7%	9.3%	10.0%	16.4%	10.0%	9.3%	9.3%	59.3%	10.0%	10.0%	60.0%
Yellow Time (s)	3.0	4.5	3.0	3.0	4.5	3.0	3.0	3.0	4.5	3.0	3.0	4.5
All-Red Time (s)	0.0	1.5	0.0	0.0	1.5	0.0	0.0	0.0	1.5	0.0	0.0	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	6.0	3.0	3.0	6.0	3.0		3.0	6.0	3.0	3.0	6.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	C-Min	None	None	C-Min
Act Effct Green (s)	16.1	21.3	35.3	10.4	15.5	32.0		8.1	79.9	96.3	10.5	82.3
Actuated g/C Ratio	0.12	0.15	0.25	0.07	0.11	0.23		0.06	0.57	0.69	0.08	0.59



Lanes, Volumes, Timings  
 2: IL 59 & Liberty Street/Jefferson Avenue

10/05/2022

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	190
Future Volume (vph)	190
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	210
Storage Lanes	1
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1495
Flt Permitted	
Satd. Flow (perm)	1495
Right Turn on Red	No
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.96
Growth Factor	100%
Heavy Vehicles (%)	8%
Bus Blockages (#/hr)	0
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	198
Turn Type	pm+ov
Protected Phases	7
Permitted Phases	6
Detector Phase	7
Switch Phase	
Minimum Initial (s)	3.0
Minimum Split (s)	9.5
Total Split (s)	20.0
Total Split (%)	14.3%
Yellow Time (s)	3.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	3.0
Lead/Lag	Lead
Lead-Lag Optimize?	Yes
Recall Mode	None
Act Effct Green (s)	104.4
Actuated g/C Ratio	0.75

Lanes, Volumes, Timings  
2: IL 59 & Liberty Street/Jefferson Avenue

10/05/2022

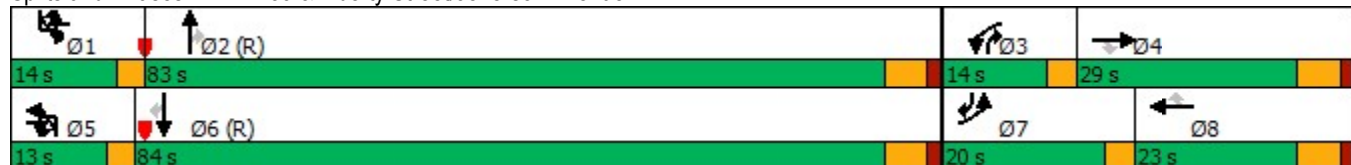


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
v/c Ratio	0.79	0.38	0.20	0.61	0.57	0.59		0.34	0.56	0.11	0.63	0.79
Control Delay	75.9	55.1	41.6	73.4	64.4	55.4		80.6	5.3	3.2	74.7	25.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Delay	75.9	55.1	41.6	73.4	64.4	55.4		80.6	5.3	3.2	74.7	25.4
LOS	E	E	D	E	E	E		F	A	A	E	C
Approach Delay		63.7			63.7				7.8			26.8
Approach LOS		E			E				A			C
Queue Length 50th (ft)	139	92	59	72	106	165		32	72	12	72	643
Queue Length 95th (ft)	#192	133	104	111	151	251		58	76	18	110	734
Internal Link Dist (ft)		473			398				888			472
Turn Bay Length (ft)	240		250	130		145		300		185	200	
Base Capacity (vph)	401	611	429	272	452	354		245	3054	1117	260	3146
Starvation Cap Reductn	0	0	0	0	0	0		0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0		0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0		0	0	0	0	0
Reduced v/c Ratio	0.75	0.35	0.19	0.58	0.52	0.58		0.27	0.56	0.11	0.60	0.79

Intersection Summary


Area Type: Other  
 Cycle Length: 140  
 Actuated Cycle Length: 140  
 Offset: 74 (53%), Referenced to phase 2:NBT and 6:SBT, Start of Green  
 Natural Cycle: 90  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.79  
 Intersection Signal Delay: 28.1 Intersection LOS: C  
 Intersection Capacity Utilization 79.0% ICU Level of Service D  
 Analysis Period (min) 15  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.  
 ! Phase conflict between lane groups.

Splits and Phases: 2: IL 59 & Liberty Street/Jefferson Avenue



Lanes, Volumes, Timings  
2: IL 59 & Liberty Street/Jefferson Avenue

10/05/2022



Lane Group	SBR
v/c Ratio	0.18
Control Delay	6.0
Queue Delay	0.0
Total Delay	6.0
LOS	A
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	49
Queue Length 95th (ft)	80
Internal Link Dist (ft)	
Turn Bay Length (ft)	210
Base Capacity (vph)	1124
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.18
Intersection Summary	

Lanes, Volumes, Timings  
3: IL 59 & Meijer Access Drive

10/05/2022

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	67	12	92	179	24	65	6	112	1688	53	1	109
Future Volume (vph)	67	12	92	179	24	65	6	112	1688	53	1	109
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	2000	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%				0%			
Storage Length (ft)	0		0	45		0		430		0		300
Storage Lanes	1		0	1		0		2		1		1
Taper Length (ft)	25			105				290				190
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.97	0.91	1.00	0.91	1.00
Ped Bike Factor												
Frt		0.867			0.891					0.850		
Flt Protected	0.950			0.950				0.950				0.950
Satd. Flow (prot)	1805	1647	0	1805	1693	0	0	3469	5301	1615	0	1805
Flt Permitted	0.697			0.500				0.950				0.331
Satd. Flow (perm)	1324	1647	0	950	1693	0	0	3469	5301	1615	0	629
Right Turn on Red			No			No				No		
Satd. Flow (RTOR)												
Link Speed (mph)		25			25				40			
Link Distance (ft)		348			383				286			
Travel Time (s)		9.5			10.4				4.9			
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%	1%	3%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%				0%			
Shared Lane Traffic (%)												
Lane Group Flow (vph)	69	107	0	185	92	0	0	121	1740	55	0	113
Turn Type	pm+pt	NA		pm+pt	NA		Prot	Prot	NA	pm+ov	Perm	Prot
Protected Phases	7	4		3	8		5	5	2	3		1
Permitted Phases	4			8						2	6	
Detector Phase	7	4		3	8		5	5	2	3	6	1
Switch Phase												
Minimum Initial (s)	3.0	8.0		3.0	8.0		3.0	3.0	15.0	3.0	15.0	3.0
Minimum Split (s)	9.5	24.0		9.5	24.0		9.5	9.5	24.0	9.5	24.0	9.5
Total Split (s)	15.0	21.0		15.0	21.0		14.0	14.0	90.0	15.0	90.0	14.0
Total Split (%)	10.7%	15.0%		10.7%	15.0%		10.0%	10.0%	64.3%	10.7%	64.3%	10.0%
Yellow Time (s)	3.0	4.5		3.0	4.5		3.0	3.0	4.5	3.0	4.5	3.0
All-Red Time (s)	0.0	1.5		0.0	1.5		0.0	0.0	1.5	0.0	1.5	0.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0	0.0		0.0
Total Lost Time (s)	3.0	6.0		3.0	6.0			3.0	6.0	3.0		3.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lead	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	None	C-Max	None	C-Max	None
Act Effct Green (s)	26.4	13.9		30.7	16.4			9.7	84.0	102.0		12.1
Actuated g/C Ratio	0.19	0.10		0.22	0.12			0.07	0.60	0.73		0.09

### Lanes, Volumes, Timings 3: IL 59 & Meijer Access Drive

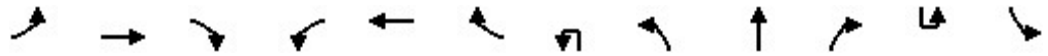
10/05/2022



Lane Group	SBT	SBR
Lane Configurations	↑↑↑↑	↑
Traffic Volume (vph)	2438	84
Future Volume (vph)	2438	84
Ideal Flow (vphpl)	2000	1900
Lane Width (ft)	12	12
Grade (%)	0%	
Storage Length (ft)		420
Storage Lanes		1
Taper Length (ft)		
Lane Util. Factor	0.91	1.00
Ped Bike Factor		
Frt		0.850
Flt Protected		
Satd. Flow (prot)	5353	1615
Flt Permitted		
Satd. Flow (perm)	5353	1615
Right Turn on Red		No
Satd. Flow (RTOR)		
Link Speed (mph)	40	
Link Distance (ft)	968	
Travel Time (s)	16.5	
Confl. Peds. (#/hr)		
Confl. Bikes (#/hr)		
Peak Hour Factor	0.97	0.97
Growth Factor	100%	100%
Heavy Vehicles (%)	2%	0%
Bus Blockages (#/hr)	0	0
Parking (#/hr)		
Mid-Block Traffic (%)	0%	
Shared Lane Traffic (%)		
Lane Group Flow (vph)	2513	87
Turn Type	NA	pm+ov
Protected Phases	6	7
Permitted Phases		6
Detector Phase	6	7
Switch Phase		
Minimum Initial (s)	15.0	3.0
Minimum Split (s)	24.0	9.5
Total Split (s)	90.0	15.0
Total Split (%)	64.3%	10.7%
Yellow Time (s)	4.5	3.0
All-Red Time (s)	1.5	0.0
Lost Time Adjust (s)	0.0	0.0
Total Lost Time (s)	6.0	3.0
Lead/Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes
Recall Mode	C-Max	None
Act Effct Green (s)	86.4	101.9
Actuated g/C Ratio	0.62	0.73

Lanes, Volumes, Timings  
3: IL 59 & Meijer Access Drive

10/05/2022

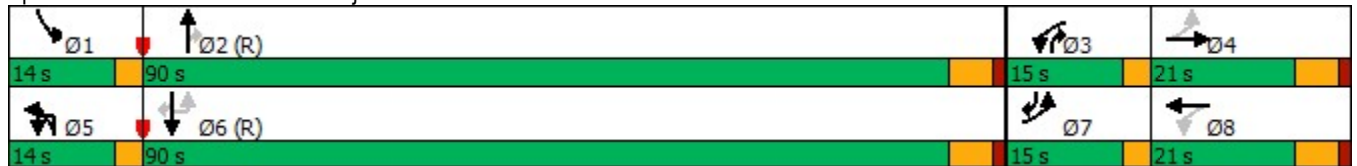


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
v/c Ratio	0.24	0.66		0.66	0.46			0.50	0.55	0.05		2.09
Control Delay	45.4	79.7		59.1	66.4			56.5	35.5	9.5		562.0
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0	0.0		0.0
Total Delay	45.4	79.7		59.1	66.4			56.5	35.5	9.5		562.0
LOS	D	E		E	E			E	D	A		F
Approach Delay		66.2			61.5				36.1			
Approach LOS		E			E				D			
Queue Length 50th (ft)	50	95		145	79			56	540	19		~171
Queue Length 95th (ft)	93	161		221	141			m89	590	m34		m#236
Internal Link Dist (ft)		268			303				206			
Turn Bay Length (ft)				45				430				300
Base Capacity (vph)	314	176		281	198			272	3180	1176		54
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	0.22	0.61		0.66	0.46			0.44	0.55	0.05		2.09

Intersection Summary

Area Type: Other  
 Cycle Length: 140  
 Actuated Cycle Length: 140  
 Offset: 77 (55%), Referenced to phase 2:NBT and 6:SBTU, Start of Green  
 Natural Cycle: 100  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 2.09  
 Intersection Signal Delay: 35.1      Intersection LOS: D  
 Intersection Capacity Utilization 78.0%      ICU Level of Service D  
 Analysis Period (min) 15  
 ~ Volume exceeds capacity, queue is theoretically infinite.  
 Queue shown is maximum after two cycles.  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.  
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: IL 59 & Meijer Access Drive



Lanes, Volumes, Timings  
 3: IL 59 & Meijer Access Drive

10/05/2022



Lane Group	SBT	SBR
v/c Ratio	0.76	0.07
Control Delay	6.6	1.8
Queue Delay	0.0	0.0
Total Delay	6.7	1.8
LOS	A	A
Approach Delay	29.6	
Approach LOS	C	
Queue Length 50th (ft)	115	5
Queue Length 95th (ft)	121	m6
Internal Link Dist (ft)	888	
Turn Bay Length (ft)		420
Base Capacity (vph)	3302	1204
Starvation Cap Reductn	44	0
Spillback Cap Reductn	0	0
Storage Cap Reductn	0	0
Reduced v/c Ratio	0.77	0.07
Intersection Summary		

Lanes, Volumes, Timings  
4: Fort Hill Drive & Aurora Avenue

10/05/2022

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	116	379	125	74	676	94	48	191	82	100	457	66
Future Volume (vph)	116	379	125	74	676	94	48	191	82	100	457	66
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	110		0	105		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	145			140			85			95		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Fr <sub>t</sub>		0.963			0.982			0.955			0.981	
Fl <sub>t</sub> Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3468	0	1805	3514	0	1805	1797	0	1787	1825	0
Fl <sub>t</sub> Permitted	0.202			0.402			0.138			0.402		
Satd. Flow (perm)	376	3468	0	764	3514	0	262	1797	0	756	1825	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		36			14			19				6
Link Speed (mph)		45			45			30				30
Link Distance (ft)		558			536			509				341
Travel Time (s)		8.5			8.1			11.6				7.8
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	0%	1%	0%	1%	0%	0%	1%	1%	1%	2%	3%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%				0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	122	531	0	78	811	0	51	287	0	105	550	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2			6			4			8		
Detector Phase	5	2		1	6		7	4		3	8	
Switch Phase												
Minimum Initial (s)	3.0	15.0		3.0	15.0		3.0	8.0		3.0	8.0	
Minimum Split (s)	9.5	35.0		9.5	36.0		9.5	42.0		9.5	38.0	
Total Split (s)	14.0	37.0		23.0	46.0		16.0	44.0		16.0	44.0	
Total Split (%)	11.7%	30.8%		19.2%	38.3%		13.3%	36.7%		13.3%	36.7%	
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		0.0	1.5		0.0	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		3.5	6.0		3.5	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	C-Min		None	C-Min		None	None		None	None	
Act Effct Green (s)	58.8	48.3		56.3	45.5		46.9	36.7		50.9	40.3	
Actuated g/C Ratio	0.49	0.40		0.47	0.38		0.39	0.31		0.42	0.34	



Lanes, Volumes, Timings  
4: Fort Hill Drive & Aurora Avenue

10/05/2022

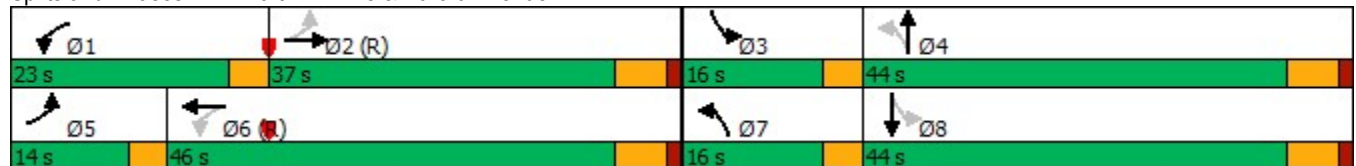


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.42	0.37		0.18	0.61		0.25	0.51		0.26	0.89	
Control Delay	21.9	26.5		18.3	33.3		20.9	34.8		20.6	55.6	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	21.9	26.5		18.3	33.3		20.9	34.8		20.6	55.6	
LOS	C	C		B	C		C	C		C	E	
Approach Delay		25.6			32.0			32.7			50.0	
Approach LOS		C			C			C			D	
Queue Length 50th (ft)	52	152		33	278		21	161		45	386	
Queue Length 95th (ft)	90	210		62	352		44	254		79	#599	
Internal Link Dist (ft)		478			456			429			261	
Turn Bay Length (ft)	140			140			110			105		
Base Capacity (vph)	307	1418		555	1340		272	601		435	624	
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	0.37		0.14	0.61		0.19	0.48		0.24	0.88	

Intersection Summary

























Area Type: Other  
 Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 54 (45%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green  
 Natural Cycle: 100  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.89  
 Intersection Signal Delay: 35.1  
 Intersection LOS: D  
 Intersection Capacity Utilization 76.2%  
 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.

Splits and Phases: 4: Fort Hill Drive & Aurora Avenue



Lanes, Volumes, Timings  
 5: Westridge Court Access Drive & Aurora Avenue

10/05/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	247	469	33	55	649	84	56	13	33	118	24	180
Future Volume (vph)	247	469	33	55	649	84	56	13	33	118	24	180
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	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)	270		0	185		160	0		0	85		0
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	190			140			25			80		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3762	1568	1736	3762	1615	1805	2000	1615	1805	1923	1599
Flt Permitted	0.346			0.469						0.548		
Satd. Flow (perm)	657	3762	1568	857	3762	1615	1900	2000	1615	1041	1923	1599
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			82			85			55			191
Link Speed (mph)		45			45			25				25
Link Distance (ft)		734			866			285				265
Travel Time (s)		11.1			13.1			7.8				7.2
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 (%)	0%	1%	3%	4%	1%	0%	0%	0%	0%	0%	4%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%				0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	263	499	35	59	690	89	60	14	35	126	26	191
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov
Protected Phases	5	2		1	6		7	4	1	3	8	5
Permitted Phases	2		2	6		6	4		4	8		8
Detector Phase	5	2	2	1	6	6	7	4	1	3	8	5
Switch Phase												
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0	15.0	5.0	8.0	5.0	5.0	8.0	5.0
Minimum Split (s)	9.5	42.5	42.5	9.5	33.5	33.5	9.5	49.5	9.5	9.5	22.5	9.5
Total Split (s)	24.0	70.0	70.0	24.0	70.0	70.0	18.0	28.0	24.0	18.0	28.0	24.0
Total Split (%)	17.1%	50.0%	50.0%	17.1%	50.0%	50.0%	12.9%	20.0%	17.1%	12.9%	20.0%	17.1%
Yellow Time (s)	3.5	4.5	4.5	3.5	4.5	4.5	3.5	4.5	3.5	3.5	4.5	3.5
All-Red Time (s)	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	0.0	0.0	2.0	0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	6.5	6.5	3.5	6.5	6.5	3.5	6.5	3.5	3.5	6.5	3.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None	None	None
Act Effct Green (s)	109.4	98.2	98.2	101.4	91.7	91.7	15.4	8.7	13.1	23.4	11.4	26.3
Actuated g/C Ratio	0.78	0.70	0.70	0.72	0.66	0.66	0.11	0.06	0.09	0.17	0.08	0.19

Lanes, Volumes, Timings  
 5: Westridge Court Access Drive & Aurora Avenue

10/05/2022

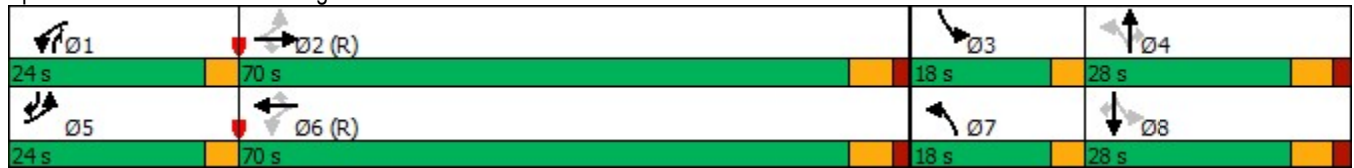


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.43	0.19	0.03	0.09	0.28	0.08	0.30	0.11	0.17	0.47	0.17	0.42
Control Delay	20.6	14.8	2.7	5.7	12.5	3.4	53.4	63.6	6.7	55.7	60.5	8.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	20.6	14.8	2.7	5.7	12.5	3.4	53.4	63.6	6.7	55.7	60.5	8.0
LOS	C	B	A	A	B	A	D	E	A	E	E	A
Approach Delay		16.2			11.0			39.7			29.5	
Approach LOS		B			B			D			C	
Queue Length 50th (ft)	154	133	1	11	137	1	53	12	0	102	23	0
Queue Length 95th (ft)	236	153	m6	30	227	28	83	36	16	153	53	58
Internal Link Dist (ft)		654			786			205			185	
Turn Bay Length (ft)	270			185		160				85		
Base Capacity (vph)	682	2639	1124	799	2464	1087	254	307	355	279	295	547
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.39	0.19	0.03	0.07	0.28	0.08	0.24	0.05	0.10	0.45	0.09	0.35

Intersection Summary

Area Type: Other  
 Cycle Length: 140  
 Actuated Cycle Length: 140  
 Offset: 73 (52%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green  
 Natural Cycle: 115  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.47  
 Intersection Signal Delay: 17.5 Intersection LOS: B  
 Intersection Capacity Utilization 58.1% ICU Level of Service B  
 Analysis Period (min) 15  
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: Westridge Court Access Drive & Aurora Avenue



HCM 6th TWSC  
6: IL 59 & Heritage Square Access Drive

10/05/2022

Intersection												
Int Delay, s/veh	1.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations			↗			↗	↘	↑↑↑	↗	↘	↑↑↑	↗
Traffic Vol, veh/h	0	0	82	0	0	109	52	1779	195	142	2507	66
Future Vol, veh/h	0	0	82	0	0	109	52	1779	195	142	2507	66
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	-	-	0	255	-	170	365	-	150
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	2	2	0	2	2	0	0	2	0	0	2	2
Mvmt Flow	0	0	85	0	0	112	54	1834	201	146	2585	68

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	-	-	1293	-	-	917	2653	0	0	2035	0	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	7.1	-	-	7.1	5.3	-	-	5.3	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.9	-	-	3.9	3.1	-	-	3.1	-	-
Pot Cap-1 Maneuver	0	0	*341	0	0	*509	*429	-	-	620	-	-
Stage 1	0	0	-	0	0	-	-	-	-	-	-	-
Stage 2	0	0	-	0	0	-	-	-	-	-	-	-
Platoon blocked, %			1			1	1	-	-	1	-	-
Mov Cap-1 Maneuver	-	-	*341	-	-	*509	*429	-	-	620	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	19		14.1		0.4		0.7	
HCM LOS	C		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	* 429	-	-	341	509	620	-	-
HCM Lane V/C Ratio	0.125	-	-	0.248	0.221	0.236	-	-
HCM Control Delay (s)	14.6	-	-	19	14.1	12.6	-	-
HCM Lane LOS	B	-	-	C	B	B	-	-
HCM 95th %tile Q(veh)	0.4	-	-	1	0.8	0.9	-	-

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

HCM 6th TWSC  
7: IL 59 & Right-In/Right-Out

10/05/2022

Intersection						
Int Delay, s/veh	0.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗	↗↗↗	↗		↗↗↗
Traffic Vol, veh/h	0	69	1790	98	0	2715
Future Vol, veh/h	0	69	1790	98	0	2715
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	-	140	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	0	2	0	0	2
Mvmt Flow	0	72	1865	102	0	2828

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	-	933	0	0	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	7.1	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	3.9	-	-	-
Pot Cap-1 Maneuver	0	*509	-	-	0
Stage 1	0	-	-	-	0
Stage 2	0	-	-	-	0
Platoon blocked, %	-	1	-	-	-
Mov Cap-1 Maneuver	-	*509	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.2	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBT
Capacity (veh/h)	-	-	509
HCM Lane V/C Ratio	-	-	0.141
HCM Control Delay (s)	-	-	13.2
HCM Lane LOS	-	-	B
HCM 95th %tile Q(veh)	-	-	0.5

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

HCM 6th TWSC  
 8: Aurora Avenue & West Right-In/Right-Out

10/05/2022

Intersection												
Int Delay, s/veh	1.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑		↑↑↑				↑			↑
Traffic Vol, veh/h	0	699	91	0	803	82	0	0	50	0	0	143
Future Vol, veh/h	0	699	91	0	803	82	0	0	50	0	0	143
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	-	-	Free	-	-	None	-	-	Stop
Storage Length	-	-	0	-	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	1	2	2	0	0	2	2	6	2	2	0
Mvmt Flow	0	744	97	0	854	87	0	0	53	0	0	152

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	-	-	372	-	-	427
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	7.02	-	-	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.36	-	-	3.9
Pot Cap-1 Maneuver	0	-	-	0	-	0	0	0	*806	0	0	*751
Stage 1	0	-	-	0	-	0	0	0	-	0	0	-
Stage 2	0	-	-	0	-	0	0	0	-	0	0	-
Platoon blocked, %		-	-		-			-	1		-	1
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	*806	-	-	*751
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0			9.8			11		
HCM LOS							A			B		

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	SBLn1
Capacity (veh/h)	806	-	-	-	751
HCM Lane V/C Ratio	0.066	-	-	-	0.203
HCM Control Delay (s)	9.8	-	-	-	11
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.2	-	-	-	0.8

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

HCM 6th TWSC  
 9: Aurora Avenue & East Right-In/Right-Out

10/05/2022

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑			↑
Traffic Vol, veh/h	0	620	761	29	0	27
Future Vol, veh/h	0	620	761	29	0	27
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	90	90	90	90	90	90
Heavy Vehicles, %	2	1	1	0	2	0
Mvmt Flow	0	689	846	32	0	30
Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	-	0	-	0	-	439
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.3
Pot Cap-1 Maneuver	0	-	-	-	0	*776
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %	-	-	-	-	-	1
Mov Cap-1 Maneuver	-	-	-	-	-	*776
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	WB	SB			
HCM Control Delay, s	0	0	9.8			
HCM LOS				A		
Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1		
Capacity (veh/h)	-	-	-	776		
HCM Lane V/C Ratio	-	-	-	0.039		
HCM Control Delay (s)	-	-	-	9.8		
HCM Lane LOS	-	-	-	A		
HCM 95th %tile Q(veh)	-	-	-	0.1		
Notes						
~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    *: All major volume in platoon						

HCM 6th TWSC  
 10: Jefferson Avenue & Target Access Drive

10/05/2022

Intersection												
Int Delay, s/veh	5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↖↗		↖	↖↗		↖	↗		↖	↗	
Traffic Vol, veh/h	104	254	116	40	347	82	60	12	43	86	15	165
Future Vol, veh/h	104	254	116	40	347	82	60	12	43	86	15	165
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	90	-	-	150	-	-	70	-	-	30	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	1	4	0	0	5	2	0	0	0	0	7	0
Mvmt Flow	109	267	122	42	365	86	63	13	45	91	16	174

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	451	0	0	389	0	0	821	1081	195	850	1099	226
Stage 1	-	-	-	-	-	-	546	546	-	492	492	-
Stage 2	-	-	-	-	-	-	275	535	-	358	607	-
Critical Hdwy	4.12	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.64	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.64	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.64	-
Follow-up Hdwy	2.21	-	-	2.2	-	-	3.5	4	3.3	3.5	4.07	3.3
Pot Cap-1 Maneuver	1113	-	-	1332	-	-	349	257	*993	331	240	783
Stage 1	-	-	-	-	-	-	623	605	-	532	534	-
Stage 2	-	-	-	-	-	-	713	527	-	820	550	-
Platoon blocked, %		-	-	1	-	-	1	1	1	1	1	
Mov Cap-1 Maneuver	1113	-	-	1332	-	-	236	224	*993	277	209	783
Mov Cap-2 Maneuver	-	-	-	-	-	-	320	309	-	372	315	-
Stage 1	-	-	-	-	-	-	562	546	-	480	517	-
Stage 2	-	-	-	-	-	-	521	510	-	689	496	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	1.9			0.7			15.1			13.9		
HCM LOS							C			B		

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	320	670	1113	-	-	1332	-	-	372	697
HCM Lane V/C Ratio	0.197	0.086	0.098	-	-	0.032	-	-	0.243	0.272
HCM Control Delay (s)	19	10.9	8.6	-	-	7.8	-	-	17.8	12.1
HCM Lane LOS	C	B	A	-	-	A	-	-	C	B
HCM 95th %tile Q(veh)	0.7	0.3	0.3	-	-	0.1	-	-	0.9	1.1

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



HCM 6th TWSC  
 11: Fort Hill Drive & Westridge Court Access Drive

10/05/2022

Intersection												
Int Delay, s/veh	3.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	30	0	92	12	1	14	60	329	12	2	519	30
Future Vol, veh/h	30	0	92	12	1	14	60	329	12	2	519	30
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	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	32	0	99	13	1	15	65	354	13	2	558	32

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1077	1075	574	1119	1085	361	590	0	0	367	0	0
Stage 1	578	578	-	491	491	-	-	-	-	-	-	-
Stage 2	499	497	-	628	594	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	184	199	518	169	196	*816	985	-	-	*1221	-	-
Stage 1	501	501	-	634	576	-	-	-	-	-	-	-
Stage 2	626	572	-	471	493	-	-	-	-	-	-	-
Platoon blocked, %	1	1		1	1	1		-	-	1	-	-
Mov Cap-1 Maneuver	169	182	518	128	180	*816	985	-	-	*1221	-	-
Mov Cap-2 Maneuver	169	182	-	128	180	-	-	-	-	-	-	-
Stage 1	459	500	-	582	529	-	-	-	-	-	-	-
Stage 2	562	524	-	380	492	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	21.8		22.7		1.3		0	
HCM LOS	C		C					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	985	-	-	344	232	*1221	-	-
HCM Lane V/C Ratio	0.065	-	-	0.381	0.125	0.002	-	-
HCM Control Delay (s)	8.9	0	-	21.8	22.7	8	0	-
HCM Lane LOS	A	A	-	C	C	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	1.7	0.4	0	-	-

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

HCM 6th TWSC  
 12: Fort Hill Drive & Goodwill Access Drive

10/05/2022

Intersection												
Int Delay, s/veh	1.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	1	7	9	0	6	11	359	3	1	535	19
Future Vol, veh/h	10	1	7	9	0	6	11	359	3	1	535	19
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	73	73	73	73	73	73	73	73	73	73	73	73
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	14	1	10	12	0	8	15	492	4	1	733	26

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1276	1274	746	1278	1285	494	759	0	0	496	0	0
Stage 1	748	748	-	524	524	-	-	-	-	-	-	-
Stage 2	528	526	-	754	761	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	119	137	413	119	134	680	852	-	-	1068	-	-
Stage 1	404	420	-	613	557	-	-	-	-	-	-	-
Stage 2	609	556	-	401	414	-	-	-	-	-	-	-
Platoon blocked, %	1	1		1	1	1		-	-	1	-	-
Mov Cap-1 Maneuver	116	133	413	113	131	680	852	-	-	1068	-	-
Mov Cap-2 Maneuver	116	133	-	113	131	-	-	-	-	-	-	-
Stage 1	394	419	-	599	544	-	-	-	-	-	-	-
Stage 2	587	542	-	390	413	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	31		29.1		0.3		0	
HCM LOS	D		D					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	852	-	-	163	170	1068	-	-
HCM Lane V/C Ratio	0.018	-	-	0.151	0.121	0.001	-	-
HCM Control Delay (s)	9.3	0	-	31	29.1	8.4	0	-
HCM Lane LOS	A	A	-	D	D	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.5	0.4	0	-	-

Capacity Analysis Summary Sheets  
Year 2028 Total Projected Saturday Midday Peak Hour

Lanes, Volumes, Timings  
1: IL 59 & Aurora Avenue

10/05/2022

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	308	529	293	370	518	206	294	1654	262	14	255	2026
Future Volume (vph)	308	529	293	370	518	206	294	1654	262	14	255	2026
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	2000	1900	1900	1900	2000
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%				0%
Storage Length (ft)	265		205	320		210	190		395		325	
Storage Lanes	2		1	2		1	2		1		2	
Taper Length (ft)	270			300			300				300	
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00	0.91	0.97	0.91
Ped Bike Factor												
Frt			0.850			0.850			0.850			
Flt Protected	0.950			0.950			0.950				0.950	
Satd. Flow (prot)	3467	5460	1615	3502	5460	1583	3502	5406	1615	0	3469	5406
Flt Permitted	0.950			0.950			0.950				0.950	
Satd. Flow (perm)	3467	5460	1615	3502	5460	1583	3502	5406	1615	0	3469	5406
Right Turn on Red			No			No			No			
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			40				40
Link Distance (ft)		654			559			897				856
Travel Time (s)		9.9			8.5			15.3				14.6
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	0%	0%	0%	0%	2%	0%	1%	0%	0%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%				0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	314	540	299	378	529	210	300	1688	267	0	274	2067
Turn Type	Prot	NA	pt+ov	Prot	NA	Prot	Prot	NA	pt+ov	Prot	Prot	NA
Protected Phases	7	4	4 5	3	8	8	5	2	2 3	1	1	6
Permitted Phases												
Detector Phase	7	4	4 5	3	8	8	5	2	2 3	1	1	6
Switch Phase												
Minimum Initial (s)	3.0	8.0		3.0	8.0	8.0	3.0	15.0		3.0	3.0	15.0
Minimum Split (s)	9.5	24.0		9.5	24.0	24.0	9.5	24.0		9.5	9.5	24.0
Total Split (s)	23.0	28.0		23.0	28.0	28.0	20.0	69.0		20.0	20.0	69.0
Total Split (%)	16.4%	20.0%		16.4%	20.0%	20.0%	14.3%	49.3%		14.3%	14.3%	49.3%
Yellow Time (s)	3.0	4.5		3.0	4.5	4.5	3.0	4.5		3.0	3.0	4.5
All-Red Time (s)	0.0	1.5		0.0	1.5	1.5	0.0	1.5		0.0	0.0	1.5
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	3.0	6.0		3.0	6.0	6.0	3.0	6.0		3.0	3.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag		Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None		None	None	None	None	C-Min		None	None	C-Min
Act Effct Green (s)	17.4	22.9	41.7	18.7	24.2	24.2	15.8	65.0	86.8		15.4	64.5
Actuated g/C Ratio	0.12	0.16	0.30	0.13	0.17	0.17	0.11	0.46	0.62		0.11	0.46

Lanes, Volumes, Timings  
1: IL 59 & Aurora Avenue

10/05/2022

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	334
Future Volume (vph)	334
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	210
Storage Lanes	1
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1615
Flt Permitted	
Satd. Flow (perm)	1615
Right Turn on Red	No
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.98
Growth Factor	100%
Heavy Vehicles (%)	0%
Bus Blockages (#/hr)	0
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	341
Turn Type	pt+ov
Protected Phases	6 7
Permitted Phases	
Detector Phase	6 7
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	
Act Effct Green (s)	85.0
Actuated g/C Ratio	0.61

Lanes, Volumes, Timings  
1: IL 59 & Aurora Avenue

10/05/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
v/c Ratio	0.73	0.61	0.62	0.81	0.56	0.77	0.76	0.67	0.27		0.72	0.83
Control Delay	69.0	57.8	48.9	72.7	49.5	68.1	72.9	31.2	13.1		68.0	31.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Total Delay	69.0	57.8	48.9	72.7	49.5	68.1	72.9	31.2	13.1		68.0	31.2
LOS	E	E	D	E	D	E	E	C	B		E	C
Approach Delay		58.6			60.9			34.6				32.8
Approach LOS		E			E			C				C
Queue Length 50th (ft)	143	170	235	174	166	187	137	439	105		116	685
Queue Length 95th (ft)	192	214	339	199	206	#331	189	499	156		m138	m736
Internal Link Dist (ft)		574			479			817				776
Turn Bay Length (ft)	265		205	320		210	190		395		325	
Base Capacity (vph)	495	892	494	500	943	273	425	2510	1015		421	2492
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0		0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0		0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0		0	0
Reduced v/c Ratio	0.63	0.61	0.61	0.76	0.56	0.77	0.71	0.67	0.26		0.65	0.83

Intersection Summary

Area Type: Other  
 Cycle Length: 140  
 Actuated Cycle Length: 140  
 Offset: 92 (66%), Referenced to phase 2:NBT and 6:SBT, Start of Green  
 Natural Cycle: 90  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.83  
 Intersection Signal Delay: 41.8      Intersection LOS: D  
 Intersection Capacity Utilization 82.5%      ICU Level of Service E  
 Analysis Period (min) 15  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.  
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: IL 59 & Aurora Avenue



Lanes, Volumes, Timings  
1: IL 59 & Aurora Avenue

10/05/2022



Lane Group	SBR
v/c Ratio	0.35
Control Delay	14.7
Queue Delay	0.0
Total Delay	14.7
LOS	B
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	191
Queue Length 95th (ft)	m218
Internal Link Dist (ft)	
Turn Bay Length (ft)	210
Base Capacity (vph)	1010
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.34
Intersection Summary	

Lanes, Volumes, Timings  
2: IL 59 & Liberty Street/Jefferson Avenue

10/05/2022

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	248	201	94	203	264	249	2	81	1660	183	1	201
Future Volume (vph)	248	201	94	203	264	249	2	81	1660	183	1	201
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	1900	1900	1900	2000	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%				0%			
Storage Length (ft)	240		250	130		145		300		185		200
Storage Lanes	2		1	2		1		2		1		2
Taper Length (ft)	115			120				290				275
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.91	0.97	0.91	1.00	0.91	0.97
Ped Bike Factor												
Frt			0.850			0.850				0.850		
Flt Protected	0.950			0.950				0.950				0.950
Satd. Flow (prot)	3433	3800	1599	3467	3800	1599	0	3502	5406	1615	0	3467
Flt Permitted	0.950			0.950				0.950				0.950
Satd. Flow (perm)	3433	3800	1599	3467	3800	1599	0	3502	5406	1615	0	3467
Right Turn on Red			No			No				No		
Satd. Flow (RTOR)												
Link Speed (mph)		40			30				40			
Link Distance (ft)		553			478				968			
Travel Time (s)		9.4			10.9				16.5			
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 (%)	2%	0%	1%	1%	0%	1%	0%	0%	1%	0%	0%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%				0%			
Shared Lane Traffic (%)												
Lane Group Flow (vph)	256	207	97	209	272	257	0	86	1711	189	0	208
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	Prot	NA	pm+ov	Prot	Prot
Protected Phases	7	4	5!	3	8	1!	5!	5	2	3	1!	1
Permitted Phases			4			8				2		
Detector Phase	7	4	5	3	8	1	5	5	2	3	1	1
Switch Phase												
Minimum Initial (s)	3.0	8.0	3.0	3.0	8.0	3.0	3.0	3.0	15.0	3.0	3.0	3.0
Minimum Split (s)	9.5	24.0	9.5	9.5	24.0	9.5	9.5	9.5	24.0	9.5	9.5	9.5
Total Split (s)	24.0	32.0	15.0	17.0	25.0	20.0	15.0	15.0	71.0	17.0	20.0	20.0
Total Split (%)	17.1%	22.9%	10.7%	12.1%	17.9%	14.3%	10.7%	10.7%	50.7%	12.1%	14.3%	14.3%
Yellow Time (s)	3.0	4.5	3.0	3.0	4.5	3.0	3.0	3.0	4.5	3.0	3.0	3.0
All-Red Time (s)	0.0	1.5	0.0	0.0	1.5	0.0	0.0	0.0	1.5	0.0	0.0	0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0		0.0
Total Lost Time (s)	3.0	6.0	3.0	3.0	6.0	3.0		3.0	6.0	3.0		3.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lead	Lag	Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	C-Min	None	None	None
Act Effct Green (s)	15.7	20.4	35.2	12.8	17.5	37.1		8.8	75.2	94.0		13.6
Actuated g/C Ratio	0.11	0.15	0.25	0.09	0.12	0.26		0.06	0.54	0.67		0.10



Lanes, Volumes, Timings  
 2: IL 59 & Liberty Street/Jefferson Avenue

10/05/2022



Lane Group	SBT	SBR
Lane Configurations	↑↑↑↑	↑
Traffic Volume (vph)	2326	166
Future Volume (vph)	2326	166
Ideal Flow (vphpl)	2000	1900
Lane Width (ft)	12	12
Grade (%)	0%	
Storage Length (ft)		210
Storage Lanes		1
Taper Length (ft)		
Lane Util. Factor	0.91	1.00
Ped Bike Factor		
Frt		0.850
Flt Protected		
Satd. Flow (prot)	5406	1583
Flt Permitted		
Satd. Flow (perm)	5406	1583
Right Turn on Red		No
Satd. Flow (RTOR)		
Link Speed (mph)	40	
Link Distance (ft)	552	
Travel Time (s)	9.4	
Confl. Peds. (#/hr)		
Confl. Bikes (#/hr)		
Peak Hour Factor	0.97	0.97
Growth Factor	100%	100%
Heavy Vehicles (%)	1%	2%
Bus Blockages (#/hr)	0	0
Parking (#/hr)		
Mid-Block Traffic (%)	0%	
Shared Lane Traffic (%)		
Lane Group Flow (vph)	2398	171
Turn Type	NA	pm+ov
Protected Phases	6	7
Permitted Phases		6
Detector Phase	6	7
Switch Phase		
Minimum Initial (s)	15.0	3.0
Minimum Split (s)	24.0	9.5
Total Split (s)	76.0	24.0
Total Split (%)	54.3%	17.1%
Yellow Time (s)	4.5	3.0
All-Red Time (s)	1.5	0.0
Lost Time Adjust (s)	0.0	0.0
Total Lost Time (s)	6.0	3.0
Lead/Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes
Recall Mode	C-Min	None
Act Effct Green (s)	80.0	101.7
Actuated g/C Ratio	0.57	0.73

# Lanes, Volumes, Timings

## 2: IL 59 & Liberty Street/Jefferson Avenue

10/05/2022

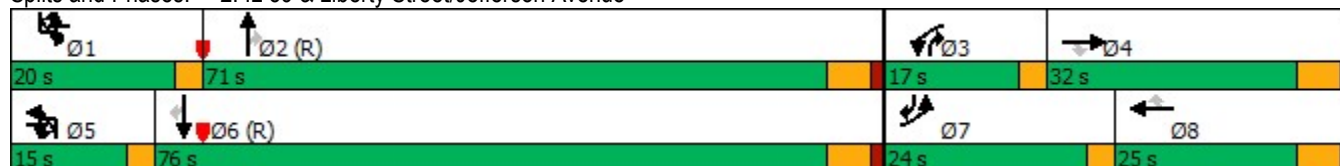


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
v/c Ratio	0.67	0.37	0.24	0.66	0.57	0.61		0.39	0.59	0.17		0.62
Control Delay	68.1	55.1	41.7	71.9	62.3	50.8		90.0	6.1	2.4		68.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0		0.0
Total Delay	68.1	55.1	41.7	71.9	62.3	50.8		90.0	6.1	2.4		68.6
LOS	E	E	D	E	E	D		F	A	A		E
Approach Delay		58.7			61.0				9.4			
Approach LOS		E			E				A			
Queue Length 50th (ft)	117	91	71	95	124	205		42	63	10		95
Queue Length 95th (ft)	159	125	113	139	170	285		m65	78	16		135
Internal Link Dist (ft)		473			398				888			
Turn Bay Length (ft)	240		250	130		145		300		185		200
Base Capacity (vph)	514	705	438	346	530	462		300	2902	1097		420
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	0.50	0.29	0.22	0.60	0.51	0.56		0.29	0.59	0.17		0.50

### Intersection Summary

Area Type: Other  
 Cycle Length: 140  
 Actuated Cycle Length: 140  
 Offset: 41 (29%), Referenced to phase 2:NBT and 6:SBT, Start of Green  
 Natural Cycle: 90  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.78  
 Intersection Signal Delay: 29.0 Intersection LOS: C  
 Intersection Capacity Utilization 76.7% ICU Level of Service D  
 Analysis Period (min) 15  
 m Volume for 95th percentile queue is metered by upstream signal.  
 ! Phase conflict between lane groups.

### Splits and Phases: 2: IL 59 & Liberty Street/Jefferson Avenue



Lanes, Volumes, Timings  
 2: IL 59 & Liberty Street/Jefferson Avenue

10/05/2022



Lane Group	SBT	SBR
v/c Ratio	0.78	0.15
Control Delay	26.6	6.8
Queue Delay	0.0	0.0
Total Delay	26.6	6.8
LOS	C	A
Approach Delay	28.5	
Approach LOS	C	
Queue Length 50th (ft)	598	44
Queue Length 95th (ft)	762	78
Internal Link Dist (ft)	472	
Turn Bay Length (ft)		210
Base Capacity (vph)	3088	1209
Starvation Cap Reductn	0	0
Spillback Cap Reductn	21	0
Storage Cap Reductn	0	0
Reduced v/c Ratio	0.78	0.14
Intersection Summary		

Lanes, Volumes, Timings  
3: IL 59 & Meijer Access Drive

10/05/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	85	21	98	268	27	66	9	157	1775	60	131	2416
Future Volume (vph)	85	21	98	268	27	66	9	157	1775	60	131	2416
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	2000	1900	1900	2000
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	45		0		430		0	300	
Storage Lanes	1		0	1		0		2		1	1	
Taper Length (ft)	25			105				290			190	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.97	0.91	1.00	1.00	0.91
Ped Bike Factor												
Frt		0.876			0.894					0.850		
Flt Protected	0.950			0.950				0.950			0.950	
Satd. Flow (prot)	1805	1664	0	1805	1699	0	0	3502	5406	1615	1805	5406
Flt Permitted	0.690			0.447				0.950			0.950	
Satd. Flow (perm)	1311	1664	0	849	1699	0	0	3502	5406	1615	1805	5406
Right Turn on Red			No			No				No		
Satd. Flow (RTOR)												
Link Speed (mph)		25			25				40			40
Link Distance (ft)		348			383				286			968
Travel Time (s)		9.5			10.4				4.9			16.5
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%				0%			0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	94	132	0	298	103	0	0	184	1972	67	146	2684
Turn Type	pm+pt	NA		pm+pt	NA		Prot	Prot	NA	pm+ov	Prot	NA
Protected Phases	7	4		3	8		5	5	2	3	1	6
Permitted Phases	4			8						2		
Detector Phase	7	4		3	8		5	5	2	3	1	6
Switch Phase												
Minimum Initial (s)	3.0	8.0		3.0	8.0		3.0	3.0	15.0	3.0	3.0	15.0
Minimum Split (s)	9.5	24.0		9.5	24.0		9.5	9.5	24.0	9.5	9.5	24.0
Total Split (s)	15.0	24.0		16.0	25.0		17.0	17.0	80.0	16.0	20.0	83.0
Total Split (%)	10.7%	17.1%		11.4%	17.9%		12.1%	12.1%	57.1%	11.4%	14.3%	59.3%
Yellow Time (s)	3.0	4.5		3.0	4.5		3.0	3.0	4.5	3.0	3.0	4.5
All-Red Time (s)	0.0	1.5		0.0	1.5		0.0	0.0	1.5	0.0	0.0	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)	3.0	6.0		3.0	6.0			3.0	6.0	3.0	3.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	None	C-Max	None	None	C-Max
Act Effct Green (s)	29.8	16.4		34.3	18.9			12.2	77.5	96.5	15.1	80.4
Actuated g/C Ratio	0.21	0.12		0.24	0.14			0.09	0.55	0.69	0.11	0.57

# Lanes, Volumes, Timings

## 3: IL 59 & Meijer Access Drive

10/05/2022

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	78
Future Volume (vph)	78
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	420
Storage Lanes	1
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1615
Flt Permitted	
Satd. Flow (perm)	1615
Right Turn on Red	No
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.90
Growth Factor	100%
Heavy Vehicles (%)	0%
Bus Blockages (#/hr)	0
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	87
Turn Type	pm+ov
Protected Phases	7
Permitted Phases	6
Detector Phase	7
Switch Phase	
Minimum Initial (s)	3.0
Minimum Split (s)	9.5
Total Split (s)	15.0
Total Split (%)	10.7%
Yellow Time (s)	3.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	3.0
Lead/Lag	Lead
Lead-Lag Optimize?	Yes
Recall Mode	None
Act Effct Green (s)	96.8
Actuated g/C Ratio	0.69

Lanes, Volumes, Timings  
 3: IL 59 & Meijer Access Drive

10/05/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
v/c Ratio	0.30	0.68		1.00	0.45			0.60	0.66	0.06	0.75	0.86
Control Delay	43.5	77.1		101.9	62.5			57.7	27.3	13.5	82.4	18.4
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0	0.0	0.0	0.0
Total Delay	43.5	77.1		101.9	62.5			57.7	27.3	13.5	82.4	18.4
LOS	D	E		F	E			E	C	B	F	B
Approach Delay		63.1			91.8				29.4			21.2
Approach LOS		E			F				C			C
Queue Length 50th (ft)	67	116		240	87			74	576	37	140	269
Queue Length 95th (ft)	117	188		#340	150			m113	627	m55	m187	419
Internal Link Dist (ft)		268			303				206			888
Turn Bay Length (ft)				45				430			300	
Base Capacity (vph)	336	213		297	232			350	2993	1113	219	3105
Starvation Cap Reductn	0	0		0	0			0	0	0	0	13
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	0.28	0.62		1.00	0.44			0.53	0.66	0.06	0.67	0.87

Intersection Summary

Area Type: Other  
 Cycle Length: 140  
 Actuated Cycle Length: 140  
 Offset: 25 (18%), Referenced to phase 2:NBT and 6:SBTU, Start of Green  
 Natural Cycle: 90  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 1.00  
 Intersection Signal Delay: 30.9 Intersection LOS: C  
 Intersection Capacity Utilization 83.9% ICU Level of Service E  
 Analysis Period (min) 15  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.  
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: IL 59 & Meijer Access Drive

Ø1 20 s	Ø2 (R) 80 s	Ø3 16 s	Ø4 24 s
Ø5 17 s	Ø6 (R) 83 s	Ø7 15 s	Ø8 25 s

Lanes, Volumes, Timings  
3: IL 59 & Meijer Access Drive

10/05/2022



Lane Group	SBR
v/c Ratio	0.08
Control Delay	4.9
Queue Delay	0.0
Total Delay	4.9
LOS	A
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	13
Queue Length 95th (ft)	m20
Internal Link Dist (ft)	
Turn Bay Length (ft)	420
Base Capacity (vph)	1135
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.08
Intersection Summary	

Lanes, Volumes, Timings  
4: Fort Hill Drive & Aurora Avenue

10/05/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	98	624	113	143	661	113	47	201	94	146	258	150
Future Volume (vph)	98	624	113	143	661	113	47	201	94	146	258	150
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	110		0	105		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	145			140			85			95		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.977			0.978			0.952				0.945
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3487	0	1805	3501	0	1805	1809	0	1770	1796	0
Flt Permitted	0.244			0.250			0.238			0.293		
Satd. Flow (perm)	464	3487	0	475	3501	0	452	1809	0	546	1796	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		21			19			19			23	
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		558			536			509			341	
Travel Time (s)		8.5			8.1			11.6			7.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	1%	2%	0%	1%	0%	0%	0%	0%	2%	0%	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)	103	776	0	151	815	0	49	311	0	154	430	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2			6			4			8		
Detector Phase	5	2		1	6		7	4		3	8	
Switch Phase												
Minimum Initial (s)	3.0	15.0		3.0	15.0		3.0	8.0		3.0	8.0	
Minimum Split (s)	9.5	35.0		9.5	36.0		9.5	42.0		9.5	38.0	
Total Split (s)	14.0	54.0		14.0	54.0		18.0	37.0		15.0	34.0	
Total Split (%)	11.7%	45.0%		11.7%	45.0%		15.0%	30.8%		12.5%	28.3%	
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		0.0	1.5		0.0	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		3.5	6.0		3.5	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	C-Min		None	C-Min		None	None		None	None	
Act Effct Green (s)	62.1	50.9		63.9	51.8		39.3	29.3		46.2	34.7	
Actuated g/C Ratio	0.52	0.42		0.53	0.43		0.33	0.24		0.38	0.29	



Lanes, Volumes, Timings  
4: Fort Hill Drive & Aurora Avenue

10/05/2022

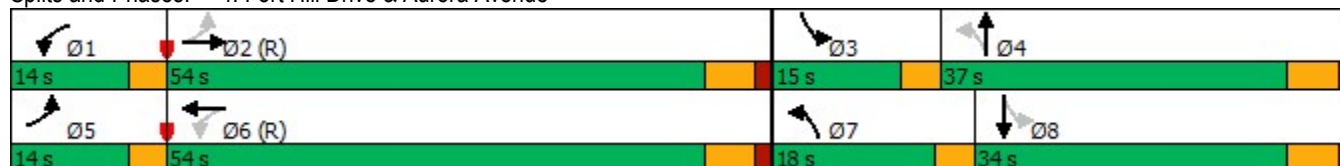


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.31	0.52		0.42	0.54		0.21	0.68		0.48	0.80	
Control Delay	16.4	27.5		17.9	27.4		23.8	46.4		28.8	49.9	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	16.4	27.5		17.9	27.4		23.8	46.4		28.8	49.9	
LOS	B	C		B	C		C	D		C	D	
Approach Delay		26.2			25.9			43.4			44.3	
Approach LOS		C			C			D			D	
Queue Length 50th (ft)	39	240		59	250		22	199		75	286	
Queue Length 95th (ft)	67	295		93	314		49	303		126	#472	
Internal Link Dist (ft)		478			456			429			261	
Turn Bay Length (ft)	140			140			110			105		
Base Capacity (vph)	364	1521		372	1538		335	489		332	536	
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	0.28	0.51		0.41	0.53		0.15	0.64		0.46	0.80	

Intersection Summary

Area Type: Other  
 Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 64 (53%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green  
 Natural Cycle: 100  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.80  
 Intersection Signal Delay: 32.1 Intersection LOS: C  
 Intersection Capacity Utilization 71.5% ICU Level of Service C  
 Analysis Period (min) 15  
 # 95th percentile volume exceeds capacity, queue may be longer.  
 Queue shown is maximum after two cycles.

Splits and Phases: 4: Fort Hill Drive & Aurora Avenue



# Lanes, Volumes, Timings

## 5: Westridge Court Access Drive & Aurora Avenue

10/05/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	318	590	54	78	654	128	106	21	54	191	20	219
Future Volume (vph)	318	590	54	78	654	128	106	21	54	191	20	219
Ideal Flow (vphpl)	1900	2000	1900	1900	2000	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)	270		0	185		160	0		0	85		0
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	190			140			25			80		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3800	1615	1752	3762	1615	1805	1905	1583	1805	1905	1599
Flt Permitted	0.331			0.416			0.744			0.472		
Satd. Flow (perm)	629	3800	1615	767	3762	1615	1414	1905	1583	897	1905	1599
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			82			130			57			231
Link Speed (mph)		45			45			25				25
Link Distance (ft)		734			866			285				265
Travel Time (s)		11.1			13.1			7.8				7.2
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	3%	1%	0%	0%	5%	2%	0%	5%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%				0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	335	621	57	82	688	135	112	22	57	201	21	231
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov
Protected Phases	5	2		1	6		7	4	1	3	8	5
Permitted Phases	2		2	6		6	4		4	8		8
Detector Phase	5	2	2	1	6	6	7	4	1	3	8	5
Switch Phase												
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0	15.0	5.0	8.0	5.0	5.0	8.0	5.0
Minimum Split (s)	9.5	42.5	42.5	9.5	33.5	33.5	9.5	49.5	9.5	9.5	22.5	9.5
Total Split (s)	24.0	70.0	70.0	24.0	70.0	70.0	18.0	28.0	24.0	18.0	28.0	24.0
Total Split (%)	17.1%	50.0%	50.0%	17.1%	50.0%	50.0%	12.9%	20.0%	17.1%	12.9%	20.0%	17.1%
Yellow Time (s)	3.5	4.5	4.5	3.5	4.5	4.5	3.5	4.5	3.5	3.5	4.5	3.5
All-Red Time (s)	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	0.0	0.0	2.0	0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	6.5	6.5	3.5	6.5	6.5	3.5	6.5	3.5	3.5	6.5	3.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None	None	None
Act Effct Green (s)	102.9	89.0	89.0	92.0	81.4	81.4	22.8	9.2	17.5	29.9	14.3	30.1
Actuated g/C Ratio	0.74	0.64	0.64	0.66	0.58	0.58	0.16	0.07	0.12	0.21	0.10	0.22

Lanes, Volumes, Timings  
5: Westridge Court Access Drive & Aurora Avenue

10/05/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.57	0.26	0.05	0.15	0.31	0.14	0.41	0.18	0.23	0.63	0.11	0.44
Control Delay	27.8	23.3	8.7	8.5	18.5	4.2	48.1	64.5	13.6	55.4	55.4	6.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	27.8	23.3	8.7	8.5	18.5	4.2	48.1	64.5	13.6	55.4	55.4	6.5
LOS	C	C	A	A	B	A	D	E	B	E	E	A
Approach Delay		23.9			15.4			39.7			30.5	
Approach LOS		C			B			D			C	
Queue Length 50th (ft)	243	239	6	22	177	2	82	19	0	155	17	0
Queue Length 95th (ft)	318	242	m17	47	277	42	127	48	39	217	43	57
Internal Link Dist (ft)		654			786			205			185	
Turn Bay Length (ft)	270			185		160				85		
Base Capacity (vph)	639	2415	1056	700	2200	998	280	292	388	322	292	582
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.52	0.26	0.05	0.12	0.31	0.14	0.40	0.08	0.15	0.62	0.07	0.40

Intersection Summary

Area Type: Other  
 Cycle Length: 140  
 Actuated Cycle Length: 140  
 Offset: 27 (19%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green  
 Natural Cycle: 115  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.63  
 Intersection Signal Delay: 23.3      Intersection LOS: C  
 Intersection Capacity Utilization 66.2%      ICU Level of Service C  
 Analysis Period (min) 15  
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: Westridge Court Access Drive & Aurora Avenue



HCM 6th TWSC  
6: IL 59 & Heritage Square Access Drive

10/05/2022

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	0	0	101	0	0	155	76	1872	235	162	2528	101
Future Vol, veh/h	0	0	101	0	0	155	76	1872	235	162	2528	101
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	-	-	0	255	-	170	365	-	150
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	1	0	2	0	0	2	0	0	1	0
Mvmt Flow	0	0	106	0	0	163	80	1971	247	171	2661	106

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	-	-	1331	-	-	986	2767	0	0	2218	0	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	7.12	-	-	7.1	5.3	-	-	5.3	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.91	-	-	3.9	3.1	-	-	3.1	-	-
Pot Cap-1 Maneuver	0	0	*340	0	0	*490	*429	-	-	497	-	-
Stage 1	0	0	-	0	0	-	-	-	-	-	-	-
Stage 2	0	0	-	0	0	-	-	-	-	-	-	-
Platoon blocked, %			1			1	1	-	-	1	-	-
Mov Cap-1 Maneuver	-	-	*340	-	-	*490	*429	-	-	497	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB		WB		NB			SB		
HCM Control Delay, s	20.3		16		0.5			0.9		
HCM LOS	C		C							

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	* 429	-	-	340	490	497	-	-
HCM Lane V/C Ratio	0.186	-	-	0.313	0.333	0.343	-	-
HCM Control Delay (s)	15.3	-	-	20.3	16	16	-	-
HCM Lane LOS	C	-	-	C	C	C	-	-
HCM 95th %tile Q(veh)	0.7	-	-	1.3	1.4	1.5	-	-

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

HCM 6th TWSC  
7: IL 59 & Right-In/Right-Out

10/05/2022

Intersection						
Int Delay, s/veh	0.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗	↑↑↑	↗		↑↑↑
Traffic Vol, veh/h	0	121	1880	147	0	2791
Future Vol, veh/h	0	121	1880	147	0	2791
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	-	140	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	0	1	0	0	1
Mvmt Flow	0	127	1979	155	0	2938

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	-	990	0	0	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	7.1	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	3.9	-	-	-
Pot Cap-1 Maneuver	0	*490	-	-	0
Stage 1	0	-	-	-	0
Stage 2	0	-	-	-	0
Platoon blocked, %	-	1	-	-	-
Mov Cap-1 Maneuver	-	*490	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	14.9	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBT
Capacity (veh/h)	-	-	490
HCM Lane V/C Ratio	-	-	0.26
HCM Control Delay (s)	-	-	14.9
HCM Lane LOS	-	-	B
HCM 95th %tile Q(veh)	-	-	1

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

HCM 6th TWSC  
 8: Aurora Avenue & West Right-In/Right-Out

10/05/2022

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	0	874	120	0	880	99	0	0	88	0	0	214
Future Vol, veh/h	0	874	120	0	880	99	0	0	88	0	0	214
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	-	-	Free	-	-	None	-	-	Stop
Storage Length	-	-	0	-	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	2	0	1	2	0	0	2	2	3	2	2	1
Mvmt Flow	0	901	124	0	907	102	0	0	91	0	0	221

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	-	-	451	-	-	454
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	6.96	-	-	7.12
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.33	-	-	3.91
Pot Cap-1 Maneuver	0	-	-	0	-	0	0	0	*726	0	0	*730
Stage 1	0	-	-	0	-	0	0	0	-	0	0	-
Stage 2	0	-	-	0	-	0	0	0	-	0	0	-
Platoon blocked, %		-	-		-				1			1
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	*726	-	-	*730
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	10.7	12.1
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	SBLn1
Capacity (veh/h)	726	-	-	-	730
HCM Lane V/C Ratio	0.125	-	-	-	0.302
HCM Control Delay (s)	10.7	-	-	-	12.1
HCM Lane LOS	B	-	-	-	B
HCM 95th %tile Q(veh)	0.4	-	-	-	1.3

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

HCM 6th TWSC  
 9: Aurora Avenue & East Right-In/Right-Out

10/05/2022

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑			↑
Traffic Vol, veh/h	0	835	820	38	0	40
Future Vol, veh/h	0	835	820	38	0	40
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	1	1	0	2	0
Mvmt Flow	0	908	891	41	0	43

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

Approach	EB	WB	SB
HCM Control Delay, s	0	0	10.1
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	750
HCM Lane V/C Ratio	-	-	-	0.058
HCM Control Delay (s)	-	-	-	10.1
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.2

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

HCM 6th TWSC  
 10: Jefferson Avenue & Target Access Drive

10/05/2022

Intersection												
Int Delay, s/veh	9.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↵	↵↵		↵	↵↵		↵	↵		↵	↵	
Traffic Vol, veh/h	134	284	167	69	430	131	82	37	81	91	31	204
Future Vol, veh/h	134	284	167	69	430	131	82	37	81	91	31	204
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	90	-	-	150	-	-	70	-	-	30	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	1	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	149	316	186	77	478	146	91	41	90	101	34	227

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	624	0	0	502	0	0	1117	1485	251	1182	1505	312
Stage 1	-	-	-	-	-	-	707	707	-	705	705	-
Stage 2	-	-	-	-	-	-	410	778	-	477	800	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
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	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	967	-	-	1201	-	-	204	140	*993	180	137	690
Stage 1	-	-	-	-	-	-	490	506	-	398	442	-
Stage 2	-	-	-	-	-	-	595	410	-	688	456	-
Platoon blocked, %		-	-	1	-	-	1	1	1	1	1	
Mov Cap-1 Maneuver	967	-	-	1201	-	-	101	111	*993	115	108	690
Mov Cap-2 Maneuver	-	-	-	-	-	-	158	183	-	219	209	-
Stage 1	-	-	-	-	-	-	415	428	-	337	414	-
Stage 2	-	-	-	-	-	-	343	384	-	479	386	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	2.2			0.9			32.9			22.9		
HCM LOS							D			C		

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	158	416	967	-	-	1201	-	-	219	529
HCM Lane V/C Ratio	0.577	0.315	0.154	-	-	0.064	-	-	0.462	0.494
HCM Control Delay (s)	54.9	17.6	9.4	-	-	8.2	-	-	34.8	18.3
HCM Lane LOS	F	C	A	-	-	A	-	-	D	C
HCM 95th %tile Q(veh)	3	1.3	0.5	-	-	0.2	-	-	2.2	2.7

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



HCM 6th TWSC  
 11: Fort Hill Drive & Westridge Court Access Drive

10/05/2022

Intersection												
Int Delay, s/veh	6.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	40	1	153	14	1	19	89	303	20	7	387	42
Future Vol, veh/h	40	1	153	14	1	19	89	303	20	7	387	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	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	45	1	174	16	1	22	101	344	23	8	440	48

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1049	1049	464	1126	1062	356	488	0	0	367	0	0
Stage 1	480	480	-	558	558	-	-	-	-	-	-	-
Stage 2	569	569	-	568	504	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	196	210	598	168	206	815	1075	-	-	1218	-	-
Stage 1	567	554	-	559	523	-	-	-	-	-	-	-
Stage 2	550	516	-	508	541	-	-	-	-	-	-	-
Platoon blocked, %	1	1	-	1	1	1	-	-	-	1	-	-
Mov Cap-1 Maneuver	171	184	598	107	180	815	1075	-	-	1218	-	-
Mov Cap-2 Maneuver	171	184	-	107	180	-	-	-	-	-	-	-
Stage 1	500	549	-	493	462	-	-	-	-	-	-	-
Stage 2	471	455	-	356	536	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	25.4		25.6		1.9		0.1	
HCM LOS	D		D					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1075	-	-	392	213	1218	-	-
HCM Lane V/C Ratio	0.094	-	-	0.562	0.181	0.007	-	-
HCM Control Delay (s)	8.7	0	-	25.4	25.6	8	0	-
HCM Lane LOS	A	A	-	D	D	A	A	-
HCM 95th %tile Q(veh)	0.3	-	-	3.3	0.6	0	-	-

HCM 6th TWSC  
12: Fort Hill Drive & Goodwill Access Drive

10/05/2022

Intersection												
Int Delay, s/veh	0.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	0	5	6	0	6	22	333	7	8	425	31
Future Vol, veh/h	10	0	5	6	0	6	22	333	7	8	425	31
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	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	12	0	6	7	0	7	27	406	9	10	518	38

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1025	1026	537	1025	1041	411	556	0	0	415	0	0
Stage 1	557	557	-	465	465	-	-	-	-	-	-	-
Stage 2	468	469	-	560	576	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	205	218	544	205	212	764	1015	-	-	1163	-	-
Stage 1	515	512	-	661	597	-	-	-	-	-	-	-
Stage 2	658	594	-	513	502	-	-	-	-	-	-	-
Platoon blocked, %	1	1		1	1	1		-	-	1	-	-
Mov Cap-1 Maneuver	195	208	544	195	202	764	1015	-	-	1163	-	-
Mov Cap-2 Maneuver	195	208	-	195	202	-	-	-	-	-	-	-
Stage 1	497	505	-	638	576	-	-	-	-	-	-	-
Stage 2	629	573	-	501	495	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	20.7		17.1		0.5		0.1	
HCM LOS	C		C					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1015	-	-	248	311	1163	-	-
HCM Lane V/C Ratio	0.026	-	-	0.074	0.047	0.008	-	-
HCM Control Delay (s)	8.6	0	-	20.7	17.1	8.1	0	-
HCM Lane LOS	A	A	-	C	C	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.2	0.1	0	-	-