

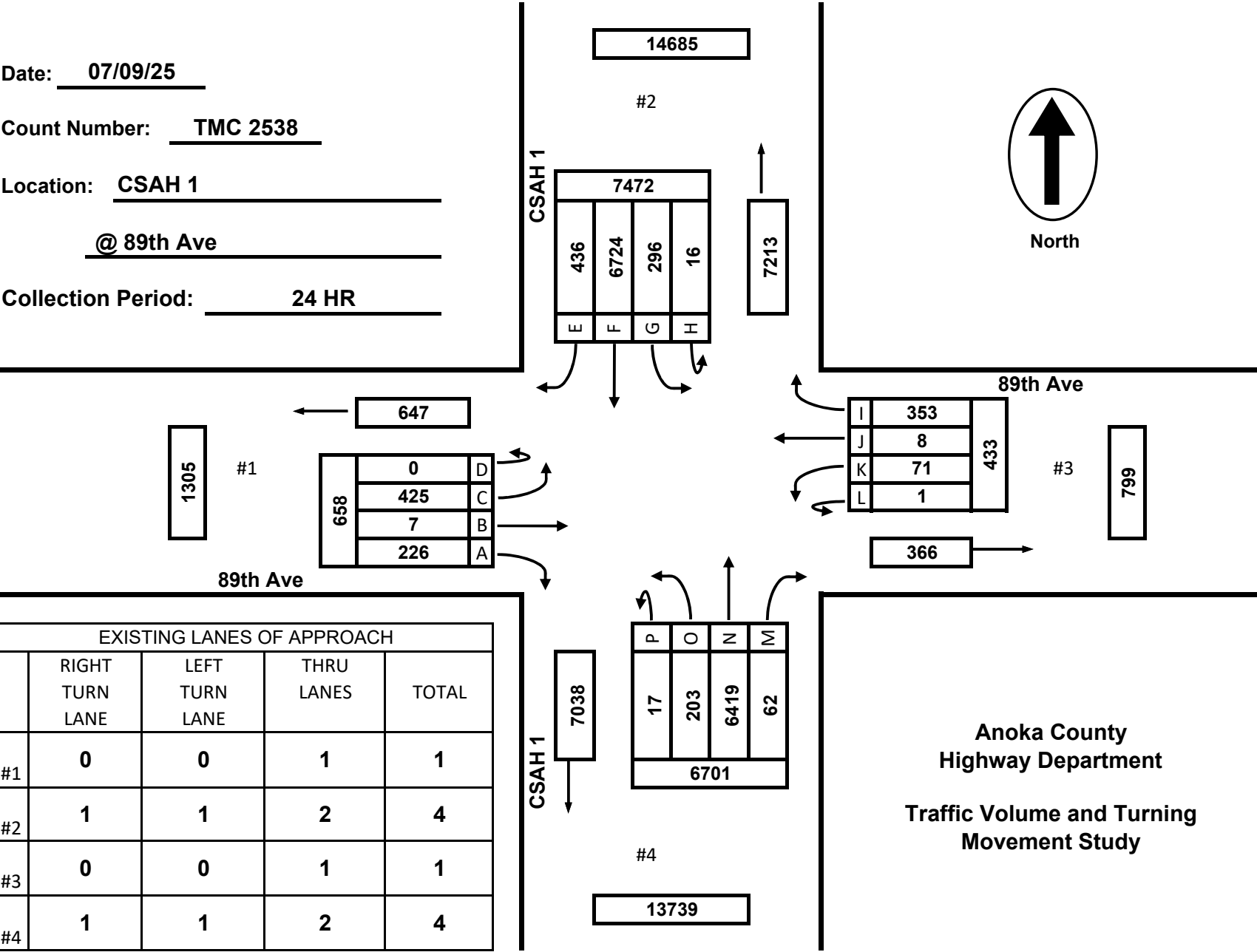
Date: 07/09/25

Count Number: TMC 2538

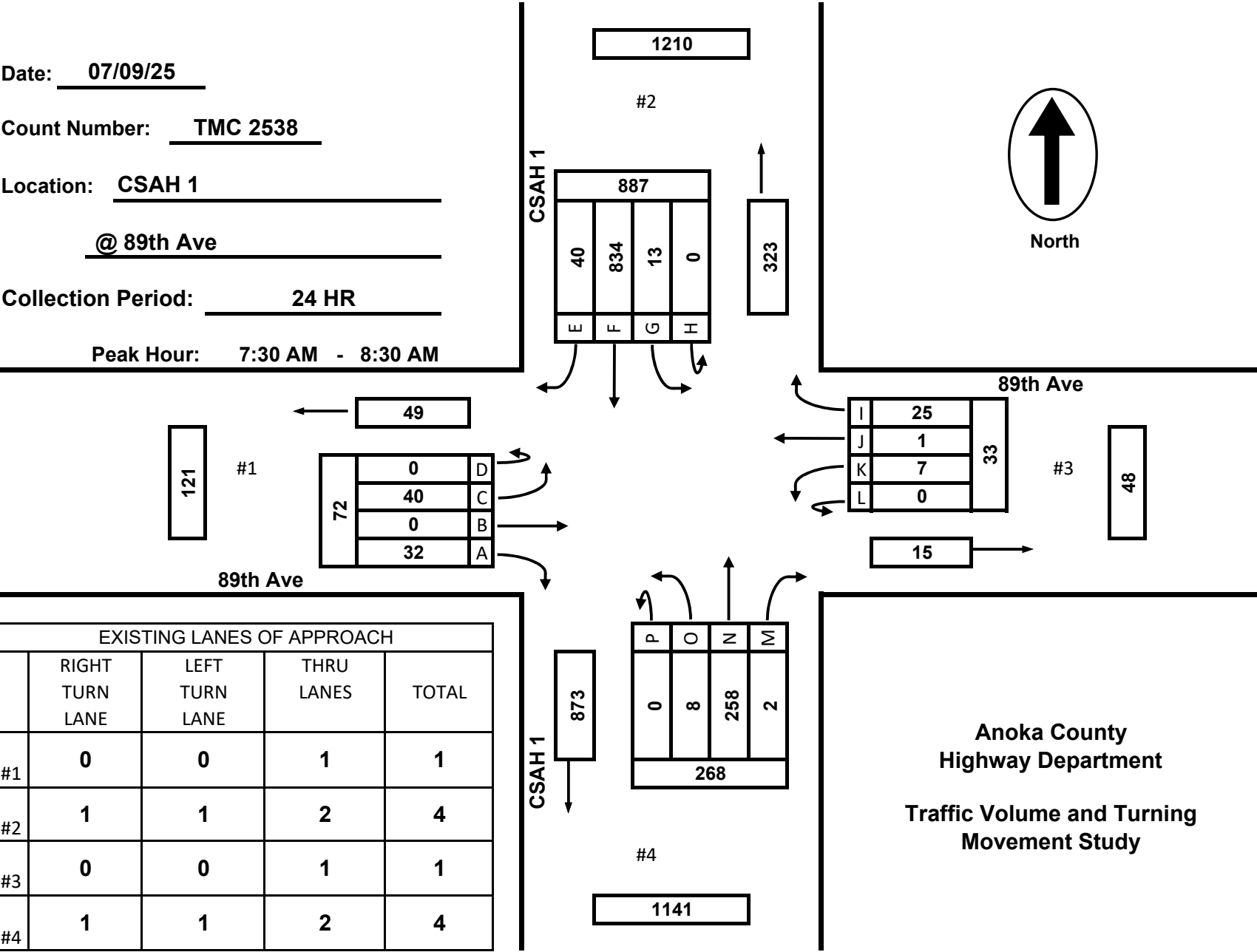
Location: CSAH 1

@ 89th Ave

Collection Period: 24 HR



Date: 07/09/25
 Count Number: TMC 2538
 Location: CSAH 1
@ 89th Ave
 Collection Period: 24 HR
 Peak Hour: 7:30 AM - 8:30 AM



Anoka County
 Highway Department
 Traffic Volume and Turning
 Movement Study

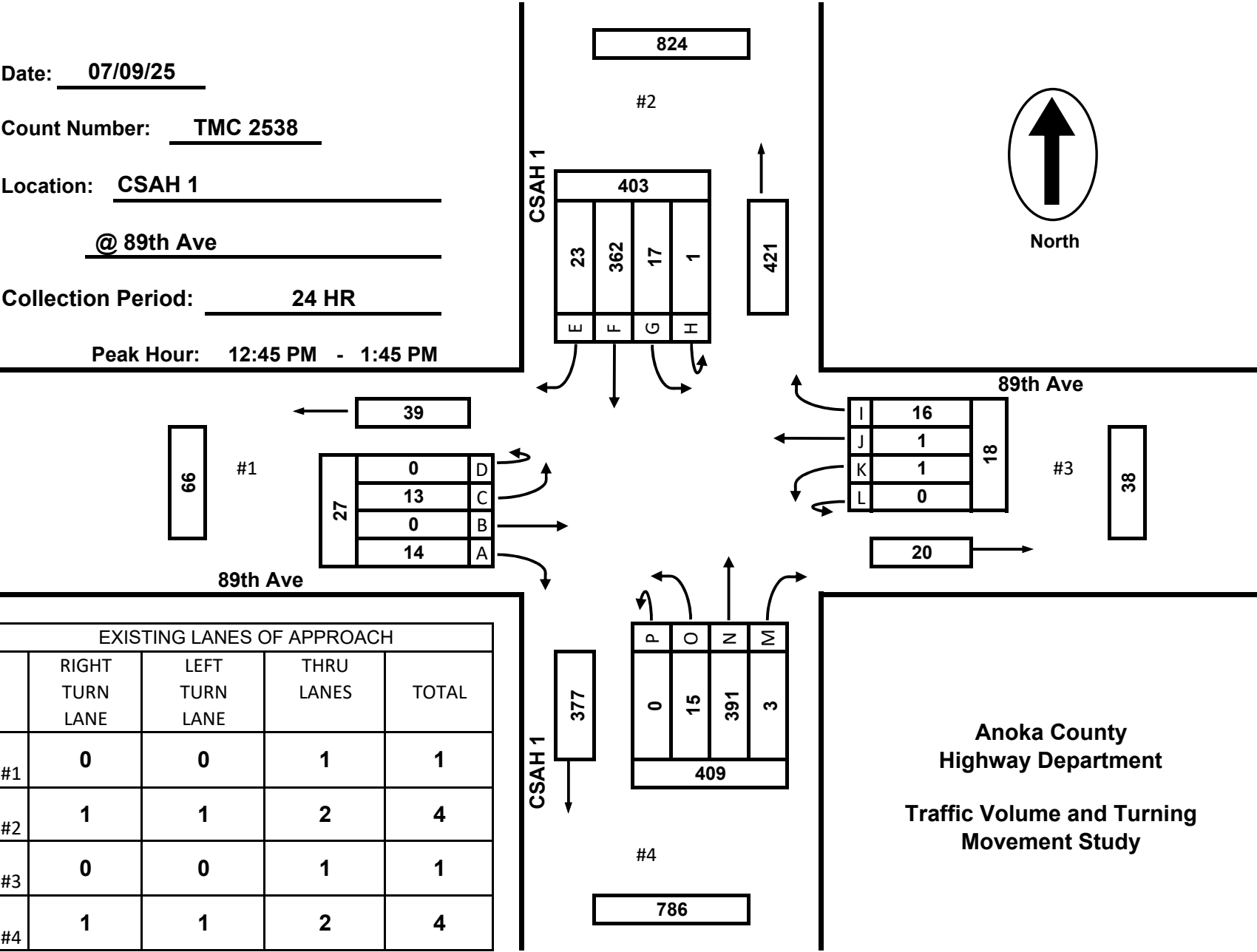
Date: 07/09/25

Count Number: TMC 2538

Location: CSAH 1
@ 89th Ave

Collection Period: 24 HR

Peak Hour: 12:45 PM - 1:45 PM



Date: 07/09/25

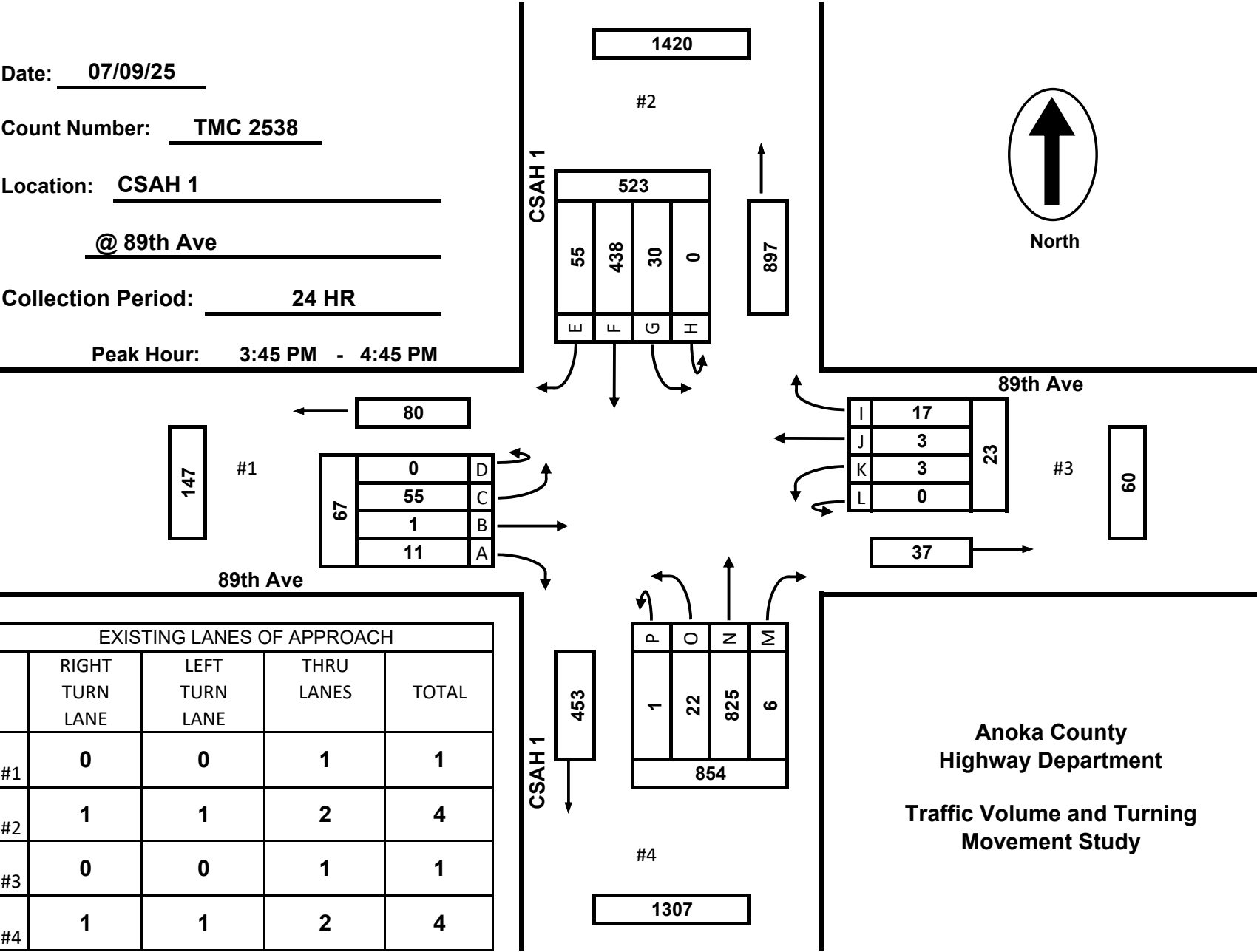
Count Number: TMC 2538

Location: CSAH 1

@ 89th Ave

Collection Period: 24 HR

Peak Hour: 3:45 PM - 4:45 PM



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

**TMC 2538 - CSAH 1 @ 89th Ave
Coon Rapids MN
Wednesday, July 9, 2025**

	Southbound CSAH 1						Westbound 89th Ave						Northbound CSAH 1						Eastbound 89th Ave						VEHICLE TOTAL	
Time	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	7	0	0	7	0	0	0	0	0	0	0	0	7	0	0	0	7	0	0	0	0	0	0	14
12:15 AM	0	0	7	1	0	8	0	0	0	0	0	0	0	0	10	0	0	0	10	0	0	0	0	0	0	18
12:30 AM	0	3	8	0	0	11	0	0	0	0	0	0	0	0	7	1	0	8	0	0	0	0	0	0	0	19
12:45 AM	0	0	5	0	0	5	0	0	0	0	0	0	0	0	5	1	0	6	0	0	0	0	0	0	0	11
Hourly Total	0	3	27	1	0	31	0	0	0	0	0	0	0	0	29	2	0	31	0	0	0	0	0	0	0	62
1:00 AM	0	0	5	1	0	6	0	0	0	0	0	0	0	0	8	0	0	8	0	0	0	0	0	0	0	14
1:15 AM	0	0	8	1	0	9	0	2	0	0	0	2	0	0	3	1	0	4	0	0	0	1	0	0	1	16
1:30 AM	0	0	6	0	0	6	0	0	0	1	0	1	0	0	19	1	0	20	0	0	0	0	0	0	0	27
1:45 AM	0	0	4	0	0	4	0	0	0	0	0	0	0	0	5	0	0	5	0	1	0	0	0	0	1	10
Hourly Total	0	0	23	2	0	25	0	2	0	1	0	3	0	0	35	2	0	37	0	1	0	1	0	2	2	67
2:00 AM	0	2	6	0	0	8	0	0	0	1	0	1	0	1	12	0	0	13	0	0	0	0	0	0	0	22
2:15 AM	0	1	3	1	0	5	0	0	0	0	0	0	0	0	4	0	0	4	0	1	0	0	0	0	1	10
2:30 AM	0	3	5	0	0	8	0	0	0	0	0	0	0	0	3	1	0	4	0	0	0	0	0	0	0	12
2:45 AM	0	0	7	0	0	7	0	0	0	1	0	1	0	0	3	0	0	3	0	0	0	0	0	0	0	11
Hourly Total	0	6	21	1	0	28	0	0	0	2	0	2	0	1	22	1	0	24	0	1	0	0	0	0	1	55
3:00 AM	0	0	5	1	0	6	0	0	0	0	0	0	1	0	9	0	0	10	0	0	0	0	0	0	0	16
3:15 AM	0	0	11	0	0	11	0	0	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	0	15
3:30 AM	0	0	9	0	0	9	0	0	0	0	0	0	0	0	29	0	0	29	0	0	0	0	0	0	0	38
3:45 AM	0	0	8	0	0	8	0	0	0	0	0	0	0	0	8	0	0	8	0	0	0	0	0	0	0	16
Hourly Total	0	0	33	1	0	34	0	0	0	0	0	0	1	0	50	0	0	51	0	0	0	0	0	0	0	85
4:00 AM	0	0	9	0	0	9	0	0	0	2	0	2	0	0	6	0	0	6	0	1	0	0	0	0	1	18
4:15 AM	0	0	18	0	0	18	0	0	0	0	0	0	0	0	6	0	0	6	0	2	0	2	0	0	4	28
4:30 AM	0	0	28	1	0	29	0	0	0	1	0	1	0	0	20	0	0	20	0	2	0	0	0	0	2	52
4:45 AM	1	1	35	1	0	38	0	0	0	1	0	1	0	0	10	0	0	10	0	1	1	0	0	2	2	51
Hourly Total	1	1	90	2	0	94	0	0	0	4	0	4	0	0	42	0	0	42	0	6	1	2	0	9	9	149
5:00 AM	0	0	40	0	0	40	0	0	0	2	0	2	0	0	9	0	0	9	0	1	0	0	0	0	1	52
5:15 AM	1	0	45	0	0	46	0	0	0	4	0	4	0	0	25	0	0	25	0	3	0	0	0	0	3	78
5:30 AM	0	1	55	1	0	57	0	2	0	5	0	7	0	0	27	1	0	28	0	3	0	3	1	0	6	98
5:45 AM	0	0	80	1	0	81	0	1	0	2	0	3	0	0	38	1	0	39	0	1	0	1	0	2	2	125
Hourly Total	1	1	220	2	0	224	0	3	0	13	0	16	0	0	99	2	0	101	0	8	0	4	1	12	12	353
6:00 AM	0	1	57	0	0	58	0	1	0	7	0	8	0	1	30	0	0	31	0	0	0	1	1	1	1	98
6:15 AM	0	1	84	4	0	89	0	0	0	3	1	3	0	0	34	0	0	34	0	0	0	2	1	2	2	128
6:30 AM	1	0	97	11	0	109	0	0	0	2	0	2	0	1	55	0	0	56	0	8	0	8	0	0	16	183
6:45 AM	0	2	108	5	0	115	0	1	0	8	0	9	0	2	47	1	1	50	0	8	0	5	0	0	13	187
Hourly Total	1	4	346	20	0	371	0	2	0	20	1	22	0	4	166	1	1	171	0	16	0	16	2	32	32	596
7:00 AM	0	2	115	15	0	132	0	0	0	7	0	7	1	2	52	0	0	55	0	9	0	8	0	0	17	211
7:15 AM	1	0	153	9	0	163	0	0	0	6	0	6	0	2	56	0	0	58	0	13	0	9	0	0	22	249
7:30 AM	0	4	196	8	0	208	0	1	1	6	0	8	0	3	77	0	0	80	0	7	0	10	0	0	17	313
7:45 AM	0	1	240	10	0	251	0	3	0	6	0	9	0	1	66	1	0	68	0	13	0	10	0	0	23	351
Hourly Total	1	7	704	42	0	754	0	4	1	25	0	30	1	8	251	1	0	261	0	42	0	37	0	79	79	1124

**TMC 2538 - CSAH 1 @ 89th Ave
Coon Rapids MN
Wednesday, July 9, 2025**

Time	Southbound CSAH 1						Westbound 89th Ave						Northbound CSAH 1						Eastbound 89th Ave						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	4	222	10	0	236	0	2	0	8	0	10	0	3	51	1	0	55	0	8	0	7	0	15	316
8:15 AM	0	4	176	12	0	192	0	1	0	5	0	6	0	1	64	0	0	65	0	12	0	5	0	17	280
8:30 AM	0	2	105	7	0	114	0	1	0	7	0	8	0	1	54	0	0	55	0	11	0	3	1	14	191
8:45 AM	0	1	98	10	0	109	0	0	0	6	0	6	0	1	45	0	1	46	0	3	0	5	0	8	169
Hourly Total	0	11	601	39	0	651	0	4	0	26	0	30	0	6	214	1	1	221	0	34	0	20	1	54	956
9:00 AM	0	5	109	4	0	118	0	3	0	6	0	9	1	2	68	0	0	71	0	9	0	6	0	15	213
9:15 AM	1	1	70	3	0	75	0	1	0	3	0	4	0	1	62	0	0	63	0	5	0	1	0	6	148
9:30 AM	0	1	72	6	0	79	0	0	0	8	0	8	0	1	60	0	0	61	0	6	0	1	0	7	155
9:45 AM	0	0	99	6	0	105	0	1	0	5	0	6	1	2	79	0	0	82	0	4	0	3	0	7	200
Hourly Total	1	7	350	19	0	377	0	5	0	22	0	27	2	6	269	0	0	277	0	24	0	11	0	35	716
10:00 AM	0	3	61	5	0	69	0	0	0	4	0	4	1	1	57	2	1	61	0	7	0	4	0	11	145
10:15 AM	0	4	72	3	0	79	0	2	0	4	1	6	0	3	76	1	1	80	0	5	0	1	0	6	171
10:30 AM	0	3	66	5	0	74	1	1	0	5	0	7	0	4	64	2	0	70	0	9	0	4	0	13	164
10:45 AM	1	3	85	2	0	91	0	3	0	6	0	9	2	2	89	0	0	93	0	4	0	0	0	4	197
Hourly Total	1	13	284	15	0	313	1	6	0	19	1	26	3	10	286	5	2	304	0	25	0	9	0	34	677
11:00 AM	0	6	67	0	0	73	0	3	0	7	0	10	0	1	65	1	0	67	0	10	0	2	0	12	162
11:15 AM	0	3	75	5	0	83	0	1	1	5	0	7	1	3	74	1	0	79	0	5	0	2	0	7	176
11:30 AM	0	2	87	4	0	93	0	4	0	3	0	7	0	4	80	0	0	84	0	4	0	3	0	7	191
11:45 AM	2	2	78	8	0	90	0	2	0	8	0	10	0	2	92	0	0	94	0	6	0	2	1	8	202
Hourly Total	2	13	307	17	0	339	0	10	1	23	0	34	1	10	311	2	0	324	0	25	0	9	1	34	731
12:00 PM	0	2	74	9	0	85	0	0	0	1	0	1	0	2	88	1	0	91	0	13	0	3	0	16	193
12:15 PM	0	2	82	4	0	88	0	1	0	9	0	10	0	1	93	1	0	95	0	6	0	4	6	10	203
12:30 PM	0	4	83	4	0	91	0	0	0	4	0	4	0	5	96	1	0	102	0	3	0	5	0	8	205
12:45 PM	1	3	97	5	0	106	0	1	0	2	0	3	0	4	97	0	0	101	0	6	0	4	0	10	220
Hourly Total	1	11	336	22	0	370	0	2	0	16	0	18	0	12	374	3	0	389	0	28	0	16	6	44	821
1:00 PM	0	6	94	7	0	107	0	0	1	7	1	8	0	4	88	0	0	92	0	0	0	4	2	4	211
1:15 PM	0	5	91	8	0	104	0	0	0	1	0	1	0	5	97	1	0	103	0	0	0	2	1	2	210
1:30 PM	0	3	80	3	0	86	0	0	0	6	0	6	0	2	109	2	0	113	0	7	0	4	1	11	216
1:45 PM	2	1	100	4	0	107	0	0	0	6	0	6	0	3	81	0	0	84	0	9	0	2	0	11	208
Hourly Total	2	15	365	22	0	404	0	0	1	20	1	21	0	14	375	3	0	392	0	16	0	12	4	28	845
2:00 PM	0	9	97	4	0	110	0	2	0	5	0	7	0	4	95	1	0	100	0	3	0	0	0	3	220
2:15 PM	0	2	130	2	1	134	0	1	0	8	1	9	1	4	112	1	0	118	0	6	0	5	0	11	272
2:30 PM	0	4	111	2	0	117	0	0	0	7	0	7	0	3	172	0	0	175	0	3	0	6	0	9	308
2:45 PM	0	2	101	7	0	110	0	1	0	8	0	9	0	6	136	2	0	144	0	4	0	0	0	4	267
Hourly Total	0	17	439	15	1	471	0	4	0	28	1	32	1	17	515	4	0	537	0	16	0	11	0	27	1067
3:00 PM	1	10	142	6	0	159	0	2	1	3	0	6	0	4	151	2	0	157	0	8	1	3	0	12	334
3:15 PM	1	10	105	6	0	122	0	0	0	6	0	6	0	4	184	1	0	189	0	6	2	4	0	12	329
3:30 PM	1	5	96	10	0	112	0	0	0	3	0	3	0	7	203	2	1	212	0	3	0	6	0	9	336
3:45 PM	0	3	111	15	0	129	0	0	1	3	0	4	0	4	194	1	0	199	0	14	0	4	0	18	350
Hourly Total	3	28	454	37	0	522	0	2	2	15	0	19	0	19	732	6	1	757	0	31	3	17	0	51	1349

TMC 2538 - CSAH 1 @ 89th Ave
Coon Rapids MN
Wednesday, July 9, 2025

Time	Southbound CSAH 1						Westbound 89th Ave						Northbound CSAH 1						Eastbound 89th Ave						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	7	93	18	0	118	0	1	0	4	0	5	0	3	209	2	0	214	0	17	0	6	0	23	360
4:15 PM	0	10	102	11	0	123	0	0	1	5	0	6	1	8	200	1	0	210	0	11	0	0	0	11	350
4:30 PM	0	10	132	11	0	153	0	2	1	5	0	8	0	7	222	2	0	231	0	13	1	1	0	15	407
4:45 PM	0	3	120	7	0	130	0	1	0	9	0	10	0	8	175	0	0	183	0	14	0	2	0	16	339
Hourly Total	0	30	447	47	0	524	0	4	2	23	0	29	1	26	806	5	0	838	0	55	1	9	0	65	1456
5:00 PM	0	8	102	8	1	118	0	1	0	3	0	4	0	4	162	1	0	167	0	10	0	3	2	13	302
5:15 PM	0	11	135	13	0	159	0	2	0	10	0	12	1	7	164	4	0	176	0	8	0	2	0	10	357
5:30 PM	0	6	120	13	0	139	0	1	0	8	0	9	0	5	112	2	0	119	0	15	0	7	0	22	289
5:45 PM	0	5	112	8	0	125	0	1	0	4	0	5	0	4	121	0	0	125	0	16	0	2	0	18	273
Hourly Total	0	30	469	42	1	541	0	5	0	25	0	30	1	20	559	7	0	587	0	49	0	14	2	63	1221
6:00 PM	0	5	101	5	0	111	0	3	0	9	0	12	0	4	96	1	0	101	0	4	0	4	0	8	232
6:15 PM	0	7	85	7	0	99	0	4	0	3	0	7	0	2	99	1	0	102	0	4	0	6	0	10	218
6:30 PM	0	4	92	7	0	103	0	0	0	2	0	2	0	3	99	1	0	103	0	5	1	4	0	10	218
6:45 PM	1	6	80	2	0	89	0	1	0	6	0	7	0	4	74	3	0	81	0	6	0	4	0	10	187
Hourly Total	1	22	358	21	0	402	0	8	0	20	0	28	0	13	368	6	0	387	0	19	1	18	0	38	855
7:00 PM	0	6	74	5	0	85	0	2	0	4	0	6	1	7	79	2	0	89	0	5	0	2	0	7	187
7:15 PM	0	8	60	3	1	71	0	1	1	6	0	8	0	3	72	1	0	76	0	3	0	3	1	6	161
7:30 PM	0	4	48	10	0	62	0	1	0	4	0	5	1	5	64	1	0	71	0	3	0	1	2	4	142
7:45 PM	0	10	52	1	0	63	0	1	0	1	0	2	0	4	52	0	0	56	0	0	0	1	0	1	122
Hourly Total	0	28	234	19	1	281	0	5	1	15	0	21	2	19	267	4	0	292	0	11	0	7	3	18	612
8:00 PM	0	1	70	2	0	73	0	0	0	6	0	6	1	2	70	1	0	74	0	1	1	2	0	4	157
8:15 PM	0	5	72	6	0	83	0	0	0	6	2	6	1	6	65	0	0	72	0	3	0	2	0	5	166
8:30 PM	0	4	54	1	0	59	0	1	0	3	0	4	0	1	65	0	0	66	0	2	0	1	2	3	132
8:45 PM	0	3	65	1	0	69	0	0	0	2	0	2	0	2	48	0	0	50	0	2	0	1	2	3	124
Hourly Total	0	13	261	10	0	284	0	1	0	17	2	18	2	11	248	1	0	262	0	8	1	6	4	15	579
9:00 PM	1	4	47	5	0	57	0	1	0	3	0	4	1	0	52	1	0	54	0	1	0	2	1	3	118
9:15 PM	0	2	61	13	0	76	0	1	0	2	0	3	0	1	60	0	0	61	0	0	0	1	1	1	141
9:30 PM	0	3	39	4	0	46	0	0	0	2	0	2	1	0	59	3	0	63	0	1	0	3	1	4	115
9:45 PM	0	4	34	6	0	44	0	1	0	1	0	2	0	1	48	0	0	49	0	2	0	0	0	2	97
Hourly Total	1	13	181	28	0	223	0	3	0	8	0	11	2	2	219	4	0	227	0	4	0	6	3	10	471
10:00 PM	0	5	35	1	0	41	0	0	0	2	0	2	0	1	30	0	0	31	0	1	0	0	0	1	75
10:15 PM	0	3	31	3	0	37	0	0	0	1	0	1	0	0	29	0	0	29	0	2	0	1	0	3	70
10:30 PM	0	1	25	3	0	29	0	0	0	2	0	2	0	2	27	1	0	30	0	1	0	0	0	1	62
10:45 PM	0	5	23	2	0	30	0	0	0	1	0	1	0	0	24	1	0	25	0	0	0	0	0	0	56
Hourly Total	0	14	114	9	0	137	0	0	0	6	0	6	0	3	110	2	0	115	0	4	0	1	0	5	263
11:00 PM	0	2	14	2	0	18	0	1	0	2	0	3	0	1	28	0	0	29	0	2	0	0	0	2	52
11:15 PM	0	2	17	0	0	19	0	0	0	0	0	0	0	0	17	0	0	17	0	0	0	0	0	0	36
11:30 PM	0	1	15	0	0	16	0	0	0	1	0	1	0	0	17	0	0	17	0	0	0	0	0	0	34
11:45 PM	0	4	14	1	0	19	0	0	0	2	0	2	0	1	10	0	0	11	0	0	0	0	0	0	32
Hourly Total	0	9	60	3	0	72	0	1	0	5	0	6	0	2	72	0	0	74	0	2	0	0	0	2	154
DAILY TOTAL	16	296	6724	436	3	7472	1	71	8	353	6	433	17	203	6419	62	5	6701	0	425	7	226	27	658	15264
Cars	16	295	6511	428	2	7250	1	70	8	348	6	427	17	203	6236	61	4	6517	0	419	7	226	22	652	14846
Heavy Vehicles	0	1	213	8	1	222	0	1	0	5	0	6	0	0	183	1	1	184	0	6	0	0	5	6	418
Heavy Vehicle %	0.00%	0.34%	3.17%	1.83%	33.33%	2.97%	0.00%	1.41%	0.00%	1.42%	0.00%	1.39%	0.00%	0.00%	2.85%	1.61%	20.00%	2.75%	0.00%	1.41%	0.00%	0.00%	18.52%	0.91%	2.74%

TMC 2538 - CSAH 1 @ 89th Ave
Coon Rapids MN
Wednesday, July 9, 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	
7:30 AM	0	4	196	8	0	208	0	1	1	6	0	8	0	3	77	0	0	80	0	7	0	10	0	17	313
7:45 AM	0	1	240	10	0	251	0	3	0	6	0	9	0	1	66	1	0	68	0	13	0	10	0	23	351
8:00 AM	0	4	222	10	0	236	0	2	0	8	0	10	0	3	51	1	0	55	0	8	0	7	0	15	316
8:15 AM	0	4	176	12	0	192	0	1	0	5	0	6	0	1	64	0	0	65	0	12	0	5	0	17	280
Peak Hour Total	0	13	834	40	0	887	0	7	1	25	0	33	0	8	258	2	0	268	0	40	0	32	0	72	1260
Peak Hour Heavy Vehicles	0	1	28	0	0	29	0	0	0	1	0	1	0	0	22	0	0	22	0	0	0	0	0	0	52
Peak Hour Heavy Vehicles %	0.00%	7.69%	3.36%	0.00%	0.00%	3.27%	0.00%	0.00%	0.00%	4.00%	0.00%	3.03%	0.00%	0.00%	8.53%	0.00%	0.00%	8.21%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	4.13%
PHF	0.000	0.813	0.869	0.833	0.000	0.883	0.000	0.583	0.250	0.781	0.000	0.825	0.000	0.667	0.838	0.500	0.000	0.838	0.000	0.769	0.000	0.800	0.000	0.783	0.897

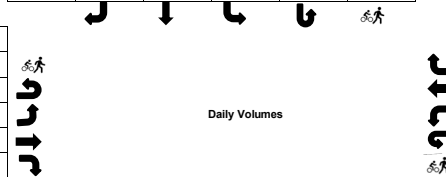
Mid Peak Hour (10:00 - 14:00)

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	
12:45 PM	1	3	97	5	0	106	0	1	0	2	0	3	0	4	97	0	0	101	0	6	0	4	0	10	220
1:00 PM	0	6	94	7	0	107	0	0	1	7	1	8	0	4	88	0	0	92	0	0	0	4	2	4	211
1:15 PM	0	5	91	8	0	104	0	0	0	1	0	1	0	5	97	1	0	103	0	0	0	2	1	2	210
1:30 PM	0	3	80	3	0	86	0	0	0	6	0	6	0	2	109	2	0	113	0	7	0	4	1	11	216
Peak Hour Total	1	17	362	23	0	403	0	1	1	16	1	18	0	15	391	3	0	409	0	13	0	14	4	27	857
Peak Hour Heavy Vehicles	0	0	15	1	0	16	0	0	0	0	0	0	0	0	16	0	0	16	0	0	0	0	0	0	32
Peak Hour Heavy Vehicles %	0.00%	0.00%	4.14%	4.35%	0.00%	3.97%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	4.09%	0.00%	0.00%	3.91%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.73%
PHF	0.250	0.708	0.933	0.719	0.000	0.942	0.000	0.250	0.250	0.571	0.250	0.563	0.000	0.750	0.897	0.375	0.000	0.905	0.000	0.464	0.000	0.875	0.500	0.614	0.974

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	
3:45 PM	0	3	111	15	0	129	0	0	1	3	0	4	0	4	194	1	0	199	0	14	0	4	0	18	350
4:00 PM	0	7	93	18	0	118	0	1	0	4	0	5	0	3	209	2	0	214	0	17	0	6	0	23	360
4:15 PM	0	10	102	11	0	123	0	0	1	5	0	6	1	8	200	1	0	210	0	11	0	0	0	11	350
4:30 PM	0	10	132	11	0	153	0	2	1	5	0	8	0	7	222	2	0	231	0	13	1	1	0	15	407
Peak Hour Total	0	30	438	55	0	523	0	3	3	17	0	23	1	22	825	6	0	854	0	55	1	11	0	67	1467
Peak Hour Heavy Vehicles	0	0	8	0	0	8	0	0	0	0	0	0	0	0	11	0	0	11	0	0	0	0	0	0	19
Peak Hour Heavy Vehicles %	0.00%	0.00%	1.83%	0.00%	0.00%	1.53%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.33%	0.00%	0.00%	1.29%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.30%
PHF	0.000	0.750	0.830	0.764	0.000	0.855	0.000	0.375	0.750	0.850	0.000	0.719	0.250	0.688	0.929	0.750	0.000	0.924	0.000	0.809	0.250	0.458	0.000	0.728	0.901

Total Vehicles On Leg			14685		
Vehicles Entering Intersection 7472			Vehicles Exiting Intersection 7213		
Southbound					
Cars	428	6511	295	16	2
Heavy	8	213	1	0	1
Total	436	6724	296	16	3



Daily Volumes

Total Vehicles on Leg 1305	Vehicles Entering Intersection 658	Eastbound	Cars	Heavy	Total	
			22	5	27	
			0	0	0	
	Vehicles Exiting Intersection 647		419	6	425	
			7	0	7	
			226	0	226	

Cars	Heavy	Total	Westbound	Vehicles Entering Intersection 433	Total Vehicles on Leg 799
348	5	353			
8	0	8			
70	1	71		Vehicles Exiting Intersection 366	
1	0	1			
6	0	6			

Cars	4	17	203	6236	61
Heavy	1	0	0	183	1
Total	5	17	203	6419	62
Northbound					
Vehicles Entering Intersection			Vehicles Exiting Intersection		
6701			7038		
Total Vehicles On Leg			13739		

TMC 2538 - CSAH 1 @ 89th Ave
Coon Rapids MN
Wednesday, July 9, 2025

Time	Southbound Heavy CSAH 1						Westbound Heavy 89th Ave						Northbound Heavy CSAH 1						Eastbound Heavy 89th Ave						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	1	0	0	1	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2
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	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
2:45 AM	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Hourly 'Heavy Vehicles'	0	0	5	0	0	5	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	6
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1
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	1	0	0	1	0	0	0	0	0	0	1
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1
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	1	0	0	1	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2
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	1	0	0	1	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	3
5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1
5:15 AM	0	0	2	0	0	2	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	3
5:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	2
5:45 AM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Hourly 'Heavy Vehicles'	0	0	3	0	0	3	0	0	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	7
6:00 AM	0	0	4	0	0	4	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	7
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	2
6:30 AM	0	0	3	0	0	3	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	4
6:45 AM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	3
Hourly 'Heavy Vehicles'	0	0	8	0	0	8	0	0	0	0	0	0	0	0	8	0	0	8	0	0	0	0	0	0	16
7:00 AM	0	0	5	0	0	5	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	6
7:15 AM	0	0	2	0	0	2	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	3
7:30 AM	0	1	6	0	0	7	0	0	0	1	0	1	0	0	1	0	0	1	0	0	0	0	0	0	9
7:45 AM	0	0	8	0	0	8	0	0	0	0	0	0	0	0	8	0	0	8	0	0	0	0	0	0	16
Hourly 'Heavy Vehicles'	0	1	21	0	0	22	0	0	0	1	0	1	0	0	11	0	0	11	0	0	0	0	0	0	34

TMC 2538 - CSAH 1 @ 89th Ave
Coon Rapids MN
Wednesday, July 9, 2025

Time	Southbound Heavy CSAH 1						Westbound Heavy 89th Ave						Northbound Heavy CSAH 1						Eastbound Heavy 89th Ave						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	7	0	0	7	0	0	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	12
8:15 AM	0	0	7	0	0	7	0	0	0	0	0	0	0	0	8	0	0	8	0	0	0	0	0	0	15
8:30 AM	0	0	3	0	0	3	0	0	0	1	0	1	0	0	4	0	0	4	0	0	0	0	0	0	8
8:45 AM	0	0	5	0	0	5	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	8
Hourly 'Heavy Vehicles'	0	0	22	0	0	22	0	0	0	1	0	1	0	0	20	0	0	20	0	0	0	0	0	0	43
9:00 AM	0	0	6	1	0	7	0	0	0	1	0	1	0	0	4	0	0	4	0	0	0	0	0	0	12
9:15 AM	0	0	4	0	0	4	0	0	0	0	0	0	0	0	9	0	0	9	0	0	0	0	0	0	13
9:30 AM	0	0	3	0	0	3	0	0	0	0	0	0	0	0	3	0	0	3	0	1	0	0	0	1	7
9:45 AM	0	0	2	0	0	2	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	3
Hourly 'Heavy Vehicles'	0	0	15	1	0	16	0	0	0	1	0	1	0	0	17	0	0	17	0	1	0	0	0	1	35
10:00 AM	0	0	3	0	0	3	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	5
10:15 AM	0	0	2	0	0	2	0	0	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	6
10:30 AM	0	0	5	0	0	5	0	0	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	0	11
10:45 AM	0	0	4	0	0	4	0	0	0	0	0	0	0	0	6	0	0	6	0	1	0	0	0	1	11
Hourly 'Heavy Vehicles'	0	0	14	0	0	14	0	0	0	0	0	0	0	0	18	0	0	18	0	1	0	0	0	1	33
11:00 AM	0	0	4	0	0	4	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	5
11:15 AM	0	0	4	0	0	4	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	6
11:30 AM	0	0	10	0	0	10	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	11
11:45 AM	0	0	7	0	0	7	0	0	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	12
Hourly 'Heavy Vehicles'	0	0	25	0	0	25	0	0	0	0	0	0	0	0	9	0	0	9	0	0	0	0	0	0	34
12:00 PM	0	0	3	1	0	4	0	0	0	1	0	1	0	0	6	0	0	6	0	0	0	0	0	0	11
12:15 PM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	4
12:30 PM	0	0	7	0	0	7	0	0	0	0	0	0	0	0	3	0	0	3	0	1	0	0	0	1	11
12:45 PM	0	0	6	0	0	6	0	0	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	0	12
Hourly 'Heavy Vehicles'	0	0	17	1	0	18	0	0	0	1	0	1	0	0	18	0	0	18	0	1	0	0	0	1	38
1:00 PM	0	0	6	1	0	7	0	0	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	11
1:15 PM	0	0	2	0	0	2	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	5
1:30 PM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	4
1:45 PM	0	0	4	0	0	4	0	0	0	0	0	0	0	0	5	0	0	5	0	1	0	0	0	1	10
Hourly 'Heavy Vehicles'	0	0	13	1	0	14	0	0	0	0	0	0	0	0	15	0	0	15	0	1	0	0	0	1	30
2:00 PM	0	0	3	0	0	3	0	1	0	0	0	1	0	0	8	1	0	9	0	0	0	0	0	0	13
2:15 PM	0	0	7	0	0	7	0	0	0	0	0	0	0	0	2	0	0	2	0	1	0	0	0	1	10
2:30 PM	0	0	6	0	0	6	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	8
2:45 PM	0	0	5	0	0	5	0	0	0	1	0	1	0	0	5	0	0	5	0	0	0	0	0	0	11
Hourly 'Heavy Vehicles'	0	0	21	0	0	21	0	1	0	1	0	2	0	0	17	1	0	18	0	1	0	0	0	1	42
3:00 PM	0	0	8	0	0	8	0	0	0	0	0	0	0	0	8	0	0	8	0	0	0	0	0	0	16
3:15 PM	0	0	3	0	0	3	0	0	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	8
3:30 PM	0	0	4	0	0	4	0	0	0	0	0	0	0	0	3	0	1	3	0	0	0	0	0	0	7
3:45 PM	0	0	3	0	0	3	0	0	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	8
Hourly 'Heavy Vehicles'	0	0	18	0	0	18	0	0	0	0	0	0	0	0	21	0	1	21	0	0	0	0	0	0	39

TMC 2538 - CSAH 1 @ 89th Ave
Coon Rapids MN
Wednesday, July 9, 2025

	Southbound Heavy CSAH 1						Westbound Heavy 89th Ave						Northbound Heavy CSAH 1						Eastbound Heavy 89th Ave						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	0	0	1	0	0	0	0	0	0	0	0	3	0	0	0	3	0	0	0	0	0	0	4
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	
4:30 PM	0	0	4	0	0	4	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	6	
4:45 PM	0	0	1	1	0	2	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	3	
Hourly 'Heavy Vehicles'	0	0	6	1	0	7	0	0	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	0	14	
5:00 PM	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	2	
5:15 PM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
5:30 PM	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
5:45 PM	0	0	2	0	0	2	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	3	
Hourly 'Heavy Vehicles'	0	0	6	0	1	6	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0	0	0	1	8	
6:00 PM	0	0	1	1	0	2	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	4	
6:15 PM	0	0	2	2	0	4	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	6	
6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	
6:45 PM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
Hourly 'Heavy Vehicles'	0	0	4	3	0	7	0	0	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	12	
7:00 PM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
7:15 PM	0	0	2	0	0	2	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	1	0	4	
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	2	0	0	
7:45 PM	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
Hourly 'Heavy Vehicles'	0	0	5	0	0	5	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	3	0	7	
8:00 PM	0	0	2	0	0	2	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	4	
8:15 PM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
8:30 PM	0	0	2	0	0	2	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	3	
8:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	
Hourly 'Heavy Vehicles'	0	0	5	0	0	5	0	0	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	9	
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	1	0	0	
9:15 PM	0	0	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
9:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1	0	1	
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	1	1	0	2	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	2	0	3	
10:00 PM	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
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	1	0	0	1	0	0	0	0	0	0	1	
Hourly 'Heavy Vehicles'	0	0	2	0	0	2	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	3	
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	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
Hourly 'Heavy Vehicles'	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
DAILY 'Heavy Vehicles'	0	1	213	8	1	222	0	1	0	5	0	6	0	0	183	1	1	184	0	6	0	0	5	6	418	

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2538

Study Date : 08/07/2025

Signal Warrants - Summary

Major Street Approaches

Northbound: CSAH 1

Number of Lanes : 2+

Total Approach Volume: 6,701

Southbound: CSAH 1

Number of Lanes : 2+

Total Approach Volume: 7,472

Minor Street Approaches

Eastbound: 89th Ave

Number of Lanes : 1

Total Approach Volume: 658

Westbound: 89th Ave

Number of Lanes : 1

Total Approach Volume: 433

Warrant Summary (Rural Values Apply)

Warrant 1 - Eight Hour Vehicular Volumes..... **Not Satisfied**

Warrant 1A - Minimum Vehicular Volume..... **Not Satisfied**

Required volumes reached for 0 hours, 8 are needed

Warrant 1B - Interruption of Continuous Traffic..... **Not Satisfied**

Required volumes reached for 5 hours, 8 are needed

Warrant 1C - Combination of Warrants..... **Not Satisfied**

Required 1A volumes reached for 0 hours, 8 are needed

Required 1B volumes reached for 7 hours, 8 are needed

Warrant 2 - Four Hour Volumes..... **Satisfied**

Number of hours (4) volumes exceed minimum >= minimum required (4).

Warrant 3 - Peak Hour..... **Not Satisfied**

Warrant 3A - Peak Hour Delay..... **Not Satisfied**

Approach volumes on minor street don't exceed minimums for any one hour period. Delay data not evaluated.

Warrant 3B - Peak Hour Volumes..... **Not Satisfied**

Volumes do not exceed minimums for any one hour period.

Warrant 4 - Pedestrian Volumes..... **Not Evaluated**

Warrant 5 - School Crossing..... **Not Evaluated**

Warrant 6 - Coordinated Signal System..... **Not Evaluated**

Warrant 7 - Crash Experience..... **Not Evaluated**

Warrant 8 - Roadway Network..... **Not Evaluated**

Warrant 9 - Intersection Near a Grade Crossing..... **Not Evaluated**

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2538

Study Date : 08/07/2025

Warrant 1A - Minimum Volumes

Description

Intended for sites where the volume of intersecting traffic is the principal reason for consideration of a signal installation.

Summary

Only 0 one hour periods meet minimums.
Warrant is NOT met.

Site Data Required

Rural Settings Apply = **True**
Number of Major Lanes = **2 or more**
Number of Minor Lanes = **1**

Volume Requirements

Rural Factor of 70 % applied
Veh/Hr Major = **420**

Veh/Hr Minor = **105**

Major Road						Minor Road		
CSAH 1						89th Ave		
Time	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	Met?
15:45 - 16:45	854	+	523	=	1377	67	23	No
16:00 - 17:00	838	+	524	=	1362	65	29	No
15:30 - 16:30	835	+	482	=	1317	61	18	No
16:30 - 17:30	757	+	560	=	1317	54	34	No
16:15 - 17:15	791	+	524	=	1315	55	28	No
15:15 - 16:15	814	+	481	=	1295	62	18	No
15:00 - 16:00	757	+	522	=	1279	51	19	No
14:45 - 15:45	702	+	503	=	1205	37	24	No
16:45 - 17:45	645	+	546	=	1191	61	35	No
14:30 - 15:30	665	+	508	=	1173	37	28	No
07:30 - 08:30	268	+	887	=	1155	72	33	No
17:00 - 18:00	587	+	541	=	1128	63	30	No
07:15 - 08:15	261	+	858	=	1119	77	33	No
14:15 - 15:15	594	+	520	=	1114	36	31	No
17:15 - 18:15	521	+	534	=	1055	58	38	No
07:45 - 08:45	243	+	793	=	1036	69	33	No
07:00 - 08:00	261	+	754	=	1015	79	30	No
14:00 - 15:00	537	+	471	=	1008	27	32	No
13:45 - 14:45	477	+	468	=	945	34	29	No
17:30 - 18:30	447	+	474	=	921	58	33	No
08:00 - 09:00	221	+	651	=	872	54	30	No
17:45 - 18:45	431	+	438	=	869	46	26	No
06:45 - 07:45	243	+	618	=	861	69	30	No
13:30 - 14:30	415	+	437	=	852	36	28	No
12:45 - 13:45	409		403		812	27	18	No

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2538

Study Date : 08/07/2025

Warrant 1B - Interruption of Continuous Traffic

Description

Intended for sites where the volume of the major street is so heavy that traffic on the minor street suffers excessive delay or hazard.

Summary

Only 5 one hour periods meet minimums.
Warrant is NOT met.

Site Data Required

Rural Settings Apply = **True**
Number of Major Lanes = **2 or more**
Number of Minor Lanes = **1**

Volume Requirements

Rural Factor of 70 % applied
Veh/Hr Major = **630**

Veh/Hr Minor = **53**

Major Road CSAH 1						Minor Road 89th Ave		
Time	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	Met?
16:15 - 17:15	791	+	524	=	1315	55	28	Yes
15:15 - 16:15	814	+	481	=	1295	62	18	Yes
07:30 - 08:30	268	+	887	=	1155	72	33	Yes
17:15 - 18:15	521	+	534	=	1055	58	38	Yes
06:30 - 07:30	219	+	519	=	738	68	24	Yes
15:00 - 16:00	757	+	522	=	1279	51	19	No
14:45 - 15:45	702	+	503	=	1205	37	24	No
14:30 - 15:30	665	+	508	=	1173	37	28	No
14:15 - 15:15	594	+	520	=	1114	36	31	No
14:00 - 15:00	537	+	471	=	1008	27	32	No
13:45 - 14:45	477	+	468	=	945	34	29	No
13:30 - 14:30	415	+	437	=	852	36	28	No
12:45 - 13:45	409	+	403	=	812	27	18	No
13:15 - 14:15	400	+	407	=	807	27	20	No
12:30 - 13:30	398	+	408	=	806	24	16	No
13:00 - 14:00	392	+	404	=	796	28	21	No
12:15 - 13:15	390	+	392	=	782	32	25	No
12:00 - 13:00	389	+	370	=	759	44	18	No
18:15 - 19:15	375	+	376	=	751	37	22	No
11:45 - 12:45	382	+	354	=	736	42	25	No
11:30 - 12:30	364	+	356	=	720	41	28	No
11:15 - 12:15	348	+	351	=	699	38	25	No
18:30 - 19:30	349	+	348	=	697	33	23	No
11:00 - 12:00	324	+	339	=	663	34	34	No
10:45 - 11:45	323		340		663	30	33	No

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2538

Study Date : 08/07/2025

Warrant 1C Combination of Warrants

Description

Intended for sites where the traffic volumes don't meet individual warrants but where Warrants 1A and 1B are both met to 80% of their stated values.

Summary

Only 0 hours meet 1A minimums.
Only 7 hours meet 1B minimums.
Warrant is NOT met.

Site Data Required

Rural Settings Apply = **True**
Number of Major Lanes = **2 or more**
Number of Minor Lanes = **1**

Volume Requirements

Rural Factor of 70% applied
Warrant 1A 1B
Veh/Hr Major = **336 504**

Veh/Hr Minor = **84 42**

Major Road CSAH 1						Minor Road 89th Ave				
Time	Major NB	+	Major SB	=	Total	Minor EB		Minor WB		Met1A?
15:45 - 16:45	854	+	523	=	1377	67		23		No
16:00 - 17:00	838	+	524	=	1362	65		29		No
15:30 - 16:30	835	+	482	=	1317	61		18		No
16:30 - 17:30	757	+	560	=	1317	54		34		No
16:15 - 17:15	791	+	524	=	1315	55		28		No
15:15 - 16:15	814	+	481	=	1295	62		18		No
15:00 - 16:00	757	+	522	=	1279	51		19		No
14:45 - 15:45	702	+	503	=	1205	37		24		No
16:45 - 17:45	645	+	546	=	1191	61		35		No
14:30 - 15:30	665	+	508	=	1173	37		28		No
07:30 - 08:30	268	+	887	=	1155	72		33		No
17:00 - 18:00	587		541		1128	63		30		No

Time	Major NB	+	Major SB	=	Total	Minor EB		Minor WB		Met1B?
16:00 - 17:00	838	+	524	=	1362	65		29		Yes
15:00 - 16:00	757	+	522	=	1279	51		19		Yes
17:00 - 18:00	587	+	541	=	1128	63		30		Yes
07:15 - 08:15	261	+	858	=	1119	77		33		Yes
08:15 - 09:15	237	+	533	=	770	54		29		Yes
11:45 - 12:45	382	+	354	=	736	42		25		Yes
06:15 - 07:15	195	+	445	=	640	48		21		Yes
14:45 - 15:45	702	+	503	=	1205	37		24		No
14:30 - 15:30	665	+	508	=	1173	37		28		No
14:15 - 15:15	594	+	520	=	1114	36		31		No
14:00 - 15:00	537	+	471	=	1008	27		32		No
13:45 - 14:45	477		468		945	34		29		No

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2538

Study Date : 08/07/2025

Warrant 2 - Four Hour Volumes

Description

Intended for sites where the volume of intersecting traffic during any four hours of the day is the principal reason for consideration of a signal installation.

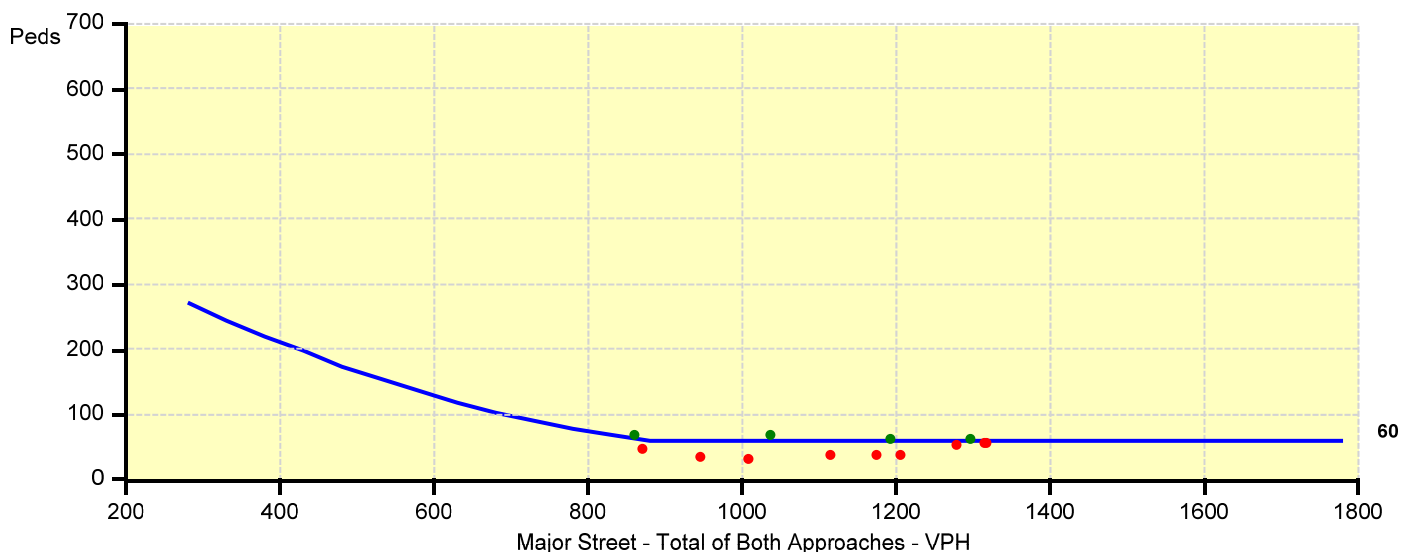
Summary

4 one hour periods meet minimums.
Warrant IS met.

Site Data Required

Rural Settings Apply = **True**
Number of Major Lanes = **2 or more**
Number of Minor Lanes = **1**

Major Road CSAH 1						Minor Road 89th Ave		
Time	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	Met?
15:15 - 16:15	814	+	481	=	1295	62	18	Yes
16:45 - 17:45	645	+	546	=	1191	61	35	Yes
07:45 - 08:45	243	+	793	=	1036	69	33	Yes
06:45 - 07:45	243	+	618	=	861	69	30	Yes
16:30 - 17:30	757	+	560	=	1317	54	34	No
16:15 - 17:15	791	+	524	=	1315	55	28	No
15:00 - 16:00	757	+	522	=	1279	51	19	No
14:45 - 15:45	702	+	503	=	1205	37	24	No
14:30 - 15:30	665	+	508	=	1173	37	28	No
14:15 - 15:15	594	+	520	=	1114	36	31	No
14:00 - 15:00	537	+	471	=	1008	27	32	No
13:45 - 14:45	477	+	468	=	945	34	29	No



ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2538

Study Date : 08/07/2025

Warrant 3B - Peak Hour Volumes

Description

Intended for sites where the volume of intersecting traffic during one hour of the day is the principal reason for consideration of a signal installation.

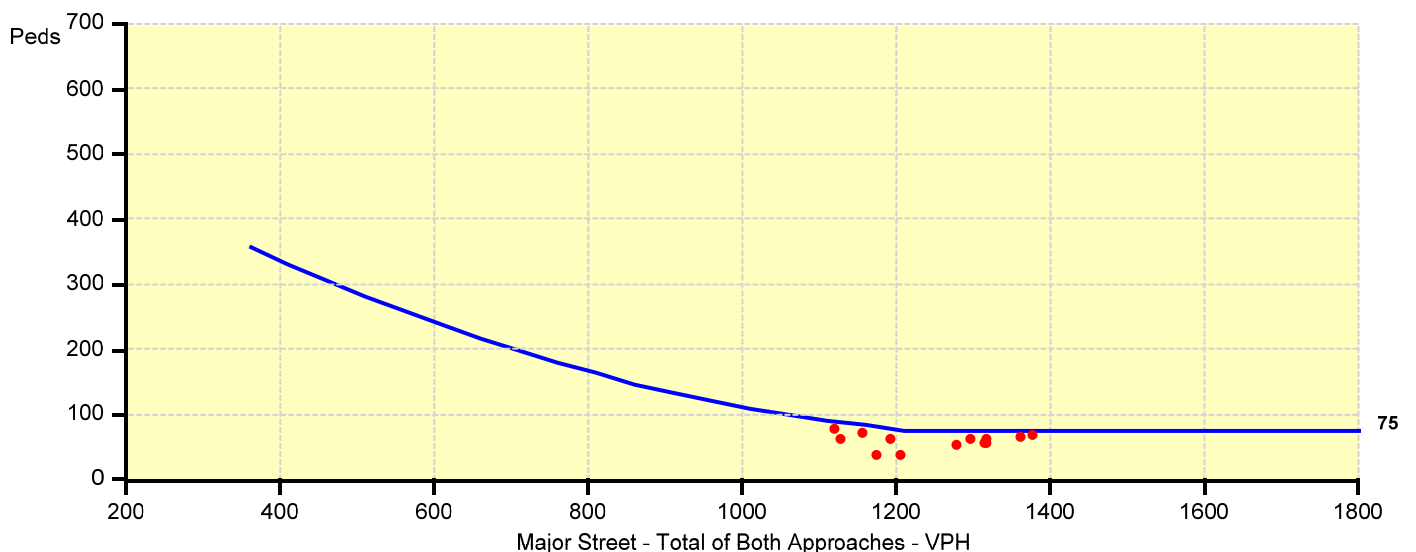
Summary

Only 0 one hour periods meet minimums.
Warrant is NOT met.

Site Data Required

Rural Settings Apply = **True**
Number of Major Lanes = **2 or more**
Number of Minor Lanes = **1**

Major Road CSAH 1						Minor Road 89th Ave		
Time	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	Met?
15:45 - 16:45	854	+	523	=	1377	67	23	No
16:00 - 17:00	838	+	524	=	1362	65	29	No
15:30 - 16:30	835	+	482	=	1317	61	18	No
16:30 - 17:30	757	+	560	=	1317	54	34	No
16:15 - 17:15	791	+	524	=	1315	55	28	No
15:15 - 16:15	814	+	481	=	1295	62	18	No
15:00 - 16:00	757	+	522	=	1279	51	19	No
14:45 - 15:45	702	+	503	=	1205	37	24	No
16:45 - 17:45	645	+	546	=	1191	61	35	No
14:30 - 15:30	665	+	508	=	1173	37	28	No
07:30 - 08:30	268	+	887	=	1155	72	33	No
17:00 - 18:00	587		541		1128	63	30	No



ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2538

Study Date : 08/07/2025

Multiway Stop Warrants - Summary

Major Street Approaches

Northbound: CSAH 1

Number of Lanes : 2+

Total Approach Volume: 6,701

Southbound: CSAH 1

Number of Lanes : 2+

Total Approach Volume: 7,472

Minor Street Approaches

Eastbound: 89th Ave

Number of Lanes : 1

Total Approach Volume: 658

Westbound: 89th Ave

Number of Lanes : 1

Total Approach Volume: 433

Warrant Summary (Rural Values Apply)

Criteria A - Interim Measure..... **Not Evaluated**
If traffic signals are justified, stop signs can be installed as an interim measure.

Criteria B - Crash Experience..... **Not Satisfied**
Number of crashes (-1) is less than minimum required (5).

Criteria C - Minimum Volumes and Delays..... **Not Satisfied**
Average of 8 highest hours is less than volume criteria.

Criteria D - 80% of Volumes, Delays, and Crashes..... **Not Satisfied**
Number of crashes (-1) is less than minimum required (4).
Average of 8 highest hours is less than volume criteria.

Criteria C Volume Summary

Time	Major Total	Major Avg	Minor Total	Minor Avg	Major Crit	Minor Crit	Meets?
15:45 - 16:45	1377	1036.5	90	79.4	210	140	No
16:45 - 17:45	1191		96				
14:45 - 15:45	1205		61				
07:30 - 08:30	1155		105				
13:45 - 14:45	945		69				
17:45 - 18:45	869		73				
12:45 - 13:45	812		49				
06:30 - 07:30	738		92				
11:45 - 12:45	736		69				
10:45 - 11:45	663		63				
08:30 - 09:30	651		70				
09:45 - 10:45	620		63				

Criteria D Volume Summary

Time	Major Total	Major Avg	Minor Total	Minor Avg	Major Crit	Minor Crit	Meets?
15:45 - 16:45	1377	1036.5	90	79.4	240	160	No
16:45 - 17:45	1191		96				
14:45 - 15:45	1205		61				
07:30 - 08:30	1155		105				
13:45 - 14:45	945		69				
17:45 - 18:45	869		73				
12:45 - 13:45	812		49				
06:30 - 07:30	738		92				
11:45 - 12:45	736		69				
10:45 - 11:45	663		63				
08:30 - 09:30	651		70				
09:45 - 10:45	620		63				