Patton Elementary School
Traffic and Parking Study
Arlington Heights, Illinois

Prepared For:

Arlington Heights
School District 25

Prepared by:

Eriksson Engineering Associates, Ltd.

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INTRODUCTION

Eriksson Engineering Associates, Ltd. (EEA) was retained by Arlington Heights School District 25 (AHSD 25) to conduct a traffic and parking study for the proposed addition of all-day Kindergarten classes at Patton School in Arlington Heights, Illinois. The purpose of the study was to observe the existing traffic patterns around the school, to determine the traffic characteristics of the existing and expanded school, to review the parking needs, and to develop roadway and parking recommendations.

EXISTING CONDITIONS

Site Location and Area Land-Uses

Patton School is located at 1616 N. Patton Avenue in Arlington Heights, Illinois. The site is bounded by Patton Avenue to the east, Maude Avenue to the south, and single-family residential to the north and west. **Figure 1** illustrates the site location and the surrounding land-uses and roads.

Bicycle and Pedestrian Routes

Kennicott Avenue and Maude Avenue are designated on-street bike routes. Public sidewalks are located on both sides of the neighborhood streets around the school.

The All-Way Stop Controlled (AWSC) northern intersection of Patton Avenue and Maude Avenue has crosswalks on the north and east legs and the southern intersection has crosswalks on the south and west legs. The All-Way Stop Controlled (AWSC) intersection of Kennicott Avenue and Maude Avenue has crosswalks on all legs of the intersections. During the school's arrival and dismissal periods crossing guards are used at the intersections of Kennicott Avenue and Maude Avenue, Maude Avenue and Patton Avenue, and Thomas Street and Harvard Avenue.

Roadway Characteristics

The roads surrounding the school are under the jurisdiction of the Village of Arlington Heights. A description of the area roadways accessing the school is provided below:

Patton Avenue is a north-south local residential roadway with one travel lane in each direction. It has a 25-mph speed limit with a 20-mph school speed limit approaching the school. All-Way-Stop-Controlled intersections are provided at Maude Avenue (east and west). No Standing, Parking or Stopping is posted on northbound and southbound Patton Avenue surrounding the school. Parking is permitted on both sides of Patton Avenue at outside of the school bounds.

Maude Avenue is an east-west local residential roadway with one travel lane in each direction. It has a 25-mph speed limit with a 20-mph school speed limit approaching the school. Parking is not permitted on both sides of the street west of Kennicott Avenue during school arrival and dismissal times.

Kennicott Boulevard is a north-south local residential collector with one travel lane in each direction. It has a 25-mph speed limit with a 20-mph school speed limit approaching the school. Parking is permitted on both sides of the street.

Existing Traffic Volumes

Weekday morning arrival (7:30-9:30 AM) and afternoon dismissal (2:30-4:30 PM) manual traffic counts were conducted along Patton Drive and at the school driveways. Peak-hours of school traffic occurred from 8:15 to 9:15 AM and 3:00 to 4:00 PM on a school weekday which coincides with the school's 9:05 AM start and 3:35 PM dismissal times. The existing traffic volumes are shown on **Figure 3A** and included in the **Appendix**. EEA then separated the school traffic from the background non-school traffic in **Figures 3B and 3C**. **Figure 4** summarizes the existing pedestrian and bicycle volumes observed.

School Observations

Patton School's attendance boundaries are Northwest Highway (US-14) to the south, Palatine Road to the north, Wilke Road to the west and Ridge Avenue to the east. The majority of the area does not qualify for school bussing. As a result, the school does not have bussing. The school has staggered start and dismissal times as follows: First thru 5th Grade – 9:05 AM to 3:35 PM and Half Day Kindergarten AM- 9:05 to 11:50 AM , PM - 12:50 PM to 3:35 PM. All classes utilize the south lot and Patton Avenue north of Maude Avenue for arrival and dismissal.

During the morning arrival period, traffic worked smoothly with little congestion. Most parents utilized the south lot for arrivals. There was some queue spillback observed from the south lot onto the northern leg of Maude Avenue, however it was continuously moving and caused minimal delays. A majority of the traffic on Maude Avenue was school traffic waiting to enter the school lot. There was a minimal activity observed on Patton Avenue for on-street drop-off.

During the afternoon, parents started lining up at the south lot around 2:55 PM. Parents were also observed parking on Patton Drive and walking to the school for pick-up. Additionally, there were parents parking along the designated on-street pick-up location along Patton Avenue. Approaching the 3:35 PM dismissal, parents were observed queuing along Maude Avenue to Kennicott Avenue and along the south leg of Kennicott Avenue due to the south lot reaching capacity and being closed off. The queuing vehicles would wait along the curb, allowing non-school traffic to pass through the intersections as needed. Approximately 10 minutes after dismissal, activity began to slow down and the queue on neighboring streets was finished.

Exhibit 1
Patton School Morning Arrival
Tuesday September 27, 2022 8:56 AM

Exhibit 1
Patton School Afternoon Dismissal
Tuesday September 27, 2022 3:35 PM

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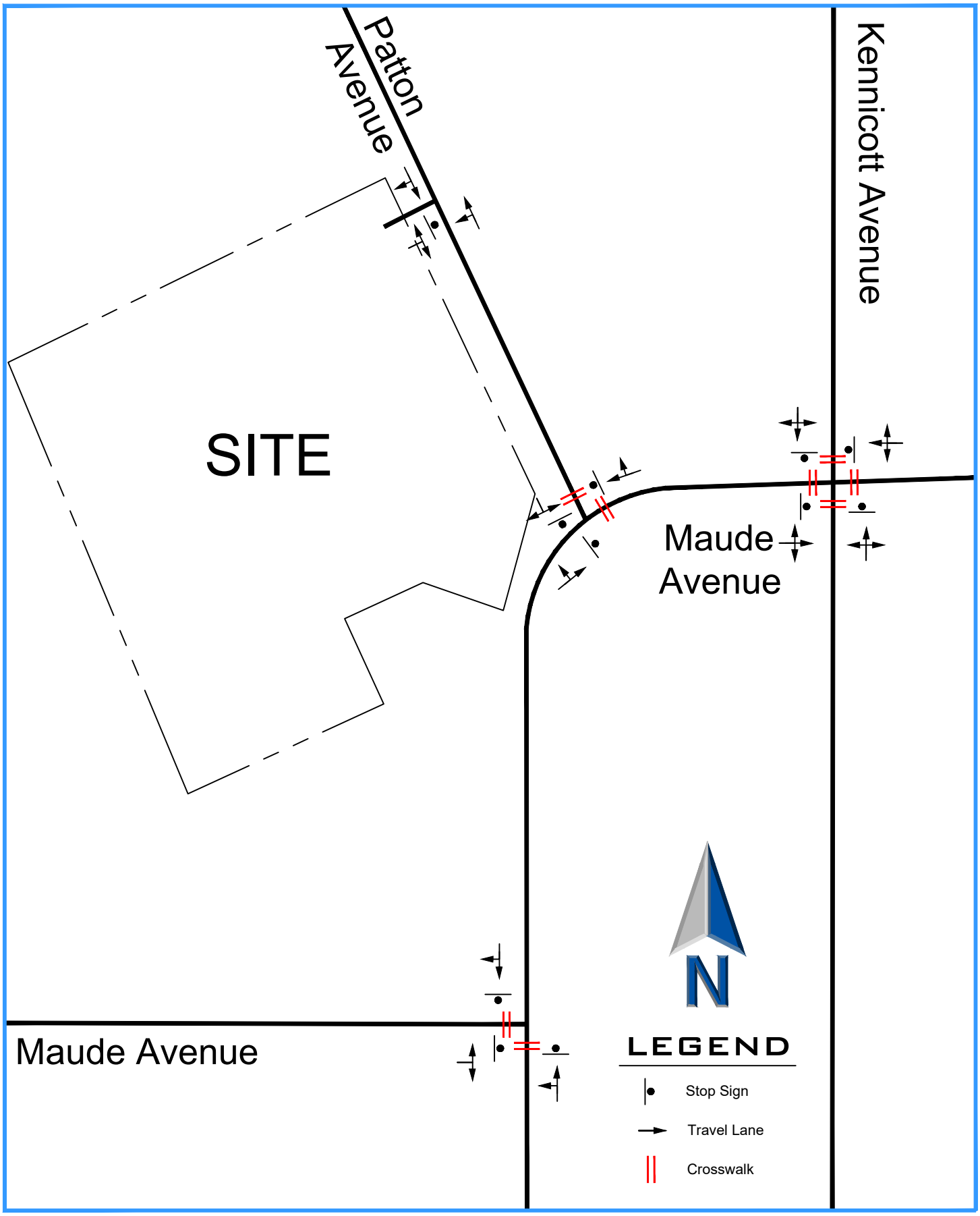
Site Location & Area Roadways

Figure 1



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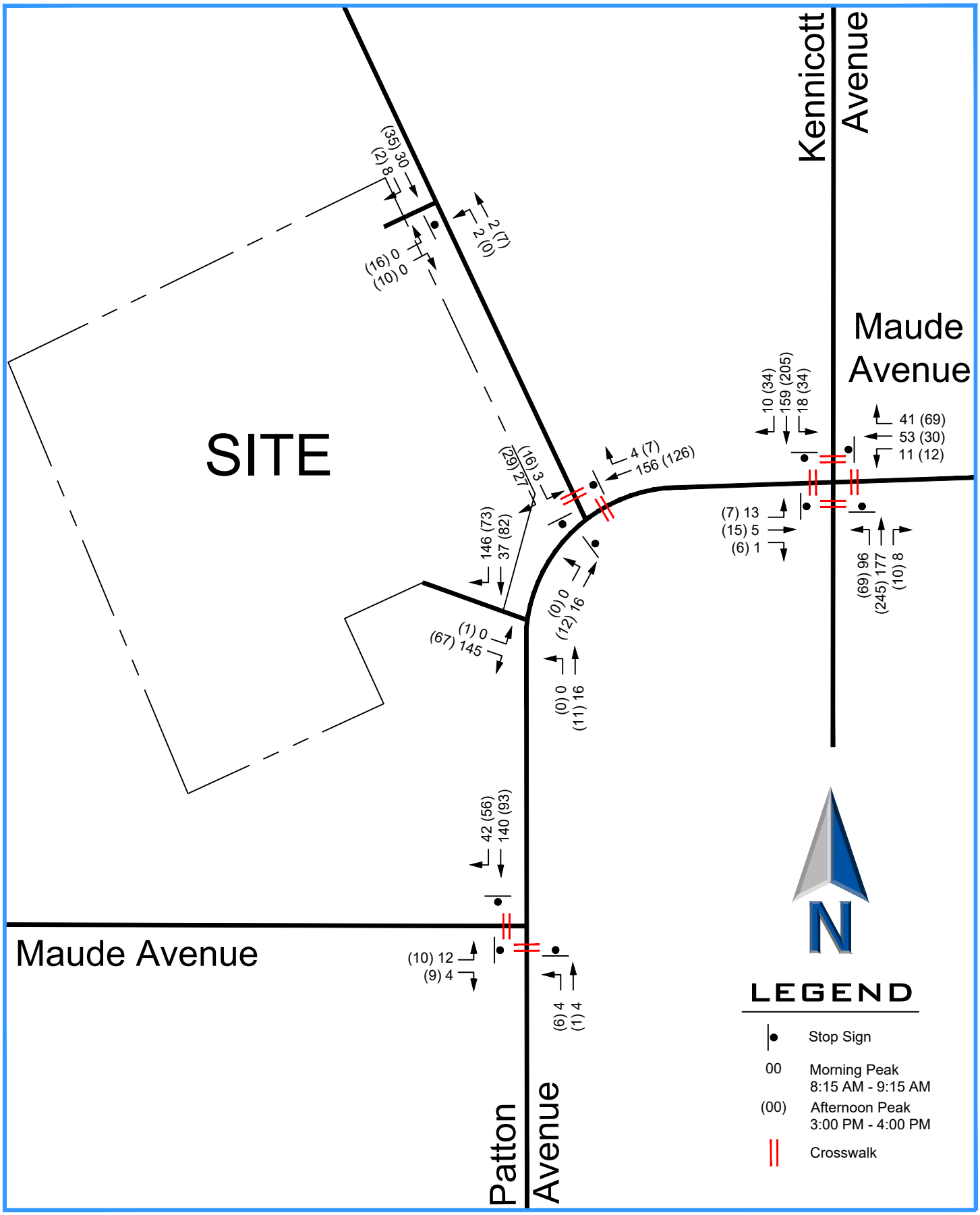
Existing Roadway Geometrics

Figure 2



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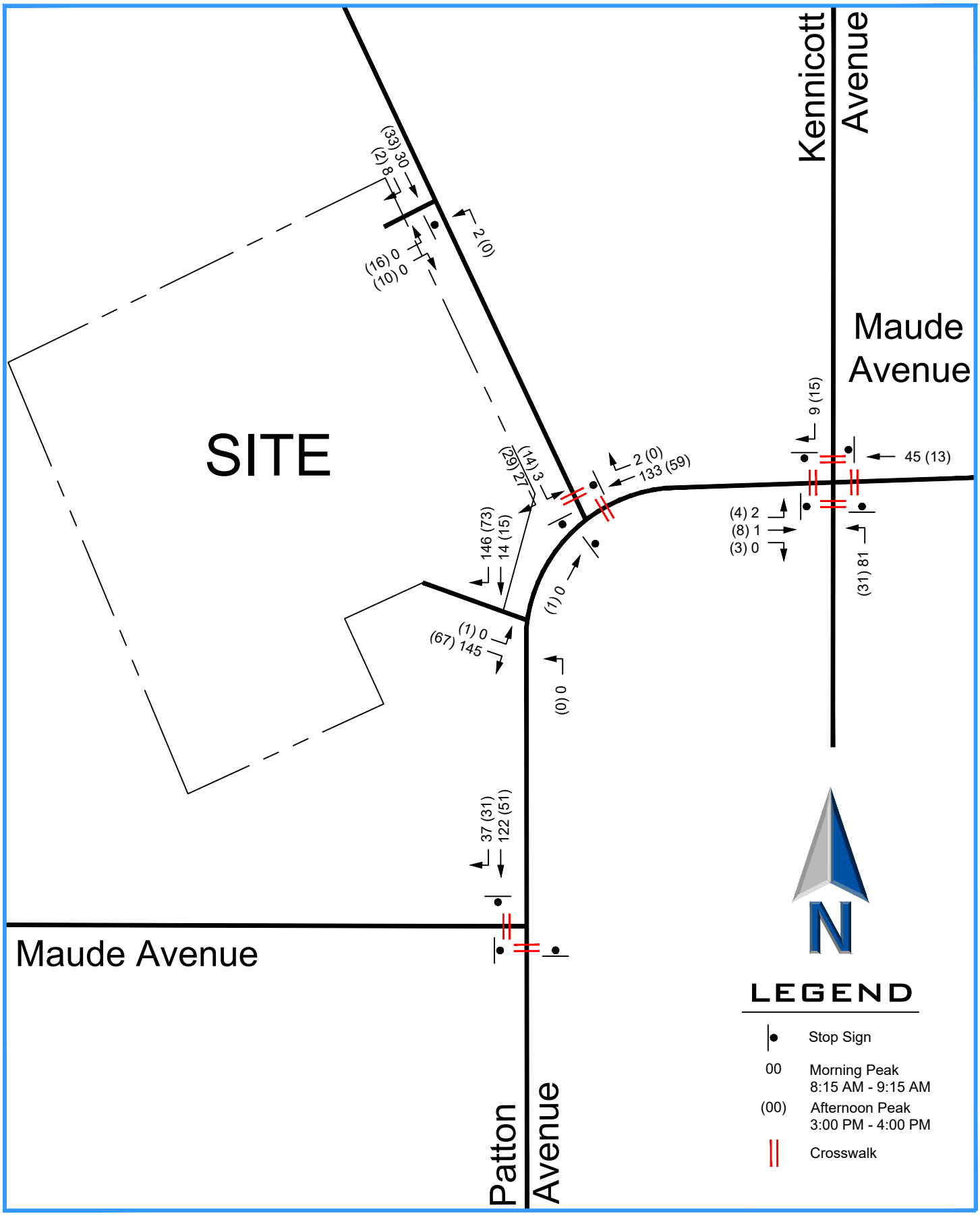
Existing Traffic Volumes

Figure 3A



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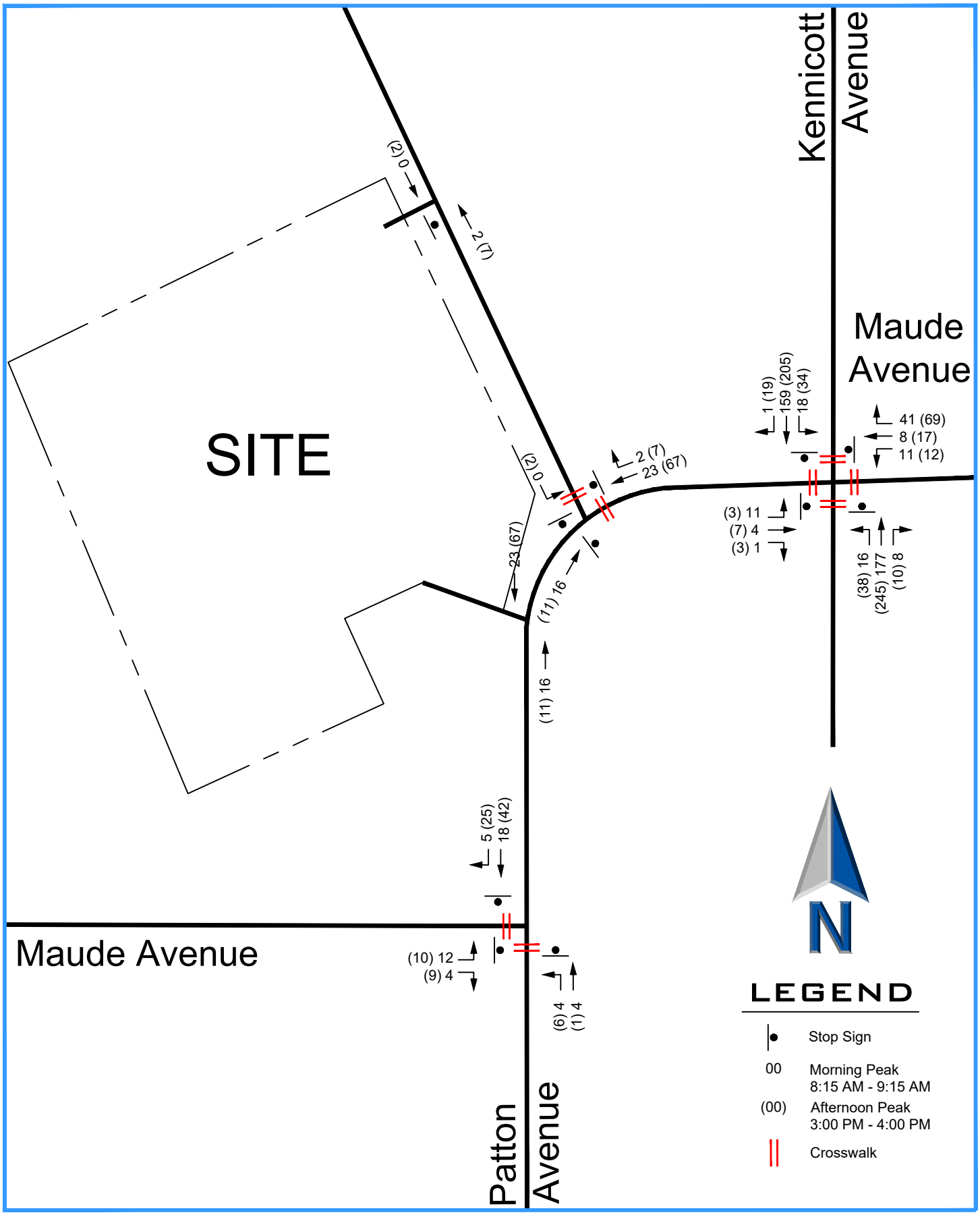
Existing School Traffic Volumes

Figure 3B



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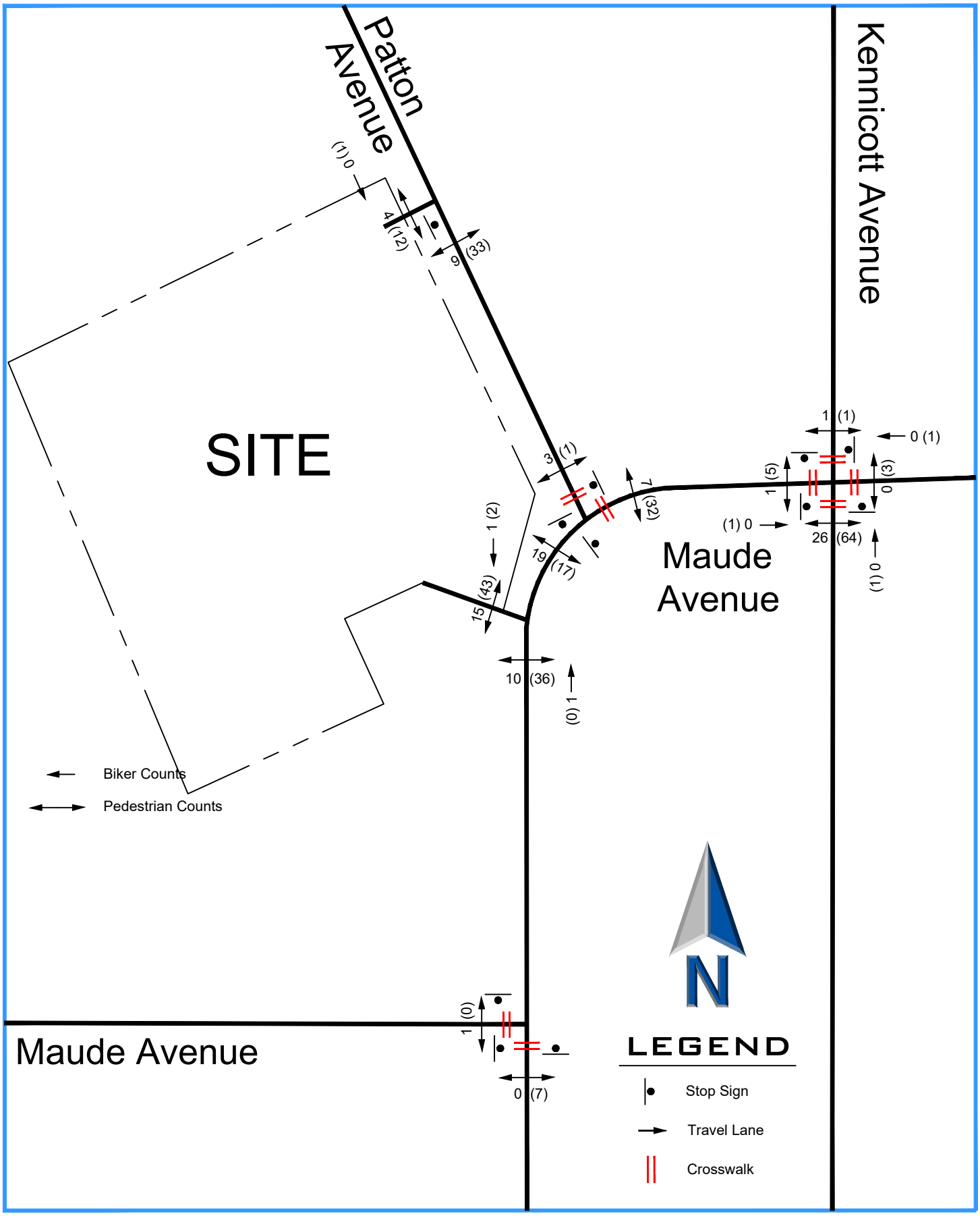
Existing Non-School Traffic Volumes

Figure 3C



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Year 2022 Pedestrian and Bike Volumes

Figure 4

SITE TRAFFIC CHARACTERISTICS

Site Plan

The school currently serves 401 children with 59 staff. A building addition is proposed to add three classrooms. Total classrooms will increase from 21 to 24. Student population is expected to grow by 21 students to 422 students (+5%) over the next five years. The number of staff is expected to grow from 59 to 61 persons.

School Trip Generation and Distribution

Traffic estimates were made for the additional students using the traffic counts at the current school. The trip generation rates for the school are higher than the data provided by the Institute of Transportation Engineer's Trip Generation, 11th Ed. manual for elementary schools due to a higher percentage of automobile usage and minimal busing. The rate of vehicle trip generation was applied with the results shown in **Table 1.**

Table 1
School Expansion Traffic Volumes

Scenario	Morning Arrival			Afternoon Dismissal		
	In	Out	Total	In	Out	Total
Trip Generation Based on Existing Traffic Volumes						
Existing 401Students	173	162	335	94	113	207
Total 422 Students	195	183	378	106	128	234
Net Additional Traffic	**+22**	**+21**	**+43**	**+12**	**+15**	**+27**
ITE Trip Generation Comparison(1)						
Existing 401 Students	160	137	297	83	97	180
Total 422 Students	168	144	312	87	103	190
Net Additional Traffic(2)	**+8**	**+7**	**+15**	**+4**	**+6**	**+10**

(1) ITE Trip Generation Manual, 11th Edition – Land Use Code 520 (Elementary School)
(2) For comparison only – Not used for analyses

The directional distribution for school traffic is based on the existing school traffic counts and is shown in **Table 2** and on **Figure 5**.

Table 2
Existing Directional Distribution

Direction	Percentage
North on Patton Avenue	20%
South on Patton Avenue	30%
West on Maude Avenue	15%
East on Maude Avenue	10%
North on Kennicott Avenue	5%
South on Kennicott Avenue	20%
Total	**100%**

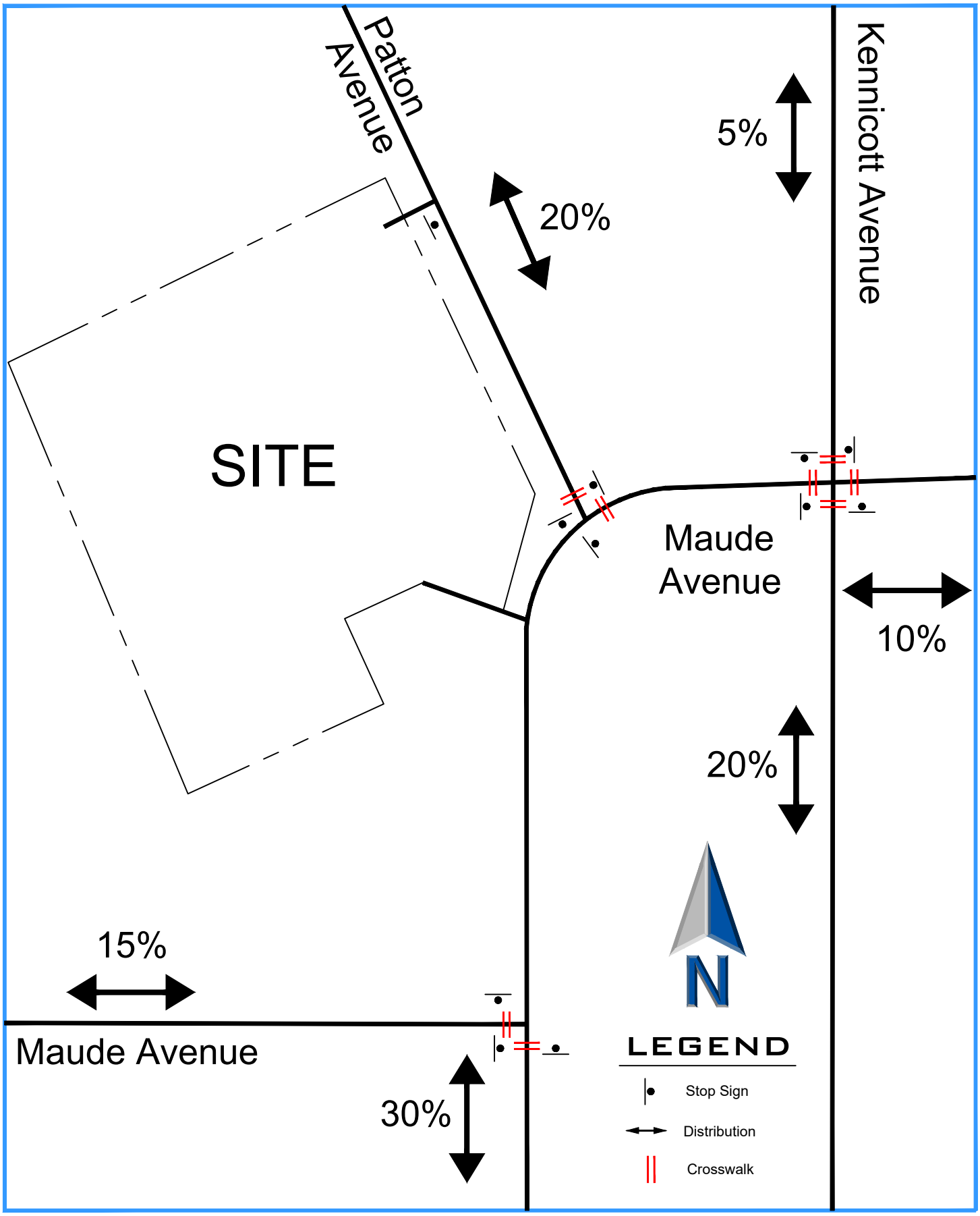
Trip Assignment

The future vehicular trips that are generated by the school were distributed to the area roadways based on the site plan, projected school volumes, and the directional distribution analysis. **Figure 6** illustrates the total traffic generated by the school (existing and expansion) and its assignment on the road system.

Traffic exiting the south lot will remain right-turn only. The current right-turn restriction on Maude Avenue onto Patton Avenue and left-turn restriction on Patton Avenue to continue on Patton Avenue will also remain. These restrictions allow for traffic to flow through the south lot quickly to avoid queuing onto Maude Avenue.

Traffic leaving the south lot and the Patton Avenue on-street pick-up/drop-off lane will continue southbound on Patton Avenue until Kennicott Avenue and can travel north or south as needed. This plan does not affect travel time significantly as most existing traffic follow the current restrictions.

Figure 7 shows the total traffic volumes which a combination of Figure 3C (Existing Non-School Traffic Volumes) and Figure 6 (Projected School Traffic Volumes).



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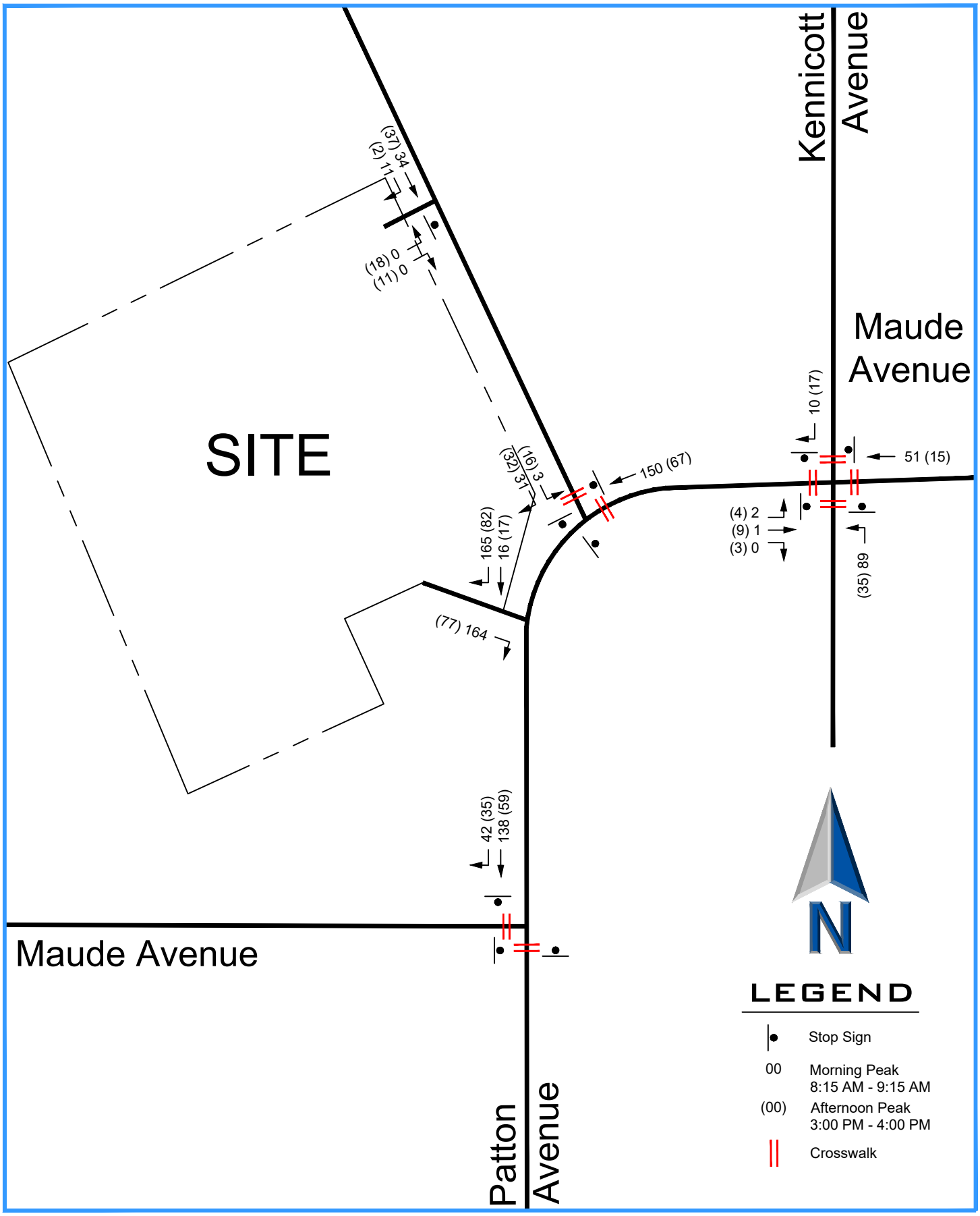
Directional Distribution

Figure 5



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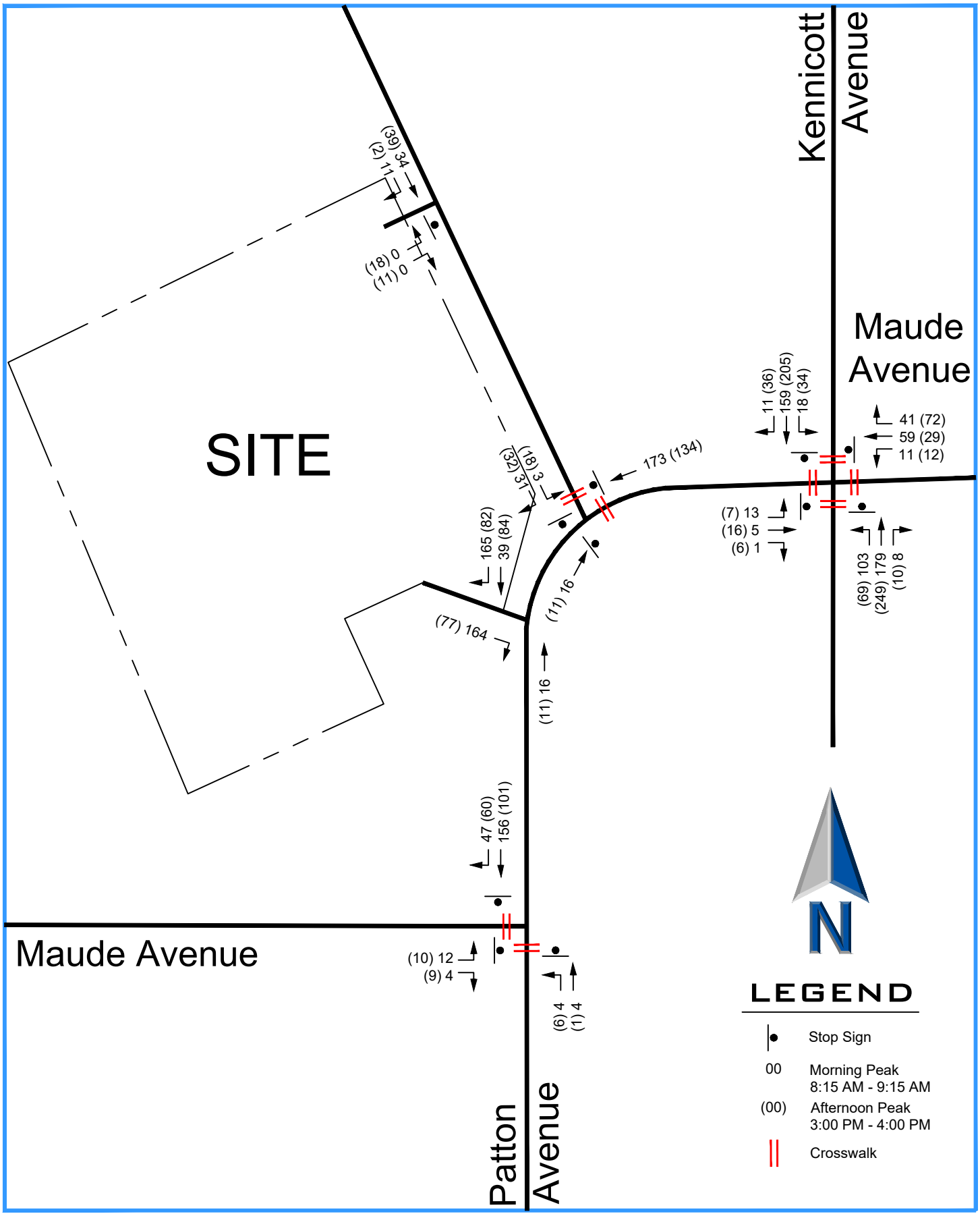
Projected School Traffic Volumes

Figure 6



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Total Traffic Volumes

Figure 7

ANALYSES

Intersection Capacity Analyses

An intersection's ability to accommodate traffic flow is based on the average control delay experienced by vehicles passing through the intersection. The intersection and individual traffic movements are assigned a level of service (LOS), ranging from A to F based on the control delay created by a traffic signal or stop sign. Control delay consists of the initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. LOS A has the best traffic flow and least delay. LOS E represents saturated or at capacity conditions. LOS F experiences oversaturated conditions and extensive delays. The Highway Capacity Manual definitions for levels of service and the corresponding control delay for both signalized and unsignalized intersections are shown in **Table 3**.

Table 3
Level of Service Criteria for Intersections

Level of Service	Description	Control Delay (seconds/vehicle)	
		Signals	Stop Signs
A	Minimal delay and few stops	<10	<10
B	Low delay with more stops	>10-20	>10-15
C	Light congestion	>20-35	>15-25
D	Congestion is more noticeable with longer delays	>35-55	>25-35
E	High delays and number of stops	>55-80	>35-50
F	Unacceptable delays and over capacity	>80	>50

Source: Highway Capacity Manual

Capacity analyses were conducted for each intersection using the computer program Highway Capacity Software (HCS) to determine the existing operating conditions of the access system. These analyses were performed for the school's peak arrival and dismissal periods. **Table 4** shows the existing and future level of service results for each intersection. Copies of the capacity analysis summaries are included in the **Appendix**.

Maude Avenue at Kennicott Boulevard

The all-way-stop intersection east of the school will continue to operate at a good level of service with low delay. No improvements are needed.

Patton Avenue at Maude Avenue (North)

The all-way-stop intersection at the east corner of the school will continue to operate at a good level of service with minimal delay. The existing turning restrictions at the intersection should continue to be enforced. No improvements are needed.

Patton Avenue at Maude Avenue (South)

The all-way-stop intersection south of the school will continue to operate at a good level of service with minimal to low delay. No improvements are needed.

Patton Avenue at North Lot

The two-way-stop intersection north of the school will continue to operate at a good level of service. With enforcement of the restricted right-turn onto Patton Avenue during arrival and dismissal, there will be minimal delay at the intersection in the future. No further improvements are needed.

Patton Avenue at South Lot

The two-way-stop intersection directly south of the school will continue to operate at the same level of service. With the restricted left-turn onto Patton Avenue and left-turn into the south lot during arrival and dismissal, there will be minimal interruptions to the current level of service. No further improvements are needed.

Table 4
Intersection Level of Service and Delay

Intersection	Movement	AM Arrival		PM Dismissal	
		Existing	Future	Existing	Future
Maude Avenue at Kennicott Boulevard	**All-Way Stop**	B-10.9	B-11.1	B-11.1	B-11.2
Patton Avenue at Maude Avenue North	**All-Way Stop**	A-9.1	A-9.5	A-8.0	A-8.1
Patton Avenue at Maude Avenue South	**All-Way Stop**	B-10.3	B-11.2	A-8.4	A-8.6
Patton Avenue at North Lot (Two-Way Stop)	**EB Lt/Rt**	A-0.0	A-0.0	A-9.3	A-9.3
	NB Lt	A-7.4	A-7.4	A-7.5	A-7.5
Patton Avenue at South Lot (Two-Way Stop)	**EB Rt**	C-15.2	C-17.9	B-10.7	B-10.9

(1) No left-turn.

Stacking

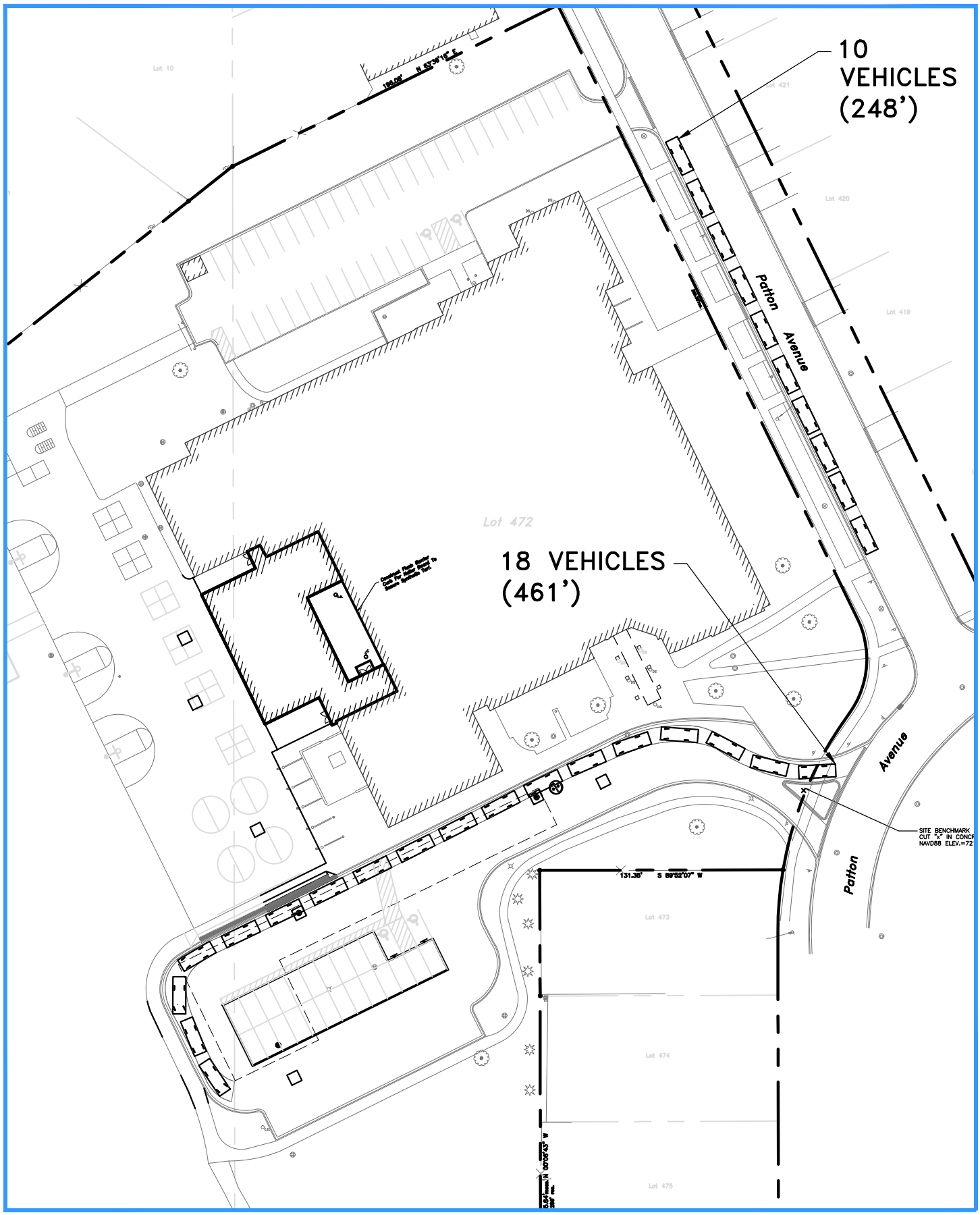
Figure 8 illustrates the existing and future on-site and on-street stacking available to use at Patton School. Patton Avenue (North) has room for 10 vehicles and the south lot has room for 35 vehicles. There are no additional recommendations for the arrival and dismissal stacking.

Parking

The Village of Arlington Heights Zoning Ordinance requires elementary schools to provide one parking space per each employee (61 staff) and one per every five classrooms (24 rooms) for a total of 66 spaces. Patton Elementary School currently meets the zoning code requirements with 75 spaces.

National parking data is available from the Institute of Transportation Engineers (ITE) in their publication *Parking Generation*, 5th Edition for elementary schools (Land Use Code 520). The peak demand in the ITE data was 0.13 spaces per student (422 students) or 55 spaces in the future.

Parking counts were conducted in October, 2022 after the morning arrival period which found the North Lot nearly full and the South Lot with unused spaces. Three staff cars were parked on Patton Drive by the North Lot. There was a total of 52 vehicles parked in 75 spaces **Table 5** summarizes the parking inventory and survey by lot.



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Existing On-Site Stacking

Figure 8

Table 5
Patton School Parking Inventory and Survey

Lot	Parking Inventory			Parking Survey	
	Standard	Accessible	Total	Vehicles	Occupancy
North	36	2	38	36	95%
South	35	2	37	13	35%
On-street				3	
Total	**71**	**4**	**75**	**52**	**69%**

In the future with the all-day kindergarten and growth in the other grades, the overall parking demand is expected to increase up to 59 vehicles which is less than the current supply. This is based on all staff parking on-site. Four accessible stalls are required and five spaces provided. Parking for special events at the school can be accommodated by a combination of the off-street parking and on-street parking by the school.

SUMMARY

This report summarizes the results of traffic and parking study for the expansion of Patton School in Arlington Heights, Illinois. The following recommendations were developed:

1. The proposed expansion of Patton School from 401 to 422 students will add 27 to 43 trips during the peak school hours will not adversely impact the level-of-service of study area intersections.
2. Parking counts at the school show that the 75 existing parking spaces will serve the needs of the expanded school.

Appendix

- Existing 2022 Traffic Counts
- School Signage Plan
- Arlington Heights Bike Map
- School Info
    - Bussing Schedule
    - Taxi Data
    - Crossing Guard Locations
- ITE Traffic Calculations
- Intersection Capacity Analyses
    - 2022 Existing Conditions
    - 2028 Total Traffic Volumes

Patton Avenue and Maude Avenue (North)

Begin Time	Patton Avenue Southbound		Maude Avenue Westbound		Maude Avenue Eastbound		15 Minute Totals	60 Minute Totals	Peak Hour Factor
	Right Turn	Left Turn	Right Turn	Through	Through	Left Turn			
	Thursday October 27, 2022								
8:00 AM	1	0	3	9	5	0	18	191	0.44
8:15 AM	1	0	3	12	5	0	21	**203**	**0.47**
8:30 AM	2	0	0	38	3	0	43	182	0.42
8:45 AM	19	0	0	89	1	0	109		
9:00 AM	5	3	0	17	5	0	30		
9:15 AM	0	0	0	0	0	0	0		
Total	28	3	6	165	19	0			
8:15-9:15 AM	**27**	**3**	**3**	**156**	**14**	**0**	**203**		
	Thursday October 27, 2022								
2:30 PM	0	0	0	0	0	0	0	92	0.47
2:45 PM	3	0	3	5	3	1	15	124	0.63
3:00 PM	5	1	0	18	4	0	28	**128**	**0.65**
3:15 PM	3	2	0	42	2	0	49		
3:30 PM	9	8	0	15	0	0	32		
3:45 PM	2	4	0	12	1	0	19		
Total	22	15	3	92	10	1			
3:00-4:00 PM	**19**	**15**	**0**	**87**	**7**	**0**	**128**		

Patton Avenue and Maude Avenue (South)

Begin Time	Patton Avenue Southbound		Patton Avenue Northbound		Maude Avenue Eastbound		15 Minute Totals	60 Minute Totals	Peak Hour Factor
	Right Turn	Through	Through	Left Turn	Right Turn	Left Turn			
	Tuesday October 25, 2022								
8:00 AM	12	15	0	0	2	5	34	173	0.38
8:15 AM	1	7	1	3	0	2	14	**186**	**0.40**
8:30 AM	1	8	0	0	0	1	10	175	0.38
8:45 AM	27	84	1	1	1	1	115		
9:00 AM	10	33	0	0	3	1	47		
9:15 AM	0	2	0	0	0	1	3		
Total	51	149	2	4	6	11			
8:15-9:15 AM	**39**	**132**	**2**	**4**	**4**	**5**	**186**		
	Tuesday October 25, 2022								
2:30 PM	2	2	0	0	1	2	7	43	0.54
2:45 PM	2	1	2	0	1	2	8	125	0.35
3:00 PM	3	0	0	2	1	2	8	**175**	**0.49**
3:15 PM	11	5	0	1	0	3	20		
3:30 PM	29	50	0	2	7	1	89		
3:45 PM	13	38	1	1	1	4	58		
Total	60	96	3	6	11	14			
3:00-4:00 PM	**56**	**93**	**1**	**6**	**9**	**10**	**175**		

Patton Drive and South Parking Lot

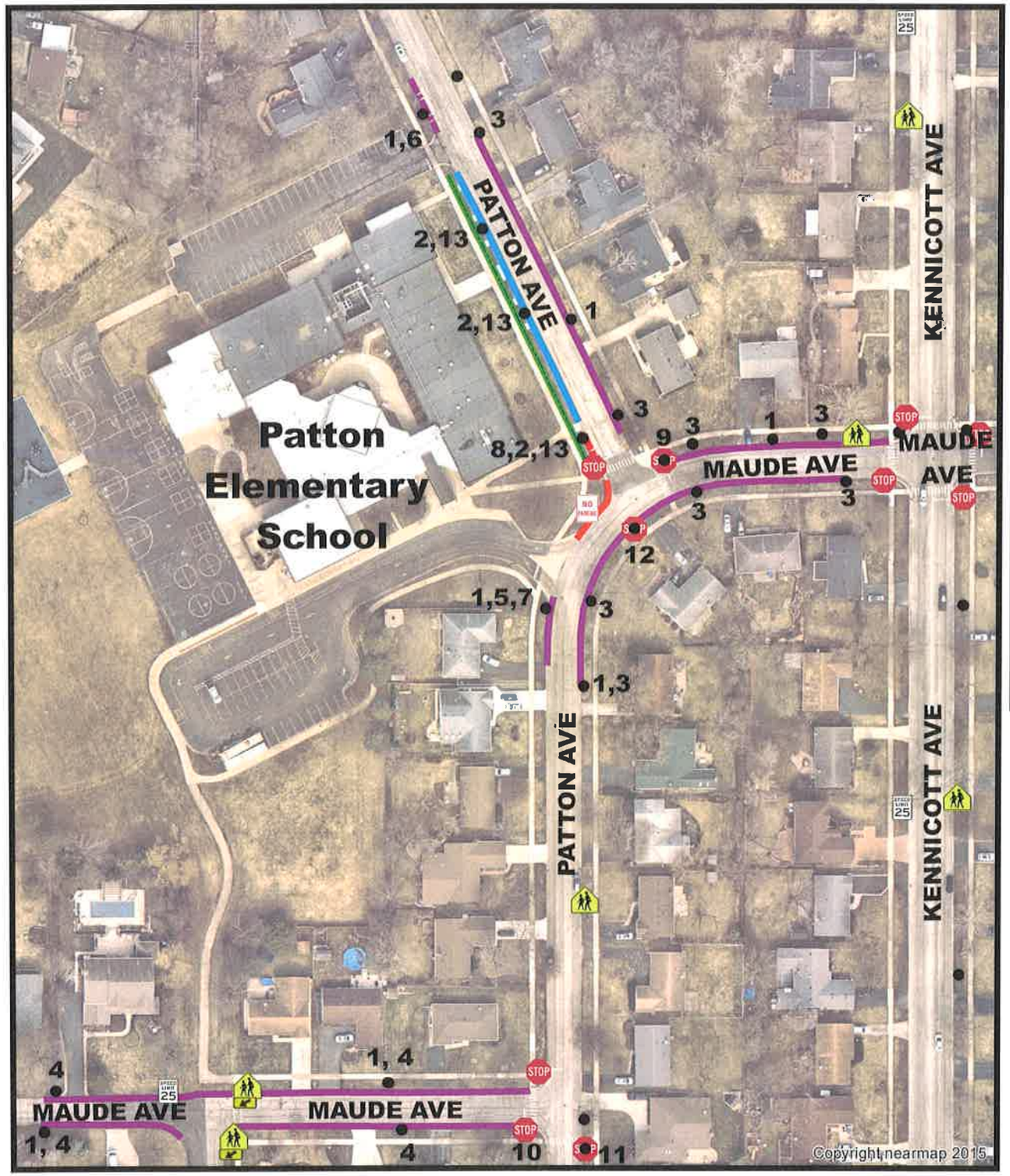
Begin Time	Patton Drive Southbound		Patton Drive Northbound		South Lot Eastbound		15 Minute Totals	60 Minute Totals	Peak Hour Factor
	Right Turn	Through	Through	Left Turn	Right Turn	Left Turn			
	Thursday November 10, 2022								
8:00 AM	6	1	2	0	1	2	12	273	0.34
8:15 AM	10	3	3	0	8	0	24	**311**	**0.39**
8:30 AM	22	1	3	0	13	0	39	302	0.38
8:45 AM	100	1	0	0	97	0	198		
9:00 AM	14	3	6	0	27	0	50		
9:15 AM	2	3	6	0	4	0	15		
Total	154	12	20	0	150	2			
8:15-9:15 AM	**146**	**8**	**12**	**0**	**145**	**0**	**311**		
	Tuesday September 27, 2022								
2:30 PM	1	5	0	0	0	0	6	89	0.47
2:45 PM	2	1	4	1	2	0	10	174	0.48
3:00 PM	20	5	0	0	1	0	26	**198**	**0.54**
3:15 PM	22	21	2	0	2	0	47		
3:30 PM	22	18	2	0	49	0	91		
3:45 PM	9	8	1	0	15	1	34		
Total	76	58	9	1	69	1			
3:00-4:00 PM	**73**	**52**	**5**	**0**	**67**	**1**	**198**		

Patton Drive and North Parking Lot

Begin Time	Patton Drive Southbound		Patton Drive Northbound		North Lot Eastbound		15 Minute Totals	60 Minute Totals	Peak Hour Factor
	Right Turn	Through	Through	Left Turn	Right Turn	Left Turn			
	Friday October 28, 2022								
8:00 AM	8	1	0	3	0	0	12	39	0.70
8:15 AM	5	1	1	2	0	0	9	**34**	**0.61**
8:30 AM	2	2	0	0	0	0	4	25	0.45
8:45 AM	1	12	1	0	0	0	14		
9:00 AM	0	7	0	0	0	0	7		
9:15 AM	0	0	0	0	0	0	0		
Total	16	23	2	5	0	0			
8:15-9:15 AM	**8**	**22**	**2**	**2**	**0**	**0**	**34**		
	Monday October 31, 2022								
2:30 PM	0	3	0	0	0	0	3	18	0.41
2:45 PM	0	1	1	0	0	0	2	42	0.39
3:00 PM	0	2	0	0	0	0	2	**61**	**0.56**
3:15 PM	0	10	1	0	0	0	11		
3:30 PM	1	13	4	0	3	6	27		
3:45 PM	1	1	2	0	7	10	21		
Total	2	30	8	0	10	16			
3:00-4:00 PM	**2**	**26**	**7**	**0**	**10**	**16**	**61**		

Kennicott Boulevard and Maude Avenue

Arlington Heights, IL															
	Kennicott Boulevard Southbound			Maude Avenue Westbound			Kennicott Boulevard Northbound			Maude Avenue Eastbound			15 Minute Totals	60 Minute Totals	Peak Hour Factor
Begin Time	Right Turn	Through	Left Turn	Right Turn	Through	Left Turn	Right Turn	Through	Left Turn	Right Turn	Through	Left Turn			
	Thursday October 13, 2022														
8:00 AM	1	62	9	12	2	1	2	53	9	1	3	2	157	617	0.80
8:15 AM	3	38	10	12	4	3	1	47	10	0	1	4	133	**587**	**0.76**
8:30 AM	2	43	4	12	13	2	2	30	23	0	2	1	134	528	0.68
8:45 AM	3	39	3	8	31	2	3	51	50	1	0	2	193		
9:00 AM	2	39	1	9	3	4	2	49	10	0	2	6	127		
9:15 AM	0	32	4	12	0	0	0	22	0	1	1	2	74		
Total	11	253	31	65	53	12	10	252	102	3	9	17			
8:15-9:15 AM	**10**	**159**	**18**	**41**	**51**	**11**	**8**	**177**	**93**	**1**	**5**	**13**	**587**		
	Thursday September 29, 2022														
2:30 PM	1	31	4	8	0	2	2	39	0	0	2	2	91	543	0.74
2:45 PM	2	30	8	12	4	1	2	45	3	0	1	2	110	606	0.82
3:00 PM	5	52	8	7	2	1	1	65	12	1	1	3	158	**694**	**0.88**
3:15 PM	8	50	3	23	14	5	3	48	20	2	5	3	184		
3:30 PM	3	45	9	20	3	3	3	52	10	1	5	0	154		
3:45 PM	7	58	14	19	2	3	3	80	5	2	4	1	198		
Total	26	266	46	89	25	15	14	329	50	6	18	11			
3:00-4:00 PM	**23**	**205**	**34**	**69**	**21**	**12**	**10**	**245**	**47**	**6**	**15**	**7**	**694**		



Legend

SIGNS

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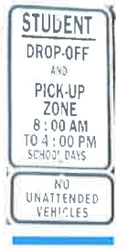
2 

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13 

N
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0 75 150 300 Feet

MAP PREPARED BY:
VILLAGE OF ARLINGTON HEIGHTS
PUBLIC WORKS DEPARTMENT
TIFFANY SCHMOKER
33 S. ARLINGTON HTS. RD.
ARLINGTON HEIGHTS, IL 60005
(847) 368-5250
http://www.vah.com

PATTON ELEMENTARY SCHOOL

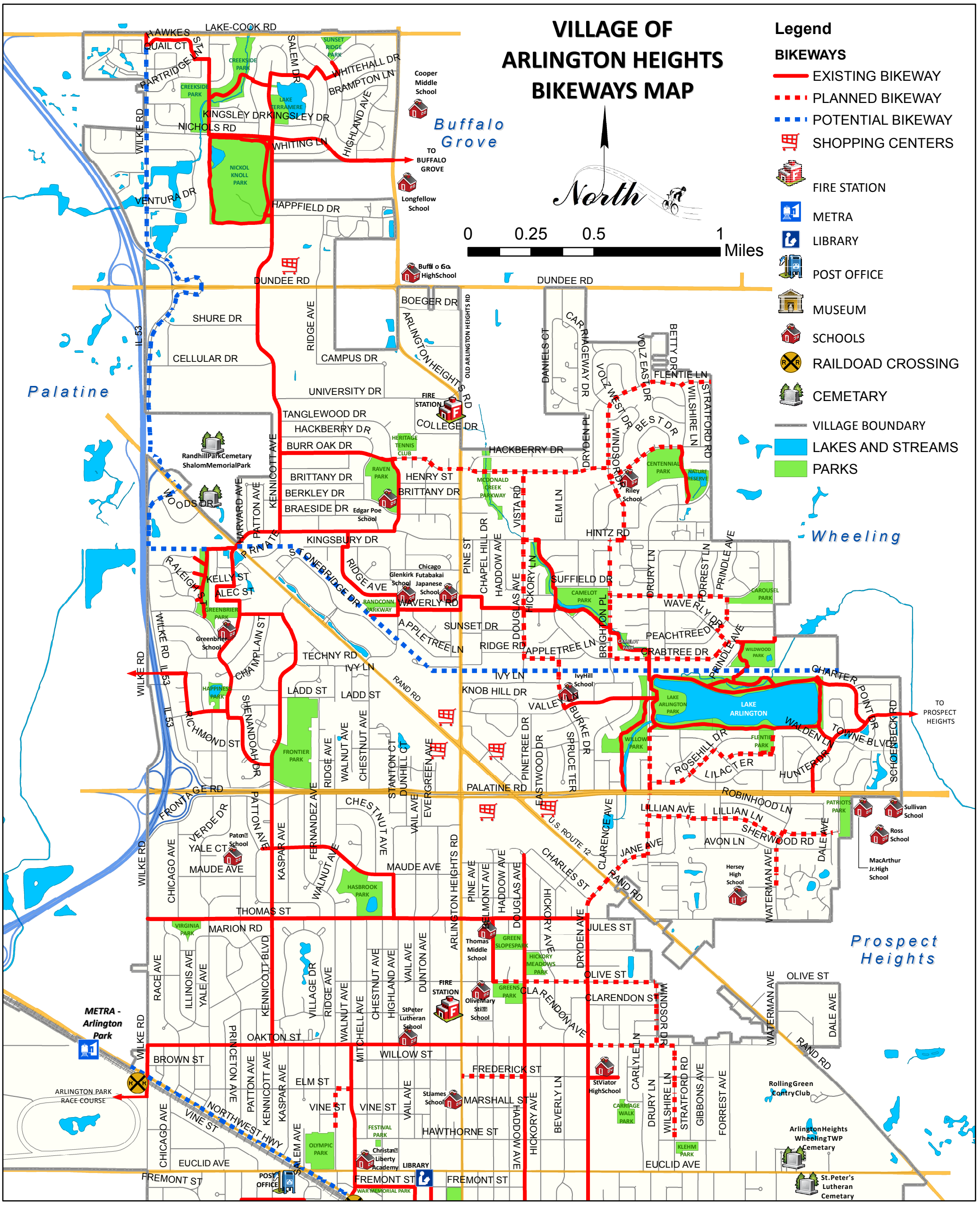
SCHOOL SITE MAP

VILLAGE OF ARLINGTON HEIGHTS

PUBLIC WORKS DEPARTMENT

DRAWN: TLS	V.MNGR:		ORD. NO. 1994-063
CHECKED: TJP	V. ENG:		DIR FAC 25:
DATE: 9/2019	POLICE:		
REVISION/DATE:	12/2021		

VILLAGE OF ARLINGTON HEIGHTS BIKEWAYS MAP



BICYCLE SAFETY RULES

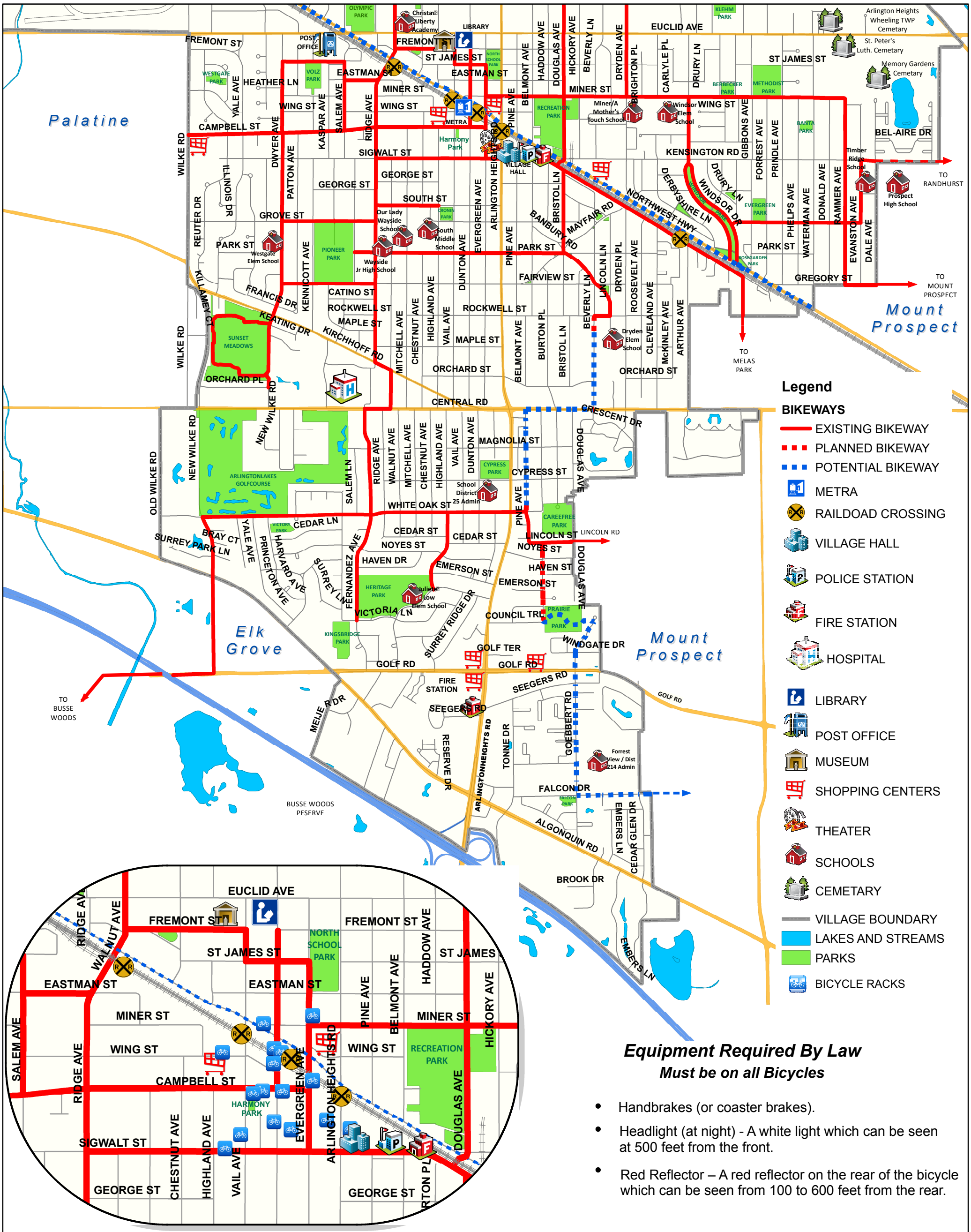
1. Always ride your bike in single file, in the same direction as traffic. Stay close to the right edge of the road.
2. Helmets are highly recommended for all bicyclists.
3. Bicycle riders are expected to know and obey all traffic regulations (signs, signals, pavement markings, etc.).
4. Riding on sidewalks is legal except in the Central Business District.
5. Indicate your intention to slow down, stop, turn or change lanes by using arm signals. This will prevent being cutoff.
6. Be extra careful at intersections and railroad crossings and when emerging from driveways, alleys or from behind parked cars. Establish eye contact with motorists who may not be looking for a cyclist.
7. Look out for motorists pulling into traffic. Keep a close watch for car doors opening suddenly in your path causing you to veer into traffic.
8. Maintain your bicycle in sake working order. Check brakes, tires and wheels.
9. Wear bright colored and reflective clothing when riding after dark. Make sure your bike has proper lights and reflectors before riding at night.
10. Stop before reaching a school bus which has s topped to load or unload passengers.
11. Be ready to yield the right-of-way to other moving vehicles.
12. Keep at least one hand on the handlebars at all times for control of the bicycle. Carry books, packages, or other items in a back pack or carrier.
13. Watch for poor road surfaces including drainage grates (tires may fall through grooves), pot holes, loose gravel, and unsafe shoulders.
14. Make sure that the bike you ride is the right size for you.
15. Right turns on red are permissible, after coming to complete stop, except where a sign is posted prohibiting such a turn. You must yield the right-of-way to other traffic lawfully using the intersection and to pedestrians.
16. Only one person should ride on a bicycle except on a tandem bicycle or with an attached child's seat if available.
17. Never hitch a ride with any motorized vehicle.
18. Do not wear headphones when riding a bicycle.

Source:

Portions of this list were excerpts from **Illinois Bicycle Rules of The Road.** Copies are available from the Arlington Heights Police Department, Village Hall, or Illinois Secretary of State, Woodfield Commons, Schaumburg, IL.

Prepared by the Village of Arlington Heights Engineering Department.

June, 2014



DOWNTOWN

Equipment Required By Law

Must be on all Bicycles

- Handbrakes (or coaster brakes).
- Headlight (at night) - A white light which can be seen at 500 feet from the front.
- Red Reflector – A red reflector on the rear of the bicycle which can be seen from 100 to 600 feet from the rear.

Village of Arlington Heights

Thomas W. Hayes, Mayor
33 South Arlington Heights Rd
Arlington Heights, IL 60005
(847) 368-5100

Reporting Bicycle Accidents

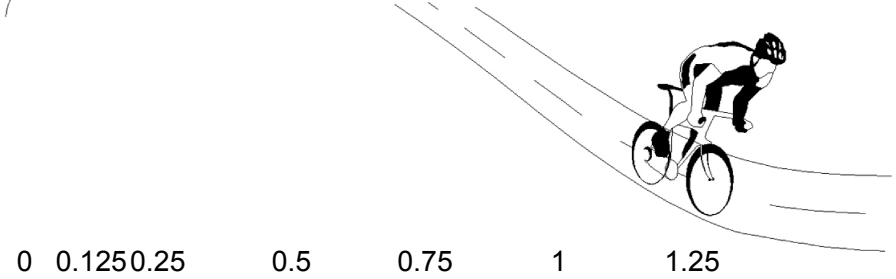
Police Department (847) 368-5300
Emergency 911

Bicycle Advisory Commission

Peter Szabo, Chairman
James K. Daley
Paul Danko
Janet Harlow
Alan Medsker
Mitchell D. Polonsky
Michael Walczak

Bike Map Information
(847) 368-5250

VILLAGE OF ARLINGTON HEIGHTS BIKEWAYS MAP



0 0.125 0.25 0.5 0.75 1 1.25 Miles

AM ROUTE THOMAS - IVY HILL - OLIVE - GREENBRIER SOUTH - WESTGATE - DRYDEN - PIONEER - OLIVE - REC PARK

1ST ROUTE 7:05-7:20AM	DRIVER	DRIVER SUB	X	BUS	BUS SUB	2ND ROUTE 8:20-8:40AM		DRIVER SUB	BUS SUB
THOMAS A 7:10				8		IVY HILL A	8:30		
THOMAS B 7:10				11		IVY HILL D (600, 700)	8:40		
THOMAS C 7:10				19		GREENBRIER A	8:35		
THOMAS D 7:10				22		IVY HILL E (800,900)	8:40		
THOMAS E 7:05				1909					
THOMAS F 7:05				5		IVY HILL B	8:35		
THOMAS G 7:15				21		IVY HILL C-(400, 500)			
THOMAS H 7:10				7GPT		OLIVE A	8:20		
THOMAS I 7:10				3		OLIVE-REC	8:40		
THOMAS J 7:10				9		DRYDEN C	8:15		
THOMAS K 7:20				1908					
THOMAS L 7:10				6GPT					

1ST ROUTE 7:05-7:20AM	DRIVER	DRIVER SUB	X	BUS	BUS SUB	2ND ROUTE 8:15-8:40AM		DRIVER SUB	BUS SUB
SOUTH A 7:10				16					
SOUTH B 7:15				4		DRYDEN B	8:15		
SOUTH C 7:10				58					
SOUTH D 7:20				24					
SOUTH E 7:20				1					
SOUTH F 7:05				2		WESTGATE A	8:20		
SOUTH G 7:15				20					
SOUTH H 7:15				1915					
SOUTH I 7:15				59		DRYDEN A	8:35		
SOUTH J 7:10				173		DRYDEN D	8:15		
SOUTH K 7:15				12		WESTGATE-PIONEER	8:35		

PM ROUTE THOMAS - IVY HILL - OLIVE **5/31/2022**

1ST ROUTE 2:45 PM	DRIVER	DRIVER SUB	X	BUS	BUS SUB	2ND ROUTE 3:35 PM	DRIVER SUB	BUS SUB
THOMAS A 2:40				8		IVY HILL A		
THOMAS B 2:40				11		IVY HILL D (600, 700)		
THOMAS C 2:40				19		GREENBRIER A		
THOMAS D 2:40				22		IVY HILL E (800,900)		
THOMAS E 2:40				1909				
THOMAS F 2:40				5		IVY HILL B		
THOMAS G 2:40				21		IVY HILL C (400,500)		
THOMAS H 2:40				7GPT		OLIVE A		
THOMAS I 2:40				3		OLIVE-REC 3:45		
THOMAS J 2:40				9		DRYDEN C		
THOMAS K 2:40				1908		ACTIVITY EAST THOMAS		
THOMAS L 2:40				6GPT		ACTIVITY WEST		

PM ROUTE SOUTH - WESTGATE - DRYDEN - PIONEER - OLIVE - REC-PARK

PUNCH	1ST ROUTE 2:45 PM	DRIVER	DRIVER SUB	X	BUS	BUS SUB	2ND ROUTE 3:35 PM	DRIVER SUB	BUS SUB
	SOUTH A 2:40				16		ACTIVITY SOUTH		
	SOUTH B 2:40				4		DRYDEN B		
	SOUTH C 2:40				58				
	SOUTH D 2:40				24		ACTIVITY NORTH		
	SOUTH E 2:40				1		ACTIVITY NORTHEAST		
	SOUTH F 2:40				2		WESTGATE A		
	SOUTH G 2:40				20				
	SOUTH H 2:40				1915				
	SOUTH I 2:40				59		DRYDEN A		
	SOUTH J 2:40				173		DRYDEN D		
	SOUTH K 2:40				12		WESTGATE-PIONEER 3:50		

MIDDAY ROUTE DRYDEN - IVY HILL - OLIVE - WESTGATE - DATE: **5/31/2022**

PUNCH	K ROUTE 11:45 AM	DRIVER	DRIVER SUB	X	BUS	BUS SUB	L ROUTE 12:20 - 12:40 PM	DRIVER SUB	BUS SUB
11:15 AM	DRYDEN K2-31				21		DRYDEN 31L 12:20		
11:15 AM	DRYDEN K31				1909				
11:15 AM	IVY HILL K37				11		IVY HILL 37L 12:30		
11:15 AM	OLIVE K34				8		OLIVE 34L 12:40		
11:15 AM					22		WESTGATE 32L 12:40		

NOTES.-

Taxi at Schools 21-22	AM	MID-DAY	PM
Dryden Elementary School	-	-	-
Greenbrier Elementary School	6	11	6
Ivy Hill Elementary School	1		1
Olive Mary Stitt Elementary School	-	-	-
Westgate Elementary School	8	3	8
Windsor Elementary School	6	1	6
Thomas Middle School	6	1	5
South Middle School	4	1	4
Total	31	17	30

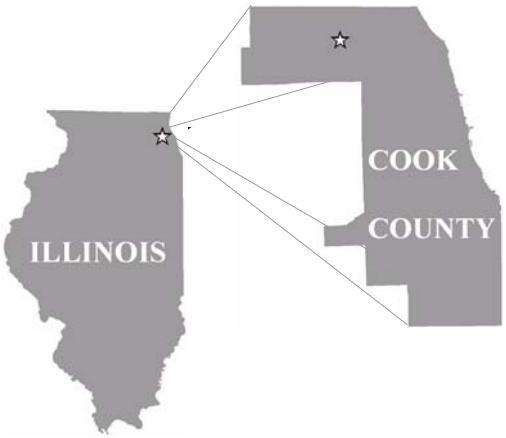
Crossing Guard Locations

Location	AM	PM	K-5	Middle School	Parochial
Arlington & Olive	7:15-9:00	2:25-4:10	Olive		St. Peters
Arlington & Park	7:10-8:25	2:45-3:30		South	OLW
Arlington & Thomas	7:15-7:45	2:45-3:15		Thomas	
Arlington @ St. James	7:45-8:30	3:15-4:00			St. James
Belmont & Thomas	7:15-7:45	2:30-4:00	Olive	Thomas	St. James, St. Peter
	8:15-9:00				
Dryden & Miner	8:05-9:05	3:40-4:10	Windsor		St. James
Dryden & Rockwell	8:35-9:05	3:35-4:05	Dryden		
Dwyer & Grove	8:35-9:05	3:35-4:05	Westgate		
Dwyer & Harvard	8:35-9:05	3:35-4:05	Westgate		
Kennicott & Maude	8:35-9:05	3:35-4:05	Patton		
Maude & Patton	8:35-9:05	3:35-4:05	Patton		
Olive & Belmont	8:35-9:05	3:35-4:05	Olive		
Olive & Douglas	8:35-9:05	3:35-4:05	Olive		
Park & Highland	7:15-7:45	2:45-3:15		South	
Ridge & Park	7:55-8:25	2:55-3:25			OLW
Thomas & Harvard	8:35-9:05	3:35-4:05	Patton		
Windsor & Kensington	8:25-9:10	3:30-4:15	Windsor		
Windsor & Miner	8:20-9:05	3:35-4:05	Windsor		

ELEMENTARY SCHOOL DISTRICTS

Village of Arlington Heights

Cook County - Illinois



Legend

VAH Elementary Schools

ELEMENTARY SCHOOL DISTRICTS

- Dryden School
- Fairview School
- Forest View School
- Greenbrier School
- Ivy Hill School
- Juliette Low School
- Lake Louise School
- Longfellow School
- Olive Mary Stitt School
- Patton School
- Poe School
- Riley School
- Sullivan School
- Westgate School
- Willow Bend School
- Windsor School
- Winston School

ELEMENTARY SCHOOL BOUNDARIES 2008

STREETS

Feature Class Type

- Interstate Highway
- US and State Highway
- Major Streets
- Local City Streets

N

Scale 1:52,300

1 inch equals 0.83 miles

Miles 0 0.35 0.7 1.4

Feet 0 1,750 3,500 7,000

Data Sources:
1. Planimetric Data - Cook County, IL (2001) - VAH GIS Div. (rev. 2004)
2. Annotation - VAH GIS Div. (2004)

Projection: State Plane Coordinate System (Illinois East)
Datum: NAD83 Map Units: feet

MAP PREPARED BY:
VILLAGE OF ARLINGTON HEIGHTS
GEOGRAPHIC INFORMATION SYSTEMS DIVISION
33 S. ARLINGTON HTS. RD.
ARLINGTON HEIGHTS, IL 60005
(847) 368-5726
http://www.vah.com

APRIL 2008

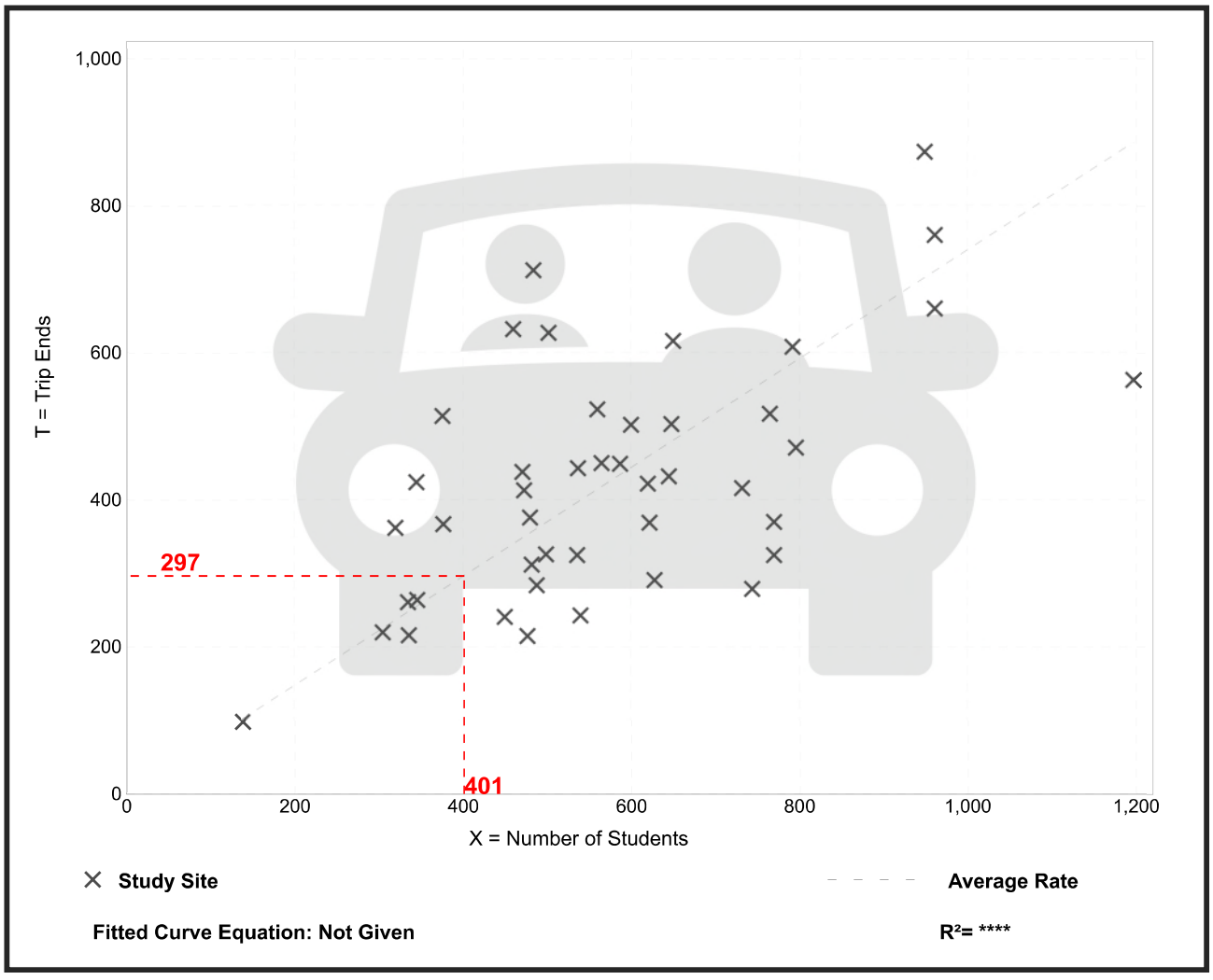
Elementary School
(520)

Vehicle Trip Ends vs: **Students**
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: 44
Avg. Num. of Students: 575
Directional Distribution: 54% entering, 46% exiting

Vehicle Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
0.74	0.38 - 1.47	0.25

Data Plot and Equation



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Elementary School
(520)

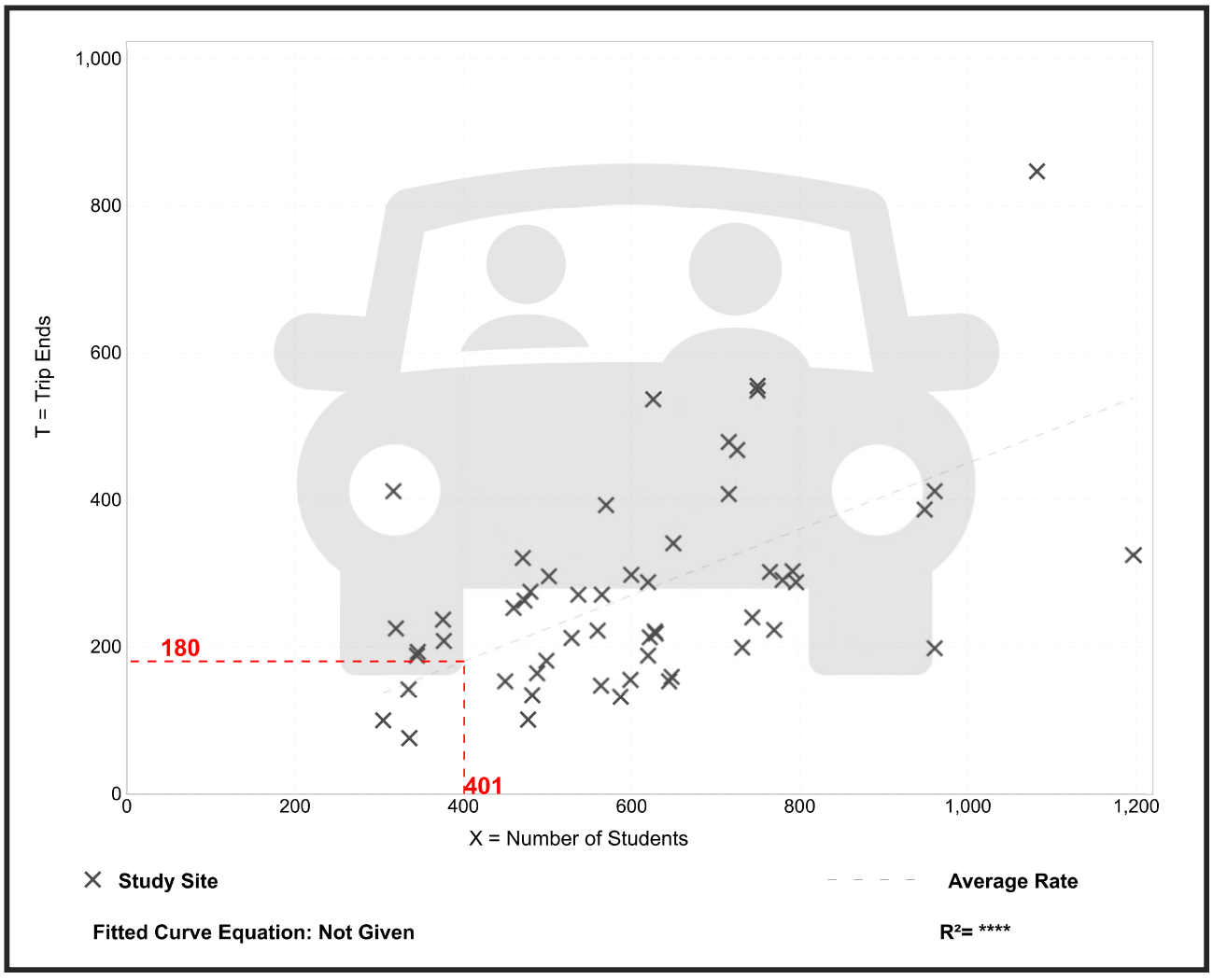
Vehicle Trip Ends vs: **Students**
On a: **Weekday,**
PM Peak Hour of Generator

Setting/Location: **General Urban/Suburban**
Number of Studies: 54
Avg. Num. of Students: 608
Directional Distribution: 46% entering, 54% exiting

Vehicle Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
0.45	0.21 - 1.30	0.19

Data Plot and Equation



Trip Gen Manual, 11th Edition ● Institute of Transportation Engineers

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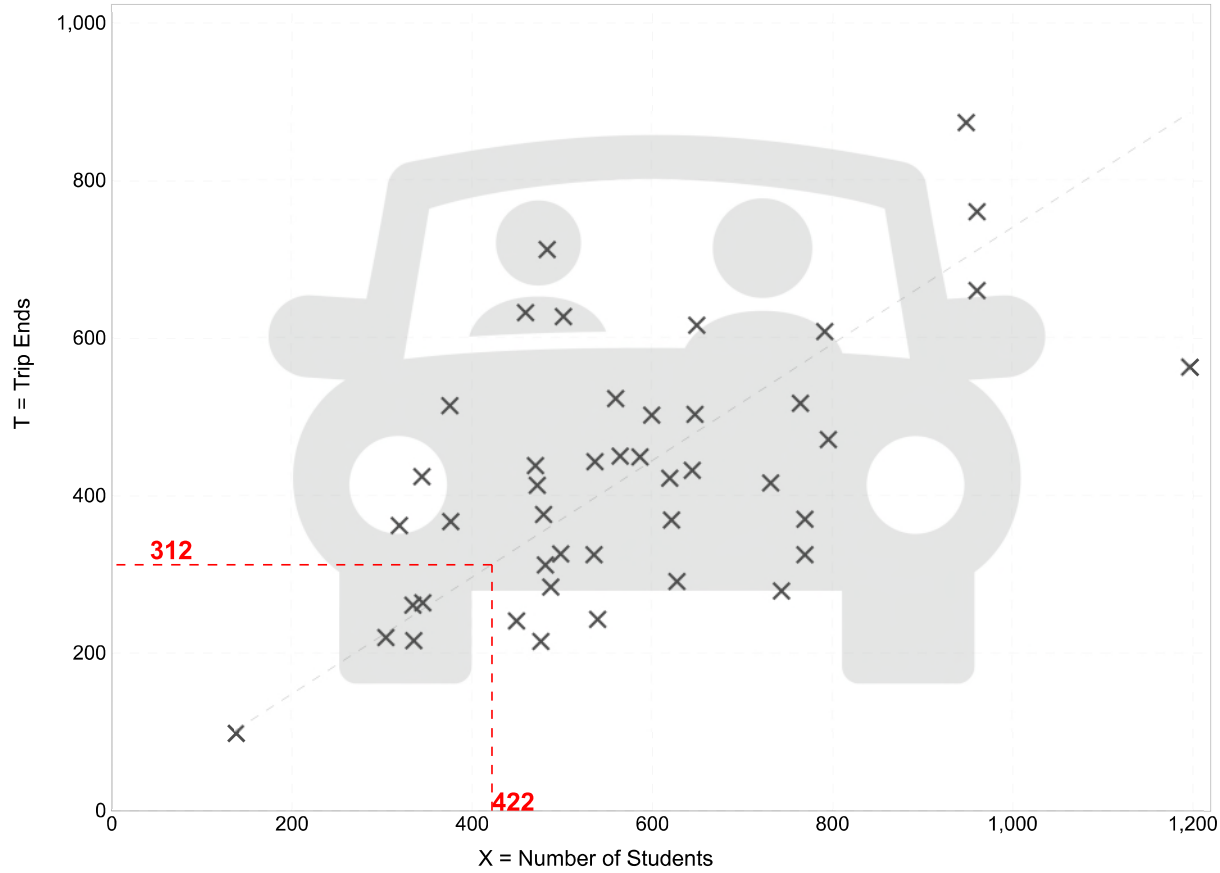

Trip Gen Manual, 11th Edition ● Institute of Transportation Engineers

Elementary School
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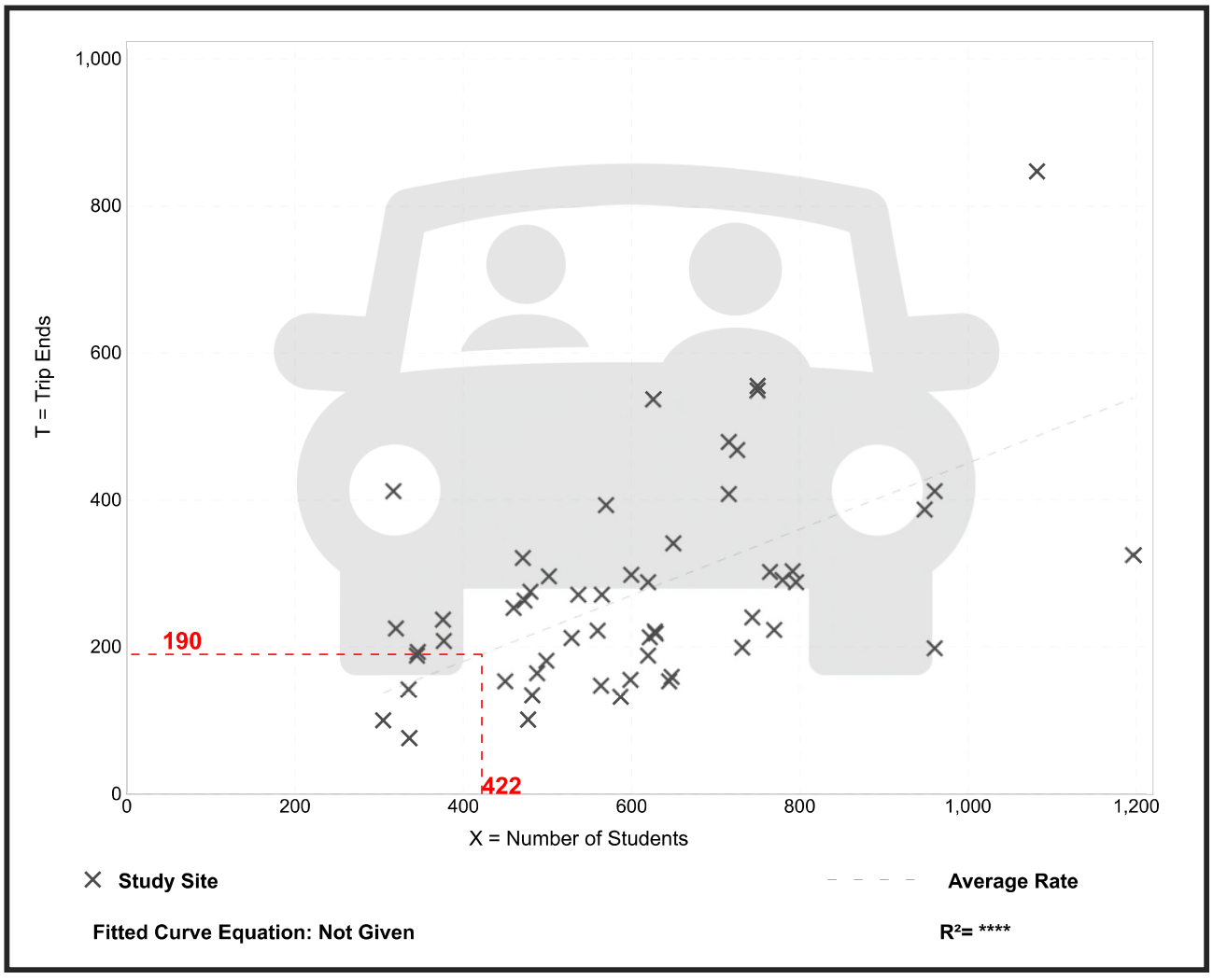


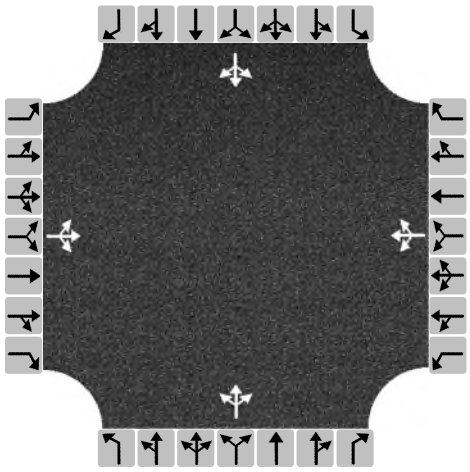
Trip Gen Manual, 11th Edition ● Institute of Transportation Engineers

HCS All-Way Stop Control Report

General and Site Information

Analyst	AG
Agency/Co.	Eriksson
Date Performed	9/12/2022
Analysis Year	2022
Analysis Time Period (hrs)	0.25
Time Analyzed	AM Peak
Project Description	Patton School
Intersection	Maude and Kennicott
Jurisdiction	Arlington Heights
East/West Street	Maude Avenue
North/South Street	Kennicott Avenue
Peak Hour Factor	0.76

Lanes



Turning Movement Demand Volumes

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume (veh/h)	13	5	1	11	53	41	96	177	8	18	159	10
% Thrus in Shared Lane												

Lane Flow Rate and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	25			138			370			246		
Percent Heavy Vehicles	0			0			0			0		
Initial Departure Headway, h_d (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.022			0.123			0.329			0.219		
Final Departure Headway, h_d (s)	5.72			5.19			4.71			4.79		
Final Degree of Utilization, x	0.040			0.199			0.483			0.327		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, t_s (s)	3.72			3.19			2.71			2.79		

Capacity, Delay and Level of Service

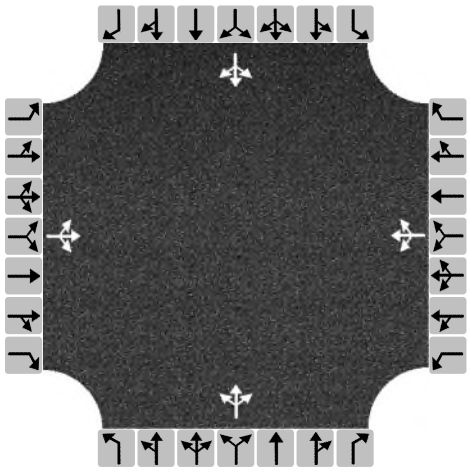
Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	25			138			370			246		
Capacity (veh/h)	629			694			765			752		
95% Queue Length, Q_{95} (veh)	0.1			0.7			2.7			1.4		
Control Delay (s/veh)	9.0			9.5			12.0			10.1		
Level of Service, LOS	A			A			B			B		
Approach Delay (s/veh) | LOS	9.0	A		9.5	A		12.0	B		10.1	B	
Intersection Delay (s/veh) | LOS	10.9						B					

HCS All-Way Stop Control Report

General and Site Information

Analyst	AG
Agency/Co.	Eriksson
Date Performed	9/12/2022
Analysis Year	2028
Analysis Time Period (hrs)	0.25
Time Analyzed	AM Peak
Project Description	Patton School
Intersection	Maude and Kennicott
Jurisdiction	Arlington Heights
East/West Street	Maude Avenue
North/South Street	Kennicott Avenue
Peak Hour Factor	0.76

Lanes



Turning Movement Demand Volumes

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume (veh/h)	13	5	1	11	59	41	103	179	8	18	159	11
% Thrus in Shared Lane												

Lane Flow Rate and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	25			146			382			247		
Percent Heavy Vehicles	0			0			0			0		
Initial Departure Headway, h_d (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.022			0.130			0.339			0.220		
Final Departure Headway, h_d (s)	5.78			5.24			4.74			4.83		
Final Degree of Utilization, x	0.040			0.212			0.502			0.332		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, t_s (s)	3.78			3.24			2.74			2.83		

Capacity, Delay and Level of Service

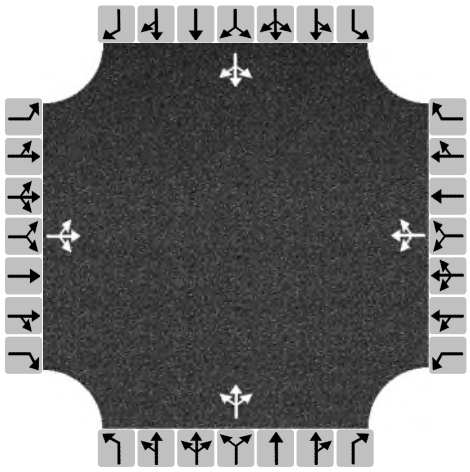
Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	25			146			382			247		
Capacity (veh/h)	623			687			759			745		
95% Queue Length, Q_{95} (veh)	0.1			0.8			2.9			1.5		
Control Delay (s/veh)	9.0			9.6			12.4			10.2		
Level of Service, LOS	A			A			B			B		
Approach Delay (s/veh) | LOS	9.0	A		9.6	A		12.4	B		10.2	B	
Intersection Delay (s/veh) | LOS	11.1						B					

HCS All-Way Stop Control Report

General and Site Information

Analyst	AG
Agency/Co.	Eriksson
Date Performed	9/12/2022
Analysis Year	2022
Analysis Time Period (hrs)	0.25
Time Analyzed	PM Peak
Project Description	Patton School
Intersection	Maude and Kennicott
Jurisdiction	Arlington Heights
East/West Street	Maude Avenue
North/South Street	Kennicott Avenue
Peak Hour Factor	0.88

Lanes



Turning Movement Demand Volumes

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume (veh/h)	7	15	6	12	30	69	69	245	10	34	205	34
% Thrus in Shared Lane												

Lane Flow Rate and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	32			126			368			310		
Percent Heavy Vehicles	0			0			0			0		
Initial Departure Headway, h_d (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.028			0.112			0.327			0.276		
Final Departure Headway, h_d (s)	5.65			5.19			4.74			4.73		
Final Degree of Utilization, x	0.050			0.182			0.484			0.408		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, t_s (s)	3.65			3.19			2.74			2.73		

Capacity, Delay and Level of Service

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	32			126			368			310		
Capacity (veh/h)	637			693			760			761		
95% Queue Length, Q_{95} (veh)	0.2			0.7			2.7			2.0		
Control Delay (s/veh)	8.9			9.3			12.1			11.0		
Level of Service, LOS	A			A			B			B		
Approach Delay (s/veh) | LOS	8.9	A		9.3	A		12.1	B		11.0	B	
Intersection Delay (s/veh) | LOS	11.1						B					

HCS All-Way Stop Control Report

General and Site Information

Analyst	AG
Agency/Co.	Eriksson
Date Performed	9/12/2022
Analysis Year	2028
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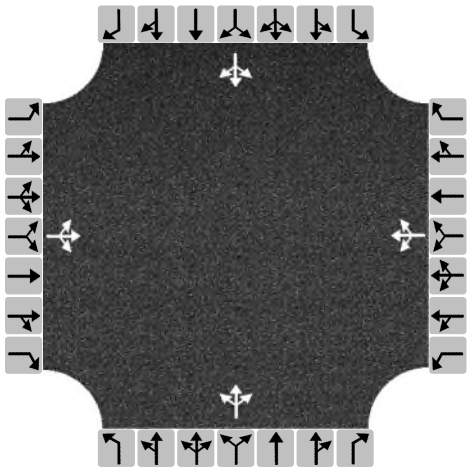
Peak Hour Factor	0.88

Lanes



Turning Movement Demand Volumes

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume (veh/h)	7	16	6	12	29	72	69	249	10	34	205	36
% Thrus in Shared Lane												

Lane Flow Rate and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	33			128			373			313		
Percent Heavy Vehicles	0			0			0			0		
Initial Departure Headway, h_d (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.029			0.114			0.331			0.278		
Final Departure Headway, h_d (s)	5.68			5.20			4.75			4.75		
Final Degree of Utilization, x	0.052			0.186			0.492			0.412		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, t_s (s)	3.68			3.20			2.75			2.75		

Capacity, Delay and Level of Service

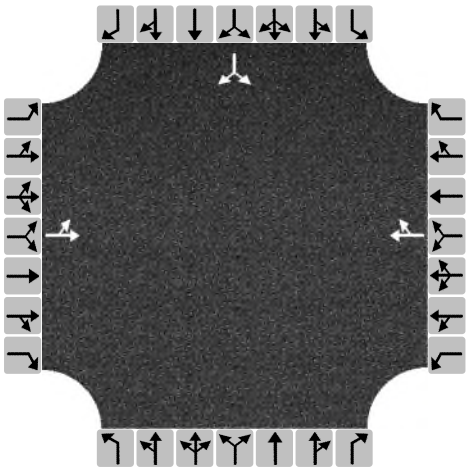
Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	33			128			373			313		
Capacity (veh/h)	634			692			758			758		
95% Queue Length, Q_{95} (veh)	0.2			0.7			2.7			2.0		
Control Delay (s/veh)	9.0			9.4			12.3			11.0		
Level of Service, LOS	A			A			B			B		
Approach Delay (s/veh) | LOS	9.0	A		9.4	A		12.3	B		11.0	B	
Intersection Delay (s/veh) | LOS	11.2						B					

HCS All-Way Stop Control Report

General and Site Information

Analyst	AG
Agency/Co.	Eriksson
Date Performed	9/12/2022
Analysis Year	2022
Analysis Time Period (hrs)	0.25
Time Analyzed	AM Peak
Project Description	Patton School
Intersection	Patton and Maude (North)
Jurisdiction	Arlington Heights
East/West Street	Maude Avenue
North/South Street	Patton Avenue
Peak Hour Factor	0.47

Lanes



Turning Movement Demand Volumes

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume (veh/h)	0	16			156	4				3		27
% Thrus in Shared Lane												

Lane Flow Rate and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LT			TR						LR		
Flow Rate, v (veh/h)	34			340						64		
Percent Heavy Vehicles	0			0						0		
Initial Departure Headway, h_d (s)	3.20			3.20						3.20		
Initial Degree of Utilization, x	0.030			0.303						0.057		
Final Departure Headway, h_d (s)	4.37			4.07						4.18		
Final Degree of Utilization, x	0.041			0.384						0.074		
Move-Up Time, m (s)	2.0			2.0						2.0		
Service Time, t_s (s)	2.37			2.07						2.18		

Capacity, Delay and Level of Service

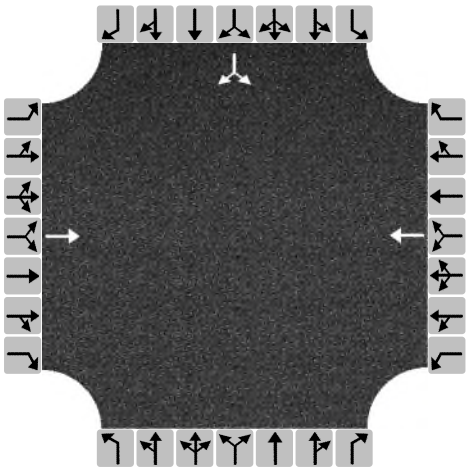
Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LT			TR						LR		
Flow Rate, v (veh/h)	34			340						64		
Capacity (veh/h)	824			886						862		
95% Queue Length, Q_{95} (veh)	0.1			1.8						0.2		
Control Delay (s/veh)	7.6			9.6						7.5		
Level of Service, LOS	A			A						A		
Approach Delay (s/veh) | LOS	7.6	A		9.6	A					7.5	A	
Intersection Delay (s/veh) | LOS	9.1						A					

HCS All-Way Stop Control Report

General and Site Information

Analyst	AG
Agency/Co.	Eriksson
Date Performed	9/12/2022
Analysis Year	2028
Analysis Time Period (hrs)	0.25
Time Analyzed	AM Peak
Project Description	Patton School
Intersection	Patton and Maude (North)
Jurisdiction	Arlington Heights
East/West Street	Maude Avenue
North/South Street	Patton Avenue
Peak Hour Factor	0.47

Lanes



Turning Movement Demand Volumes

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume (veh/h)		16			173					3		31
% Thrus in Shared Lane												

Lane Flow Rate and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	T			T						LR		
Flow Rate, v (veh/h)	34			368						72		
Percent Heavy Vehicles	0			0						0		
Initial Departure Headway, h_d (s)	3.20			3.20						3.20		
Initial Degree of Utilization, x	0.030			0.327						0.064		
Final Departure Headway, h_d (s)	4.42			4.10						4.23		
Final Degree of Utilization, x	0.042			0.420						0.085		
Move-Up Time, m (s)	2.0			2.0						2.0		
Service Time, t_s (s)	2.42			2.10						2.23		

Capacity, Delay and Level of Service

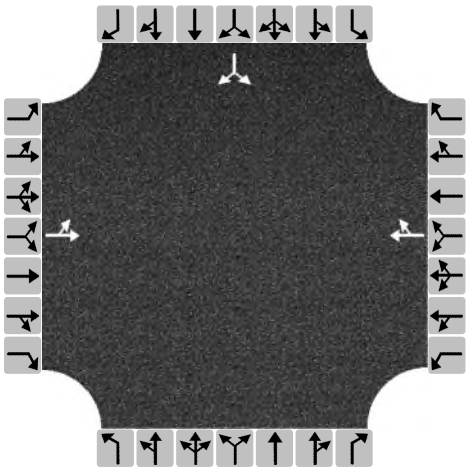
Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	T			T						LR		
Flow Rate, v (veh/h)	34			368						72		
Capacity (veh/h)	814			877						850		
95% Queue Length, Q_{95} (veh)	0.1			2.1						0.3		
Control Delay (s/veh)	7.6			10.0						7.6		
Level of Service, LOS	A			B						A		
Approach Delay (s/veh) | LOS	7.6		A	10.0		B				7.6		A
Intersection Delay (s/veh) | LOS	9.5						A					

HCS All-Way Stop Control Report

General and Site Information

Analyst	AG
Agency/Co.	Eriksson
Date Performed	9/12/2022
Analysis Year	2022
Analysis Time Period (hrs)	0.25
Time Analyzed	PM Peak
Project Description	Patton School
Intersection	Patton and Maude
Jurisdiction	Arlington Heights
East/West Street	Maude Avenue
North/South Street	Patton Avenue
Peak Hour Factor	0.65

Lanes



Turning Movement Demand Volumes

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume (veh/h)	0	12			126	7				16		29
% Thrus in Shared Lane												

Lane Flow Rate and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LT			TR						LR		
Flow Rate, v (veh/h)	18			205						69		
Percent Heavy Vehicles	0			0						0		
Initial Departure Headway, h_d (s)	3.20			3.20						3.20		
Initial Degree of Utilization, x	0.016			0.182						0.062		
Final Departure Headway, h_d (s)	4.24			4.04						4.06		
Final Degree of Utilization, x	0.022			0.229						0.078		
Move-Up Time, m (s)	2.0			2.0						2.0		
Service Time, t_s (s)	2.24			2.04						2.06		

Capacity, Delay and Level of Service

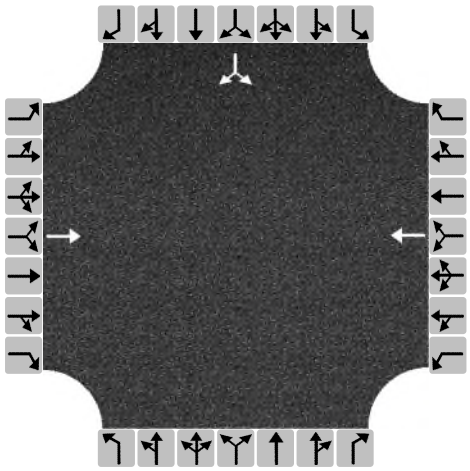
Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LT			TR						LR		
Flow Rate, v (veh/h)	18			205						69		
Capacity (veh/h)	848			892						887		
95% Queue Length, Q_{95} (veh)	0.1			0.9						0.3		
Control Delay (s/veh)	7.3			8.2						7.4		
Level of Service, LOS	A			A						A		
Approach Delay (s/veh) | LOS	7.3	A		8.2	A					7.4	A	
Intersection Delay (s/veh) | LOS	8.0						A					

HCS All-Way Stop Control Report

General and Site Information

Analyst	AG
Agency/Co.	Eriksson
Date Performed	9/12/2022
Analysis Year	2028
Analysis Time Period (hrs)	0.25
Time Analyzed	PM Peak
Project Description	Patton School
Intersection	Patton and Maude
Jurisdiction	Arlington Heights
East/West Street	Maude Avenue
North/South Street	Patton Avenue
Peak Hour Factor	0.65

Lanes



Turning Movement Demand Volumes

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume (veh/h)		11			134					18		32
% Thrus in Shared Lane												

Lane Flow Rate and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	T			T						LR		
Flow Rate, v (veh/h)	17			206						77		
Percent Heavy Vehicles	2			2						0		
Initial Departure Headway, h_d (s)	3.20			3.20						3.20		
Initial Degree of Utilization, x	0.015			0.183						0.068		
Final Departure Headway, h_d (s)	4.30			4.12						4.07		
Final Degree of Utilization, x	0.020			0.236						0.087		
Move-Up Time, m (s)	2.0			2.0						2.0		
Service Time, t_s (s)	2.30			2.12						2.07		

Capacity, Delay and Level of Service

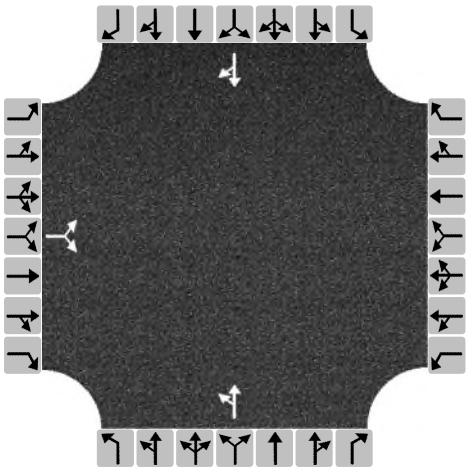
Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	T			T						LR		
Flow Rate, v (veh/h)	17			206						77		
Capacity (veh/h)	837			874						884		
95% Queue Length, Q_{95} (veh)	0.1			0.9						0.3		
Control Delay (s/veh)	7.4			8.4						7.5		
Level of Service, LOS	A			A						A		
Approach Delay (s/veh) | LOS	7.4	A		8.4	A					7.5	A	
Intersection Delay (s/veh) | LOS	8.1						A					

HCS All-Way Stop Control Report

General and Site Information

Analyst	AG
Agency/Co.	Eriksson
Date Performed	9/12/2022
Analysis Year	2022
Analysis Time Period (hrs)	0.25
Time Analyzed	AM Peak
Project Description	Patton School
Intersection	Patton and Maude South
Jurisdiction	Arlington Heights
East/West Street	Maude Avenue
North/South Street	Patton Avenue
Peak Hour Factor	0.40

Lanes



Turning Movement Demand Volumes

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume (veh/h)	12		4				4	4			140	42
% Thrus in Shared Lane												

Lane Flow Rate and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LR						LT			TR		
Flow Rate, v (veh/h)	40						20			455		
Percent Heavy Vehicles	0						0			0		
Initial Departure Headway, h_d (s)	3.20						3.20			3.20		
Initial Degree of Utilization, x	0.036						0.018			0.404		
Final Departure Headway, h_d (s)	4.87						4.52			3.89		
Final Degree of Utilization, x	0.054						0.025			0.491		
Move-Up Time, m (s)	2.0						2.0			2.0		
Service Time, t_s (s)	2.87						2.52			1.89		

Capacity, Delay and Level of Service

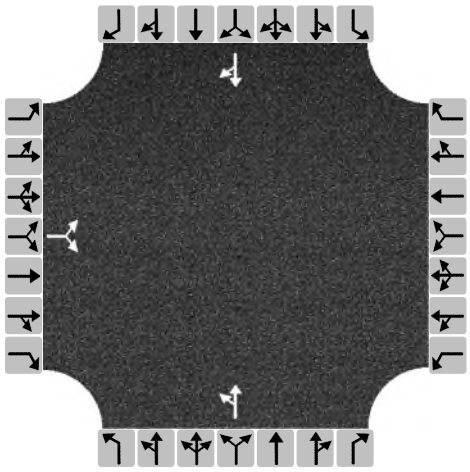
Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LR						LT			TR		
Flow Rate, v (veh/h)	40						20			455		
Capacity (veh/h)	739						797			926		
95% Queue Length, Q_{95} (veh)	0.2						0.1			2.8		
Control Delay (s/veh)	8.2						7.6			10.6		
Level of Service, LOS	A						A			B		
Approach Delay (s/veh) | LOS	8.2	A					7.6	A		10.6	B	
Intersection Delay (s/veh) | LOS	10.3						B					

HCS All-Way Stop Control Report

General and Site Information

Analyst	AG
Agency/Co.	Eriksson
Date Performed	9/12/2022
Analysis Year	2028
Analysis Time Period (hrs)	0.25
Time Analyzed	AM Peak
Project Description	Patton School
Intersection	Patton and Maude South
Jurisdiction	Arlington Heights
East/West Street	Maude Avenue
North/South Street	Patton Avenue
Peak Hour Factor	0.40

Lanes



Turning Movement Demand Volumes

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume (veh/h)	12		4				4	4			156	47
% Thrus in Shared Lane												

Lane Flow Rate and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LR						LT			TR		
Flow Rate, v (veh/h)	40						20			508		
Percent Heavy Vehicles	0						0			0		
Initial Departure Headway, h_d (s)	3.20						3.20			3.20		
Initial Degree of Utilization, x	0.036						0.018			0.451		
Final Departure Headway, h_d (s)	4.98						4.57			3.89		
Final Degree of Utilization, x	0.055						0.025			0.549		
Move-Up Time, m (s)	2.0						2.0			2.0		
Service Time, t_s (s)	2.98						2.57			1.89		

Capacity, Delay and Level of Service

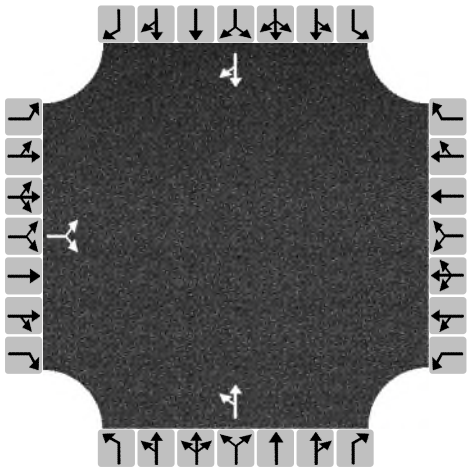
Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LR						LT			TR		
Flow Rate, v (veh/h)	40						20			508		
Capacity (veh/h)	723						788			925		
95% Queue Length, Q_{95} (veh)	0.2						0.1			3.4		
Control Delay (s/veh)	8.3						7.7			11.5		
Level of Service, LOS	A						A			B		
Approach Delay (s/veh) | LOS	8.3	A					7.7	A		11.5	B	
Intersection Delay (s/veh) | LOS	11.2						B					

HCS All-Way Stop Control Report

General and Site Information

Analyst	AG
Agency/Co.	Eriksson
Date Performed	9/12/2022
Analysis Year	2022
Analysis Time Period (hrs)	0.25
Time Analyzed	PM Peak
Project Description	Patton School
Intersection	Patton and Maude South
Jurisdiction	Arlington Heights
East/West Street	Maude Avenue
North/South Street	Patton Avenue
Peak Hour Factor	0.49

Lanes



Turning Movement Demand Volumes

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume (veh/h)	10		9				6	1			93	56
% Thrus in Shared Lane												

Lane Flow Rate and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LR						LT			TR		
Flow Rate, v (veh/h)	39						14			304		
Percent Heavy Vehicles	0						0			0		
Initial Departure Headway, h_d (s)	3.20						3.20			3.20		
Initial Degree of Utilization, x	0.034						0.013			0.270		
Final Departure Headway, h_d (s)	4.36						4.43			3.78		
Final Degree of Utilization, x	0.047						0.018			0.319		
Move-Up Time, m (s)	2.0						2.0			2.0		
Service Time, t_s (s)	2.36						2.43			1.78		

Capacity, Delay and Level of Service

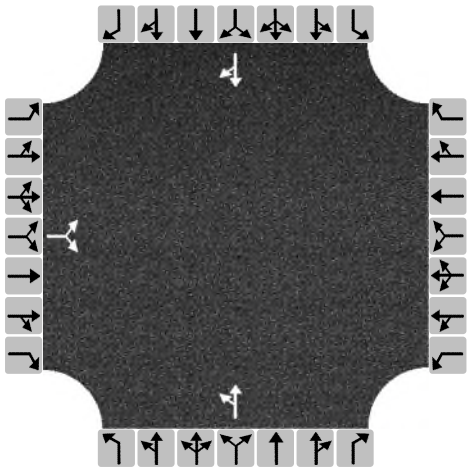
Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LR						LT			TR		
Flow Rate, v (veh/h)	39						14			304		
Capacity (veh/h)	826						813			953		
95% Queue Length, Q_{95} (veh)	0.1						0.1			1.4		
Control Delay (s/veh)	7.6						7.5			8.5		
Level of Service, LOS	A						A			A		
Approach Delay (s/veh) | LOS	7.6	A					7.5	A		8.5	A	
Intersection Delay (s/veh) | LOS	8.4						A					

HCS All-Way Stop Control Report

General and Site Information

Analyst	AG
Agency/Co.	Eriksson
Date Performed	9/12/2022
Analysis Year	2028
Analysis Time Period (hrs)	0.25
Time Analyzed	PM Peak
Project Description	Patton School
Intersection	Patton and Maude South
Jurisdiction	Arlington Heights
East/West Street	Maude Avenue
North/South Street	Patton Avenue
Peak Hour Factor	0.49

Lanes



Turning Movement Demand Volumes

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume (veh/h)	10		9				6	1			101	60
% Thrus in Shared Lane												

Lane Flow Rate and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LR						LT			TR		
Flow Rate, v (veh/h)	39						14			329		
Percent Heavy Vehicles	0						0			0		
Initial Departure Headway, h_d (s)	3.20						3.20			3.20		
Initial Degree of Utilization, x	0.034						0.013			0.292		
Final Departure Headway, h_d (s)	4.41						4.45			3.78		
Final Degree of Utilization, x	0.047						0.018			0.345		
Move-Up Time, m (s)	2.0						2.0			2.0		
Service Time, t_s (s)	2.41						2.45			1.78		

Capacity, Delay and Level of Service

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LR						LT			TR		
Flow Rate, v (veh/h)	39						14			329		
Capacity (veh/h)	817						809			952		
95% Queue Length, Q_{95} (veh)	0.1						0.1			1.6		
Control Delay (s/veh)	7.6						7.5			8.8		
Level of Service, LOS	A						A			A		
Approach Delay (s/veh) | LOS	7.6	A					7.5	A		8.8	A	
Intersection Delay (s/veh) | LOS	8.6						A					

HCS Two-Way Stop-Control Report

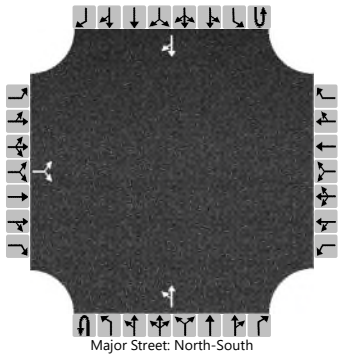
General Information

Analyst	AG
Agency/Co.	Eriksson
Date Performed	9/12/2022
Analysis Year	2022
Time Analyzed	AM Peak
Intersection Orientation	North-South
Project Description	Patton School

Site Information

Intersection	Patton and North Lot
Jurisdiction	Arlington Heights
East/West Street	North Lot
North/South Street	Patton Avenue
Peak Hour Factor	0.61
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	0	1	0	0	0	1	0
Configuration			LR							LT						TR
Volume (veh/h)		0		0						2	2				30	8
Percent Heavy Vehicles (%)		0		0						0						
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.40		6.20						4.10						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.50		3.30						2.20						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			0							3						
Capacity, c (veh/h)			0							1529						
v/c Ratio										0.00						
95% Queue Length, Q_{95} (veh)										0.0						
Control Delay (s/veh)										7.4	0.0					
Level of Service (LOS)										A	A					
Approach Delay (s/veh)									3.7							
Approach LOS									A							

HCS Two-Way Stop-Control Report

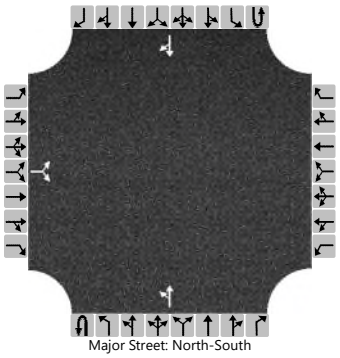
General Information

Analyst	AG
Agency/Co.	Eriksson
Date Performed	9/12/2022
Analysis Year	2028
Time Analyzed	AM Peak
Intersection Orientation	North-South
Project Description	Patton School

Site Information

Intersection	Patton and North Lot
Jurisdiction	Arlington Heights
East/West Street	North Lot
North/South Street	Patton Avenue
Peak Hour Factor	0.61
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	0	1	0	0	0	1	0
Configuration			LR							LT						TR
Volume (veh/h)		0		0						0	0				34	11
Percent Heavy Vehicles (%)		0		0						0						
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.40		6.20						4.10						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.50		3.30						2.20						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			0							0						
Capacity, c (veh/h)			0							1514						
v/c Ratio										0.00						
95% Queue Length, Q_{95} (veh)										0.0						
Control Delay (s/veh)										7.4	0.0					
Level of Service (LOS)										A	A					
Approach Delay (s/veh)																
Approach LOS																

HCS Two-Way Stop-Control Report

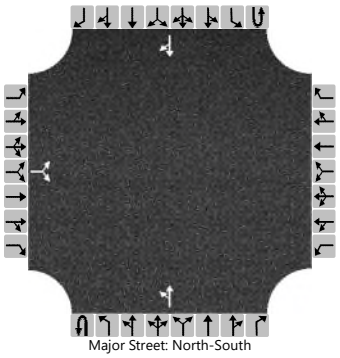
General Information

Analyst	AG
Agency/Co.	Eriksson
Date Performed	9/12/2022
Analysis Year	2022
Time Analyzed	PM Peak
Intersection Orientation	North-South
Project Description	Patton School

Site Information

Intersection	Patton and North Lot
Jurisdiction	Arlington Heights
East/West Street	North Lot
North/South Street	Patton Avenue
Peak Hour Factor	0.56
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	0	1	0	0	0	1	0
Configuration			LR							LT						TR
Volume (veh/h)		16		10						0	7				35	2
Percent Heavy Vehicles (%)		0		0						0						
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.40		6.20						4.10						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.50		3.30						2.20						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			46							0						
Capacity, c (veh/h)			881							1459						
v/c Ratio			0.05							0.00						
95% Queue Length, Q_{95} (veh)			0.2							0.0						
Control Delay (s/veh)			9.3							7.5	0.0					
Level of Service (LOS)			A							A	A					
Approach Delay (s/veh)		9.3								0.0						
Approach LOS		A								A						

HCS Two-Way Stop-Control Report

General Information

Analyst	AG
Agency/Co.	Eriksson
Date Performed	9/12/2022
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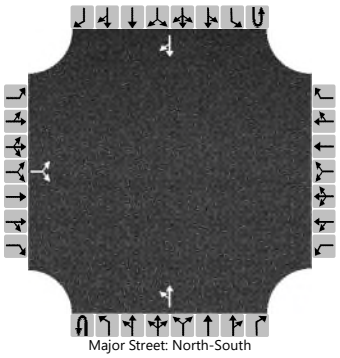
Time Analyzed	PM Peak
Intersection Orientation	North-South
Project Description	Patton School

Site Information

Intersection	Patton and North Lot
Jurisdiction	Arlington Heights
East/West Street	North Lot
North/South Street	Patton Avenue
Peak Hour Factor	0.56
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	0	1	0	0	0	1	0
Configuration			LR							LT						TR
Volume (veh/h)		18		11						0	0				39	2
Percent Heavy Vehicles (%)		0		0						0						
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.40		6.20						4.10						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.50		3.30						2.20						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			52							0						
Capacity, c (veh/h)			882							1450						
v/c Ratio			0.06							0.00						
95% Queue Length, Q_{95} (veh)			0.2							0.0						
Control Delay (s/veh)			9.3							7.5	0.0					
Level of Service (LOS)			A							A	A					
Approach Delay (s/veh)		9.3														
Approach LOS		A														

HCS Two-Way Stop-Control Report

General Information

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Date Performed	9/12/2022
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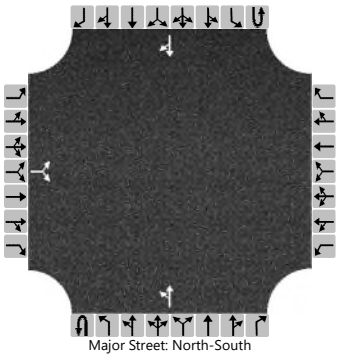
Time Analyzed	AM Peak
Intersection Orientation	North-South
Project Description	Patton School

Site Information

Intersection	Patton and South Lot
Jurisdiction	Arlington Heights
East/West Street	South Lot
North/South Street	Patton Avenue
Peak Hour Factor	0.39
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	0	1	0	0	0	1	0
Configuration			LR							LT						TR
Volume (veh/h)		0		145						0	16				37	146
Percent Heavy Vehicles (%)		0		0						0						
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.40		6.20						4.10						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.50		3.30						2.20						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			372							0						
Capacity, c (veh/h)			720							1083						
v/c Ratio			0.52							0.00						
95% Queue Length, Q_{95} (veh)			3.0							0.0						
Control Delay (s/veh)			15.2							8.3	0.0					
Level of Service (LOS)			C							A	A					
Approach Delay (s/veh)		15.2								0.0						
Approach LOS		C								A						

HCS Two-Way Stop-Control Report

General Information

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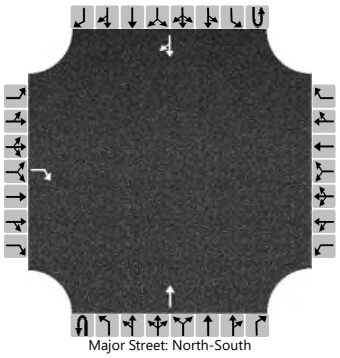
Project Description	Patton School

Site Information

Intersection	Patton and South Lot
Jurisdiction	Arlington Heights
East/West Street	South Lot
North/South Street	Patton Avenue
Peak Hour Factor	0.39
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	1		0	0	0	0	0	1	0	0	0	1	0
Configuration				R							T					TR
Volume (veh/h)				164							16				39	165
Percent Heavy Vehicles (%)				0												
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized		No														
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)				6.2												
Critical Headway (sec)				6.20												
Base Follow-Up Headway (sec)				3.3												
Follow-Up Headway (sec)				3.30												

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)				421												
Capacity, c (veh/h)				693												
v/c Ratio				0.61												
95% Queue Length, Q_{95} (veh)				4.1												
Control Delay (s/veh)				17.9												
Level of Service (LOS)				C												
Approach Delay (s/veh)		17.9														
Approach LOS		C														

HCS Two-Way Stop-Control Report

General Information

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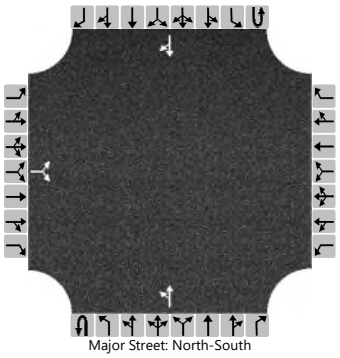
Project Description	Patton School

Site Information

Intersection	Patton and South Lot
Jurisdiction	Arlington Heights
East/West Street	South Lot
North/South Street	Patton Avenue
Peak Hour Factor	0.54
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	0	1	0	0	0	1	0
Configuration			LR							LT						TR
Volume (veh/h)		1		67						0	11				82	73
Percent Heavy Vehicles (%)		0		0						0						
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.40		6.20						4.10						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.50		3.30						2.20						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			126							0						
Capacity, c (veh/h)			759							1205						
v/c Ratio			0.17							0.00						
95% Queue Length, Q_{95} (veh)			0.6							0.0						
Control Delay (s/veh)			10.7							8.0	0.0					
Level of Service (LOS)			B							A	A					
Approach Delay (s/veh)		10.7								0.0						
Approach LOS		B								A						

HCS Two-Way Stop-Control Report

General Information

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Agency/Co.	Eriksson
Date Performed	9/12/2022
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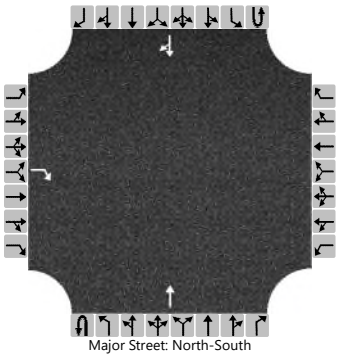
Intersection Orientation	North-South
Project Description	Patton School

Site Information

Intersection	Patton and South Lot
Jurisdiction	Arlington Heights
East/West Street	South Lot
North/South Street	Patton Avenue
Peak Hour Factor	0.54
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	1		0	0	0	0	0	1	0	0	0	1	0
Configuration				R							T					TR
Volume (veh/h)				77							11				84	82
Percent Heavy Vehicles (%)				0												
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized	No															
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)				6.2												
Critical Headway (sec)				6.20												
Base Follow-Up Headway (sec)				3.3												
Follow-Up Headway (sec)				3.30												

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)				143												
Capacity, c (veh/h)				749												
v/c Ratio				0.19												
95% Queue Length, Q_{95} (veh)				0.7												
Control Delay (s/veh)				10.9												
Level of Service (LOS)				B												
Approach Delay (s/veh)	10.9															
Approach LOS	B															