

## MEMORANDUM

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To: Craig D. Ausen, PE, City of Waukesha

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From: Alexander Cowan, PE, PTOE

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Date: March 19, 2025

Project No.: 24-0477.00

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Re: Chapman Drive & Green Valley Drive  
Two-Way Stop to Four-Way Stop Conversion Request

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### Background

A request was made for the potential conversion of the existing two-way stop-controlled intersection at Chapman Drive and Green Valley Drive to a four-way stop. Attachment 1 shows the intersection configuration. Chapman Drive and Green Valley Drive are both 25-mph two-lane roadways with parking allowed on both sides of the street.

### Crash History

A review of the WisDOT Community Maps tool suggests the most recent intersection crash occurred in 2015. This crash resulted in property damage only. The closest crash occurred in 2021 approximately 200 feet to the south near Wisteria Lane.

### Traffic Volumes

An intersection turning movement count was conducted on Tuesday, March 11, 2025, to understand the magnitude of traffic experienced at the intersection. The count resulted in the data shown in Attachment 2. Chapman Drive experiences approximately 900 vehicles per day (vpd) while Green Valley Road experiences approximately 180 vpd. Of particular interest is the finding that the majority of traffic on Green Valley Drive does not travel through the intersection, but instead turns to/from the north leg of Chapman Drive.

An all-way stop control warrant analysis was evaluated based on Manual on Uniform Traffic Control Devices (MUTCD) and WisDOT guidance. The results, shown in Attachment 3, suggest that an all-way stop is not warranted based on the traffic volumes. The warrants do suggest that the intersection meets WisDOT Warrant 1, which verifies all roadway approaches are of a similar classification type but is not grounds within itself to warrant an all-way stop installation given the low volumes.

### Field Visit

Field observations of the afternoon traffic operations were made on Thursday, March 6, 2025. It was noted that traffic volumes appeared to be significantly higher along Chapman Drive than Green Valley Drive. Additionally, many vehicles on Chapman Drive made an aggressive stop and acceleration maneuver. Traffic on Green Valley Drive approached cautiously, with the majority slowing to make a turn onto the north leg of Chapman Drive.

### Conclusion

Given the lack of a reported crash history at this location, coupled with the low, unbalanced traffic volumes, it is not recommended that an all-way stop be installed at the Chapman Drive intersection with Green Valley Drive. Given that traffic volumes along Chapman Drive are approximately five times higher than Green Valley Drive, it is recommended that the two-way stop control be adjusted so that free-flow traffic exists along Chapman Drive and the stop control be applied to Green Valley Drive. This is also consistent with the rest of the corridor, as Chapman Drive is only required to stop at School Drive and otherwise operates under free-flow condition, resulting in conditions more in line with driver expectancy.



- Legend**
- Address Labels
  - Parcels
  - Taxkey Labels
  - City Limits
  - Railroads
  - Water Bodies
  - Landmarks**
  - Cemetery
  - County
  - Municipal
  - Hospital
  - Parks
  - School
  - State/Federal

1: 250



41.7 0 20.83 41.7 Feet

This map is a user generated static output from an Internet mapping site and is for reference only. The data found on this site is considered to be correct, but should not be used for engineering or survey applications without verifying the information from officially recorded sources.

Notes:

# Intersection Traffic Volume Report

<b>Count Basics</b>		<b>Version 2023.05.03</b>		<b>Page 1 of 13</b>	
Start Date:	Tuesday, March 11, 2025	Weekday	Schools in Session		
Total Number of Hours Counted:	16	Non-Holiday	No Special Events		

## Base Information, Observed (16) Hour and Estimated (24) Hour Volume Summaries

Major St: Chapman Dr.  
 Minor St: Green Valley Dr.  
 Intersection of: Chapman Dr. & Green Valley Dr.



IX\_ID:

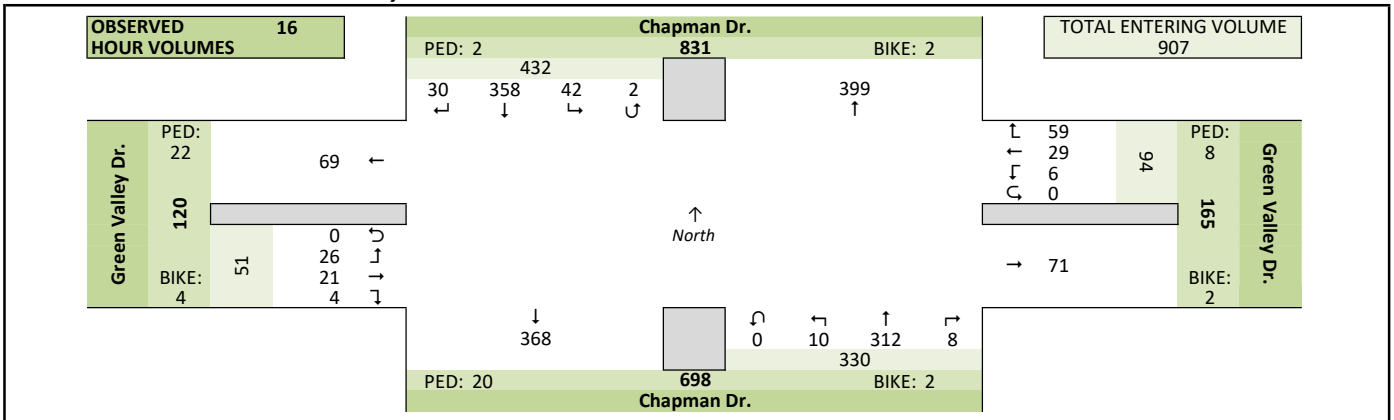
### Site Information

Municipality	City of Waukesha		
County	67 - Waukesha	WisDOT Region	SE
Traffic Control	Partial Stop Control		
Roadway Names	North Direction		↑
North Leg	Chapman Dr.		
East Leg	Green Valley Dr.		
South Leg	Chapman Dr.		
West Leg	Green Valley Dr.		
Special Considerations	Schools <a href="#">In Session</a> Holidays <a href="#">None</a> Special Events <a href="#">None</a> Special Pedestrians Observed		
	Pre-school children	<a href="#">None</a>	
	Elementary school age children	<a href="#">None</a>	
	Visually impaired (white cane/helper dog)	<a href="#">None</a>	
	Elderly/disabled (except wheelchairs)	<a href="#">None</a>	
	Wheelchairs/electric scooters	<a href="#">None</a>	
Other (describe)	<a href="#">None</a>	<a href="#">None</a>	

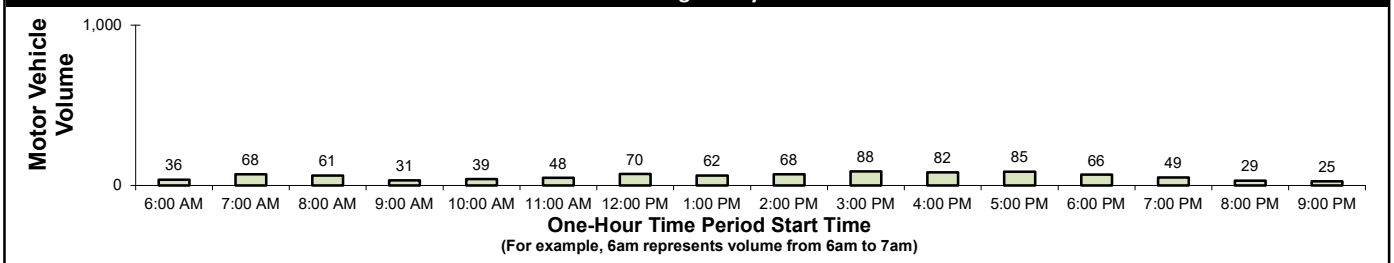
### Count Information

Hrs Counted:	06:00 AM-10:00 PM		
1st Day of Count	Tuesday, March 11, 2025		Weather
AM Peak Period	Tuesday, March 11, 2025	Clear & Dry	
Midday Peak Period	Tuesday, March 11, 2025	Clear & Dry	
PM Peak Period	Tuesday, March 11, 2025	Clear & Dry	
Calculated Peak Hours	AM 7:00-8:00am MD 12:30-1:30pm PM 3:45-4:45pm		
Peak Hours Selected for Analysis	AM 7:00-8:00am MD 12:30-1:30pm PM 3:45-4:45pm		
Daily/Seasonal Adjustment Group	<a href="#">(2) Urban Arterials &amp; Collectors</a>		
Count Expansion Group	<a href="#">(2) Urban Arterials &amp; Collectors</a>		
Daily/Seasonal Adjustment Factor	1.022	Count Expansion Factor	1.063
Company Name	<a href="#">Ayles Associates</a>		Manual Adj. 1.000
Observers	AM Peak Period	<a href="#">Miovision Video Recording</a>	
	Midday Peak Period	<a href="#">Miovision Video Recording</a>	
	PM Peak Period	<a href="#">Miovision Video Recording</a>	
Comments	2021 DOT Daily & Seasonal Factors		

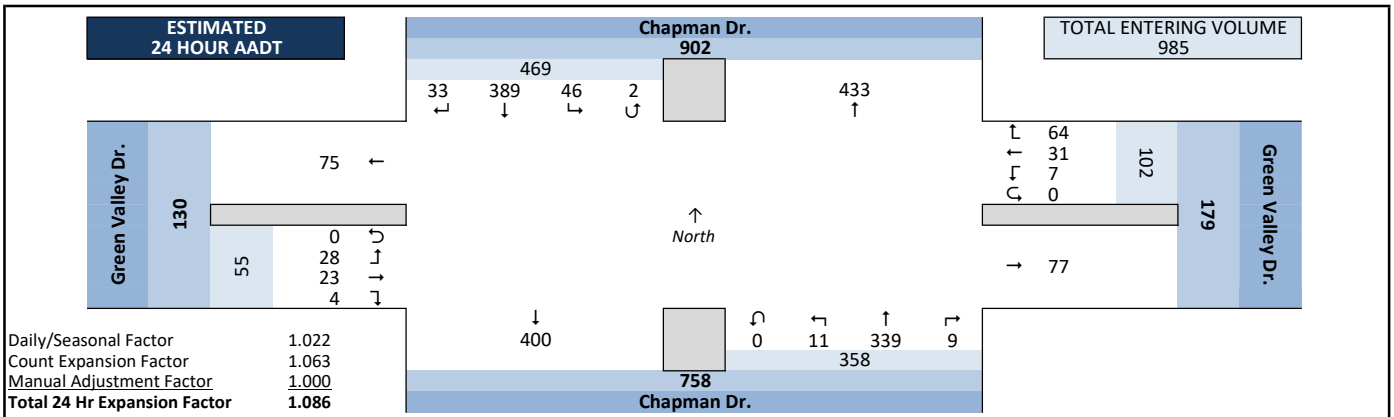
### Observed 16 Hour Volume Summary



Total Entering Hourly Volume



### Estimated 24 Hour AADT



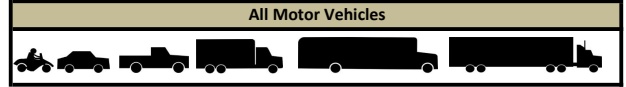


# Intersection Traffic Volume Report

<b>Count Basics</b>			<b>Page 3 of 13</b>
Start Date:	Tuesday, March 11, 2025	Weekday	Schools in Session
Total Number of Hours Counted:	16	Non-Holiday	No Special Events

## Peak Hour Volume Summary

Chapman Dr. & Green Valley Dr.



### Peak Hour Volumes, Truck Percentages, and PHFs

Tuesday, March 11, 2025		From North Chapman Dr.					From East Green Valley Dr.					From South Chapman Dr.					From West Green Valley Dr.					Totals		
AM Peak Hour	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total			
AM Peak Hour	7:00 AM	0	5	1	0	6	2	1	0	0	3	0	11	0	0	11	0	0	1	0	1	0	1	21
	7:15 AM	0	4	0	0	4	4	0	0	0	4	0	8	0	0	8	0	0	1	0	1	0	1	17
	7:30 AM	0	4	0	0	4	3	0	0	0	3	0	10	0	0	10	0	1	1	0	2	0	2	19
	7:45 AM	0	1	1	0	2	1	0	1	0	2	0	4	0	0	4	0	1	2	0	3	0	3	11
	Peak Hour Volume	0	14	2	0	16	10	1	1	0	12	0	33	0	0	33	0	2	5	0	7	0	7	68
	Rounded Hourly Volume	0	15	0	0	15	10	0	0	0	10	0	35	0	0	35	0	0	5	0	5	0	5	65
	% Single Unit Trucks	0.0	14.3	50.0	0.0	18.7	10.0	0.0	0.0	0.0	8.3	0.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.4
	% Heavy Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5
	% Trucks (Total)	0.0	14.3	50.0	0.0	18.7	10.0	0.0	0.0	0.0	8.3	0.0	6.1	0.0	0.0	6.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.8
	Peak Hour Factor (PHF)	0.00	0.70	0.50	0.00	0.67	0.62	0.25	0.25	0.00	0.75	0.00	0.75	0.00	0.00	0.75	0.00	0.50	0.62	0.00	0.58	0.00	0.81	0.81

Tuesday, March 11, 2025		From North Chapman Dr.					From East Green Valley Dr.					From South Chapman Dr.					From West Green Valley Dr.					Totals		
MD Peak Hour	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total			
Midday (MD) Peak Hour	12:30 PM	0	9	0	0	9	3	0	0	0	3	0	7	0	0	7	0	0	0	0	0	0	0	19
	12:45 PM	1	13	1	0	15	2	0	0	0	2	2	10	1	0	13	0	0	1	0	1	0	1	31
	1:00 PM	1	6	0	0	7	2	0	0	0	2	0	4	1	0	5	0	1	0	0	1	0	1	15
	1:15 PM	0	5	1	0	6	2	0	0	0	2	0	5	0	0	5	0	0	0	0	0	0	0	13
	Peak Hour Volume	2	33	2	0	37	9	0	0	0	9	2	26	2	0	30	0	1	1	0	2	0	2	78
	Rounded Hourly Volume	0	35	0	0	35	10	0	0	0	10	0	25	0	0	25	0	0	0	0	0	0	0	70
	% Single Unit Trucks	0.0	0.0	0.0	0.0	0.0	11.1	0.0	0.0	0.0	11.1	0.0	0.0	50.0	0.0	3.3	0.0	0.0	100.0	0.0	50.0	0.0	0.0	3.8
	% Heavy Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% Trucks (Total)	0.0	0.0	0.0	0.0	0.0	11.1	0.0	0.0	0.0	11.1	0.0	0.0	50.0	0.0	3.3	0.0	0.0	100.0	0.0	50.0	0.0	0.0	3.8
	Peak Hour Factor (PHF)	0.50	0.63	0.50	0.00	0.62	0.75	0.00	0.00	0.00	0.75	0.25	0.65	0.50	0.00	0.58	0.00	0.25	0.25	0.00	0.50	0.00	0.63	0.63

Tuesday, March 11, 2025		From North Chapman Dr.					From East Green Valley Dr.					From South Chapman Dr.					From West Green Valley Dr.					Totals		
PM Peak Hour	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total			
PM Peak Hour	3:45 PM	0	10	2	0	12	2	1	1	0	4	2	9	2	0	13	0	1	1	0	2	0	2	31
	4:00 PM	2	6	1	0	9	1	0	0	0	1	0	6	0	0	6	0	0	1	0	1	0	1	17
	4:15 PM	1	12	1	0	14	0	3	1	0	4	0	5	0	0	5	0	0	1	0	1	0	1	24
	4:30 PM	2	13	1	0	16	1	2	0	0	3	0	2	0	0	2	0	0	1	0	1	0	1	22
	Peak Hour Volume	5	41	5	0	51	4	6	2	0	12	2	22	2	0	26	0	1	4	0	5	0	5	94
	Rounded Hourly Volume	5	40	5	0	50	5	5	0	0	10	0	20	0	0	20	0	0	5	0	5	0	5	85
	% Single Unit Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% Heavy Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% Trucks (Total)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Peak Hour Factor (PHF)	0.62	0.79	0.62	0.00	0.80	0.50	0.50	0.50	0.00	0.75	0.25	0.61	0.25	0.00	0.50	0.00	0.25	1.00	0.00	0.62	0.00	0.76	0.76

### Peak Hour Pedestrian and Bicyclist Volumes

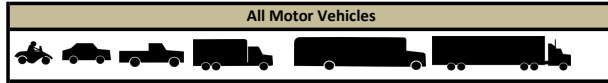
Pedestrians and Bicyclists	Crossing North Approach			Crossing East Approach			Crossing South Approach			Crossing West Approach			Total Ped & Bike Volume
	Chapman Dr.			Green Valley Dr.			Chapman Dr.			Green Valley Dr.			
15-Minute Start Time	Pedestrian	Bicyclist	Total	Pedestrian	Bicyclist	Total	Pedestrian	Bicyclist	Total	Pedestrian	Bicyclist	Total	
AM	7:00 AM	0	0	0	0	0	0	0	0	0	2	0	2
	7:15 AM	0	0	0	1	0	1	0	0	0	1	0	1
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	1	0	1	0	0	0	3	0	3
MD	12:30 PM	0	0	0	0	0	0	1	0	1	1	0	1
	12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
	1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
	1:15 PM	0	0	0	0	0	0	2	0	2	1	0	1
	Total	0	0	0	0	0	0	3	0	3	2	0	2
PM	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
	4:00 PM	0	0	0	0	2	2	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	1	0	1	2	2	4
	4:30 PM	0	0	0	0	0	0	1	0	1	1	0	1
	Total	0	0	0	0	2	2	2	0	2	3	2	5

# Intersection Traffic Volume Report

<b>Count Basics</b>		Page 4 of 13	
Start Date:	Tuesday, March 11, 2025	Weekday	Schools in Session
Total Number of Hours Counted:	16	Non-Holiday	No Special Events

## Hourly Volume Summary - Motor Vehicle Data

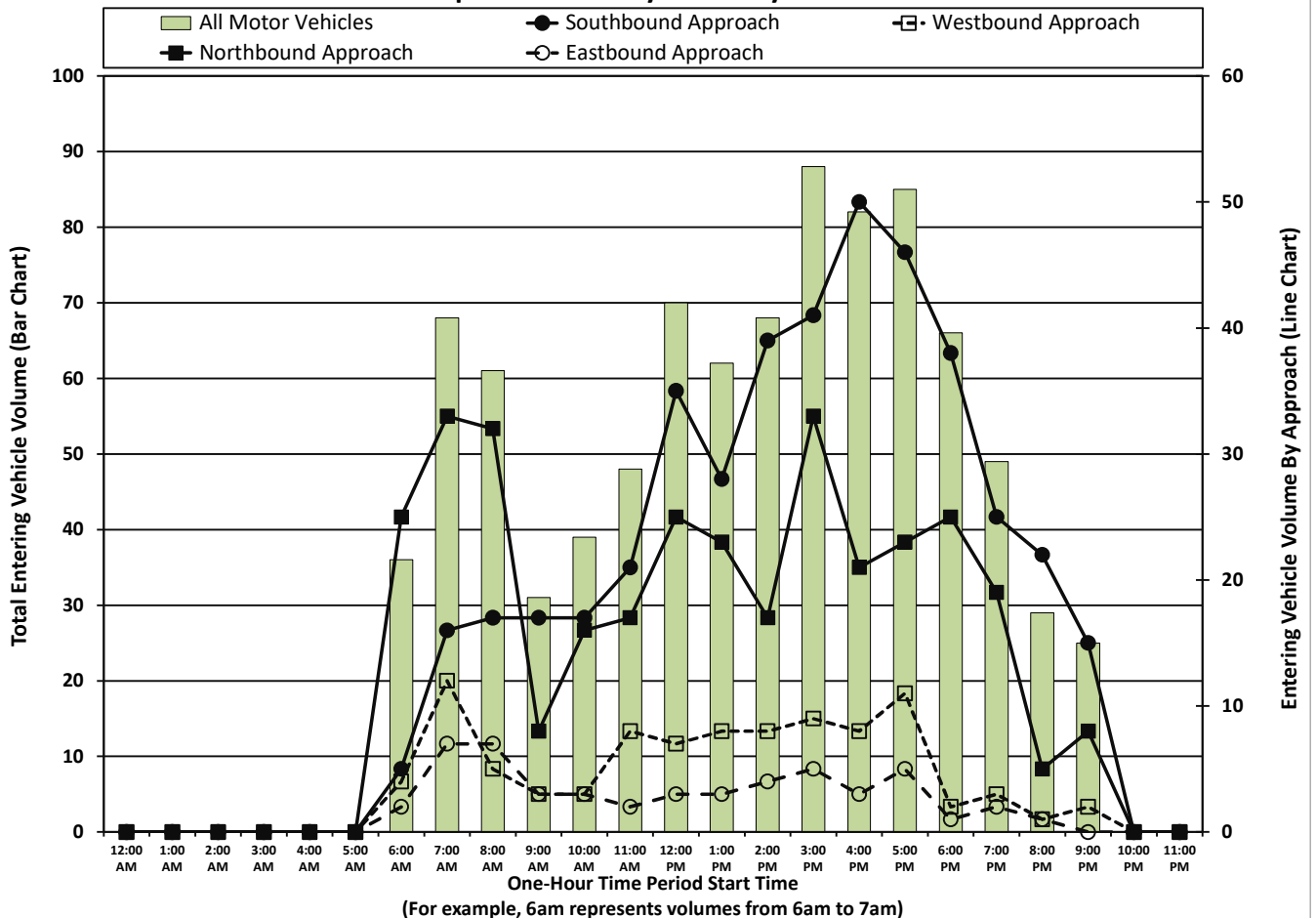
Chapman Dr. & Green Valley Dr.



### One-Hour Motor Vehicle Data

One-Hour Time Period	From North Chapman Dr.					From East Green Valley Dr.					From South Chapman Dr.					From West Green Valley Dr.					Total Vehicle	Directional Volume Totals E/W N/S				
	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total						
	Start Time																									
Pre-AM																										
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 AM	0	5	0	0	5	2	2	0	0	4	0	25	0	0	25	0	1	1	0	2	36	6	30			
7:00 AM	0	14	2	0	16	10	1	1	0	12	0	33	0	0	33	0	2	5	0	7	68	19	49			
8:00 AM	3	12	2	0	17	2	3	0	0	5	3	29	0	0	32	0	4	3	0	7	61	12	49			
9:00 AM	1	15	1	0	17	2	1	0	0	3	0	8	0	0	8	1	1	1	0	3	31	6	25			
10:00 AM	2	12	3	0	17	2	0	1	0	3	0	16	0	0	16	0	0	3	0	3	39	6	33			
11:00 AM	1	17	3	0	21	5	3	0	0	8	0	17	0	0	17	0	0	2	0	2	48	10	38			
12:00 PM	1	32	2	0	35	7	0	0	0	7	2	22	1	0	25	0	1	2	0	3	70	10	60			
1:00 PM	2	20	5	1	28	6	2	0	0	8	1	21	1	0	23	0	2	1	0	3	62	11	51			
2:00 PM	2	35	2	0	39	5	2	1	0	8	0	15	2	0	17	0	2	2	0	4	68	12	56			
3:00 PM	1	37	3	0	41	6	2	1	0	9	2	29	2	0	33	1	3	1	0	5	88	14	74			
4:00 PM	5	42	3	0	50	2	5	1	0	8	0	21	0	0	21	0	0	3	0	3	82	11	71			
5:00 PM	4	38	4	0	46	6	4	1	0	11	0	21	2	0	23	1	3	1	0	5	85	16	69			
6:00 PM	4	27	7	0	38	2	0	0	0	2	0	24	1	0	25	0	1	0	0	1	66	3	63			
7:00 PM	0	24	1	0	25	1	2	0	0	3	0	19	0	0	19	0	1	1	0	2	49	5	44			
8:00 PM	3	17	2	0	22	0	1	0	0	1	0	5	0	0	5	1	0	0	0	1	29	2	27			
9:00 PM	1	11	2	1	15	1	1	0	0	2	0	7	1	0	8	0	0	0	0	0	25	2	23			
10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Totals	30	358	42	2	432	59	29	6	0	94	8	312	10	0	330	4	21	26	0	51	907	145	762			

### Graphical Summary of Hourly Volumes



# Intersection Traffic Volume Report

## 15-Minute Motor Vehicle Data

Chapman Dr. & Green Valley Dr.



### 15-Minute Motor Vehicle Data

15-Minute Time Period Start Time	From North Chapman Dr.					From East Green Valley Dr.					From South Chapman Dr.					From West Green Valley Dr.					15-Min Totals	Hourly Sum	PHF	
	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total				
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
12:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
12:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
12:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
1:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
1:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
1:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
2:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
2:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
2:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
3:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
3:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
3:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
4:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
4:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
4:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
5:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
5:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
5:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
6:00 AM	0	1	0	0	1	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	0	0	36	0.56
6:15 AM	0	2	0	0	2	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	0	0	50	0.60
6:30 AM	0	0	0	0	0	1	2	0	0	3	0	11	0	0	11	0	1	1	0	2	2	16	61	0.73
6:45 AM	0	2	0	0	2	1	0	0	0	1	0	4	0	0	4	0	0	0	0	0	0	7	64	0.76
7:00 AM	0	5	1	0	6	2	1	0	0	3	0	11	0	0	11	0	1	0	1	1	21	68	0.81	
7:15 AM	0	4	0	0	4	4	0	0	0	4	0	8	0	0	8	0	1	0	1	1	17	61	0.80	
7:30 AM	0	4	0	0	4	3	0	0	0	3	0	10	0	0	10	0	1	1	0	2	19	60	0.79	
7:45 AM	0	1	1	0	2	1	0	1	0	2	0	4	0	0	4	0	1	2	0	3	11	61	0.76	
8:00 AM	1	2	1	0	4	0	0	0	0	1	7	0	0	8	0	1	1	0	2	14	61	0.76		
8:15 AM	0	4	1	0	5	0	1	0	0	1	6	0	0	7	0	2	1	0	3	16	55	0.69		
8:30 AM	1	4	0	0	5	1	1	0	0	2	12	0	0	13	0	0	0	0	0	20	47	0.59		
8:45 AM	1	2	0	0	3	1	1	0	0	2	0	4	0	0	4	0	1	1	0	2	11	41	0.73	
9:00 AM	0	3	0	0	3	1	1	0	0	2	0	2	0	2	0	0	1	0	1	8	31	0.55		
9:15 AM	1	3	0	0	4	0	0	0	0	0	3	0	0	3	1	0	0	0	1	8	33	0.59		
9:30 AM	0	8	1	0	9	1	0	0	0	1	0	3	0	0	3	0	1	0	0	1	14	35	0.63	
9:45 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	34	0.65		
10:00 AM	0	4	0	0	4	0	0	0	0	0	6	0	0	6	0	0	0	0	0	10	39	0.75		
10:15 AM	1	1	0	0	2	2	0	0	0	2	0	6	0	0	6	0	0	0	0	10	37	0.71		
10:30 AM	1	4	2	0	7	0	0	1	0	1	0	3	0	0	3	0	2	0	2	13	47	0.59		
10:45 AM	0	3	1	0	4	0	0	0	0	0	0	1	0	0	1	0	0	1	0	6	44	0.55		
11:00 AM	1	2	0	0	3	2	0	0	0	2	0	3	0	0	3	0	0	0	0	8	48	0.60		
11:15 AM	0	6	1	0	7	1	2	0	0	3	0	9	0	0	9	0	1	0	1	20	49	0.61		
11:30 AM	0	6	1	0	7	1	0	0	0	1	0	2	0	0	2	0	0	0	0	10	40	0.91		
11:45 AM	0	3	1	0	4	1	1	0	0	2	0	3	0	0	3	0	1	0	1	10	49	0.64		
12:00 PM	0	5	1	0	6	1	0	0	0	1	0	2	0	0	2	0	0	0	0	9	70	0.56		
12:15 PM	0	5	0	0	5	1	0	0	0	1	0	3	0	0	3	0	1	1	0	2	11	76	0.61	
12:30 PM	0	9	0	0	9	3	0	0	0	3	0	7	0	0	7	0	0	0	0	19	78	0.63		
12:45 PM	1	13	1	0	15	2	0	0	0	2	2	10	1	0	13	0	1	0	1	31	73	0.59		
1:00 PM	1	6	0	0	7	2	0	0	0	2	0	4	1	0	5	0	1	0	1	15	62	0.78		
1:15 PM	0	5	1	0	6	2	0	0	0	2	0	5	0	0	5	0	0	0	0	13	63	0.79		
1:30 PM	0	2	2	0	4	1	1	0	0	2	0	7	0	0	7	0	1	0	1	14	63	0.79		
1:45 PM	1	7	2	1	11	1	1	0	0	2	1	5	0	0	6	0	1	0	1	20	71	0.81		
2:00 PM	0	7	1	0	8	1	1	0	0	2	0	5	1	0	6	0	0	0	0	16	68	0.77		
2:15 PM	1	5	0	0	6	2	0	0	0	2	0	5	0	0	5	0	0	0	0	13	68	0.77		
2:30 PM	1	13	1	0	15	2	0	0	0	2	0	3	0	0	3	0	1	1	0	22	78	0.85		
2:45 PM	0	10	0	0	10	0	1	1	0	2	0	2	1	0	3	0	1	1	0	2	17	74	0.80	
3:00 PM	0	6	0	0	6	2	0	0	0	1	0	7	0	0	7	0	1	0	0	1	16	88	0.71	
3:15 PM	1	13	0	0	14	1	0	0	0	1	0	6	0	0	6	1	1	0	0	2	23	89	0.72	
3:30 PM	0	8	1	0	9	1	1	0	0	2	0	7	0	0	7	0	0	0	0	18	90	0.73		
3:45 PM	0	10	2	0	12	2	1	1	0	4	2	9	2	0	13	0	1	1	0	2	31	94	0.76	
4:00 PM	2	6	1	0	9	1	0	0	0	1	0	6	0	0	6	0	0	1	0	1	17	82	0.85	
4:15 PM	1	12	1	0	14	0	3	1	0	4	0	5	0	0	5	0	0	1	0	1	24	89	0.93	
4:30 PM	2	13	1	0	16	1	2	0	0	3	0	2	0	0	2	0	0	1	0	1	22	79	0.82	
4:45 PM	0	11	0	0	11	0	0	0	0	0	0	8	0	0	8	0	0	0	0	19	81	0.84		
5:00 PM	3	9	1	0	13	2	2	1	0	5	0	4	1	0	5	0	1	0	0	1	24	85	0.89	
5:15 PM	0	4	1	0	5	2	2	0	0	4	0	5	0	0	5	0	0	0	0	14	74	0.77		
5:30 PM	0	12	1	0	13	1	0	0	0	1	0	8	0	0	8	0	2	0	0	2	24	80	0.83	
5:45 PM	1	13	1	0	15	1	0	0	0	1	0	4	1	0	5	1	0	1	0	2	23	75	0.82	
6:00 PM	1	5	2	0	8	1	0	0	0	1	0	7	0	0	5	0	0	0	0	13	66	0.83		
6:15 PM	1	10	0	0	11	1	0	0	0	1	0	7	0	0	7	0	1	0	0	1	20	68	0.85	
6:30 PM	0	7	2	0	9	0	0	0	0	0	9	1	0	0	10	0	0	0	0	19	63	0.83		
6:45 PM	2	5	3	0	10	1</																		













# Intersection Traffic Volume Report

<b>Count Basics</b>	Start Date: Tuesday, March 11, 2025	Weekday	Page 11 of 13
	Total Number of Hours Counted: 16	Non-Holiday	Schools in Session
			No Special Events

## 15-Minute Pedestrian and Bicyclist Data

Chapman Dr. & Green Valley Dr.



### 15-Minute Pedestrian and Bicyclist Data

15-Minute Time Period Start Time	Crossing North Approach Chapman Dr.			Crossing East Approach Green Valley Dr.			Crossing South Approach Chapman Dr.			Crossing West Approach Green Valley Dr.			15-Min Totals	Hourly Sum
	Pedestrian	Bicyclist	Total	Pedestrian	Bicyclist	Total	Pedestrian	Bicyclist	Total	Pedestrian	Bicyclist	Total		
	12:00 AM	0	0	0	0	0	0	0	0	0	0	0		
12:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	
12:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	
12:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	
1:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	
1:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	
1:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	
2:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	
2:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	
2:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	
3:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	
3:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	
3:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	
5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	
5:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	
5:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	
5:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	
6:00 AM	0	0	0	0	0	0	1	0	1	0	0	0	1	1
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	4
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	4
7:00 AM	0	0	0	1	0	1	0	0	2	0	0	2	2	4
7:15 AM	0	0	0	1	0	1	0	0	1	0	0	1	2	2
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
9:00 AM	0	0	0	0	0	0	0	0	1	0	1	1	1	1
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2
10:00 AM	0	0	0	1	0	1	1	0	1	0	0	0	2	5
10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	4
10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	4
10:45 AM	0	0	0	0	0	0	2	0	2	1	0	1	3	4
11:00 AM	0	0	0	0	0	0	0	0	0	1	0	1	1	1
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	5
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	5
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	7
12:00 PM	0	0	0	2	0	2	2	0	2	1	0	1	5	7
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2
12:30 PM	0	0	0	0	0	0	1	0	1	1	0	1	2	5
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	3
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	3
1:15 PM	0	0	0	0	0	0	2	0	2	1	0	1	3	7
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	5
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	6
2:00 PM	0	0	0	2	0	2	2	0	2	0	0	0	4	9
2:15 PM	0	0	0	0	0	0	0	0	0	1	0	1	1	5
2:30 PM	0	0	0	0	0	0	0	0	0	1	0	1	1	6
2:45 PM	0	0	0	0	0	0	0	0	0	3	0	3	1	5
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2
3:15 PM	0	0	0	0	0	0	0	0	0	2	0	2	2	4
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	7
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	9
4:00 PM	0	0	0	0	2	2	0	0	0	0	0	0	2	10
4:15 PM	0	0	0	0	0	0	1	0	1	2	2	4	5	10
4:30 PM	0	0	0	0	0	0	1	0	1	1	0	1	2	7
4:45 PM	0	0	0	0	0	0	1	0	1	0	0	0	1	7
5:00 PM	0	0	0	0	0	0	1	0	1	1	0	1	2	10
5:15 PM	0	0	0	0	0	0	1	0	1	1	0	1	2	9
5:30 PM	0	2	2	0	0	0	0	0	0	0	0	0	2	10
5:45 PM	0	0	0	0	0	0	1	2	3	0	1	1	4	8
6:00 PM	0	0	0	0	0	0	0	0	0	1	1	1	1	5
6:15 PM	0	0	0	1	0	1	2	0	2	0	0	0	3	7
6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	5
6:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	1	5
7:00 PM	2	0	2	1	0	1	0	0	0	0	0	0	3	4
7:15 PM	0	0	0	0	0	0	1	0	1	0	0	0	1	1
7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Totals</b>	<b>2</b>	<b>2</b>	<b>4</b>	<b>8</b>	<b>2</b>	<b>10</b>	<b>20</b>	<b>2</b>	<b>22</b>	<b>22</b>	<b>4</b>	<b>26</b>	<b>62</b>	

### Special Pedestrians

Pedestrian Type	None	1 or 2	A Few	Several	Many	Unknown
Pre-school Children	x					
Elementary School Age Children	x					
Visually Impaired (white cane/help)	x					
Elderly/Disabled (except wheelcha)	x					
Wheelchairs/Electric Scooters	x					
Other (None)	x					

ASWC Warrant Criteria - Chapman Drive & Green Valley Drive

MUTCD No

WisDOT Yes

3/19/2025

MUTCD

Met?	Criteria	
No	A. Is a signal justified?	No
No	B. # of crashes in a 12 month period that can be corrected by multi-way stop control:	0
No	C. Minimum Volumes	

1. Major road approach volume (total of both) at least 300 vph for min 8 hours?
2. Combined ped, bike, and veh volume on minor approach (total of both) at least 200 units per hour for the same 8 hours as criteria C-1?
3. If the 85th percentile speed on the major road exceeds 40 mph, may use 70% of the values in C-1 and C-2

Major Street 85th percentile mph: 30

Time Period	From	To	Major Road: Both App.	Minor Road: Both App. (VPH)	C-1	C-2	Both Met?	D (80%)		Both Met?
1	6:00	7:00	30	6	No	No	No	No	No	No
2	7:00	8:00	49	19	No	No	No	No	No	No
3	8:00	9:00	49	12	No	No	No	No	No	No
4	9:00	10:00	25	6	No	No	No	No	No	No
5	10:00	11:00	33	6	No	No	No	No	No	No
6	11:00	12:00	38	10	No	No	No	No	No	No
7	12:00	13:00	60	10	No	No	No	No	No	No
8	13:00	14:00	51	11	No	No	No	No	No	No
9	14:00	15:00	56	12	No	No	No	No	No	No
10	15:00	16:00	74	14	No	No	No	No	No	No
11	16:00	17:00	71	11	No	No	No	No	No	No
12	17:00	18:00	69	16	No	No	No	No	No	No
13	18:00	19:00	63	3	No	No	No	No	No	No
14	19:00	20:00	44	5	No	No	No	No	No	No
15	20:00	21:00	27	2	No	No	No	No	No	No
16	21:00	22:00	23	2	No	No	No	No	No	No

No	D. Use when previous criteria have not been met: If 80% minimum values of Criteria B, C-1, and C-2 (C-3 excluded) are satisfied, warrant is met.	
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WisDOT

Met?	Criteria	
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Yes	1 <b>Functional Highway Classification</b>											
<table border="1"> <thead> <tr> <th>Approach</th> <th>Classification</th> </tr> </thead> <tbody> <tr><td>1: (SB)</td><td>Local Road</td></tr> <tr><td>2: (WB)</td><td>Local Road</td></tr> <tr><td>3: (NB)</td><td>Local Road</td></tr> <tr><td>4: (EB)</td><td>Local Road</td></tr> </tbody> </table>			Approach	Classification	1: (SB)	Local Road	2: (WB)	Local Road	3: (NB)	Local Road	4: (EB)	Local Road
Approach	Classification											
1: (SB)	Local Road											
2: (WB)	Local Road											
3: (NB)	Local Road											
4: (EB)	Local Road											

No	2 <b>Average Daily Traffic</b>											
<table border="1"> <thead> <tr> <th>Approach</th> <th>AADT</th> </tr> </thead> <tbody> <tr><td>Minor 1</td><td>179</td></tr> <tr><td>Minor 2</td><td>130</td></tr> <tr><td>Major 1</td><td>902</td></tr> <tr><td>Major 2</td><td>758</td></tr> </tbody> </table>			Approach	AADT	Minor 1	179	Minor 2	130	Major 1	902	Major 2	758
Approach	AADT											
Minor 1	179											
Minor 2	130											
Major 1	902											
Major 2	758											

No	3 <b>Crash History</b>	
# of crashes in a 12 month period that can be corrected by multi-way stop control:		0
Expected to significantly reduce the overall severity of future crashes?		No

4 **Alternatives**  
Refer to TGM 13-26-5 Section D.

No	5 <b>Mobility Impact</b>	
Will the high-volume "through" street experience significant delays for the benefit of reducing delays for a low-volume side street?		Yes

6 **Right Turn Inclusion**  
Refer to WisDOT TSDM 2-3-2