

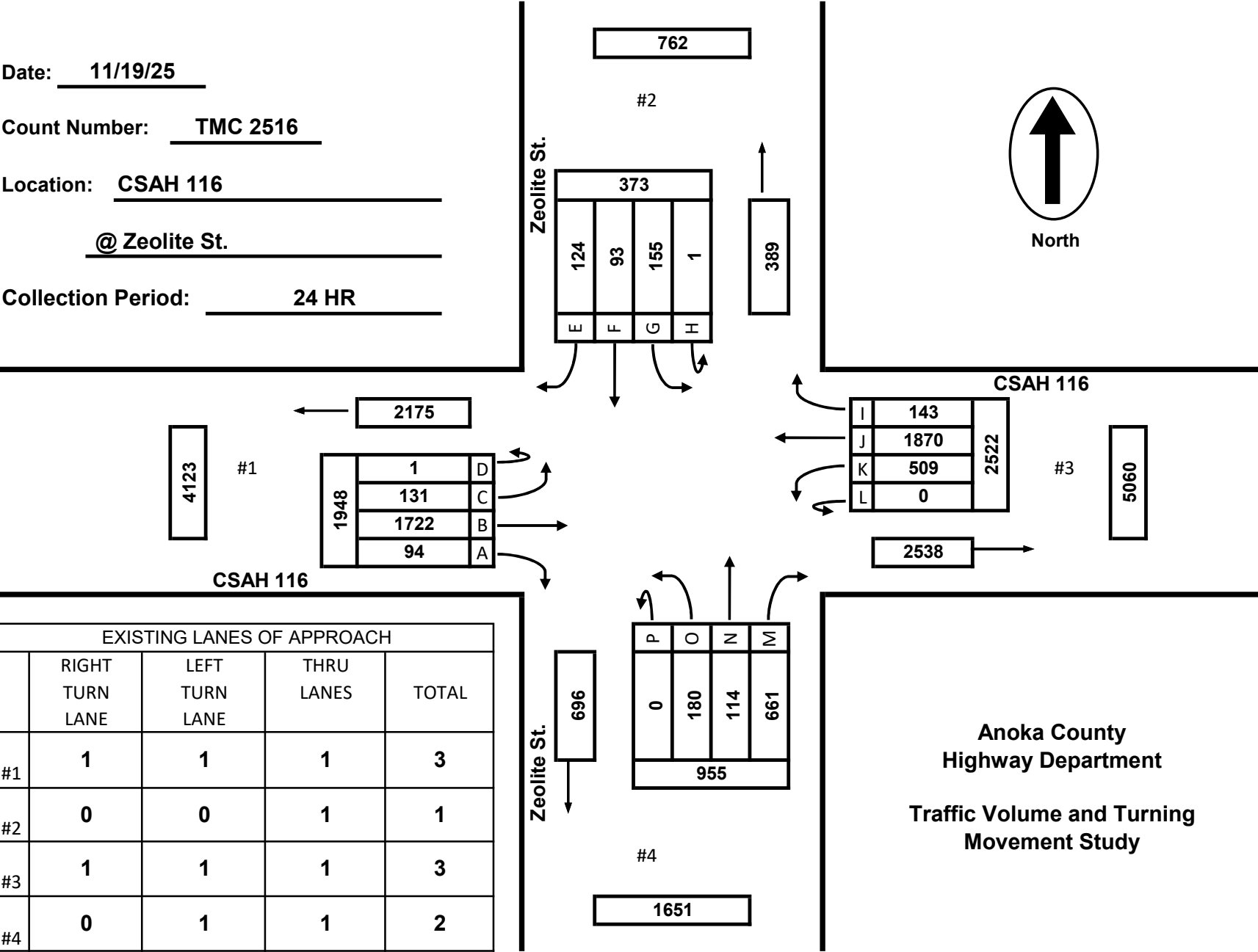
Date: 11/19/25

Count Number: TMC 2516

Location: CSAH 116

@ Zeolite St.

Collection Period: 24 HR



Date: 11/19/25

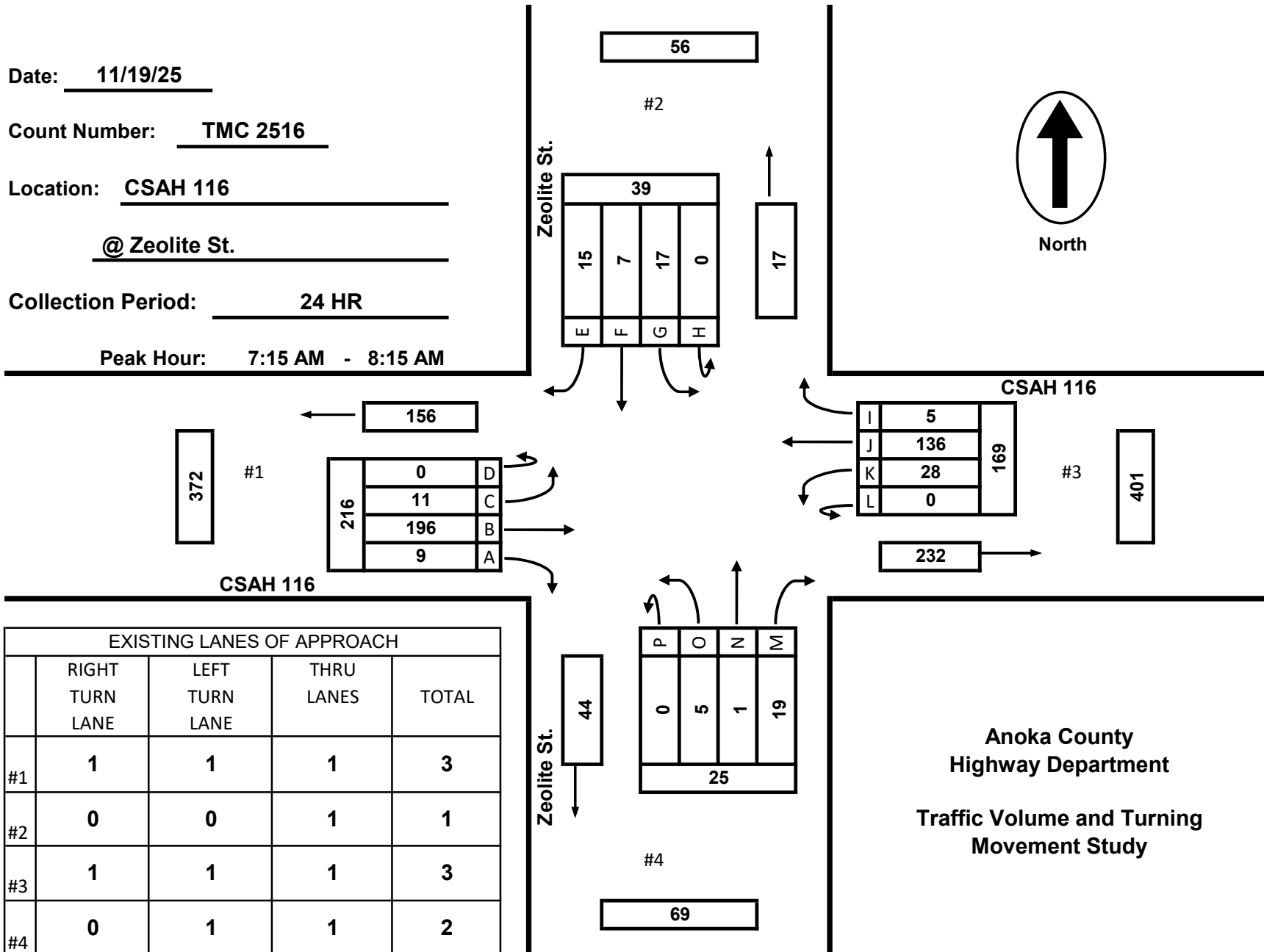
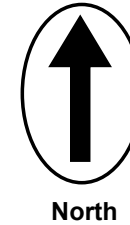
Count Number: TMC 2516

Location: CSAH 116

@ Zeolite St.

Collection Period: 24 HR

Peak Hour: 7:15 AM - 8:15 AM



Date: 11/19/25

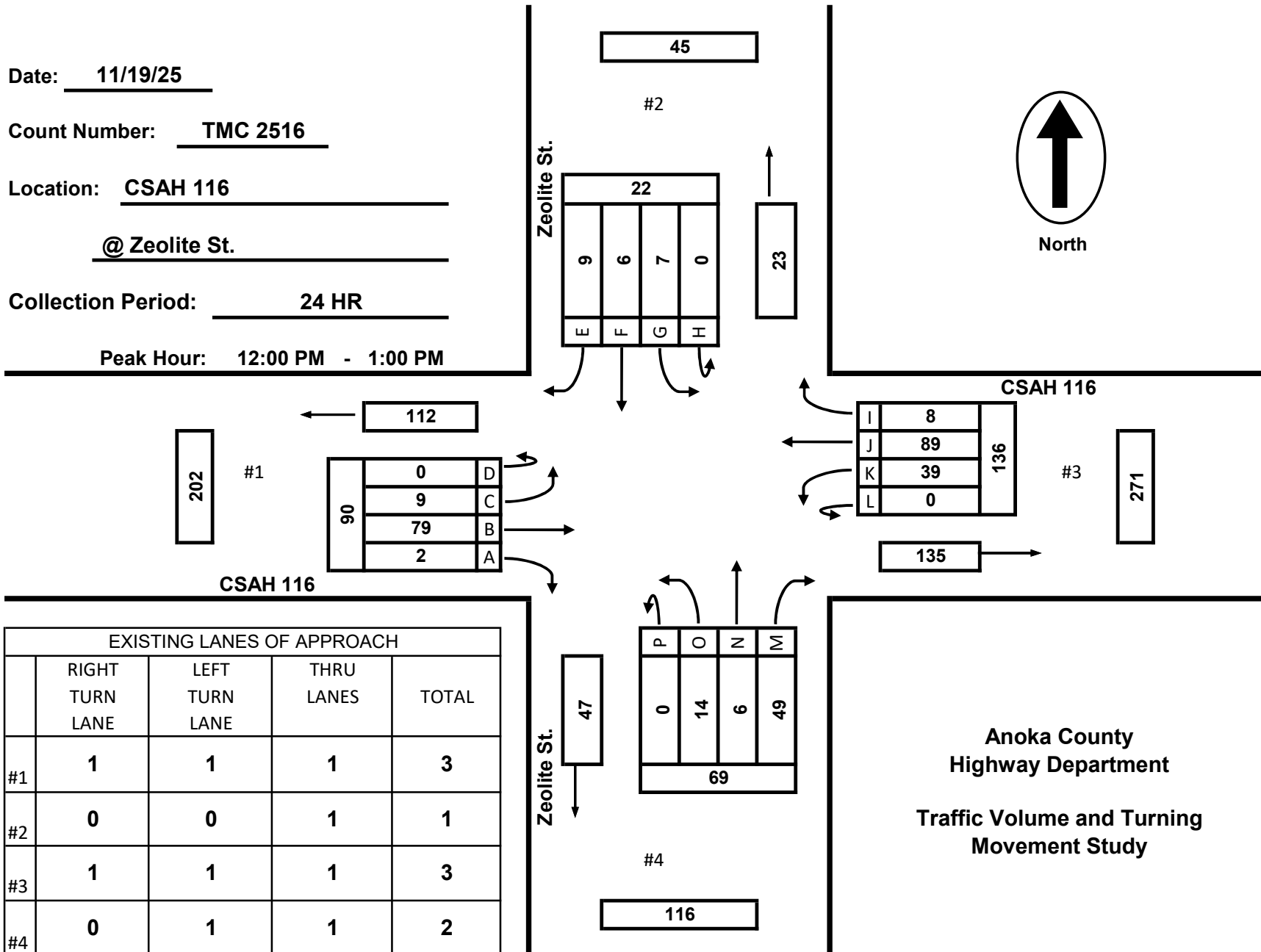
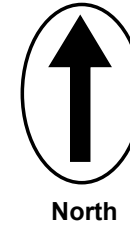
Count Number: TMC 2516

Location: CSAH 116

@ Zeolite St.

Collection Period: 24 HR

Peak Hour: 12:00 PM - 1:00 PM



EXISTING LANES OF APPROACH				
	RIGHT TURN LANE	LEFT TURN LANE	THRU LANES	TOTAL
#1	1	1	1	3
#2	0	0	1	1
#3	1	1	1	3
#4	0	1	1	2

Date: 11/19/25

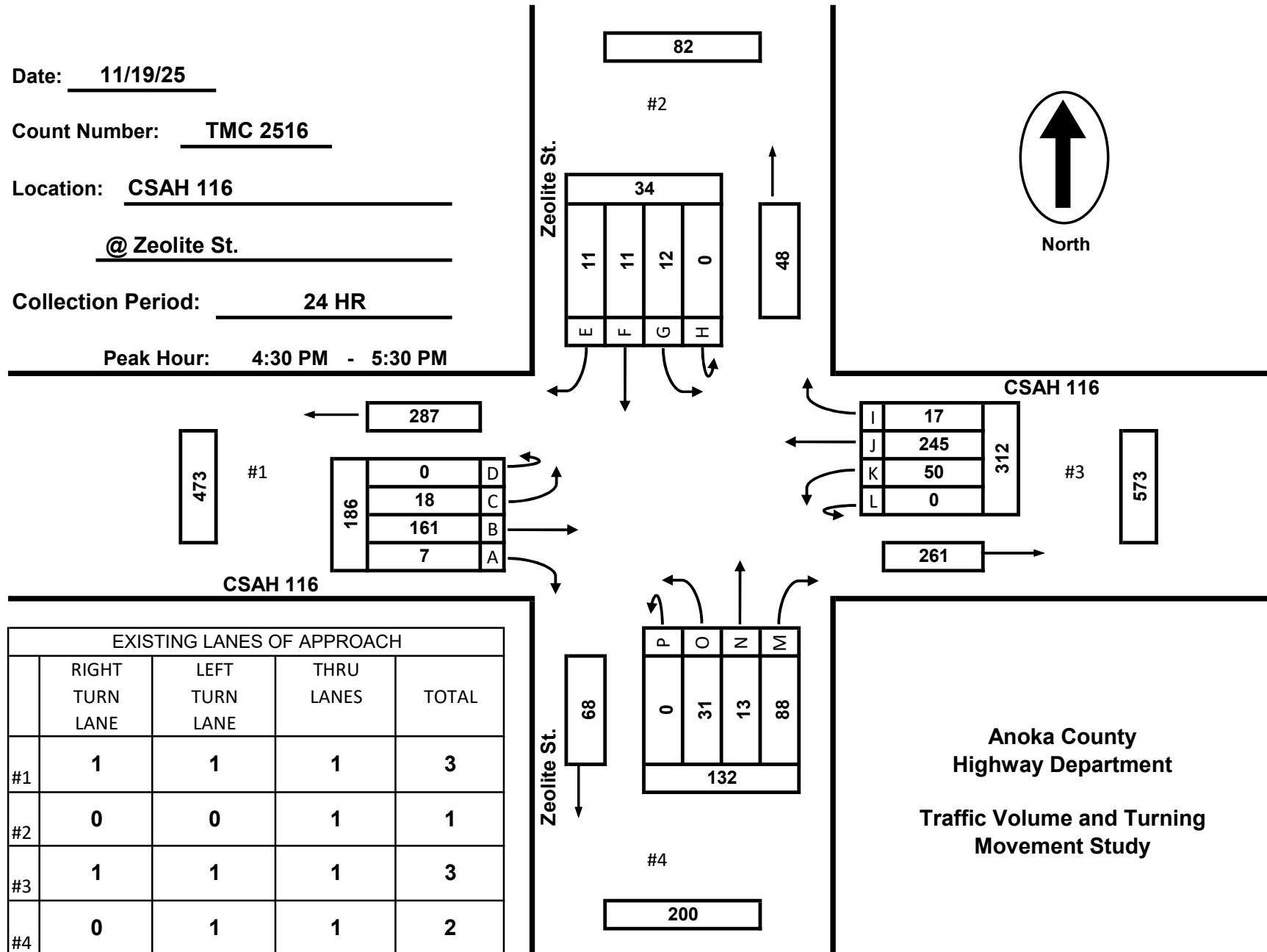
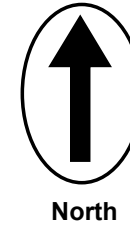
Count Number: TMC 2516

Location: CSAH 116

@ Zeolite St.

Collection Period: 24 HR

Peak Hour: 4:30 PM - 5:30 PM



**TMC 2516 - CSAH 116 @ Zeolite St.
Ramsey MN
Wednesday, November 19, 2025**

Wednesday, November 10, 2021																									
Time	Southbound Zeolite St.						Westbound CSAH 116						Northbound Zeolite St.						Eastbound CSAH 116						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	
12:00 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	3	0	0	0	3	4
12:15 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	2	0	0	2	3
12:30 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	1	0	0	0	1	2
12:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	3	0	0	3	4
Hourly Total	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	1	0	1	0	4	5	0	0	9	13
1:00 AM	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	1	0	0	1	3
1:15 AM	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
1:30 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
1:45 AM	0	0	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	0	0	0	1	0	0	1	3
Hourly Total	0	0	0	0	0	0	0	0	6	1	0	7	0	0	0	0	0	0	0	0	2	0	0	2	9
2:00 AM	0	1	0	0	0	1	0	0	1	2	0	3	0	0	0	0	0	0	0	0	0	0	0	0	4
2:15 AM	0	0	0	0	0	0	0	1	2	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
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	0	0	0
2:45 AM	0	1	0	0	0	1	0	0	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	3
Hourly Total	0	2	0	0	0	2	0	1	4	3	0	8	0	0	0	0	0	0	0	0	0	0	0	0	10
3:00 AM	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
3:15 AM	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	1	0	1	0	0	0	0	0	0	3
3:30 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	2	0	0	2	3
3:45 AM	0	0	0	1	0	1	0	0	2	0	0	2	0	0	0	0	0	0	0	0	3	0	0	3	6
Hourly Total	0	0	0	1	0	1	0	1	5	0	0	6	0	0	0	1	0	1	0	0	5	0	0	5	13
4:00 AM	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	1	0	0	1	3
4:15 AM	0	1	1	2	0	4	0	0	4	0	0	4	0	0	0	0	0	0	0	0	4	0	0	4	12
4:30 AM	0	1	1	1	0	3	0	0	2	0	0	2	0	0	0	0	0	0	0	9	1	0	10	15	
4:45 AM	0	4	0	0	0	4	0	0	7	0	0	7	0	0	0	0	0	0	0	0	11	0	0	11	22
Hourly Total	0	6	2	3	0	11	0	0	15	0	0	15	0	0	0	0	0	0	0	0	25	1	0	26	52
5:00 AM	0	2	1	0	0	3	0	0	2	0	1	2	0	0	0	0	0	0	0	0	13	0	0	13	18
5:15 AM	0	0	0	1	0	1	0	1	9	0	0	10	0	0	0	0	0	0	0	0	14	0	1	14	25
5:30 AM	0	2	0	2	0	4	0	1	9	0	0	10	0	0	0	2	0	2	0	1	18	1	0	20	36
5:45 AM	0	2	0	0	0	2	0	1	10	0	0	11	0	0	0	0	0	0	0	1	27	1	0	29	42
Hourly Total	0	6	1	3	0	10	0	3	30	0	1	33	0	0	0	2	0	2	0	2	72	2	1	76	121
6:00 AM	0	4	0	1	0	5	0	1	13	0	0	14	0	0	0	2	0	2	0	0	17	1	0	18	39
6:15 AM	0	2	1	4	0	7	0	3	14	0	0	17	0	1	0	1	0	2	0	0	23	1	0	24	50
6:30 AM	0	1	1	3	0	5	0	8	20	1	0	29	0	0	1	0	0	1	0	2	29	1	0	32	67
6:45 AM	0	4	0	3	0	7	0	5	24	0	1	29	0	0	1	5	0	6	0	0	48	2	0	50	92
Hourly Total	0	11	2	11	0	24	0	17	71	1	1	89	0	1	2	8	0	11	0	2	117	5	0	124	248
7:00 AM	0	4	2	3	0	9	0	3	25	0	0	28	0	0	1	3	0	4	0	1	45	2	0	48	89
7:15 AM	0	6	2	5	0	13	0	4	31	1	0	36	0	2	0	3	0	5	0	3	54	6	0	63	117
7:30 AM	0	6	3	4	0	13	0	8	45	2	0	55	0	0	1	5	0	6	0	2	38	1	0	41	115
7:45 AM	0	2	2	2	0	6	0	12	34	1	0	47	0	0	0	6	0	6	0	5	61	0	0	66	125
Hourly Total	0	18	9	14	0	41	0	27	135	4	0	166	0	2	2	17	0	21	0	11	198	9	0	218	446

**TMC 2516 - CSAH 116 @ Zeolite St.
Ramsey MN
Wednesday, November 19, 2025**

Time	Southbound Zeolite St.						Westbound CSAH 116						Northbound Zeolite St.						Eastbound CSAH 116						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	
8:00 AM	0	3	0	4	0	7	0	4	26	1	0	31	0	3	0	5	0	8	0	1	43	2	0	46	92
8:15 AM	0	2	2	1	0	5	0	5	36	1	0	42	0	0	0	1	0	1	0	4	33	0	0	37	85
8:30 AM	0	3	0	3	0	6	0	2	12	2	0	16	0	1	2	7	0	10	0	0	26	0	0	26	58
8:45 AM	0	3	3	3	0	9	0	9	17	2	0	28	0	0	0	2	0	2	0	2	18	0	0	20	59
Hourly Total	0	11	5	11	0	27	0	20	91	6	0	117	0	4	2	15	0	21	0	7	120	2	0	129	294
9:00 AM	0	2	2	6	0	10	0	4	22	3	0	29	0	0	0	4	0	4	0	5	24	1	0	30	73
9:15 AM	0	2	2	1	0	5	0	9	17	3	0	29	0	2	2	7	0	11	0	0	15	2	0	17	62
9:30 AM	0	2	1	1	0	4	0	11	20	2	0	33	0	1	2	10	0	13	0	0	26	1	0	27	77
9:45 AM	0	2	0	0	0	2	0	6	24	1	0	31	0	4	1	5	0	10	0	2	18	2	0	22	65
Hourly Total	0	8	5	8	0	21	0	30	83	9	0	122	0	7	5	26	0	38	0	7	83	6	0	96	277
10:00 AM	0	0	1	1	0	2	0	5	24	3	0	32	0	2	0	15	0	17	0	0	19	1	0	20	71
10:15 AM	0	2	1	1	0	4	0	6	23	1	0	30	0	4	0	3	1	7	0	1	15	1	0	17	58
10:30 AM	0	1	0	0	0	1	0	7	19	0	0	26	0	1	1	6	0	8	0	0	18	2	0	20	55
10:45 AM	0	2	4	2	0	8	0	8	18	1	0	27	0	0	1	2	0	3	1	1	25	3	1	30	68
Hourly Total	0	5	6	4	0	15	0	26	84	5	0	115	0	7	2	26	1	35	1	2	77	7	1	87	252
11:00 AM	0	0	2	2	0	4	0	14	18	1	0	33	0	4	1	6	0	11	0	3	27	3	0	33	81
11:15 AM	1	0	3	1	0	5	0	12	18	1	0	31	0	1	3	11	0	15	0	5	26	1	0	32	83
11:30 AM	0	2	2	1	0	5	0	9	20	0	1	29	0	6	4	11	0	21	0	4	20	2	0	26	81
11:45 AM	0	1	0	0	0	1	0	11	23	0	0	34	0	3	3	9	0	15	0	3	13	2	0	18	68
Hourly Total	1	3	7	4	0	15	0	46	79	2	1	127	0	14	11	37	0	62	0	15	86	8	0	109	313
12:00 PM	0	1	1	1	0	3	0	6	21	0	2	27	0	2	3	16	0	21	0	1	21	0	0	22	73
12:15 PM	0	1	1	1	0	3	0	10	21	5	0	36	0	5	2	11	0	18	0	3	23	1	0	27	84
12:30 PM	0	2	3	3	0	8	0	9	21	2	0	32	0	6	0	11	0	17	0	4	19	0	0	23	80
12:45 PM	0	3	1	4	0	8	0	14	26	1	0	41	0	1	1	11	0	13	0	1	16	1	0	18	80
Hourly Total	0	7	6	9	0	22	0	39	89	8	2	136	0	14	6	49	0	69	0	9	79	2	0	90	317
1:00 PM	0	2	1	2	0	5	0	9	27	2	0	38	0	4	2	7	0	13	0	3	12	1	0	16	72
1:15 PM	0	3	0	2	0	5	0	15	22	4	0	41	0	1	1	11	0	13	0	1	11	4	0	16	75
1:30 PM	0	1	1	3	0	5	0	7	20	0	0	27	0	4	3	13	0	20	0	0	22	0	0	22	74
1:45 PM	0	4	1	5	0	10	0	10	18	2	0	30	0	6	2	13	0	21	0	1	18	1	0	20	81
Hourly Total	0	10	3	12	0	25	0	41	87	8	0	136	0	15	8	44	0	67	0	5	63	6	0	74	302
2:00 PM	0	4	1	1	0	6	0	13	33	1	0	47	0	1	0	18	0	19	0	0	26	2	0	28	100
2:15 PM	0	1	0	1	0	2	0	3	44	5	0	52	0	5	1	14	0	20	0	3	30	0	0	33	107
2:30 PM	0	5	1	0	0	6	0	8	35	5	0	48	0	5	2	11	0	18	0	2	13	1	0	16	88
2:45 PM	0	5	3	4	1	12	0	12	37	2	0	51	0	4	4	11	0	19	0	0	38	0	0	38	120
Hourly Total	0	15	5	6	1	26	0	36	149	13	0	198	0	15	7	54	0	76	0	5	107	3	0	115	415
3:00 PM	0	3	2	0	1	5	0	13	42	1	0	56	0	5	4	12	0	21	0	3	34	1	0	38	120
3:15 PM	0	1	0	1	1	2	0	7	36	8	0	51	0	8	1	12	0	21	0	0	44	2	0	46	120
3:30 PM	0	1	2	1	0	4	0	12	66	1	0	79	0	6	1	19	1	26	0	1	42	3	1	46	155
3:45 PM	0	2	3	1	0	6	0	7	50	2	0	59	0	7	2	17	0	26	0	0	34	3	0	37	128
Hourly Total	0	7	7	3	2	17	0	39	194	12	0	245	0	26	8	60	1	94	0	4	154	9	1	167	523

**TMC 2516 - CSAH 116 @ Zeolite St.
Ramsey MN
Wednesday, November 19, 2025**

Time	Southbound Zeolite St.						Westbound CSAH 116						Northbound Zeolite St.						Eastbound CSAH 116						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	
4:00 PM	0	3	2	2	0	7	0	15	63	3	1	81	0	5	2	16	0	23	0	7	29	1	0	37	148
4:15 PM	0	4	2	3	0	9	0	10	43	5	0	58	0	6	4	17	1	27	0	5	34	0	1	39	133
4:30 PM	0	3	5	4	0	12	0	10	63	4	0	77	0	2	3	16	0	21	0	4	38	1	0	43	153
4:45 PM	0	4	3	4	0	11	0	14	74	5	0	93	0	6	3	19	0	28	0	7	41	2	0	50	182
Hourly Total	0	14	12	13	0	39	0	49	243	17	1	309	0	19	12	68	1	99	0	23	142	4	1	169	616
5:00 PM	0	2	1	3	2	6	0	11	59	5	0	75	0	15	5	29	0	49	0	3	52	4	0	59	189
5:15 PM	0	3	2	0	0	5	0	15	49	3	0	67	0	8	2	24	0	34	0	4	30	0	0	34	140
5:30 PM	0	3	1	5	0	9	0	13	39	3	0	55	0	4	1	21	0	26	0	1	31	1	0	33	123
5:45 PM	0	2	1	0	0	3	0	10	40	3	0	53	0	4	4	12	0	20	0	0	26	3	0	29	105
Hourly Total	0	10	5	8	2	23	0	49	187	14	0	250	0	31	12	86	0	129	0	8	139	8	0	155	557
6:00 PM	0	4	1	1	0	6	0	10	26	1	0	37	0	2	4	25	0	31	0	1	35	2	0	38	112
6:15 PM	0	2	1	3	0	6	0	11	20	6	0	37	0	1	1	11	0	13	0	2	20	2	1	24	80
6:30 PM	0	1	2	3	0	6	0	9	26	0	0	35	0	2	6	17	0	25	0	2	12	2	0	16	82
6:45 PM	0	2	2	0	0	4	0	10	30	3	0	43	0	3	2	14	0	19	0	3	8	3	0	14	80
Hourly Total	0	9	6	7	0	22	0	40	102	10	0	152	0	8	13	67	0	88	0	8	75	9	1	92	354
7:00 PM	0	1	0	1	0	2	0	8	9	5	1	22	0	1	1	11	0	13	0	2	25	0	0	27	64
7:15 PM	0	1	0	0	0	1	0	6	17	0	0	23	0	1	2	10	0	13	0	1	11	0	0	12	49
7:30 PM	0	0	0	0	0	0	0	9	18	2	0	29	0	3	2	12	0	17	0	0	14	1	0	15	61
7:45 PM	0	1	2	0	0	3	0	6	20	2	0	28	0	3	2	12	0	17	0	3	10	0	0	13	61
Hourly Total	0	3	2	1	0	6	0	29	64	9	1	102	0	8	7	45	0	60	0	6	60	1	0	67	235
8:00 PM	0	1	1	2	0	4	0	1	20	0	0	21	0	2	2	13	0	17	0	0	19	2	0	21	63
8:15 PM	0	1	4	0	0	5	0	1	12	3	0	16	0	1	5	7	0	13	0	1	15	2	0	18	52
8:30 PM	0	1	0	0	0	1	0	3	24	0	0	27	0	1	3	10	0	14	0	0	6	0	0	6	48
8:45 PM	0	1	2	0	0	3	0	1	15	4	0	20	0	1	1	3	0	5	0	2	7	0	0	9	37
Hourly Total	0	4	7	2	0	13	0	6	71	7	0	84	0	5	11	33	0	49	0	3	47	4	0	54	200
9:00 PM	0	2	0	1	0	3	0	0	23	1	0	24	0	2	2	8	0	12	0	0	18	0	0	18	57
9:15 PM	0	0	1	0	0	1	0	4	13	3	0	20	0	0	1	4	0	5	0	3	2	2	0	7	33
9:30 PM	0	1	1	2	0	4	0	2	13	5	0	20	0	0	0	3	0	3	0	1	8	2	0	11	38
9:45 PM	0	0	1	1	0	2	0	0	6	1	0	7	0	1	1	0	0	2	0	1	1	0	0	2	13
Hourly Total	0	3	3	4	0	10	0	6	55	10	0	71	0	3	4	15	0	22	0	5	29	4	0	38	141
10:00 PM	0	1	0	0	0	1	0	0	2	1	0	3	0	0	0	4	0	4	0	0	9	1	0	10	18
10:15 PM	0	1	0	0	0	1	0	0	3	0	0	3	0	0	0	0	0	0	0	2	8	0	0	10	14
10:30 PM	0	0	0	0	0	0	0	3	4	0	0	7	0	0	2	3	0	5	0	0	6	1	0	7	19
10:45 PM	0	0	0	0	0	0	0	0	2	0	0	2	0	1	0	0	0	1	0	0	5	2	0	7	10
Hourly Total	0	2	0	0	0	2	0	3	11	1	0	15	0	1	2	7	0	10	0	2	28	4	0	34	61
11:00 PM	0	0	0	0	0	0	0	1	6	1	0	8	0	0	0	0	0	0	0	2	3	0	0	5	13
11:15 PM	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	1	5	0	0	6	9
11:30 PM	0	1	0	0	0	1	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
11:45 PM	0	0	0	0	0	0	0	0	3	1	0	4	0	0	0	0	0	0	0	0	1	0	0	1	5
Hourly Total	0	1	0	0	0	1	0	1	12	3	0	16	0	0	0	0	0	0	0	3	9	0	0	12	29
DAILY TOTAL	1	155	93	124	5	373	0	509	1870	143	7	2522	0	180	114	661	3	955	1	131	1722	94	5	1948	5798
Cars	1	150	89	117	3	357	0	500	1796	139	6	2435	0	175	113	654	3	942	1	123	1654	87	5	1865	5599
Heavy Vehicles	0	5	4	7	2	16	0	9	74	4	1	87	0	5	1	7	0	13	0	8	68	7	0	83	199
Heavy Vehicle %	0.00%	3.23%	4.30%	5.65%	40.00%	4.29%	0.00%	1.77%	3.96%	2.80%	14.29%	3.45%	0.00%	2.78%	0.88%	1.06%	0.00%	1.36%	0.00%	6.11%	3.95%	7.45%	0.00%	4.26%	3.43%

TMC 2516 - CSAH 116 @ Zeolite St.
Ramsey MN
Wednesday, November 19, 2025
AM Peak Hour (00:00 to 10:00)

Time	Southbound						Westbound						Northbound						Eastbound						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	
7:15 AM	0	6	2	5	0	13	0	4	31	1	0	36	0	2	0	3	0	5	0	3	54	6	0	63	117
7:30 AM	0	6	3	4	0	13	0	8	45	2	0	55	0	0	1	5	0	6	0	2	38	1	0	41	115
7:45 AM	0	2	2	2	0	6	0	12	34	1	0	47	0	0	0	6	0	6	0	5	61	0	0	66	125
8:00 AM	0	3	0	4	0	7	0	4	26	1	0	31	0	3	0	5	0	8	0	1	43	2	0	46	92
Peak Hour Total	0	17	7	15	0	39	0	28	136	5	0	169	0	5	1	19	0	25	0	11	196	9	0	216	449
Peak Hour Heavy Vehicles	0	0	0	2	0	2	0	2	10	0	0	12	0	0	0	0	0	0	0	4	5	4	0	13	27
Peak Hour Heavy Vehicles % PHF	0.00%	0.00%	0.00%	13.33%	0.00%	5.13%	0.00%	7.14%	7.35%	0.00%	0.00%	7.10%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	36.36%	2.55%	44.44%	0.00%	6.02%	6.01%
	0.000	0.708	0.583	0.750	0.000	0.750	0.000	0.583	0.756	0.625	0.000	0.768	0.000	0.417	0.250	0.792	0.000	0.781	0.000	0.550	0.803	0.375	0.000	0.818	0.898

Mid Peak Hour (10:00 - 14:00)

Time	Southbound						Westbound						Northbound						Eastbound						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	
12:00 PM	0	1	1	1	0	3	0	6	21	0	2	27	0	2	3	16	0	21	0	1	21	0	0	22	73
12:15 PM	0	1	1	1	0	3	0	10	21	5	0	36	0	5	2	11	0	18	0	3	23	1	0	27	84
12:30 PM	0	2	3	3	0	8	0	9	21	2	0	32	0	6	0	11	0	17	0	4	19	0	0	23	80
12:45 PM	0	3	1	4	0	8	0	14	26	1	0	41	0	1	1	11	0	13	0	1	16	1	0	18	80
Peak Hour Total	0	7	6	9	0	22	0	39	89	8	2	136	0	14	6	49	0	69	0	9	79	2	0	90	317
Peak Hour Heavy Vehicles	0	1	0	0	0	1	0	2	6	0	0	8	0	0	1	1	0	2	0	0	5	0	0	5	16
Peak Hour Heavy Vehicles % PHF	0.00%	14.29%	0.00%	0.00%	0.00%	4.55%	0.00%	5.13%	6.74%	0.00%	0.00%	5.88%	0.00%	0.00%	16.67%	2.04%	0.00%	2.90%	0.00%	0.00%	6.33%	0.00%	0.00%	5.56%	5.05%
	0.000	0.583	0.500	0.563	0.000	0.688	0.000	0.696	0.856	0.400	0.250	0.829	0.000	0.583	0.500	0.766	0.000	0.821	0.000	0.563	0.859	0.500	0.000	0.833	0.943

PM Peak Hour (14:00 - 24:00)

Time	Southbound						Westbound						Northbound						Eastbound						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	
4:30 PM	0	3	5	4	0	12	0	10	63	4	0	77	0	2	3	16	0	21	0	4	38	1	0	43	153
4:45 PM	0	4	3	4	0	11	0	14	74	5	0	93	0	6	3	19	0	28	0	7	41	2	0	50	182
5:00 PM	0	2	1	3	2	6	0	11	59	5	0	75	0	15	5	29	0	49	0	3	52	4	0	59	189
5:15 PM	0	3	2	0	0	5	0	15	49	3	0	67	0	8	2	24	0	34	0	4	30	0	0	34	140
Peak Hour Total	0	12	11	11	2	34	0	50	245	17	0	312	0	31	13	88	0	132	0	18	161	7	0	186	664
Peak Hour Heavy Vehicles	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	1	0	1	0	1	5	0	0	6	10
Peak Hour Heavy Vehicles % PHF	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.22%	0.00%	0.00%	0.96%	0.00%	0.00%	0.00%	1.14%	0.00%	0.76%	0.00%	5.56%	3.11%	0.00%	0.00%	3.23%	1.51%
	0.000	0.750	0.550	0.688	0.250	0.708	0.000	0.833	0.828	0.850	0.000	0.839	0.000	0.517	0.650	0.759	0.000	0.673	0.000	0.643	0.774	0.438	0.000	0.788	0.878

Total Vehicles On Leg			762		
Vehicles Entering Intersection 373			Vehicles Exiting Intersection 389		
Southbound					
Cars	117	89	150	1	3
Heavy	7	4	5	0	2
Total	124	93	155	1	5



Total Vehicles on Leg 4123	Vehicles Entering Intersection 1948	Eastbound	Cars	Heavy	Total	
			5	0	5	
			1	0	1	
	Vehicles Exiting Intersection 2175		123	8	131	
			1654	68	1722	
			87	7	94	



Daily Volumes

Cars	Heavy	Total	Westbound	Vehicles Entering Intersection 2522	Total Vehicles on Leg 5060
139	4	143			
1796	74	1870			
500	9	509			
0	0	0			
6	1	7		Vehicles Exiting Intersection 2538	



Cars	3	0	175	113	654
Heavy	0	0	5	1	7
Total	3	0	180	114	661
Northbound					
Vehicles Entering Intersection 955			Vehicles Exiting Intersection 696		
Total Vehicles On Leg			1651		



TMC 2516 - CSAH 116 @ Zeolite St.
 Ramsey MN
 Wednesday, November 19, 2025

Time	Southbound Heavy Zeolite St.						Westbound Heavy CSAH 116						Northbound Heavy Zeolite St.						Eastbound Heavy CSAH 116						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach 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	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	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	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	0	0	0
Hourly 'Heavy Vehicles'	0	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
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	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	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	0	0	0
Hourly 'Heavy Vehicles'	0	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
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	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	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	0	0	0
Hourly 'Heavy Vehicles'	0	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
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	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	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	0	0	0
Hourly 'Heavy Vehicles'	0	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
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	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	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	0	0	0
Hourly 'Heavy Vehicles'	0	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
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	0	0	0
5:30 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
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	0	0	0
Hourly 'Heavy Vehicles'	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
6:00 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
6:15 AM	0	0	0	1	0	1	0	0	2	0	0	2	0	1	0	0	0	1	0	0	0	0	0	0	4
6:30 AM	0	0	0	0	0	0	0	0	2	1	0	3	0	0	0	0	0	0	0	0	2	0	0	2	5
6:45 AM	0	0	0	0	0	0	0	1	2	0	0	3	0	0	0	0	0	0	0	0	3	0	0	3	6
Hourly 'Heavy Vehicles'	0	0	0	1	0	1	0	1	6	1	0	8	0	1	0	0	0	1	0	0	5	0	0	5	15
7:00 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1	0	0	1	2
7:15 AM	0	0	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	0	1	3	2	0	6	11
7:30 AM	0	0	0	1	0	1	0	0	3	0	0	3	0	0	0	0	0	0	0	0	2	1	0	3	7
7:45 AM	0	0	0	1	0	1	0	1	1	0	0	2	0	0	0	0	0	0	0	3	0	0	0	3	6
Hourly 'Heavy Vehicles'	0	0	0	2	0	2	0	1	10	0	0	11	0	0	0	0	0	0	0	4	6	3	0	13	26

TMC 2516 - CSAH 116 @ Zeolite St.
 Ramsey MN
 Wednesday, November 19, 2025

Time	Southbound Heavy Zeolite St.						Westbound Heavy CSAH 116						Northbound Heavy Zeolite St.						Eastbound Heavy CSAH 116						VEHICLE 'Heavy Vehicles'
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	<i>Vehicle Approach 'Heavy Vehicles'</i>	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	<i>Vehicle Approach 'Heavy Vehicles'</i>	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	<i>Vehicle Approach 'Heavy Vehicles'</i>	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	<i>Vehicle Approach 'Heavy Vehicles'</i>	
8:00 AM	0	0	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	0	0	0	0	1	0	1	3
8:15 AM	0	0	1	0	0	1	0	0	5	0	0	5	0	0	0	0	0	0	0	0	0	2	0	2	8
8:30 AM	0	0	0	0	0	0	0	0	2	0	0	2	0	1	0	0	0	1	0	0	3	0	0	3	6
8:45 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	2	0	0	2	3
Hourly 'Heavy Vehicles'	0	0	1	0	0	1	0	1	9	0	0	10	0	1	0	0	0	1	0	0	7	1	0	8	20
9:00 AM	0	0	0	1	0	1	0	1	3	1	0	5	0	0	0	1	0	1	0	1	3	0	0	4	11
9:15 AM	0	1	0	0	0	1	0	0	1	0	0	1	0	1	0	0	0	1	0	0	0	0	0	0	3
9:30 AM	0	0	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	0	0	1	0	0	1	5
9:45 AM	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	1	0	0	1	3
Hourly 'Heavy Vehicles'	0	1	0	1	0	2	0	1	10	1	0	12	0	1	0	1	0	2	0	1	5	0	0	6	22
10:00 AM	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	1	0	1	0	0	1	0	0	1	4
10:15 AM	0	0	0	0	0	0	0	2	3	0	0	5	0	0	0	0	0	0	0	1	0	0	0	1	6
10:30 AM	0	0	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	0	0	0	1	0	0	1	3
10:45 AM	0	0	1	0	0	1	0	0	1	0	0	1	0	0	0	0	0	0	0	0	3	0	0	3	5
Hourly 'Heavy Vehicles'	0	0	1	0	0	1	0	3	7	0	0	10	0	0	0	1	0	1	0	1	5	0	0	6	18
11:00 AM	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	1	0	4	6
11:15 AM	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	1	0	1	0	0	6	0	0	6	9
11:30 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1	1	0	2	3
11:45 AM	0	0	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	0	0	0	1	0	1	5
Hourly 'Heavy Vehicles'	0	0	0	0	0	0	0	0	9	0	0	9	0	0	0	1	0	1	0	0	10	3	0	13	23
12:00 PM	0	0	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
12:15 PM	0	1	0	0	0	1	0	1	2	0	0	3	0	0	1	0	0	1	0	0	2	0	0	2	7
12:30 PM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	3	0	0	3	4
12:45 PM	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	1	0	1	0	0	0	0	0	0	3
Hourly 'Heavy Vehicles'	0	1	0	0	0	1	0	2	6	0	0	8	0	0	1	1	0	2	0	0	5	0	0	5	16
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2
1:15 PM	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0	1	0	2	0	0	0	0	0	0	3
1:30 PM	0	0	0	1	0	1	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
1:45 PM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	4
Hourly 'Heavy Vehicles'	0	0	1	1	0	2	0	0	2	0	0	2	0	1	0	1	0	2	0	0	5	0	0	5	11
2:00 PM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	2	0	0	2	3
2:15 PM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	3	0	0	3	4
2:30 PM	0	1	0	0	0	1	0	0	2	0	0	2	0	0	0	1	0	1	0	0	0	0	0	0	4
2:45 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	3
Hourly 'Heavy Vehicles'	0	1	0	0	1	1	0	0	4	0	0	4	0	0	0	1	0	1	0	0	8	0	0	8	14
3:00 PM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1	3	0	4	5
3:15 PM	0	0	0	0	1	0	0	0	1	0	0	1	0	1	0	0	0	1	0	0	3	0	0	3	5
3:30 PM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1	0	0	1	2
3:45 PM	0	1	0	1	0	2	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3
Hourly 'Heavy Vehicles'	0	1	0	1	1	2	0	0	4	0	0	4	0	1	0	0	0	1	0	1	7	0	0	8	15

TMC 2516 - CSAH 116 @ Zeolite St.
Ramsey MN
Wednesday, November 19, 2025

	Southbound Heavy Zeolite St.						Westbound Heavy CSAH 116						Northbound Heavy Zeolite St.						Eastbound Heavy CSAH 116						VEHICLE 'Heavy Vehicles'
Time	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach 'Heavy Vehicles'	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach 'Heavy Vehicles'	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach 'Heavy Vehicles'	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach 'Heavy Vehicles'	
4:00 PM	0	0	1	1	0	2	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3
4:15 PM	0	1	0	0	0	1	0	0	3	1	0	4	0	0	0	0	0	0	0	0	0	0	0	0	5
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	5	0	0	6	
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Hourly 'Heavy Vehicles'	0	1	1	1	0	3	0	0	3	2	0	5	0	0	0	0	0	0	0	1	5	0	0	6	14
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5:15 PM	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	1	0	1	0	0	0	0	0	0	4
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Hourly 'Heavy Vehicles'	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	1	0	1	0	0	0	0	0	0	4
6:00 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	
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Hourly 'Heavy Vehicles'	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly 'Heavy Vehicles'	0	0	0	0	0	0	0	0	0	0	1	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	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	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	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	0	0	0	0	0	0	0	0	0	0	0
Hourly 'Heavy Vehicles'	0	0	0	0	0	0	0	0	0	0	0	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	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	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	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	0	0	0	0	0	0	0	0	0	0	0
Hourly 'Heavy Vehicles'	0	0	0	0	0	0	0	0	0	0	0	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	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	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	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	0	0	0	0	0	0	0	0	0	0	0
Hourly 'Heavy Vehicles'	0	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
11:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly 'Heavy Vehicles'	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DAILY 'Heavy Vehicles'	0	5	4	7	2	16	0	9	74	4	1	87	0	5	1	7	0	13	0	8	68	7	0	83	199

Traffic Signal Warrant Analysis

Warrants 1 - 3 (Volume Warrants)

TMC	2516
Date	11/19/2025
Intersection Geometrics	Thru-Stop

Intersection Information			
Major Street (E/W Road)	CSAH 116	Minor Street (N/S Road)	Zeolite St.
Analyzed with	2 or more approach lanes	Analyzed with	2 or more approach lanes
Total Approach Volume	4470 vehicles	Total Approach Volume	1328 vehicles
Total Ped/Bike Volume	12 crossings	Total Ped/Bike Volume	8 crossings
Right turn reduction of	0 percent applied	Right turn reduction of	0%

No high speed or isolated community reduction applied to the Volume Warrant thresholds.

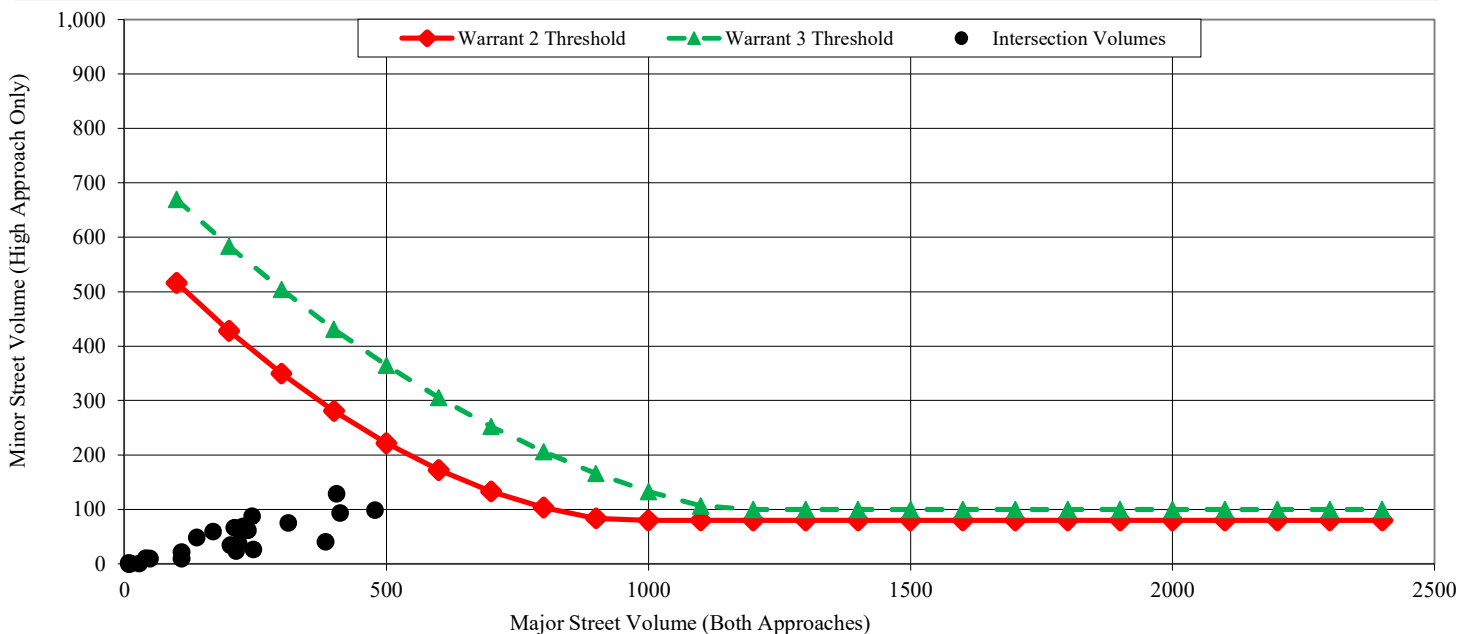
Warrant 1, Eight Hour Vehicular Volume			
	Condition A	Condition B	Condition A+B*
Condition Satisfied?	Not Satisfied	Not Satisfied	Not Satisfied
Required values reached for	0 hours	0 hours	1 (Cond. A) & 0 (Cond. B)
Criteria - Major Street (veh/hr)	420	630	336 (Cond. A) & 504 (Cond. B)
Criteria - Minor Street (veh/hr)	140	70	112 (Cond. A) & 56 (Cond. B)

* Should be applied only after an adequate trial of other alternatives that could cause less delay and inconvenience to traffic has failed to solve the traffic problems.

Warrant 2, Four Hour Vehicular Volume	
Condition Satisfied?	Not Satisfied
Required values reached for	0 hours
Criteria	See Figure Below

Warrant 3, Peak Hour Vehicular Volume		
	Condition A	Condition B
Condition Satisfied?	Not Examined	Not Satisfied
Required values reached for		0 hours
Criteria - Total Approach Volume (veh in one hour)		See Figure Below
Criteria - Minor Street High Side Volume (veh in one hour)		
Criteria - Minor Street High Side Delay (veh-hrs)		

Figure 4C-2 (Warrant 2 - 70% Factor) & Figure 4C-4 (Warrant 3 - 70% Factor)



Traffic Signal Warrant Analysis

Multi-Way Stop Warrants

TMC	2516
Date	11/19/2025
Intersection Geometrics	Thru-Stop

Intersection Information			
Major Street (E/W Road)	CSAH 116	Minor Street (N/S Road)	Zeolite St.
Analyzed with	2 or more approach lanes	Analyzed with	2 or more approach lanes
Total Approach Volume	4470 vehicles	Total Approach Volume	1328 vehicles
Total Ped/Bike Volume	12 crossings	Total Ped/Bike Volume	8 crossings
Right turn reduction of	0 percent applied	Right turn reduction of	0%

Reduction applied to Multi-Way Stop Warrant thresholds due to high speeds on CSAH 116.

Condition A - Traffic Signal Warrant	
Condition Satisfied?	Not Examined
Criteria*	

* Multi-way stop control may be used as an interim measure that can be installed quickly to control traffic while arrangements are being made for the installation of the traffic control signal.

Condition B - Crash Experience	
Condition Satisfied?	Not Examined
Required values reached for	
Criteria - Crash Experience	

Condition C - Intersection Volume & Delay	
Condition Satisfied?	Not Satisfied
Required values reached for	1 hour & sec. average delay/veh
Criteria - Major Street (veh/hr)	210 for any 8 hours of an average day
Criteria - Minor Street (total vol-veh, ped, & bikes/hr)	140 for the same 8 hours of an average day
Criteria - Delay (average sec/veh)	30 during the highest hour

Condition D - Combination Volume, Crash Experience, & Delay	
Condition Satisfied?	Not Examined
Required values reached for	
Criteria - Major Street (veh/hr)	
Criteria - Minor Street (total vol-veh, ped, & bikes/hr)	
Criteria - Crash Experience	
Criteria - Delay (average sec/veh)	