

AUDREY MULTIFAMILY

Traffic Impact Study

Naperville, Illinois

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Prepared for:

OKW ARCHITECTS, INC

Kimley»»Horn

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EXECUTIVE SUMMARY

Kimley-Horn and Associates, Inc. (Kimley-Horn) performed a traffic impact study for a multifamily development located north of Audrey Avenue and east of Illinois Route 59 (IL 59) in Naperville, Illinois. The project site is currently undeveloped agricultural land. The proposed development would consist of one building with five floors consisting of a total of 236 multifamily units. Access to the site would be provided via two full access driveways on the north side of Audrey Avenue (Access A and Access B). Access A would be located near the southwest corner of the site, aligned opposite of the existing The Home Depot driveway. Access B would be located near the southeast corner of the site, aligned opposite of the existing Dick's Sporting Goods driveway.

As part of this study, the existing roadway network was analyzed to determine current operations at key intersections in the site vicinity. In order to assess the potential impact on the area roadway network, site-generated trips were established and added to future background volumes. The site is anticipated to be completed by Year 2028. Per Illinois Department of Transportation (IDOT) guidelines, traffic conditions were analyzed for Year 2033 (build-plus-five-years).

Based on a review of future traffic conditions, site-generated traffic is not expected to materially impact the study intersections. The study intersections are expected to operate similar to existing conditions. Though not warranted, eastbound left-turn lanes at the intersections of Audrey Avenue/The Home Depot driveway-Access A and Audrey Avenue/Dick's Sporting Goods driveway-Access B will be provided and were included in the analysis of future conditions. Minor-leg stop control should be installed for outbound traffic at both site access driveways.

Additional details related to the recommendations above are provided in the *Recommendations & Conclusions* section of this report.

1. INTRODUCTION

Kimley-Horn was retained by OKW Architects, Inc. to conduct a traffic impact study for a proposed multifamily development located north of Audrey Avenue east of Illinois Route 59 (IL 59) in Naperville, Illinois. The subject site is highlighted in **Exhibit 1**.

The development would include a total of 236 multifamily units. Access to the site would be provided via two full access driveways on the north side of Audrey Avenue. Access A would be located near the southwest corner of the site, approximately 565 feet east of IL 59, aligned opposite of the existing The Home Depot driveway. Access B would be located near the southeast corner of the site, approximately 1,060 feet east of IL 59, aligned opposite of the existing Dick's Sporting Goods driveway.

As part of this study, the existing roadway network was analyzed to determine the current operations at the study intersections. Site trip generation characteristics were established for the development and added to background traffic volumes in order to assess the site's potential impact on the area roadway network. The subject site was assumed to be completed in 2028; therefore, Year 2033 (build-plus-five-years) traffic conditions were analyzed, consistent with Illinois Department of Transportation (IDOT) standards. This report presents and documents the study methodology, summarizes data collection and development traffic characteristics, highlights the evaluation of traffic conditions on the study intersections and roadways, and identifies recommendations to address operational impacts and integrate the proposed development into the surrounding transportation system.



2. EXISTING CONDITIONS

Kimley-Horn conducted a review of the subject site including existing land uses in the surrounding area and adjacent street system, current traffic volumes and operating conditions, lane configurations and traffic controls at nearby intersections, and other key roadway characteristics. This section of the report details information on the existing conditions.

Area Land Uses & Connectivity

The proposed development is located on the north side of Audrey Avenue, east of IL 59 in Naperville, Illinois. The subject site is currently undeveloped agricultural land bounded by commercial developments to the west and south and residential developments to the north and east.

In the project vicinity, local and regional north-south access is provided via IL 59, while Fort Hill Drive provides local access. Directly south of the site, Audrey Avenue provides local east-west access along with 75th Street, located approximately 900 feet south of the site. Additional regional north-south access is provided via Interstate 355 (I-355). 75th Street provides a full interchange with I-355 approximately 8.5 miles west of the site. Regional east-west access is provided via Interstate 88 (I-88). Access to I-88 is provided via IL 59 approximately 3.7 miles north of the site.

Existing Roadway Characteristics

IL 59 is a north-south roadway located approximately 500 feet west of the site. IDOT classifies IL 59 as a Strategic Regional Arterial (SRA). The SRA system was established by IDOT to promote mobility on key routes through the Chicago area by applying various strategies such as access control and limited signalization. Through the study area, IL 59 provides three travel lanes in each direction. At its signalized intersection with Audrey Avenue-Aurora Market Place, IL 59 provides two dedicated left-turn lanes, two through lanes, and a shared through/right-turn lane on the north leg and a dedicated left-turn lane, three through lanes, and a dedicated right-turn lane on the south leg. According to IDOT, IL 59 is classified as a Principal Arterial under the jurisdiction of IDOT. IL 59 has a posted speed limit of 40 miles per hour (mph) through the study area.

Audrey Avenue is an east-west road located on the southern boundary of the site. Through the study area, Audrey Avenue provides one travel lane in each direction. At its signalized intersection with IL 59, Audrey Avenue provides a dedicated left-turn lane, a through lane, a dedicated right-turn lane on the east leg. At its unsignalized intersection with The Home Depot driveway, Audrey Avenue provides a dedicated left-turn lane and a through lane on the east leg and a shared through/right-turn lane on the west leg. At its unsignalized intersection with Dick's Sporting Goods driveway, Audrey Avenue provides a shared through/left-turn lane on the east leg and a shared through/right-turn lane on the west leg. At its minor-leg stop-controlled intersection with Fort Hill Drive, Audrey Avenue provides a shared left/right-turn lane. Audrey Avenue is classified as a local road under the jurisdiction of the City of Naperville. Audrey Avenue has a posted speed limit of 30 mph.

Aurora Market Place is an east-west private drive located approximately 600 feet west of the site. Through the project vicinity, Aurora Market Place provides one travel lane in each direction. At its signalized intersection with IL 59, Aurora Market Place provides a dedicated left-turn lane and a shared through/right-turn lane on the west leg. There is no posted speed limit at Aurora Market Place; therefore, a speed limit of 25 mph was assumed.

Fort Hill Drive is a north-south roadway located approximately 1,400 feet east of the site. Through the project vicinity, Fort Hill Drive provides two travel lanes in each direction. North of Dunraven Avenue, Fort Hill Drive transitions to one lane in each direction. At its unsignalized intersection with Audrey Avenue, Fort Hill Drive provides a through lane and a shared through/right-turn lane on the north leg and a shared through/left-turn lane and through lane on the south leg. Fort Hill Drive is classified as a local road under the jurisdiction of the City of Naperville. Fort Hill Drive has a posted speed limit of 30 mph.

The Home Depot driveway and Dick's Sporting Goods driveway are full access driveways located on the south side of Audrey Avenue immediately south of the site. At their minor-leg stop-controlled intersections with Audrey Avenue, one inbound and one outbound lane is provided. There is no posted speed limit at either driveway; therefore, a speed limit of 25 mph was assumed.

Traffic Count Data

Weekday turning movement count data was collected on Tuesday September 23, 2025 at the following intersections. The counts were conducted during the weekday morning (7:00 to 9:00AM) and weekday evening (4:00 to 6:00PM) peak periods. These count periods were selected in order to capture the peak travel periods in the area.

- IL 59 / Audrey Avenue-Aurora Market Place
- Audrey Avenue / The Home Depot driveway
- Audrey Avenue / Dick's Sporting Goods driveway
- Fort Hill Drive / Audrey Avenue

The traffic count data indicates that peak traffic volumes occur within the study area from 7:30 to 8:30AM and 4:30 to 5:30PM during a typical weekday.

For purposes of this analysis, the peak hour vehicle traffic volumes were rounded to the nearest multiple of five. Due to the number of driveways and roads between intersections, the volumes were not balanced between intersections. Peak hour traffic volumes are summarized in **Exhibit 2**. A summary of the traffic count data is provided in the appendix.



ILLINOIS
59

LEGEND

- xx** Weekday AM Peak
(7:30 – 8:30am)
- (xx)** Weekday PM Peak
(4:30 – 5:30pm)
- Existing Signalized Intersection
- Existing Stop Sign
- Less than Five Vehicles

AURORA MARKET PLACE

(5) -
(165) 80
(2710) 1360
(55) 25

(60) 60
(60) 30
(95) 30

70 (175)
15 (40)
30 (60)

40 (55)
2440 (2015)
15 (35)

(265) 110
(10) 5

**THE HOME DEPOT
DRIVEWAY**

20 (25)
10 (30)

SITE

90 (210)
15 (40)

(280) 125
(5) 5

**DICK'S SPORTING
GOODS DRIVEWAY**

- (-)
- (-)

AUDREY AVENUE

(65) 45
(80) 45

(440) 130
(105) 30

165 (245)
40 (70)

FORT HILL DRIVE

Existing Capacity Analysis

Synchro capacity software was used to evaluate the existing operational conditions at the study intersections during the weekday peak hours. The capacity of an intersection quantifies its ability to accommodate traffic volumes and is expressed in terms of level of service (LOS), measured in average delay per vehicle. LOS grades range from A to F, with LOS A as the highest (best traffic flow and least delay), LOS E as saturated or at-capacity conditions, and LOS F as the lowest (oversaturated conditions). The lowest LOS grade typically accepted by jurisdictional transportation agencies in Northeastern Illinois is LOS D, and a minimum LOS C is required for through movements on SRA routes such as IL 59.

The LOS grades shown below, which are provided in the Transportation Research Board's Highway Capacity Manual (HCM), quantify and categorize the driver's discomfort, frustration, fuel consumption, and travel times experienced as a result of intersection control and the resulting traffic queuing. A detailed description of each LOS rating can be found in **Table 2.1**.

Table 2.1 Level of Service Grading Descriptions¹

Level of Service	Description
A	Minimal control delay; traffic operates at primarily free-flow conditions; unimpeded movement within traffic stream.
B	Minor control delay at signalized intersections; traffic operates at a fairly unimpeded level with slightly restricted movement within traffic stream.
C	Moderate control delay; movement within traffic stream more restricted than at LOS B; formation of queues contributes to lower average travel speeds.
D	Considerable control delay that may be substantially increased by small increases in flow; average travel speeds continue to decrease.
E	High control delay; average travel speed no more than 33 percent of free flow speed.
F	Extremely high control delay; extensive queuing and high volumes create exceedingly restricted traffic flow.

¹Highway Capacity Manual, 7th Edition.

The range of control delay for each rating (as detailed in the HCM) is shown in **Table 2.2**. Because signalized intersections are expected to carry a larger volume of vehicles and stopping is required during red time, note that higher delays are tolerated for the corresponding LOS ratings.

Table 2.2 Level of Service Grading Criteria¹

Level of Service	Average Control Delay (s/veh) at:	
	Unsignalized Intersections	Signalized Intersections
A	0 – 10	0 – 10
B	> 10 – 15	> 10 – 20
C	> 15 – 25	> 20 – 35
D	> 25 – 35	> 35 – 55
E	> 35 – 50	> 55 – 80
F ²	> 50	> 80

¹Highway Capacity Manual, 7th Edition

²All movements with a Volume to Capacity (v/c) ratio greater than 1 receive a rating of LOS F.

For purposes of the analysis, signal timing data was obtained from IDOT. Per IDOT standards, right-turn-on-red (RTOR) movements were not included in the analysis despite being observed in the field.

Based on these standards, capacity results were identified for the study intersections under existing conditions. The results of the capacity analysis are summarized in **Table 2.3**. In this table, the operation on each approach is quantified according to the average delay per vehicle and the corresponding LOS. Overall intersection level of service is not reported for minor-leg stop-controlled intersection, since the majority of vehicles are able to move through the intersection with little to no delay. The results are based on Synchro's HCM 7th Edition reports. Copies of the capacity analysis reports are provided in the appendix.

Table 2.3 Existing (2025) Levels of Service

Intersection	Weekday			
	AM Peak Period		PM Peak Period	
	Delay (s/veh)	LOS	Delay (s/veh)	LOS
IL 59 / Audrey Avenue-Aurora Market Place *				
Eastbound	63	E	95	F
Westbound	72	E	117	F
Northbound	13	B ¹	18	B ¹
Southbound	11	B ²	25	C ¹
Intersection	15	B	30	C
Audrey Avenue / Home Depot driveway △				
Westbound (Left)	8	A	8	A
Northbound	9	A	12	B
Audrey Avenue / Dick's Sporting Goods driveway △				
Westbound (Left)	8	A	8	A
Northbound	9	A	11	B
Fort Hill Drive / Audrey Avenue △				
Eastbound	10+	B	17	C
Northbound (Left)	8	A	9	A

* -Signalized Intersection

△-Minor-Leg Stop-Controlled Intersection

¹Left-turn movement operates at LOS F.

²Left-turn movement operates at LOS E.

Under existing conditions the IL 59 / Audrey Avenue-Aurora Market Place intersection experiences operational challenges, primarily due to the high traffic volumes on the SRA route (IL 59). Per IDOT standards, through movements along SRA routes are expected to operate at LOS C or better. Under existing conditions, this standard is met for the through movements along IL 59. During the morning peak hour the eastbound and westbound approaches and the southbound left-turn movement operate at LOS E, while the northbound left-turn movement operates at LOS F. During the evening peak hour the eastbound and westbound approaches and the northbound and southbound left-turn movements operate at LOS F. The delay is attributable to the signal cycle length (140 seconds during the morning and 180 seconds during evening peak hour) and priority given to north-south through traffic on IL 59. As a result, relatively limited green time is allocated to the protected left-turn phases and minor-leg approaches. The 95th percentile queues for the northbound and southbound turning movements along IL 59 are projected to be eight vehicles (200 feet) or less, and are anticipated to be fully accommodated within the existing roadway geometry. During the evening peak hour the 95th percentile queue for the westbound right-turn lane is projected to be 18 vehicles (450 feet) and westbound left-turn lane is projected to be five vehicles (125 feet). The westbound queue is expected to exceed the available turn lane storage, and extend past the commercial driveways along Audrey Avenue. During the evening peak hour the 95th percentile queue for the eastbound shared through/right-turn lane is projected to be 14 vehicles (350 feet) and is projected to extend past the commercial driveways along Aurora Market Place. "Do Not Block Intersection" signage should be considered along Audrey Avenue and Aurora Market Place.

The unsignalized intersections operate at LOS (C) or better during the morning and evening peak hours. The 95th percentile queues are projected to be two vehicles (50 feet) or less.

3. PROPOSED DEVELOPMENT

This section of the report outlines the proposed site plan and summarizes site-specific traffic characteristics.

Development Characteristics

The proposed development would include one building with five floors that include a total of 236 multifamily units. Access to the site would be provided via two full access driveways on the north side of Audrey Avenue. Access A would be located near the southwest corner of the site, approximately 565 feet east of IL 59, aligned opposite of the existing The Home Depot driveway. Access B would be located near the southeast corner of the site, approximately 1,060 feet east of IL 59, aligned opposite of the existing Dick's Sporting Goods driveway. The proposed site plan is provided in the appendix.

Trip Generation

In order to calculate trips generated by the proposed site, data was referenced from the Institute of Transportation Engineers (ITE) Trip Generation Manual, 12th Edition. Trip generation rates for the ITE Land Use Code (LUC) corresponding to the multifamily land use are shown in **Table 3.1**. A copy of the ITE data is provided in the appendix.

Table 3.1 ITE Trip Generation Data

ITE Land Use	Weekday	
	AM Peak Hour	PM Peak Hour
Multifamily Housing (Mid-Rise) (LUC 221)	$T = 0.42X - 7.77$ 23% in/77% out	$T = 0.36X + 3.07$ 64% in/36% out

T = Trips; X = Number of Dwelling Units

Trip generation projections for the development were estimated using the ITE data. The total site-generated trips are based on the rates provided above. A summary of the site-generated traffic is presented in **Table 3.2**.

Table 3.2 Site-Generated Traffic Projections¹

Land Use	Size	Weekday					
		AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Mid-Rise) (LUC 221)	236 Units	20	70	90	55	35	90

¹Daily trips rounded to the nearest multiple of ten. Peak hour in/out volumes are rounded to the nearest multiple of five.

Directional Distribution

The estimated distribution of site-generated traffic on the surrounding roadway network as it approaches and departs the site is a function of several variables, such as access and parking locations, prevailing traffic volumes/patterns, employment centers, characteristics of the street system, and the ease with which vehicles can travel over various sections of that system. As such, **Table 3.3** presents the anticipated directional distribution from which vehicles travel to and from the site.

Table 3.3 Estimated Trip Distribution

Traveling to/from	Estimated Trip Distribution
North on IL 59	40%
South on IL 59	40%
North on Fort Hill Drive	10%
South on Fort Hill Drive	10%
Total	100%

The site traffic assignment, representing traffic volumes associated with the proposed development at the study intersections, is a function of the estimated trip generation (Table 3.2) and the directional distribution (Table 3.3). Based on these assumptions, site-generated traffic is illustrated in **Exhibit 3**.



ILLINOIS
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LEGEND

- xx** Weekday AM Peak
(7:30 – 8:30am)
- (xx)** Weekday PM Peak
(4:30 – 5:30pm)
- Existing Signalized Intersection
- Existing Stop Sign
- Proposed Stop Sign
- Less than Five Vehicles

AURORA MARKET PLACE

(20) 10
30 (15)
30 (10)
10 (25)

(10) 20
(5) 5

ACCESS A

40 (15)
- (5)

(20) 10
(25) 10

THE HOME DEPOT
DRIVEWAY

(15) 40
(5) 5

ACCESS B

(25) 10
(5) 5

DICK'S SPORTING
GOODS DRIVEWAY

AUDREY AVENUE

(5) -
(5) 5
(5) 5
- (5)

FORT HILL DRIVE

4. FUTURE CONDITIONS

This section of the report develops future traffic projections for analysis. The project was assumed to be completed in 2028. Therefore, Year 2033 traffic projections were developed for the analysis, which reflects a build-plus-five years, per typical IDOT requirements.

No-Build (2033) Traffic Projections

Background traffic growth estimates were developed using Year 2050 data from the Chicago Metropolitan Agency for Planning (CMAP). As summarized in **Table 4.1**, the average annual growth rate for the area roadway network is approximately 0.79 percent. An annual compounded growth rate of 0.79 percent was applied for the period of eight years to reflect traffic growth between Year 2025 (existing traffic counts) and future Year 2033. The resulting Year 2033 no-build traffic projections are presented in **Exhibit 4**.

Table 4.1 CMAP Projected Growth Rates

Roadway Segment	CMAP Projected Annual Growth Rate
IL 59, between Ogden Avenue and 75 th Street	0.28%
IL 59, north of Ogden Avenue	0.31%
IL 59, south of 75 th Street	0.33%
Ogden Avenue, between IL 59 and Commons Drive	0.74%
Ogden Avenue, east of IL 59	0.77%
75 th Street, between IL 59 and Commons Drive	0.87%
75 th Street, east of IL 59	2.22%
Average Annual Growth Rate	0.79%

Build (2033) Traffic Projections

To estimate future traffic volumes with the proposed development, the total site-generated trips (Exhibit 3) were added to the background traffic projections (Exhibit 4). The resulting Year 2033 build traffic projections are depicted in **Exhibit 5**.

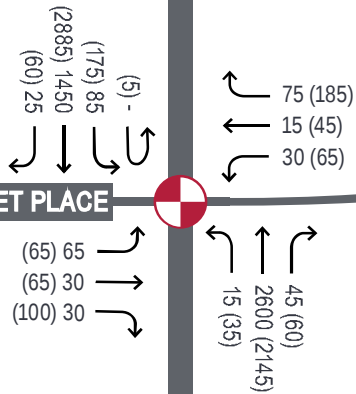


ILLINOIS
59

LEGEND

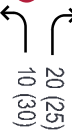
- xx** Weekday AM Peak
(7:30 – 8:30am)
- (xx)** Weekday PM Peak
(4:30 – 5:30pm)
- Existing Signalized Intersection
- Existing Stop Sign
- Less than Five Vehicles

AURORA MARKET PLACE



(280) 115
(10) 5

**THE HOME DEPOT
DRIVEWAY**



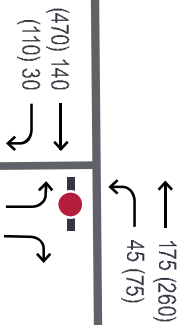
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(5) 5

**DICK'S SPORTING
GOODS DRIVEWAY**

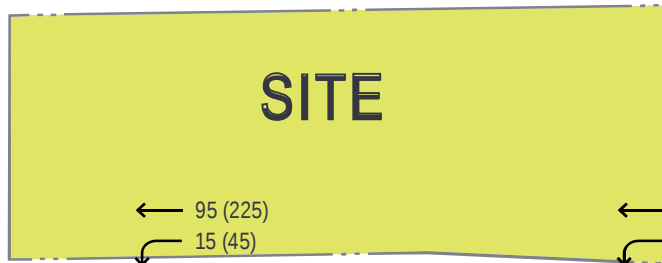


AUDREY AVENUE

(70) 50
(85) 50



FORT HILL DRIVE



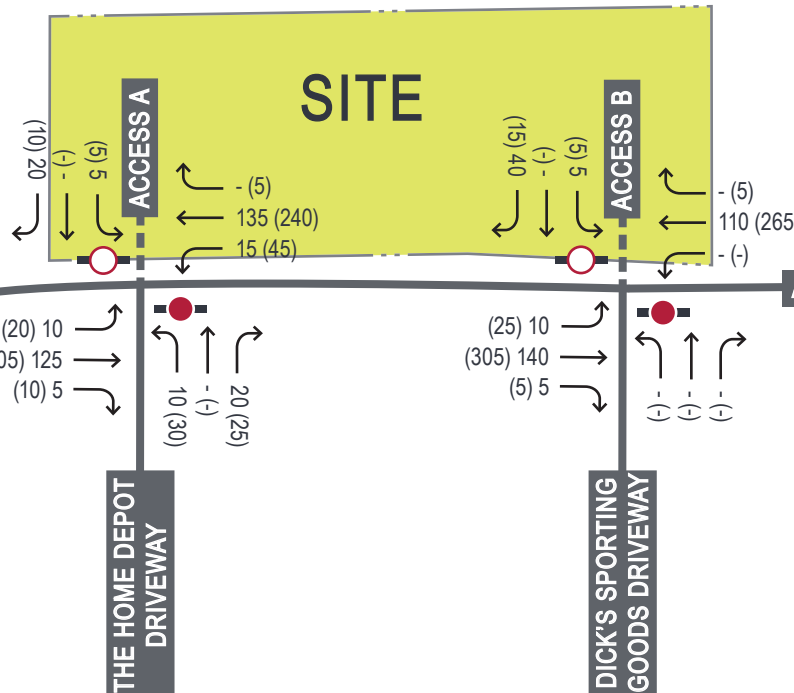
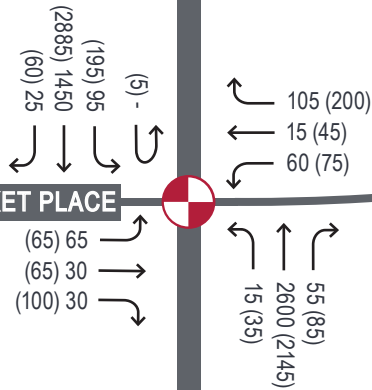


ILLINOIS
59

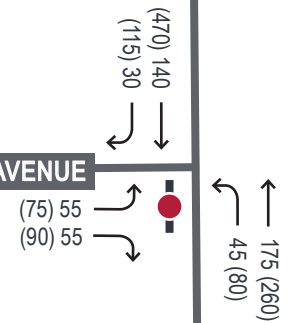
LEGEND

- xx** Weekday AM Peak
(7:30 – 8:30am)
- (xx)** Weekday PM Peak
(4:30 – 5:30pm)
-  Existing Signalized Intersection
-  Existing Stop Sign
-  Proposed Stop Sign
- Less than Five Vehicles

AURORA MARKET PLACE



AUDREY AVENUE



FORT HILL DRIVE

Future Geometry

Based on the projected traffic volumes and guidance outlined in the IDOT *Bureau of Design and Environment (BDE) Manual*, the following turn lane warrants analysis were evaluated at the following study intersections.

IL 59 / Audrey Avenue-Aurora Market Place

According to Section 36-3.01 of the IDOT *BDE Manual*, a dedicated right-turn lane should be considered at any signalized intersection where the right-turning volume is greater than 150 vehicles per hour (vph) and where there is greater than 300 vehicles per hour per lane (vphpl) on the mainline. Based on a review of Build (2033) traffic projections, southbound and eastbound right-turning volumes do not meet these criteria. Therefore, southbound and eastbound right-turn lanes were not included in the analysis.

Fort Hill Drive / Audrey Avenue

The IDOT BDE Manual does not provide specific guidance for right-turn lanes at unsignalized intersections on a four-lane roadway with a design speed of 35 mph (posted speed limit on Fort Hill Drive is 30 mph). Based on Figure 36-3.B in the IDOT *BDE Manual* (for a four-lane roadway with a design speed of 50 mph), right-turning volumes at Fort Hill Drive / Audrey Avenue do meet warrant criteria for installation of a southbound right-turn lane under existing conditions. No plans are known for the installation of a southbound right-turn lane; therefore, it was not included in the analysis.

The IDOT *BDE Manual* states left-turn lanes are to be provided on divided highways, regardless of traffic volumes. However, other factors are to be considered such as operations, uniformity along the corridor, and engineering judgement. Based on the capacity analysis of Build (2033) traffic projections, the intersection operates acceptably (LOS C or better) and no other left-turns are provided for the divided section of Fort Hill Drive. Therefore, a northbound left-turn lane was not included in the analysis.

Audrey Avenue / The Home Depot driveway-Access A & Audrey Avenue / Dick's Sporting Goods driveway-Access B

Based on Figure 36-3.A in the IDOT *BDE Manual*, right-turning volumes at Access A or Access B do not meet warrant criteria for installation of a westbound right-turn lane. The IDOT *BDE Manual* does not provide specific guidance for left-turn lanes at unsignalized intersections on roads with a design speed of 35 mph (posted speed limit on Audrey Avenue is 30 mph), but do not meet criteria on Figure 36.3G (two-lane roadway with a design speed of 40 mph). Based on coordination with the City, though an eastbound left-turn lane at the intersections of Audrey Avenue/The Home Depot driveway-Access A and Audrey Avenue/Dick's Sporting Goods driveway-Access B are not warranted, they will be installed and were included in the analysis of future conditions.

Future (2033) Capacity Analysis

Based on projected traffic volumes and future geometry assumptions, capacity results were identified for the study intersections under Year 2033 no-build and build conditions.

The results of the no-build and build capacity analyses are summarized in **Table 4.3** and **Table 4.4**, respectively. The results are based on Synchro's HCM 7th Edition reports. Copies of the Synchro reports are provided in the appendix.

Table 4.2 No-Build (2033) Levels of Service

Intersection	Weekday			
	AM Peak Period		PM Peak Period	
	Delay (s/veh)	LOS	Delay (s/veh)	LOS
IL 59 / Audrey Avenue-Aurora Market Place *				
Eastbound	61	E	101	F
Westbound	72	E	128	F
Northbound	14	B ¹	20-	B ¹
Southbound	11	B ²	28	C ¹
<i>Intersection</i>	<i>16</i>	<i>B</i>	<i>33</i>	<i>C</i>
Audrey Avenue / Home Depot driveway △				
Westbound (Left)	8	A	8	A
Northbound	9	A	13	B
Audrey Avenue / Dick's Sporting Goods driveway △				
Westbound (Left)	8	A	8	A
Northbound	9	A	11	B
Fort Hill Drive / Audrey Avenue △				
Eastbound	11	B	19	C
Northbound (Left)	8	A	9	A

* -Signalized Intersection

△ -Minor-Leg Stop-Controlled Intersection

¹Left-turn movement operates at LOS F.

²Left-turn movement operates at LOS E.

With the addition of background traffic growth, the study intersections are expected to operate similar to existing conditions. The overall delay at the signalized intersection of IL 59/Audrey Avenue-Aurora Market Place is expected to increase by three seconds or less and the projected 95th percentile queues generally remain consistent with existing conditions. The northbound and southbound through lane movements are expected to continue operating at LOS C or better, meeting IDOT requirements for SRA routes.

At all unsignalized intersections, the delay increases by two seconds or less and the projected 95th percentile queues are projected to be two vehicles (50 feet) or less.

Table 4.3 Build (2033) Levels of Service

Intersection	Weekday			
	AM Peak Period		PM Peak Period	
	Delay (s/veh)	LOS	Delay (s/veh)	LOS
IL 59 / Audrey Avenue *				
Eastbound	60	E	104	F
Westbound	70	E	138	F
Northbound	17	B ¹	21	C ¹
Southbound	13	B ²	29	C ¹
<i>Intersection</i>	<i>19</i>	<i>B</i>	<i>35-</i>	<i>C</i>
Audrey Avenue / Home Depot driveway-Access A △				
Eastbound (Left)	8	A	8	A
Westbound (Left)	8	A	8	A
Northbound	10-	A	15-	B
Southbound	10-	A	12	B
Audrey Avenue / Dick's Sporting Goods driveway-Access B △				
Eastbound (Left)	8	A	8	A
Westbound (Left)	8	A	8	A
Northbound	10+	B	13	B
Southbound	9	A	11	B
Fort Hill Drive / Audrey Avenue △				
Eastbound	11	B	21	C
Northbound (Left)	8	A	9	A

* -Signalized Intersection

△ -Minor-Leg Stop-Controlled Intersection

¹Left-turn movement operates at LOS F.

²Left-turn movement operates at LOS E.

The addition of site-generated traffic is not expected to materially impact the study intersections. Under the build scenario, the intersections are projected to operate similar to existing and no-build conditions. The overall delay at the signalized intersection of IL 59/Audrey Avenue-Aurora Market Place is expected to increase by two seconds or less and the projected 95th percentile queues generally remain consistent with no-build conditions. The northbound and southbound through lane movements are expected to continue operating at LOS C or better, meeting IDOT requirements for SRA routes.

At all unsignalized intersections, the delay increases by two seconds or less and the projected 95th percentile queues are projected to be three vehicles (75 feet) or less.

The 95th percentile queues at Access A and Access B are projected to be one vehicle (25 feet) or less.

5. RECOMMENDATIONS & CONCLUSIONS

Based on Kimley-Horn's review of the proposed site plan and evaluation of existing and future traffic conditions, the following recommendations were identified to facilitate access to the site and limit the impact of the proposed development on the surrounding area's traffic conditions:

Existing (2025)

IL 59 / Audrey Avenue-Aurora Market Place

- Install "Do Not Block Intersection" signage along Audrey Avenue and Aurora Market Place prior to commercial drives east and west of IL 59, respectively.

Build (2033)

Audrey Avenue / The Home Depot driveway-Access A

- Install an eastbound left-turn lane.
- Install minor-leg stop control with a stop sign and stop bar for outbound traffic.
- Provide one inbound and one outbound lane.

Audrey Avenue / Dick's Sporting Goods driveway-Access B

- Install an eastbound left-turn lane.
- Install minor-leg stop control with a stop sign and stop bar for outbound traffic.
- Provide one inbound and one outbound lane.

Based on a review of future traffic projections, site-generated traffic is not expected to materially impact the study intersections. The study network is expected to operate similar to existing conditions. Additionally, the access driveways are anticipated to operate at LOS B or better with the projected 95th percentile queues at one vehicle (25 feet) or less during the peak hours.

Regardless of the final configuration of the intersection geometrics, several additional items should be taken into consideration when preparing site and roadway improvement plans for the subject development. As the site design progresses, care should be taken with landscaping, signage, and monumentation at the site access locations to ensure that adequate horizontal sight distance is provided from the new stop bars. If alterations to the site plan or land use should occur, changes to the analysis provided within this traffic impact study may be needed.

APPENDIX

Site Plan

Traffic Count Data

Existing (2025) Capacity Reports

Data from ITE Trip Generation Manual, 12th Edition

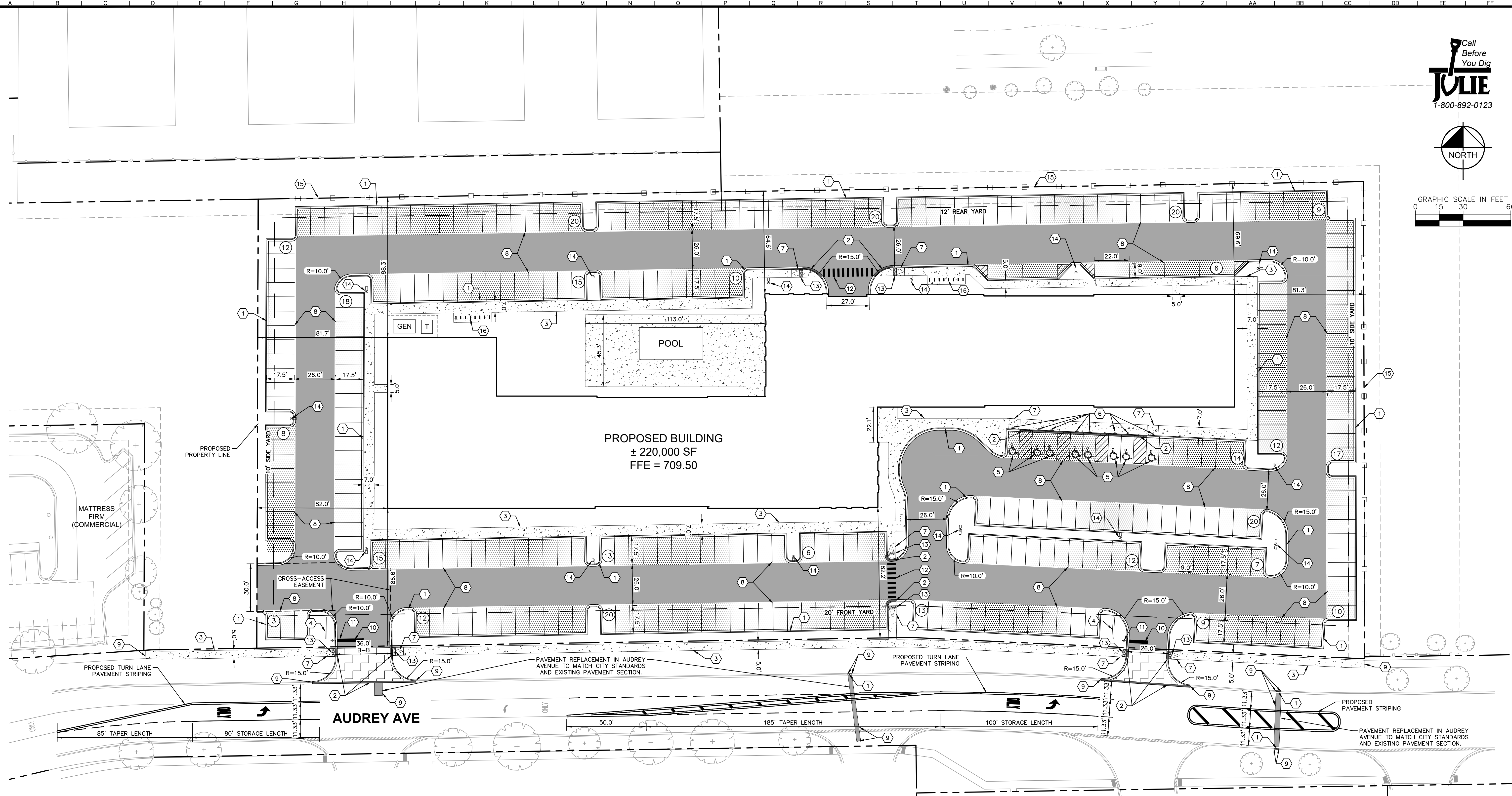
CMAP Year 2050 Traffic Projections

No-Build (2033) Capacity Reports

Build (2033) Capacity Reports

SITE PLAN

Drawing name: K:\GIS_LDE\268929000_Bridge_OP_Audrey Ave Multifamily_Naperville_IL\2 Design\CAD\PlanSheets\ Preliminary Engineering\ C2.0 Dec 15, 2025 10:42am by: Taylor Westenhoff
This document, together with the concepts and designs presented herein, is intended only for the specific purpose and client for which it was prepared. Reuse of this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



GRAPHIC SCALE IN FEET
0 15 30 60

- ### GENERAL NOTES
- ALL DIMENSIONS REFER TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
 - BUILDING DIMENSIONS ARE TO THE OUTSIDE FACE OF BUILDING UNLESS OTHERWISE NOTED.
 - REFER TO ARCHITECTURAL AND STRUCTURAL PLANS TO VERIFY ALL BUILDING DIMENSIONS.
 - RADIi ADJACENT TO PARKING STALL AND NOT DIMENSIONED ON THIS PLAN SHALL BE 3'-FEET, TYPICAL.
 - REFER TO ARCHITECTURAL PLANS FOR MONUMENT SIGN DETAILS.
 - ALL PROPOSED ON-SITE STRIPING SHALL BE PAINTED UNLESS OTHERWISE NOTED.

ZONING SUMMARY

EXISTING ZONING: B-2 COMMUNITY SHOPPING CENTER DISTRICT
PROPOSED ZONING: OCI OFFICE, COMMERCIAL AND INSTITUTIONAL DISTRICT

EXISTING USE: VACANT LAND
PROPOSED USE: CONDITIONAL USE - MULTI-FAMILY RESIDENTIAL

PROPOSED LOT AREA: 4.57 AC

REQUIRED FAR: 1.5 MAX.
PROPOSED FAR: 1.1

REQUIRED SETBACKS:
FRONT YARD: 20 FEET
SIDE YARD: 10 FEET
REAR YARD: 12 FEET*

PROPOSED BUILDING SETBACKS:
FRONT: 82.2 FEET MIN.
SIDE: 81.3 FEET MIN.
REAR: 64.6 FEET MIN.

*WHERE ADJACENT TO R3A PUD

MAXIMUM BUILDING HEIGHT: 43 FEET
PROPOSED BUILDING HEIGHT: 57 FEET (VARIANCE)

MAXIMUM DENSITY: 1 UNIT PER 2,600 SF, 76 UNITS
PROPOSED DENSITY: 236 UNITS (VARIANCE)

PROPOSED UNIT COUNT

STUDIO UNITS:	77 UNITS
1 BED UNITS:	133 UNITS
2 BED UNITS:	26 UNITS
TOTAL UNITS PROPOSED:	236 UNITS
TOTAL BEDROOMS PROPOSED:	262 BEDROOMS

PARKING SUMMARY

PARKING SPACES REQUIRED (PER CITY REQUIREMENTS)	= 531 SPACES
2.25 SPACES PER UNIT	
PARKING SPACES REQUIRED (REQUESTED VARIANCE)	= 321 SPACES
1 SPACE PER BEDROOM	
0.25 SPACES PER UNIT	
STANDARD PARKING SPACES PROVIDED	= 313 SPACES
ACCESSIBLE PARKING SPACES REQUIRED	= 8 SPACES
ACCESSIBLE PARKING SPACES PROVIDED	= 8 SPACES
TOTAL PARKING SPACES PROVIDED	= 321 SPACES
BICYCLE PARKING REQUIRED	= 32 SPACES
(10% OF VEHICLE PARKING REQUIREMENTS)	
BICYCLE PARKING PROVIDED	= 32 SPACES

PAVING AND CURB LEGEND

	STANDARD DUTY ASPHALT PAVEMENT (1.5" SURFACE / 3.0" BINDER / 8.0" AGGREGATE)
	HEAVY DUTY ASPHALT PAVEMENT (1.5" SURFACE / 3.0" BINDER / 12.0" AGGREGATE)
	CONCRETE SIDEWALK (5.0" PCC / 4.0" AGGREGATE)
	HEAVY DUTY CONCRETE (8.0" PCC / 4.0" AGGREGATE)
	CONCRETE CURB AND GUTTER
	CONCRETE DEPRESSED CURB AND GUTTER

- ### KEY NOTES
- B6.12 CONCRETE CURB AND GUTTER, TYP. (SEE DETAILS)
 - DEPRESSED CURB AND GUTTER
 - CONCRETE SIDEWALK, TYP. (SEE DETAILS)
 - MONUMENT SIGN (SEE ARCHITECTURAL PLANS FOR DETAILS)
 - ACCESSIBLE PAVEMENT MARKINGS, TYP. (SEE DETAILS)
 - ACCESSIBLE PARKING SIGN, TYP. (MUTCD R7-8 & R7-1101, SEE DETAILS)
 - ACCESSIBLE RAMP (SEE DETAILS)
 - 4" WIDE PAINTED SOLID LINE, TYP.
 - CONNECT TO EXISTING PAVEMENT, SIDEWALK, CURB, TYP.
 - 24" WIDE STOP BAR, TYP. (SEE DETAILS)
 - STOP SIGN, TYP. (MUTCD R1-1, SEE DETAILS)
 - CROSSWALK STRIPING
 - ADA DETECTABLE WARNING STRIP
 - LIGHT POLE, TYP. (SEE PLANS BY OTHERS FOR DETAILS)
 - ADD 6'-FT SCREEN FENCE
 - BIKE RACK, TYP.

Kimley»Horn

© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
4201 WINTER ROAD, SUITE 600
NAPERVILLE, IL 60540
PHONE: 630-487-5550
WWW.KIMLEY-HORN.COM

SCALE: AS NOTED
DESIGNED BY: TRW
DRAWN BY: TRW
CHECKED BY: TRE

SITE PLAN

BRIDGE CAPITAL PARTNERS, INC.
THE ATLAS DEVELOPMENT
2839 AUDREY AVE
NAPERVILLE, IL 60540

ORIGINAL ISSUE:
10/17/25
KHA PROJECT NO.
268929000

SHEET NUMBER
C2.0

CITY COMMENTS

REVISIONS

DATE

BY

12/15/25

TRW

TRAFFIC COUNT DATA

1_IL 59 / Audrey Avenue - TMC

Tue Sep 23, 2025

Full Length (7 AM-9 AM, 4 PM-6 PM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 1335677, Location: 41.749467, -88.205965



Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg Direction	Audrey Ave Eastbound						Audrey Ave Westbound						IL 59 Northbound						IL 59 Southbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2025-09-23 7:00AM	11	2	8	0	21	0	3	2	16	0	21	0	3	700	6	0	709	0	11	246	9	0	266	0	1017
7:15AM	13	0	10	0	23	0	3	2	20	0	25	0	4	657	5	0	666	0	12	276	4	0	292	0	1006
7:30AM	13	7	7	0	27	0	7	4	10	0	21	0	1	614	12	0	627	0	21	339	1	0	361	0	1036
7:45AM	15	10	3	0	28	0	14	3	18	0	35	0	7	562	9	0	578	0	27	359	6	0	392	0	1033
Hourly Total	52	19	28	0	99	0	27	11	64	0	102	0	15	2533	32	0	2580	0	71	1220	20	0	1311	0	4092
8:00AM	17	9	13	0	39	0	4	3	20	0	27	1	4	635	8	0	647	0	12	311	13	0	336	0	1049
8:15AM	15	6	7	0	28	0	7	5	24	0	36	0	3	629	9	0	641	0	21	350	7	0	378	1	1083
8:30AM	12	5	11	0	28	0	6	2	25	0	33	0	8	574	5	0	587	0	25	305	8	1	339	0	987
8:45AM	7	7	7	0	21	0	3	1	26	0	30	0	11	536	13	0	560	0	26	314	7	0	347	0	958
Hourly Total	51	27	38	0	116	0	20	11	95	0	126	1	26	2374	35	0	2435	0	84	1280	35	1	1400	1	4077
4:00PM	11	15	21	0	47	0	16	10	41	0	67	1	6	514	14	3	537	0	44	613	13	0	670	0	1321
4:15PM	17	6	22	0	45	0	16	11	47	0	74	0	9	465	11	0	485	0	49	639	12	1	701	0	1305
4:30PM	16	11	20	0	47	0	10	8	35	0	53	0	9	495	16	0	520	0	39	658	10	2	709	0	1329
4:45PM	15	21	29	0	65	0	18	9	59	1	87	0	9	485	10	0	504	0	38	689	16	1	744	0	1400
Hourly Total	59	53	92	0	204	0	60	38	182	1	281	1	33	1959	51	3	2046	0	170	2599	51	4	2824	0	5355
5:00PM	19	12	19	0	50	0	21	11	39	0	71	0	8	473	14	1	496	0	39	656	15	1	711	0	1328
5:15PM	8	18	26	0	52	0	10	11	42	0	63	0	11	564	17	0	592	0	47	707	13	3	770	0	1477
5:30PM	16	11	25	0	52	1	20	12	53	0	85	0	7	444	20	0	471	0	47	553	14	2	616	0	1224
5:45PM	17	7	34	0	58	0	12	13	53	0	78	0	8	471	14	0	493	0	29	609	19	1	658	0	1287
Hourly Total	60	48	104	0	212	1	63	47	187	0	297	0	34	1952	65	1	2052	0	162	2525	61	7	2755	0	5316
Total	222	147	262	0	631	1	170	107	528	1	806	2	108	8818	183	4	9113	0	487	7624	167	12	8290	1	18840
% Approach	35.2%	23.3%	41.5%	0%	-	-	21.1%	13.3%	65.5%	0.1%	-	-	1.2%	96.8%	2.0%	0%	-	-	5.9%	92.0%	2.0%	0.1%	-	-	-
% Total	1.2%	0.8%	1.4%	0%	3.3%	-	0.9%	0.6%	2.8%	0%	4.3%	-	0.6%	46.8%	1.0%	0%	48.4%	-	2.6%	40.5%	0.9%	0.1%	44.0%	-	-
Lights	218	147	261	0	626	-	165	106	522	1	794	-	108	8459	178	4	8749	-	478	7290	165	12	7945	-	18114
% Lights	98.2%	100%	99.6%	0%	99.2%	-	97.1%	99.1%	98.9%	100%	98.5%	-	100%	95.9%	97.3%	100%	96.0%	-	98.2%	95.6%	98.8%	100%	95.8%	-	96.1%
Articulated Trucks	1	0	1	0	2	-	0	1	0	0	1	-	0	206	3	0	209	-	1	179	0	0	180	-	392
% Articulated Trucks	0.5%	0%	0.4%	0%	0.3%	-	0%	0.9%	0%	0%	0.1%	-	0%	2.3%	1.6%	0%	2.3%	-	0.2%	2.3%	0%	0%	2.2%	-	2.1%
Buses and Single-Unit Trucks	3	0	0	0	3	-	4	0	6	0	10	-	0	153	2	0	155	-	8	155	2	0	165	-	333
% Buses and Single-Unit Trucks	1.4%	0%	0%	0%	0.5%	-	2.4%	0%	1.1%	0%	1.2%	-	0%	1.7%	1.1%	0%	1.7%	-	1.6%	2.0%	1.2%	0%	2.0%	-	1.8%
Bicycles on Road	0	0	0	0	0	-	1	0	0	0	1	-	0	0	0	0	0	-	0	0	0	0	0	-	1
% Bicycles on Road	0%	0%	0%	0%	0%	-	0.6%	0%	0%	0%	0.1%	-	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%
Pedestrians	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	1	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	50.0%	-	-	-	-	-	-	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	50.0%	-	-	-	-	-	-	-	-	-	-	-	0%	

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

1_IL 59 / Audrey Avenue - TMC

Tue Sep 23, 2025

AM Peak (7:30 AM - 8:30 AM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 1335677, Location: 41.749467, -88.205965



Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg Direction	Audrey Ave Eastbound						Audrey Ave Westbound						IL 59 Northbound						IL 59 Southbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2025-09-23 7:30AM	13	7	7	0	27	0	7	4	10	0	21	0	1	614	12	0	627	0	21	339	1	0	361	0	1036
7:45AM	15	10	3	0	28	0	14	3	18	0	35	0	7	562	9	0	578	0	27	359	6	0	392	0	1033
8:00AM	17	9	13	0	39	0	4	3	20	0	27	1	4	635	8	0	647	0	12	311	13	0	336	0	1049
8:15AM	15	6	7	0	28	0	7	5	24	0	36	0	3	629	9	0	641	0	21	350	7	0	378	1	1083
Total	60	32	30	0	122	0	32	15	72	0	119	1	15	2440	38	0	2493	0	81	1359	27	0	1467	1	4201
% Approach	49.2%	26.2%	24.6%	0%	-	-	26.9%	12.6%	60.5%	0%	-	-	0.6%	97.9%	1.5%	0%	-	-	5.5%	92.6%	1.8%	0%	-	-	-
% Total	1.4%	0.8%	0.7%	0%	2.9%	-	0.8%	0.4%	1.7%	0%	2.8%	-	0.4%	58.1%	0.9%	0%	59.3%	-	1.9%	32.3%	0.6%	0%	34.9%	-	-
PHF	0.882	0.800	0.577	-	0.782	-	0.596	0.750	0.750	-	0.819	-	0.536	0.961	0.792	-	0.963	-	0.750	0.946	0.519	-	0.936	-	0.970
Lights	59	32	30	0	121	-	28	14	70	0	112	-	15	2308	35	0	2358	-	76	1250	26	0	1352	-	3943
% Lights	98.3%	100%	100%	0%	99.2%	-	87.5%	93.3%	97.2%	0%	94.1%	-	100%	94.6%	92.1%	0%	94.6%	-	93.8%	92.0%	96.3%	0%	92.2%	-	93.9%
Articulated Trucks	0	0	0	0	0	-	0	1	0	0	1	-	0	85	2	0	87	-	0	58	0	0	58	-	146
% Articulated Trucks	0%	0%	0%	0%	0%	-	0%	6.7%	0%	0%	0.8%	-	0%	3.5%	5.3%	0%	3.5%	-	0%	4.3%	0%	0%	4.0%	-	3.5%
Buses and Single-Unit Trucks	1	0	0	0	1	-	3	0	2	0	5	-	0	47	1	0	48	-	5	51	1	0	57	-	111
% Buses and Single-Unit Trucks	1.7%	0%	0%	0%	0.8%	-	9.4%	0%	2.8%	0%	4.2%	-	0%	1.9%	2.6%	0%	1.9%	-	6.2%	3.8%	3.7%	0%	3.9%	-	2.6%
Bicycles on Road	0	0	0	0	0	-	1	0	0	0	1	-	0	0	0	0	0	-	0	0	0	0	0	-	1
% Bicycles on Road	0%	0%	0%	0%	0%	-	3.1%	0%	0%	0%	0.8%	-	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

1_IL 59 / Audrey Avenue - TMC

Tue Sep 23, 2025

PM Peak (4:30 PM - 5:30 PM) - Overall Peak Hour

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 1335677, Location: 41.749467, -88.205965



Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg Direction	Audrey Ave Eastbound						Audrey Ave Westbound						IL 59 Northbound						IL 59 Southbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2025-09-23 4:30PM	16	11	20	0	47	0	10	8	35	0	53	0	9	495	16	0	520	0	39	658	10	2	709	0	1329
4:45PM	15	21	29	0	65	0	18	9	59	1	87	0	9	485	10	0	504	0	38	689	16	1	744	0	1400
5:00PM	19	12	19	0	50	0	21	11	39	0	71	0	8	473	14	1	496	0	39	656	15	1	711	0	1328
5:15PM	8	18	26	0	52	0	10	11	42	0	63	0	11	564	17	0	592	0	47	707	13	3	770	0	1477
Total	58	62	94	0	214	0	59	39	175	1	274	0	37	2017	57	1	2112	0	163	2710	54	7	2934	0	5534
% Approach	27.1%	29.0%	43.9%	0%	-	-	21.5%	14.2%	63.9%	0.4%	-	-	1.8%	95.5%	2.7%	0%	-	-	5.6%	92.4%	1.8%	0.2%	-	-	-
% Total	1.0%	1.1%	1.7%	0%	3.9%	-	1.1%	0.7%	3.2%	0%	5.0%	-	0.7%	36.4%	1.0%	0%	38.2%	-	2.9%	49.0%	1.0%	0.1%	53.0%	-	-
PHF	0.763	0.738	0.810	-	0.823	-	0.702	0.886	0.742	0.250	0.787	-	0.841	0.894	0.838	0.250	0.892	-	0.867	0.958	0.844	0.583	0.953	-	0.937
Lights	58	62	94	0	214	-	59	39	174	1	273	-	37	1966	56	1	2060	-	162	2660	54	7	2883	-	5430
% Lights	100%	100%	100%	0%	100%	-	100%	100%	99.4%	100%	99.6%	-	100%	97.5%	98.2%	100%	97.5%	-	99.4%	98.2%	100%	100%	98.3%	-	98.1%
Articulated Trucks	0	0	0	0	0	-	0	0	0	0	0	-	0	27	1	0	28	-	0	33	0	0	33	-	61
% Articulated Trucks	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%	1.3%	1.8%	0%	1.3%	-	0%	1.2%	0%	0%	1.1%	-	1.1%
Buses and Single-Unit Trucks	0	0	0	0	0	-	0	0	1	0	1	-	0	24	0	0	24	-	1	17	0	0	18	-	43
% Buses and Single-Unit Trucks	0%	0%	0%	0%	0%	-	0%	0%	0.6%	0%	0.4%	-	0%	1.2%	0%	0%	1.1%	-	0.6%	0.6%	0%	0%	0.6%	-	0.8%
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%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

* Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

2_Audrey Avenue / Home Depot Drive - TMC

Tue Sep 23, 2025

Full Length (7 AM-9 AM, 4 PM-6 PM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 1335679, Location: 41.749574, -88.203865



Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg Direction	Audrey Ave Eastbound					Audrey Ave Westbound					Home Depot Drive Northbound					
Time	T	R	U	App	Ped*	L	T	U	App	Ped*	L	R	U	App	Ped*	Int
2025-09-23 7:00AM	15	0	0	15	0	0	12	0	12	0	4	4	0	8	0	35
7:15AM	13	1	0	14	0	3	18	0	21	0	2	2	0	4	0	39
7:30AM	25	2	0	27	0	3	21	0	24	0	1	3	0	4	0	55
7:45AM	32	0	0	32	0	2	26	0	28	0	2	6	0	8	0	68
Hourly Total	85	3	0	88	0	8	77	0	85	0	9	15	0	24	0	197
8:00AM	25	0	0	25	0	5	18	0	23	0	7	3	0	10	0	58
8:15AM	29	1	0	30	0	4	25	0	29	0	2	7	0	9	0	68
8:30AM	19	3	0	22	0	3	26	0	29	0	1	6	0	7	0	58
8:45AM	35	2	0	37	0	10	20	0	30	0	6	12	0	18	0	85
Hourly Total	108	6	0	114	0	22	89	0	111	0	16	28	0	44	0	269
4:00PM	57	2	0	59	0	11	43	0	54	0	9	17	0	26	0	139
4:15PM	51	3	0	54	0	12	57	0	69	0	1	13	0	14	1	137
4:30PM	65	1	0	66	0	11	46	0	57	0	7	10	0	17	1	140
4:45PM	68	3	0	71	0	13	57	0	70	0	9	3	0	12	0	153
Hourly Total	241	9	0	250	0	47	203	0	250	0	26	43	0	69	2	569
5:00PM	55	2	0	57	0	8	50	0	58	0	6	7	0	13	0	128
5:15PM	76	3	0	79	0	7	57	0	64	0	6	6	0	12	0	155
5:30PM	62	1	0	63	0	7	58	0	65	0	6	2	0	8	0	136
5:45PM	43	5	0	48	1	6	59	0	65	0	8	6	0	14	1	127
Hourly Total	236	11	0	247	1	28	224	0	252	0	26	21	0	47	1	546
Total	670	29	0	699	1	105	593	0	698	0	77	107	0	184	3	1581
% Approach	95.9%	4.1%	0%	-	-	15.0%	85.0%	0%	-	-	41.8%	58.2%	0%	-	-	-
% Total	42.4%	1.8%	0%	44.2%	-	6.6%	37.5%	0%	44.1%	-	4.9%	6.8%	0%	11.6%	-	-
Lights	660	28	0	688	-	104	584	0	688	-	76	107	0	183	-	1559
% Lights	98.5%	96.6%	0%	98.4%	-	99.0%	98.5%	0%	98.6%	-	98.7%	100%	0%	99.5%	-	98.6%
Articulated Trucks	4	1	0	5	-	1	2	0	3	-	0	0	0	0	-	8
% Articulated Trucks	0.6%	3.4%	0%	0.7%	-	1.0%	0.3%	0%	0.4%	-	0%	0%	0%	0%	-	0.5%
Buses and Single-Unit Trucks	6	0	0	6	-	0	7	0	7	-	1	0	0	1	-	14
% Buses and Single-Unit Trucks	0.9%	0%	0%	0.9%	-	0%	1.2%	0%	1.0%	-	1.3%	0%	0%	0.5%	-	0.9%
Bicycles on Road	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0
% Bicycles on Road	0%	0%	0%	0%	-	0%	0%	0%	0%	-	0%	0%	0%	0%	-	0%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	1	-
% Pedestrians	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	33.3%	-
Bicycles on Crosswalk	-	-	-	-	1	-	-	-	-	0	-	-	-	-	2	-
% Bicycles on Crosswalk	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	66.7%	-

* Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

2_Audrey Avenue / Home Depot Drive - TMC

Tue Sep 23, 2025

Forced Peak (7:30 AM - 8:30 AM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 1335679, Location: 41.749574, -88.203865



Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg Direction	Audrey Ave Eastbound					Audrey Ave Westbound					Home Depot Drive Northbound					
Time	T	R	U	App	Ped*	L	T	U	App	Ped*	L	R	U	App	Ped*	Int
2025-09-23 7:30AM	25	2	0	27	0	3	21	0	24	0	1	3	0	4	0	55
7:45AM	32	0	0	32	0	2	26	0	28	0	2	6	0	8	0	68
8:00AM	25	0	0	25	0	5	18	0	23	0	7	3	0	10	0	58
8:15AM	29	1	0	30	0	4	25	0	29	0	2	7	0	9	0	68
Total	111	3	0	114	0	14	90	0	104	0	12	19	0	31	0	249
% Approach	97.4%	2.6%	0%	-	-	13.5%	86.5%	0%	-	-	38.7%	61.3%	0%	-	-	-
% Total	44.6%	1.2%	0%	45.8%	-	5.6%	36.1%	0%	41.8%	-	4.8%	7.6%	0%	12.4%	-	-
PHF	0.867	0.375	-	0.891	-	0.700	0.865	-	0.897	-	0.429	0.679	-	0.775	-	0.915
Lights	106	3	0	109	-	14	84	0	98	-	12	19	0	31	-	238
% Lights	95.5%	100%	0%	95.6%	-	100%	93.3%	0%	94.2%	-	100%	100%	0%	100%	-	95.6%
Articulated Trucks	1	0	0	1	-	0	1	0	1	-	0	0	0	0	-	2
% Articulated Trucks	0.9%	0%	0%	0.9%	-	0%	1.1%	0%	1.0%	-	0%	0%	0%	0%	-	0.8%
Buses and Single-Unit Trucks	4	0	0	4	-	0	5	0	5	-	0	0	0	0	-	9
% Buses and Single-Unit Trucks	3.6%	0%	0%	3.5%	-	0%	5.6%	0%	4.8%	-	0%	0%	0%	0%	-	3.6%
Bicycles on Road	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0
% Bicycles on Road	0%	0%	0%	0%	-	0%	0%	0%	0%	-	0%	0%	0%	0%	-	0%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

* Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

2_Audrey Avenue / Home Depot Drive - TMC

Tue Sep 23, 2025

PM Peak (4:30 PM - 5:30 PM) - Overall Peak Hour

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 1335679, Location: 41.749574, -88.203865



Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg Direction	Audrey Ave Eastbound					Audrey Ave Westbound					Home Depot Drive Northbound					
Time	T	R	U	App	Ped*	L	T	U	App	Ped*	L	R	U	App	Ped*	Int
2025-09-23 4:30PM	65	1	0	66	0	11	46	0	57	0	7	10	0	17	1	140
4:45PM	68	3	0	71	0	13	57	0	70	0	9	3	0	12	0	153
5:00PM	55	2	0	57	0	8	50	0	58	0	6	7	0	13	0	128
5:15PM	76	3	0	79	0	7	57	0	64	0	6	6	0	12	0	155
Total	264	9	0	273	0	39	210	0	249	0	28	26	0	54	1	576
% Approach	96.7%	3.3%	0%	-	-	15.7%	84.3%	0%	-	-	51.9%	48.1%	0%	-	-	-
% Total	45.8%	1.6%	0%	47.4%	-	6.8%	36.5%	0%	43.2%	-	4.9%	4.5%	0%	9.4%	-	-
PHF	0.868	0.750	-	0.864	-	0.750	0.921	-	0.889	-	0.778	0.650	-	0.794	-	0.929
Lights	262	9	0	271	-	38	210	0	248	-	28	26	0	54	-	573
% Lights	99.2%	100%	0%	99.3%	-	97.4%	100%	0%	99.6%	-	100%	100%	0%	100%	-	99.5%
Articulated Trucks	2	0	0	2	-	1	0	0	1	-	0	0	0	0	-	3
% Articulated Trucks	0.8%	0%	0%	0.7%	-	2.6%	0%	0%	0.4%	-	0%	0%	0%	0%	-	0.5%
Buses and Single-Unit Trucks	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0
% Buses and Single-Unit Trucks	0%	0%	0%	0%	-	0%	0%	0%	0%	-	0%	0%	0%	0%	-	0%
Bicycles on Road	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0
% Bicycles on Road	0%	0%	0%	0%	-	0%	0%	0%	0%	-	0%	0%	0%	0%	-	0%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	1	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	-

* Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

3_Audrey Avenue / Dick's Sporting Goods Drive - TMC

Tue Sep 23, 2025

Full Length (7 AM-9 AM, 4 PM-6 PM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 1335681, Location: 41.749553, -88.202079



Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg Direction	Audrey Ave Eastbound					Audrey Ave Westbound					Dick's Sporting Goods Drive Northbound					
Time	T	R	U	App	Ped*	L	T	U	App	Ped*	L	R	U	App	Ped*	Int
2025-09-23 7:00AM	19	0	0	19	0	0	11	0	11	0	0	0	0	0	0	30
7:15AM	16	0	0	16	0	0	20	0	20	0	0	0	0	0	0	36
7:30AM	28	1	0	29	0	0	24	0	24	0	0	0	0	0	0	53
7:45AM	37	1	0	38	0	0	28	0	28	0	0	0	0	0	0	66
Hourly Total	100	2	0	102	0	0	83	0	83	0	0	0	0	0	0	185
8:00AM	27	0	0	27	0	0	25	0	25	0	0	0	0	0	0	52
8:15AM	35	1	0	36	0	0	27	0	27	0	0	0	0	0	0	63
8:30AM	25	0	0	25	0	0	30	0	30	0	0	0	0	0	0	55
8:45AM	42	3	0	45	0	0	28	0	28	0	0	0	0	0	0	73
Hourly Total	129	4	0	133	0	0	110	0	110	0	0	0	0	0	0	243
4:00PM	67	0	0	67	0	0	54	0	54	0	2	0	0	2	0	123
4:15PM	62	0	0	62	0	0	66	0	66	0	1	0	0	1	0	129
4:30PM	69	0	0	69	0	0	58	0	58	0	0	0	0	0	0	127
4:45PM	70	0	0	70	0	0	69	0	69	0	0	0	0	0	0	139
Hourly Total	268	0	0	268	0	0	247	0	247	0	3	0	0	3	0	518
5:00PM	58	2	0	60	0	0	57	0	57	0	0	1	0	1	0	118
5:15PM	81	1	0	82	0	0	63	0	63	0	0	0	0	0	3	145
5:30PM	66	0	0	66	0	0	65	0	65	0	0	0	0	0	1	131
5:45PM	49	1	0	50	0	0	64	0	64	0	1	0	0	1	1	115
Hourly Total	254	4	0	258	0	0	249	0	249	0	1	1	0	2	5	509
Total	751	10	0	761	0	0	689	0	689	0	4	1	0	5	5	1455
% Approach	98.7%	1.3%	0%	-	-	0%	100%	0%	-	-	80.0%	20.0%	0%	-	-	-
% Total	51.6%	0.7%	0%	52.3%	-	0%	47.4%	0%	47.4%	-	0.3%	0.1%	0%	0.3%	-	-
Lights	743	8	0	751	-	0	681	0	681	-	4	1	0	5	-	1437
% Lights	98.9%	80.0%	0%	98.7%	-	0%	98.8%	0%	98.8%	-	100%	100%	0%	100%	-	98.8%
Articulated Trucks	2	1	0	3	-	0	1	0	1	-	0	0	0	0	-	4
% Articulated Trucks	0.3%	10.0%	0%	0.4%	-	0%	0.1%	0%	0.1%	-	0%	0%	0%	0%	-	0.3%
Buses and Single-Unit Trucks	6	1	0	7	-	0	7	0	7	-	0	0	0	0	-	14
% Buses and Single-Unit Trucks	0.8%	10.0%	0%	0.9%	-	0%	1.0%	0%	1.0%	-	0%	0%	0%	0%	-	1.0%
Bicycles on Road	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0
% Bicycles on Road	0%	0%	0%	0%	-	0%	0%	0%	0%	-	0%	0%	0%	0%	-	0%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	4	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	80.0%	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	1	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20.0%	-

* Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

3_Audrey Avenue / Dick's Sporting Goods Drive - TMC

Tue Sep 23, 2025

Forced Peak (7:30 AM - 8:30 AM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 1335681, Location: 41.749553, -88.202079



Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg Direction	Audrey Ave Eastbound						Audrey Ave Westbound						Dick's Sporting Goods Drive Northbound						
Time	T	R	U	App	Ped*		L	T	U	App	Ped*		L	R	U	App	Ped*		Int
2025-09-23 7:30AM	28	1	0	29	0		0	24	0	24	0		0	0	0	0	0	0	53
7:45AM	37	1	0	38	0		0	28	0	28	0		0	0	0	0	0	0	66
8:00AM	27	0	0	27	0		0	25	0	25	0		0	0	0	0	0	0	52
8:15AM	35	1	0	36	0		0	27	0	27	0		0	0	0	0	0	0	63
Total	127	3	0	130	0		0	104	0	104	0		0	0	0	0	0	0	234
% Approach	97.7%	2.3%	0%	-	-		0%	100%	0%	-	-		0%	0%	0%	-	-	-	-
% Total	54.3%	1.3%	0%	55.6%	-		0%	44.4%	0%	44.4%	-		0%	0%	0%	0%	-	-	-
PHF	0.858	0.750	-	0.855	-		-	0.929	-	0.929	-		-	-	-	-	-	-	0.886
Lights	123	3	0	126	-		0	98	0	98	-		0	0	0	0	-	-	224
% Lights	96.9%	100%	0%	96.9%	-		0%	94.2%	0%	94.2%	-		0%	0%	0%	-	-	-	95.7%
Articulated Trucks	1	0	0	1	-		0	1	0	1	-		0	0	0	0	-	-	2
% Articulated Trucks	0.8%	0%	0%	0.8%	-		0%	1.0%	0%	1.0%	-		0%	0%	0%	-	-	-	0.9%
Buses and Single-Unit Trucks	3	0	0	3	-		0	5	0	5	-		0	0	0	0	-	-	8
% Buses and Single-Unit Trucks	2.4%	0%	0%	2.3%	-		0%	4.8%	0%	4.8%	-		0%	0%	0%	-	-	-	3.4%
Bicycles on Road	0	0	0	0	-		0	0	0	0	-		0	0	0	0	-	-	0
% Bicycles on Road	0%	0%	0%	0%	-		0%	0%	0%	0%	-		0%	0%	0%	-	-	-	0%
Pedestrians	-	-	-	-	0		-	-	-	-	0		-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-		-	-	-	-	-		-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	0		-	-	-	-	0		-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-		-	-	-	-	-		-	-	-	-	-	-	-

* Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

3_Audrey Avenue / Dick's Sporting Goods Drive - TMC

Tue Sep 23, 2025

Forced Peak (4:30 PM - 5:30 PM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 1335681, Location: 41.749553, -88.202079



Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg Direction	Audrey Ave Eastbound					Audrey Ave Westbound					Dick's Sporting Goods Drive Northbound					
Time	T	R	U	App	Ped*	L	T	U	App	Ped*	L	R	U	App	Ped*	Int
2025-09-23 4:30PM	69	0	0	69	0	0	58	0	58	0	0	0	0	0	0	127
4:45PM	70	0	0	70	0	0	69	0	69	0	0	0	0	0	0	139
5:00PM	58	2	0	60	0	0	57	0	57	0	0	1	0	1	0	118
5:15PM	81	1	0	82	0	0	63	0	63	0	0	0	0	0	3	145
Total	278	3	0	281	0	0	247	0	247	0	0	1	0	1	3	529
% Approach	98.9%	1.1%	0%	-	-	0%	100%	0%	-	-	0%	100%	0%	-	-	-
% Total	52.6%	0.6%	0%	53.1%	-	0%	46.7%	0%	46.7%	-	0%	0.2%	0%	0.2%	-	-
PHF	0.858	0.375	-	0.857	-	-	0.895	-	0.895	-	-	0.250	-	0.250	-	0.912
Lights	276	2	0	278	-	0	246	0	246	-	0	1	0	1	-	525
% Lights	99.3%	66.7%	0%	98.9%	-	0%	99.6%	0%	99.6%	-	0%	100%	0%	100%	-	99.2%
Articulated Trucks	0	1	0	1	-	0	0	0	0	-	0	0	0	0	-	1
% Articulated Trucks	0%	33.3%	0%	0.4%	-	0%	0%	0%	0%	-	0%	0%	0%	0%	-	0.2%
Buses and Single-Unit Trucks	2	0	0	2	-	0	1	0	1	-	0	0	0	0	-	3
% Buses and Single-Unit Trucks	0.7%	0%	0%	0.7%	-	0%	0.4%	0%	0.4%	-	0%	0%	0%	0%	-	0.6%
Bicycles on Road	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0
% Bicycles on Road	0%	0%	0%	0%	-	0%	0%	0%	0%	-	0%	0%	0%	0%	-	0%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	3	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	-

* Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

4_Fort Hill Drive / Audrey Avenue - TMC

Tue Sep 23, 2025

Full Length (7 AM-9 AM, 4 PM-6 PM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 1335682, Location: 41.749589, -88.19626



Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg Direction	Audrey Ave Eastbound					Fort Hill Drive Northbound					Fort Hill Drive Southbound					
Time	L	R	U	App	Ped*	L	T	U	App	Ped*	T	R	U	App	Ped*	Int
2025-09-23 7:00AM	5	14	0	19	0	9	24	0	33	0	15	1	1	17	0	69
7:15AM	2	10	0	12	0	13	36	0	49	0	22	3	0	25	0	86
7:30AM	12	8	0	20	0	6	33	0	39	0	36	6	0	42	0	101
7:45AM	13	9	0	22	0	8	53	0	61	0	27	7	4	38	0	121
Hourly Total	32	41	0	73	0	36	146	0	182	0	100	17	5	122	0	377
8:00AM	6	14	0	20	0	13	47	0	60	0	31	9	2	42	0	122
8:15AM	12	12	0	24	0	11	32	0	43	0	34	7	0	41	0	108
8:30AM	4	11	0	15	0	13	38	0	51	0	35	9	0	44	1	110
8:45AM	14	15	0	29	0	9	42	0	51	0	47	10	4	61	0	141
Hourly Total	36	52	0	88	0	46	159	0	205	0	147	35	6	188	1	481
4:00PM	19	23	0	42	0	15	70	0	85	0	95	30	1	126	0	253
4:15PM	24	15	0	39	0	14	56	0	70	0	83	34	5	122	0	231
4:30PM	16	17	0	33	0	17	50	0	67	0	111	30	2	143	0	243
4:45PM	14	20	0	34	0	19	64	0	83	0	108	23	1	132	0	249
Hourly Total	73	75	0	148	0	65	240	0	305	0	397	117	9	523	0	976
5:00PM	17	21	0	38	0	14	66	0	80	0	101	22	0	123	0	241
5:15PM	19	24	0	43	0	20	67	0	87	0	121	31	0	152	0	282
5:30PM	21	17	0	38	3	19	60	0	79	0	96	31	0	127	0	244
5:45PM	15	15	0	30	6	22	60	0	82	1	117	26	1	144	2	256
Hourly Total	72	77	0	149	9	75	253	0	328	1	435	110	1	546	2	1023
Total	213	245	0	458	9	222	798	0	1020	1	1079	279	21	1379	3	2857
% Approach	46.5%	53.5%	0%	-	-	21.8%	78.2%	0%	-	-	78.2%	20.2%	1.5%	-	-	-
% Total	7.5%	8.6%	0%	16.0%	-	7.8%	27.9%	0%	35.7%	-	37.8%	9.8%	0.7%	48.3%	-	-
Lights	209	241	0	450	-	220	788	0	1008	-	1072	273	21	1366	-	2824
% Lights	98.1%	98.4%	0%	98.3%	-	99.1%	98.7%	0%	98.8%	-	99.4%	97.8%	100%	99.1%	-	98.8%
Articulated Trucks	0	0	0	0	-	0	1	0	1	-	1	0	0	1	-	2
% Articulated Trucks	0%	0%	0%	0%	-	0%	0.1%	0%	0.1%	-	0.1%	0%	0%	0.1%	-	0.1%
Buses and Single-Unit Trucks	3	4	0	7	-	2	9	0	11	-	4	6	0	10	-	28
% Buses and Single-Unit Trucks	1.4%	1.6%	0%	1.5%	-	0.9%	1.1%	0%	1.1%	-	0.4%	2.2%	0%	0.7%	-	1.0%
Bicycles on Road	1	0	0	1	-	0	0	0	0	-	2	0	0	2	-	3
% Bicycles on Road	0.5%	0%	0%	0.2%	-	0%	0%	0%	0%	-	0.2%	0%	0%	0.1%	-	0.1%
Pedestrians	-	-	-	-	9	-	-	-	-	1	-	-	-	-	3	-
% Pedestrians	-	-	-	-	100%	-	-	-	-	100%	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-
% Bicycles on Crosswalk	-	-	-	-	0%	-	-	-	-	0%	-	-	-	-	0%	-

* Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

4_Fort Hill Drive / Audrey Avenue - TMC

Tue Sep 23, 2025

Forced Peak (7:30 AM - 8:30 AM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 1335682, Location: 41.749589, -88.19626



Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg Direction	Audrey Ave Eastbound					Fort Hill Drive Northbound					Fort Hill Drive Southbound					
Time	L	R	U	App	Ped*	L	T	U	App	Ped*	T	R	U	App	Ped*	Int
2025-09-23 7:30AM	12	8	0	20	0	6	33	0	39	0	36	6	0	42	0	101
7:45AM	13	9	0	22	0	8	53	0	61	0	27	7	4	38	0	121
8:00AM	6	14	0	20	0	13	47	0	60	0	31	9	2	42	0	122
8:15AM	12	12	0	24	0	11	32	0	43	0	34	7	0	41	0	108
Total	43	43	0	86	0	38	165	0	203	0	128	29	6	163	0	452
% Approach	50.0%	50.0%	0%	-	-	18.7%	81.3%	0%	-	-	78.5%	17.8%	3.7%	-	-	-
% Total	9.5%	9.5%	0%	19.0%	-	8.4%	36.5%	0%	44.9%	-	28.3%	6.4%	1.3%	36.1%	-	-
PHF	0.827	0.768	-	0.896	-	0.731	0.778	-	0.832	-	0.882	0.806	0.375	0.964	-	0.932
Lights	41	42	0	83	-	38	162	0	200	-	125	27	6	158	-	441
% Lights	95.3%	97.7%	0%	96.5%	-	100%	98.2%	0%	98.5%	-	97.7%	93.1%	100%	96.9%	-	97.6%
Articulated Trucks	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0
% Articulated Trucks	0%	0%	0%	0%	-	0%	0%	0%	0%	-	0%	0%	0%	0%	-	0%
Buses and Single-Unit Trucks	2	1	0	3	-	0	3	0	3	-	2	2	0	4	-	10
% Buses and Single-Unit Trucks	4.7%	2.3%	0%	3.5%	-	0%	1.8%	0%	1.5%	-	1.6%	6.9%	0%	2.5%	-	2.2%
Bicycles on Road	0	0	0	0	-	0	0	0	0	-	1	0	0	1	-	1
% Bicycles on Road	0%	0%	0%	0%	-	0%	0%	0%	0%	-	0.8%	0%	0%	0.6%	-	0.2%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

* Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

4_Fort Hill Drive / Audrey Avenue - TMC

Tue Sep 23, 2025

Forced Peak (4:30 PM - 5:30 PM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 1335682, Location: 41.749589, -88.19626



Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg Direction	Audrey Ave Eastbound					Fort Hill Drive Northbound					Fort Hill Drive Southbound					
Time	L	R	U	App	Ped*	L	T	U	App	Ped*	T	R	U	App	Ped*	Int
2025-09-23 4:30PM	16	17	0	33	0	17	50	0	67	0	111	30	2	143	0	243
4:45PM	14	20	0	34	0	19	64	0	83	0	108	23	1	132	0	249
5:00PM	17	21	0	38	0	14	66	0	80	0	101	22	0	123	0	241
5:15PM	19	24	0	43	0	20	67	0	87	0	121	31	0	152	0	282
Total	66	82	0	148	0	70	247	0	317	0	441	106	3	550	0	1015
% Approach	44.6%	55.4%	0%	-	-	22.1%	77.9%	0%	-	-	80.2%	19.3%	0.5%	-	-	-
% Total	6.5%	8.1%	0%	14.6%	-	6.9%	24.3%	0%	31.2%	-	43.4%	10.4%	0.3%	54.2%	-	-
PHF	0.868	0.854	-	0.860	-	0.875	0.922	-	0.911	-	0.909	0.855	0.375	0.903	-	0.899
Lights	66	81	0	147	-	70	246	0	316	-	440	104	3	547	-	1010
% Lights	100%	98.8%	0%	99.3%	-	100%	99.6%	0%	99.7%	-	99.8%	98.1%	100%	99.5%	-	99.5%
Articulated Trucks	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0
% Articulated Trucks	0%	0%	0%	0%	-	0%	0%	0%	0%	-	0%	0%	0%	0%	-	0%
Buses and Single-Unit Trucks	0	1	0	1	-	0	1	0	1	-	0	2	0	2	-	4
% Buses and Single-Unit Trucks	0%	1.2%	0%	0.7%	-	0%	0.4%	0%	0.3%	-	0%	1.9%	0%	0.4%	-	0.4%
Bicycles on Road	0	0	0	0	-	0	0	0	0	-	1	0	0	1	-	1
% Bicycles on Road	0%	0%	0%	0%	-	0%	0%	0%	0%	-	0.2%	0%	0%	0.2%	-	0.1%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

* Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

EXISTING (2025) CAPACITY REPORTS

HCM 7th Signalized Intersection Summary
100: IL 59 & Aurora Market Place/Audrey Avenue

Existing (2025) Traffic Volumes

AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations								  		 	 	
Traffic Volume (veh/h)	60	30	30	30	15	70	15	2440	40	80	1360	25
Future Volume (veh/h)	60	30	30	30	15	70	15	2440	40	80	1360	25
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1891	1870	1870	1938	1826	1870	1841	1870
Adj Flow Rate, veh/h	63	32	32	32	16	74	16	2568	42	84	1432	26
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
Percent Heavy Veh, %	2	2	2	2	7	2	2	4	5	2	4	2
Cap, veh/h	199	64	64	158	117	98	19	3780	1106	129	3767	68
Arrive On Green	0.04	0.07	0.07	0.03	0.06	0.06	0.01	0.71	0.71	0.04	0.74	0.74
Sat Flow, veh/h	1781	858	858	1781	1891	1585	1781	5290	1547	3456	5082	92
Grp Volume(v), veh/h	63	0	64	32	16	74	16	2568	42	84	944	514
Grp Sat Flow(s),veh/h/ln	1781	0	1716	1781	1891	1585	1781	1763	1547	1728	1675	1824
Q Serve(g_s), s	4.6	0.0	5.0	2.3	1.1	6.4	1.3	37.7	1.1	3.4	14.2	14.2
Cycle Q Clear(g_c), s	4.6	0.0	5.0	2.3	1.1	6.4	1.3	37.7	1.1	3.4	14.2	14.2
Prop In Lane	1.00		0.50	1.00		1.00	1.00		1.00	1.00		0.05
Lane Grp Cap(c), veh/h	199	0	127	158	117	98	19	3780	1106	129	2483	1352
V/C Ratio(X)	0.32	0.00	0.50	0.20	0.14	0.75	0.83	0.68	0.04	0.65	0.38	0.38
Avail Cap(c_a), veh/h	268	0	233	249	257	215	146	3780	1106	284	2483	1352
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.9	0.0	62.3	58.7	62.1	64.6	69.1	11.1	5.9	66.5	6.5	6.5
Incr Delay (d2), s/veh	0.9	0.0	4.3	0.6	0.7	15.2	57.1	1.0	0.1	5.4	0.4	0.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.9	0.0	4.3	1.9	1.0	5.4	1.6	18.8	0.7	2.8	8.1	8.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	58.8	0.0	66.6	59.3	62.9	79.8	126.3	12.1	5.9	71.9	7.0	7.3
LnGrp LOS	E		E	E	E	E	F	B	A	E	A	A
Approach Vol, veh/h	127			122			2626			1542		
Approach Delay, s/veh	62.8			72.2			12.7			10.6		
Approach LOS	E			E			B			B		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.7	106.0	7.8	16.4	6.0	109.8	9.6	14.7				
Change Period (Y+Rc), s	4.5	6.0	3.5	6.0	4.5	6.0	3.5	6.0				
Max Green Setting (Gmax), s	11.5	78.0	11.5	19.0	11.5	78.0	11.5	19.0				
Max Q Clear Time (g_c+I1), s	5.4	39.7	4.3	7.0	3.3	16.2	6.6	8.4				
Green Ext Time (p_c), s	0.1	37.9	0.0	0.2	0.0	45.6	0.0	0.2				
Intersection Summary												
HCM 7th Control Delay, s/veh	15.1											
HCM 7th LOS	B											

HCM 7th Signalized Intersection Capacity Analysis
100: IL 59 & Aurora Market Place/Audrey Avenue

Existing (2025) Traffic Volumes

AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	30	30	30	15	70	15	2440	40	80	1360	25
Future Volume (veh/h)	60	30	30	30	15	70	15	2440	40	80	1360	25
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No				No				No			
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1891	1870	1870	1938	1826	1870	1841	1870
Adj Flow Rate, veh/h	63	32	32	32	16	74	16	2568	42	84	1432	26
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
Percent Heavy Veh, %	2	2	2	2	7	2	2	4	5	2	4	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	199	64	64	158	117	98	19	3780	1106	129	3767	68
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.04	0.07	0.07	0.03	0.06	0.06	0.01	0.71	0.71	0.04	0.74	0.74
Unsig. Movement Delay												
Ln Grp Delay, s/veh	58.8	0.0	66.6	59.3	62.9	79.8	126.3	12.1	5.9	71.9	7.0	7.3
Ln Grp LOS	E		E	E	E	E	F	B	A	E	A	A
Approach Vol, veh/h	127			122			2626			1542		
Approach Delay, s/veh	62.8			72.2			12.7			10.6		
Approach LOS	E			E			B			B		
Timer:	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Case No	2.0	3.0	1.1	4.0	2.0	4.0	1.1	3.0				
Phs Duration (G+Y+Rc), s	9.7	106.0	7.8	16.4	6.0	109.8	9.6	14.7				
Change Period (Y+Rc), s	4.5	6.0	3.5	6.0	4.5	6.0	3.5	6.0				
Max Green (Gmax), s	11.5	78.0	11.5	19.0	11.5	78.0	11.5	19.0				
Max Allow Headway (MAH), s	3.7	8.9	3.8	6.6	3.7	9.0	3.9	5.3				
Max Q Clear (g_c+I1), s	5.4	39.7	4.3	7.0	3.3	16.2	6.6	8.4				
Green Ext Time (g_e), s	0.1	37.9	0.0	0.2	0.0	45.6	0.0	0.2				
Prob of Phs Call (p_c)	0.96	1.00	1.00	1.00	0.46	1.00	0.91	1.00				
Prob of Max Out (p_x)	0.04	0.99	0.01	0.03	0.00	0.62	0.27	0.02				
Left-Turn Movement Data												
Assigned Mvmt	1		3		5		7					
Mvmt Sat Flow, veh/h	3456		1781		1781		1781					
Through Movement Data												
Assigned Mvmt	2			4			6			8		
Mvmt Sat Flow, veh/h	5290			858			5082			1891		
Right-Turn Movement Data												
Assigned Mvmt	12			14			16			18		
Mvmt Sat Flow, veh/h	1547			858			92			1585		
Left Lane Group Data												
Assigned Mvmt	1	0	3	0	5	0	7	0				

HCM 7th Signalized Intersection Capacity Analysis

100: IL 59 & Aurora Market Place/Audrey Avenue

Existing (2025) Traffic Volumes
AM Peak Hour

Lane Assignment	L (Prot)		L (Pr/Pm)		L (Prot)		L (Pr/Pm)	
Lanes in Grp	2	0	1	0	1	0	1	0
Grp Vol (v), veh/h	84	0	32	0	16	0	63	0
Grp Sat Flow (s), veh/h/ln	1728	0	1781	0	1781	0	1781	0
Q Serve Time (g_s), s	3.4	0.0	2.3	0.0	1.3	0.0	4.6	0.0
Cycle Q Clear Time (g_c), s	3.4	0.0	2.3	0.0	1.3	0.0	4.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	1338	0	0	0	1307	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	8.7	0.0	0.0	0.0	8.9	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	5.4	0.0	0.0	0.0	7.5	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	129	0	158	0	19	0	199	0
V/C Ratio (X)	0.65	0.00	0.20	0.00	0.83	0.00	0.32	0.00
Avail Cap (c_a), veh/h	284	0	249	0	146	0	268	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	66.5	0.0	58.7	0.0	69.1	0.0	57.9	0.0
Incr Delay (d2), s/veh	5.4	0.0	0.6	0.0	57.1	0.0	0.9	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	71.9	0.0	59.3	0.0	126.3	0.0	58.8	0.0
1st-Term Q (Q1), veh/ln	1.5	0.0	1.1	0.0	0.6	0.0	2.1	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	0.0	0.0	0.3	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	1.80	0.00	1.80	0.00	1.80	0.00
%ile Back of Q (95%), veh/ln	2.8	0.0	1.9	0.0	1.6	0.0	3.9	0.0
%ile Storage Ratio (RQ%)	0.29	0.00	0.43	0.00	0.15	0.00	0.36	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data

Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment	T		T		T		T	
Lanes in Grp	0	3	0	0	0	2	0	1
Grp Vol (v), veh/h	0	2568	0	0	0	944	0	16
Grp Sat Flow (s), veh/h/ln	0	1763	0	0	0	1675	0	1891
Q Serve Time (g_s), s	0.0	37.7	0.0	0.0	0.0	14.2	0.0	1.1
Cycle Q Clear Time (g_c), s	0.0	37.7	0.0	0.0	0.0	14.2	0.0	1.1
Lane Grp Cap (c), veh/h	0	3780	0	0	0	2483	0	117
V/C Ratio (X)	0.00	0.68	0.00	0.00	0.00	0.38	0.00	0.14
Avail Cap (c_a), veh/h	0	3780	0	0	0	2483	0	257
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	11.1	0.0	0.0	0.0	6.5	0.0	62.1
Incr Delay (d2), s/veh	0.0	1.0	0.0	0.0	0.0	0.4	0.0	0.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	12.1	0.0	0.0	0.0	7.0	0.0	62.9
1st-Term Q (Q1), veh/ln	0.0	12.5	0.0	0.0	0.0	4.4	0.0	0.5

HCM 7th Signalized Intersection Capacity Analysis

100: IL 59 & Aurora Market Place/Audrey Avenue

Existing (2025) Traffic Volumes
AM Peak Hour

2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	0.0	0.0	0.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.46	0.00	1.00	0.00	1.77	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	18.8	0.0	0.0	0.0	8.1	0.0	1.0
%ile Storage Ratio (RQ%)	0.00	0.95	0.00	0.00	0.00	0.58	0.00	0.06
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data

Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	42	0	64	0	514	0	74
Grp Sat Flow (s), veh/h/ln	0	1547	0	1716	0	1824	0	1585
Q Serve Time (g_s), s	0.0	1.1	0.0	5.0	0.0	14.2	0.0	6.4
Cycle Q Clear Time (g_c), s	0.0	1.1	0.0	5.0	0.0	14.2	0.0	6.4
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.50	0.00	0.05	0.00	1.00
Lane Grp Cap (c), veh/h	0	1106	0	127	0	1352	0	98
V/C Ratio (X)	0.00	0.04	0.00	0.50	0.00	0.38	0.00	0.75
Avail Cap (c_a), veh/h	0	1106	0	233	0	1352	0	215
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	5.9	0.0	62.3	0.0	6.5	0.0	64.6
Incr Delay (d2), s/veh	0.0	0.1	0.0	4.3	0.0	0.8	0.0	15.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	5.9	0.0	66.6	0.0	7.3	0.0	79.8
1st-Term Q (Q1), veh/ln	0.0	0.4	0.0	2.2	0.0	4.8	0.0	2.6
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.2	0.0	0.3	0.0	0.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.72	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	0.7	0.0	4.3	0.0	8.8	0.0	5.4
%ile Storage Ratio (RQ%)	0.00	0.11	0.00	0.40	0.00	0.63	0.00	1.20
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary

HCM 7th Control Delay, s/veh	15.1
HCM 7th LOS	B

HCM 7th TWSC
200: The Home Depot Driveway & Audrey Avenue

Existing (2025) Traffic Volumes
AM Peak Hour

Intersection						
Int Delay, s/veh	1.6					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	110	5	15	90	10	20
Future Vol, veh/h	110	5	15	90	10	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	80	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	3	2	2	2
Mvmt Flow	116	5	16	95	11	21
Major/Minor	Major1	Major2		Minor1		
Conflicting Flow All	0	0	121	0	245	118
Stage 1	-	-	-	-	118	-
Stage 2	-	-	-	-	126	-
Critical Hdwy	-	-	4.13	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.227	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1460	-	744	933
Stage 1	-	-	-	-	907	-
Stage 2	-	-	-	-	899	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1460	-	736	933
Mov Cap-2 Maneuver	-	-	-	-	736	-
Stage 1	-	-	-	-	907	-
Stage 2	-	-	-	-	890	-
Approach	EB	WB		NB		
HCM Control Delay, s/v	0	1.07		9.36		
HCM LOS	A					
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	857	-	-	1460	-	
HCM Lane V/C Ratio	0.037	-	-	0.011	-	
HCM Control Delay (s/veh)	9.4	-	-	7.5	-	
HCM Lane LOS	A	-	-	A	-	
HCM 95th %tile Q(veh)	0.1	-	-	0	-	

HCM 7th TWSC
300: DICKS Driveway & Audrey Avenue

Existing (2025) Traffic Volumes
AM Peak Hour

Intersection						
Int Delay, s/veh	0.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↶			↷		↶
Traffic Vol, veh/h	125	5	1	105	1	1
Future Vol, veh/h	125	5	1	105	1	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	132	5	1	111	1	1
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	137	0	247	134
Stage 1	-	-	-	-	134	-
Stage 2	-	-	-	-	113	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1447	-	742	915
Stage 1	-	-	-	-	892	-
Stage 2	-	-	-	-	912	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1447	-	741	915
Mov Cap-2 Maneuver	-	-	-	-	741	-
Stage 1	-	-	-	-	892	-
Stage 2	-	-	-	-	911	-
Approach	EB		WB		NB	
HCM Control Delay, s/v	0		0.07		9.41	
HCM LOS	A					
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	819	-	-	17	-	
HCM Lane V/C Ratio	0.003	-	-	0.001	-	
HCM Control Delay (s/veh)	9.4	-	-	7.5	0	
HCM Lane LOS	A	-	-	A	A	
HCM 95th %tile Q(veh)	0	-	-	0	-	

HCM 7th TWSC
400: Fort Hill Drive & Audrey Avenue

Existing (2025) Traffic Volumes
AM Peak Hour

Intersection						
Int Delay, s/veh	2.8					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	45	45	40	165	130	30
Future Vol, veh/h	45	45	40	165	130	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	47	47	42	174	137	32
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	324	84	168	0	-	0
Stage 1	153	-	-	-	-	-
Stage 2	171	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	645	958	1407	-	-	-
Stage 1	859	-	-	-	-	-
Stage 2	842	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	625	958	1407	-	-	-
Mov Cap-2 Maneuver	625	-	-	-	-	-
Stage 1	832	-	-	-	-	-
Stage 2	842	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s/v10.44		1.62		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	702	-	756	-	-	
HCM Lane V/C Ratio	0.03	-	0.125	-	-	
HCM Control Delay (s/veh)	7.6	0.2	10.4	-	-	
HCM Lane LOS	A	A	B	-	-	
HCM 95th %tile Q(veh)	0.1	-	0.4	-	-	

HCM 7th Signalized Intersection Summary

100: IL 59 & Aurora Market Place/Audrey Avenue

Existing (2025) Traffic Volumes
PM Peak Hour

																			
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT							
Lane Configurations																			
Traffic Volume (veh/h)	60	60	95	60	40	175	35	2015	55	5	165	2710							
Future Volume (veh/h)	60	60	95	60	40	175	35	2015	55	5	165	2710							
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0		0	0							
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00							
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00		1.00								
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00							
Work Zone On Approach	No			No			No				No								
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1969	1870	1870	1969	1870		1870	1870							
Adj Flow Rate, veh/h	63	63	100	63	42	184	37	2121	58		174	2853							
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							
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2		2	2							
Cap, veh/h	224	75	119	140	230	185	48	3600	1062		214	3632							
Arrive On Green	0.04	0.11	0.11	0.04	0.12	0.12	0.03	0.67	0.67		0.06	0.70							
Sat Flow, veh/h	1781	651	1033	1781	1969	1585	1781	5375	1585		3456	5152							
Grp Volume(v), veh/h	63	0	163	63	42	184	37	2121	58		174	1879							
Grp Sat Flow(s),veh/h/ln	1781	0	1684	1781	1969	1585	1781	1792	1585		1728	1702							
Q Serve(g_s), s	5.6	0.0	17.1	5.6	3.5	20.9	3.7	38.7	2.3		9.0	65.4							
Cycle Q Clear(g_c), s	5.6	0.0	17.1	5.6	3.5	20.9	3.7	38.7	2.3		9.0	65.4							
Prop In Lane	1.00		0.61	1.00		1.00	1.00		1.00		1.00								
Lane Grp Cap(c), veh/h	224	0	194	140	230	185	48	3600	1062		214	2400							
V/C Ratio(X)	0.28	0.00	0.84	0.45	0.18	1.00	0.77	0.59	0.05		0.81	0.78							
Avail Cap(c_a), veh/h	256	0	197	168	230	185	114	3600	1062		298	2400							
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00							
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00							
Uniform Delay (d), s/veh	66.6	0.0	78.1	67.1	71.8	79.4	87.0	16.2	10.2		83.4	17.5							
Incr Delay (d2), s/veh	0.7	0.0	27.4	2.3	0.5	64.7	22.7	0.7	0.1		11.2	2.6							
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0							
%ile BackOfQ(95%),veh/ln	4.7	0.0	13.9	4.8	3.2	17.6	3.6	21.8	1.5		7.7	33.0							
Unsig. Movement Delay, s/veh																			
LnGrp Delay(d), s/veh	67.3	0.0	105.4	69.4	72.3	144.1	109.8	16.9	10.3		94.6	20.1							
LnGrp LOS	E		F	E	E	F	F	B	B		F	C							
Approach Vol, veh/h	226			289			2216			3085									
Approach Delay, s/veh	94.8			117.4			18.3			25.2									
Approach LOS	F			F			B			C									
Timer - Assigned Phs	1	2	3	4	5	6	7	8											
Phs Duration (G+Y+Rc), s	15.7	126.6	11.1	26.7	9.3	132.9	10.8	27.0											
Change Period (Y+Rc), s	4.5	6.0	3.5	6.0	4.5	6.0	3.5	6.0											
Max Green Setting (Gmax), s	15.5	113.0	10.5	21.0	11.5	117.0	10.5	21.0											
Max Q Clear Time (g_c+I1), s	11.0	40.7	7.6	19.1	5.7	68.9	7.6	22.9											
Green Ext Time (p_c), s	0.2	67.8	0.0	0.2	0.0	47.9	0.0	0.0											
Intersection Summary																			
HCM 7th Control Delay, s/veh	29.8																		
HCM 7th LOS	C																		
Notes																			
User approved ignoring U-Turning movement.																			

HCM 7th Signalized Intersection Summary
 100: IL 59 & Aurora Market Place/Audrey Avenue

Existing (2025) Traffic Volumes
 PM Peak Hour

Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	55
Future Volume (veh/h)	55
Initial Q (Qb), veh	0
Lane Width Adj.	1.00
Ped-Bike Adj(A_pbT)	1.00
Parking Bus, Adj	1.00
Work Zone On Approach	
Adj Sat Flow, veh/h/ln	1870
Adj Flow Rate, veh/h	58
Peak Hour Factor	0.95
Percent Heavy Veh, %	2
Cap, veh/h	73
Arrive On Green	0.70
Sat Flow, veh/h	104
Grp Volume(v), veh/h	1032
Grp Sat Flow(s),veh/h/ln	1852
Q Serve(g_s), s	66.9
Cycle Q Clear(g_c), s	66.9
Prop In Lane	0.06
Lane Grp Cap(c), veh/h	1305
V/C Ratio(X)	0.79
Avail Cap(c_a), veh/h	1305
HCM Platoon Ratio	1.00
Upstream Filter(l)	1.00
Uniform Delay (d), s/veh	17.7
Incr Delay (d2), s/veh	5.0
Initial Q Delay(d3), s/veh	0.0
%ile BackOfQ(95%),veh/ln	37.2
Unsig. Movement Delay, s/veh	
LnGrp Delay(d), s/veh	22.7
LnGrp LOS	C
Approach Vol, veh/h	
Approach Delay, s/veh	
Approach LOS	
Timer - Assigned Phs	

HCM 7th Signalized Intersection Capacity Analysis

100: IL 59 & Aurora Market Place/Audrey Avenue

Existing (2025) Traffic Volumes

PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	60	60	95	60	40	175	35	2015	55	5	165	2710
Future Volume (veh/h)	60	60	95	60	40	175	35	2015	55	5	165	2710
Number	7	4	14	3	8	18	5	2	12		1	6
Initial Q, veh	0	0	0	0	0	0	0	0	0		0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00		1.00	
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00
Work Zone On Approach		No			No			No				No
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1969	1870	1870	1969	1870		1870	1870
Adj Flow Rate, veh/h	63	63	100	63	42	184	37	2121	58		174	2853
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2		2	2
Opposing Right Turn Influence	Yes			Yes			Yes				Yes	
Cap, veh/h	224	75	119	140	230	185	48	3600	1062		214	3632
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00
Prop Arrive On Green	0.04	0.11	0.11	0.04	0.12	0.12	0.03	0.67	0.67		0.06	0.70
Unsig. Movement Delay												
Ln Grp Delay, s/veh	67.3	0.0	105.4	69.4	72.3	144.1	109.8	16.9	10.3		94.6	20.1
Ln Grp LOS	E		F	E	E	F	F	B	B		F	C
Approach Vol, veh/h		226			289			2216				3085
Approach Delay, s/veh		94.8			117.4			18.3				25.2
Approach LOS		F			F			B				C
Timer:		1	2	3	4	5	6	7	8			
Assigned Phs		1	2	3	4	5	6	7	8			
Case No		2.0	3.0	1.1	4.0	2.0	4.0	1.1	3.0			
Phs Duration (G+Y+Rc), s		15.7	126.6	11.1	26.7	9.3	132.9	10.8	27.0			
Change Period (Y+Rc), s		4.5	6.0	3.5	6.0	4.5	6.0	3.5	6.0			
Max Green (Gmax), s		15.5	113.0	10.5	21.0	11.5	117.0	10.5	21.0			
Max Allow Headway (MAH), s		3.7	8.9	3.8	6.6	3.7	9.0	3.9	5.3			
Max Q Clear (g_c+I1), s		11.0	40.7	7.6	19.1	5.7	68.9	7.6	22.9			
Green Ext Time (g_e), s		0.2	67.8	0.0	0.2	0.0	47.9	0.0	0.0			
Prob of Phs Call (p_c)		1.00	1.00	1.00	1.00	0.84	1.00	0.96	1.00			
Prob of Max Out (p_x)		0.46	0.90	1.00	1.00	0.04	1.00	1.00	1.00			
Left-Turn Movement Data												
Assigned Mvmt		1		3		5		7				
Mvmt Sat Flow, veh/h		3456		1781		1781		1781				
Through Movement Data												
Assigned Mvmt			2		4		6		8			
Mvmt Sat Flow, veh/h			5375		651		5152		1969			
Right-Turn Movement Data												
Assigned Mvmt			12		14		16		18			
Mvmt Sat Flow, veh/h			1585		1033		104		1585			
Left Lane Group Data												
Assigned Mvmt		1	0	3	0	5	0	7	0			

HCM 7th Signalized Intersection Capacity Analysis
100: IL 59 & Aurora Market Place/Audrey Avenue

Existing (2025) Traffic Volumes
PM Peak Hour

Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	55
Future Volume (veh/h)	55
Number	16
Initial Q, veh	0
Lane Width Adj.	1.00
Ped-Bike Adj (A_pbT)	1.00
Parking Bus Adj	1.00
Work Zone On Approach	
Lanes Open During Work Zone	
Adj Sat Flow, veh/h/ln	1870
Adj Flow Rate, veh/h	58
Peak Hour Factor	0.95
Percent Heavy Veh, %	2
Opposing Right Turn Influence	
Cap, veh/h	73
HCM Platoon Ratio	1.00
Prop Arrive On Green	0.70
Unsig. Movement Delay	
Ln Grp Delay, s/veh	22.7
Ln Grp LOS	C
Approach Vol, veh/h	
Approach Delay, s/veh	
Approach LOS	
Timer:	

HCM 7th Signalized Intersection Capacity Analysis

100: IL 59 & Aurora Market Place/Audrey Avenue

Existing (2025) Traffic Volumes
PM Peak Hour

Lane Assignment	L (Prot)		L (Pr/Pm)		L (Prot)		L (Pr/Pm)	
Lanes in Grp	2	0	1	0	1	0	1	0
Grp Vol (v), veh/h	174	0	63	0	37	0	63	0
Grp Sat Flow (s), veh/h/ln	1728	0	1781	0	1781	0	1781	0
Q Serve Time (g_s), s	9.0	0.0	5.6	0.0	3.7	0.0	5.6	0.0
Cycle Q Clear Time (g_c), s	9.0	0.0	5.6	0.0	3.7	0.0	5.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	1223	0	0	0	1155	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	20.7	0.0	0.0	0.0	20.7	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	3.6	0.0	0.0	0.0	17.5	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.9	0.0	0.0	0.0	0.2	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	214	0	140	0	48	0	224	0
V/C Ratio (X)	0.81	0.00	0.45	0.00	0.77	0.00	0.28	0.00
Avail Cap (c_a), veh/h	298	0	168	0	114	0	256	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	83.4	0.0	67.1	0.0	87.0	0.0	66.6	0.0
Incr Delay (d2), s/veh	11.2	0.0	2.3	0.0	22.7	0.0	0.7	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	94.6	0.0	69.4	0.0	109.8	0.0	67.3	0.0
1st-Term Q (Q1), veh/ln	4.0	0.0	2.6	0.0	1.7	0.0	2.6	0.0
2nd-Term Q (Q2), veh/ln	0.3	0.0	0.1	0.0	0.3	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.79	0.00	1.80	0.00	1.80	0.00	1.80	0.00
%ile Back of Q (95%), veh/ln	7.7	0.0	4.8	0.0	3.6	0.0	4.7	0.0
%ile Storage Ratio (RQ%)	0.79	0.00	1.05	0.00	0.34	0.00	0.44	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data

Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment	T		T		T		T	
Lanes in Grp	0	3	0	0	0	2	0	1
Grp Vol (v), veh/h	0	2121	0	0	0	1879	0	42
Grp Sat Flow (s), veh/h/ln	0	1792	0	0	0	1702	0	1969
Q Serve Time (g_s), s	0.0	38.7	0.0	0.0	0.0	65.4	0.0	3.5
Cycle Q Clear Time (g_c), s	0.0	38.7	0.0	0.0	0.0	65.4	0.0	3.5
Lane Grp Cap (c), veh/h	0	3600	0	0	0	2400	0	230
V/C Ratio (X)	0.00	0.59	0.00	0.00	0.00	0.78	0.00	0.18
Avail Cap (c_a), veh/h	0	3600	0	0	0	2400	0	230
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	16.2	0.0	0.0	0.0	17.5	0.0	71.8
Incr Delay (d2), s/veh	0.0	0.7	0.0	0.0	0.0	2.6	0.0	0.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	16.9	0.0	0.0	0.0	20.1	0.0	72.3
1st-Term Q (Q1), veh/ln	0.0	15.1	0.0	0.0	0.0	24.0	0.0	1.8

HCM 7th Signalized Intersection Capacity Analysis

100: IL 59 & Aurora Market Place/Audrey Avenue

Existing (2025) Traffic Volumes
PM Peak Hour

2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.0	0.0	0.9	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.42	0.00	1.00	0.00	1.33	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	21.8	0.0	0.0	0.0	33.0	0.0	3.2
%ile Storage Ratio (RQ%)	0.00	1.09	0.00	0.00	0.00	2.32	0.00	0.17
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data

Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	58	0	163	0	1032	0	184
Grp Sat Flow (s), veh/h/ln	0	1585	0	1684	0	1852	0	1585
Q Serve Time (g_s), s	0.0	2.3	0.0	17.1	0.0	66.9	0.0	20.9
Cycle Q Clear Time (g_c), s	0.0	2.3	0.0	17.1	0.0	66.9	0.0	20.9
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.61	0.00	0.06	0.00	1.00
Lane Grp Cap (c), veh/h	0	1062	0	194	0	1305	0	185
V/C Ratio (X)	0.00	0.05	0.00	0.84	0.00	0.79	0.00	1.00
Avail Cap (c_a), veh/h	0	1062	0	197	0	1305	0	185
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	10.2	0.0	78.1	0.0	17.7	0.0	79.4
Incr Delay (d2), s/veh	0.0	0.1	0.0	27.4	0.0	5.0	0.0	64.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	10.3	0.0	105.4	0.0	22.7	0.0	144.1
1st-Term Q (Q1), veh/ln	0.0	0.8	0.0	7.5	0.0	26.6	0.0	8.6
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	1.5	0.0	1.8	0.0	3.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.55	0.00	1.31	0.00	1.48
%ile Back of Q (95%), veh/ln	0.0	1.5	0.0	13.9	0.0	37.2	0.0	17.6
%ile Storage Ratio (RQ%)	0.00	0.23	0.00	1.30	0.00	2.61	0.00	3.88
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary

HCM 7th Control Delay, s/veh	29.8
HCM 7th LOS	C

Notes

User approved ignoring U-Turning movement.

HCM 7th TWSC
200: The Home Depot Driveway & Audrey Avenue

Existing (2025) Traffic Volumes
PM Peak Hour

Intersection						
Int Delay, s/veh	1.7					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	265	10	40	210	30	25
Future Vol, veh/h	265	10	40	210	30	25
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	80	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	279	11	42	221	32	26
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	289	0	589	284
Stage 1	-	-	-	-	284	-
Stage 2	-	-	-	-	305	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1272	-	471	755
Stage 1	-	-	-	-	764	-
Stage 2	-	-	-	-	747	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1272	-	455	755
Mov Cap-2 Maneuver	-	-	-	-	455	-
Stage 1	-	-	-	-	764	-
Stage 2	-	-	-	-	723	-
Approach	EB		WB		NB	
HCM Control Delay, s/v	0		1.27		12.24	
HCM LOS	B					
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	555	-	-	1272	-	
HCM Lane V/C Ratio	0.104	-	-	0.033	-	
HCM Control Delay (s/veh)	12.2	-	-	7.9	-	
HCM Lane LOS	B	-	-	A	-	
HCM 95th %tile Q(veh)	0.3	-	-	0.1	-	

HCM 7th TWSC
300: DICKS Driveway & Audrey Avenue

Existing (2025) Traffic Volumes
PM Peak Hour

Intersection						
Int Delay, s/veh	0.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	280	5	1	245	1	1
Future Vol, veh/h	280	5	1	245	1	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	33	2	2	2	2
Mvmt Flow	295	5	1	258	1	1

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	300
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	4.12
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	2.218
Pot Cap-1 Maneuver	-	-	1261
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	1261
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.03	11.12
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	591	-	-	7	-
HCM Lane V/C Ratio	0.004	-	-	0.001	-
HCM Control Delay (s/veh)	11.1	-	-	7.9	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

HCM 7th TWSC
400: Fort Hill Drive & Audrey Avenue

Existing (2025) Traffic Volumes
PM Peak Hour

Intersection						
Int Delay, s/veh	3.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W			↑↑	↑↑	
Traffic Vol, veh/h	65	80	70	245	440	105
Future Vol, veh/h	65	80	70	245	440	105
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	68	84	74	258	463	111

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	795	287	574	0	-	0
Stage 1	518	-	-	-	-	-
Stage 2	276	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	325	710	995	-	-	-
Stage 1	562	-	-	-	-	-
Stage 2	745	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	299	710	995	-	-	-
Mov Cap-2 Maneuver	299	-	-	-	-	-
Stage 1	517	-	-	-	-	-
Stage 2	745	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	17.49	2.33	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	800	-	439	-	-
HCM Lane V/C Ratio	0.074	-	0.347	-	-
HCM Control Delay (s/veh)	8.9	0.5	17.5	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0.2	-	1.5	-	-

DATA FROM ITE TRIP GENERATION MANUAL, 12TH EDITION

Land Use: 221

Multifamily Housing (Mid-Rise)

Description

Mid-rise multifamily housing is a residential building with between four and 10 floors of residence. Access to individual dwelling units is through an outside building entrance, a lobby, elevator, and a set of hallways.

Land Use Subcategory

Data are presented for two subcategories for this land use: (1) not close to rail transit and (2) close to rail transit. A site is considered close to rail transit if the walking distance between the residential site entrance and the closest rail transit station entrance is ½ mile or less.

Additional Data

For the six sites for which both the number of residents and the number of occupied dwelling units were available, there was an average of 2.5 residents per occupied dwelling unit.

For the five sites for which the numbers of both total dwelling units and occupied dwelling units were available, an average of 96 percent of the total dwelling units were occupied.

It is expected that the number of bedrooms and number of residents are likely correlated to the trips generated by a residential site. To assist in future analysis, trip generation studies of all multifamily housing should attempt to obtain information on occupancy rate and on the mix of residential unit sizes (i.e., number of units by number of bedrooms at the site complex).

The sites were surveyed in the 2000s, the 2010s, and the 2020s in Alberta (CAN), California, District of Columbia, Florida, Georgia, Massachusetts, Minnesota, Montana, New Jersey, New York, Ontario (CAN), Oregon, and Virginia.

Source Numbers

818, 857, 862, 866, 901, 904, 910, 949, 951, 963, 964, 966, 967, 969, 970, 1004, 1014, 1022, 1023, 1025, 1031, 1032, 1035, 1047, 1057, 1058, 1071, 1076, 1219, 1292

Multifamily Housing (Mid-Rise) Not Close to Rail Transit (221)

Vehicle Trip Ends vs: Dwelling Units

On a: Weekday

Setting/Location: General Urban/Suburban

Number of Studies: 7

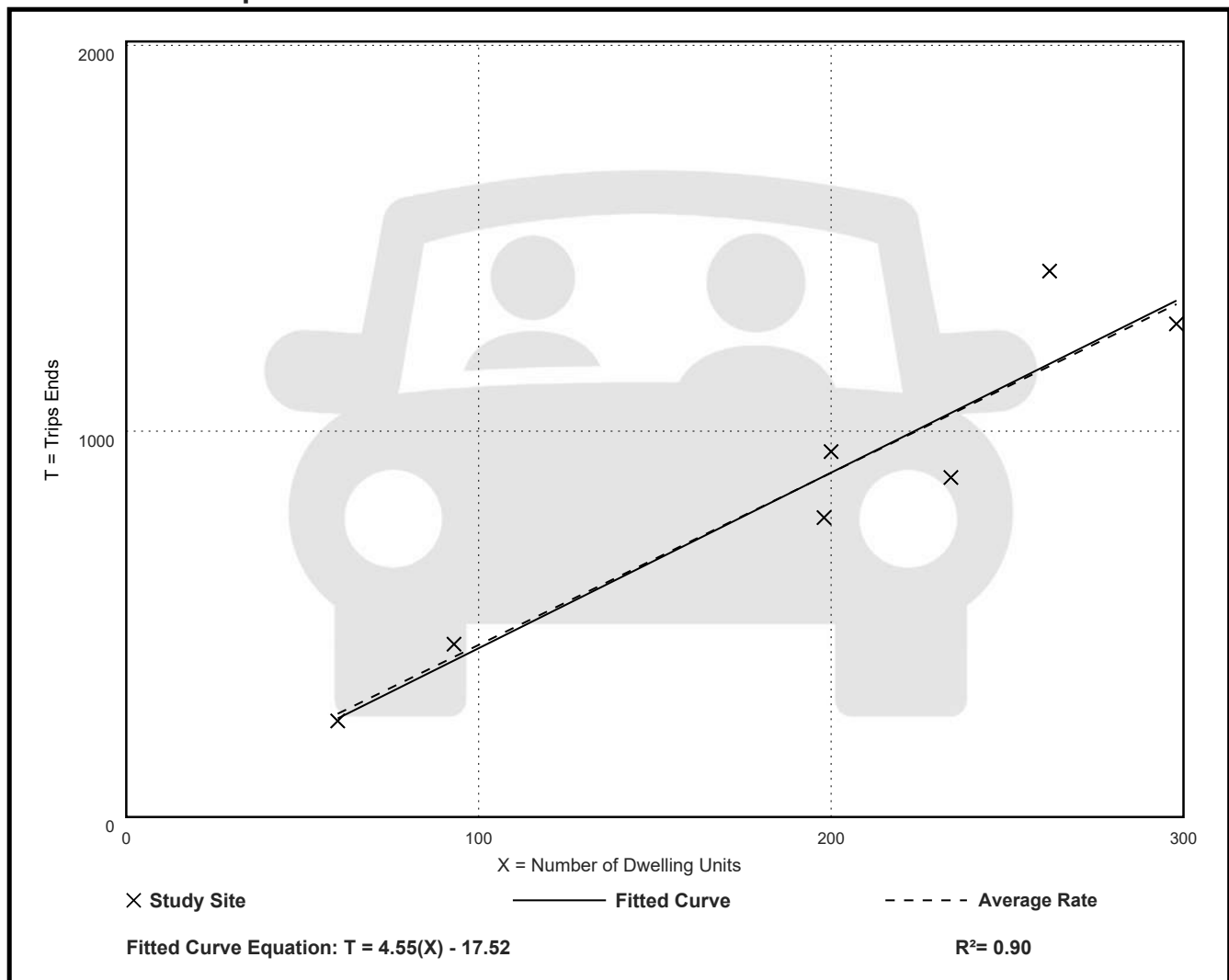
Avg. Num. of Dwelling Units: 192

Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
4.46	3.76 - 5.40	0.62

Data Plot and Equation



Multifamily Housing (Mid-Rise) Not Close to Rail Transit (221)

Vehicle Trip Ends vs: Dwelling Units

On a: Weekday,

Peak Hour of Adjacent Street Traffic,

One Hour Between 7 and 9 a.m.

Setting/Location: General Urban/Suburban

Number of Studies: 20

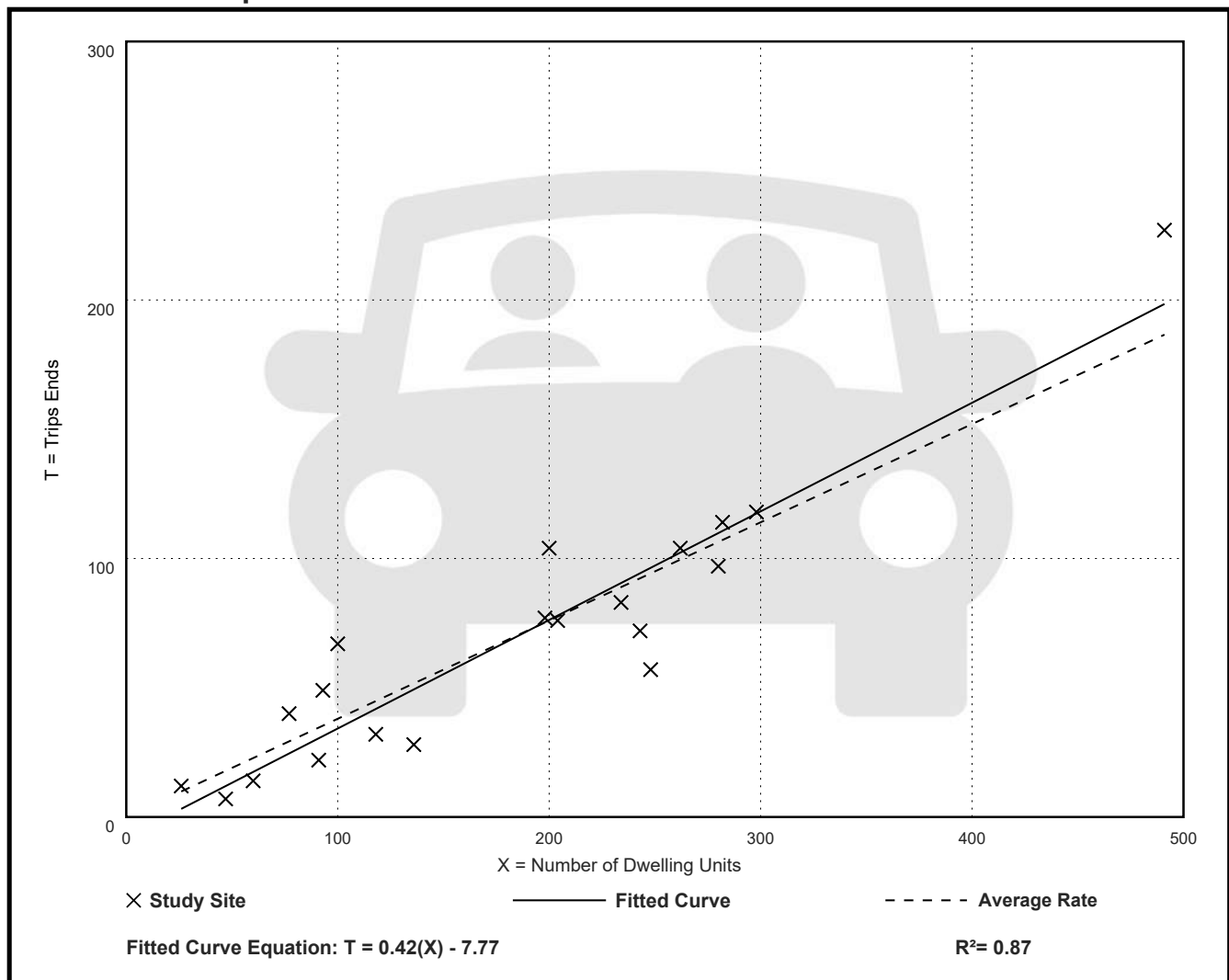
Avg. Num. of Dwelling Units: 184

Directional Distribution: 23% entering, 77% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.38	0.15 - 0.67	0.10

Data Plot and Equation



Multifamily Housing (Mid-Rise) Not Close to Rail Transit (221)

Vehicle Trip Ends vs: Dwelling Units

On a: Weekday,

Peak Hour of Adjacent Street Traffic,

One Hour Between 4 and 6 p.m.

Setting/Location: General Urban/Suburban

Number of Studies: 21

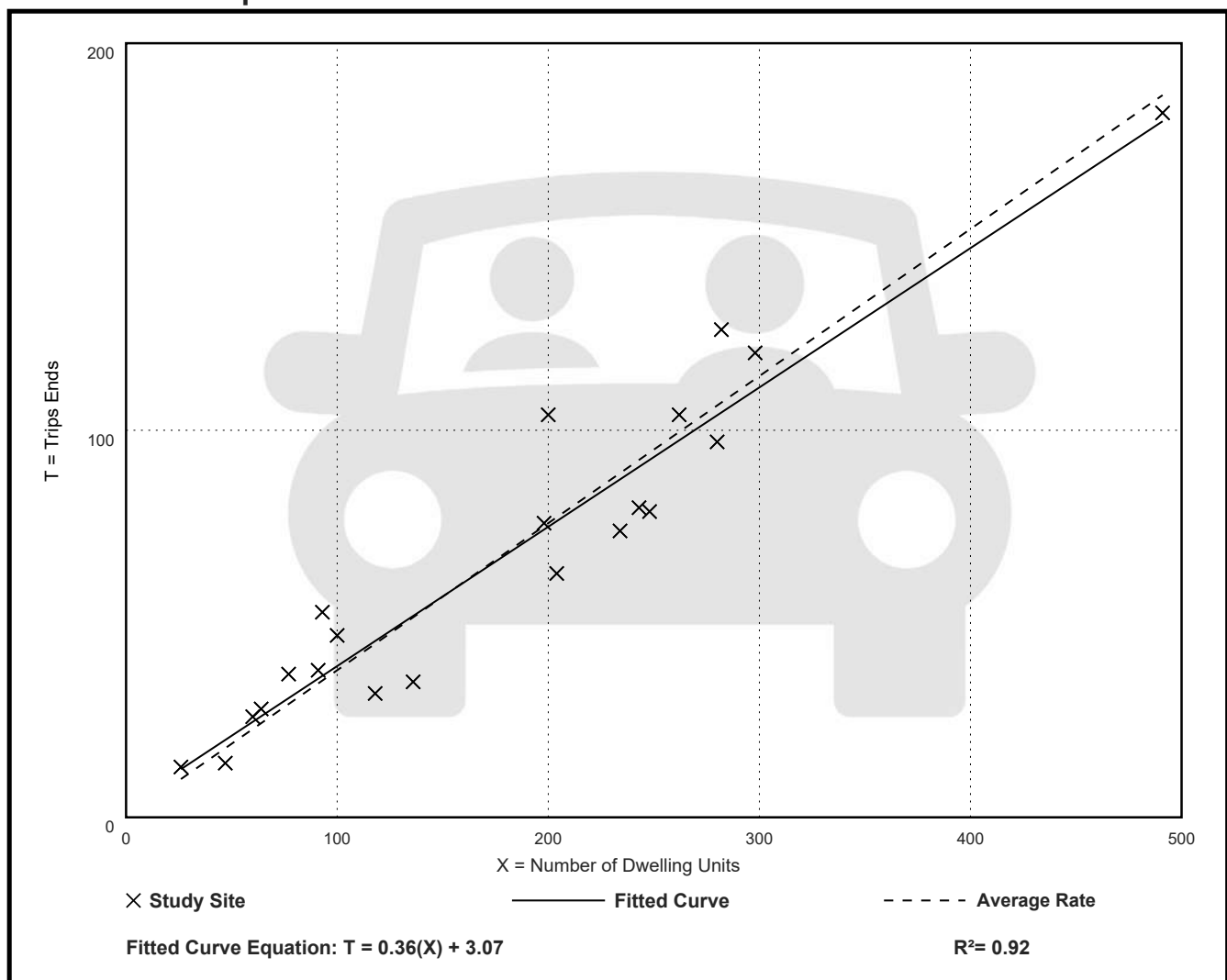
Avg. Num. of Dwelling Units: 179

Directional Distribution: 64% entering, 36% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.38	0.26 - 0.57	0.07

Data Plot and Equation



CMAP YEAR 2050 TRAFFIC PROJECTIONS



September 23, 2025

Alainie Sawtelle E.I
Kimley-Horn
4201 Winfield Road
Suite 600
Warrenville, IL 60555

Subject: IL 59 - Ogden Avenue - 75th Street
IDOT

Dear Ms. Sawtelle:

In response to a request made on your behalf and dated September 23, 2025, we have developed year 2050 average daily traffic (ADT) projections for the subject location.

ROAD SEGMENT	Current ADT	Existing Street Network 2050 ADT	Build Thru- Commons Drive 2050 ADT
IL 59 between Ogden Ave and 75th Street	55,500	59,800	58,200
IL 59 north of Ogden Ave	52,200	56,800	53,800
IL 59 south of 75th St	55,500	60,700	62,100
75th St from IL 59 west to Commons Dr	20,500	25,700	24,600
75th St east of IL 59	32,800	36,300	38,200
Ogden Ave from IL 59 west to Commons Dr	24,900	30,400	29,400
Ogden Ave east of IL 59	24,500	30,100	30,500

Traffic projections are developed using existing ADT data provided in the request letter and the results from the June 2025 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 or email me at jrodriguez@cmap.illinois.gov

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

TRAFFIC FORECAST RECORD

Record Number: du-50-25

Type of Report: Projection

Year Sought: 2050

Analyst: JAr

Organization Requestion Forecast: Kimley-Horn

Contact: Alainie Sawtelle

Email or Phone: alainie.sawtelle@kimley-horn.com

Sponsor: IDOT

Date request was received: 9/23/2025

Date that response was emailed: 9/23/2025

Facility Location: IL 59 - Ogden Avenue - 75th Street

Municipality: Naperville

NO-BUILD (2033) CAPACITY REPORTS

HCM 7th Signalized Intersection Summary

100: IL 59 & Aurora Market Place/Audrey Avenue

No-Build (2033) Traffic Volumes

AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	65	30	30	30	15	75	15	2600	45	85	1450	25
Future Volume (veh/h)	65	30	30	30	15	75	15	2600	45	85	1450	25
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1891	1870	1870	1938	1826	1870	1841	1870
Adj Flow Rate, veh/h	68	32	32	32	16	79	16	2737	47	89	1526	26
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
Percent Heavy Veh, %	2	2	2	2	7	2	2	4	5	2	4	2
Cap, veh/h	208	69	69	166	123	103	19	3739	1094	135	3740	64
Arrive On Green	0.05	0.08	0.08	0.03	0.07	0.07	0.01	0.71	0.71	0.04	0.74	0.74
Sat Flow, veh/h	1781	858	858	1781	1891	1585	1781	5290	1547	3456	5089	87
Grp Volume(v), veh/h	68	0	64	32	16	79	16	2737	47	89	1005	547
Grp Sat Flow(s),veh/h/ln	1781	0	1716	1781	1891	1585	1781	1763	1547	1728	1675	1825
Q Serve(g_s), s	4.9	0.0	5.0	2.3	1.1	6.9	1.3	44.0	1.3	3.6	15.9	15.9
Cycle Q Clear(g_c), s	4.9	0.0	5.0	2.3	1.1	6.9	1.3	44.0	1.3	3.6	15.9	15.9
Prop In Lane	1.00		0.50	1.00		1.00	1.00		1.00	1.00		0.05
Lane Grp Cap(c), veh/h	208	0	138	166	123	103	19	3739	1094	135	2463	1342
V/C Ratio(X)	0.33	0.00	0.46	0.19	0.13	0.77	0.83	0.73	0.04	0.66	0.41	0.41
Avail Cap(c_a), veh/h	272	0	233	258	257	215	146	3739	1094	284	2463	1342
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.9	0.0	61.5	58.3	61.7	64.4	69.1	12.5	6.2	66.3	7.0	7.0
Incr Delay (d2), s/veh	0.9	0.0	3.4	0.6	0.7	15.3	57.1	1.3	0.1	5.4	0.5	0.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.1	0.0	4.2	1.9	1.0	5.8	1.6	21.7	0.8	3.0	8.9	9.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	57.8	0.0	64.9	58.8	62.4	79.7	126.3	13.8	6.3	71.7	7.5	7.9
LnGrp LOS	E		E	E	E	E	F	B	A	E	A	A
Approach Vol, veh/h	132				127		2800				1641	
Approach Delay, s/veh	61.3				72.3		14.3				11.1	
Approach LOS	E				E		B				B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.0	104.9	7.8	17.2	6.0	108.9	10.0	15.1				
Change Period (Y+Rc), s	4.5	6.0	3.5	6.0	4.5	6.0	3.5	6.0				
Max Green Setting (Gmax), s	11.5	78.0	11.5	19.0	11.5	78.0	11.5	19.0				
Max Q Clear Time (g_c+I1), s	5.6	46.0	4.3	7.0	3.3	17.9	6.9	8.9				
Green Ext Time (p_c), s	0.1	31.8	0.0	0.2	0.0	47.3	0.0	0.3				
Intersection Summary												
HCM 7th Control Delay, s/veh	16.1											
HCM 7th LOS	B											

HCM 7th Signalized Intersection Capacity Analysis

100: IL 59 & Aurora Market Place/Audrey Avenue

No-Build (2033) Traffic Volumes
AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	65	30	30	30	15	75	15	2600	45	85	1450	25
Future Volume (veh/h)	65	30	30	30	15	75	15	2600	45	85	1450	25
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1891	1870	1870	1938	1826	1870	1841	1870
Adj Flow Rate, veh/h	68	32	32	32	16	79	16	2737	47	89	1526	26
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
Percent Heavy Veh, %	2	2	2	2	7	2	2	4	5	2	4	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	208	69	69	166	123	103	19	3739	1094	135	3740	64
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.05	0.08	0.08	0.03	0.07	0.07	0.01	0.71	0.71	0.04	0.74	0.74
Unsig. Movement Delay												
Ln Grp Delay, s/veh	57.8	0.0	64.9	58.8	62.4	79.7	126.3	13.8	6.3	71.7	7.5	7.9
Ln Grp LOS	E		E	E	E	E	F	B	A	E	A	A
Approach Vol, veh/h	132			127			2800			1641		
Approach Delay, s/veh	61.3			72.3			14.3			11.1		
Approach LOS	E			E			B			B		
Timer:	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Case No	2.0	3.0	1.1	4.0	2.0	4.0	1.1	3.0				
Phs Duration (G+Y+Rc), s	10.0	104.9	7.8	17.2	6.0	108.9	10.0	15.1				
Change Period (Y+Rc), s	4.5	6.0	3.5	6.0	4.5	6.0	3.5	6.0				
Max Green (Gmax), s	11.5	78.0	11.5	19.0	11.5	78.0	11.5	19.0				
Max Allow Headway (MAH), s	3.7	8.9	3.8	6.6	3.7	9.0	3.9	5.3				
Max Q Clear (g_c+I1), s	5.6	46.0	4.3	7.0	3.3	17.9	6.9	8.9				
Green Ext Time (g_e), s	0.1	31.8	0.0	0.2	0.0	47.3	0.0	0.3				
Prob of Phs Call (p_c)	0.97	1.00	1.00	1.00	0.46	1.00	0.93	1.00				
Prob of Max Out (p_x)	0.06	0.99	0.01	0.03	0.00	0.70	0.41	0.03				
Left-Turn Movement Data												
Assigned Mvmt	1		3		5		7					
Mvmt Sat Flow, veh/h	3456		1781		1781		1781					
Through Movement Data												
Assigned Mvmt		2		4		6		8				
Mvmt Sat Flow, veh/h		5290		858		5089		1891				
Right-Turn Movement Data												
Assigned Mvmt		12		14		16		18				
Mvmt Sat Flow, veh/h		1547		858		87		1585				
Left Lane Group Data												
Assigned Mvmt	1	0	3	0	5	0	7	0				

HCM 7th Signalized Intersection Capacity Analysis

100: IL 59 & Aurora Market Place/Audrey Avenue

No-Build (2033) Traffic Volumes
AM Peak Hour

Lane Assignment	L (Prot)		L (Pr/Pm)		L (Prot)		L (Pr/Pm)	
Lanes in Grp	2	0	1	0	1	0	1	0
Grp Vol (v), veh/h	89	0	32	0	16	0	68	0
Grp Sat Flow (s), veh/h/ln	1728	0	1781	0	1781	0	1781	0
Q Serve Time (g_s), s	3.6	0.0	2.3	0.0	1.3	0.0	4.9	0.0
Cycle Q Clear Time (g_c), s	3.6	0.0	2.3	0.0	1.3	0.0	4.9	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	1338	0	0	0	1301	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	9.1	0.0	0.0	0.0	9.7	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	6.3	0.0	0.0	0.0	8.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	135	0	166	0	19	0	208	0
V/C Ratio (X)	0.66	0.00	0.19	0.00	0.83	0.00	0.33	0.00
Avail Cap (c_a), veh/h	284	0	258	0	146	0	272	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	66.3	0.0	58.3	0.0	69.1	0.0	56.9	0.0
Incr Delay (d2), s/veh	5.4	0.0	0.6	0.0	57.1	0.0	0.9	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	71.7	0.0	58.8	0.0	126.3	0.0	57.8	0.0
1st-Term Q (Q1), veh/ln	1.6	0.0	1.0	0.0	0.6	0.0	2.2	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	0.0	0.0	0.3	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	1.80	0.00	1.80	0.00	1.80	0.00
%ile Back of Q (95%), veh/ln	3.0	0.0	1.9	0.0	1.6	0.0	4.1	0.0
%ile Storage Ratio (RQ%)	0.30	0.00	0.43	0.00	0.15	0.00	0.39	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data

Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment	T		T		T		T	
Lanes in Grp	0	3	0	0	0	2	0	1
Grp Vol (v), veh/h	0	2737	0	0	0	1005	0	16
Grp Sat Flow (s), veh/h/ln	0	1763	0	0	0	1675	0	1891
Q Serve Time (g_s), s	0.0	44.0	0.0	0.0	0.0	15.9	0.0	1.1
Cycle Q Clear Time (g_c), s	0.0	44.0	0.0	0.0	0.0	15.9	0.0	1.1
Lane Grp Cap (c), veh/h	0	3739	0	0	0	2463	0	123
V/C Ratio (X)	0.00	0.73	0.00	0.00	0.00	0.41	0.00	0.13
Avail Cap (c_a), veh/h	0	3739	0	0	0	2463	0	257
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	12.5	0.0	0.0	0.0	7.0	0.0	61.7
Incr Delay (d2), s/veh	0.0	1.3	0.0	0.0	0.0	0.5	0.0	0.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	13.8	0.0	0.0	0.0	7.5	0.0	62.4
1st-Term Q (Q1), veh/ln	0.0	14.9	0.0	0.0	0.0	5.0	0.0	0.5

HCM 7th Signalized Intersection Capacity Analysis

100: IL 59 & Aurora Market Place/Audrey Avenue

No-Build (2033) Traffic Volumes

AM Peak Hour

2nd-Term Q (Q2), veh/ln	0.0	0.5	0.0	0.0	0.0	0.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.42	0.00	1.00	0.00	1.72	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	21.7	0.0	0.0	0.0	8.9	0.0	1.0
%ile Storage Ratio (RQ%)	0.00	1.10	0.00	0.00	0.00	0.63	0.00	0.06
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data

Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	47	0	64	0	547	0	79
Grp Sat Flow (s), veh/h/ln	0	1547	0	1716	0	1825	0	1585
Q Serve Time (g_s), s	0.0	1.3	0.0	5.0	0.0	15.9	0.0	6.9
Cycle Q Clear Time (g_c), s	0.0	1.3	0.0	5.0	0.0	15.9	0.0	6.9
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.50	0.00	0.05	0.00	1.00
Lane Grp Cap (c), veh/h	0	1094	0	138	0	1342	0	103
V/C Ratio (X)	0.00	0.04	0.00	0.46	0.00	0.41	0.00	0.77
Avail Cap (c_a), veh/h	0	1094	0	233	0	1342	0	215
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	6.2	0.0	61.5	0.0	7.0	0.0	64.4
Incr Delay (d2), s/veh	0.0	0.1	0.0	3.4	0.0	0.9	0.0	15.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	6.3	0.0	64.9	0.0	7.9	0.0	79.7
1st-Term Q (Q1), veh/ln	0.0	0.4	0.0	2.2	0.0	5.4	0.0	2.8
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.3	0.0	0.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.68	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	0.8	0.0	4.2	0.0	9.7	0.0	5.8
%ile Storage Ratio (RQ%)	0.00	0.12	0.00	0.39	0.00	0.69	0.00	1.28
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary

HCM 7th Control Delay, s/veh	16.1
HCM 7th LOS	B

HCM 7th TWSC
200: The Home Depot Driveway & Audrey Avenue

No-Build (2033) Traffic Volumes
AM Peak Hour

Intersection						
Int Delay, s/veh	1.5					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	115	5	15	95	10	20
Future Vol, veh/h	115	5	15	95	10	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	80	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	3	2	2	2
Mvmt Flow	121	5	16	100	11	21
Major/Minor	Major1	Major2		Minor1		
Conflicting Flow All	0	0	126	0	255	124
Stage 1	-	-	-	-	124	-
Stage 2	-	-	-	-	132	-
Critical Hdwy	-	-	4.13	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.227	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1454	-	733	927
Stage 1	-	-	-	-	902	-
Stage 2	-	-	-	-	895	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1454	-	725	927
Mov Cap-2 Maneuver	-	-	-	-	725	-
Stage 1	-	-	-	-	902	-
Stage 2	-	-	-	-	885	-
Approach	EB	WB		NB		
HCM Control Delay, s/v	0	1.02		9.41		
HCM LOS	A					
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	848	-	-	1454	-	
HCM Lane V/C Ratio	0.037	-	-	0.011	-	
HCM Control Delay (s/veh)	9.4	-	-	7.5	-	
HCM Lane LOS	A	-	-	A	-	
HCM 95th %tile Q(veh)	0.1	-	-	0	-	

HCM 7th TWSC
300: DICKS Driveway & Audrey Avenue

No-Build (2033) Traffic Volumes
AM Peak Hour

Intersection						
Int Delay, s/veh	0.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	135	5	1	110	1	1
Future Vol, veh/h	135	5	1	110	1	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	142	5	1	116	1	1

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	147
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	4.12
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	2.218
Pot Cap-1 Maneuver	-	-	1434
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	1434
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.07	9.49
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	805	-	-	16	-
HCM Lane V/C Ratio	0.003	-	-	0.001	-
HCM Control Delay (s/veh)	9.5	-	-	7.5	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

HCM 7th TWSC
400: Fort Hill Drive & Audrey Avenue

No-Build (2033) Traffic Volumes
AM Peak Hour

Intersection						
Int Delay, s/veh	3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	YT			↑↑	↑↑	
Traffic Vol, veh/h	50	50	45	175	140	30
Future Vol, veh/h	50	50	45	175	140	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	53	53	47	184	147	32

Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	350	89	179	0	-	0
Stage 1	163	-	-	-	-	-
Stage 2	187	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	621	951	1394	-	-	-
Stage 1	849	-	-	-	-	-
Stage 2	826	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	599	951	1394	-	-	-
Mov Cap-2 Maneuver	599	-	-	-	-	-
Stage 1	819	-	-	-	-	-
Stage 2	826	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v10.72		1.71	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	736	-	735	-	-
HCM Lane V/C Ratio	0.034	-	0.143	-	-
HCM Control Delay (s/veh)	7.7	0.2	10.7	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.5	-	-

HCM 7th Signalized Intersection Summary

100: IL 59 & Aurora Market Place/Audrey Avenue

No-Build (2033) Traffic Volumes

PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	65	65	100	65	45	185	35	2145	60	5	175	2885
Future Volume (veh/h)	65	65	100	65	45	185	35	2145	60	5	175	2885
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0		0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00		1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00
Work Zone On Approach	No			No			No				No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1969	1870	1870	1969	1870		1870	1870
Adj Flow Rate, veh/h	68	68	105	68	47	195	37	2258	63		184	3037
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2		2	2
Cap, veh/h	225	76	118	136	230	185	48	3570	1053		224	3616
Arrive On Green	0.04	0.12	0.12	0.04	0.12	0.12	0.03	0.66	0.66		0.06	0.70
Sat Flow, veh/h	1781	663	1023	1781	1969	1585	1781	5375	1585		3456	5149
Grp Volume(v), veh/h	68	0	173	68	47	195	37	2258	63		184	2001
Grp Sat Flow(s),veh/h/ln	1781	0	1686	1781	1969	1585	1781	1792	1585		1728	1702
Q Serve(g_s), s	6.0	0.0	18.2	6.0	3.9	21.0	3.7	43.8	2.5		9.5	76.4
Cycle Q Clear(g_c), s	6.0	0.0	18.2	6.0	3.9	21.0	3.7	43.8	2.5		9.5	76.4
Prop In Lane	1.00		0.61	1.00		1.00	1.00		1.00		1.00	
Lane Grp Cap(c), veh/h	225	0	194	136	230	185	48	3570	1053		224	2390
V/C Ratio(X)	0.30	0.00	0.89	0.50	0.20	1.05	0.77	0.63	0.06		0.82	0.84
Avail Cap(c_a), veh/h	252	0	197	161	230	185	114	3570	1053		298	2390
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00
Uniform Delay (d), s/veh	66.3	0.0	78.5	67.0	71.9	79.5	87.0	17.5	10.6		83.1	19.4
Incr Delay (d2), s/veh	0.7	0.0	36.2	2.8	0.6	81.3	22.7	0.9	0.1		12.8	3.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
%ile BackOfQ(95%),veh/ln	5.1	0.0	15.1	5.2	3.6	19.1	3.6	24.3	1.7		8.1	38.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	67.1	0.0	114.7	69.8	72.6	160.8	109.8	18.4	10.7		96.0	23.0
LnGrp LOS	E		F	E	E	F	F	B	B		F	C
Approach Vol, veh/h	241			310			2358			3284		
Approach Delay, s/veh	101.2			127.5			19.6			28.3		
Approach LOS	F			F			B			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	16.2	125.6	11.5	26.7	9.3	132.4	11.3	27.0				
Change Period (Y+Rc), s	4.5	6.0	3.5	6.0	4.5	6.0	3.5	6.0				
Max Green Setting (Gmax), s	15.5	113.0	10.5	21.0	11.5	117.0	10.5	21.0				
Max Q Clear Time (g_c+I1), s	11.5	45.8	8.0	20.2	5.7	80.4	8.0	23.0				
Green Ext Time (p_c), s	0.2	64.6	0.0	0.1	0.0	36.6	0.0	0.0				
Intersection Summary												
HCM 7th Control Delay, s/veh				32.8								
HCM 7th LOS				C								
Notes												
User approved ignoring U-Turning movement.												

HCM 7th Signalized Intersection Summary
100: IL 59 & Aurora Market Place/Audrey Avenue

No-Build (2033) Traffic Volumes
PM Peak Hour

Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	60
Future Volume (veh/h)	60
Initial Q (Qb), veh	0
Lane Width Adj.	1.00
Ped-Bike Adj(A_pbT)	1.00
Parking Bus, Adj	1.00
Work Zone On Approach	
Adj Sat Flow, veh/h/ln	1870
Adj Flow Rate, veh/h	63
Peak Hour Factor	0.95
Percent Heavy Veh, %	2
Cap, veh/h	75
Arrive On Green	0.70
Sat Flow, veh/h	106
Grp Volume(v), veh/h	1099
Grp Sat Flow(s),veh/h/ln	1851
Q Serve(g_s), s	78.4
Cycle Q Clear(g_c), s	78.4
Prop In Lane	0.06
Lane Grp Cap(c), veh/h	1300
V/C Ratio(X)	0.85
Avail Cap(c_a), veh/h	1300
HCM Platoon Ratio	1.00
Upstream Filter(I)	1.00
Uniform Delay (d), s/veh	19.6
Incr Delay (d2), s/veh	6.9
Initial Q Delay(d3), s/veh	0.0
%ile BackOfQ(95%),veh/ln	43.4
Unsig. Movement Delay, s/veh	
LnGrp Delay(d), s/veh	26.5
LnGrp LOS	C
Approach Vol, veh/h	
Approach Delay, s/veh	
Approach LOS	
Timer - Assigned Phs	

HCM 7th Signalized Intersection Capacity Analysis

100: IL 59 & Aurora Market Place/Audrey Avenue

No-Build (2033) Traffic Volumes
PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	65	65	100	65	45	185	35	2145	60	5	175	2885
Future Volume (veh/h)	65	65	100	65	45	185	35	2145	60	5	175	2885
Number	7	4	14	3	8	18	5	2	12		1	6
Initial Q, veh	0	0	0	0	0	0	0	0	0		0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00		1.00	
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00
Work Zone On Approach		No			No			No				No
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1969	1870	1870	1969	1870		1870	1870
Adj Flow Rate, veh/h	68	68	105	68	47	195	37	2258	63		184	3037
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2		2	2
Opposing Right Turn Influence	Yes			Yes			Yes				Yes	
Cap, veh/h	225	76	118	136	230	185	48	3570	1053		224	3616
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00
Prop Arrive On Green	0.04	0.12	0.12	0.04	0.12	0.12	0.03	0.66	0.66		0.06	0.70
Unsig. Movement Delay												
Ln Grp Delay, s/veh	67.1	0.0	114.7	69.8	72.6	160.8	109.8	18.4	10.7		96.0	23.0
Ln Grp LOS	E		F	E	E	F	F	B	B		F	C
Approach Vol, veh/h		241			310			2358				3284
Approach Delay, s/veh		101.2			127.5			19.6				28.3
Approach LOS		F			F			B				C
Timer:		1	2	3	4	5	6	7	8			
Assigned Phs		1	2	3	4	5	6	7	8			
Case No		2.0	3.0	1.1	4.0	2.0	4.0	1.1	3.0			
Phs Duration (G+Y+Rc), s		16.2	125.6	11.5	26.7	9.3	132.4	11.3	27.0			
Change Period (Y+Rc), s		4.5	6.0	3.5	6.0	4.5	6.0	3.5	6.0			
Max Green (Gmax), s		15.5	113.0	10.5	21.0	11.5	117.0	10.5	21.0			
Max Allow Headway (MAH), s		3.7	8.9	3.8	6.6	3.7	9.0	3.9	5.3			
Max Q Clear (g_c+I1), s		11.5	45.8	8.0	20.2	5.7	80.4	8.0	23.0			
Green Ext Time (g_e), s		0.2	64.6	0.0	0.1	0.0	36.6	0.0	0.0			
Prob of Phs Call (p_c)		1.00	1.00	1.00	1.00	0.84	1.00	0.97	1.00			
Prob of Max Out (p_x)		0.76	0.94	1.00	1.00	0.04	1.00	1.00	1.00			
Left-Turn Movement Data												
Assigned Mvmt		1		3		5		7				
Mvmt Sat Flow, veh/h		3456		1781		1781		1781				
Through Movement Data												
Assigned Mvmt			2		4		6		8			
Mvmt Sat Flow, veh/h			5375		663		5149		1969			
Right-Turn Movement Data												
Assigned Mvmt			12		14		16		18			
Mvmt Sat Flow, veh/h			1585		1023		106		1585			
Left Lane Group Data												
Assigned Mvmt		1	0	3	0	5	0	7	0			

HCM 7th Signalized Intersection Capacity Analysis
100: IL 59 & Aurora Market Place/Audrey Avenue

No-Build (2033) Traffic Volumes
PM Peak Hour

Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	60
Future Volume (veh/h)	60
Number	16
Initial Q, veh	0
Lane Width Adj.	1.00
Ped-Bike Adj (A_pbT)	1.00
Parking Bus Adj	1.00
Work Zone On Approach	
Lanes Open During Work Zone	
Adj Sat Flow, veh/h/ln	1870
Adj Flow Rate, veh/h	63
Peak Hour Factor	0.95
Percent Heavy Veh, %	2
Opposing Right Turn Influence	
Cap, veh/h	75
HCM Platoon Ratio	1.00
Prop Arrive On Green	0.70
Unsig. Movement Delay	
Ln Grp Delay, s/veh	26.5
Ln Grp LOS	C
Approach Vol, veh/h	
Approach Delay, s/veh	
Approach LOS	
Timer:	

HCM 7th Signalized Intersection Capacity Analysis

100: IL 59 & Aurora Market Place/Audrey Avenue

No-Build (2033) Traffic Volumes
PM Peak Hour

Lane Assignment	L (Prot)		L (Pr/Pm)		L (Prot)		L (Pr/Pm)	
Lanes in Grp	2	0	1	0	1	0	1	0
Grp Vol (v), veh/h	184	0	68	0	37	0	68	0
Grp Sat Flow (s), veh/h/ln	1728	0	1781	0	1781	0	1781	0
Q Serve Time (g_s), s	9.5	0.0	6.0	0.0	3.7	0.0	6.0	0.0
Cycle Q Clear Time (g_c), s	9.5	0.0	6.0	0.0	3.7	0.0	6.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	1212	0	0	0	1138	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	20.7	0.0	0.0	0.0	20.7	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	2.5	0.0	0.0	0.0	17.1	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	1.1	0.0	0.0	0.0	0.2	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	224	0	136	0	48	0	225	0
V/C Ratio (X)	0.82	0.00	0.50	0.00	0.77	0.00	0.30	0.00
Avail Cap (c_a), veh/h	298	0	161	0	114	0	252	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	83.1	0.0	67.0	0.0	87.0	0.0	66.3	0.0
Incr Delay (d2), s/veh	12.8	0.0	2.8	0.0	22.7	0.0	0.7	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	96.0	0.0	69.8	0.0	109.8	0.0	67.1	0.0
1st-Term Q (Q1), veh/ln	4.2	0.0	2.8	0.0	1.7	0.0	2.8	0.0
2nd-Term Q (Q2), veh/ln	0.4	0.0	0.1	0.0	0.3	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.76	0.00	1.80	0.00	1.80	0.00	1.80	0.00
%ile Back of Q (95%), veh/ln	8.1	0.0	5.2	0.0	3.6	0.0	5.1	0.0
%ile Storage Ratio (RQ%)	0.83	0.00	1.14	0.00	0.34	0.00	0.48	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data

Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment	T				T		T	
Lanes in Grp	0	3	0	0	0	2	0	1
Grp Vol (v), veh/h	0	2258	0	0	0	2001	0	47
Grp Sat Flow (s), veh/h/ln	0	1792	0	0	0	1702	0	1969
Q Serve Time (g_s), s	0.0	43.8	0.0	0.0	0.0	76.4	0.0	3.9
Cycle Q Clear Time (g_c), s	0.0	43.8	0.0	0.0	0.0	76.4	0.0	3.9
Lane Grp Cap (c), veh/h	0	3570	0	0	0	2390	0	230
V/C Ratio (X)	0.00	0.63	0.00	0.00	0.00	0.84	0.00	0.20
Avail Cap (c_a), veh/h	0	3570	0	0	0	2390	0	230
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	17.5	0.0	0.0	0.0	19.4	0.0	71.9
Incr Delay (d2), s/veh	0.0	0.9	0.0	0.0	0.0	3.7	0.0	0.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	18.4	0.0	0.0	0.0	23.0	0.0	72.6
1st-Term Q (Q1), veh/ln	0.0	17.2	0.0	0.0	0.0	28.1	0.0	2.0

HCM 7th Signalized Intersection Capacity Analysis

100: IL 59 & Aurora Market Place/Audrey Avenue

No-Build (2033) Traffic Volumes
PM Peak Hour

2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.0	0.0	1.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.39	0.00	1.00	0.00	1.30	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	24.3	0.0	0.0	0.0	38.2	0.0	3.6
%ile Storage Ratio (RQ%)	0.00	1.22	0.00	0.00	0.00	2.68	0.00	0.19
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data

Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	63	0	173	0	1099	0	195
Grp Sat Flow (s), veh/h/ln	0	1585	0	1686	0	1851	0	1585
Q Serve Time (g_s), s	0.0	2.5	0.0	18.2	0.0	78.4	0.0	21.0
Cycle Q Clear Time (g_c), s	0.0	2.5	0.0	18.2	0.0	78.4	0.0	21.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.61	0.00	0.06	0.00	1.00
Lane Grp Cap (c), veh/h	0	1053	0	194	0	1300	0	185
V/C Ratio (X)	0.00	0.06	0.00	0.89	0.00	0.85	0.00	1.05
Avail Cap (c_a), veh/h	0	1053	0	197	0	1300	0	185
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	10.6	0.0	78.5	0.0	19.6	0.0	79.5
Incr Delay (d2), s/veh	0.0	0.1	0.0	36.2	0.0	6.9	0.0	81.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	10.7	0.0	114.7	0.0	26.5	0.0	160.8
1st-Term Q (Q1), veh/ln	0.0	0.9	0.0	8.0	0.0	31.3	0.0	8.6
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	2.0	0.0	2.5	0.0	4.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.52	0.00	1.28	0.00	1.49
%ile Back of Q (95%), veh/ln	0.0	1.7	0.0	15.1	0.0	43.4	0.0	19.1
%ile Storage Ratio (RQ%)	0.00	0.26	0.00	1.41	0.00	3.04	0.00	4.22
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3

Intersection Summary

HCM 7th Control Delay, s/veh	32.8
HCM 7th LOS	C

Notes

User approved ignoring U-Turning movement.

HCM 7th TWSC
200: The Home Depot Driveway & Audrey Avenue

No-Build (2033) Traffic Volumes
PM Peak Hour

Intersection						
Int Delay, s/veh	1.7					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	280	10	45	225	30	25
Future Vol, veh/h	280	10	45	225	30	25
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	80	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	295	11	47	237	32	26
Major/Minor						
	Major1	Major2		Minor1		
Conflicting Flow All	0	0	305	0	632	300
Stage 1	-	-	-	-	300	-
Stage 2	-	-	-	-	332	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1256	-	445	740
Stage 1	-	-	-	-	752	-
Stage 2	-	-	-	-	727	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1256	-	428	740
Mov Cap-2 Maneuver	-	-	-	-	428	-
Stage 1	-	-	-	-	752	-
Stage 2	-	-	-	-	700	-
Approach						
	EB	WB		NB		
HCM Control Delay, s/v	0	1.33		12.64		
HCM LOS				B		
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	529	-	-	1256	-	
HCM Lane V/C Ratio	0.109	-	-	0.038	-	
HCM Control Delay (s/veh)	12.6	-	-	8	-	
HCM Lane LOS	B	-	-	A	-	
HCM 95th %tile Q(veh)	0.4	-	-	0.1	-	

HCM 7th TWSC
300: DICKS Driveway & Audrey Avenue

No-Build (2033) Traffic Volumes
PM Peak Hour

Intersection						
Int Delay, s/veh	0.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	300	5	1	260	1	1
Future Vol, veh/h	300	5	1	260	1	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	33	2	2	2	2
Mvmt Flow	316	5	1	274	1	1

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	321
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	4.12
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	2.218
Pot Cap-1 Maneuver	-	-	1239
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	1239
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.03	11.37
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	567	-	-	7	-
HCM Lane V/C Ratio	0.004	-	-	0.001	-
HCM Control Delay (s/veh)	11.4	-	-	7.9	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

HCM 7th TWSC
400: Fort Hill Drive & Audrey Avenue

No-Build (2033) Traffic Volumes
PM Peak Hour

Intersection						
Int Delay, s/veh	3.6					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W			↑↑	↑↑	
Traffic Vol, veh/h	70	85	75	260	470	110
Future Vol, veh/h	70	85	75	260	470	110
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	74	89	79	274	495	116

Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	847	305	611	0	-	0
Stage 1	553	-	-	-	-	-
Stage 2	295	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	301	691	964	-	-	-
Stage 1	540	-	-	-	-	-
Stage 2	730	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	274	691	964	-	-	-
Mov Cap-2 Maneuver	274	-	-	-	-	-
Stage 1	492	-	-	-	-	-
Stage 2	730	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v19.49		2.43	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	806	-	410	-	-
HCM Lane V/C Ratio	0.082	-	0.398	-	-
HCM Control Delay (s/veh)	9.1	0.5	19.5	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0.3	-	1.9	-	-

BUILD (2033) CAPACITY REPORTS

HCM 7th Signalized Intersection Summary 100: IL 59 & Aurora Market Place/Audrey Avenue

Build (2033) Traffic Volumes
AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	65	30	30	60	15	105	15	2600	55	95	1450	25
Future Volume (veh/h)	65	30	30	60	15	105	15	2600	55	95	1450	25
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1891	1870	1870	1938	1826	1870	1841	1870
Adj Flow Rate, veh/h	68	32	32	63	16	111	16	2737	58	100	1526	26
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
Percent Heavy Veh, %	2	2	2	2	7	2	2	4	5	2	4	2
Cap, veh/h	231	72	72	200	161	135	19	3616	1058	147	3640	62
Arrive On Green	0.05	0.08	0.08	0.05	0.09	0.09	0.01	0.68	0.68	0.04	0.72	0.72
Sat Flow, veh/h	1781	858	858	1781	1891	1585	1781	5290	1547	3456	5089	87
Grp Volume(v), veh/h	68	0	64	63	16	111	16	2737	58	100	1005	547
Grp Sat Flow(s),veh/h/ln	1781	0	1716	1781	1891	1585	1781	1763	1547	1728	1675	1825
Q Serve(g_s), s	4.8	0.0	5.0	4.5	1.1	9.6	1.3	47.5	1.7	4.0	17.1	17.1
Cycle Q Clear(g_c), s	4.8	0.0	5.0	4.5	1.1	9.6	1.3	47.5	1.7	4.0	17.1	17.1
Prop In Lane	1.00		0.50	1.00		1.00	1.00		1.00	1.00		0.05
Lane Grp Cap(c), veh/h	231	0	145	200	161	135	19	3616	1058	147	2397	1306
V/C Ratio(X)	0.29	0.00	0.44	0.32	0.10	0.82	0.83	0.76	0.05	0.68	0.42	0.42
Avail Cap(c_a), veh/h	296	0	233	263	257	215	146	3616	1058	284	2397	1306
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.1	0.0	60.9	54.9	59.1	63.0	69.1	14.5	7.3	66.1	8.1	8.1
Incr Delay (d2), s/veh	0.7	0.0	3.0	0.9	0.4	16.7	57.1	1.5	0.1	5.4	0.5	1.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.0	0.0	4.2	3.7	1.0	8.0	1.6	23.9	1.1	3.3	9.7	10.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	55.8	0.0	63.9	55.8	59.4	79.7	126.3	16.1	7.4	71.4	8.6	9.1
LnGrp LOS	E		E	E	E	E	F	B	A	E	A	A
Approach Vol, veh/h	132			190			2811			1652		
Approach Delay, s/veh	59.7			70.1			16.5			12.6		
Approach LOS	E			E			B			B		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.5	101.7	10.0	17.8	6.0	106.2	9.9	17.9				
Change Period (Y+Rc), s	4.5	6.0	3.5	6.0	4.5	6.0	3.5	6.0				
Max Green Setting (Gmax), s	11.5	78.0	11.5	19.0	11.5	78.0	11.5	19.0				
Max Q Clear Time (g_c+I1), s	6.0	49.5	6.5	7.0	3.3	19.1	6.8	11.6				
Green Ext Time (p_c), s	0.1	28.4	0.0	0.2	0.0	46.5	0.0	0.3				
Intersection Summary												
HCM 7th Control Delay, s/veh	18.5											
HCM 7th LOS	B											

HCM 7th Signalized Intersection Capacity Analysis 100: IL 59 & Aurora Market Place/Audrey Avenue

Build (2033) Traffic Volumes
AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	65	30	30	60	15	105	15	2600	55	95	1450	25
Future Volume (veh/h)	65	30	30	60	15	105	15	2600	55	95	1450	25
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1891	1870	1870	1938	1826	1870	1841	1870
Adj Flow Rate, veh/h	68	32	32	63	16	111	16	2737	58	100	1526	26
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
Percent Heavy Veh, %	2	2	2	2	7	2	2	4	5	2	4	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	231	72	72	200	161	135	19	3616	1058	147	3640	62
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.05	0.08	0.08	0.05	0.09	0.09	0.01	0.68	0.68	0.04	0.72	0.72
Unsig. Movement Delay												
Ln Grp Delay, s/veh	55.8	0.0	63.9	55.8	59.4	79.7	126.3	16.1	7.4	71.4	8.6	9.1
Ln Grp LOS	E		E	E	E	E	F	B	A	E	A	A
Approach Vol, veh/h	132			190			2811			1652		
Approach Delay, s/veh	59.7			70.1			16.5			12.6		
Approach LOS	E			E			B			B		
Timer:	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Case No	2.0	3.0	1.1	4.0	2.0	4.0	1.1	3.0				
Phs Duration (G+Y+Rc), s	10.5	101.7	10.0	17.8	6.0	106.2	9.9	17.9				
Change Period (Y+Rc), s	4.5	6.0	3.5	6.0	4.5	6.0	3.5	6.0				
Max Green (Gmax), s	11.5	78.0	11.5	19.0	11.5	78.0	11.5	19.0				
Max Allow Headway (MAH), s	3.7	8.9	3.8	6.6	3.7	9.0	3.9	5.2				
Max Q Clear (g_c+I1), s	6.0	49.5	6.5	7.0	3.3	19.1	6.8	11.6				
Green Ext Time (g_e), s	0.1	28.4	0.0	0.2	0.0	46.5	0.0	0.3				
Prob of Phs Call (p_c)	0.98	1.00	1.00	1.00	0.46	1.00	0.93	1.00				
Prob of Max Out (p_x)	0.12	1.00	0.21	0.03	0.00	0.70	0.38	0.25				
Left-Turn Movement Data												
Assigned Mvmt	1		3		5		7					
Mvmt Sat Flow, veh/h	3456		1781		1781		1781					
Through Movement Data												
Assigned Mvmt		2		4		6		8				
Mvmt Sat Flow, veh/h		5290		858		5089		1891				
Right-Turn Movement Data												
Assigned Mvmt		12		14		16		18				
Mvmt Sat Flow, veh/h		1547		858		87		1585				
Left Lane Group Data												
Assigned Mvmt	1	0	3	0	5	0	7	0				

HCM 7th Signalized Intersection Capacity Analysis
100: IL 59 & Aurora Market Place/Audrey Avenue

Build (2033) Traffic Volumes
AM Peak Hour

Lane Assignment	L (Prot)		L (Pr/Pm)		L (Prot)		L (Pr/Pm)	
Lanes in Grp	2	0	1	0	1	0	1	0
Grp Vol (v), veh/h	100	0	63	0	16	0	68	0
Grp Sat Flow (s), veh/h/ln	1728	0	1781	0	1781	0	1781	0
Q Serve Time (g_s), s	4.0	0.0	4.5	0.0	1.3	0.0	4.8	0.0
Cycle Q Clear Time (g_c), s	4.0	0.0	4.5	0.0	1.3	0.0	4.8	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	1338	0	0	0	1264	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	11.8	0.0	0.0	0.0	11.8	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	6.9	0.0	0.0	0.0	10.8	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.2	0.0	0.0	0.0	0.1	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	147	0	200	0	19	0	231	0
V/C Ratio (X)	0.68	0.00	0.32	0.00	0.83	0.00	0.29	0.00
Avail Cap (c_a), veh/h	284	0	263	0	146	0	296	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	66.1	0.0	54.9	0.0	69.1	0.0	55.1	0.0
Incr Delay (d2), s/veh	5.4	0.0	0.9	0.0	57.1	0.0	0.7	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	71.4	0.0	55.8	0.0	126.3	0.0	55.8	0.0
1st-Term Q (Q1), veh/ln	1.7	0.0	2.0	0.0	0.6	0.0	2.2	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	0.0	0.0	0.3	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	1.80	0.00	1.80	0.00	1.80	0.00
%ile Back of Q (95%), veh/ln	3.3	0.0	3.7	0.0	1.6	0.0	4.0	0.0
%ile Storage Ratio (RQ%)	0.34	0.00	0.82	0.00	0.15	0.00	0.38	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment	T				T		T	
Lanes in Grp	0	3	0	0	0	2	0	1
Grp Vol (v), veh/h	0	2737	0	0	0	1005	0	16
Grp Sat Flow (s), veh/h/ln	0	1763	0	0	0	1675	0	1891
Q Serve Time (g_s), s	0.0	47.5	0.0	0.0	0.0	17.1	0.0	1.1
Cycle Q Clear Time (g_c), s	0.0	47.5	0.0	0.0	0.0	17.1	0.0	1.1
Lane Grp Cap (c), veh/h	0	3616	0	0	0	2397	0	161
V/C Ratio (X)	0.00	0.76	0.00	0.00	0.00	0.42	0.00	0.10
Avail Cap (c_a), veh/h	0	3616	0	0	0	2397	0	257
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	14.5	0.0	0.0	0.0	8.1	0.0	59.1
Incr Delay (d2), s/veh	0.0	1.5	0.0	0.0	0.0	0.5	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	16.1	0.0	0.0	0.0	8.6	0.0	59.4
1st-Term Q (Q1), veh/ln	0.0	16.6	0.0	0.0	0.0	5.6	0.0	0.5

HCM 7th Signalized Intersection Capacity Analysis
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Build (2033) Traffic Volumes
AM Peak Hour

2nd-Term Q (Q2), veh/ln	0.0	0.5	0.0	0.0	0.0	0.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.40	0.00	1.00	0.00	1.68	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	23.9	0.0	0.0	0.0	9.7	0.0	1.0
%ile Storage Ratio (RQ%)	0.00	1.21	0.00	0.00	0.00	0.69	0.00	0.05
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data

Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	58	0	64	0	547	0	111
Grp Sat Flow (s), veh/h/ln	0	1547	0	1716	0	1825	0	1585
Q Serve Time (g_s), s	0.0	1.7	0.0	5.0	0.0	17.1	0.0	9.6
Cycle Q Clear Time (g_c), s	0.0	1.7	0.0	5.0	0.0	17.1	0.0	9.6
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.50	0.00	0.05	0.00	1.00
Lane Grp Cap (c), veh/h	0	1058	0	145	0	1306	0	135
V/C Ratio (X)	0.00	0.05	0.00	0.44	0.00	0.42	0.00	0.82
Avail Cap (c_a), veh/h	0	1058	0	233	0	1306	0	215
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	7.3	0.0	60.9	0.0	8.1	0.0	63.0
Incr Delay (d2), s/veh	0.0	0.1	0.0	3.0	0.0	1.0	0.0	16.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	7.4	0.0	63.9	0.0	9.1	0.0	79.7
1st-Term Q (Q1), veh/ln	0.0	0.6	0.0	2.2	0.0	6.0	0.0	3.9
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.4	0.0	0.6
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.65	0.00	1.77
%ile Back of Q (95%), veh/ln	0.0	1.1	0.0	4.2	0.0	10.5	0.0	8.0
%ile Storage Ratio (RQ%)	0.00	0.17	0.00	0.39	0.00	0.75	0.00	1.77
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary

HCM 7th Control Delay, s/veh	18.5
HCM 7th LOS	B

HCM 7th TWSC
200: The Home Depot Driveway/Access A & Audrey Avenue

Build (2033) Traffic Volumes
AM Peak Hour

Intersection												
Int Delay, s/veh	2.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	125	5	15	135	1	10	1	20	5	1	20
Future Vol, veh/h	10	125	5	15	135	1	10	1	20	5	1	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	80	-	-	80	-	-	-	-	-	-	-	-
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	2	3	2	2	2	2	2	2	2	2
Mvmt Flow	11	132	5	16	142	1	11	1	21	5	1	21

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	143	0	0	137	0	0	329	330	134	327	332	143
Stage 1	-	-	-	-	-	-	155	155	-	174	174	-
Stage 2	-	-	-	-	-	-	174	175	-	153	158	-
Critical Hdwy	4.12	-	-	4.13	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.227	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1439	-	-	1441	-	-	624	589	915	626	588	905
Stage 1	-	-	-	-	-	-	847	769	-	828	755	-
Stage 2	-	-	-	-	-	-	828	754	-	849	767	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1439	-	-	1441	-	-	597	578	915	599	577	905
Mov Cap-2 Maneuver	-	-	-	-	-	-	597	578	-	599	577	-
Stage 1	-	-	-	-	-	-	841	763	-	819	747	-
Stage 2	-	-	-	-	-	-	798	746	-	822	761	-

Approach	EB			WB			NB			SB		
HCM Ctrl Dly, s/v	0.54			0.75			9.89			9.61		
HCM LOS							A			A		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	768	1439	-	-	1441	-	-	808
HCM Lane V/C Ratio	0.042	0.007	-	-	0.011	-	-	0.034
HCM Ctrl Dly (s/v)	9.9	7.5	-	-	7.5	-	-	9.6
HCM Lane LOS	A	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.1

HCM 7th TWSC
300: DICKS Driveway/Access B & Audrey Avenue

Build (2033) Traffic Volumes
AM Peak Hour

Intersection												
Int Delay, s/veh	1.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	140	5	1	110	1	1	1	1	5	1	40
Future Vol, veh/h	10	140	5	1	110	1	1	1	1	5	1	40
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	100	-	-	-	-	-	-	-	-	-	-	-
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	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	147	5	1	116	1	1	1	1	5	1	42

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	117	0	0	153	0	0	289	290	150	287	292	116
Stage 1	-	-	-	-	-	-	171	171	-	118	118	-
Stage 2	-	-	-	-	-	-	118	119	-	169	174	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1472	-	-	1428	-	-	663	620	896	665	619	936
Stage 1	-	-	-	-	-	-	831	757	-	886	798	-
Stage 2	-	-	-	-	-	-	886	797	-	833	755	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1472	-	-	1428	-	-	627	615	896	658	614	936
Mov Cap-2 Maneuver	-	-	-	-	-	-	627	615	-	658	614	-
Stage 1	-	-	-	-	-	-	825	752	-	885	797	-
Stage 2	-	-	-	-	-	-	844	797	-	825	750	-

Approach	EB			WB			NB			SB		
HCM Ctrl Dly, s/v	0.48			0.07			10.23			9.3		
HCM LOS							B			A		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	692	1472	-	-	16	-	-	885
HCM Lane V/C Ratio	0.005	0.007	-	-	0.001	-	-	0.055
HCM Ctrl Dly (s/v)	10.2	7.5	-	-	7.5	0	-	9.3
HCM Lane LOS	B	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.2

Intersection						
Int Delay, s/veh	3.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	YT			↑↑	↑↑	
Traffic Vol, veh/h	55	55	45	175	140	30
Future Vol, veh/h	55	55	45	175	140	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	58	58	47	184	147	32

Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	350	89	179	0	-	0
Stage 1	163	-	-	-	-	-
Stage 2	187	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	621	951	1394	-	-	-
Stage 1	849	-	-	-	-	-
Stage 2	826	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	599	951	1394	-	-	-
Mov Cap-2 Maneuver	599	-	-	-	-	-
Stage 1	819	-	-	-	-	-
Stage 2	826	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	10.81	1.71	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	736	-	735	-	-
HCM Lane V/C Ratio	0.034	-	0.158	-	-
HCM Ctrl Dly (s/v)	7.7	0.2	10.8	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.6	-	-

HCM 7th Signalized Intersection Summary
100: IL 59 & Aurora Market Place/Audrey Avenue

Build (2033) Traffic Volumes
PM Peak Hour

																										
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT														
Lane Configurations																										
Traffic Volume (veh/h)	65	65	100	75	45	200	35	2145	85	5	195	2885														
Future Volume (veh/h)	65	65	100	75	45	200	35	2145	85	5	195	2885														
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0		0	0														
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00														
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00		1.00															
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00														
Work Zone On Approach	No			No			No				No															
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1969	1870	1870	1969	1870		1870	1870														
Adj Flow Rate, veh/h	68	68	105	79	47	211	37	2258	89		205	3037														
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														
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2		2	2														
Cap, veh/h	227	75	116	143	236	190	48	3521	1038		244	3599														
Arrive On Green	0.04	0.11	0.11	0.05	0.12	0.12	0.03	0.66	0.66		0.07	0.70														
Sat Flow, veh/h	1781	663	1023	1781	1969	1585	1781	5375	1585		3456	5149														
Grp Volume(v), veh/h	68	0	173	79	47	211	37	2258	89		205	2001														
Grp Sat Flow(s),veh/h/ln	1781	0	1686	1781	1969	1585	1781	1792	1585		1728	1702														
Q Serve(g_s), s	6.0	0.0	18.3	7.0	3.9	21.6	3.7	45.0	3.7		10.5	77.2														
Cycle Q Clear(g_c), s	6.0	0.0	18.3	7.0	3.9	21.6	3.7	45.0	3.7		10.5	77.2														
Prop In Lane	1.00		0.61	1.00		1.00	1.00		1.00		1.00															
Lane Grp Cap(c), veh/h	227	0	191	143	236	190	48	3521	1038		244	2379														
V/C Ratio(X)	0.30	0.00	0.91	0.55	0.20	1.11	0.77	0.64	0.09		0.84	0.84														
Avail Cap(c_a), veh/h	254	0	197	158	236	190	114	3521	1038		298	2379														
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00														
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00														
Uniform Delay (d), s/veh	66.6	0.0	78.9	67.0	71.4	79.2	87.0	18.5	11.3		82.6	19.8														
Incr Delay (d2), s/veh	0.7	0.0	39.7	3.3	0.6	98.2	22.7	0.9	0.2		16.1	3.8														
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0														
%ile BackOfQ(95%),veh/ln	5.1	0.0	15.4	6.0	3.6	21.1	3.6	25.0	2.5		9.0	38.6														
Unsig. Movement Delay, s/veh																										
LnGrp Delay(d), s/veh	67.4	0.0	118.6	70.2	72.0	177.4	109.8	19.4	11.5		98.7	23.6														
LnGrp LOS	E		F	E	E	F	F	B	B		F	C														
Approach Vol, veh/h	241			337			2384				3305															
Approach Delay, s/veh	104.1			137.6			20.5				29.4															
Approach LOS	F			F			C				C															
Timer - Assigned Phs	1	2	3	4	5	6	7	8																		
Phs Duration (G+Y+Rc), s	17.2	123.9	12.5	26.3	9.3	131.8	11.3	27.6																		
Change Period (Y+Rc), s	4.5	6.0	3.5	6.0	4.5	6.0	3.5	6.0																		
Max Green Setting (Gmax), s	15.5	113.0	10.5	21.0	11.5	117.0	10.5	21.0																		
Max Q Clear Time (g_c+I1), s	12.5	47.0	9.0	20.3	5.7	81.2	8.0	23.6																		
Green Ext Time (p_c), s	0.2	63.6	0.0	0.1	0.0	35.7	0.0	0.0																		
Intersection Summary																										
HCM 7th Control Delay, s/veh				34.7																						
HCM 7th LOS				C																						
Notes																										
User approved ignoring U-Turning movement.																										

HCM 7th Signalized Intersection Summary
 100: IL 59 & Aurora Market Place/Audrey Avenue

Build (2033) Traffic Volumes
 PM Peak Hour

Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	60
Future Volume (veh/h)	60
Initial Q (Qb), veh	0
Lane Width Adj.	1.00
Ped-Bike Adj(A_pbT)	1.00
Parking Bus, Adj	1.00
Work Zone On Approach	
Adj Sat Flow, veh/h/ln	1870
Adj Flow Rate, veh/h	63
Peak Hour Factor	0.95
Percent Heavy Veh, %	2
Cap, veh/h	74
Arrive On Green	0.70
Sat Flow, veh/h	106
Grp Volume(v), veh/h	1099
Grp Sat Flow(s),veh/h/ln	1851
Q Serve(g_s), s	79.2
Cycle Q Clear(g_c), s	79.2
Prop In Lane	0.06
Lane Grp Cap(c), veh/h	1294
V/C Ratio(X)	0.85
Avail Cap(c_a), veh/h	1294
HCM Platoon Ratio	1.00
Upstream Filter(I)	1.00
Uniform Delay (d), s/veh	20.1
Incr Delay (d2), s/veh	7.1
Initial Q Delay(d3), s/veh	0.0
%ile BackOfQ(95%),veh/ln	43.8
Unsig. Movement Delay, s/veh	
LnGrp Delay(d), s/veh	27.2
LnGrp LOS	C
Approach Vol, veh/h	
Approach Delay, s/veh	
Approach LOS	
Timer - Assigned Phs	

HCM 7th Signalized Intersection Capacity Analysis
100: IL 59 & Aurora Market Place/Audrey Avenue

Build (2033) Traffic Volumes
PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	65	65	100	75	45	200	35	2145	85	5	195	2885
Future Volume (veh/h)	65	65	100	75	45	200	35	2145	85	5	195	2885
Number	7	4	14	3	8	18	5	2	12		1	6
Initial Q, veh	0	0	0	0	0	0	0	0	0		0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00		1.00	
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00
Work Zone On Approach		No			No			No				No
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1969	1870	1870	1969	1870		1870	1870
Adj Flow Rate, veh/h	68	68	105	79	47	211	37	2258	89		205	3037
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2		2	2
Opposing Right Turn Influence	Yes			Yes			Yes				Yes	
Cap, veh/h	227	75	116	143	236	190	48	3521	1038		244	3599
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00
Prop Arrive On Green	0.04	0.11	0.11	0.05	0.12	0.12	0.03	0.66	0.66		0.07	0.70
Unsig. Movement Delay												
Ln Grp Delay, s/veh	67.4	0.0	118.6	70.2	72.0	177.4	109.8	19.4	11.5		98.7	23.6
Ln Grp LOS	E		F	E	E	F	F	B	B		F	C
Approach Vol, veh/h		241			337			2384				3305
Approach Delay, s/veh		104.1			137.6			20.5				29.4
Approach LOS		F			F			C				C
Timer:		1	2	3	4	5	6	7	8			
Assigned Phs		1	2	3	4	5	6	7	8			
Case No		2.0	3.0	1.1	4.0	2.0	4.0	1.1	3.0			
Phs Duration (G+Y+Rc), s		17.2	123.9	12.5	26.3	9.3	131.8	11.3	27.6			
Change Period (Y+Rc), s		4.5	6.0	3.5	6.0	4.5	6.0	3.5	6.0			
Max Green (Gmax), s		15.5	113.0	10.5	21.0	11.5	117.0	10.5	21.0			
Max Allow Headway (MAH), s		3.7	8.9	3.8	6.6	3.7	9.0	3.9	5.3			
Max Q Clear (g_c+I1), s		12.5	47.0	9.0	20.3	5.7	81.2	8.0	23.6			
Green Ext Time (g_e), s		0.2	63.6	0.0	0.1	0.0	35.7	0.0	0.0			
Prob of Phs Call (p_c)		1.00	1.00	1.00	1.00	0.84	1.00	0.97	1.00			
Prob of Max Out (p_x)		1.00	0.94	1.00	1.00	0.04	1.00	1.00	1.00			
Left-Turn Movement Data												
Assigned Mvmt		1		3		5		7				
Mvmt Sat Flow, veh/h		3456		1781		1781		1781				
Through Movement Data												
Assigned Mvmt			2		4		6		8			
Mvmt Sat Flow, veh/h			5375		663		5149		1969			
Right-Turn Movement Data												
Assigned Mvmt			12		14		16		18			
Mvmt Sat Flow, veh/h			1585		1023		106		1585			
Left Lane Group Data												
Assigned Mvmt		1	0	3	0	5	0	7	0			

Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	60
Future Volume (veh/h)	60
Number	16
Initial Q, veh	0
Lane Width Adj.	1.00
Ped-Bike Adj (A_pbT)	1.00
Parking Bus Adj	1.00
Work Zone On Approach	
Lanes Open During Work Zone	
Adj Sat Flow, veh/h/ln	1870
Adj Flow Rate, veh/h	63
Peak Hour Factor	0.95
Percent Heavy Veh, %	2
Opposing Right Turn Influence	
Cap, veh/h	74
HCM Platoon Ratio	1.00
Prop Arrive On Green	0.70
Unsig. Movement Delay	
Ln Grp Delay, s/veh	27.2
Ln Grp LOS	C
Approach Vol, veh/h	
Approach Delay, s/veh	
Approach LOS	
Timer:	

HCM 7th Signalized Intersection Capacity Analysis

100: IL 59 & Aurora Market Place/Audrey Avenue

Build (2033) Traffic Volumes
PM Peak Hour

Lane Assignment	L (Prot)		L (Pr/Pm)		L (Prot)		L (Pr/Pm)	
Lanes in Grp	2	0	1	0	1	0	1	0
Grp Vol (v), veh/h	205	0	79	0	37	0	68	0
Grp Sat Flow (s), veh/h/ln	1728	0	1781	0	1781	0	1781	0
Q Serve Time (g_s), s	10.5	0.0	7.0	0.0	3.7	0.0	6.0	0.0
Cycle Q Clear Time (g_c), s	10.5	0.0	7.0	0.0	3.7	0.0	6.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	1212	0	0	0	1121	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	20.3	0.0	0.0	0.0	20.3	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	2.1	0.0	0.0	0.0	17.7	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	1.3	0.0	0.0	0.0	0.2	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	244	0	143	0	48	0	227	0
V/C Ratio (X)	0.84	0.00	0.55	0.00	0.77	0.00	0.30	0.00
Avail Cap (c_a), veh/h	298	0	158	0	114	0	254	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	82.6	0.0	67.0	0.0	87.0	0.0	66.6	0.0
Incr Delay (d2), s/veh	16.1	0.0	3.3	0.0	22.7	0.0	0.7	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	98.7	0.0	70.2	0.0	109.8	0.0	67.4	0.0
1st-Term Q (Q1), veh/ln	4.7	0.0	3.2	0.0	1.7	0.0	2.8	0.0
2nd-Term Q (Q2), veh/ln	0.5	0.0	0.1	0.0	0.3	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.72	0.00	1.80	0.00	1.80	0.00	1.80	0.00
%ile Back of Q (95%), veh/ln	9.0	0.0	6.0	0.0	3.6	0.0	5.1	0.0
%ile Storage Ratio (RQ%)	0.91	0.00	1.33	0.00	0.34	0.00	0.48	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data

Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment	T		T		T		T	
Lanes in Grp	0	3	0	0	0	2	0	1
Grp Vol (v), veh/h	0	2258	0	0	0	2001	0	47
Grp Sat Flow (s), veh/h/ln	0	1792	0	0	0	1702	0	1969
Q Serve Time (g_s), s	0.0	45.0	0.0	0.0	0.0	77.2	0.0	3.9
Cycle Q Clear Time (g_c), s	0.0	45.0	0.0	0.0	0.0	77.2	0.0	3.9
Lane Grp Cap (c), veh/h	0	3521	0	0	0	2379	0	236
V/C Ratio (X)	0.00	0.64	0.00	0.00	0.00	0.84	0.00	0.20
Avail Cap (c_a), veh/h	0	3521	0	0	0	2379	0	236
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	18.5	0.0	0.0	0.0	19.8	0.0	71.4
Incr Delay (d2), s/veh	0.0	0.9	0.0	0.0	0.0	3.8	0.0	0.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	19.4	0.0	0.0	0.0	23.6	0.0	72.0
1st-Term Q (Q1), veh/ln	0.0	17.8	0.0	0.0	0.0	28.4	0.0	2.0

HCM 7th Signalized Intersection Capacity Analysis 100: IL 59 & Aurora Market Place/Audrey Avenue

Build (2033) Traffic Volumes
PM Peak Hour

2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.0	0.0	1.3	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.39	0.00	1.00	0.00	1.30	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	25.0	0.0	0.0	0.0	38.6	0.0	3.6
%ile Storage Ratio (RQ%)	0.00	1.25	0.00	0.00	0.00	2.71	0.00	0.19
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data

Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	89	0	173	0	1099	0	211
Grp Sat Flow (s), veh/h/ln	0	1585	0	1686	0	1851	0	1585
Q Serve Time (g_s), s	0.0	3.7	0.0	18.3	0.0	79.2	0.0	21.6
Cycle Q Clear Time (g_c), s	0.0	3.7	0.0	18.3	0.0	79.2	0.0	21.6
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.61	0.00	0.06	0.00	1.00
Lane Grp Cap (c), veh/h	0	1038	0	191	0	1294	0	190
V/C Ratio (X)	0.00	0.09	0.00	0.91	0.00	0.85	0.00	1.11
Avail Cap (c_a), veh/h	0	1038	0	197	0	1294	0	190
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	11.3	0.0	78.9	0.0	20.1	0.0	79.2
Incr Delay (d2), s/veh	0.0	0.2	0.0	39.7	0.0	7.1	0.0	98.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	11.5	0.0	118.6	0.0	27.2	0.0	177.4
1st-Term Q (Q1), veh/ln	0.0	1.3	0.0	8.0	0.0	31.7	0.0	8.9
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	2.1	0.0	2.6	0.0	5.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.52	0.00	1.28	0.00	1.50
%ile Back of Q (95%), veh/ln	0.0	2.5	0.0	15.4	0.0	43.8	0.0	21.1
%ile Storage Ratio (RQ%)	0.00	0.39	0.00	1.43	0.00	3.08	0.00	4.67
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.3
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3

Intersection Summary

HCM 7th Control Delay, s/veh	34.7
HCM 7th LOS	C

Notes

User approved ignoring U-Turning movement.

HCM 7th TWSC
200: The Home Depot Driveway/Access A & Audrey Avenue

Build (2033) Traffic Volumes
PM Peak Hour

Intersection												
Int Delay, s/veh	2.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	305	10	45	240	5	30	1	25	5	1	10
Future Vol, veh/h	20	305	10	45	240	5	30	1	25	5	1	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	80	-	-	80	-	-	-	-	-	-	-	-
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	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	21	321	11	47	253	5	32	1	26	5	1	11
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	258	0	0	332	0	0	716	721	326	714	724	255
Stage 1	-	-	-	-	-	-	368	368	-	350	350	-
Stage 2	-	-	-	-	-	-	348	353	-	364	374	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1307	-	-	1228	-	-	345	353	715	346	352	783
Stage 1	-	-	-	-	-	-	651	621	-	666	633	-
Stage 2	-	-	-	-	-	-	668	631	-	655	618	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1307	-	-	1228	-	-	321	334	715	315	333	783
Mov Cap-2 Maneuver	-	-	-	-	-	-	321	334	-	315	333	-
Stage 1	-	-	-	-	-	-	641	611	-	641	608	-
Stage 2	-	-	-	-	-	-	633	607	-	620	608	-
Approach	EB			WB			NB			SB		
HCM Ctrl Dly, s/v	0.47			1.25			14.8			12.37		
HCM LOS							B			B		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	426	1307	-	-	1228	-	-	505				
HCM Lane V/C Ratio	0.138	0.016	-	-	0.039	-	-	0.033				
HCM Ctrl Dly (s/v)	14.8	7.8	-	-	8	-	-	12.4				
HCM Lane LOS	B	A	-	-	A	-	-	B				
HCM 95th %tile Q(veh)	0.5	0	-	-	0.1	-	-	0.1				

Intersection												
Int Delay, s/veh	0.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	25	305	5	1	265	5	1	1	1	5	1	15
Future Vol, veh/h	25	305	5	1	265	5	1	1	1	5	1	15
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	100	-	-	-	-	-	-	-	-	-	-	-
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	33	2	2	2	2	2	2	2	2	2
Mvmt Flow	26	321	5	1	279	5	1	1	1	5	1	16

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	284	0	0	326	0	0	658	663	324	658	663	282
Stage 1	-	-	-	-	-	-	376	376	-	284	284	-
Stage 2	-	-	-	-	-	-	282	286	-	374	379	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1278	-	-	1233	-	-	378	382	717	378	382	757
Stage 1	-	-	-	-	-	-	645	616	-	723	677	-
Stage 2	-	-	-	-	-	-	725	675	-	647	615	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1278	-	-	1233	-	-	361	374	717	368	374	757
Mov Cap-2 Maneuver	-	-	-	-	-	-	361	374	-	368	374	-
Stage 1	-	-	-	-	-	-	632	604	-	723	676	-
Stage 2	-	-	-	-	-	-	708	674	-	631	602	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.59	0.03	13.27	11.43
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	438	1278	-	-	7	-	-	582
HCM Lane V/C Ratio	0.007	0.021	-	-	0.001	-	-	0.038
HCM Ctrl Dly (s/v)	13.3	7.9	-	-	7.9	0	-	11.4
HCM Lane LOS	B	A	-	-	A	A	-	B
HCM 95th %tile Q(veh)	0	0.1	-	-	0	-	-	0.1

Intersection						
Int Delay, s/veh	3.9					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	YT			↑↑	↑↑	
Traffic Vol, veh/h	75	90	80	260	470	115
Future Vol, veh/h	75	90	80	260	470	115
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	79	95	84	274	495	121

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	861	308	616	0	-	0
Stage 1	555	-	-	-	-	-
Stage 2	305	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	295	688	960	-	-	-
Stage 1	538	-	-	-	-	-
Stage 2	721	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	267	688	960	-	-	-
Mov Cap-2 Maneuver	267	-	-	-	-	-
Stage 1	487	-	-	-	-	-
Stage 2	721	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	20.68	2.55	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	847	-	401	-	-
HCM Lane V/C Ratio	0.088	-	0.434	-	-
HCM Ctrl Dly (s/v)	9.1	0.5	20.7	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0.3	-	2.1	-	-



Kimley»Horn

4201 Winfield Road | Suite 600 | Warrenville, IL 60555
630-487-5550