

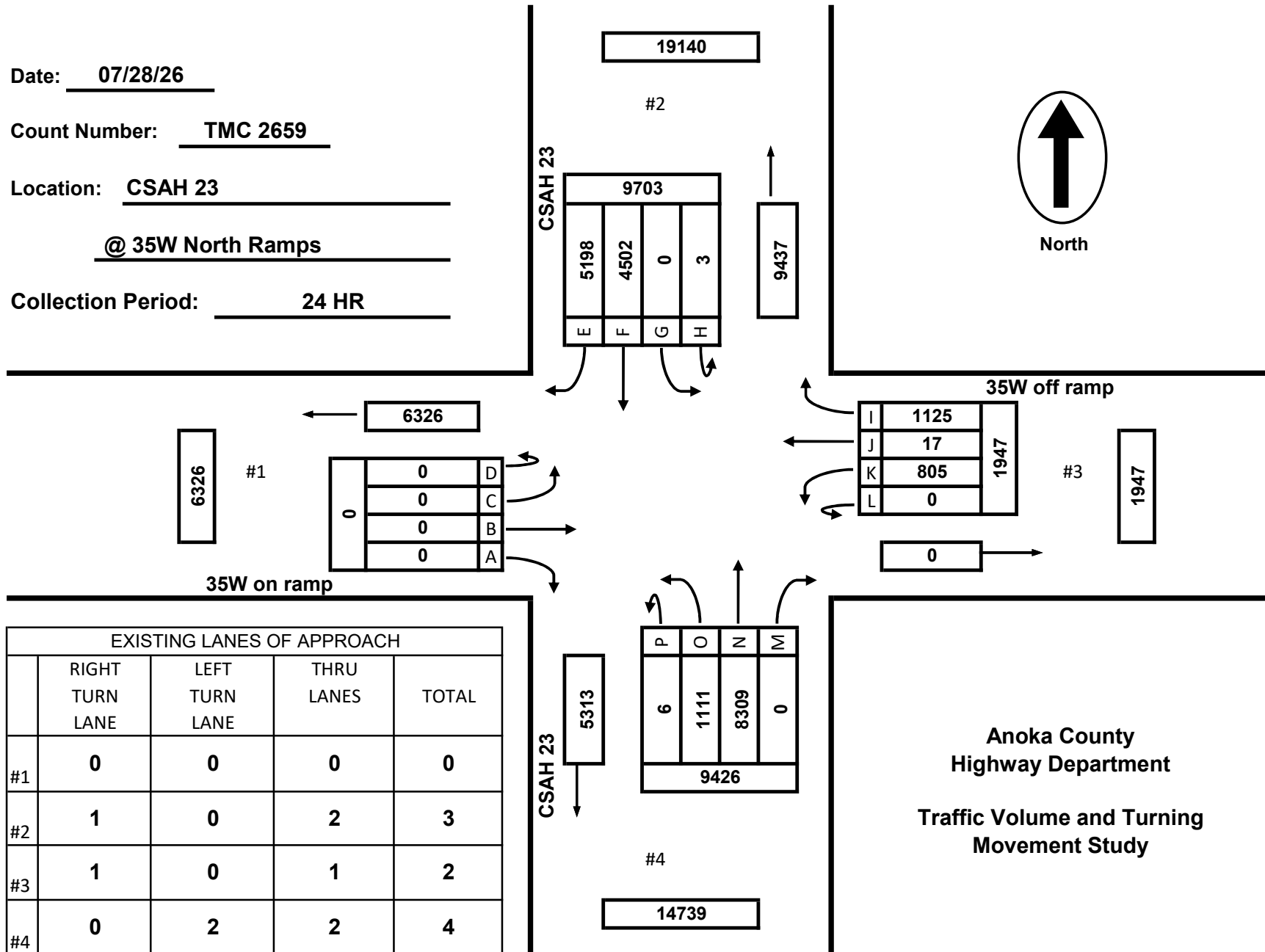
Date: 07/28/26

Count Number: TMC 2659

Location: CSAH 23

@ 35W North Ramps

Collection Period: 24 HR



Date: 07/28/26

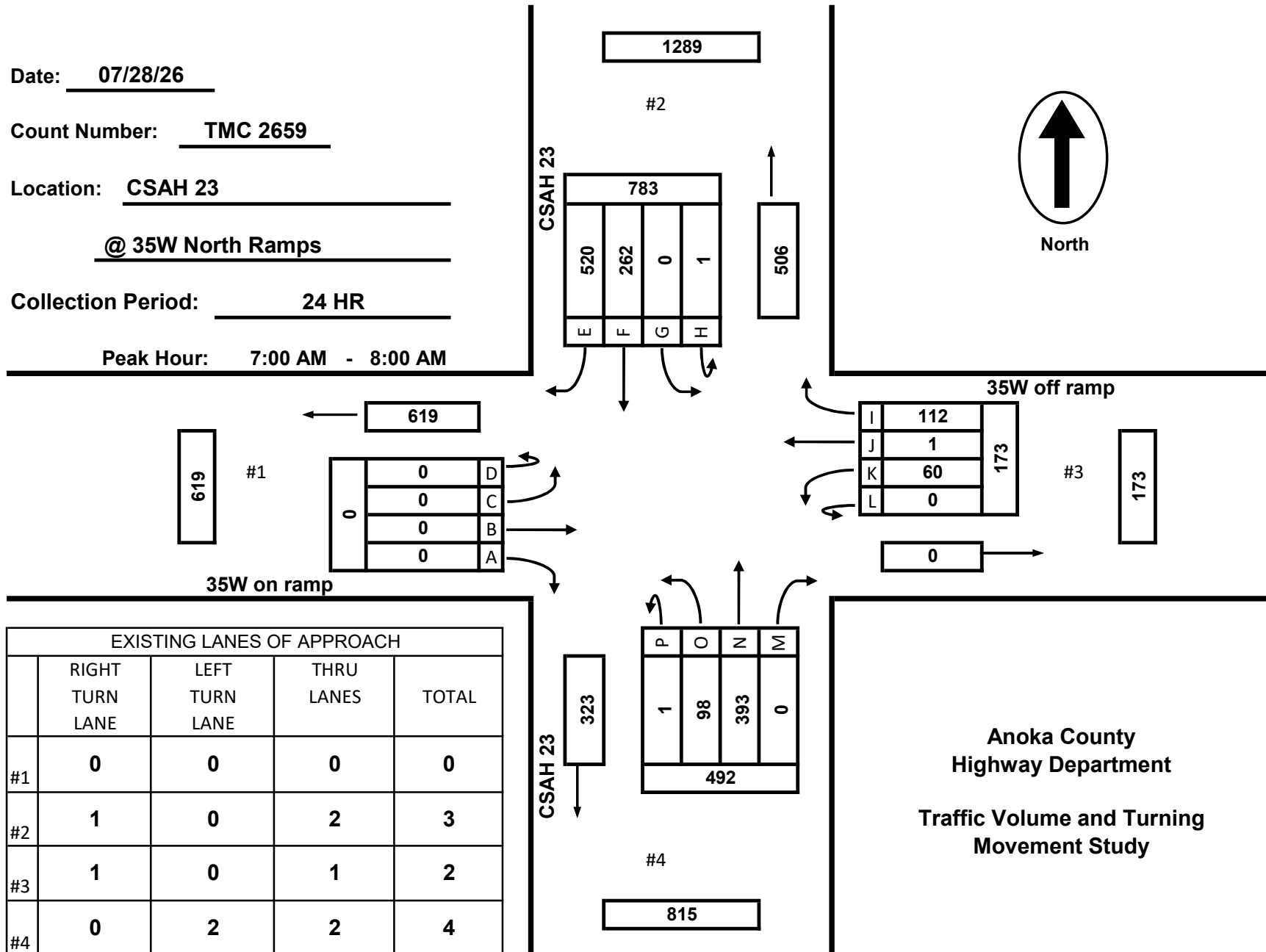
Count Number: TMC 2659

Location: CSAH 23

@ 35W North Ramps

Collection Period: 24 HR

Peak Hour: 7:00 AM - 8:00 AM



Date: 07/28/26

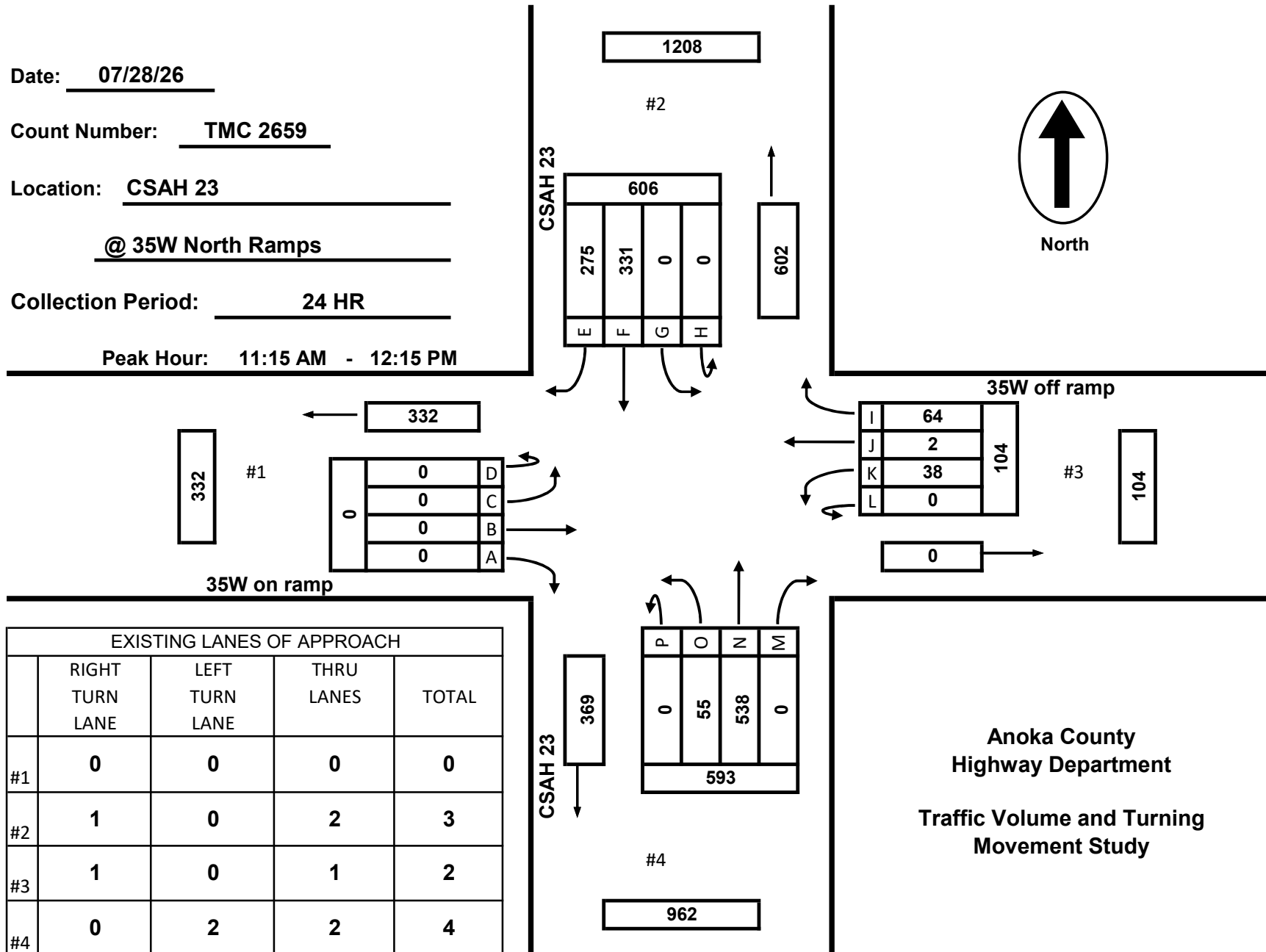
Count Number: TMC 2659

Location: CSAH 23

@ 35W North Ramps

Collection Period: 24 HR

Peak Hour: 11:15 AM - 12:15 PM



Date: 07/28/26

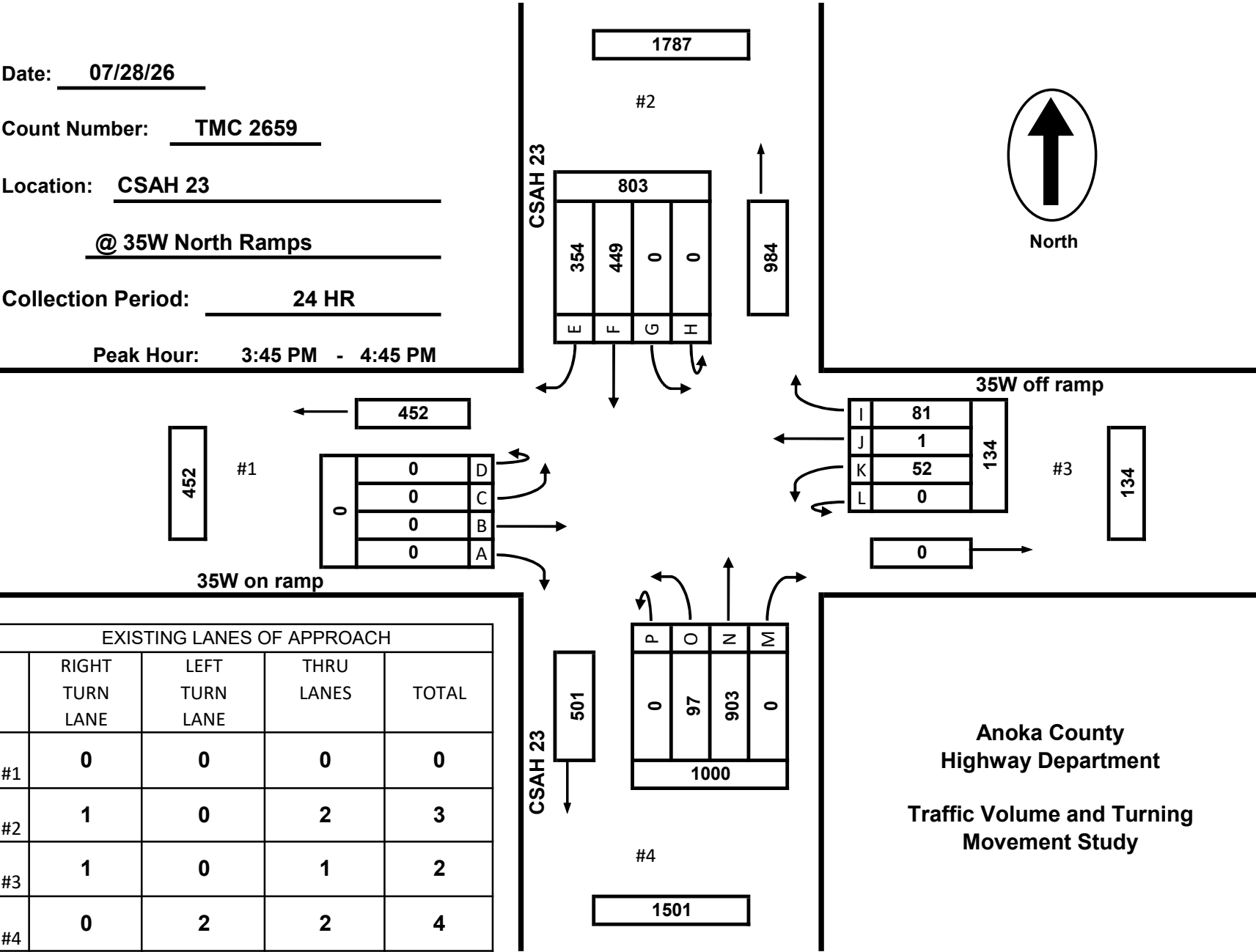
Count Number: TMC 2659

Location: CSAH 23

@ 35W North Ramps

Collection Period: 24 HR

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



Anoka County
Highway Department

Traffic Volume and Turning
Movement Study

TMC 2659 - CSAH 23 @ 35W North Ramps
Lino Lakes MN
Tuesday, July 28, 2026

Time	Southbound CSAH 23						Westbound 35W on ramp						Northbound CSAH 23						Eastbound None						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	2	3	0	5	0	1	0	0	0	1	0	0	5	0	0	0	5	0	0	0	0	0	0	11
12:15 AM	0	0	3	3	0	6	0	2	0	1	0	3	0	1	16	0	0	17	0	0	0	0	0	0	26	
12:30 AM	0	0	4	2	0	6	0	2	0	0	0	2	0	2	7	0	0	9	0	0	0	0	0	0	17	
12:45 AM	0	0	3	3	0	6	0	3	0	1	0	4	0	2	7	0	0	9	0	0	0	0	0	0	19	
Hourly Total	0	0	12	11	0	23	0	8	0	2	0	10	0	5	35	0	0	40	0	0	0	0	0	0	73	
1:00 AM	0	0	1	2	0	3	0	1	0	0	0	1	0	1	3	0	0	4	0	0	0	0	0	0	8	
1:15 AM	0	0	1	4	0	5	0	1	0	0	0	1	0	9	1	0	0	10	0	0	0	0	0	0	16	
1:30 AM	0	0	0	3	0	3	0	2	0	1	0	3	0	6	9	0	0	15	0	0	0	0	0	0	21	
1:45 AM	0	0	1	2	0	3	0	0	0	0	0	0	0	2	5	0	0	7	0	0	0	0	0	0	10	
Hourly Total	0	0	3	11	0	14	0	4	0	1	0	5	0	18	18	0	0	36	0	0	0	0	0	0	55	
2:00 AM	0	0	3	0	0	3	0	0	0	0	1	0	0	3	3	0	0	6	0	0	0	0	0	0	9	
2:15 AM	0	0	2	0	0	2	0	2	0	0	0	2	0	0	3	0	0	3	0	0	0	0	0	0	7	
2:30 AM	0	0	2	2	0	4	0	0	0	0	0	0	0	1	3	0	0	4	0	0	0	0	0	0	8	
2:45 AM	0	0	1	4	0	5	0	1	0	0	0	1	0	0	12	0	0	12	0	0	0	0	0	0	18	
Hourly Total	0	0	8	6	0	14	0	3	0	0	1	3	0	4	21	0	0	25	0	0	0	0	0	0	42	
3:00 AM	0	0	0	2	0	2	0	1	0	0	0	1	0	2	4	0	0	6	0	0	0	0	0	0	9	
3:15 AM	0	0	3	4	0	7	0	1	0	1	0	2	0	2	4	0	0	6	0	0	0	0	0	0	15	
3:30 AM	0	0	4	6	0	10	0	1	0	2	0	3	0	0	5	0	0	5	0	0	0	0	0	0	18	
3:45 AM	0	0	3	6	0	9	0	0	0	4	0	4	0	2	13	0	0	15	0	0	0	0	0	0	28	
Hourly Total	0	0	10	18	0	28	0	3	0	7	0	10	0	6	26	0	0	32	0	0	0	0	0	0	70	
4:00 AM	0	0	4	8	0	12	0	1	0	0	0	1	0	0	4	0	0	4	0	0	0	0	0	0	17	
4:15 AM	0	0	4	17	0	21	0	0	0	5	0	5	0	4	2	0	0	6	0	0	0	0	0	0	32	
4:30 AM	0	0	9	23	0	32	0	4	0	10	0	14	0	6	21	0	0	27	0	0	0	0	0	0	73	
4:45 AM	0	0	9	31	0	40	0	6	0	8	0	14	0	3	14	0	0	17	0	0	0	0	0	0	71	
Hourly Total	0	0	26	79	0	105	0	11	0	23	0	34	0	13	41	0	0	54	0	0	0	0	0	0	193	
5:00 AM	0	0	14	40	0	54	0	6	0	7	0	13	0	4	19	0	0	23	0	0	0	0	0	0	90	
5:15 AM	0	0	10	65	0	75	0	5	0	8	0	13	1	10	22	0	0	33	0	0	0	0	0	0	121	
5:30 AM	0	0	12	70	0	82	0	7	0	10	1	17	0	9	41	0	0	50	0	0	0	0	0	0	149	
5:45 AM	0	0	20	56	0	76	0	5	0	15	0	20	0	8	49	0	0	57	0	0	0	0	0	0	153	
Hourly Total	0	0	56	231	0	287	0	23	0	40	1	63	1	31	131	0	0	163	0	0	0	0	0	0	513	
6:00 AM	0	0	21	90	0	111	0	7	1	17	0	25	0	10	48	0	0	58	0	0	0	0	0	0	194	
6:15 AM	0	0	34	114	0	148	0	12	0	17	6	29	0	16	53	0	0	69	0	0	0	0	0	0	246	
6:30 AM	0	0	36	130	0	166	0	8	0	17	0	25	0	23	73	0	0	96	0	0	0	0	0	0	287	
6:45 AM	0	0	47	106	0	153	0	16	0	27	0	43	0	20	79	0	0	99	0	0	0	0	0	0	295	
Hourly Total	0	0	138	440	0	578	0	43	1	78	6	122	0	69	253	0	0	322	0	0	0	0	0	0	1022	
7:00 AM	1	0	47	157	0	205	0	10	0	36	0	46	0	18	86	0	0	104	0	0	0	0	0	0	355	
7:15 AM	0	0	74	140	0	214	0	15	0	31	1	46	0	24	83	0	0	107	0	0	0	0	0	0	367	
7:30 AM	0	0	67	108	0	175	0	17	0	23	2	40	0	29	102	0	0	131	0	0	0	0	0	0	346	
7:45 AM	0	0	74	115	0	189	0	18	1	22	1	41	1	27	122	0	0	150	0	0	0	0	0	0	380	
Hourly Total	1	0	262	520	0	783	0	60	1	112	4	173	1	98	393	0	0	492	0	0	0	0	0	0	1448	

TMC 2659 - CSAH 23 @ 35W North Ramps
Lino Lakes MN
Tuesday, July 28, 2026

Time	Southbound CSAH 23						Westbound 35W on ramp						Northbound CSAH 23						Eastbound None						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	0	68	91	0	159	0	14	0	21	0	35	0	18	92	0	0	110	0	0	0	0	0	0	304
8:15 AM	0	0	67	117	0	184	0	18	0	22	0	40	0	15	99	0	0	114	0	0	0	0	0	0	338
8:30 AM	0	0	67	107	0	174	0	18	0	16	0	34	0	25	83	0	0	108	0	0	0	0	0	0	316
8:45 AM	0	0	65	86	0	151	0	15	0	19	0	34	0	27	111	0	0	138	0	0	0	0	0	0	323
Hourly Total	0	0	267	401	0	668	0	65	0	78	0	143	0	85	385	0	0	470	0	0	0	0	0	0	1281
9:00 AM	0	0	65	85	0	150	0	10	0	12	6	22	0	21	123	0	0	144	0	0	0	0	0	0	316
9:15 AM	0	0	71	89	0	160	0	13	0	22	0	35	0	18	92	0	0	110	0	0	0	0	0	0	305
9:30 AM	0	0	43	79	0	122	0	19	1	14	0	34	0	18	87	0	0	105	0	0	0	0	0	0	261
9:45 AM	0	0	61	64	0	125	0	15	0	17	2	32	0	13	104	0	0	117	0	0	0	0	0	0	274
Hourly Total	0	0	240	317	0	557	0	57	1	65	8	123	0	70	406	0	0	476	0	0	0	0	0	0	1156
10:00 AM	0	0	58	60	0	118	0	8	0	16	0	24	0	6	105	0	0	111	0	0	0	0	0	0	253
10:15 AM	0	0	63	71	0	134	0	9	0	22	1	31	0	13	103	0	0	116	0	0	0	0	0	0	281
10:30 AM	0	0	62	78	0	140	0	9	0	16	2	25	0	15	104	0	0	119	0	0	0	0	0	0	284
10:45 AM	0	0	68	54	0	122	0	9	0	15	1	24	0	6	133	0	0	139	0	0	0	0	0	0	285
Hourly Total	0	0	251	263	0	514	0	35	0	69	4	104	0	40	445	0	0	485	0	0	0	0	0	0	1103
11:00 AM	0	0	77	56	0	133	0	7	0	17	0	24	1	19	122	0	0	142	0	0	0	0	0	0	299
11:15 AM	0	0	86	65	0	151	0	17	0	20	0	37	0	9	126	0	0	135	0	0	0	0	0	0	323
11:30 AM	0	0	74	72	0	146	0	6	1	19	1	26	0	14	132	0	0	146	0	0	0	0	0	0	318
11:45 AM	0	0	72	72	0	144	0	7	1	12	1	20	0	13	131	0	0	144	0	0	0	0	0	0	308
Hourly Total	0	0	309	265	0	574	0	37	2	68	2	107	1	55	511	0	0	567	0	0	0	0	0	0	1248
12:00 PM	0	0	99	66	0	165	0	8	0	13	0	21	0	19	149	0	0	168	0	0	0	0	0	0	354
12:15 PM	0	0	59	69	0	128	0	14	0	22	3	36	0	19	133	0	0	152	0	0	0	0	0	0	316
12:30 PM	0	0	78	66	0	144	0	7	0	15	2	22	0	17	119	0	0	136	0	0	0	0	0	0	302
12:45 PM	0	0	65	59	0	124	0	4	0	11	5	15	0	13	133	0	0	146	0	0	0	0	0	0	285
Hourly Total	0	0	301	260	0	561	0	33	0	61	10	94	0	68	534	0	0	602	0	0	0	0	0	0	1257
1:00 PM	0	0	65	70	0	135	0	13	0	19	1	32	0	9	119	0	0	128	0	0	0	0	0	0	295
1:15 PM	0	0	81	65	0	146	0	7	0	18	1	25	1	16	131	0	0	148	0	0	0	0	0	0	319
1:30 PM	0	0	74	71	0	145	0	6	0	21	1	27	0	18	135	0	0	153	0	0	0	0	0	0	325
1:45 PM	0	0	74	55	0	129	0	8	0	20	1	28	0	9	119	0	0	128	0	0	0	0	0	0	285
Hourly Total	0	0	294	261	0	555	0	34	0	78	4	112	1	52	504	0	0	557	0	0	0	0	0	0	1224
2:00 PM	0	0	80	80	0	160	0	12	1	14	1	27	1	16	151	0	0	168	0	0	0	0	0	0	355
2:15 PM	0	0	75	70	0	145	0	15	0	16	1	31	0	9	141	0	0	150	0	0	0	0	0	0	326
2:30 PM	1	0	91	76	0	168	0	17	0	19	2	36	0	20	168	0	0	188	0	0	0	0	0	0	392
2:45 PM	0	0	94	74	0	168	0	13	2	17	1	32	0	20	200	0	0	220	0	0	0	0	0	0	420
Hourly Total	1	0	340	300	0	641	0	57	3	66	5	126	1	65	660	0	0	726	0	0	0	0	0	0	1493
3:00 PM	0	0	99	100	0	199	0	19	1	24	0	44	0	20	163	0	0	183	0	0	0	0	0	0	426
3:15 PM	0	0	100	78	0	178	0	16	0	20	0	36	0	11	215	0	0	226	0	0	0	0	0	0	440
3:30 PM	0	0	94	111	0	205	0	22	0	27	0	49	0	24	208	0	0	232	0	0	0	0	0	0	486
3:45 PM	0	0	121	94	0	215	0	13	0	25	1	38	0	33	226	0	0	259	0	0	0	0	0	0	512
Hourly Total	0	0	414	383	0	797	0	70	1	96	1	167	0	88	812	0	0	900	0	0	0	0	0	0	1864

TMC 2659 - CSAH 23 @ 35W North Ramps
Lino Lakes MN
Tuesday, July 28, 2026
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	
7:00 AM	1	0	47	157	0	205	0	10	0	36	0	46	0	18	86	0	0	104	0	0	0	0	0	0	355
7:15 AM	0	0	74	140	0	214	0	15	0	31	1	46	0	24	83	0	0	107	0	0	0	0	0	0	367
7:30 AM	0	0	67	108	0	175	0	17	0	23	2	40	0	29	102	0	0	131	0	0	0	0	0	0	346
7:45 AM	0	0	74	115	0	189	0	18	1	22	1	41	1	27	122	0	0	150	0	0	0	0	0	0	380
Peak Hour Total	1	0	262	520	0	783	0	60	1	112	4	173	1	98	393	0	0	492	0	0	0	0	0	0	1448
Peak Hour Heavy Vehicle	0	0	14	37	0	51	0	0	0	3	2	3	0	7	19	0	0	26	0	0	0	0	0	0	80
Peak Hour Heavy Vehicle PHF	0.00%	0.00%	5.34%	7.12%	0.00%	6.51%	0.00%	0.00%	0.00%	2.68%	50.00%	1.73%	0.00%	7.14%	4.83%	0.00%	0.00%	5.28%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	5.52%
	0.250	0.000	0.885	0.828	0.000	0.915	0.000	0.833	0.250	0.778	0.500	0.940	0.250	0.845	0.805	0.000	0.000	0.820	0.000	0.000	0.000	0.000	0.000	0.000	0.953

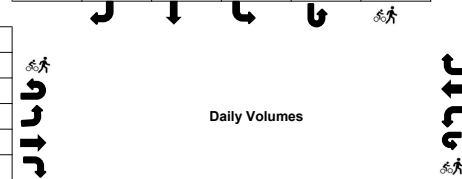
Mid Peak Hour (10:00 - 14:00)

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	
11:15 AM	0	0	86	65	0	151	0	17	0	20	0	37	0	9	126	0	0	135	0	0	0	0	0	0	323
11:30 AM	0	0	74	72	0	146	0	6	1	19	1	26	0	14	132	0	0	146	0	0	0	0	0	0	318
11:45 AM	0	0	72	72	0	144	0	7	1	12	1	20	0	13	131	0	0	144	0	0	0	0	0	0	308
12:00 PM	0	0	99	66	0	165	0	8	0	13	0	21	0	19	149	0	0	168	0	0	0	0	0	0	354
Peak Hour Total	0	0	331	275	0	606	0	38	2	64	2	104	0	55	538	0	0	593	0	0	0	0	0	0	1303
Peak Hour Heavy Vehicle	0	0	8	25	0	33	0	3	0	1	2	4	0	3	29	0	0	32	0	0	0	0	0	0	69
Peak Hour Heavy Vehicle PHF	0.00%	0.00%	2.42%	9.09%	0.00%	5.45%	0.00%	7.89%	0.00%	1.56%	100.00%	3.85%	0.00%	5.45%	5.39%	0.00%	0.00%	5.40%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	5.30%
	0.000	0.000	0.836	0.955	0.000	0.918	0.000	0.559	0.500	0.800	0.500	0.703	0.000	0.724	0.903	0.000	0.000	0.882	0.000	0.000	0.000	0.000	0.000	0.000	0.920

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	0	121	94	0	215	0	13	0	25	1	38	0	33	226	0	0	259	0	0	0	0	0	0	512
4:00 PM	0	0	122	79	0	201	0	14	0	12	0	26	0	23	226	0	0	249	0	0	0	0	0	0	476
4:15 PM	0	0	91	87	0	178	0	12	1	23	5	36	0	17	220	0	0	237	0	0	0	0	0	0	451
4:30 PM	0	0	115	94	0	209	0	13	0	21	4	34	0	24	231	0	0	255	0	0	0	0	0	0	498
Peak Hour Total	0	0	449	354	0	803	0	52	1	81	10	134	0	97	903	0	0	1000	0	0	0	0	0	0	1937
Peak Hour Heavy Vehicle	0	0	5	17	0	22	0	2	0	2	9	4	0	5	24	0	0	29	0	0	0	0	0	0	55
Peak Hour Heavy Vehicle PHF	0.00%	0.00%	1.11%	4.80%	0.00%	2.74%	0.00%	3.85%	0.00%	2.47%	90.00%	2.99%	0.00%	5.15%	2.66%	0.00%	0.00%	2.90%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	2.84%
	0.000	0.000	0.920	0.941	0.000	0.934	0.000	0.929	0.250	0.810	0.500	0.882	0.000	0.735	0.977	0.000	0.000	0.965	0.000	0.000	0.000	0.000	0.000	0.000	0.946

Total Vehicles On Leg			19140		
Vehicles Entering Intersection		9703	Vehicles Exiting Intersection		9437
Southbound					
Cars	4886	4406	0	3	0
Heavy	312	96	0	0	0
Total	5198	4502	0	3	0



Daily Volumes

Total Vehicles on Leg 6326	Vehicles Entering Intersection 0	Eastbound	Cars	Heavy	Total
			0	0	0
			0	0	0
	Vehicles Exiting Intersection 6326		0	0	0
			0	0	0

Cars	Heavy	Total	Westbound	Vehicles Entering Intersection 1947	Total Vehicles on Leg 1947
1097	28	1125			
17	0	17			
778	27	805		Vehicles Exiting Intersection 0	
0	0	0			
46	60	106			

Cars	0	6	1052	7987	0
Heavy	0	0	59	322	0
Total	0	6	1111	8309	0
Northbound					
Vehicles Entering Intersection			Vehicles Exiting Intersection		
9426			5313		
Total Vehicles On Leg			14739		

TMC 2659 - CSAH 23 @ 35W North Ramps
Lino Lakes MN
Tuesday, July 28, 2026

Time	Southbound Heavy CSAH 23						Westbound Heavy 35W on ramp						Northbound Heavy CSAH 23						Eastbound Heavy None						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	1	0	0	0	0	1	0	0	0	0	0	1
Hourly 'Heavy Vehicles'	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	1
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	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
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	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	1	0	0	0	0	0	0	1
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	1	0	0	1	0	0	0	1	0	0	0	0	0	0	1
3:00 AM	0	0	0	1	0	1	0	0	0	0	0	0	0	1	2	0	0	3	0	0	0	0	0	0	4
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	1	0	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	2
Hourly 'Heavy Vehicles'	0	0	0	2	0	2	0	0	0	0	0	0	0	2	2	0	0	4	0	0	0	0	0	0	6
4:00 AM	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
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	1	0	1	0	2	0	0	0	2	0	1	1	0	0	2	0	0	0	0	0	0	5
4:45 AM	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	1	4	0	5	0	2	0	0	0	2	0	1	2	0	0	3	0	0	0	0	0	0	10
5:00 AM	0	0	1	2	0	3	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	4
5:15 AM	0	0	1	6	0	7	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	8
5:30 AM	0	0	0	2	0	2	0	0	0	0	0	0	0	2	2	0	0	4	0	0	0	0	0	0	6
5:45 AM	0	0	0	3	0	3	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	4
Hourly 'Heavy Vehicles'	0	0	2	13	0	15	0	0	0	0	0	0	0	2	5	0	0	7	0	0	0	0	0	0	22
6:00 AM	0	0	0	6	0	6	0	0	0	0	0	0	0	1	4	0	0	5	0	0	0	0	0	0	11
6:15 AM	0	0	3	15	0	18	0	1	0	1	0	2	0	0	3	0	0	3	0	0	0	0	0	0	23
6:30 AM	0	0	5	7	0	12	0	0	0	0	0	0	0	1	3	0	0	4	0	0	0	0	0	0	16
6:45 AM	0	0	4	12	0	16	0	0	0	2	0	2	0	1	2	0	0	3	0	0	0	0	0	0	21
Hourly 'Heavy Vehicles'	0	0	12	40	0	52	0	1	0	3	0	4	0	3	12	0	0	15	0	0	0	0	0	0	71
7:00 AM	0	0	4	8	0	12	0	0	0	1	0	1	0	2	4	0	0	6	0	0	0	0	0	0	19
7:15 AM	0	0	4	14	0	18	0	0	0	0	0	0	0	2	6	0	0	8	0	0	0	0	0	0	26
7:30 AM	0	0	1	6	0	7	0	0	0	2	1	2	0	1	4	0	0	5	0	0	0	0	0	0	14
7:45 AM	0	0	5	9	0	14	0	0	0	0	1	0	0	2	5	0	0	7	0	0	0	0	0	0	21
Hourly 'Heavy Vehicles'	0	0	14	37	0	51	0	0	0	3	2	3	0	7	19	0	0	26	0	0	0	0	0	0	80

TMC 2659 - CSAH 23 @ 35W North Ramps
Lino Lakes MN
Tuesday, July 28, 2026

	Southbound Heavy CSAH 23						Westbound Heavy 35W on ramp						Northbound Heavy CSAH 23						Eastbound Heavy None						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'		
8:00 AM	0	0	3	4	0	7	0	0	0	1	0	1	0	2	9	0	0	0	11	0	0	0	0	0	0	19
8:15 AM	0	0	1	10	0	11	0	2	0	1	0	3	0	2	9	0	0	0	11	0	0	0	0	0	0	25
8:30 AM	0	0	2	9	0	11	0	0	0	1	0	1	0	2	6	0	0	0	8	0	0	0	0	0	0	20
8:45 AM	0	0	2	9	0	11	0	0	0	3	0	3	0	0	10	0	0	0	10	0	0	0	0	0	0	24
Hourly 'Heavy Vehicles'	0	0	8	32	0	40	0	2	0	6	0	8	0	6	34	0	0	0	40	0	0	0	0	0	0	88
9:00 AM	0	0	1	10	0	11	0	2	0	1	6	3	0	0	8	0	0	0	8	0	0	0	0	0	0	22
9:15 AM	0	0	7	6	0	13	0	0	0	0	0	0	0	0	8	0	0	0	8	0	0	0	0	0	0	21
9:30 AM	0	0	1	11	0	12	0	0	0	0	0	0	0	0	5	0	0	0	5	0	0	0	0	0	0	17
9:45 AM	0	0	1	5	0	6	0	1	0	0	1	1	0	0	5	0	0	0	5	0	0	0	0	0	0	12
Hourly 'Heavy Vehicles'	0	0	10	32	0	42	0	3	0	1	7	4	0	0	26	0	0	0	26	0	0	0	0	0	0	72
10:00 AM	0	0	3	7	0	10	0	3	0	0	0	3	0	1	10	0	0	0	11	0	0	0	0	0	0	24
10:15 AM	0	0	0	8	0	8	0	0	0	0	1	0	0	1	4	0	0	0	5	0	0	0	0	0	0	13
10:30 AM	0	0	2	5	0	7	0	0	0	0	2	0	0	0	9	0	0	0	9	0	0	0	0	0	0	16
10:45 AM	0	0	1	7	0	8	0	1	0	0	1	1	0	0	5	0	0	0	5	0	0	0	0	0	0	14
Hourly 'Heavy Vehicles'	0	0	6	27	0	33	0	4	0	0	4	4	0	2	28	0	0	0	30	0	0	0	0	0	0	67
11:00 AM	0	0	1	2	0	3	0	0	0	0	0	0	0	2	12	0	0	0	14	0	0	0	0	0	0	17
11:15 AM	0	0	1	5	0	6	0	2	0	1	0	3	0	0	4	0	0	0	4	0	0	0	0	0	0	13
11:30 AM	0	0	3	4	0	7	0	0	0	0	1	0	0	1	5	0	0	0	6	0	0	0	0	0	0	13
11:45 AM	0	0	1	7	0	8	0	0	0	0	1	0	0	2	9	0	0	0	11	0	0	0	0	0	0	19
Hourly 'Heavy Vehicles'	0	0	6	18	0	24	0	2	0	1	2	3	0	5	30	0	0	0	35	0	0	0	0	0	0	62
12:00 PM	0	0	3	9	0	12	0	1	0	0	0	1	0	0	11	0	0	0	11	0	0	0	0	0	0	24
12:15 PM	0	0	1	5	0	6	0	0	0	1	2	1	0	1	7	0	0	0	8	0	0	0	0	0	0	15
12:30 PM	0	0	2	2	0	4	0	0	0	0	2	0	0	1	5	0	0	0	6	0	0	0	0	0	0	10
12:45 PM	0	0	1	7	0	8	0	0	0	0	3	0	0	1	6	0	0	0	7	0	0	0	0	0	0	15
Hourly 'Heavy Vehicles'	0	0	7	23	0	30	0	1	0	1	7	2	0	3	29	0	0	0	32	0	0	0	0	0	0	64
1:00 PM	0	0	3	10	0	13	0	1	0	1	0	2	0	2	4	0	0	0	6	0	0	0	0	0	0	21
1:15 PM	0	0	1	5	0	6	0	1	0	0	0	1	0	1	6	0	0	0	7	0	0	0	0	0	0	14
1:30 PM	0	0	0	6	0	6	0	1	0	2	0	3	0	3	12	0	0	0	15	0	0	0	0	0	0	24
1:45 PM	0	0	2	4	0	6	0	1	0	0	1	1	0	2	3	0	0	0	5	0	0	0	0	0	0	12
Hourly 'Heavy Vehicles'	0	0	6	25	0	31	0	4	0	3	1	7	0	8	25	0	0	0	33	0	0	0	0	0	0	71
2:00 PM	0	0	3	6	0	9	0	0	0	1	1	1	0	2	7	0	0	0	9	0	0	0	0	0	0	19
2:15 PM	0	0	2	1	0	3	0	0	0	2	1	2	0	0	8	0	0	0	8	0	0	0	0	0	0	13
2:30 PM	0	0	1	6	0	7	0	1	0	0	2	1	0	1	7	0	0	0	8	0	0	0	0	0	0	16
2:45 PM	0	0	3	2	0	5	0	1	0	1	1	2	0	1	8	0	0	0	9	0	0	0	0	0	0	16
Hourly 'Heavy Vehicles'	0	0	9	15	0	24	0	2	0	4	5	6	0	4	30	0	0	0	34	0	0	0	0	0	0	64
3:00 PM	0	0	0	0	0	0	0	2	0	1	0	3	0	2	2	0	0	0	4	0	0	0	0	0	0	7
3:15 PM	0	0	3	2	0	5	0	0	0	0	0	0	0	2	9	0	0	0	11	0	0	0	0	0	0	16
3:30 PM	0	0	1	7	0	8	0	0	0	1	0	1	0	0	10	0	0	0	10	0	0	0	0	0	0	19
3:45 PM	0	0	1	4	0	5	0	1	0	2	0	3	0	2	6	0	0	0	8	0	0	0	0	0	0	16
Hourly 'Heavy Vehicles'	0	0	5	13	0	18	0	3	0	4	0	7	0	6	27	0	0	0	33	0	0	0	0	0	0	58

Tuesday, July 28, 2026

	Southbound Heavy CSAH 23						Westbound Heavy 3SW on ramp						Northbound Heavy CSAH 23						Eastbound Heavy None						VEHICLE 'Heavy Vehicles'	
Time	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehcle Approach 'Heavy Vehicles'	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehcle Approach 'Heavy Vehicles'	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehcle Approach 'Heavy Vehicles'	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehcle Approach 'Heavy Vehicles'		
4:00 PM	0	0	2	1	0	3	0	0	0	0	0	0	0	2	7	0	0	0	9	0	0	0	0	0	0	12
4:15 PM	0	0	2	4	0	6	0	0	0	0	5	0	0	1	5	0	0	0	6	0	0	0	0	0	0	12
4:30 PM	0	0	0	8	0	8	0	1	0	0	4	1	0	0	6	0	0	0	6	0	0	0	0	0	0	15
4:45 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	3	0	0	0	3	0	0	0	0	0	0	3
Hourly 'Heavy Vehicles'	0	0	4	13	0	17	0	1	0	0	11	1	0	3	21	0	0	0	24	0	0	0	0	0	0	42
5:00 PM	0	0	0	2	0	2	0	0	0	0	4	0	0	0	3	0	0	0	3	0	0	0	0	0	0	5
5:15 PM	0	0	0	2	0	2	0	0	0	0	1	0	0	0	2	0	0	0	2	0	0	0	0	0	0	4
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	5	0	0	0	0	0	0	5
5:45 PM	0	0	0	1	0	1	0	0	0	0	0	0	0	0	5	0	0	0	5	0	0	0	0	0	0	6
Hourly 'Heavy Vehicles'	0	0	0	5	0	5	0	0	0	0	5	0	0	0	15	0	0	0	15	0	0	0	0	0	0	20
6:00 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
6:15 PM	0	0	0	0	0	0	0	1	0	0	1	1	0	0	1	0	0	0	1	0	0	0	0	0	0	2
6:30 PM	0	0	1	1	0	2	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	3
6:45 PM	0	0	1	2	0	3	0	1	0	1	3	2	0	2	1	0	0	0	3	0	0	0	0	0	0	8
Hourly 'Heavy Vehicles'	0	0	3	3	0	6	0	2	0	1	4	3	0	2	6	0	0	0	8	0	0	0	0	0	0	17
7:00 PM	0	0	1	2	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
7:15 PM	0	0	0	1	0	1	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	3
7:30 PM	0	0	0	2	0	2	0	0	0	0	3	0	0	0	2	0	0	0	2	0	0	0	0	0	0	4
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	0
Hourly 'Heavy Vehicles'	0	0	1	5	0	6	0	0	0	0	3	0	0	0	4	0	0	0	4	0	0	0	0	0	0	10
8:00 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	1	1	0	0	0	2	0	0	0	0	0	0	2
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	0
8:30 PM	0	0	0	0	0	0	0	0	0	0	3	0	0	1	2	0	0	0	3	0	0	0	0	0	0	3
8:45 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	0	1
Hourly 'Heavy Vehicles'	0	0	1	0	0	1	0	0	0	0	5	0	0	2	3	0	0	0	5	0	0	0	0	0	0	6
9:00 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	0	1
9:15 PM	0	0	0	2	0	2	0	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	1	0	0	0	1	0	0	0	1	0	0	0	0	0	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	0
Hourly 'Heavy Vehicles'	0	0	1	2	0	3	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	4
10:00 PM	0	0	0	0	0	0	0	0	0	0	2	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	1	0	0	0	0	1	0	0	0	0	0	0	1
10:30 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
10:45 PM	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Hourly 'Heavy Vehicles'	0	0	0	1	0	1	0	0	0	1	2	1	0	1	0	0	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	0
11:15 PM	0	0	0	1	0	1	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	3
11:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	1
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	0
Hourly 'Heavy Vehicles'	0	0	0	1	0	1	0	0	0	0	0	0	0	0	3	0	0	0	3	0	0	0	0	0	0	4
DAILY 'Heavy Vehicles'	0	0	96	312	0	408	0	27	0	28	60	55	0	59	322	0	0	0	381	0	0	0	0	0	0	844

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2659

Study Date : 08/13/2026

Signal Warrants - Summary

Major Street Approaches

Northbound: CSAH 23

Number of Lanes : 2+

Total Approach Volume: 9,426

Southbound: CSAH 23

Number of Lanes : 2+

Total Approach Volume: 9,703

Minor Street Approaches

Westbound: 35W off ramp

Number of Lanes : 1

Total Approach Volume: 822

Warrant Summary (Rural Values Apply)

Warrant 1 - Eight Hour Vehicular Volumes.....Satisfied

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

Required volumes reached for 4 hours, 8 are needed

Warrant 1B - Interruption of Continuous Traffic.....Satisfied

Required volumes reached for 14 hours, 8 are needed

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

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

Required 1B volumes reached for 15 hours, 8 are needed

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

Number of hours (5) 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 2659

Study Date : 08/13/2026

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 4 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 = **252**

Veh/Hr Minor = **63**

Major Road						Minor Road		
CSAH 23						None		
Time	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	Met?
15:15 - 16:15	966	+	799	=	1765	0	65	Yes
16:15 - 17:15	955	+	770	=	1725	0	69	Yes
14:15 - 15:15	741	+	680	=	1421	0	67	Yes
07:15 - 08:15	498	+	737	=	1235	0	65	Yes
17:15 - 18:15	769	+	600	=	1369	0	46	No
14:00 - 15:00	726	+	641	=	1367	0	60	No
07:00 - 08:00	492	+	783	=	1275	0	61	No
17:30 - 18:30	698	+	545	=	1243	0	39	No
13:45 - 14:45	634	+	602	=	1236	0	53	No
11:15 - 12:15	593	+	606	=	1199	0	40	No
11:30 - 12:30	610	+	583	=	1193	0	37	No
06:45 - 07:45	441	+	747	=	1188	0	58	No
11:45 - 12:45	600	+	581	=	1181	0	37	No
13:30 - 14:30	599	+	579	=	1178	0	42	No
13:15 - 14:15	597	+	580	=	1177	0	34	No
12:00 - 13:00	602	+	561	=	1163	0	33	No
08:15 - 09:15	504	+	659	=	1163	0	61	No
06:30 - 07:30	406	+	738	=	1144	0	49	No
11:00 - 12:00	567	+	574	=	1141	0	39	No
08:30 - 09:30	500	+	635	=	1135	0	56	No
12:45 - 13:45	575	+	550	=	1125	0	30	No
17:45 - 18:45	613	+	504	=	1117	0	48	No
10:45 - 11:45	562	+	552	=	1114	0	40	No
13:00 - 14:00	557	+	555	=	1112	0	34	No
12:30 - 13:30	558		549		1107	0	31	No

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2659

Study Date : 08/13/2026

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

14 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**

Volume Requirements

Rural Factor of 70 % applied
Veh/Hr Major = **378**

Veh/Hr Minor = **32**

Major Road						Minor Road		
CSAH 23						None		
Time	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	Met?
16:00 - 17:00	954	+	784	=	1738	0	64	Yes
15:00 - 16:00	900	+	797	=	1697	0	71	Yes
17:00 - 18:00	843	+	659	=	1502	0	57	Yes
14:00 - 15:00	726	+	641	=	1367	0	60	Yes
07:30 - 08:30	505	+	707	=	1212	0	68	Yes
11:30 - 12:30	610	+	583	=	1193	0	37	Yes
06:30 - 07:30	406	+	738	=	1144	0	49	Yes
08:30 - 09:30	500	+	635	=	1135	0	56	Yes
13:00 - 14:00	557	+	555	=	1112	0	34	Yes
18:00 - 19:00	582	+	504	=	1086	0	48	Yes
10:30 - 11:30	535	+	546	=	1081	0	42	Yes
09:30 - 10:30	449	+	499	=	948	0	52	Yes
19:30 - 20:30	353	+	299	=	652	0	34	Yes
05:30 - 06:30	234	+	417	=	651	0	32	Yes
12:45 - 13:45	575	+	550	=	1125	0	30	No
12:30 - 13:30	558	+	549	=	1107	0	31	No
19:00 - 20:00	372	+	383	=	755	0	25	No
19:15 - 20:15	359	+	325	=	684	0	27	No
20:30 - 21:30	278	+	266	=	544	0	20	No
05:15 - 06:15	198	+	344	=	542	0	25	No
20:45 - 21:45	252	+	242	=	494	0	18	No
05:00 - 06:00	163	+	287	=	450	0	23	No
21:00 - 22:00	209	+	213	=	422	0	12	No
21:15 - 22:15	178	+	196	=	374	0	11	No
04:45 - 05:45	123		251		374	0	24	No

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2659

Study Date : 08/13/2026

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 7 hours meet 1A minimums.
15 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 = **202 302**

Veh/Hr Minor = **50 26**

Major Road						Minor Road					
CSAH 23						None					
Time	Major NB	+	Major SB	=	Total		Minor EB		Minor WB		Met1A?
15:45 - 16:45	1000	+	803	=	1803		0		53		Yes
16:45 - 17:45	903	+	729	=	1632		0		67		Yes
14:45 - 15:45	861	+	750	=	1611		0		73		Yes
13:45 - 14:45	634	+	602	=	1236		0		53		Yes
07:45 - 08:45	482	+	706	=	1188		0		69		Yes
06:45 - 07:45	441	+	747	=	1188		0		58		Yes
08:45 - 09:45	497	+	583	=	1080		0		58		Yes
11:15 - 12:15	593	+	606	=	1199		0		40		No
11:30 - 12:30	610	+	583	=	1193		0		37		No
11:45 - 12:45	600	+	581	=	1181		0		37		No
13:30 - 14:30	599	+	579	=	1178		0		42		No
13:15 - 14:15	597		580		1177		0		34		No

Time	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	Met1B?
15:30 - 16:30	977	+	799	=	1776	0	62	Yes
16:30 - 17:30	953	+	775	=	1728	0	72	Yes
14:30 - 15:30	817	+	713	=	1530	0	68	Yes
17:30 - 18:30	698	+	545	=	1243	0	39	Yes
07:30 - 08:30	505	+	707	=	1212	0	68	Yes
11:30 - 12:30	610	+	583	=	1193	0	37	Yes
13:30 - 14:30	599	+	579	=	1178	0	42	Yes
06:30 - 07:30	406	+	738	=	1144	0	49	Yes
08:30 - 09:30	500	+	635	=	1135	0	56	Yes
12:30 - 13:30	558	+	549	=	1107	0	31	Yes
10:30 - 11:30	535	+	546	=	1081	0	42	Yes
09:30 - 10:30	449	+	499	=	948	0	52	Yes

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2659

Study Date : 08/13/2026

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.

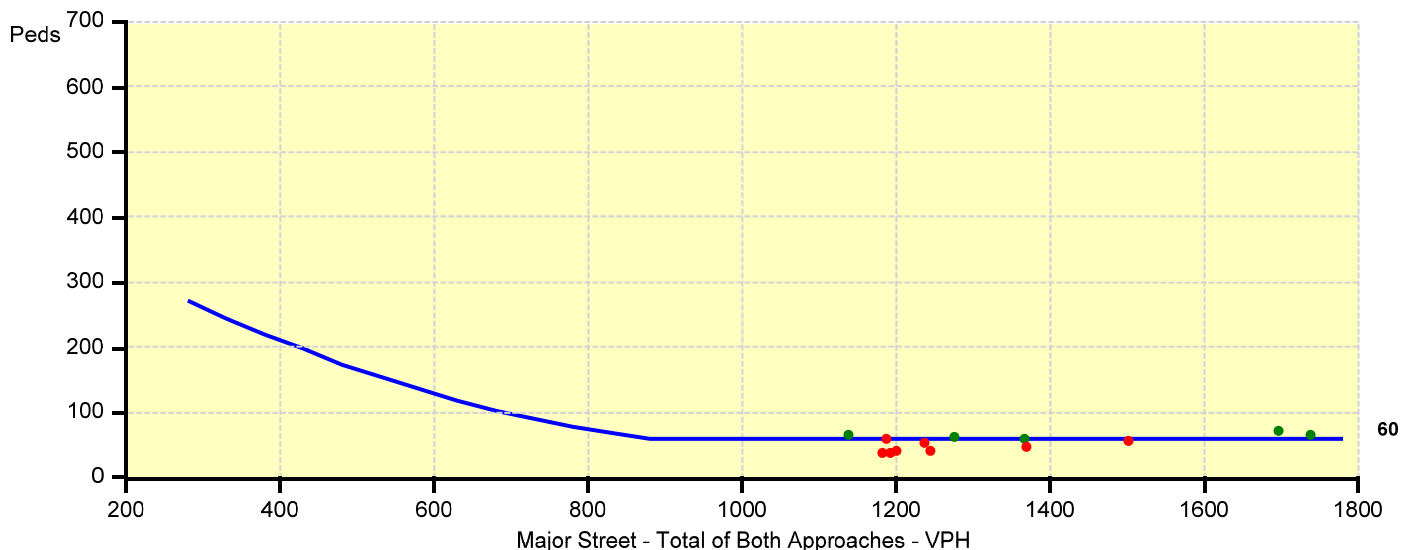
Summary

5 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 23						Minor Road None		
Time	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	Met?
16:00 - 17:00	954	+	784	=	1738	0	64	Yes
15:00 - 16:00	900	+	797	=	1697	0	71	Yes
14:00 - 15:00	726	+	641	=	1367	0	60	Yes
07:00 - 08:00	492	+	783	=	1275	0	61	Yes
08:00 - 09:00	470	+	668	=	1138	0	65	Yes
17:00 - 18:00	843	+	659	=	1502	0	57	No
17:15 - 18:15	769	+	600	=	1369	0	46	No
17:30 - 18:30	698	+	545	=	1243	0	39	No
13:45 - 14:45	634	+	602	=	1236	0	53	No
11:15 - 12:15	593	+	606	=	1199	0	40	No
11:30 - 12:30	610	+	583	=	1193	0	37	No
06:45 - 07:45	441	+	747	=	1188	0	58	No



ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2659

Study Date : 08/13/2026

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						Minor Road			
CSAH 23						None			
Time	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	Met?	
15:45 - 16:45	1000	+	803	=	1803	0	53	No	
15:30 - 16:30	977	+	799	=	1776	0	62	No	
15:15 - 16:15	966	+	799	=	1765	0	65	No	
16:00 - 17:00	954	+	784	=	1738	0	64	No	
16:30 - 17:30	953	+	775	=	1728	0	72	No	
16:15 - 17:15	955	+	770	=	1725	0	69	No	
15:00 - 16:00	900	+	797	=	1697	0	71	No	
16:45 - 17:45	903	+	729	=	1632	0	67	No	
14:45 - 15:45	861	+	750	=	1611	0	73	No	
14:30 - 15:30	817	+	713	=	1530	0	68	No	
17:00 - 18:00	843	+	659	=	1502	0	57	No	
14:15 - 15:15	741	+	680	=	1421	0	67	No	

