Memorandum

To: Kate Thunstrom, City of St Francis

From: Jason Junge, PE, Senior Traffic Operations Engineer

Date: April 17, 2026

Re: Bridge Street/Ambassador Blvd Traffic Study Report
WSB Project No. 031945-000

Introduction

The purpose of this memorandum is to document the methodology and results of the traffic study that WSB performed for the intersection of Bridge Street and Ambassador Blvd in St Francis, MN. The adjacent intersections at Bridge Street and Rum River Blvd and at Ambassador Blvd and 229th Avenue were also included.

The goal of the study was to evaluate future intersection operations and safety, accounting for traffic generated by several proposed developments in the area. In addition, there is a possibility that Bridge Street may be extended west in the future to connect to Trunk Highway (TH) 47 at the existing Pederson Drive intersection. The impacts that this potential connection would have on travel patterns, traffic volumes, and intersection operations were also analyzed.

Project Location

The study area is shown in **Figure 1** and includes three intersections:

1. Bridge Street and Ambassador Blvd
2. Bridge Street and Rum River Blvd
3. Ambassador Blvd and 229th Avenue

Bridge Street, also known as County State Aid Highway (CSAH) 24, is an east-west roadway that provides the only connection across the Rum River in the city. It is a two-lane roadway classified as a minor arterial with a posted speed of 30 miles per hour. The route of CSAH 24 currently follows Ambassador Blvd and 227th Avenue to connect between Bridge Street and TH 47.

Ambassador Blvd, also known as CSAH 28 north of Bridge Street and CSAH 24 south of Bridge Street, is a north-south route between St Francis and Anoka to the south. It is a two-lane roadway posted at 35 miles per hour, functionally classified as a minor arterial north of Bridge Street and a major collector south of Bridge Street.

There is a mix of land uses in this area, with residential, neighborhood commercial, and institutional developments nearby. St Francis Middle School and St Francis Elementary School are located on the west side of the Bridge Street/Ambassador Blvd intersection, with the middle school driveway connecting as the west leg of the intersection. St Francis High School is on Bridge Street one half mile east. The St Francis City Hall was constructed in the southeast quadrant of the intersection in 2024.

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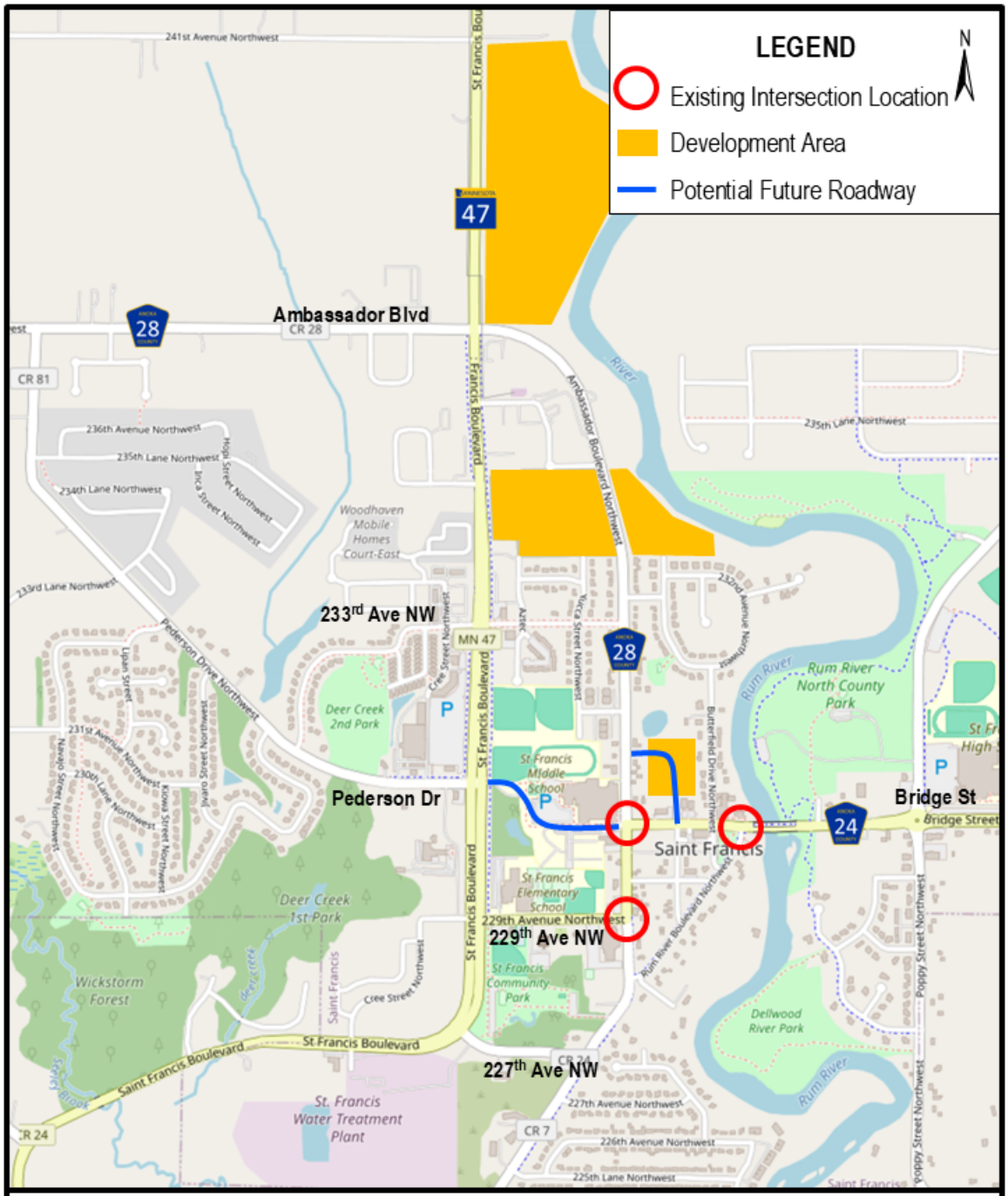

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Bridge Street/Ambassador Boulevard Traffic Study
St. Francis, MN
Figure 1. Intersection Location and Surrounding Network

Existing Conditions

Turning movement counts for the study intersections were collected in October 2025. Based on the count data for the Bridge Street/Ambassador Blvd intersection, the peak hours for traffic in this area begin at 7:00 AM and 4:15 PM on weekdays. The count data is included in **Appendix A**. The existing intersection geometry and traffic volumes are shown in **Figure 2**, and the existing conditions at each intersection are described in more detail below.

1. Bridge Street and Ambassador Blvd

This is a four-leg intersection with all-way stop control. The west leg is a driveway for St Francis Middle School and St Francis Elementary School. There is significant school bus traffic during school arrival and dismissal times. The east leg has a dedicated right turn lane and a shared thru/left turn lane. The other three legs have a single shared lane for all turning movements.

Because Bridge Street does not currently connect to TH 47 to the west, east-west thru traffic must turn at this intersection. The closest connection to TH 47 is 229th Avenue about 800 feet south, so the westbound left turn and northbound right turn volumes at this intersection are relatively high.

2. Bridge Street and Rum River Blvd

This is a T intersection with stop control on the south leg (Rum River Blvd) and no north leg. Rum River Blvd has separate lanes for left turns and right turns. There are no turn lanes on Bridge Street.

3. Ambassador Blvd and 229th Avenue

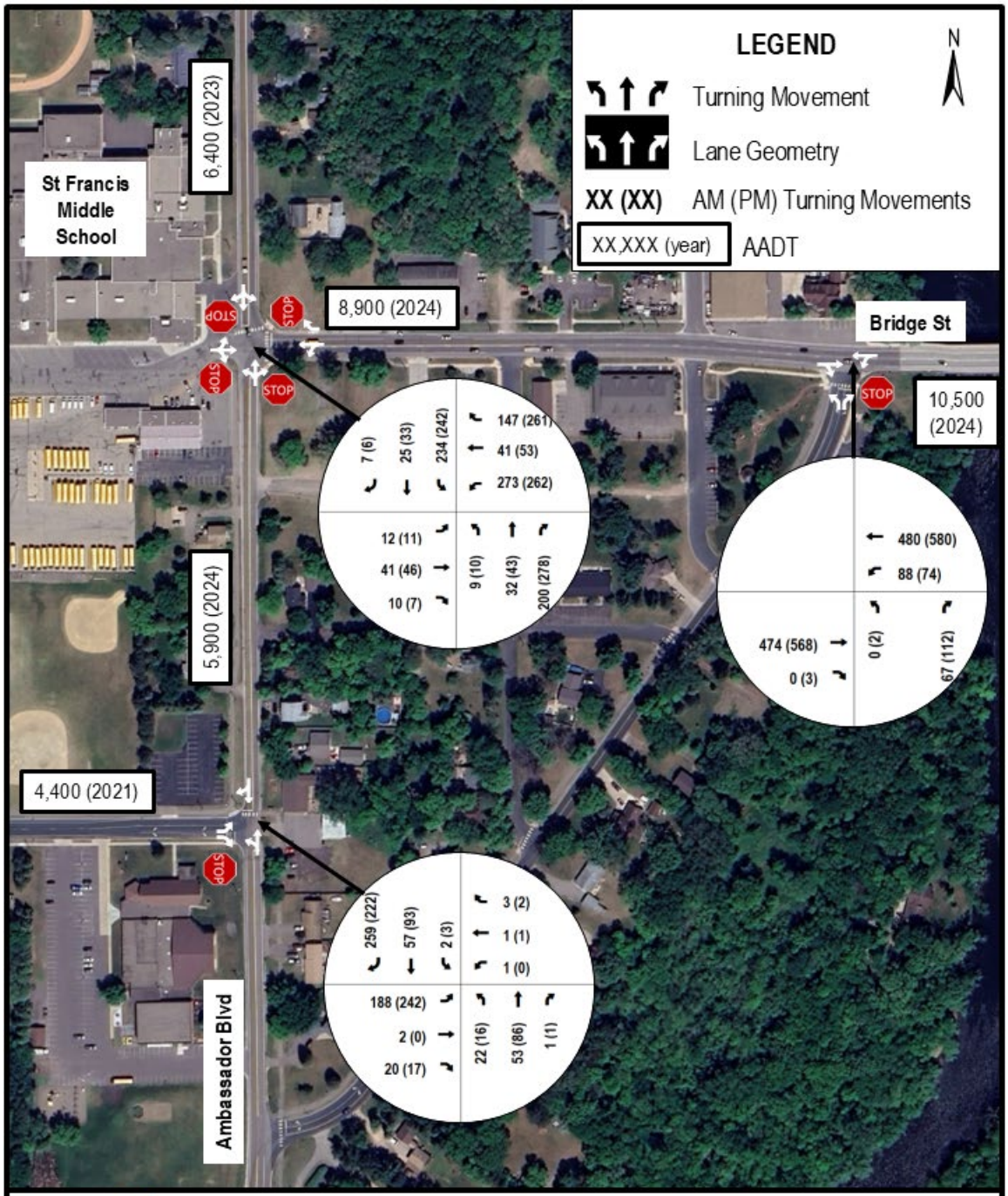
This is a T intersection with stop control on the west leg (229th Avenue). There is a low-volume business driveway that connects as a fourth leg on the east side of the intersection. 229th Avenue has separate lanes for left turns and right turns. There are no turn lanes on Ambassador Blvd.

229th Avenue provides the closest connection between Bridge Street and TH 47 and is a city street. The route of CSAH 24 follows Bridge Street, Ambassador Blvd, and 227th Avenue. The eastbound left turn and southbound right turn volumes at this intersection are relatively high.

Future Conditions

Traffic in the study area is expected to increase in the future as more development occurs. Connecting Bridge Street to TH 47 would also increase traffic volume at the Bridge Street/ Ambassador Blvd intersection by creating a more direct and intuitive east-west through route. The Metropolitan Council's 2050 Regional Travel Demand Model was used to forecast future traffic volumes in the area, with and without the Bridge Street extension. Results indicate that 2050 daily traffic volume on the Rum River bridge would be about 5 percent higher with the extension than without it, and peak hour traffic entering the Bridge Street/Ambassador Blvd intersection would be about 15 percent higher.

Traffic generated by several specific developments was also included in the future volume forecasts. The 2050 traffic volumes that were used for future operations analysis are shown in **Figure 3** without the Bridge Street extension and in **Figure 4** with the Bridge Street extension. The development of the traffic forecasts is described in more detail in the forecast memo for this project, which is included in **Appendix B**.



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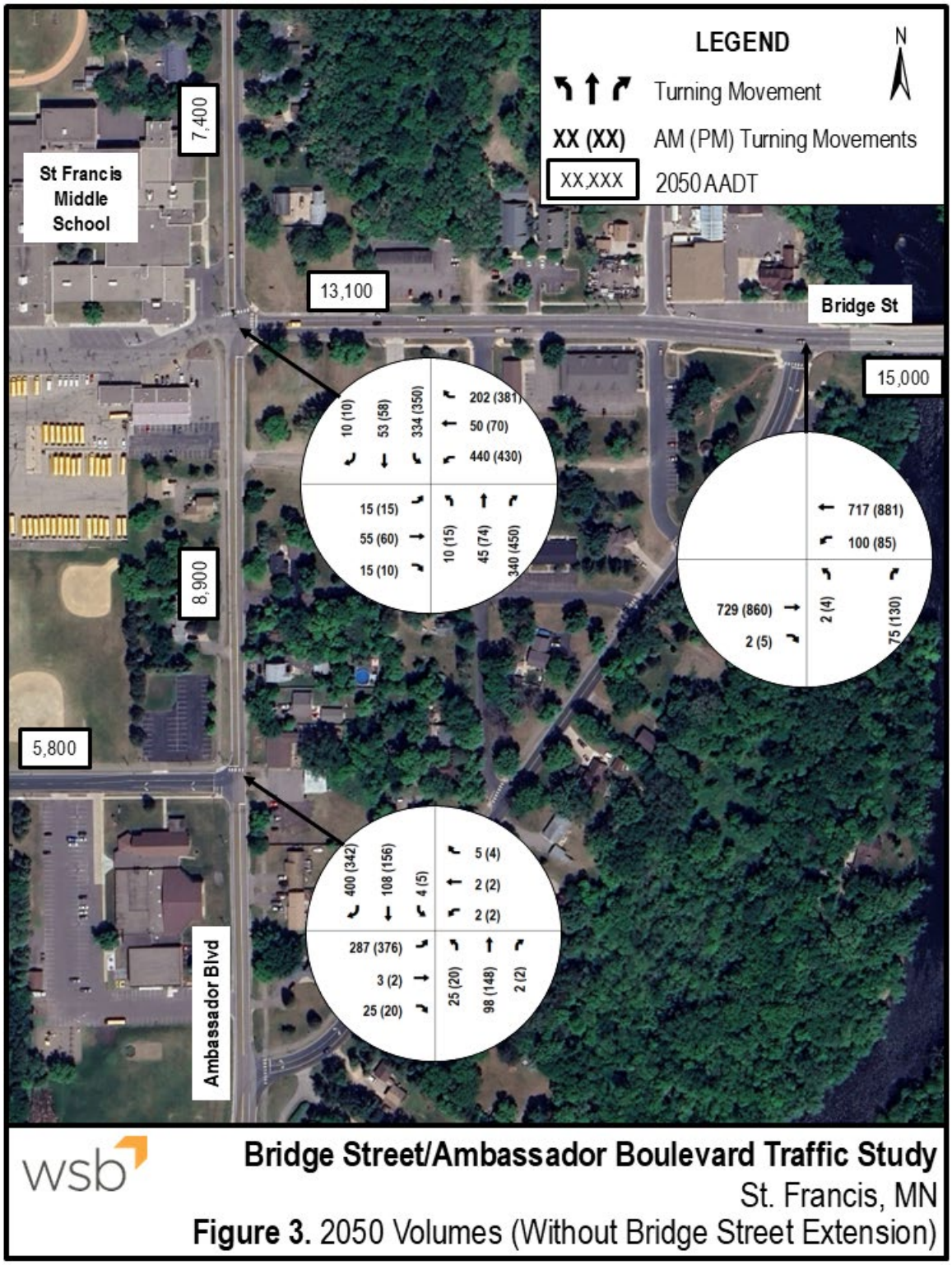
Bridge Street/Ambassador Boulevard Traffic Study
St. Francis, MN
Figure 2. 2025 Turning Movement Volumes & Existing Geometry



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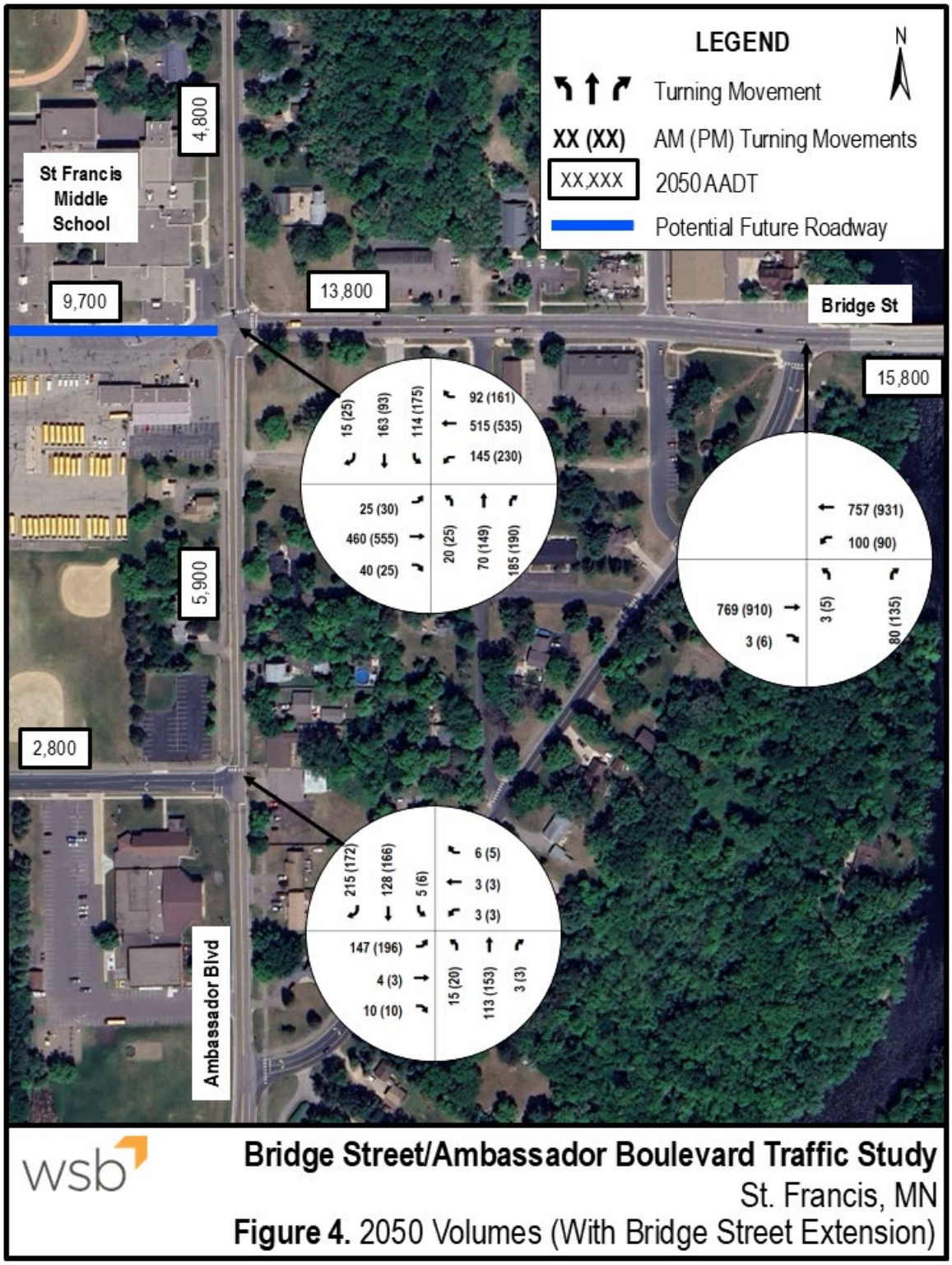
Bridge Street/Ambassador Boulevard Traffic Study
St. Francis, MN
Figure 3. 2050 Volumes (Without Bridge Street Extension)



Bridge Street/Ambassador Boulevard Traffic Study
St. Francis, MN
Figure 4. 2050 Volumes (With Bridge Street Extension)

Safety

The Minnesota Crash Mapping Analysis Tool (MnCMAT2) was used to gather crash data for each intersection in the analysis area for the most recent five full years available (2021-2025). The crash data does not indicate significant existing safety issues at any of the intersections in the study area.

Crash rates for each intersection are shown in **Table 1** and compared to the critical crash rates. Critical rates are a statistical measure used to determine whether a specific location has more crashes than expected, calculated by adjusting the average crash rate for similar intersections for the existing traffic volume. A crash rate that exceeds the critical rate indicates a statistically significant safety issue. Average crash rates were taken from MnDOT's Crash Data Toolkit. The crash rates at all three intersections analyzed are less than the critical rates.

The Bridge Street/Ambassador Blvd intersection had one rear end and one sideswipe crash, both of which were property damage only. The intersection of Ambassador Blvd and 229th Avenue had two angle crashes, one of which involved a possible injury. There were no crashes at the intersection of Bridge Street and Rum River Blvd.

Table 1. Intersection crashes and rates 2021-2025.

Intersection	Total Crashes	Daily Entering Vehicles	Calculated Crash Rate*	Average Crash Rate*	Critical Crash Rate*	Critical Index
Bridge Street & Ambassador Blvd	2	10,975	0.100	0.289	0.620	0.161
Bridge Street & Rum River Blvd	0	10,250	0.000	0.151	0.410	0.000
Ambassador Blvd & 229th Avenue	2	6,500	0.168	0.151	0.480	0.351

*Intersection crash rates are expressed in crashes per million entering vehicles.

Warrant Analysis

The Minnesota Manual on Uniform Traffic Control Devices (MN MUTCD) includes a series of warrants that define the minimum conditions under which a traffic signal could be justified. A signal warrant analysis was performed for the intersection of Bridge Street and Ambassador Blvd. Volumes at this intersection are sufficient to meet Warrant 2 (four-hour volume) and Warrant 3 (peak hour volume). Pedestrian crossing volumes during school dismissal times are also high enough to meet Warrant 5 (school crossing).

The MN MUTCD also includes warrants for all-way stop control. The existing volumes at the Bridge Street/Ambassador Blvd intersection are high enough to meet the all-way stop volume warrant. The details of the signal and all-way stop warrant analysis are included in **Appendix C**.

The Minnesota Intersection Control Evaluation Manual considers roundabouts to be warranted if any signal or all-way stop warrants are met. A signal and all-way stop would both be warranted at this intersection based on existing volumes, so a roundabout would also be warranted.

Traffic Operations

Intersection traffic operations for the study area were analyzed using Synchro/SimTraffic 11 and Highway Capacity Software 2025. Intersection operations were evaluated in terms of average delay per vehicle, level of service (LOS), and queue length for each approach and turning movement at each intersection. Summary tables for AM and PM peak hour operations are included in this section.

Three alternatives were analyzed for the Bridge Street/Ambassador Blvd intersection: all-way stop (no build), signal, and roundabout. The existing thru-stop control at the intersections of Bridge Street/Rum River Blvd and Ambassador Blvd/229th Avenue was assumed to remain in place in all alternatives.

Signalized intersection LOS is defined in terms of a weighted average control delay for the entire intersection. Intersection LOS for unsignalized intersections is not defined, as the major street through movement is assumed to experience no delays. LOS at intersections with thru-stop control is defined in terms of the average control delay for movements from the minor street approaches and left turns from the major street. As **Figure 5** shows, the LOS thresholds for unsignalized intersections are lower than for signalized intersections, because delays at signals are perceived as being more tolerable than delays waiting for a gap in traffic at a stop sign, especially when there are vehicles queued behind. LOS D is generally recognized as the lowest acceptable LOS for urban intersections. Per the MnDOT Facility Design Guide, LOS is not used to evaluate roundabouts.

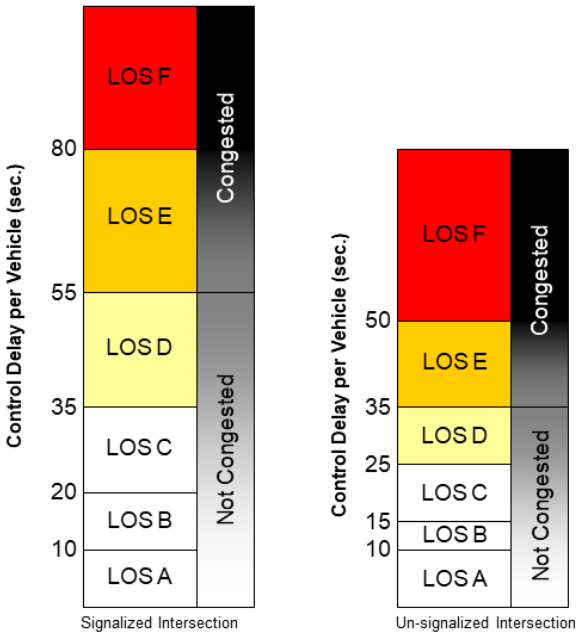


Figure 5. Level of service guidelines.

All-way Stop (No Build)

Existing traffic operations with 2025 volumes are summarized in **Table 2**. Operations at all three intersections are acceptable in both peak hours, with average delays of about 10 seconds per vehicle or less on all turning movements.

Table 2. 2025 existing all-way stop operations.

Intersection			AM Peak				PM Peak			
Control	Location	Approach	Movement Delay* (LOS)			Intersection Delay* (LOS)	Movement Delay* (LOS)			Intersection Delay* (LOS)
			Left	Through	Right		Left	Through	Right	
All-Way Stop	Ambassador Blvd & School Access/Bridge St	NB	6 (A)	9 (A)	5 (A)	7 (A)	8 (A)	11 (B)	7 (A)	8 (A)
		WB	9 (A)	6 (A)	5 (A)		10 (B)	10 (B)	6 (A)	
		SB	7 (A)	8 (A)	4 (A)		9 (A)	10 (B)	6 (A)	
		EB	6 (A)	7 (A)	4 (A)		6 (A)	8 (A)	4 (A)	
Thru-Stop	Rum River Blvd & Bridge St	NB	0 (A)	0 (A)	5 (A)	2 (A)	7 (A)	0 (A)	7 (A)	3 (A)
		WB	5 (A)	3 (A)	0 (A)		6 (A)	3 (A)	0 (A)	
		SB								
		EB	0 (A)	1 (A)	0 (A)		0 (A)	2 (A)	1 (A)	
Thru-Stop	Ambassador Blvd & 229th Ave	NB	4 (A)	1 (A)	0 (A)	4 (A)	3 (A)	0 (A)	0 (A)	4 (A)
		WB	0 (A)	0 (A)	0 (A)		0 (A)	0 (A)	0 (A)	
		SB	0 (A)	3 (A)	2 (A)		0 (A)	2 (A)	2 (A)	
		EB	7 (A)	0 (A)	3 (A)		8 (A)	0 (A)	4 (A)	

*Delays in seconds per vehicle

Operations with traffic from the proposed developments added to the 2025 volumes are summarized in **Table 3**. Developments in the four areas highlighted in **Figure 1** are estimated to add about 90 vehicles in the AM peak hour and 110 vehicles in the PM peak hour to the Bridge Street/Ambassador Blvd intersection. This amount of additional traffic increases 2025 average delays at the all-way stop by only a few seconds. All turning movements still operate at LOS A or B, indicating that these intersections have sufficient capacity available to accommodate the development traffic without any additional mitigations.

Table 3. 2025 all-way stop operations with development traffic added.

Intersection			AM Peak				PM Peak			
Control	Location	Approach	Movement Delay* (LOS)			Intersection Delay* (LOS)	Movement Delay* (LOS)			Intersection Delay* (LOS)
			Left	Through	Right		Left	Through	Right	
All-Way Stop	Ambassador Blvd & School Access/Bridge St	NB	7 (A)	9 (A)	6 (A)	8 (A)	11 (B)	12 (B)	8 (A)	9 (A)
		WB	9 (A)	7 (A)	5 (A)		11 (B)	11 (B)	7 (A)	
		SB	9 (A)	9 (A)	5 (A)		11 (B)	12 (B)	7 (A)	
		EB	7 (A)	8 (A)	4 (A)		6 (A)	9 (A)	4 (A)	
Thru-Stop	Rum River Blvd & Bridge St	NB	0 (A)	0 (A)	5 (A)	3 (A)	6 (A)	0 (A)	7 (A)	3 (A)
		WB	6 (A)	3 (A)	0 (A)		8 (A)	4 (A)	0 (A)	
		SB								
		EB	0 (A)	2 (A)	0 (A)		0 (A)	2 (A)	1 (A)	
Thru-Stop	Ambassador Blvd & 229th Ave	NB	4 (A)	0 (A)	0 (A)	4 (A)	3 (A)	0 (A)	0 (A)	4 (A)
		WB	0 (A)	0 (A)	0 (A)		0 (A)	0 (A)	0 (A)	
		SB	0 (A)	3 (A)	2 (A)		0 (A)	3 (A)	2 (A)	
		EB	7 (A)	0 (A)	4 (A)		8 (A)	0 (A)	4 (A)	

*Delays in seconds per vehicle

Operations with 2050 volumes without the Bridge Street extension are summarized in **Table 4**. In the AM peak hour, all movements would still have delays within an acceptable range except the low-volume northbound left turn from Rum River Blvd. The anticipated increase in Bridge Street traffic will reduce the availability of gaps for traffic turning from side street approaches. The forecast traffic increase is expected to lead to significant delays on several movements in the PM peak hour, with the longest delays on northbound Ambassador Blvd at Bridge Street.

Table 4. 2050 all-way stop operations without the Bridge Street extension.

Intersection			AM Peak				PM Peak			
Control	Location	Approach	Movement Delay* (LOS)			Intersection Delay* (LOS)	Movement Delay* (LOS)			Intersection Delay* (LOS)
			Left	Through	Right		Left	Through	Right	
All-Way Stop	Ambassador Blvd & School Access/Bridge St	NB	14 (B)	19 (C)	15 (C)	17 (C)	135 (F)	133 (F)	124 (F)	60 (F)
		WB	24 (C)	17 (C)	7 (A)		57 (F)	52 (F)	20 (C)	
		SB	18 (C)	20 (C)	21 (C)		27 (D)	28 (D)	22 (C)	
		EB	9 (A)	11 (B)	5 (A)		9 (A)	12 (B)	7 (A)	
Thru-Stop	Rum River Blvd & Bridge St	NB	69 (F)	0 (A)	7 (A)	4 (A)	55 (F)	0 (A)	10 (B)	6 (A)
		WB	9 (A)	5 (A)	0 (A)		13 (B)	7 (A)	0 (A)	
		SB								
		EB	0 (A)	2 (A)	2 (A)		0 (A)	2 (A)	2 (A)	
Thru-Stop	Ambassador Blvd & 229th Ave	NB	5 (A)	1 (A)	0 (A)	5 (A)	7 (A)	6 (A)	0 (A)	14 (B)
		WB	0 (A)	0 (A)	0 (A)		0 (A)	0 (A)	0 (A)	
		SB	0 (A)	3 (A)	2 (A)		0 (A)	3 (A)	2 (A)	
		EB	10 (B)	0 (A)	4 (A)		33 (D)	0 (A)	12 (B)	

*Delays in seconds per vehicle

Operations with 2050 volumes with the Bridge Street extension are summarized in **Table 5**. This scenario results in significant delays on both directions of Bridge Street at Ambassador Blvd in both peak hours. The westbound queues extend long enough to impact operations at the Bridge Street/Rum River Blvd intersection. In addition to the increase in overall traffic volume that the extension would bring, the distribution of turning movements results in less efficient all-way stop operation with the Bridge Street extension than without it.

Table 5. 2050 all-way stop operations with the Bridge Street extension.

Intersection			AM Peak				PM Peak			
Control	Location	Approach	Movement Delay* (LOS)			Intersection Delay* (LOS)	Movement Delay* (LOS)			Intersection Delay* (LOS)
			Left	Through	Right		Left	Through	Right	
All-Way Stop	Ambassador Blvd & School Access/Bridge St	NB	15 (C)	16 (C)	12 (B)	95 (F)	30 (D)	32 (D)	28 (D)	132 (F)
		WB	172 (F)	170 (F)	103 (F)		220 (F)	220 (F)	138 (F)	
		SB	19 (C)	19 (C)	16 (C)		22 (C)	21 (C)	18 (C)	
		EB	80 (F)	83 (F)	86 (F)		132 (F)	134 (F)	131 (F)	
Thru-Stop	Rum River Blvd & Bridge St	NB	206 (F)	0 (A)	7 (A)	63 (F)	231 (F)	0 (A)	10 (B)	119 (F)
		WB	118 (F)	123 (F)	0 (A)		233 (F)	237 (F)	0 (A)	
		SB								
		EB	0 (A)	3 (A)	3 (A)		0 (A)	3 (A)	3 (A)	
Thru-Stop	Ambassador Blvd & 229th Ave	NB	3 (A)	0 (A)	0 (A)	3 (A)	3 (A)	0 (A)	0 (A)	3 (A)
		WB	0 (A)	0 (A)	0 (A)		0 (A)	0 (A)	0 (A)	
		SB	0 (A)	3 (A)	2 (A)		0 (A)	2 (A)	2 (A)	
		EB	7 (A)	0 (A)	3 (A)		8 (A)	0 (A)	4 (A)	

*Delays in seconds per vehicle

Signal

Traffic operations with a signal at the intersection of Bridge Street and Ambassador Blvd were analyzed first without making any changes to the existing lane configuration. This would require all left turns to be permissive only, because there are currently no left turn lanes.

Signal operations in 2050 with the existing lane configuration and without the Bridge Street extension are summarized in **Table 6**. Overall intersection operations in this scenario are better than with all-way stop control, but some movements would still have unacceptable delays, indicating that the existing lane configuration would not provide sufficient capacity for 2050 traffic volumes regardless of traffic control.

Signal operations in 2050 with the existing lane configuration and with the Bridge Street extension are summarized in **Table 7**. As with all-way stop control, the Bridge Street extension increases the amount of delay at the signalized intersection compared to the 2050 results without the extension.

Table 6. 2050 signal operations (existing lane configuration) without the Bridge Street extension.

Intersection			AM Peak				PM Peak			
Control	Location	Approach	Movement Delay* (LOS)			Intersection Delay* (LOS)	Movement Delay* (LOS)			Intersection Delay* (LOS)
			Left	Through	Right		Left	Through	Right	
Signalized	Ambassador Blvd & School Access/Bridge St	NB	13 (B)	14 (B)	8 (A)	22 (C)	16 (B)	16 (B)	10 (B)	52 (D)
		WB	27 (C)	20 (C)	6 (A)		**56 (E)**	**56 (E)**	17 (B)	
		SB	42 (D)	43 (D)	51 (D)		**139 (F)**	**134 (F)**	**141 (F)**	
		EB	16 (B)	14 (B)	6 (A)		25 (C)	22 (C)	10 (B)	
Thru-Stop	Rum River Blvd & Bridge St	NB	28 (D)	0 (A)	8 (A)	4 (A)	**111 (F)**	0 (A)	12 (B)	6 (A)
		WB	10 (B)	6 (A)	0 (A)		14 (B)	8 (A)	0 (A)	
		SB								
		EB	0 (A)	2 (A)	1 (A)		0 (A)	2 (A)	1 (A)	
Thru-Stop	Ambassador Blvd & 229th Ave	NB	9 (A)	1 (A)	0 (A)	6 (A)	6 (A)	1 (A)	0 (A)	9 (A)
		WB	0 (A)	0 (A)	0 (A)		0 (A)	0 (A)	0 (A)	
		SB	0 (A)	6 (A)	4 (A)		0 (A)	6 (A)	4 (A)	
		EB	12 (B)	0 (A)	5 (A)		18 (C)	0 (A)	6 (A)	

*Delays in seconds per vehicle

Table 7. 2050 signal operations (existing lane configuration) with the Bridge Street extension.

Intersection			AM Peak				PM Peak			
Control	Location	Approach	Movement Delay* (LOS)			Intersection Delay* (LOS)	Movement Delay* (LOS)			Intersection Delay* (LOS)
			Left	Through	Right		Left	Through	Right	
Signalized	Ambassador Blvd & School Access/Bridge St	NB	25 (C)	23 (C)	14 (B)	36 (D)	38 (D)	33 (C)	26 (C)	**119 (F)**
		WB	53 (D)	53 (D)	20 (C)		**205 (F)**	**202 (F)**	**123 (F)**	
		SB	**57 (E)**	**57 (E)**	39 (D)		**206 (F)**	**213 (F)**	**193 (F)**	
		EB	24 (C)	16 (B)	13 (B)		25 (C)	22 (C)	19 (B)	
Thru-Stop	Rum River Blvd & Bridge St	NB	**57 (F)**	0 (A)	8 (A)	6 (A)	**561 (F)**	0 (A)	18 (C)	**114 (F)**
		WB	11 (B)	8 (A)	0 (A)		**216 (F)**	**226 (F)**	0 (A)	
		SB								
		EB	0 (A)	3 (A)	2 (A)		0 (A)	3 (A)	3 (A)	
Thru-Stop	Ambassador Blvd & 229th Ave	NB	4 (A)	0 (A)	0 (A)	3 (A)	3 (A)	0 (A)	0 (A)	3 (A)
		WB	0 (A)	0 (A)	0 (A)		0 (A)	0 (A)	0 (A)	
		SB	0 (A)	3 (A)	2 (A)		0 (A)	2 (A)	2 (A)	
		EB	7 (A)	0 (A)	3 (A)		8 (A)	0 (A)	4 (A)	

*Delays in seconds per vehicle

Because of the delays observed in the initial model results with signal control and the existing lane geometry, a second signal alternative with additional turn lanes at the intersection of Bridge Street and Ambassador Blvd was analyzed. This alternative would provide dedicated left turn lanes on all four approaches and dedicated right turn lanes on the northbound and westbound approaches. All left turns are assumed to be protected only. The lane configuration of this alternative is shown in **Figure 6**.

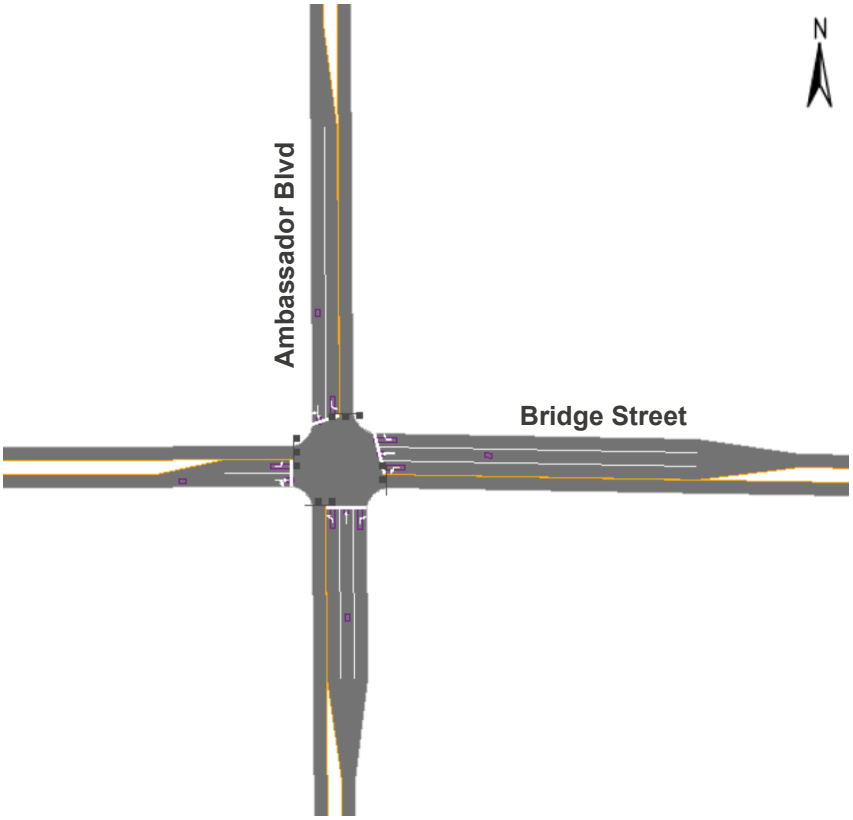


Figure 6. Signal alternative with additional turn lanes.

The results of this alternative with 2050 volumes without the Bridge Street extension are summarized in **Table 8**. This lane configuration provides acceptable operations in both peak hours at the Bridge Street/Ambassador Blvd intersection. There are long delays for northbound left turns from Rum River Blvd onto Bridge Street, but this is a low-volume movement and alternate routes are available.

Signal operations in 2050 with the additional turn lanes and with the Bridge Street extension are summarized in **Table 9**. Operations are similar with and without the extension. Delays for southbound traffic are greater with the extension than without it, because there would be more conflicting eastbound traffic with the extension. Overall intersection operations are acceptable in this scenario.

Table 8. 2050 signal operations (additional turn lanes) without the Bridge Street extension.

Intersection			AM Peak				PM Peak			
Control	Location	Approach	Movement Delay* (LOS)			Intersection Delay* (LOS)	Movement Delay* (LOS)			Intersection Delay* (LOS)
			Left	Through	Right		Left	Through	Right	
Signalized	Ambassador Blvd & School Access/Bridge St	NB	41 (D)	28 (C)	13 (B)	22 (C)	39 (D)	35 (D)	18 (B)	24 (C)
		WB	27 (C)	12 (B)	6 (A)		32 (C)	18 (B)	8 (A)	
		SB	30 (C)	17 (B)	7 (A)		35 (D)	16 (B)	7 (A)	
		EB	40 (D)	38 (D)	13 (B)		43 (D)	42 (D)	17 (B)	
Thru-Stop	Rum River Blvd & Bridge St	NB	71 (F)	0 (A)	8 (A)	5 (A)	117 (F)	0 (A)	14 (B)	8 (A)
		WB	12 (B)	7 (A)	0 (A)		18 (C)	11 (B)	0 (A)	
		SB								
		EB	0 (A)	2 (A)	2 (A)		0 (A)	2 (A)	2 (A)	
Thru-Stop	Ambassador Blvd & 229th Ave	NB	9 (A)	1 (A)	0 (A)	7 (A)	9 (A)	1 (A)	0 (A)	10 (B)
		WB	0 (A)	0 (A)	0 (A)		0 (A)	0 (A)	0 (A)	
		SB	0 (A)	7 (A)	5 (A)		0 (A)	7 (A)	5 (A)	
		EB	13 (B)	0 (A)	4 (A)		20 (C)	0 (A)	6 (A)	

*Delays in seconds per vehicle

Table 9. 2050 signal operations (additional turn lanes) with the Bridge Street extension.

Intersection			AM Peak				PM Peak			
Control	Location	Approach	Movement Delay* (LOS)			Intersection Delay* (LOS)	Movement Delay* (LOS)			Intersection Delay* (LOS)
			Left	Through	Right		Left	Through	Right	
Signalized	Ambassador Blvd & School Access/Bridge St	NB	33 (C)	26 (C)	12 (B)	21 (C)	47 (D)	35 (D)	18 (B)	33 (C)
		WB	32 (C)	16 (B)	5 (A)		51 (D)	21 (C)	8 (A)	
		SB	33 (C)	22 (C)	16 (B)		55 (E)	24 (C)	14 (B)	
		EB	46 (D)	22 (C)	17 (B)		72 (E)	43 (D)	39 (D)	
Thru-Stop	Rum River Blvd & Bridge St	NB	46 (E)	0 (A)	9 (A)	6 (A)	320 (F)	0 (A)	18 (C)	17 (C)
		WB	12 (B)	7 (A)	0 (A)		33 (D)	26 (D)	0 (A)	
		SB								
		EB	0 (A)	3 (A)	3 (A)		0 (A)	4 (A)	4 (A)	
Thru-Stop	Ambassador Blvd & 229th Ave	NB	5 (A)	0 (A)	0 (A)	4 (A)	4 (A)	1 (A)	0 (A)	5 (A)
		WB	0 (A)	0 (A)	0 (A)		0 (A)	0 (A)	0 (A)	
		SB	0 (A)	4 (A)	3 (A)		0 (A)	4 (A)	3 (A)	
		EB	7 (A)	0 (A)	4 (A)		10 (B)	0 (A)	4 (A)	

*Delays in seconds per vehicle

Roundabout

According to the MnDOT Facility Design Guide, a single-lane roundabout provides sufficient capacity for conflicting volumes in the circulating roadway up to 1,100 vehicles per hour. Without the Bridge Street extension, all conflicting volumes in a roundabout at Bridge Street and Ambassador Blvd would be less than 1,000 vehicles per hour in both 2050 peak hours. With the extension, 2050 PM peak hour conflicting volumes would be slightly more than 1,100 vehicles per hour. This indicates that a single-lane roundabout would likely provide sufficient capacity for 2050 traffic volumes. The conflicting volume calculations are included with the counts in **Appendix A**.

Single-lane roundabout operations results are shown in **Table 10** without the Bridge Street extension. Average delays on all four approaches are around 20 seconds per vehicle or less in both peak hours in 2050.

Table 11 shows single-lane roundabout operations with the Bridge Street extension. The addition of a through street connecting to the west side of the roundabout would redistribute turning movements at the intersection and increase the volumes of movements that would conflict. Average 2050 PM peak hour delays in this scenario are higher on all four approaches than without the extension, but all delays are less than one minute per vehicle.

Table 10. 2050 roundabout operations without the Bridge Street extension.

Intersection			AM Peak		PM Peak	
Control	Location	Approach	Approach Delay*	Intersection Delay*	Approach Delay*	Intersection Delay*
Roundabout	Ambassador Blvd & School Access/Bridge St	NB	12	13	22	21
		WB	11		22	
		SB	16		18	
		EB	10		10	

*Delays in seconds per vehicle

Table 11. 2050 roundabout operations with the Bridge Street extension.

Intersection			AM Peak		PM Peak	
Control	Location	Approach	Approach Delay*	Intersection Delay*	Approach Delay*	Intersection Delay*
Roundabout	Ambassador Blvd & School Access/Bridge St	NB	13	17	31	43
		WB	15		52	
		SB	17		22	
		EB	20		47	

*Delays in seconds per vehicle

Conclusions and Recommendations

This study analyzed traffic operations at the intersection of Bridge Street and Ambassador Blvd and two adjacent intersections with existing conditions, future no build, and two build alternatives – a signal and a roundabout. The existing conditions analysis did not identify any significant concerns with safety or operations at the existing intersections.

The operations analysis indicated that all intersections and turning movements operate acceptably in both the AM and PM peak hours with existing 2025 traffic volumes. When the traffic generated by the four proposed developments is added to the 2025 volumes, delays at the all-way stop are still minimal. No changes to intersection geometry or traffic control are needed to mitigate the impact of development traffic and maintain acceptable operations at the time of development completion and full occupancy.

Traffic volume in the study area is expected to increase in future years as the surrounding area continues to develop. In the no build condition, delays on several legs of the all-way stop are expected to reach the threshold for LOS F by 2050, with westbound queues occasionally extending far enough to cause delays at the Rum River Blvd intersection upstream. This would occur whether the Bridge Street extension is constructed or not.

A signal with additional turn lanes or a single-lane roundabout would both provide acceptable 2050 peak hour intersection operations with or without the Bridge Street extension, and both would be considered warranted based on traffic volumes. A roundabout would have fewer conflict points, a lower risk of severe crashes, and shorter pedestrian crossing distances. Because of the high volume of pedestrian crossings during school arrival and dismissal times, crossing enhancements such as rectangular rapid flashing beacons (RRFBs) could be considered with a roundabout. With the additional turn lanes that would be needed to provide acceptable signal operations, both alternatives would likely have right of way impacts.

The results of this analysis indicate that reasonable intersection improvements can accommodate future traffic volumes with or without the Bridge Street extension. After more development occurs, traffic volumes increase further and approach the capacity of the existing all-way stop, and a decision has been made on whether to construct the extension, an intersection control evaluation should be performed to determine the preferred traffic control at the intersection.

Appendix A

Turning Movement Counts

wsb

701 Xenia Ave S, Suite 300
Minneapolis, MN 55416

Bridge St & Ambassador Blvd
6am to 7pm
vehicles, peds, bikes
St Francis, MN

File Name : Bridge St & Ambassador Blvd
Site Code : 1
Start Date : 10/1/2025
Page No : 1

Groups Printed- vehicles & peds - bikes

	Ambassador Blvd From North					Bridge St From East					Ambassador Blvd From South					Bridge St From West					
Start Time	Right	Thru	Left	bikes	App. Total	Right	Thru	Left	bikes	App. Total	Right	Thru	Left	bikes	App. Total	Right	Thru	Left	bikes	App. Total	Int. Total
06:00 AM	5	7	30	0	42	17	2	42	0	61	17	4	1	0	22	1	6	3	0	10	135
06:15 AM	0	9	40	0	49	22	2	43	0	67	17	2	0	0	19	4	3	2	0	9	144
06:30 AM	2	5	65	0	72	12	3	40	0	55	28	3	0	0	31	0	2	1	0	3	161
06:45 AM	0	4	48	0	52	27	10	71	0	108	35	5	0	1	41	1	4	1	0	6	207
Total	7	25	183	0	215	78	17	196	0	291	97	14	1	1	113	6	15	7	0	28	647
07:00 AM	3	12	51	5	71	31	14	85	2	132	63	6	7	2	78	2	14	0	0	16	297
07:15 AM	1	5	77	4	87	36	19	57	1	113	65	7	2	0	74	6	15	8	0	29	303
07:30 AM	1	2	59	3	65	41	7	62	0	110	40	9	0	2	51	0	7	2	0	9	235
07:45 AM	2	6	47	0	55	39	1	69	0	109	32	10	0	0	42	2	5	2	0	9	215
Total	7	25	234	12	278	147	41	273	3	464	200	32	9	4	245	10	41	12	0	63	1050
08:00 AM	0	9	45	0	54	21	0	25	1	47	28	10	0	0	38	0	3	0	0	3	142
08:15 AM	0	10	31	0	41	24	0	53	0	77	27	1	1	0	29	0	2	0	0	2	149
08:30 AM	0	6	33	0	39	35	0	32	2	69	25	3	0	0	28	0	1	1	0	2	138
08:45 AM	6	9	38	1	54	24	4	56	0	84	34	9	5	0	48	0	2	1	1	4	190
Total	6	34	147	1	188	104	4	166	3	277	114	23	6	0	143	0	8	2	1	11	619
09:00 AM	2	4	32	0	38	27	14	21	0	62	30	7	1	0	38	0	2	4	1	7	145
09:15 AM	1	6	32	0	39	27	16	25	0	68	22	5	0	0	27	4	9	5	0	18	152
09:30 AM	0	5	36	0	41	37	1	28	0	66	22	0	1	1	24	0	3	1	0	4	135
09:45 AM	1	6	32	0	39	36	0	28	0	64	30	2	0	0	32	0	5	4	0	9	144
Total	4	21	132	0	157	127	31	102	0	260	104	14	2	1	121	4	19	14	1	38	576
10:00 AM	0	1	31	1	33	33	1	22	0	56	22	3	0	0	25	0	2	0	0	2	116
10:15 AM	0	3	36	0	39	32	2	33	0	67	25	1	0	0	26	2	3	3	0	8	140
10:30 AM	4	3	34	0	41	38	0	29	0	67	13	2	1	0	16	1	0	0	0	1	125
10:45 AM	2	6	31	0	39	24	0	17	1	42	29	4	1	1	35	0	2	1	0	3	119
Total	6	13	132	1	152	127	3	101	1	232	89	10	2	1	102	3	7	4	0	14	500
11:00 AM	1	5	35	0	41	28	3	32	1	64	21	2	0	0	23	0	4	2	0	6	134
11:15 AM	1	5	28	1	35	37	1	33	0	71	29	7	0	2	38	1	4	0	0	5	149
11:30 AM	1	2	37	1	41	45	3	31	0	79	33	6	0	0	39	0	0	1	0	1	160
11:45 AM	0	6	49	0	55	39	5	38	0	82	23	5	0	0	28	2	3	1	0	6	171
Total	3	18	149	2	172	149	12	134	1	296	106	20	0	2	128	3	11	4	0	18	614
12:00 PM	2	11	38	1	52	45	3	49	0	97	25	5	1	0	31	0	3	0	0	3	183
12:15 PM	1	8	45	0	54	43	1	32	1	77	31	4	1	1	37	0	3	0	0	3	171
12:30 PM	2	5	28	0	35	39	4	38	0	81	25	3	0	0	28	1	3	0	0	4	148
12:45 PM	1	5	44	1	51	40	3	32	0	75	37	4	0	0	41	1	2	2	0	5	172
Total	6	29	155	2	192	167	11	151	1	330	118	16	2	1	137	2	11	2	0	15	674
01:00 PM	2	6	50	0	58	35	0	31	0	66	38	5	2	0	45	0	0	0	0	0	169
01:15 PM	3	3	34	0	40	37	6	48	0	91	29	5	3	0	37	2	0	2	0	4	172
01:30 PM	2	10	45	0	57	35	6	48	0	89	29	11	0	0	40	0	1	3	0	4	190
01:45 PM	6	8	39	1	54	31	12	46	0	89	30	7	5	0	42	2	8	8	0	18	203
Total	13	27	168	1	209	138	24	173	0	335	126	28	10	0	164	4	9	13	0	26	734
02:00 PM	3	5	42	9	59	62	8	37	3	110	46	6	6	0	58	1	9	4	0	14	241
02:15 PM	0	5	54	31	90	35	1	47	0	83	76	5	0	0	81	0	35	2	0	37	291
02:30 PM	1	6	47	14	68	56	6	75	3	140	53	7	0	5	65	1	2	1	1	5	278
02:45 PM	1	4	47	0	52	51	0	53	0	104	43	9	0	0	52	0	1	0	0	1	209
Total	5	20	190	54	269	204	15	212	6	437	218	27	6	5	256	2	47	7	1	57	1019
03:00 PM	1	4	68	1	74	50	1	52	0	103	38	11	2	0	51	0	3	0	0	3	231
03:15 PM	0	1	48	1	50	57	3	60	1	121	50	11	4	0	65	0	0	0	0	0	236
03:30 PM	1	9	54	0	64	59	1	63	0	123	86	11	1	2	100	1	2	1	0	4	291
03:45 PM	2	3	35	7	47	64	6	54	0	124	96	12	0	0	108	6	2	4	0	12	291
Total	4	17	205	9	235	230	11	229	1	471	270	45	7	2	324	7	7	5	0	19	1049

wsb

701 Xenia Ave S, Suite 300
Minneapolis, MN 55416

Bridge St & Ambassador Blvd
6am to 7pm
vehicles, peds, bikes
St Francis, MN

File Name : Bridge St & Ambassador Blvd
Site Code : 1
Start Date : 10/1/2025
Page No : 2

Groups Printed- vehicles & peds - bikes

	Ambassador Blvd From North					Bridge St From East					Ambassador Blvd From South					Bridge St From West					
Start Time	Right	Thru	Left	bikes	App. Total	Right	Thru	Left	bikes	App. Total	Right	Thru	Left	bikes	App. Total	Right	Thru	Left	bikes	App. Total	Int. Total
04:00 PM	0	8	57	0	65	69	4	53	0	126	68	10	0	1	79	0	2	3	0	5	275
04:15 PM	5	7	51	3	66	70	20	61	1	152	66	6	3	0	75	0	7	2	0	9	302
04:30 PM	0	8	66	3	77	74	21	68	0	163	71	12	6	0	89	5	24	5	0	34	363
04:45 PM	1	9	65	3	78	57	8	61	0	126	80	11	1	0	92	1	11	2	0	14	310
Total	6	32	239	9	286	270	53	243	1	567	285	39	10	1	335	6	44	12	0	62	1250
05:00 PM	0	9	60	1	70	60	4	72	0	136	61	14	0	0	75	1	4	2	0	7	288
05:15 PM	1	5	50	7	63	65	1	46	0	112	69	10	0	0	79	1	0	0	0	1	255
05:30 PM	0	4	57	2	63	76	0	45	0	121	76	9	0	0	85	1	1	1	0	3	272
05:45 PM	0	5	50	2	57	47	1	48	0	96	52	11	0	0	63	0	0	0	0	0	216
Total	1	23	217	12	253	248	6	211	0	465	258	44	0	0	302	3	5	3	0	11	1031
06:00 PM	2	6	57	0	65	58	8	54	0	120	41	7	0	0	48	0	0	1	0	1	234
06:15 PM	1	6	45	0	52	55	14	67	0	136	58	7	0	0	65	0	0	0	0	0	253
06:30 PM	0	4	44	2	50	44	4	56	0	104	59	7	0	0	66	0	1	0	0	1	221
06:45 PM	2	5	35	3	45	40	2	28	0	70	36	13	0	0	49	1	0	1	0	2	166
Total	5	21	181	5	212	197	28	205	0	430	194	34	0	0	228	1	1	2	0	4	874
Grand Total	73	305	2332	108	2818	2186	256	2396	17	4855	2179	346	55	18	2598	51	225	87	3	366	10637
Apprch %	2.6	10.8	82.8	3.8		45	5.3	49.4	0.4		83.9	13.3	2.1	0.7		13.9	61.5	23.8	0.8		
Total %	0.7	2.9	21.9	1	26.5	20.6	2.4	22.5	0.2	45.6	20.5	3.3	0.5	0.2	24.4	0.5	2.1	0.8	0	3.4	
vehicles & peds																					
% vehicles & peds	100	100	100	69.4	98.8	100	100	100	94.1	100	100	100	100	66.7	99.8	100	100	100	66.7	99.7	99.6
bikes	0	0	0	33	33	0	0	0	1	1	0	0	0	6	6	0	0	0	1	1	41
% bikes	0	0	0	30.6	1.2	0	0	0	5.9	0	0	0	0	33.3	0.2	0	0	0	33.3	0.3	0.4

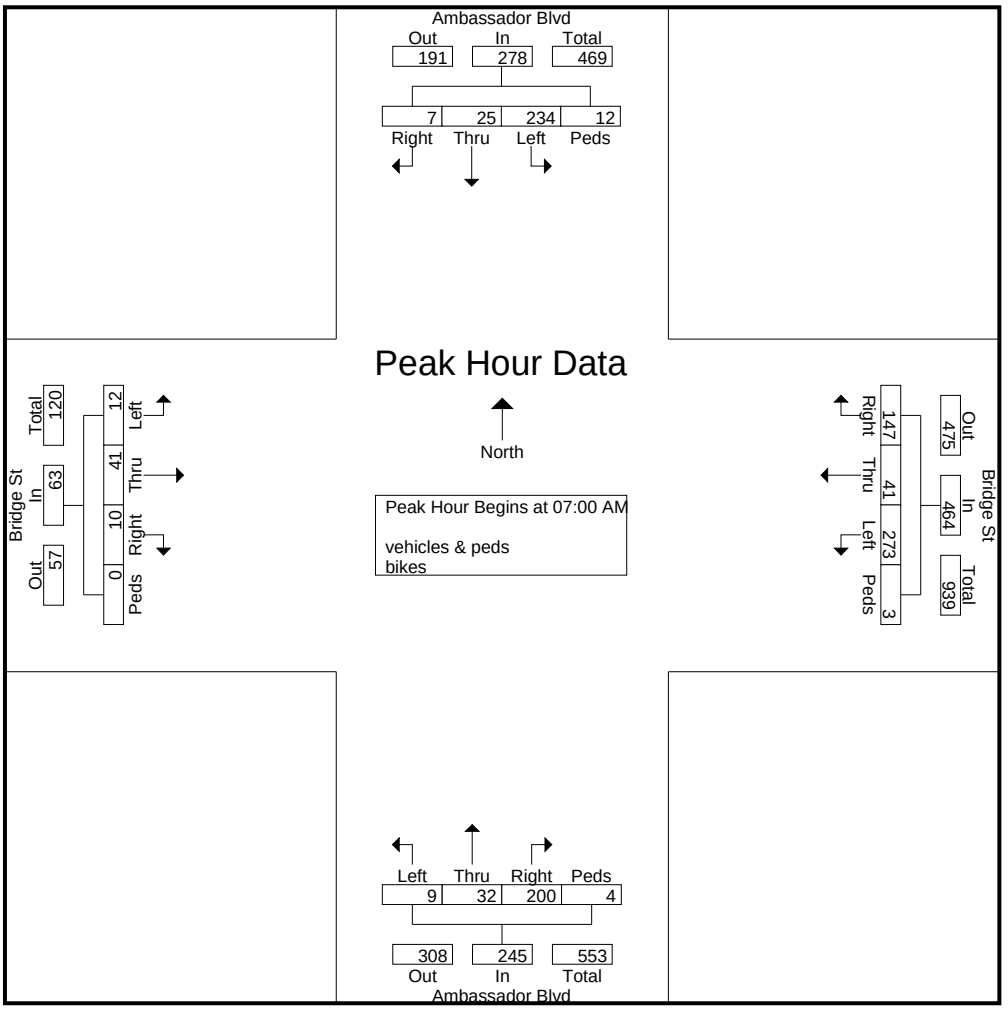
wsb

701 Xenia Ave S, Suite 300
Minneapolis, MN 55416

Bridge St & Ambassador Blvd
6am to 7pm
vehicles, peds, bikes
St Francis, MN

File Name : Bridge St & Ambassador Blvd
Site Code : 1
Start Date : 10/1/2025
Page No : 3

	Ambassador Blvd From North					Bridge St From East					Ambassador Blvd From South					Bridge St From West					
Start Time	Right	Thru	Left	bikes	App. Total	Right	Thru	Left	bikes	App. Total	Right	Thru	Left	bikes	App. Total	Right	Thru	Left	bikes	App. Total	Int. Total
Peak Hour Analysis From 06:00 AM to 09:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	**3**	**12**	51	**5**				**85**	**2**	**132**	63	6	**7**	**2**	**78**	2	14	0	0	16	297
07:15 AM	1	5	**77**		**87**	36	**19**				**65**					**6**	**15**	**8**		**29**	**303**
07:30 AM	1	2	59	3	65	**41**	7	62	0	110	40	9	0	2	51	0	7	2	0	9	235
07:45 AM	2	6	47	0	55	39	1	69	0	109	32	**10**									
Total Volume	7	25	234	12	278	147	41	273	3	464	200	32	9	4	245	10	41	12	0	63	1050
% App. Total	2.5	9	84.2	4.3		31.7	8.8	58.8	0.6		81.6	13.1	3.7	1.6		15.9	65.1	19	0		
PHF	.583	.521	.760	.600	.799	.896	.539	.803	.375	.879	.769	.800	.321	.500	.785	.417	.683	.375	.000	.543	.866



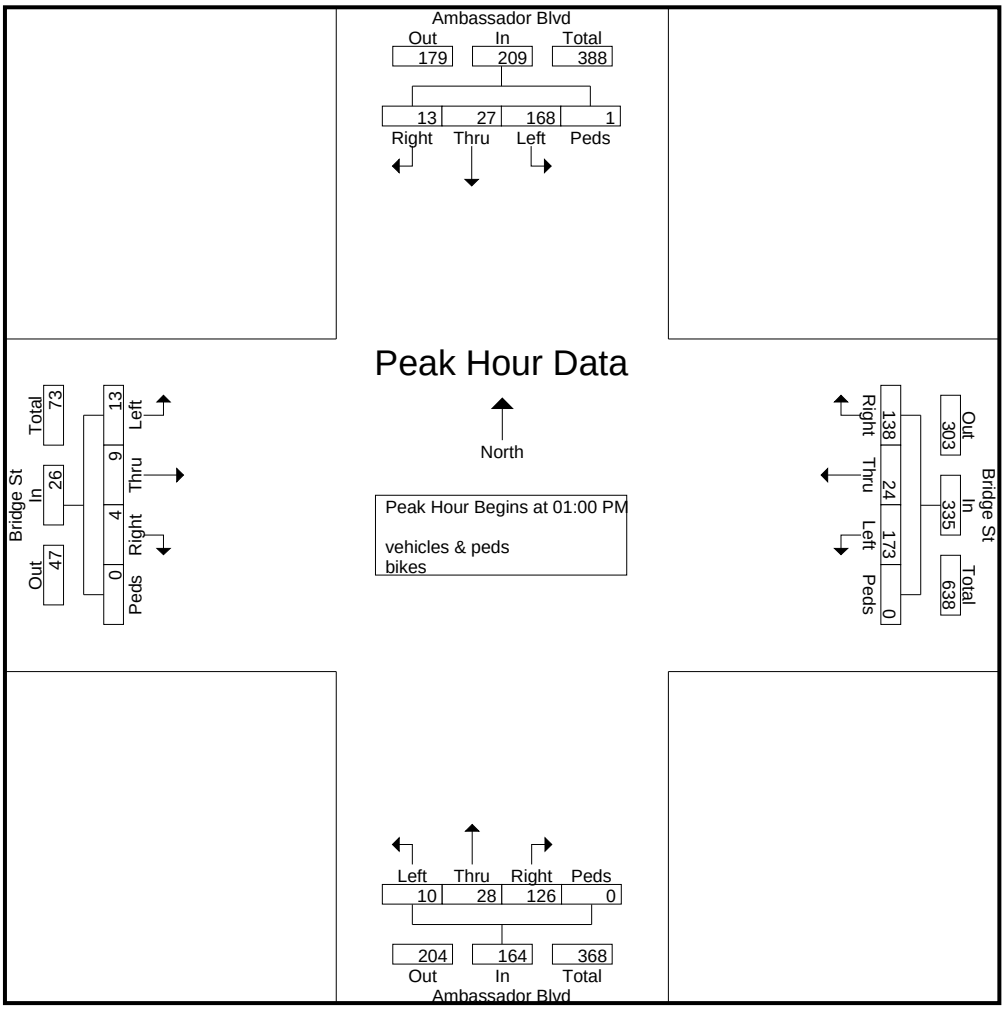
wsb

701 Xenia Ave S, Suite 300
Minneapolis, MN 55416

Bridge St & Ambassador Blvd
6am to 7pm
vehicles, peds, bikes
St Francis, MN

File Name : Bridge St & Ambassador Blvd
Site Code : 1
Start Date : 10/1/2025
Page No : 4

	Ambassador Blvd From North					Bridge St From East					Ambassador Blvd From South					Bridge St From West					
Start Time	Right	Thru	Left	bikes	App. Total	Right	Thru	Left	bikes	App. Total	Right	Thru	Left	bikes	App. Total	Right	Thru	Left	bikes	App. Total	Int. Total
Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 01:00 PM																					
01:00 PM	2	6	**50**		**58**	35	0	31	0	66	**38**				**45**	0	0	0	0	0	169
01:15 PM	3	3	34	0	40	**37**	6	**48**		**91**	29	5	3	0	37	**2**					
01:30 PM	**2**	**10**	45	0	57	35	6	48	0	89	29	**11**	**0**	**0**	**40**	**0**	**1**	**3**	**0**	**4**	**190**
01:45 PM	**6**	**8**	**39**	**1**	**54**	**31**	**12**	**46**	**0**	**89**	**30**	**7**	**5**	0	42	2	**8**	**8**	**0**	**18**	**203**
Total Volume	13	27	168	1	209	138	24	173	0	335	126	28	10	0	164	4	9	13	0	26	734
% App. Total	6.2	12.9	80.4	0.5		41.2	7.2	51.6	0		76.8	17.1	6.1	0		15.4	34.6	50	0		
PHF	.542	.675	.840	.250	.901	.932	.500	.901	.000	.920	.829	.636	.500	.000	.911	.500	.281	.406	.000	.361	.904



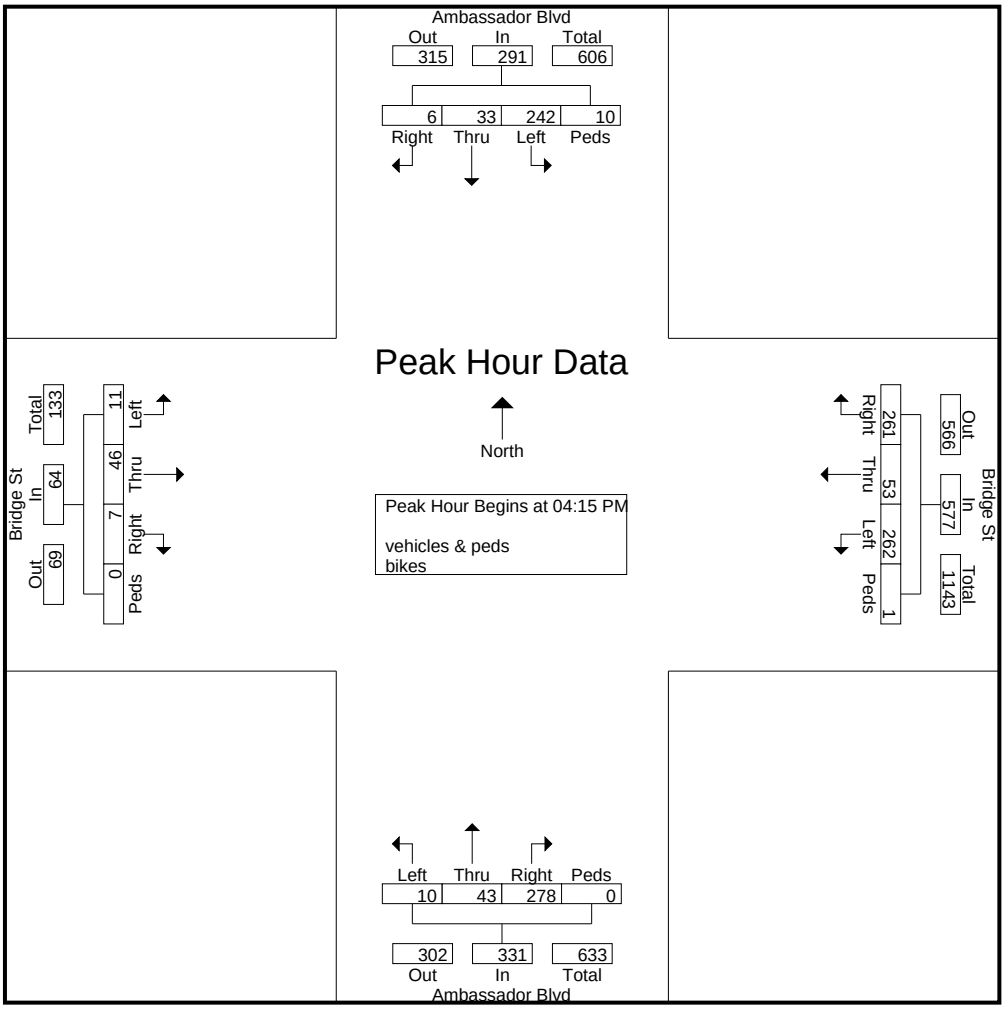
wsb

701 Xenia Ave S, Suite 300
Minneapolis, MN 55416

Bridge St & Ambassador Blvd
6am to 7pm
vehicles, peds, bikes
St Francis, MN

File Name : Bridge St & Ambassador Blvd
Site Code : 1
Start Date : 10/1/2025
Page No : 5

	Ambassador Blvd From North					Bridge St From East					Ambassador Blvd From South					Bridge St From West					
Start Time	Right	Thru	Left	bikes	App. Total	Right	Thru	Left	bikes	App. Total	Right	Thru	Left	bikes	App. Total	Right	Thru	Left	bikes	App. Total	Int. Total
Peak Hour Analysis From 02:00 PM to 06:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:15 PM																					
04:15 PM	**5**			**3**					**1**	152	66	6	3	0	75	0	7	2	0	9	302
04:30 PM	0	8	**66**			**74**	**21**			**163**	71	12	**6**	0	89	**5**	**24**	**5**		**34**	**363**
04:45 PM	1	**9**	65	3	**78**	57	8	61	0	126	**80**				**92**	1	11	2	0	14	310
05:00 PM	0	9	60	1	70	60	4	**72**				**14**									
Total Volume	6	33	242	10	291	261	53	262	1	577	278	43	10	0	331	7	46	11	0	64	1263
% App. Total	2.1	11.3	83.2	3.4		45.2	9.2	45.4	0.2		84	13	3	0		10.9	71.9	17.2	0		
PHF	.300	.917	.917	.833	.933	.882	.631	.910	.250	.885	.869	.768	.417	.000	.899	.350	.479	.550	.000	.471	.870



wsb

701 Xenia Ave S, Suite 300
Minneapolis, MN 55416

Bridge St & Rum River Blvd
6am to 7pm
vehicles, peds, bikes
St Francis, MN

File Name : Bridge St & Rum River Blvd
Site Code : 2
Start Date : 10/1/2025
Page No : 1

Groups Printed- vehicles & peds - bikes

	Parking Lot From North					Bridge St From East					Rum River Blvd From South					Bridge St From West					
Start Time	Right	Thru	Left	bikes	App. Total	Right	Thru	Left	bikes	App. Total	Right	Thru	Left	bikes	App. Total	Right	Thru	Left	bikes	App. Total	Int. Total
06:00 AM	0	0	0	0	0	0	61	6	0	67	3	0	0	0	3	0	54	0	0	54	124
06:15 AM	0	0	0	0	0	0	67	7	0	74	9	0	0	0	9	0	62	0	0	62	145
06:30 AM	0	0	0	0	0	0	56	15	0	71	16	0	0	0	16	0	103	0	0	103	190
06:45 AM	0	0	0	0	0	0	108	13	0	121	9	0	0	0	9	0	94	0	0	94	224
Total	0	0	0	0	0	0	292	41	0	333	37	0	0	0	37	0	313	0	0	313	683
07:00 AM	0	0	0	0	0	0	150	35	0	185	14	0	0	0	14	0	119	0	0	119	318
07:15 AM	0	0	0	3	3	0	110	16	0	126	26	0	0	0	26	0	155	0	0	155	310
07:30 AM	0	0	0	4	4	0	112	24	0	136	18	0	0	0	18	0	106	0	0	106	264
07:45 AM	0	0	0	0	0	0	116	12	0	128	10	0	0	0	10	0	83	0	0	83	221
Total	0	0	0	7	7	0	488	87	0	575	68	0	0	0	68	0	463	0	0	463	1113
08:00 AM	0	0	0	0	0	0	50	10	0	60	9	0	0	0	9	0	77	0	0	77	146
08:15 AM	0	0	0	0	0	0	80	2	0	82	8	0	0	1	9	0	65	0	0	65	156
08:30 AM	0	0	0	0	0	0	72	11	0	83	3	0	0	0	3	0	65	0	0	65	151
08:45 AM	0	0	0	1	1	0	88	5	0	93	3	0	0	0	3	0	76	0	0	76	173
Total	0	0	0	1	1	0	290	28	0	318	23	0	0	1	24	0	283	0	0	283	626
09:00 AM	0	0	0	1	1	0	66	5	0	71	8	0	1	0	9	0	69	1	0	70	151
09:15 AM	0	0	0	1	1	0	65	5	0	70	5	0	1	0	6	1	60	0	0	61	138
09:30 AM	0	0	0	1	1	0	66	4	5	75	7	0	1	0	8	0	66	0	0	66	150
09:45 AM	0	0	0	0	0	0	67	5	1	73	7	0	0	0	7	2	62	0	0	64	144
Total	0	0	0	3	3	0	264	19	6	289	27	0	3	0	30	3	257	1	0	261	583
10:00 AM	1	0	0	1	2	0	61	6	1	68	7	0	1	0	8	0	60	0	0	60	138
10:15 AM	0	0	0	3	3	0	72	6	0	78	6	0	1	0	7	0	72	0	0	72	160
10:30 AM	0	0	0	1	1	0	69	4	0	73	6	0	0	0	6	1	47	0	0	48	128
10:45 AM	0	0	0	10	10	0	38	3	0	41	6	1	1	0	8	1	61	0	0	62	121
Total	1	0	0	15	16	0	240	19	1	260	25	1	3	0	29	2	240	0	0	242	547
11:00 AM	0	0	0	3	3	0	66	4	0	70	5	0	0	0	5	1	67	0	1	69	147
11:15 AM	0	0	0	4	4	0	71	6	0	77	6	0	1	0	7	2	58	0	0	60	148
11:30 AM	0	0	0	0	0	0	84	7	0	91	5	0	1	0	6	2	77	0	1	80	177
11:45 AM	0	0	0	0	0	0	79	3	0	82	8	0	0	0	8	1	75	0	0	76	166
Total	0	0	0	7	7	0	300	20	0	320	24	0	2	0	26	6	277	0	2	285	638
12:00 PM	0	0	0	2	2	0	96	4	0	100	5	0	3	0	8	0	66	0	1	67	177
12:15 PM	0	0	0	0	0	0	73	4	0	77	5	0	1	1	7	2	74	0	0	76	160
12:30 PM	0	0	0	0	0	0	83	5	0	88	11	0	0	0	11	2	60	0	0	62	161
12:45 PM	0	0	0	0	0	0	70	9	0	79	5	0	0	1	6	1	79	0	0	80	165
Total	0	0	0	2	2	0	322	22	0	344	26	0	4	2	32	5	279	0	1	285	663
01:00 PM	0	0	0	2	2	0	70	3	0	73	5	0	0	1	6	1	82	0	0	83	164
01:15 PM	0	0	0	1	1	0	86	10	0	96	15	1	2	0	18	1	62	0	0	63	178
01:30 PM	0	0	0	1	1	0	92	5	0	97	12	0	0	0	12	0	77	0	0	77	187
01:45 PM	0	0	0	0	0	0	89	10	0	99	12	0	2	0	14	2	74	0	0	76	189
Total	0	0	0	4	4	0	337	28	0	365	44	1	4	1	50	4	295	0	0	299	718
02:00 PM	0	0	0	0	0	0	109	11	0	120	12	0	1	0	13	1	95	0	0	96	229
02:15 PM	0	0	0	24	24	0	82	12	0	94	10	0	0	2	12	0	165	0	0	165	295
02:30 PM	0	0	0	9	9	0	142	13	0	155	12	0	0	3	15	2	101	0	0	103	282
02:45 PM	0	0	0	0	0	0	95	11	0	106	24	0	0	1	25	0	93	0	0	93	224
Total	0	0	0	33	33	0	428	47	0	475	58	0	1	6	65	3	454	0	0	457	1030
03:00 PM	0	0	0	0	0	0	104	11	0	115	18	0	1	0	19	0	110	0	0	110	244
03:15 PM	0	0	0	2	2	1	133	12	0	146	11	0	1	1	13	0	99	0	0	99	260
03:30 PM	0	0	0	3	3	1	121	7	0	129	18	0	0	2	20	0	139	0	0	139	291
03:45 PM	0	0	0	2	2	0	120	18	0	138	19	0	2	1	22	0	132	0	0	132	294
Total	0	0	0	7	7	2	478	48	0	528	66	0	4	4	74	0	480	0	0	480	1089

wsb

701 Xenia Ave S, Suite 300
Minneapolis, MN 55416

Bridge St & Rum River Blvd
6am to 7pm
vehicles, peds, bikes
St Francis, MN

File Name : Bridge St & Rum River Blvd
Site Code : 2
Start Date : 10/1/2025
Page No : 2

Groups Printed- vehicles & peds - bikes

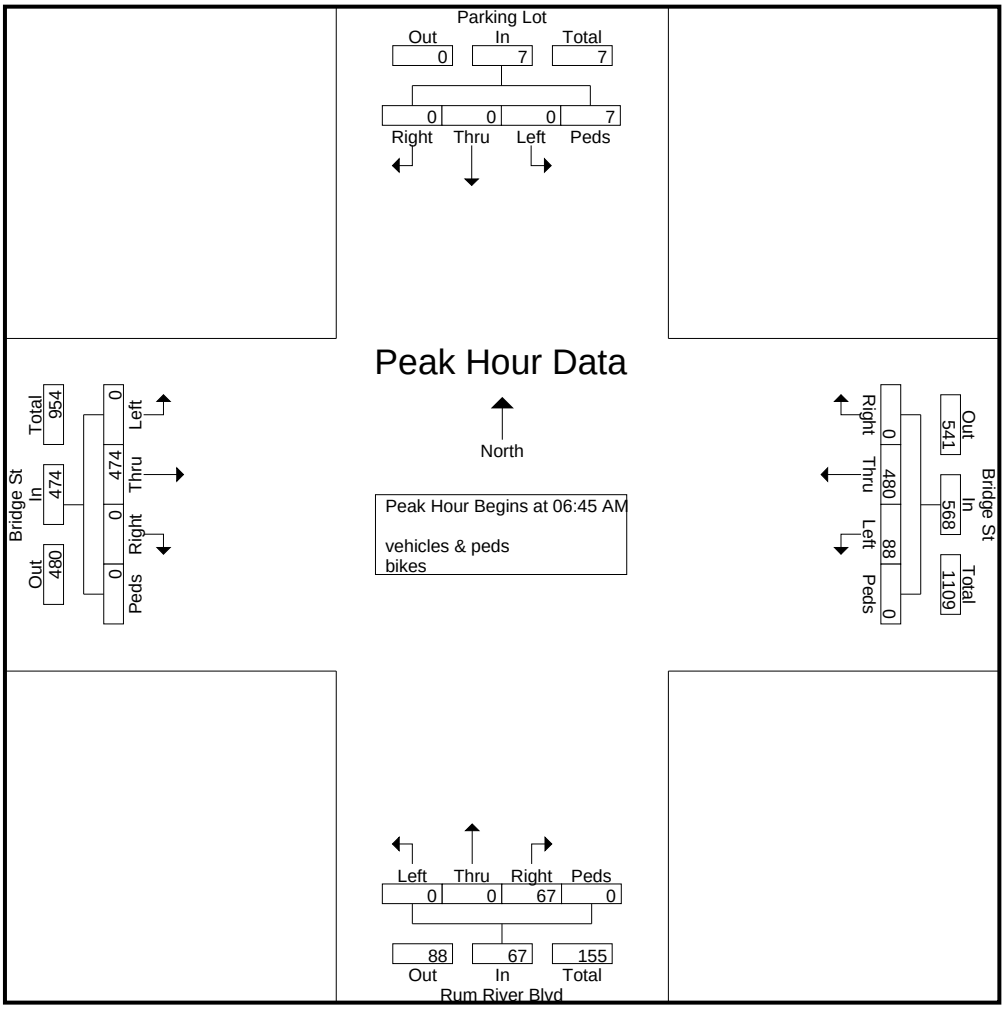
	Parking Lot From North					Bridge St From East					Rum River Blvd From South					Bridge St From West					
Start Time	Right	Thru	Left	bikes	App. Total	Right	Thru	Left	bikes	App. Total	Right	Thru	Left	bikes	App. Total	Right	Thru	Left	bikes	App. Total	Int. Total
04:00 PM	0	0	0	2	2	1	127	23	0	151	34	0	1	0	35	1	134	0	0	135	323
04:15 PM	0	0	0	3	3	0	159	15	0	174	21	0	0	0	21	0	126	0	0	126	324
04:30 PM	0	0	0	4	4	0	166	20	0	186	32	0	0	0	32	0	159	0	0	159	381
04:45 PM	0	0	0	1	1	0	128	16	0	144	25	0	1	0	26	2	149	0	0	151	322
Total	0	0	0	10	10	1	580	74	0	655	112	0	2	0	114	3	568	0	0	571	1350
05:00 PM	0	0	0	1	1	0	134	12	0	146	19	0	1	0	20	2	128	0	0	130	297
05:15 PM	0	0	0	6	6	0	120	17	0	137	18	0	0	0	18	0	121	0	0	121	282
05:30 PM	0	0	0	2	2	0	131	8	0	139	20	0	1	0	21	0	132	0	0	132	294
05:45 PM	0	0	0	2	2	0	99	7	0	106	20	0	0	0	20	0	102	0	0	102	230
Total	0	0	0	11	11	0	484	44	0	528	77	0	2	0	79	2	483	0	0	485	1103
06:00 PM	0	0	0	0	0	0	126	12	0	138	17	0	0	0	17	0	97	0	0	97	252
06:15 PM	0	0	0	0	0	0	131	9	0	140	18	0	1	0	19	0	102	0	0	102	261
06:30 PM	0	0	0	3	3	0	97	8	0	105	10	0	0	2	12	0	101	0	0	101	221
06:45 PM	0	0	0	3	3	0	68	4	0	72	7	0	0	0	7	0	78	0	0	78	160
Total	0	0	0	6	6	0	422	33	0	455	52	0	1	2	55	0	378	0	0	378	894
Grand Total	1	0	0	106	107	3	4925	510	7	5445	639	2	26	16	683	28	4770	1	3	4802	11037
Apprch %	0.9	0	0	99.1		0.1	90.4	9.4	0.1		93.6	0.3	3.8	2.3		0.6	99.3	0	0.1		
Total %	0	0	0	1	1	0	44.6	4.6	0.1	49.3	5.8	0	0.2	0.1	6.2	0.3	43.2	0	0	43.5	
vehicles & peds	1	0	0	58	59	3	4925	510	5	5443	639	2	26	5	672	28	4770	1	1	4800	10974
% vehicles & peds	100	0	0	54.7	55.1	100	100	100	71.4	100	100	100	100	31.2	98.4	100	100	100	33.3	100	99.4
bikes	0	0	0	48	48	0	0	0	2	2	0	0	0	11	11	0	0	0	2	2	63
% bikes	0	0	0	45.3	44.9	0	0	0	28.6	0	0	0	0	68.8	1.6	0	0	0	66.7	0	0.6

wsb
701 Xenia Ave S, Suite 300
Minneapolis, MN 55416

Bridge St & Rum River Blvd
6am to 7pm
vehicles, peds, bikes
St Francis, MN

File Name : Bridge St & Rum River Blvd
Site Code : 2
Start Date : 10/1/2025
Page No : 3

	Parking Lot From North					Bridge St From East					Rum River Blvd From South					Bridge St From West					
Start Time	Right	Thru	Left	bikes	App. Total	Right	Thru	Left	bikes	App. Total	Right	Thru	Left	bikes	App. Total	Right	Thru	Left	bikes	App. Total	Int. Total
Peak Hour Analysis From 06:00 AM to 09:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 06:45 AM																					
06:45 AM	0	0	0	0	0	0	108	13	0	121	9	0	0	0	9	0	94	0	0	94	224
07:00 AM	0	0	0	0	0	0	**150**	**35**		**185**	14	0	0	0	14	0	119	0	0	119	**318**
07:15 AM	0	0	0	3	3	0	110	16	0	126	**26**				**26**	0	**155**	0	0	**155**	310
07:30 AM	0	0	0	**4**	**4**	0	112	24	0	136	18	0	0	0	18	0	106	0	0	106	264
Total Volume	0	0	0	7	7	0	480	88	0	568	67	0	0	0	67	0	474	0	0	474	1116
% App. Total	0	0	0	100		0	84.5	15.5	0		100	0	0	0		0	100	0	0		
PHF	.000	.000	.000	.438	.438	.000	.800	.629	.000	.768	.644	.000	.000	.000	.644	.000	.765	.000	.000	.765	.877



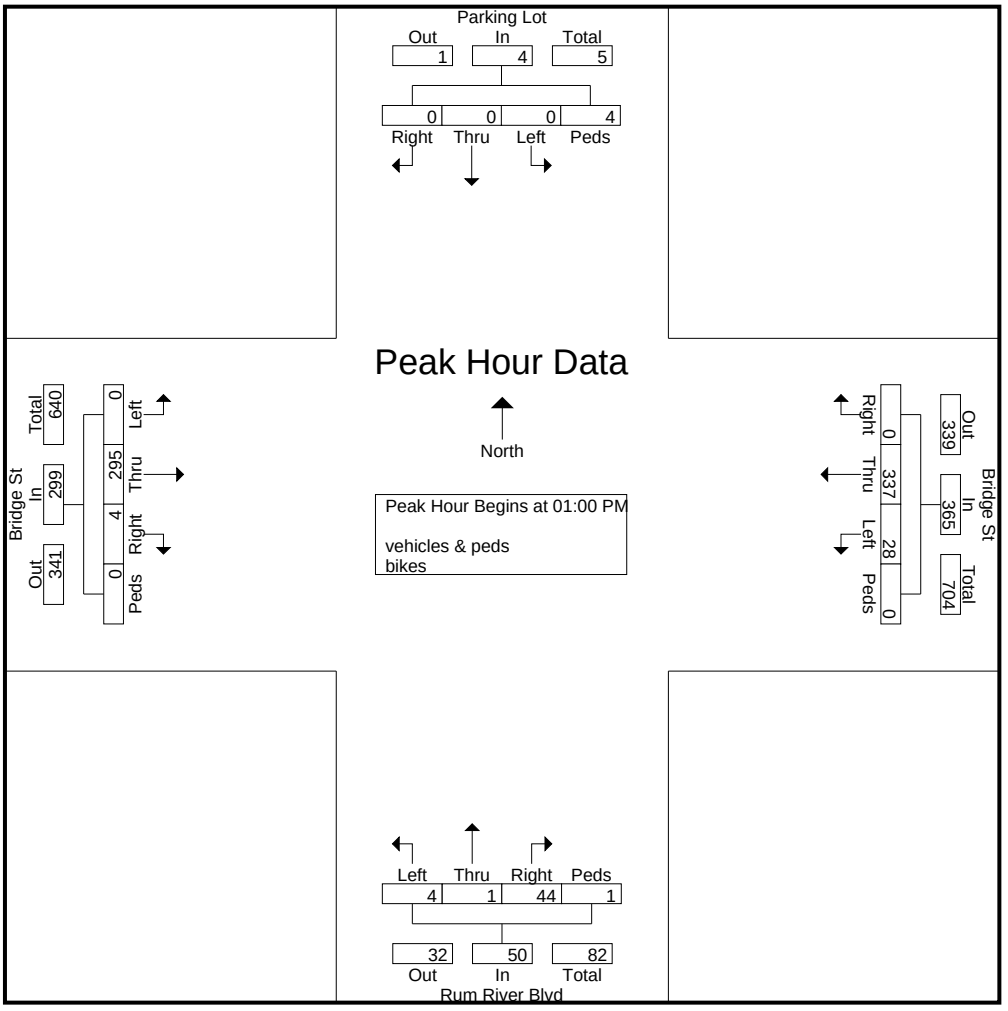
wsb

701 Xenia Ave S, Suite 300
Minneapolis, MN 55416

Bridge St & Rum River Blvd
6am to 7pm
vehicles, peds, bikes
St Francis, MN

File Name : Bridge St & Rum River Blvd
Site Code : 2
Start Date : 10/1/2025
Page No : 4

	Parking Lot From North					Bridge St From East					Rum River Blvd From South					Bridge St From West					
Start Time	Right	Thru	Left	bikes	App. Total	Right	Thru	Left	bikes	App. Total	Right	Thru	Left	bikes	App. Total	Right	Thru	Left	bikes	App. Total	Int. Total
Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 01:00 PM																					
01:00 PM	0	0	0	**2**	**2**	0	70	3	0	73	5	0	0	**1**			**82**	0	0	**83**	164
01:15 PM	0	0	0	1	1	0	86	**10**			**15**	**1**	**2**	0	**18**	1	62	0	0	63	178
01:30 PM	0	0	0	1	1	0	**92**														
01:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**89**	**10**	**0**	**99**	12	0	2	0	14	**2**	**74**	**0**	**0**	**76**	**189**
Total Volume	0	0	0	4	4	0	337	28	0	365	44	1	4	1	50	4	295	0	0	299	718
% App. Total	0	0	0	100		0	92.3	7.7	0		88	2	8	2		1.3	98.7	0	0		
PHF	.000	.000	.000	.500	.500	.000	.916	.700	.000	.922	.733	.250	.500	.250	.694	.500	.899	.000	.000	.901	.950



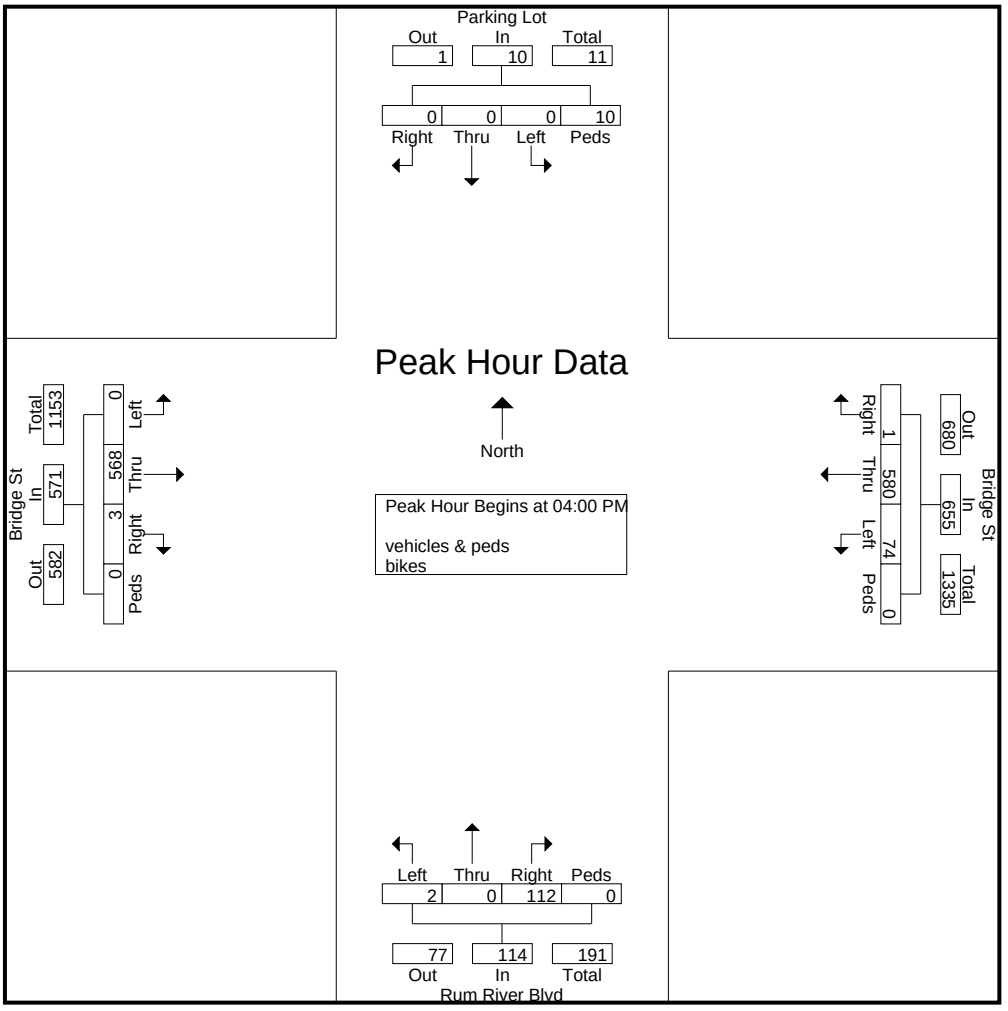
wsb

701 Xenia Ave S, Suite 300
Minneapolis, MN 55416

Bridge St & Rum River Blvd
6am to 7pm
vehicles, peds, bikes
St Francis, MN

File Name : Bridge St & Rum River Blvd
Site Code : 2
Start Date : 10/1/2025
Page No : 5

	Parking Lot From North					Bridge St From East					Rum River Blvd From South					Bridge St From West					
Start Time	Right	Thru	Left	bikes	App. Total	Right	Thru	Left	bikes	App. Total	Right	Thru	Left	bikes	App. Total	Right	Thru	Left	bikes	App. Total	Int. Total
Peak Hour Analysis From 02:00 PM to 06:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
04:00 PM	0	0	0	2	2	**1**	127	**23**			**34**		**1**	0	**35**	1	134	0	0	135	323
04:15 PM	0	0	0	3	3	0	159	15	0	174	21	0	0	0	21	0	126	0	0	126	324
04:30 PM	0	0	0	**4**	**4**	0	**166**			**186**	32	0	0	0	32	0	**159**	0	0	**159**	**381**
04:45 PM	0	0	0	1	1	0	128	16	0	144	25	0	1	0	26	**2**					
Total Volume	0	0	0	10	10	1	580	74	0	655	112	0	2	0	114	3	568	0	0	571	1350
% App. Total	0	0	0	100		0.2	88.5	11.3	0		98.2	0	1.8	0		0.5	99.5	0	0		
PHF	.000	.000	.000	.625	.625	.250	.873	.804	.000	.880	.824	.000	.500	.000	.814	.375	.893	.000	.000	.898	.886



wsb

701 Xenia Ave S, Suite 300
Minneapolis, MN 55416

Ambassador Blvd & 229th Ave
6am to 7pm
vehicles, peds, bikes
St Francis, MN

File Name : Ambassador Blvd & 229th Ave
Site Code : 3
Start Date : 10/1/2025
Page No : 1

Groups Printed- vehicles & peds - bikes

	Ambassador Blvd From North					Driveway From East					Ambassador Blvd From South					229th Ave From West					
Start Time	Right	Thru	Left	bikes	App. Total	Right	Thru	Left	bikes	App. Total	Right	Thru	Left	bikes	App. Total	Right	Thru	Left	bikes	App. Total	Int. Total
06:00 AM	32	15	0	0	47	0	0	0	0	0	0	4	1	0	5	2	0	18	0	20	72
06:15 AM	30	23	2	0	55	0	0	0	0	0	0	5	1	0	6	4	1	15	0	20	81
06:30 AM	29	16	1	0	46	1	0	0	0	1	0	7	5	0	12	7	0	26	0	33	92
06:45 AM	62	12	1	0	75	3	0	0	0	3	1	12	3	0	16	7	1	31	1	40	134
Total	153	66	4	0	223	4	0	0	0	4	1	28	10	0	39	20	2	90	1	113	379
07:00 AM	84	17	1	1	103	0	1	1	0	2	0	13	6	0	19	8	0	63	0	71	195
07:15 AM	58	16	0	0	74	0	0	0	0	0	0	16	8	0	24	3	0	57	0	60	158
07:30 AM	55	12	0	0	67	0	0	0	0	0	0	12	5	0	17	2	1	37	0	40	124
07:45 AM	57	16	1	0	74	1	0	0	0	1	0	11	3	0	14	2	0	31	0	33	122
Total	254	61	2	1	318	1	1	1	0	3	0	52	22	0	74	15	1	188	0	204	599
08:00 AM	23	11	2	0	36	0	0	0	0	0	0	11	2	0	13	1	0	24	0	25	74
08:15 AM	44	18	1	0	63	0	0	0	0	0	0	6	3	0	9	3	0	22	0	25	97
08:30 AM	29	11	0	0	40	0	0	0	0	0	0	8	2	0	10	8	0	23	0	31	81
08:45 AM	54	10	0	0	64	0	0	0	0	0	0	9	7	0	16	3	0	43	0	46	126
Total	150	50	3	0	203	0	0	0	0	0	0	34	14	0	48	15	0	112	0	127	378
09:00 AM	22	4	0	0	26	0	0	0	0	0	0	6	4	0	10	8	0	30	0	38	74
09:15 AM	22	18	0	1	41	0	0	0	0	0	1	4	0	0	5	2	0	19	0	21	67
09:30 AM	23	8	0	0	31	0	0	0	0	0	0	7	1	0	8	2	0	16	0	18	57
09:45 AM	25	10	0	1	36	1	0	0	0	1	0	8	2	0	10	1	0	24	0	25	72
Total	92	40	0	2	134	1	0	0	0	1	1	25	7	0	33	13	0	89	0	102	270
10:00 AM	21	5	0	0	26	0	0	0	0	0	0	9	1	0	10	1	0	16	0	17	53
10:15 AM	30	7	0	0	37	0	0	0	0	0	0	6	1	0	7	0	1	20	0	21	65
10:30 AM	21	10	1	0	32	0	0	1	0	1	0	5	3	0	8	3	1	13	0	17	58
10:45 AM	16	5	0	1	22	0	0	0	1	1	0	11	3	0	14	0	0	22	0	22	59
Total	88	27	1	1	117	0	0	1	1	2	0	31	8	0	39	4	2	71	0	77	235
11:00 AM	28	7	0	0	35	0	1	0	0	1	0	8	3	0	11	3	0	16	0	19	66
11:15 AM	30	6	0	1	37	0	1	0	0	1	0	9	0	0	9	3	0	29	0	32	79
11:30 AM	28	5	0	0	33	0	0	0	0	0	0	10	1	0	11	1	1	29	0	31	75
11:45 AM	30	12	0	0	42	0	0	0	0	0	0	10	1	0	11	4	0	20	0	24	77
Total	116	30	0	1	147	0	2	0	0	2	0	37	5	0	42	11	1	94	0	106	297
12:00 PM	38	16	0	3	57	0	1	0	0	1	0	9	2	0	11	1	2	24	0	27	96
12:15 PM	28	12	0	0	40	0	0	0	0	0	0	9	0	0	9	1	0	24	0	25	74
12:30 PM	25	15	1	1	42	0	0	0	0	0	0	5	2	0	7	0	0	21	0	21	70
12:45 PM	34	7	0	1	42	1	0	1	0	2	0	10	1	0	11	2	0	31	0	33	88
Total	125	50	1	5	181	1	1	1	0	3	0	33	5	0	38	4	2	100	0	106	328
01:00 PM	25	10	0	0	35	1	0	0	0	1	0	13	0	0	13	2	0	31	0	33	82
01:15 PM	44	10	0	1	55	0	0	0	0	0	0	11	2	0	13	2	0	25	0	27	95
01:30 PM	45	9	0	0	54	0	0	0	0	0	0	12	1	0	13	0	0	31	0	31	98
01:45 PM	36	13	0	0	49	0	0	0	0	0	0	19	1	0	20	1	0	25	0	26	95
Total	150	42	0	1	193	1	0	0	0	1	0	55	4	0	59	5	0	112	0	117	370
02:00 PM	37	12	1	0	50	1	0	0	0	1	0	10	5	0	15	3	0	46	1	50	116
02:15 PM	28	19	0	8	55	0	0	0	0	0	0	14	5	0	19	0	0	69	1	70	144
02:30 PM	68	16	0	0	84	0	0	0	0	0	0	12	3	0	15	1	0	44	2	47	146
02:45 PM	47	14	0	0	61	1	1	0	0	2	0	10	0	0	10	4	0	43	0	47	120
Total	180	61	1	8	250	2	1	0	0	3	0	46	13	0	59	8	0	202	4	214	526
03:00 PM	39	16	0	0	55	0	0	0	0	0	0	17	5	0	22	4	0	33	0	37	114
03:15 PM	49	14	1	0	64	0	0	1	0	1	0	24	11	0	35	1	1	48	0	50	150
03:30 PM	60	14	0	0	74	1	0	1	0	2	0	21	10	0	31	7	1	81	0	89	196
03:45 PM	46	14	1	0	61	1	0	0	0	1	0	22	3	0	25	5	0	85	3	93	180
Total	194	58	2	0	254	2	0	2	0	4	0	84	29	0	113	17	2	247	3	269	640

wsb

701 Xenia Ave S, Suite 300
Minneapolis, MN 55416

Ambassador Blvd & 229th Ave
6am to 7pm
vehicles, peds, bikes
St Francis, MN

File Name : Ambassador Blvd & 229th Ave
Site Code : 3
Start Date : 10/1/2025
Page No : 2

Groups Printed- vehicles & peds - bikes

	Ambassador Blvd From North					Driveway From East					Ambassador Blvd From South					229th Ave From West					
Start Time	Right	Thru	Left	bikes	App. Total	Right	Thru	Left	bikes	App. Total	Right	Thru	Left	bikes	App. Total	Right	Thru	Left	bikes	App. Total	Int. Total
04:00 PM	42	19	0	0	61	1	0	0	0	1	0	17	5	0	22	3	1	58	1	63	147
04:15 PM	48	17	2	0	67	1	0	0	0	1	0	23	3	0	26	3	0	59	2	64	158
04:30 PM	67	25	0	0	92	0	1	0	0	1	0	20	8	0	28	5	0	67	0	72	193
04:45 PM	53	22	0	0	75	0	0	0	0	0	0	20	3	0	23	6	0	68	0	74	172
Total	210	83	2	0	295	2	1	0	0	3	0	80	19	0	99	17	1	252	3	273	670
05:00 PM	54	29	1	0	84	1	0	0	0	1	1	23	2	0	26	3	0	48	0	51	162
05:15 PM	43	11	0	0	54	0	0	1	0	1	0	18	3	0	21	3	0	62	3	68	144
05:30 PM	43	8	0	2	53	1	0	0	0	1	0	19	2	0	21	2	0	65	0	67	142
05:45 PM	42	10	0	0	52	0	0	0	0	0	0	17	1	0	18	3	0	45	0	48	118
Total	182	58	1	2	243	2	0	1	0	3	1	77	8	0	86	11	0	220	3	234	566
06:00 PM	48	9	0	0	57	0	0	0	0	0	0	14	2	0	16	3	1	39	0	43	116
06:15 PM	63	11	0	0	74	0	0	0	0	0	0	13	3	0	16	2	0	54	0	56	146
06:30 PM	45	13	0	0	58	0	0	0	0	0	0	11	2	0	13	4	1	54	0	59	130
06:45 PM	26	7	0	0	33	0	0	0	0	0	0	16	1	0	17	2	0	32	0	34	84
Total	182	40	0	0	222	0	0	0	0	0	0	54	8	0	62	11	2	179	0	192	476
Grand Total	2076	666	17	21	2780	16	6	6	1	29	3	636	152	0	791	151	13	1956	14	2134	5734
Apprch %	74.7	24	0.6	0.8		55.2	20.7	20.7	3.4		0.4	80.4	19.2	0		7.1	0.6	91.7	0.7		
Total %	36.2	11.6	0.3	0.4	48.5	0.3	0.1	0.1	0	0.5	0.1	11.1	2.7	0	13.8	2.6	0.2	34.1	0.2	37.2	
vehicles & peds																					
% vehicles & peds	100	100	100	9.5	99.3	100	100	100	0	96.6	100	100	100	0	100	100	100	100	85.7	99.9	99.6
bikes	0	0	0	19	19	0	0	0	1	1	0	0	0	0	0	0	0	0	2	2	22
% bikes	0	0	0	90.5	0.7	0	0	0	100	3.4	0	0	0	0	0	0	0	0	14.3	0.1	0.4

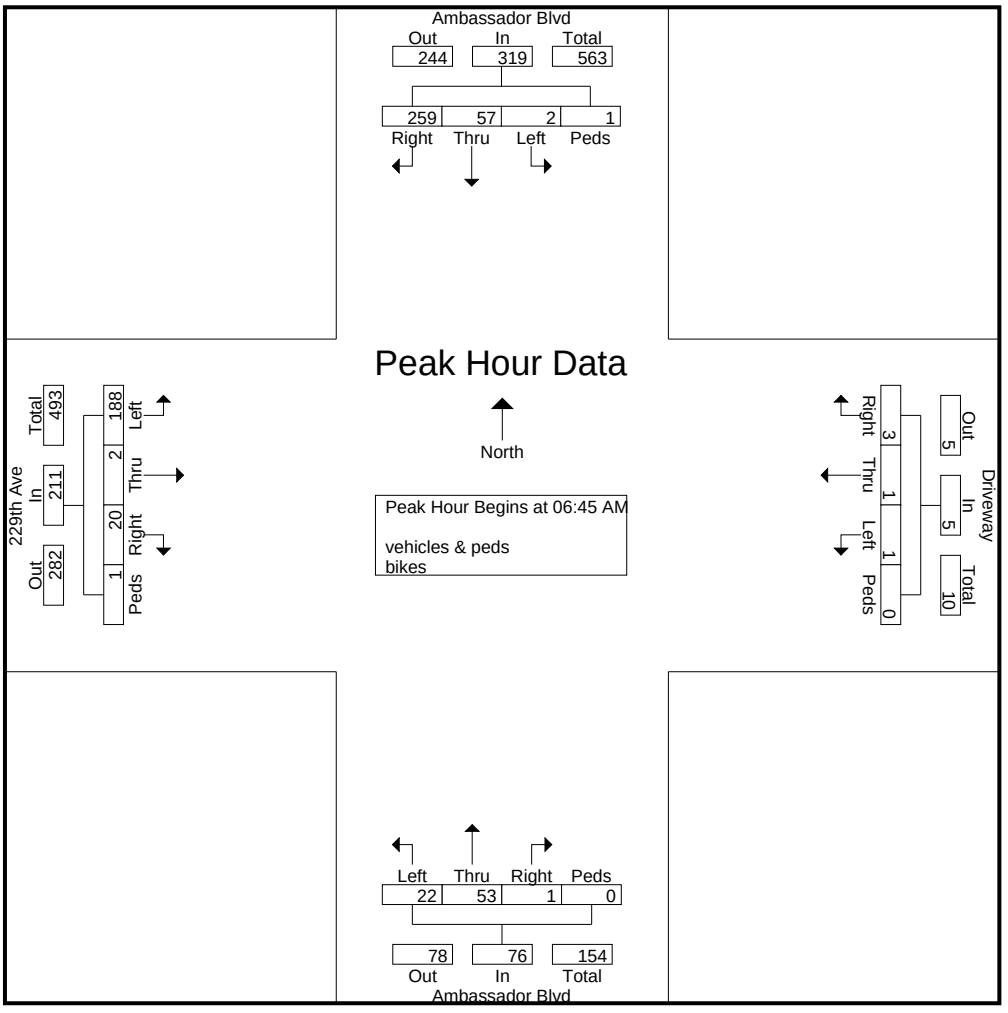
wsb

701 Xenia Ave S, Suite 300
Minneapolis, MN 55416

Ambassador Blvd & 229th Ave
6am to 7pm
vehicles, peds, bikes
St Francis, MN

File Name : Ambassador Blvd & 229th Ave
Site Code : 3
Start Date : 10/1/2025
Page No : 3

	Ambassador Blvd From North					Driveway From East					Ambassador Blvd From South					229th Ave From West					
Start Time	Right	Thru	Left	bikes	App. Total	Right	Thru	Left	bikes	App. Total	Right	Thru	Left	bikes	App. Total	Right	Thru	Left	bikes	App. Total	Int. Total
Peak Hour Analysis From 06:00 AM to 09:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 06:45 AM																					
06:45 AM	62	12	**1**			**3**	0	0	0	**3**	**1**						**1**	31	**1**		
07:00 AM	**84**	**17**	1	**1**	**103**	0	**1**	**1**	**0**	**2**	**0**	**13**	**6**	**0**	**19**	**8**	**0**	**63**	**0**	**71**	**195**
07:15 AM	58	16	0	0	74	0	0	0	0	0	0	**16**	**8**	0	**24**	3	0	57	0	60	158
07:30 AM	55	12	0	0	67	0	0	0	0	0	0	12	5	0	17	2	1	37	0	40	124
Total Volume	259	57	2	1	319	3	1	1	0	5	1	53	22	0	76	20	2	188	1	211	611
% App. Total	81.2	17.9	0.6	0.3		60	20	20	0		1.3	69.7	28.9	0		9.5	0.9	89.1	0.5		
PHF	.771	.838	.500	.250	.774	.250	.250	.250	.000	.417	.250	.828	.688	.000	.792	.625	.500	.746	.250	.743	.783



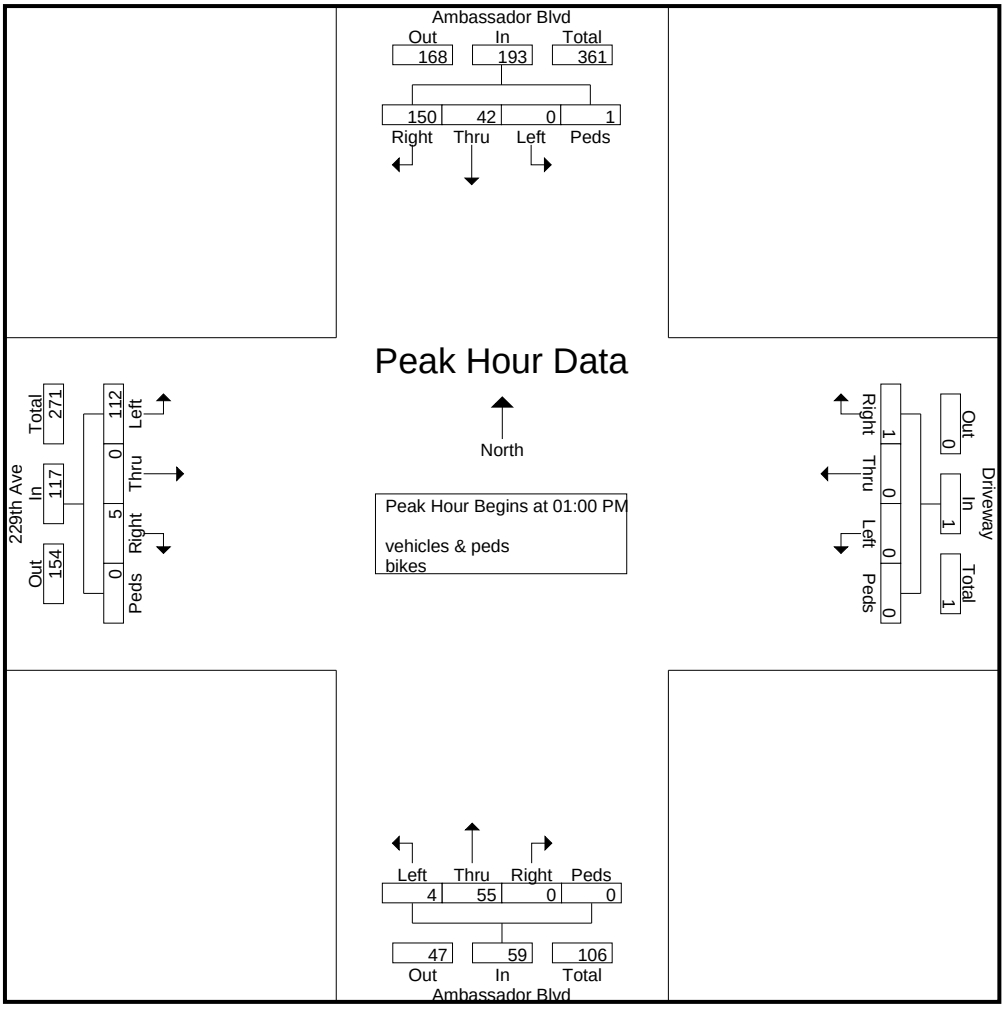
wsb

701 Xenia Ave S, Suite 300
Minneapolis, MN 55416

Ambassador Blvd & 229th Ave
6am to 7pm
vehicles, peds, bikes
St Francis, MN

File Name : Ambassador Blvd & 229th Ave
Site Code : 3
Start Date : 10/1/2025
Page No : 4

	Ambassador Blvd From North					Driveway From East					Ambassador Blvd From South					229th Ave From West					
Start Time	Right	Thru	Left	bikes	App. Total	Right	Thru	Left	bikes	App. Total	Right	Thru	Left	bikes	App. Total	Right	Thru	Left	bikes	App. Total	Int. Total
Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 01:00 PM																					
01:00 PM	25	10	0	0	35	**1**	0	0	0	**1**	0	13	0	0	13	**2**		**31**		**33**	82
01:15 PM	44	10	0	**1**	**55**	0	0	0	0	0	0	11	**2**	0	13	2	0	25	0	27	95
01:30 PM	**45**																				**98**
01:45 PM	36	**13**	0	0	49	0	0	0	0	0	0	**19**			**20**	1	0	25	0	26	95
Total Volume	150	42	0	1	193	1	0	0	0	1	0	55	4	0	59	5	0	112	0	117	370
% App. Total	77.7	21.8	0	0.5		100	0	0	0		0	93.2	6.8	0		4.3	0	95.7	0		
PHF	.833	.808	.000	.250	.877	.250	.000	.000	.000	.250	.000	.724	.500	.000	.738	.625	.000	.903	.000	.886	.944



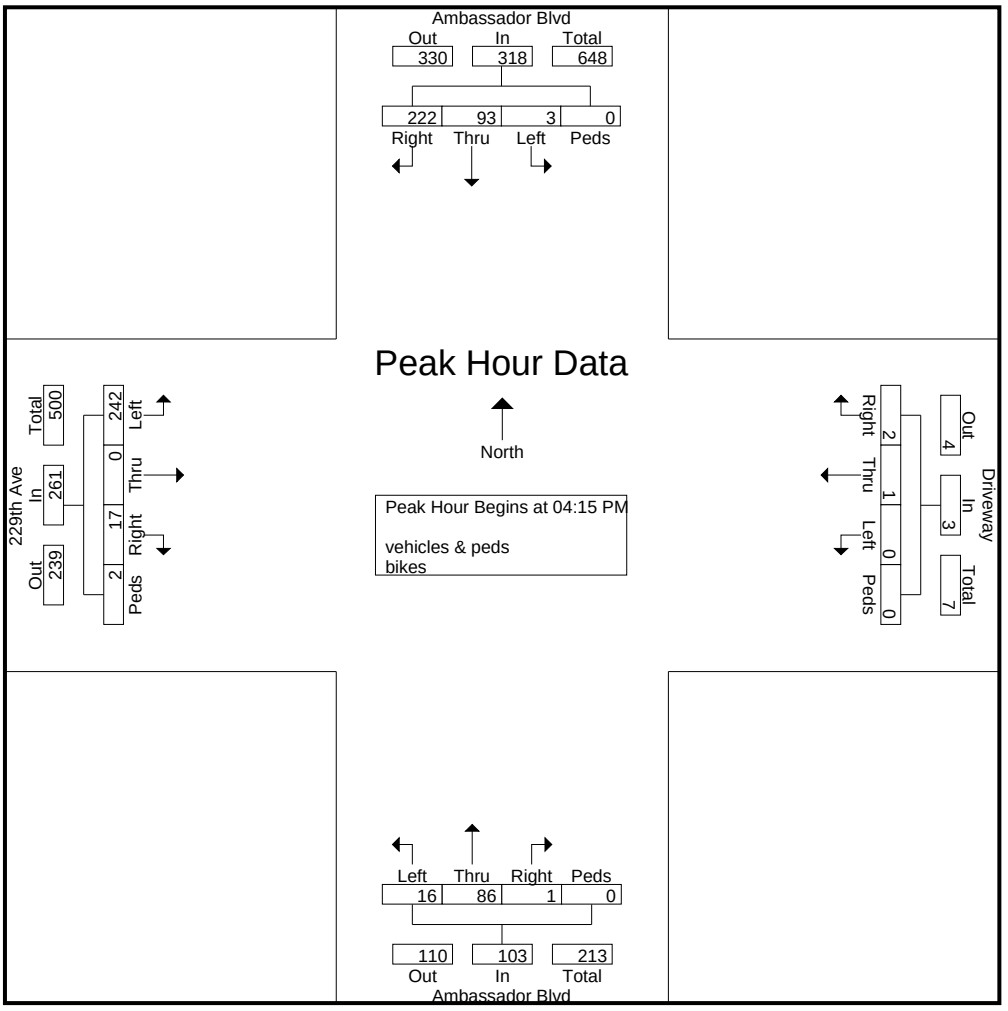
wsb

701 Xenia Ave S, Suite 300
Minneapolis, MN 55416

Ambassador Blvd & 229th Ave
6am to 7pm
vehicles, peds, bikes
St Francis, MN

File Name : Ambassador Blvd & 229th Ave
Site Code : 3
Start Date : 10/1/2025
Page No : 5

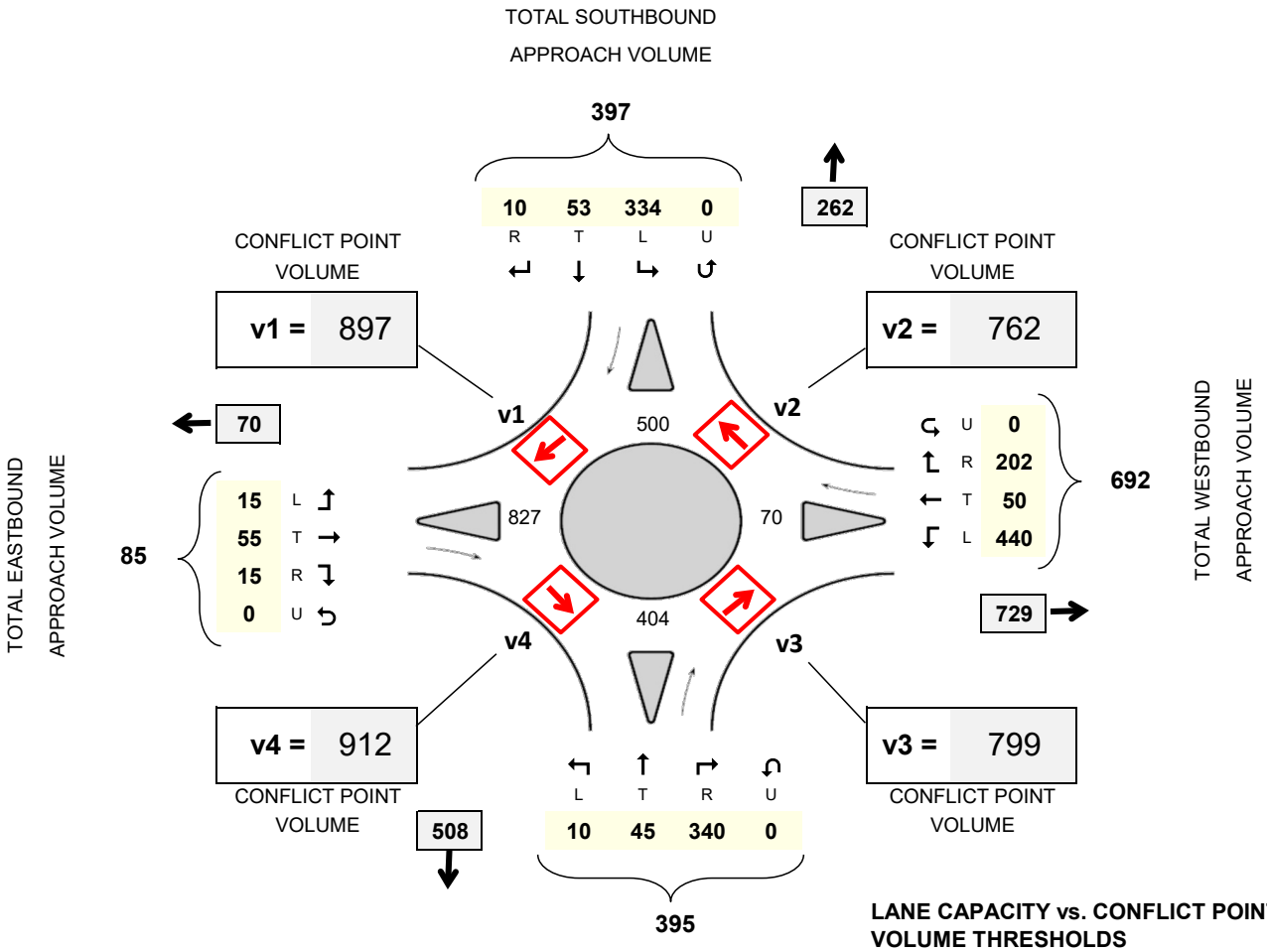
	Ambassador Blvd From North					Driveway From East					Ambassador Blvd From South					229th Ave From West					
Start Time	Right	Thru	Left	bikes	App. Total	Right	Thru	Left	bikes	App. Total	Right	Thru	Left	bikes	App. Total	Right	Thru	Left	bikes	App. Total	Int. Total
Peak Hour Analysis From 02:00 PM to 06:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:15 PM																					
04:15 PM	48	17	**2**			**1**	0	0	0	**1**	0	**23**							**2**		
04:30 PM	**67**	**25**	**0**	**0**	**92**	0	**1**	**0**	**0**	**1**	**0**	**20**	**8**	0	**28**	5	0	67	0	72	**193**
04:45 PM	53	22	0	0	75	0	0	0	0	0	0	20	3	0	23	**6**		**68**		**74**	172
05:00 PM	54	**29**	1	0	84	1	0	0	0	1	**1**										
Total Volume	222	93	3	0	318	2	1	0	0	3	1	86	16	0	103	17	0	242	2	261	685
% App. Total	69.8	29.2	0.9	0		66.7	33.3	0	0		1	83.5	15.5	0		6.5	0	92.7	0.8		
PHF	.828	.802	.375	.000	.864	.500	.250	.000	.000	.750	.250	.935	.500	.000	.920	.708	.000	.890	.250	.882	.887



ROUNDABOUT ANALYSIS

Based on conflicting traffic volumes between approaches

East / West Street:	**Bridge St**	Agency:	**St Francis**
South / North Street:	**Ambassador Blvd**	Analyst:	**JJ**
Analysis Time Period:	**AM**	Date:	**1/16/2026**
Analysis Year:	**2050 - without extension**		

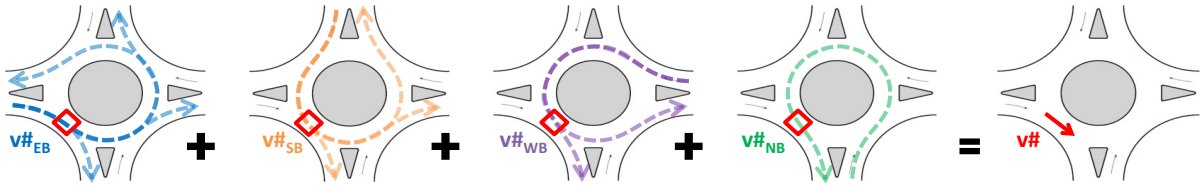


LANE CAPACITY vs. CONFLICT POINT VOLUME THRESHOLDS

LESS THAN 1100 vph: SINGLE LANE OK
BETWEEN 1100 vph AND 1400 vph: ANALYZE FURTHER
GREATER THAN 1400 vph: DOUBLE LANE REQUIRED

vph= vehicles per hour

EXAMPLE CONFLICT POINT VOLUME COMPOSITION



ENTER THRESHOLDS

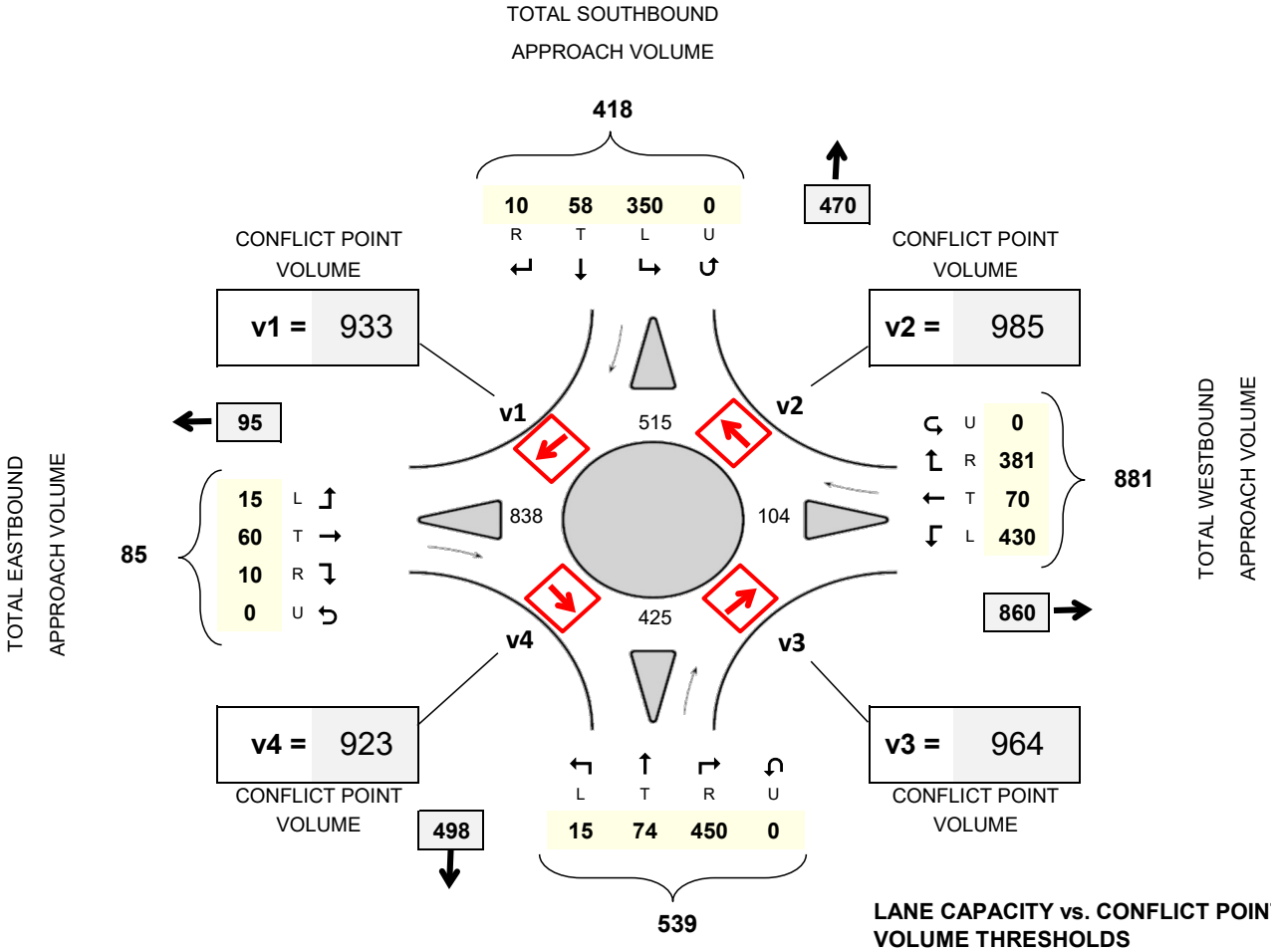
SINGLE	1100
DOUBLE	1400

ROUNDABOUT ANALYSIS

Based on conflicting traffic volumes between approaches

East / West Street:	**Bridge St**
South / North Street:	**Ambassador Blvd**
Analysis Time Period:	**PM**
Analysis Year:	**2050 - without extension**

Agency:	**St Francis**
Analyst:	**JJ**
Date:	**1/16/2026**



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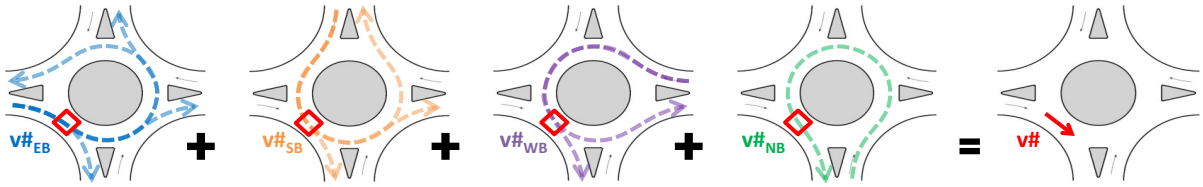
EXAMPLE CONFLICT POINT VOLUME COMPOSITION



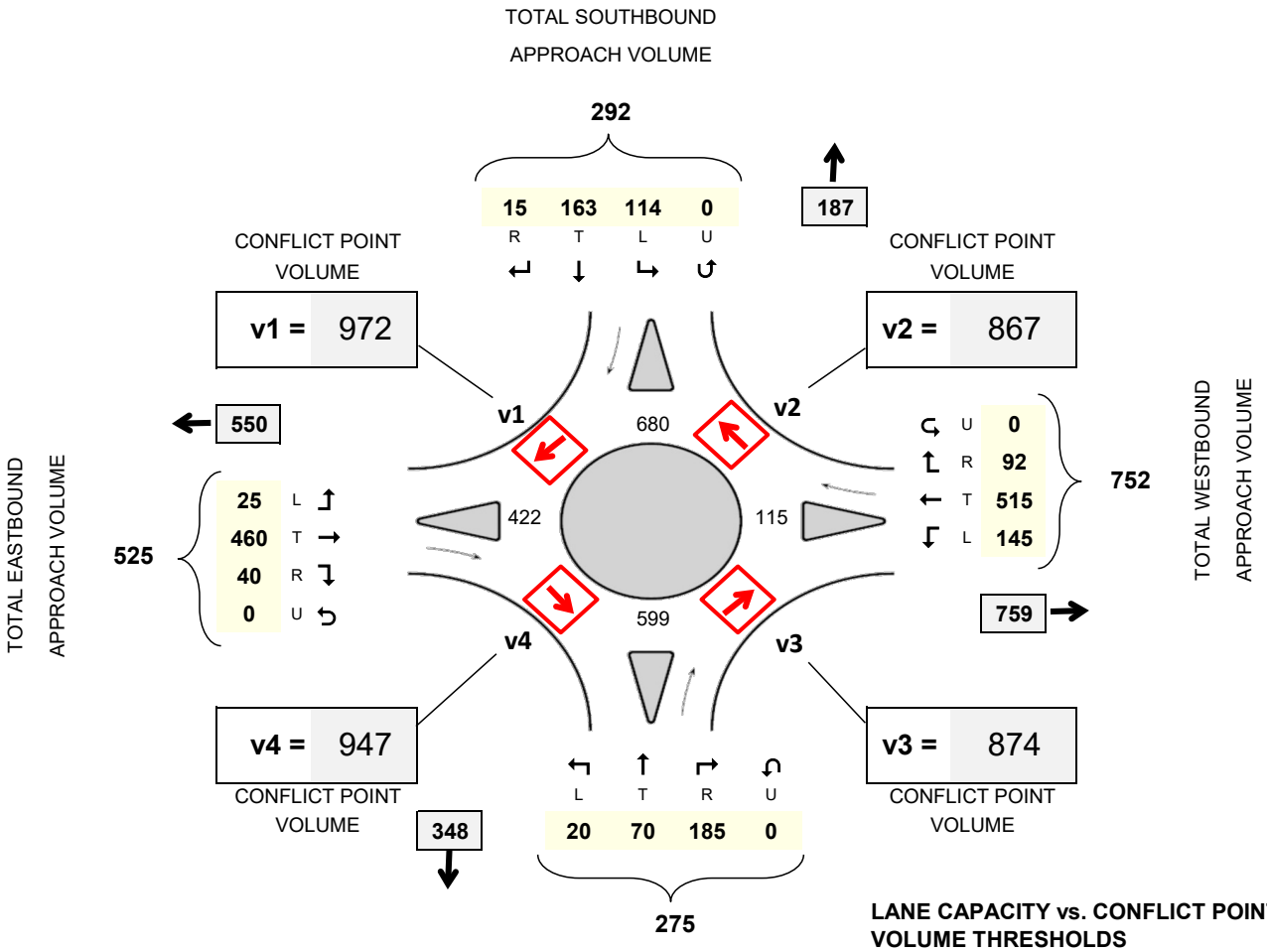
ENTER THRESHOLDS

SINGLE	1100
DOUBLE	1400

ROUNDABOUT ANALYSIS

Based on conflicting traffic volumes between approaches

East / West Street:	**Bridge St**	Agency:	**St Francis**
South / North Street:	**Ambassador Blvd**	Analyst:	**JJ**
Analysis Time Period:	**AM**	Date:	**1/16/2026**
Analysis Year:	**2050 - with extension**		



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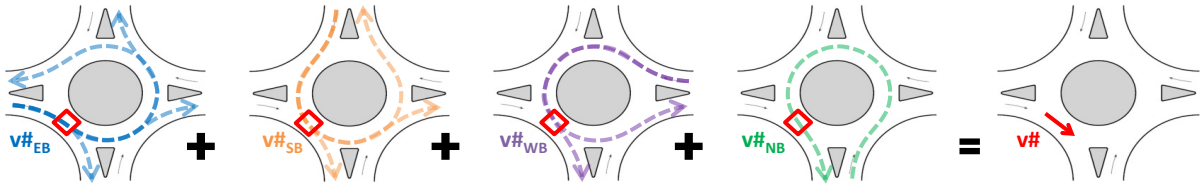


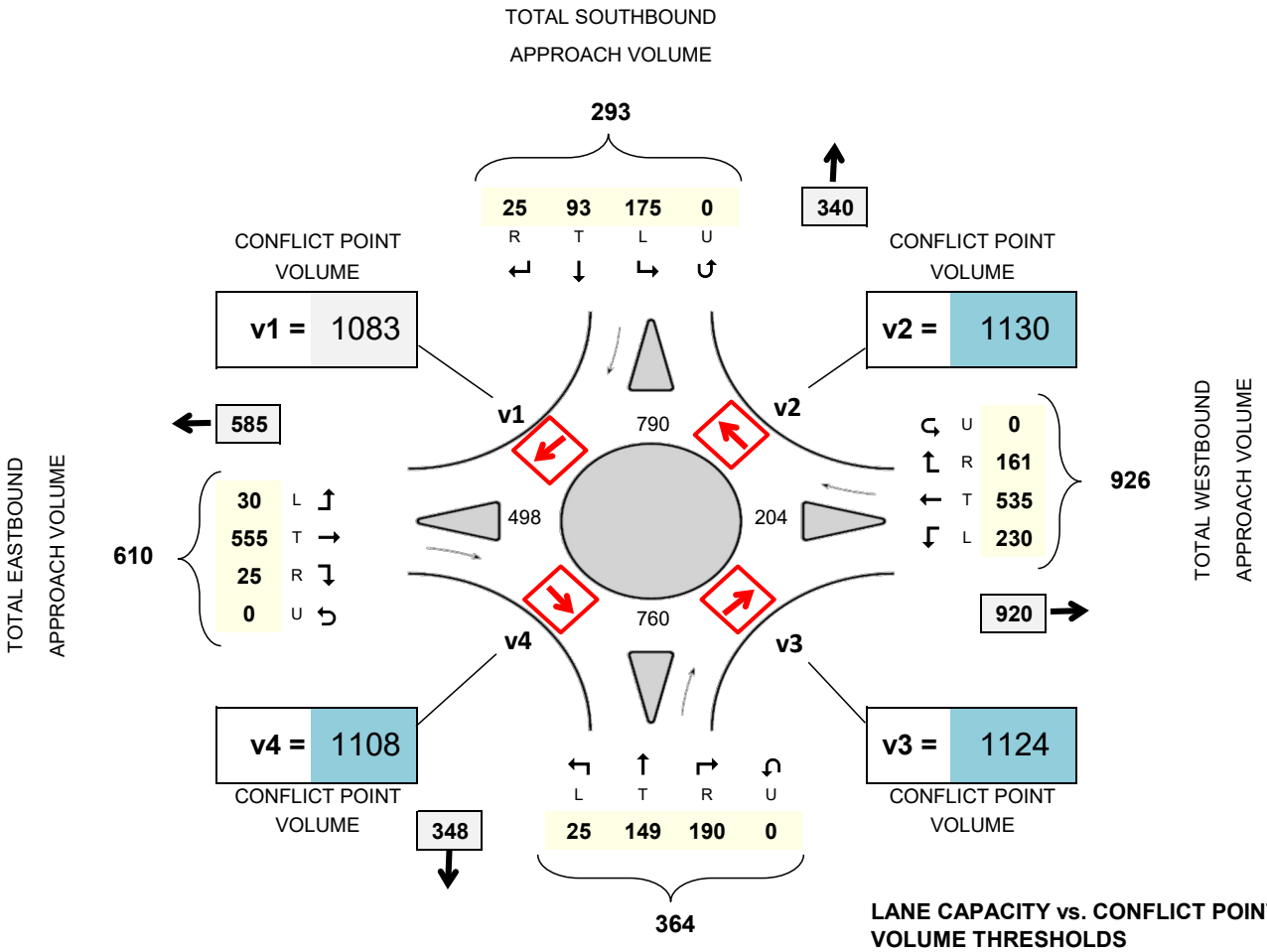
ENTER THRESHOLDS

SINGLE	1100
DOUBLE	1400

ROUNDABOUT ANALYSIS

Based on conflicting traffic volumes between approaches

East / West Street:	**Bridge St**	Agency:	**St Francis**
South / North Street:	**Ambassador Blvd**	Analyst:	**JJ**
Analysis Time Period:	**PM**	Date:	**1/16/2026**
Analysis Year:	**2050 - with extension**		



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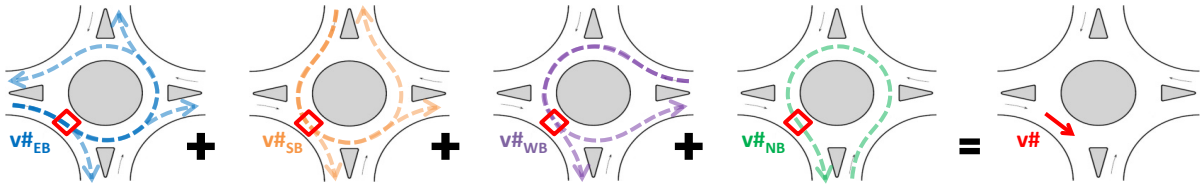
EXAMPLE CONFLICT POINT VOLUME COMPOSITION



ENTER THRESHOLDS

SINGLE	1100
DOUBLE	1400

Appendix B

Forecast Memo

Memorandum

To: Kate Thunstrom, City of St Francis

From: Jason Junge, PE, Senior Traffic Operations Engineer

Date: November 13, 2025

Re: Bridge Street/Ambassador Blvd Traffic Study – Traffic Forecast
WSB Project No. 031945-000

The purpose of this memorandum is to document the forecasting approach and future traffic volumes that will be used in the operations analysis for the Bridge Street/Ambassador Blvd Traffic Study. The Bridge Street/Rum River Blvd and Ambassador Blvd/229th Avenue NW intersections were also included in the study. The location of these intersections within the context of the surrounding area is shown in **Figure 1**.

Turning movement counts for these intersections were collected in October 2025. Based on the count data for the Bridge Street/Ambassador Blvd intersection, the peak hours for traffic in this area begin at 7:00 AM and 4:15 PM on weekdays. The existing peak hour intersection traffic volumes are shown in **Figure 2**.

The traffic forecast approach for this project consisted of the following steps:

1. Review AADT history and previous forecasts from other recent studies
2. Run the Metropolitan Council's 2050 Regional Travel Demand Model
3. Review development plans in the area and add traffic from trips generated by development that is likely to occur between 2025 and 2050

AADT History

Traffic volume history was analyzed for roadway segments in the study area with data available from MnDOT's Traffic Count Database System. The most recent AADT data available for these roadways is from 2024. As shown in **Table 1**, traffic volume on these segments has been increasing as the surrounding area has developed, particularly on Ambassador Blvd north of Bridge Street.

Table 1. AADT history.

Segment	2016 AADT	2024 AADT	Annual Growth Rate
Ambassador Blvd North of Bridge St	5,700	6,611	1.9%
Ambassador Blvd South of Bridge St	5,800	5,996	0.4%
Bridge St East of Ambassador Blvd	9,100	8,893	-0.3%

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Previous Forecast Information

Three previous studies in the area were reviewed:

- The Bridge Street Extension Study (2005) did not specifically forecast traffic volumes at these intersections but noted that the current Metropolitan Council forecast at that time expected the City of St Francis population to increase by 160 percent between 2000 and 2030.
- The Northern Anoka County River Crossing Study (2012) forecasted annual growth rates of 0.9 to 1.3 percent to 2030 for daily traffic on these roadway segments.
- The traffic forecast from the Trunk Highway 47 Alternatives Evaluation (2022) assumed annual growth rates of 1.5 percent for TH 47, Pederson Drive, and 229th Avenue traffic, and a rate of 3 percent for traffic on Ambassador Blvd where it intersects with TH 47.

Regional Travel Demand Model

The Metropolitan Council's 2050 Regional Travel Demand Model was used to forecast future traffic volumes in the area. The model was run with and without the potential extension of Bridge Street to TH 47. Comparing the 2050 model results without the Bridge Street extension to the 2025 counts shows that traffic volumes at the Bridge Street/Ambassador Blvd intersection are anticipated to increase by about 1.5 percent per year on average.

The results of the model with the Bridge Street extension indicate that 2050 traffic volume on Bridge Street would increase by about 5 percent if the connection to TH 47 were added. Travel patterns for through traffic in the area would also change. Volume on 229th Avenue would decrease by about half as traffic shifts to the new roadway. Volume on Ambassador Blvd would also decrease, because traffic from TH 47 would no longer need to use Ambassador Blvd to reach the bridge across the Rum River.

The regional model is not precise enough to forecast the impact of development proposals for specific parcels on turning movement volumes at individual intersections. The model runs for future years used the existing land use input data for the transportation analysis zone that contains the proposed developments. Trip generation and distribution from the developments were estimated separately and added to the regional model forecasts.

Development Trip Generation

Developments have been proposed for several existing vacant parcels in the study area that are likely to be constructed within the next 10 years. These parcels are shown in **Figure 3** along with estimated trip generation, distribution, and additional peak hour intersection traffic volumes.

Trip generation was estimated using the Institute of Transportation Engineers (ITE) Trip Generation Manual 12th Edition. Pass-by and internal site capture trip percentages for retail and convenience businesses were estimated based on guidance and data included in the ITE Trip Generation Handbook 3rd Edition. Pass-by trips represent stops made by traffic already passing through on adjacent roadways and do not increase the total amount of traffic entering the study area. The land use assumptions and trip generation rates are shown in **Table 2**, and the resulting trip generation calculations are shown in **Table 3**.

Trip distribution was estimated based on a StreetLight Data analysis of origins and destinations for trips to and from existing development nearby that was conducted as part of the traffic operations analysis for the TH 47 project.

Forecast Traffic Volumes

Peak hour intersection traffic volumes at the completion of the proposed developments were estimated by adding the traffic generated by the developments to the existing counts. The resulting volumes are shown in **Figure 4**.

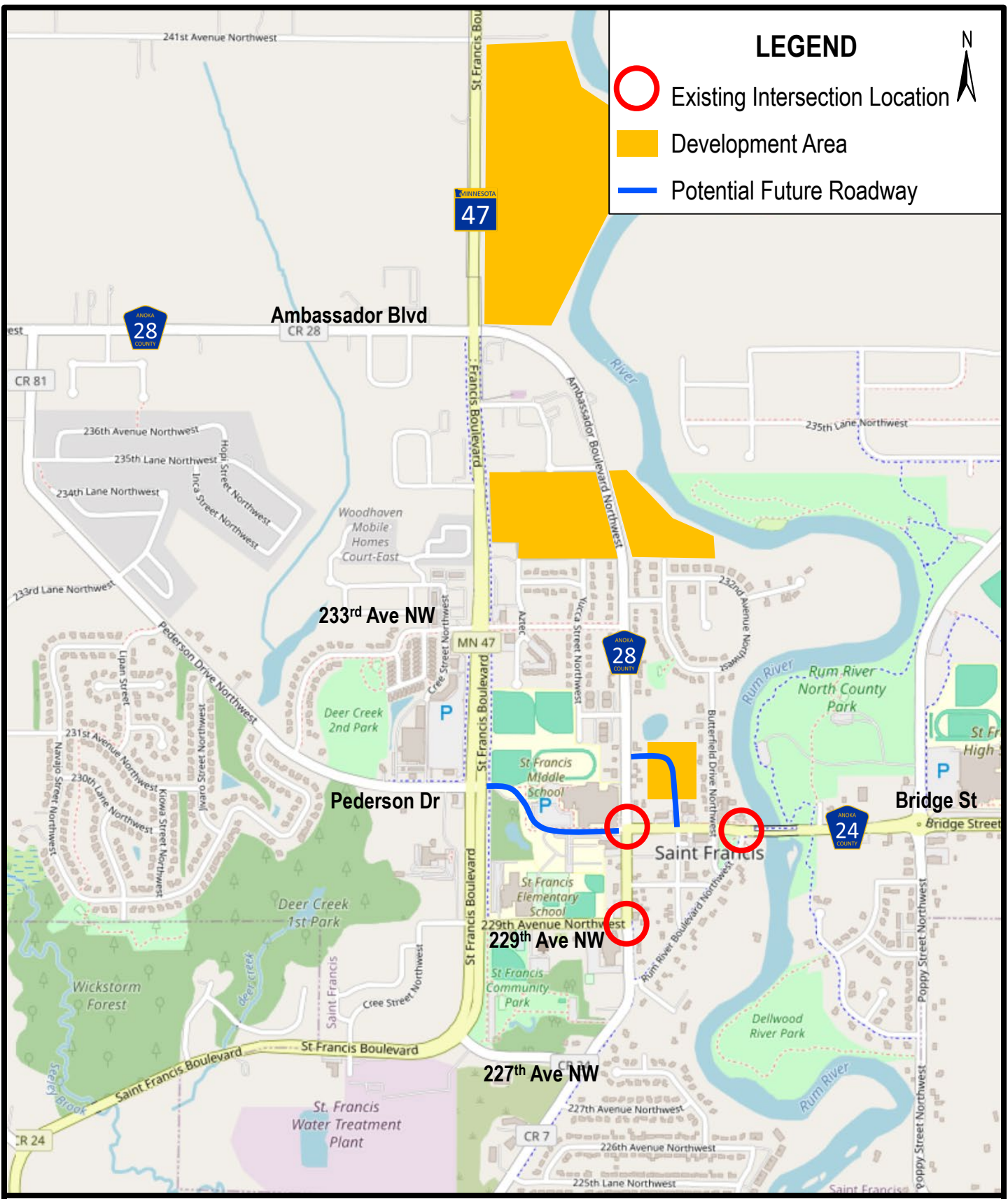
2050 AM and PM peak hour traffic volumes were estimated by adding the traffic generated by the proposed developments to the forecasts from the regional travel demand model. The resulting volumes for the three intersections analyzed are shown in **Figure 5** without the Bridge Street extension and in **Figure 6** with the Bridge Street extension.

Table 2. Development trip generation rates.

					Daily	AM peak hour			PM peak hour				
Site	**Land use**	**ITE code**	**Unit**	**Value**	**Trip rate**	**Trip rate**	**Entering**	**Exiting**	**Trip rate**	**Entering**	**Exiting**	**Capture**	**Pass-by**
1. NE quad TH 47 and Ambassador	Single family	210	Housing unit	45	9.09	0.7	27%	73%	0.93	62%	38%		
	Detached townhomes	215	Housing unit	145	6.57	0.47	25%	75%	0.51	57%	43%		
	Apartments	220	Housing unit	105	6.21	0.41	24%	76%	0.52	62%	38%		
	Commercial (retail)	822	1000 sq. ft.	12	54.45	3.93	55%	45%	6.29	50%	50%	10%	40%
2. Senior housing	Senior housing	252	Housing unit	134	3.25	0.19	34%	66%	0.25	56%	44%		
3. 234th Ave	Single family	210	Housing unit	15	9.09	0.7	27%	73%	0.93	62%	38%		
4. Subway	Townhomes	215	Housing unit	40	6.57	0.47	25%	75%	0.51	57%	43%		

Table 3. Trips generated.

		Daily	AM peak hour			PM peak hour		
Site	**Land use**	**Total**	**Total**	**Entering**	**Exiting**	**Total**	**Entering**	**Exiting**
1. NE quad TH 47 and Ambassador	Single family	409	32	9	23	42	26	16
	Detached townhomes	953	68	17	51	74	42	32
	Apartments	652	43	10	33	55	34	21
	Commercial (retail)	353	25	14	11	41	21	20
2. Senior housing	Senior housing	436	25	9	16	34	19	15
3. 234th Ave	Single family	136	11	3	8	14	9	5
4. Subway	Townhomes	263	19	5	14	20	11	9
Total		**3202**	**223**	**67**	**156**	**280**	**162**	**118**



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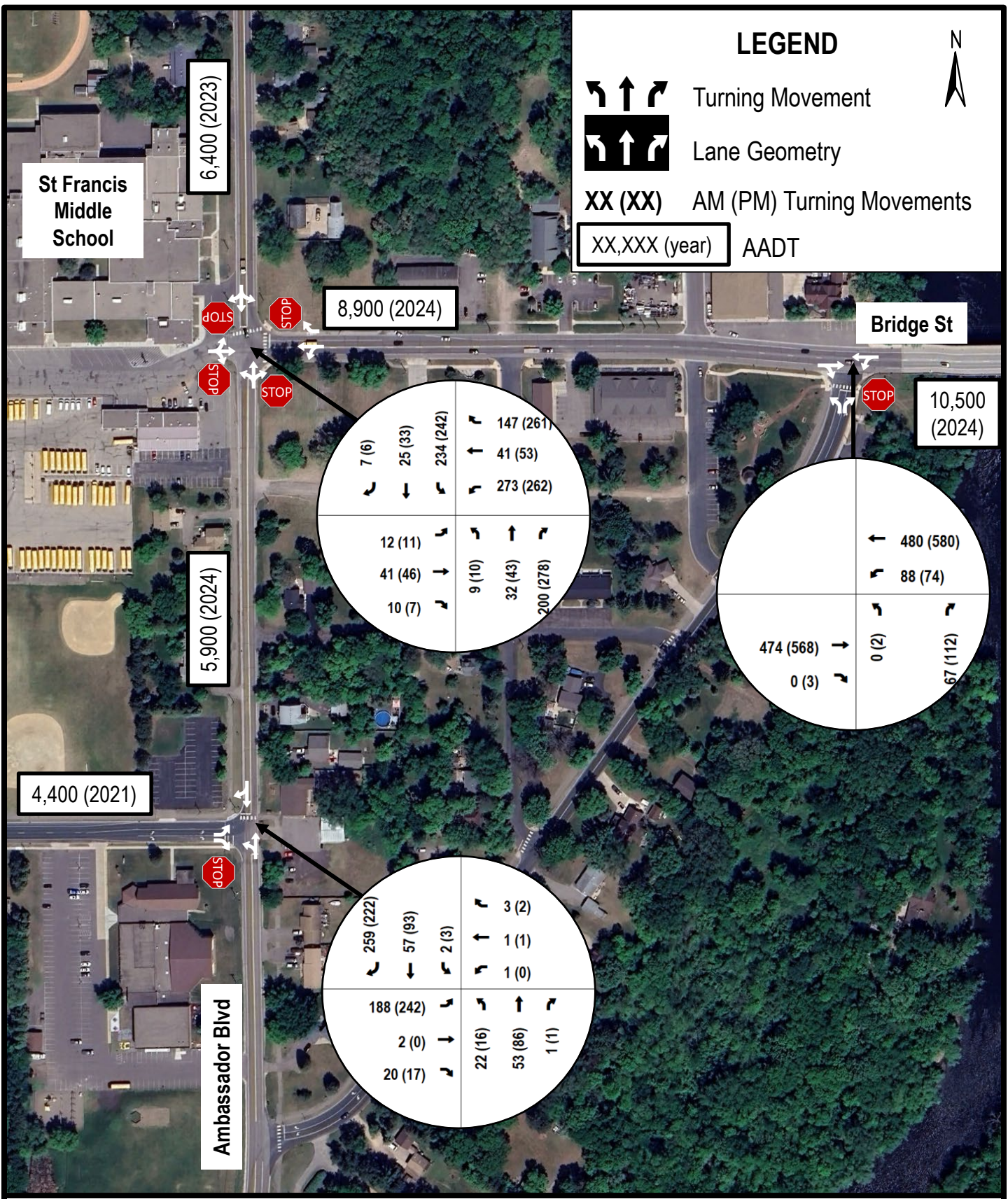
Bridge Street/Ambassador Boulevard Traffic Study

St. Francis, MN

Figure 1. Intersection Location and Surrounding Network



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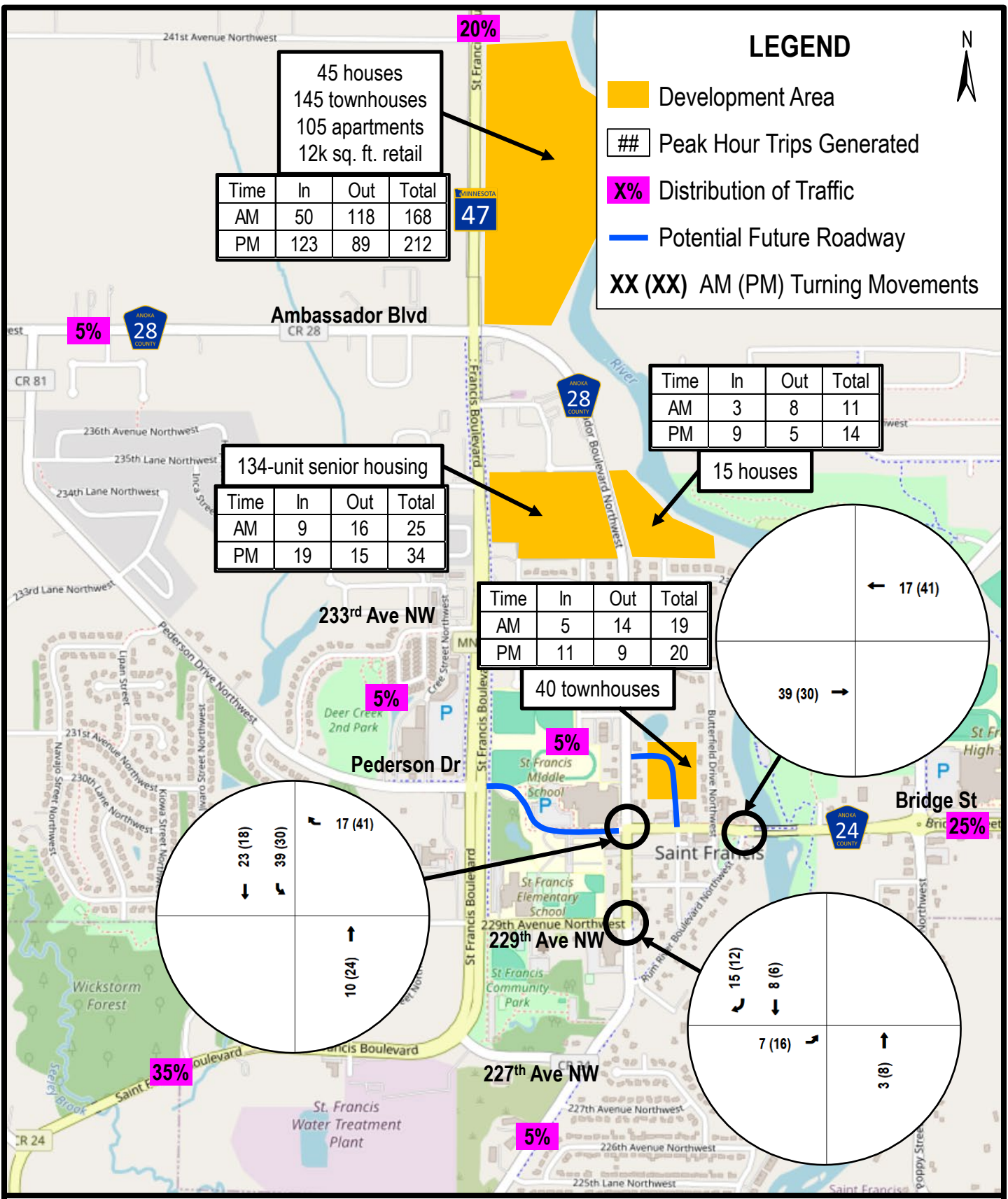
Bridge Street/Ambassador Boulevard Traffic Study

St. Francis, MN

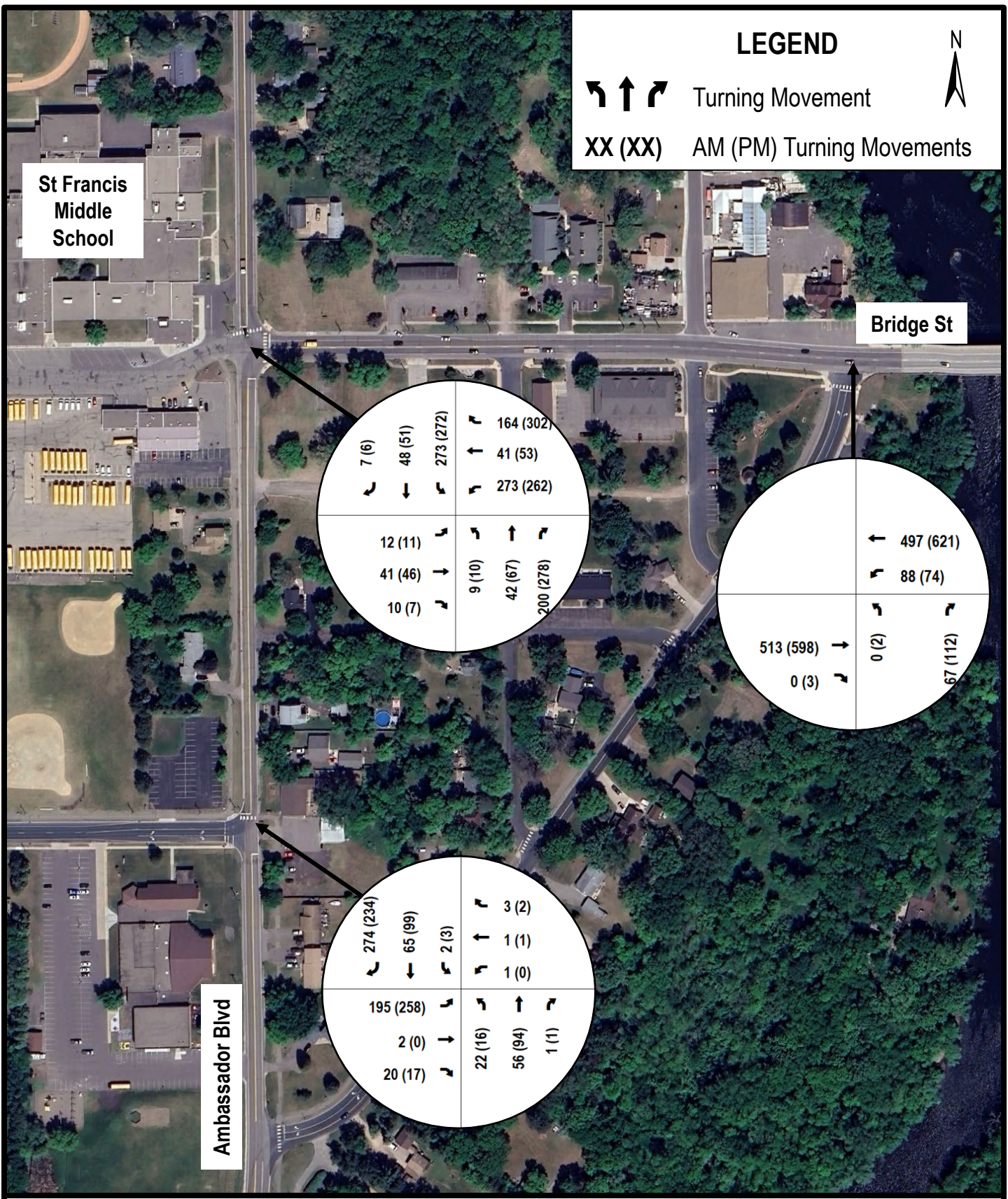
Figure 2. 2025 Turning Movement Volumes & Existing Geometry



Bridge Street/Ambassador Boulevard Traffic Study

St. Francis, MN

Figure 3. Development Trip Generation and Distribution



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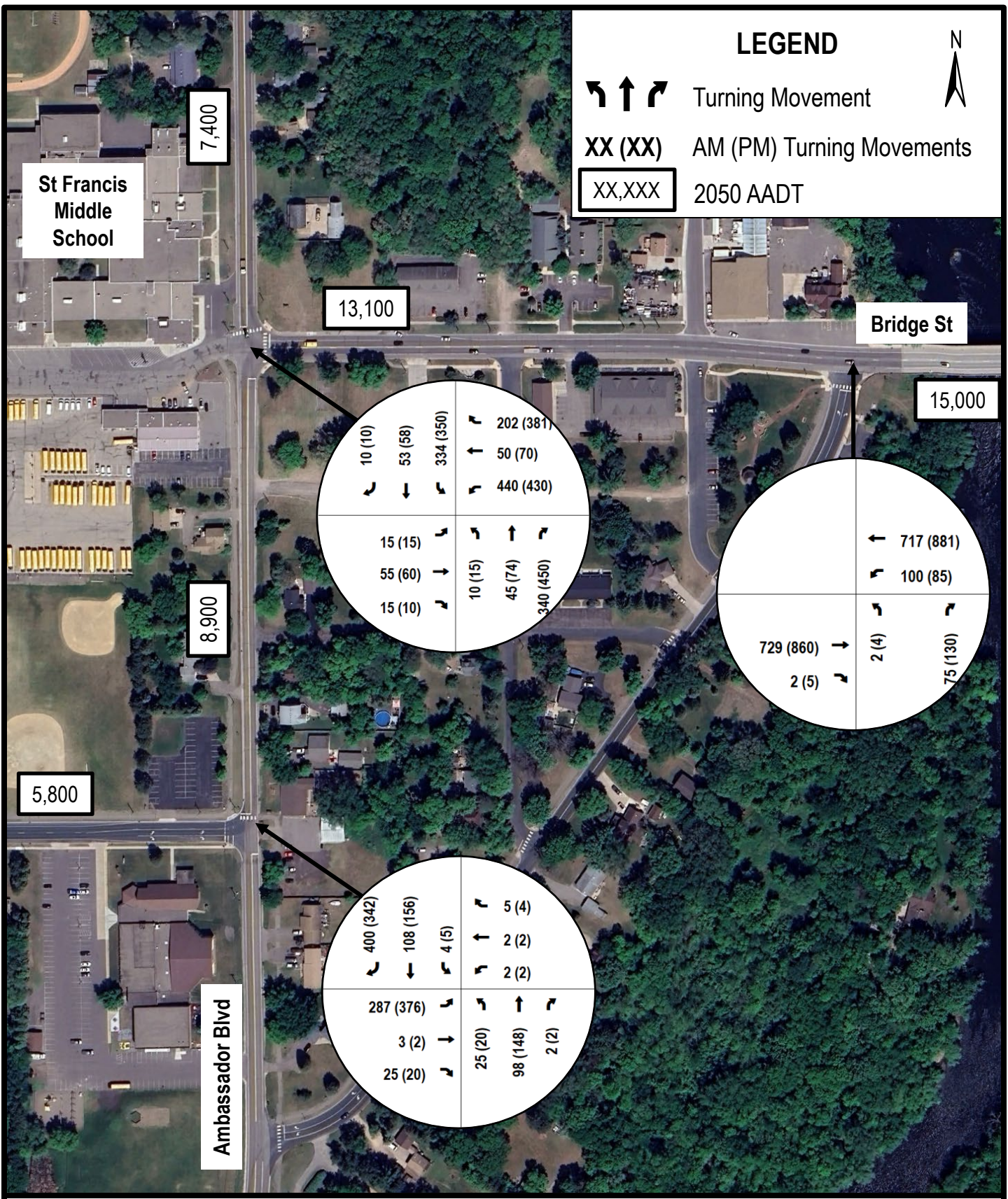
Bridge Street/Ambassador Boulevard Traffic Study

St. Francis, MN

Figure 4. 2025 Volumes With Development



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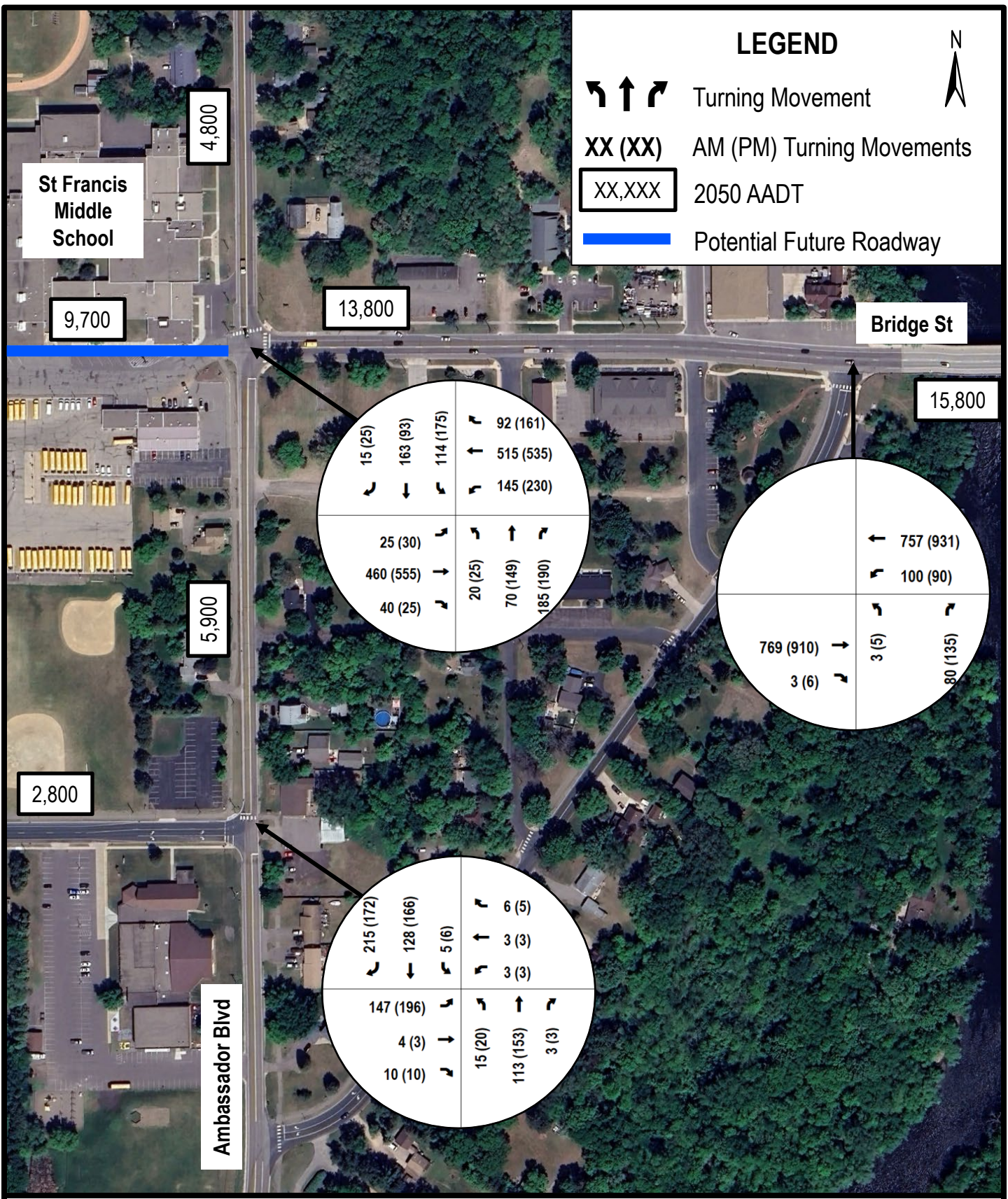
Bridge Street/Ambassador Boulevard Traffic Study

St. Francis, MN

Figure 5. 2050 Volumes (Without Bridge Street Extension)



wsb

Bridge Street/Ambassador Boulevard Traffic Study

St. Francis, MN

Figure 6. 2050 Volumes (With Bridge Street Extension)

Appendix C

Warrant Analysis

SIGNAL WARRANTS ANALYSIS

Year: 2025
Condition: Existing volumes

LOCATION: Bridge St and Ambassador Blvd
COUNTY: Anoka
REF. POINT:
DATE: 11/5/2025
OPERATOR: JJ

WARRANT 1 - EIGHT HOUR VOLUME

POPULATION < 10,000?	Yes
0.70 FACTOR USED?	Yes
EXISTING SIGNAL ?	No
0.80 FACTOR USED?	No

Speed	Approach Description		Lanes
35	Major App 1	Ambassador Blvd (SB)	1
35	Major App 3	Ambassador Blvd (NB)	1
30	Minor App 2	School Access (EB)	1
30	Minor App 4	Bridge St (WB)	1

Notes: Minor street right turns not included

HOUR	MAJOR APP 1	MAJOR APP. 3	TOTAL 1+3	MINOR APP. 2	MINOR APP. 4	MAJOR 1A/1B	MINOR 2 1A/1B	MINOR 4 1A/1B	**MET SAME 1A/1B**	MAJOR 1C A/B	MINOR 2 1C A/B	MINOR 4 1C A/B	**MET SAME 1C (A/B)**
THRESHOLDS 1A/1B/1C:						350/525	105/53	105/53		280/420	84/42	84/42	
12:00 AM - 1:00 AM	0	0	0	0	0	/	/	/	/	/	/	/	/
1:00 AM - 2:00 AM	0	0	0	0	0	/	/	/	/	/	/	/	/
2:00 AM - 3:00 AM	0	0	0	0	0	/	/	/	/	/	/	/	/
3:00 AM - 4:00 AM	0	0	0	0	0	/	/	/	/	/	/	/	/
4:00 AM - 5:00 AM	0	0	0	0	0	/	/	/	/	/	/	/	/
5:00 AM - 6:00 AM	0	0	0	0	0	/	/	/	/	/	/	/	/
6:00 AM - 7:00 AM	215	112	327	22	213	/	/	X/X	/	X/	/	X/X	**X/**
7:00 AM - 8:00 AM	266	241	507	53	314	X/	/X	X/X	**X/**	X/X	/X	X/X	**X/X**
8:00 AM - 9:00 AM	187	143	330	10	170	/	/	X/X	/	X/	/	X/X	**X/**
9:00 AM - 10:00 AM	157	120	277	33	133	/	/	X/X	/	/	/	X/X	/
10:00 AM - 11:00 AM	151	101	252	11	104	/	/	/X	/	/	/	X/X	/
11:00 AM - 12:00 PM	170	126	296	15	146	/	/	X/X	/	X/	/	X/X	**X/**
12:00 PM - 1:00 PM	190	136	326	13	162	/	/	X/X	/	X/	/	X/X	**X/**
1:00 PM - 2:00 PM	208	164	372	22	197	X/	/	X/X	**X/**	X/	/	X/X	**X/**
2:00 PM - 3:00 PM	215	251	466	54	227	X/	/X	X/X	**X/**	X/X	/X	X/X	**X/X**
3:00 PM - 4:00 PM	226	322	548	12	240	X/X	/	X/X	**X/X**	X/X	/	X/X	**X/X**
4:00 PM - 5:00 PM	277	334	611	56	296	X/X	/X	X/X	**X/X**	X/X	/X	X/X	**X/X**
5:00 PM - 6:00 PM	241	302	543	8	217	X/X	/	X/X	**X/X**	X/X	/	X/X	**X/X**
6:00 PM - 7:00 PM	207	228	435	3	233	X/	/	X/X	**X/**	X/X	/	X/X	**X/X**
7:00 PM - 8:00 PM	0	0	0	0	0	/	/	/	/	/	/	/	/
8:00 PM - 9:00 PM	0	0	0	0	0	/	/	/	/	/	/	/	/
9:00 PM - 10:00 PM	0	0	0	0	0	/	/	/	/	/	/	/	/
10:00 PM - 11:00 PM	0	0	0	0	0	/	/	/	/	/	/	/	/
11:00 PM - 12:00 AM	0	0	0	0	0	/	/	/	/	/	/	/	/

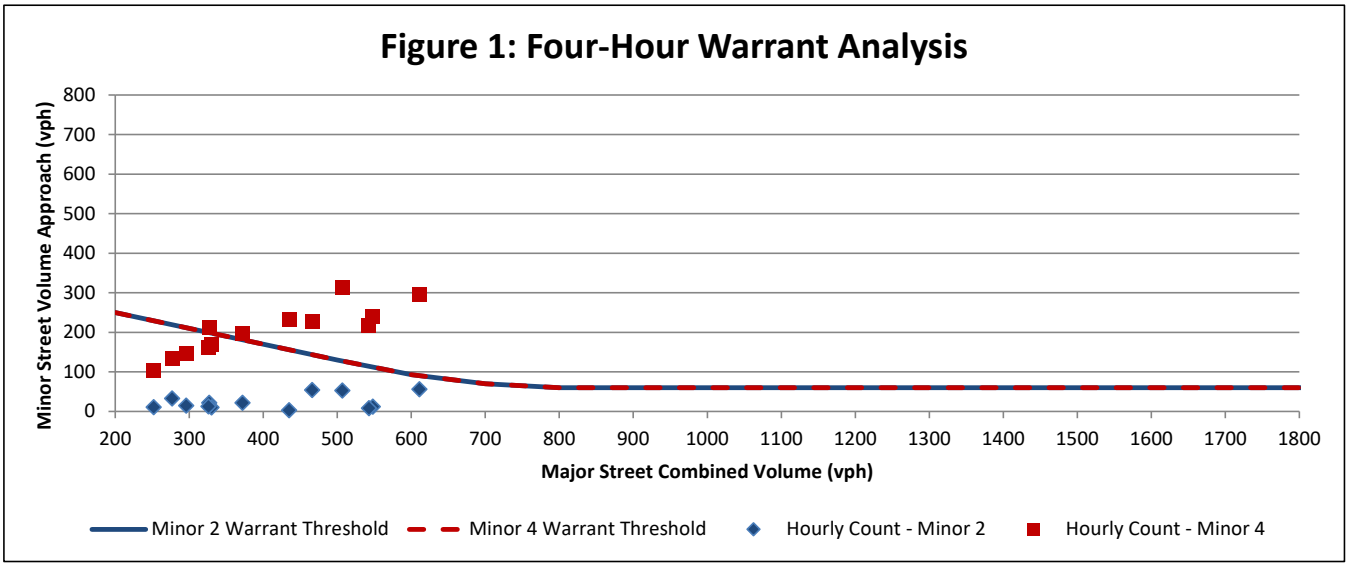
	Met (Hr)	Required (Hr)	Warrant Satisfied?
Warrant 1A	7	8	Not Satisfied
Warrant 1B	3	8	Not Satisfied
Warrant 1C (Cond A)	11	8	Not Satisfied
Warrant 1C (Cond B)	6	8	

LOCATION: Bridge St and Ambassador Blvd
COUNTY: Anoka
REF. POINT:
DATE: 11/5/2025
OPERATOR: JJ

		Speed			Lanes
		35	Major App1:	Ambassador Blvd (SB)	1
0.70 FACTOR USED?	Yes	35	Major App3:	Ambassador Blvd (NB)	1
POPULATION < 10,000?	Yes	30	Minor App2:	School Access (EB)	1
		30	Minor App4:	Bridge St (WB)	1

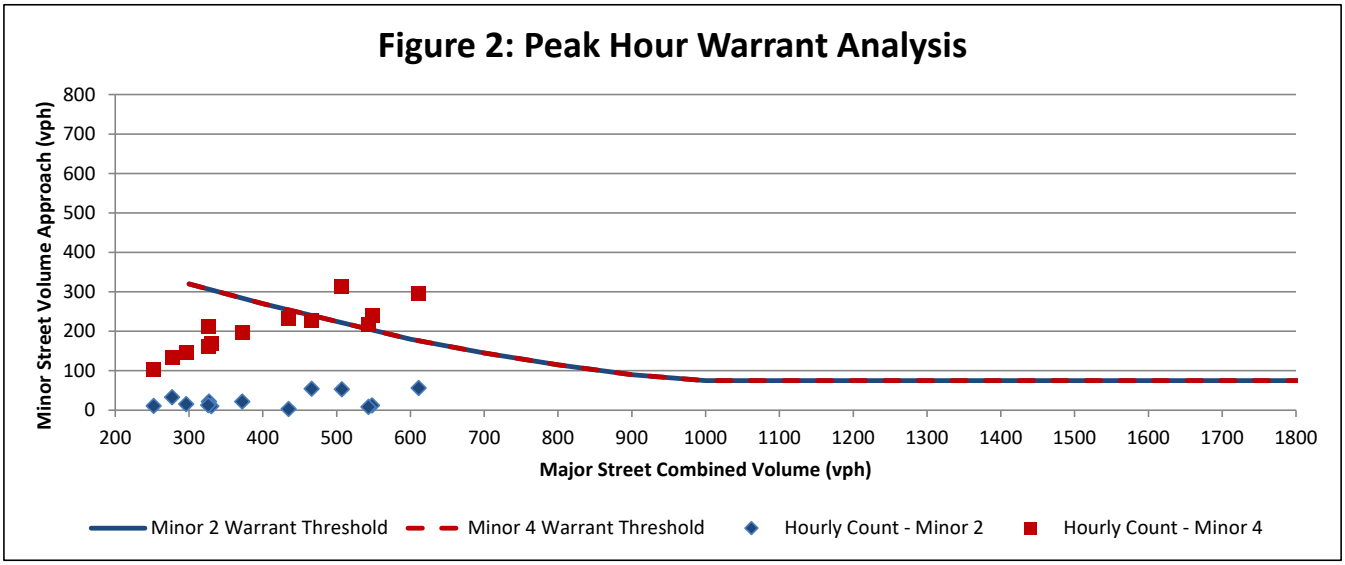
Notes: Minor street right turns not included

WARRANT 2 - FOUR HOUR VOLUME



	Met (Hr)	Required (Hr)	Warrant Satisfied?
Warrant 2	8	4	Satisfied

WARRANT 3 - PEAK HOUR VOLUME



	Met (Hr)	Required (Hr)	Warrant Satisfied?
Warrant 3	4	1	Satisfied

LOCATION: Bridge St and Ambassador Blvd
COUNTY: Anoka
REF. POINT:
DATE: 11/5/2025
OPERATOR: JJ

WARRANT 4 - PEDESTRIAN VOLUME

0.70 FACTOR USED?	Yes
POPULATION < 10,000?	Yes

Speed	Approach Description	
35	Major App1:	Ambassador Blvd (SB)
35	Major App3:	Ambassador Blvd (NB)
30	Minor App2:	School Access (EB)
30	Minor App4:	Bridge St (WB)

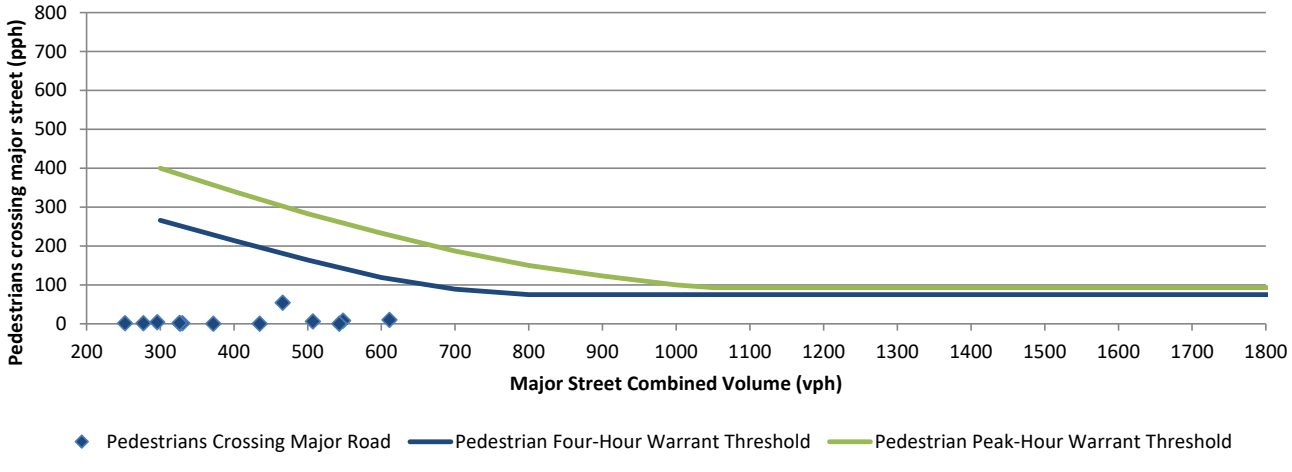
HOUR	MAJOR APP 1	MAJOR APP. 3	TOTAL 1+3	PEDS X-ING MAJOR
12:00 AM - 1:00 AM	0	0	0	0
1:00 AM - 2:00 AM	0	0	0	0
2:00 AM - 3:00 AM	0	0	0	0
3:00 AM - 4:00 AM	0	0	0	0
4:00 AM - 5:00 AM	0	0	0	0
5:00 AM - 6:00 AM	0	0	0	0
6:00 AM - 7:00 AM	215	112	327	0
7:00 AM - 8:00 AM	266	241	507	6
8:00 AM - 9:00 AM	187	143	330	1
9:00 AM - 10:00 AM	157	120	277	1
10:00 AM - 11:00 AM	151	101	252	1
11:00 AM - 12:00 PM	170	126	296	4
12:00 PM - 1:00 PM	190	136	326	2
1:00 PM - 2:00 PM	208	164	372	0
2:00 PM - 3:00 PM	215	251	466	54
3:00 PM - 4:00 PM	226	322	548	8
4:00 PM - 5:00 PM	277	334	611	10
5:00 PM - 6:00 PM	241	302	543	0
6:00 PM - 7:00 PM	207	228	435	0
7:00 PM - 8:00 PM	0	0	0	0
8:00 PM - 9:00 PM	0	0	0	0
9:00 PM - 10:00 PM	0	0	0	0
10:00 PM - 11:00 PM	0	0	0	0
11:00 PM - 12:00 AM	0	0	0	0

	Met (Hr)	Required (Hr)
Warrant 4 (4-Hour Pedestrian Vol.)	0	4
Warrant 4 (Peak Pedestrian Vol.)	0	1

Is crossing within 300' of other signal or stop sign controlling the major approach?	No
If Yes, will proposed signal inhibit the progression of traffic on the major approach?	N/A

Warrant 4 Satisfied?	Not Satisfied

Figure 3: Pedestrian Warrant Analysis



LOCATION: Bridge St and Ambassador Blvd
COUNTY: Anoka
REF. POINT:
DATE: 11/5/2025
OPERATOR: JJ

WARRANT 5 - SCHOOL CROSSING

Is the principal reason for the signal to accommodate the movement of schoolchildren across the major road?	Yes
Are there at least 20 schoolchildren crossing the major road in the highest crossing hour?	Yes

If both above questions are answered yes, calculate the available gaps below:

Are needed gaps greater than available gaps?	Yes
Is crossing within 300' of other signal or stop sign controlling the major approach?	No
If Yes, will proposed signal inhibit the progression of traffic on the major approach?	N/A
Warrant 5 met?	Yes

WARRANT 6 - COORDINATED SIGNAL SYSTEM

Part A

Is the street a one-way street or a street that has traffic predominately in one direction?	No
Do adjacent traffic control signals provide adequate platooning?	N/A

Part B

Is the street a two-way street?	Yes
Do adjacent traffic control signals provide adequate platooning?	N/A
Will proposed signal provide for progressive operation of traffic?	N/A
Will proposed signal spacing be less than 1000 feet?	No

Provide proof of platooning issues:

N/A

Warrant 6 met?	No

LOCATION: Bridge St and Ambassador Blvd
COUNTY: Anoka
REF. POINT:
DATE: 11/5/2025
OPERATOR: JJ

WARRANT 7 - CRASH EXPERIENCE

THRESHOLDS 1A/1B/1C: 280/420 84/42 84/42

HOUR	MAJOR APP 1	MAJOR APP. 3	TOTAL 1+3	MINOR APP. 2	MINOR APP. 4	MAJOR 7 A/B	MINOR 2 7 A/B	MINOR 4 7 A/B	**MET SAME 7 (A/B)**
12:00 AM - 1:00 AM	0	0	0	0	0	/	/	/	**/**
1:00 AM - 2:00 AM	0	0	0	0	0	/	/	/	**/**
2:00 AM - 3:00 AM	0	0	0	0	0	/	/	/	**/**
3:00 AM - 4:00 AM	0	0	0	0	0	/	/	/	**/**
4:00 AM - 5:00 AM	0	0	0	0	0	/	/	/	**/**
5:00 AM - 6:00 AM	0	0	0	0	0	/	/	/	**/**
6:00 AM - 7:00 AM	22	215	237	213	112	X/	/	X/X	**X/**
7:00 AM - 8:00 AM	53	266	319	314	241	X/X	/X	X/X	**X/X**
8:00 AM - 9:00 AM	10	187	197	170	143	X/	/	X/X	**X/**
9:00 AM - 10:00 AM	33	157	190	133	120	/	/	X/X	**/**
10:00 AM - 11:00 AM	11	151	162	104	101	/	/	X/X	**/**
11:00 AM - 12:00 PM	15	170	185	146	126	X/	/	X/X	**X/**
12:00 PM - 1:00 PM	13	190	203	162	136	X/	/	X/X	**X/**
1:00 PM - 2:00 PM	22	208	230	197	164	X/	/	X/X	**X/**
2:00 PM - 3:00 PM	54	215	269	227	251	X/X	/X	X/X	**X/X**
3:00 PM - 4:00 PM	12	226	238	240	322	X/X	/	X/X	**X/X**
4:00 PM - 5:00 PM	56	277	333	296	334	X/X	/X	X/X	**X/X**
5:00 PM - 6:00 PM	8	241	249	217	302	X/X	/	X/X	**X/X**
6:00 PM - 7:00 PM	3	207	210	233	228	X/X	/	X/X	**X/X**
7:00 PM - 8:00 PM	0	0	0	0	0	/	/	/	**/**
8:00 PM - 9:00 PM	0	0	0	0	0	/	/	/	**/**
9:00 PM - 10:00 PM	0	0	0	0	0	/	/	/	**/**
10:00 PM - 11:00 PM	0	0	0	0	0	/	/	/	**/**
11:00 PM - 12:00 AM	0	0	0	0	0	/	/	/	**/**

	Met (Hr)	Required (Hr)
Warrant 7 (Cond A)	**11**	8
Warrant 7 (Cond B)	6	8

Has there been an adequate trial of alternatives that has failed to reduce the crash frequency? No

Crash History (within a 12-month period)

	Number of Crashes:
Right Angle:	0
Left Turn:	0
Pedestrian:	0

TOTAL: 0
Required: 5

Warrant 7 met? No

LOCATION: Bridge St and Ambassador Blvd
COUNTY: Anoka
REF. POINT:
DATE: 11/5/2025
OPERATOR: JJ

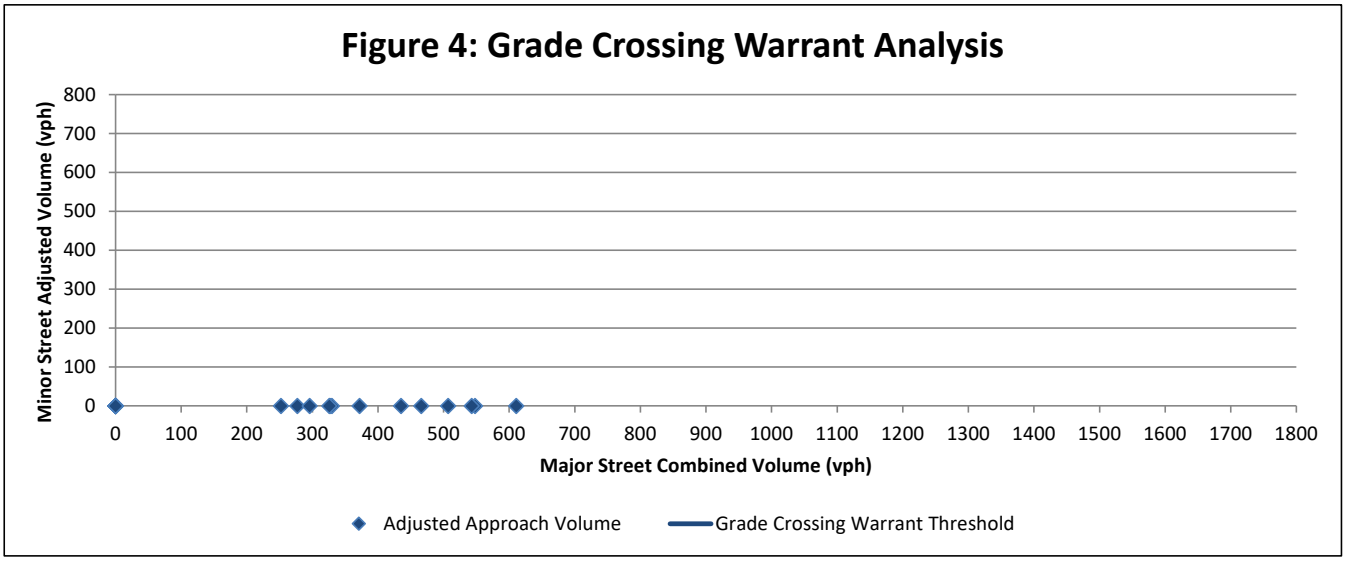
WARRANT 8 - ROADWAY NETWORK

	Major Approach Road	Minor Approach Road
Part of street or highway system that serves as the principal roadway network for through traffic flow	No	No
Rural or suburban highway outside, entering, or traversing a city	No	No
Appears as a major route on an official plan	No	No

Does the intersection have a total existing or immediately projected entering volume of at least 1,000 vehicles per	Yes
Does the intersection have 5-Year projected traffic volumes that meet Warrants 1, 2, or 3?	Yes
Does the intersection have a total existing or immediately projected entering volume of at least 1,000 vehicles per	No
Warrant 8 met?	No

WARRANT 9 - INTERSECTION NEAR GRADE CROSSING

Is the principal reason for installation of a signal the proximity of the intersection to a grade crossing controlled by a stop or yield control?	No
Is the center of the railroad track less than 140 feet from the stop line or yield line?	N/A
Clear storage distance (closest to)	N/A
Approach crossing grade	N/A
Rail traffic per day	0
Percent of high-occupancy buses on minor-street approach	0%
Percent of tractor-trailer trucks on minor-street approach	0%



	Met (Hr)	Required (Hr)
Warrant 9	0	1

Warrant 9 met?	No

LOCATION: Bridge St and Ambassador Blvd
COUNTY: Anoka
REF. POINT:
DATE: 11/5/2025
OPERATOR: JJ

WARRANT SUMMARY

Warrant 1	Not Met
Condition A	Not Met
Condition B	Not Met
Condition C	Not Met
Warrant 2	**Met**
Warrant 3	**Met**
Warrant 4	Not Met
Warrant 5	**Met**
Warrant 6	Not Met
Warrant 7	Not Met
Warrant 8	Not Met
Warrant 9	Not Met

Notes:

ALL WAY STOP WARRANT

Year: 2025
Existing Condition: Existing volumes

LOCATION: Bridge St and Ambassador Blvd
COUNTY: Anoka
REF. POINT:
DATE: 11/5/2025
OPERATOR: JJ

Speed	Approach Description	Lanes
35	Major App1: Ambassador Blvd (SB)	1
35	Major App3: Ambassador Blvd (NB)	1
30	Minor App2: School Access (EB)	1
30	Minor App4: Bridge St (WB)	1

0.70 FACTOR USED? No

VOLUME WARRANT

VOLUME THRESHOLDS: 300 200 240/160

HOUR	MAJOR APP. 1	MAJOR APP. 3	MINOR APP. 2	MINOR APP. 4	MAJOR TOTAL Σ (APP. 1 & APP. 3)	MINOR TOTAL Σ (APP. 2 & APP. 4)	100% VOLUME WARRANT MET	80% VOLUME WARRANT MET
							/	/
1:00:00 AM							/	/
2:00:00 AM							/	/
3:00:00 AM							/	/
4:00:00 AM							/	/
5:00:00 AM							/	/
6:00:00 AM	215	112	22	213	327	235	X/X	X/X
7:00:00 AM	266	241	53	314	507	367	X/X	X/X
8:00:00 AM	187	143	10	170	330	180	X/	X/X
9:00:00 AM	157	120	33	133	277	166	/	X/X
10:00:00 AM	151	101	11	104	252	115	/	X/
11:00:00 AM	170	126	15	146	296	161	/	X/X
12:00:00 PM	190	136	13	162	326	175	X/	X/X
1:00:00 PM	208	164	22	197	372	219	X/X	X/X
2:00:00 PM	215	251	54	227	466	281	X/X	X/X
3:00:00 PM	226	322	12	240	548	252	X/X	X/X
4:00:00 PM	277	334	56	296	611	352	X/X	X/X
5:00:00 PM	241	302	8	217	543	225	X/X	X/X
6:00:00 PM	207	228	3	233	435	236	X/X	X/X
7:00:00 PM							/	/
8:00:00 PM							/	/
9:00:00 PM							/	/
10:00:00 PM							/	/
11:00:00 PM							/	/

	Met (Hr)	Required (Hr)
All Way Stop 100% Volume Warrant:	8	8
All Way Stop 80% Volume Warrant:	12	8

Minor road peak hour delay (seconds): 28

Volume warrant met? No

LOCATION: Bridge St and Ambassador Blvd
COUNTY: Anoka
REF. POINT:
DATE: 11/5/2025

OPERATOR: JJ

OTHER WARRANTS

Is a traffic control signal justified?		Yes
Amount of correctible crashes:		
Right-Turn		
Left-Turn		
Right-Angle		
Other		
Is there a need to control left-turn conflicts?		Yes
Is there a need to control vehicle/pedestrian conflicts near a high pedestrian generator?		Yes
Are there sight issues (inability to see conflicting traffic) at the intersection?		No
Is the intersection between two residential neighborhood collector (through) streets of similar design and operating characteristics where multi-way stop control would improve traffic operational characteristics of the intersection?		No

Notes/explanations:

Other warrants met? Yes (Signal Justified,Left-Turn Conflicts,Pedestrian Conflicts