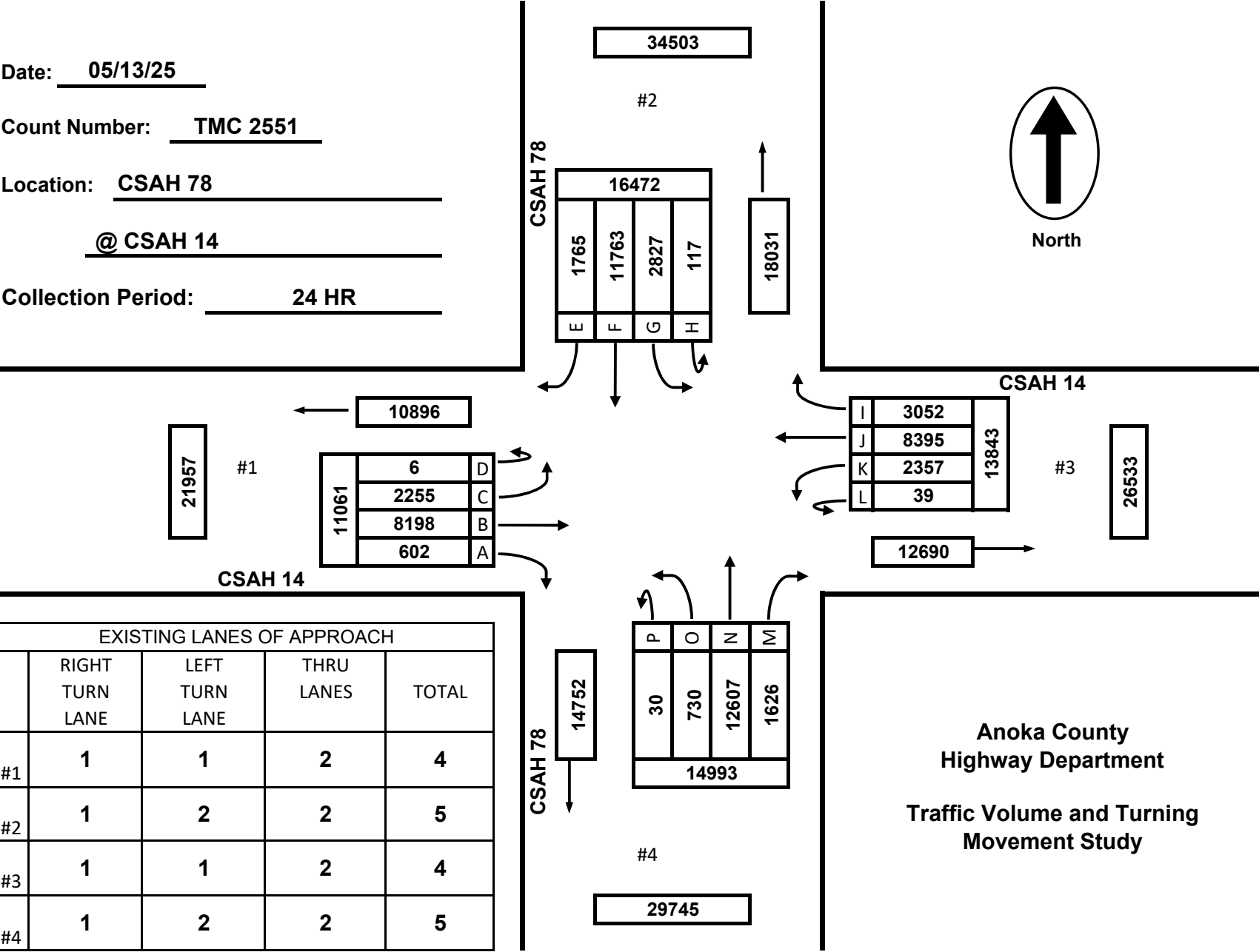
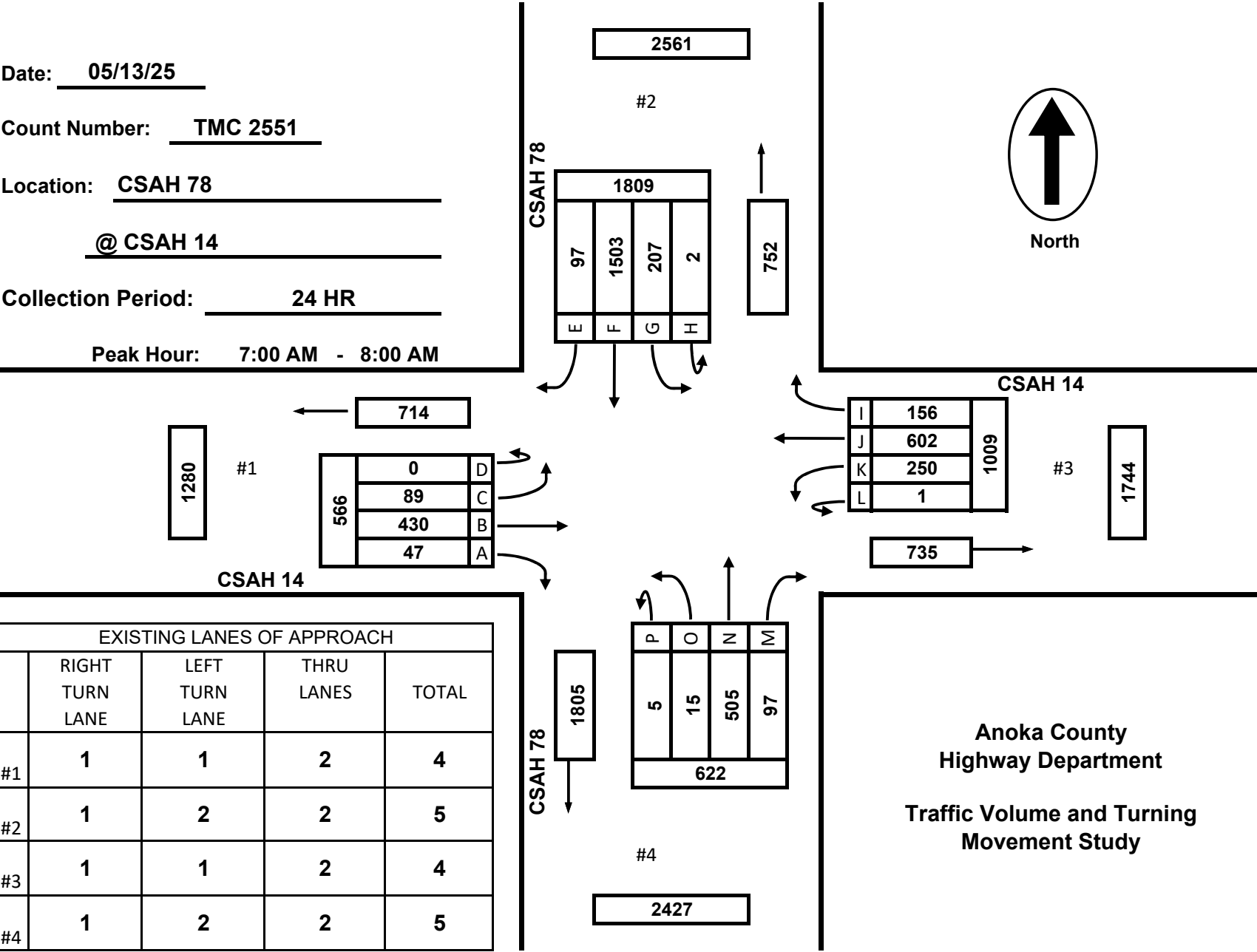


Date: 05/13/25
Count Number: TMC 2551
Location: CSAH 78
@ CSAH 14
Collection Period: 24 HR



Anoka County
Highway Department
Traffic Volume and Turning
Movement Study

Date: 05/13/25
 Count Number: TMC 2551
 Location: CSAH 78
@ CSAH 14
 Collection Period: 24 HR
 Peak Hour: 7:00 AM - 8:00 AM



Anoka County
 Highway Department
 Traffic Volume and Turning
 Movement Study

Date: 05/13/25

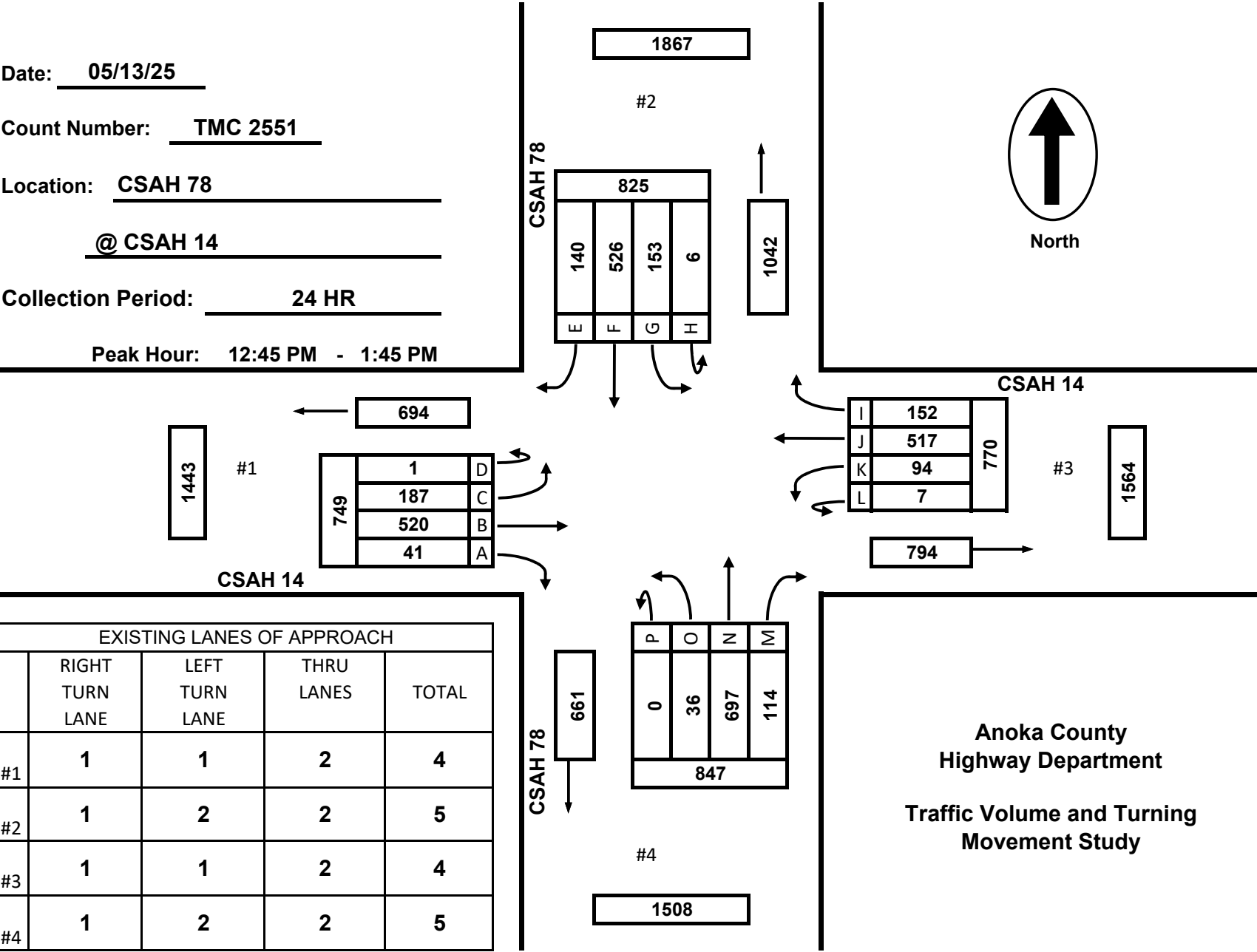
Count Number: TMC 2551

Location: CSAH 78

@ CSAH 14

Collection Period: 24 HR

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



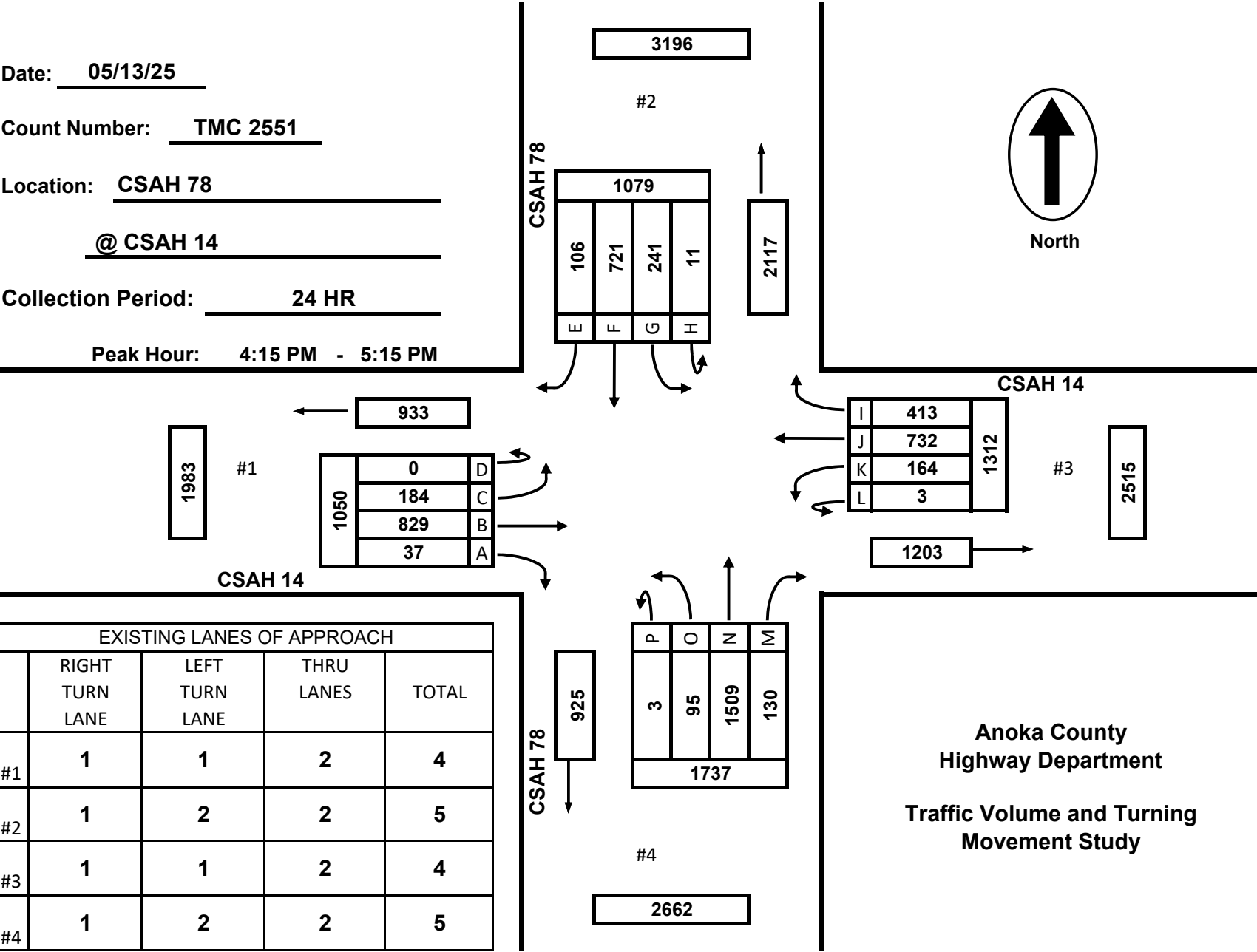
Date: 05/13/25

Count Number: TMC 2551

Location: CSAH 78
@ CSAH 14

Collection Period: 24 HR

Peak Hour: 4:15 PM - 5:15 PM



TMC 2551 - CSAH 78 @ CSAH 14
Coon Rapids MN
Tuesday, May 13, 2025

Time	Southbound CSAH 78						Westbound CSAH 14						Northbound CSAH 78						Eastbound CSAH 14						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	4	14	4	0	22	0	0	6	1	0	7	0	3	25	3	0	31	0	1	9	1	0	11	71
12:15 AM	0	3	8	1	0	12	0	3	13	5	0	21	0	1	20	5	0	26	0	1	6	0	0	7	66
12:30 AM	1	4	4	0	0	9	0	3	6	1	0	10	0	2	9	1	0	12	0	0	7	2	0	9	40
12:45 AM	0	1	3	0	0	4	0	2	2	3	0	7	0	3	9	1	0	13	0	1	4	2	0	7	31
Hourly Total	1	12	29	5	0	47	0	8	27	10	0	45	0	9	63	10	0	82	0	3	26	5	0	34	208
1:00 AM	0	2	6	0	0	8	0	3	3	0	0	6	0	2	16	0	0	18	0	1	3	1	0	5	37
1:15 AM	0	0	12	0	0	12	0	2	3	1	0	6	0	2	13	1	0	16	0	1	3	0	0	4	38
1:30 AM	0	0	2	0	0	2	0	1	2	1	0	4	0	0	8	1	0	9	0	2	8	0	0	10	25
1:45 AM	0	1	7	0	0	8	0	1	1	3	0	5	0	0	8	1	0	9	0	0	3	0	0	3	25
Hourly Total	0	3	27	0	0	30	0	7	9	5	0	21	0	4	45	3	0	52	0	4	17	1	0	22	125
2:00 AM	0	1	5	0	0	6	0	1	3	0	0	4	0	1	10	2	0	13	0	2	4	0	0	6	29
2:15 AM	1	1	8	1	0	11	0	0	5	0	0	5	0	0	12	0	0	12	0	3	2	0	0	5	33
2:30 AM	0	1	4	2	0	7	0	0	3	1	0	4	0	1	6	2	0	9	0	0	2	0	0	2	22
2:45 AM	0	1	9	1	0	11	0	2	1	2	0	5	0	1	7	0	0	8	0	1	3	0	0	4	28
Hourly Total	1	4	26	4	0	35	0	3	12	3	0	18	0	3	35	4	0	42	0	6	11	0	0	17	112
3:00 AM	0	0	9	1	0	10	0	1	3	0	0	4	0	0	7	1	0	8	0	0	0	0	0	0	22
3:15 AM	0	1	16	0	0	17	0	1	4	2	0	7	0	0	5	0	0	5	0	0	1	0	0	1	30
3:30 AM	0	2	13	1	0	16	0	2	5	1	0	8	0	1	7	1	0	9	0	0	3	0	0	3	36
3:45 AM	0	5	15	0	0	20	0	3	7	1	0	11	0	0	12	1	0	13	0	1	3	0	0	4	48
Hourly Total	0	8	53	2	0	63	0	7	19	4	0	30	0	1	31	3	0	35	0	1	7	0	0	8	136
4:00 AM	0	3	20	1	0	24	1	6	0	2	0	9	0	0	6	1	0	7	0	1	6	2	0	9	49
4:15 AM	2	6	43	2	0	53	0	1	11	2	0	14	0	1	5	2	0	8	0	0	5	0	0	5	80
4:30 AM	0	7	54	3	0	64	0	3	23	5	0	31	0	1	9	4	0	14	0	2	9	3	0	14	123
4:45 AM	0	5	63	8	0	76	0	7	27	4	0	38	0	1	17	0	0	18	0	4	15	0	0	19	151
Hourly Total	2	21	180	14	0	217	1	17	61	13	0	92	0	3	37	7	0	47	0	7	35	5	0	47	403
5:00 AM	0	6	103	9	0	118	0	8	24	5	0	37	0	0	9	0	0	9	0	5	13	0	0	18	182
5:15 AM	0	11	138	8	1	157	0	17	44	5	1	66	0	2	23	7	0	32	0	2	26	8	1	36	291
5:30 AM	0	24	164	9	0	197	1	8	46	15	0	70	0	1	45	7	0	53	0	8	22	3	0	33	353
5:45 AM	0	23	185	7	0	215	0	18	43	16	0	77	0	1	35	4	0	40	0	9	33	0	0	42	374
Hourly Total	0	64	590	33	1	687	1	51	157	41	1	250	0	4	112	18	0	134	0	24	94	11	1	129	1200
6:00 AM	1	20	218	4	0	243	0	17	51	13	0	81	0	3	54	5	1	62	0	8	45	1	0	54	440
6:15 AM	0	37	265	13	0	315	0	32	59	21	0	112	0	2	92	6	0	100	0	15	56	4	0	75	602
6:30 AM	0	45	346	18	0	409	0	23	96	25	0	144	0	1	95	17	0	113	0	7	83	3	0	93	759
6:45 AM	1	52	320	25	0	398	0	49	133	29	0	211	0	4	107	13	0	124	0	26	82	4	0	112	845
Hourly Total	2	154	1149	60	0	1365	0	121	339	88	0	548	0	10	348	41	1	399	0	56	266	12	0	334	2646
7:00 AM	2	39	410	19	0	470	0	54	106	30	1	190	0	3	104	20	0	127	0	14	80	5	0	99	886
7:15 AM	0	56	341	22	1	419	0	72	148	51	0	271	0	4	106	26	0	136	0	24	134	17	0	175	1001
7:30 AM	0	44	375	26	0	445	0	62	173	39	1	274	1	4	144	26	0	175	0	15	106	12	0	133	1027
7:45 AM	0	68	377	30	0	475	1	62	175	36	0	274	4	4	151	25	0	184	0	36	110	13	0	159	1092
Hourly Total	2	207	1503	97	1	1809	1	250	602	156	2	1009	5	15	505	97	0	622	0	89	430	47	0	566	4006

TMC 2551 - CSAH 78 @ CSAH 14
Coon Rapids MN
Tuesday, May 13, 2025

Time	Southbound CSAH 78						Westbound CSAH 14						Northbound CSAH 78						Eastbound CSAH 14						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	47	315	25	0	387	0	47	117	24	0	188	0	3	118	18	0	139	0	22	131	18	0	171	885
8:15 AM	3	62	256	16	0	337	1	42	131	22	0	196	1	11	135	22	0	169	0	24	91	15	0	130	832
8:30 AM	1	34	194	25	0	254	2	52	106	41	0	201	0	4	133	25	0	162	0	20	84	7	0	111	728
8:45 AM	0	41	180	27	0	248	0	55	113	33	0	201	0	5	127	26	0	158	0	23	96	6	0	125	732
Hourly Total	4	184	945	93	0	1226	3	196	467	120	0	786	1	23	513	91	0	628	0	89	402	46	0	537	3177
9:00 AM	1	40	190	26	0	257	1	41	100	33	0	175	0	4	128	16	0	148	0	30	88	4	0	122	702
9:15 AM	1	29	211	37	0	278	0	53	97	51	0	201	1	12	139	5	0	157	0	18	64	11	1	93	729
9:30 AM	0	43	200	32	0	275	1	40	113	37	0	191	1	2	123	21	0	147	0	29	76	10	0	115	728
9:45 AM	1	33	171	35	0	240	0	35	110	27	0	172	0	14	135	17	1	166	0	27	96	5	1	128	706
Hourly Total	3	145	772	130	0	1050	2	169	420	148	0	739	2	32	525	59	1	618	0	104	324	30	2	458	2865
10:00 AM	0	28	141	32	0	201	0	33	124	32	0	189	0	8	106	19	1	133	0	23	101	5	0	129	652
10:15 AM	2	32	140	32	0	206	0	27	137	33	0	197	2	7	118	20	0	147	1	27	101	9	0	138	688
10:30 AM	1	29	147	37	0	214	1	33	116	33	0	183	0	6	123	24	0	153	0	26	111	11	0	148	698
10:45 AM	4	25	120	38	0	187	1	28	113	37	0	179	1	15	142	19	0	177	0	30	124	11	0	165	708
Hourly Total	7	114	548	139	0	808	2	121	490	135	0	748	3	36	489	82	1	610	1	106	437	36	0	580	2746
11:00 AM	1	42	144	25	0	212	0	22	127	24	0	173	1	6	130	21	1	158	0	40	135	11	0	186	729
11:15 AM	2	34	134	26	0	196	0	36	130	36	0	202	1	12	136	19	0	168	0	48	117	6	0	171	737
11:30 AM	0	26	155	33	1	214	0	32	144	28	0	204	1	7	158	27	0	193	0	27	133	7	0	167	778
11:45 AM	1	32	138	34	0	205	0	33	148	41	0	222	0	10	152	20	0	182	0	43	147	12	0	202	811
Hourly Total	4	134	571	118	1	827	0	123	549	129	0	801	3	35	576	87	1	701	0	158	532	36	0	726	3055
12:00 PM	4	39	130	40	0	213	0	28	148	39	0	215	0	14	131	19	0	164	0	23	141	8	0	172	764
12:15 PM	3	27	125	32	0	187	0	30	131	28	0	189	0	12	145	22	0	179	0	45	131	8	0	184	739
12:30 PM	5	31	125	24	0	185	0	28	127	49	0	204	0	5	160	27	0	192	0	41	101	6	0	148	729
12:45 PM	3	55	127	34	0	219	0	21	137	36	0	194	0	4	185	29	0	218	1	58	139	6	0	204	835
Hourly Total	15	152	507	130	0	804	0	107	543	152	0	802	0	35	621	97	0	753	1	167	512	28	0	708	3067
1:00 PM	1	27	143	35	0	206	1	24	126	29	0	180	0	12	149	28	0	189	0	48	134	11	0	193	768
1:15 PM	0	33	119	34	0	186	4	26	119	38	0	187	0	5	164	34	0	203	0	40	143	13	0	196	772
1:30 PM	2	38	137	37	0	214	2	23	135	49	0	209	0	15	199	23	0	237	0	41	104	11	0	156	816
1:45 PM	1	62	130	30	0	223	0	32	119	44	0	195	1	7	172	28	0	208	0	30	148	12	0	190	816
Hourly Total	4	160	529	136	0	829	7	105	499	160	0	771	1	39	684	113	0	837	0	159	529	47	0	735	3172
2:00 PM	2	40	168	31	0	241	0	29	116	46	0	191	0	12	210	28	0	250	0	53	144	13	0	210	892
2:15 PM	2	48	132	35	0	217	1	42	135	44	0	222	0	20	200	35	0	255	0	46	161	17	0	224	918
2:30 PM	1	44	129	38	0	212	0	34	165	47	0	246	0	23	270	39	0	332	0	35	164	11	1	210	1000
2:45 PM	4	49	135	30	0	218	1	36	153	59	0	249	0	23	289	29	1	341	1	46	135	11	0	193	1001
Hourly Total	9	181	564	134	0	888	2	141	569	196	0	908	0	78	969	131	1	1178	1	180	604	52	1	837	3811
3:00 PM	1	35	154	26	0	216	1	31	135	55	0	222	0	25	294	33	0	352	0	52	139	11	0	202	992
3:15 PM	3	34	149	32	0	218	1	27	148	74	0	250	0	25	359	35	0	419	0	56	165	13	0	234	1121
3:30 PM	5	50	150	27	0	232	0	57	153	94	0	304	1	21	332	39	1	393	0	27	166	9	0	202	1131
3:45 PM	2	37	155	38	0	232	0	42	180	81	0	303	2	27	321	34	0	384	0	54	201	8	0	263	1182
Hourly Total	11	156	608	123	0	898	2	157	616	304	0	1079	3	98	1306	141	1	1548	0	189	671	41	0	901	4426

TMC 2551 - CSAH 78 @ CSAH 14
Coon Rapids MN
Tuesday, May 13, 2025

Time	Southbound CSAH 78						Westbound CSAH 14						Northbound CSAH 78						Eastbound CSAH 14						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	3	59	194	27	0	283	2	35	155	120	0	312	0	25	323	26	1	374	0	56	180	8	0	244	1213
4:15 PM	3	67	176	22	0	268	2	47	205	114	0	368	0	29	331	35	1	396	0	63	222	13	0	298	1330
4:30 PM	1	64	172	31	0	268	1	32	156	101	0	290	1	26	353	27	0	407	0	45	201	13	1	259	1224
4:45 PM	2	47	165	30	0	244	0	52	227	110	0	389	1	19	388	31	0	439	0	45	217	9	1	271	1343
Hourly Total	9	237	707	110	0	1063	5	166	743	445	0	1359	3	99	1395	119	2	1616	0	209	820	43	2	1072	5110
5:00 PM	5	63	208	23	0	299	0	33	144	88	0	265	0	21	437	37	1	495	0	31	189	2	0	222	1281
5:15 PM	2	53	172	28	0	255	0	53	160	78	0	291	0	14	342	35	0	391	0	60	192	8	0	260	1197
5:30 PM	7	48	176	35	0	266	4	48	177	84	0	313	0	20	348	39	0	407	0	45	157	11	0	213	1199
5:45 PM	2	63	170	23	0	258	0	43	133	60	3	236	0	19	289	30	1	338	0	30	163	8	0	201	1033
Hourly Total	16	227	726	109	0	1078	4	177	614	310	3	1105	0	74	1416	141	2	1631	0	166	701	29	0	896	4710
6:00 PM	1	46	153	27	0	227	2	27	130	54	0	213	1	6	241	37	3	285	0	33	143	5	0	181	906
6:15 PM	1	60	126	23	0	210	1	19	148	60	0	228	0	9	255	25	1	289	0	50	143	14	0	207	934
6:30 PM	0	56	138	23	0	217	1	37	97	50	0	185	1	6	172	16	0	195	0	46	133	5	0	184	781
6:45 PM	3	50	131	31	0	215	1	26	135	56	0	218	1	9	204	36	1	250	0	35	125	6	0	166	849
Hourly Total	5	212	548	104	0	869	5	109	510	220	0	844	3	30	872	114	5	1019	0	164	544	30	0	738	3470
7:00 PM	3	59	125	29	0	216	0	30	114	37	0	181	1	10	190	31	0	232	0	25	107	9	0	141	770
7:15 PM	0	39	89	27	0	155	0	30	105	34	1	169	0	14	178	37	0	229	0	41	96	7	0	144	697
7:30 PM	1	45	100	21	0	167	1	25	98	31	0	155	0	4	149	14	0	167	0	47	127	9	0	183	672
7:45 PM	2	42	91	18	0	153	1	21	107	31	0	160	0	2	146	27	0	175	1	32	106	7	0	146	634
Hourly Total	6	185	405	95	0	691	2	106	424	133	1	665	1	30	663	109	0	803	1	145	436	32	0	614	2773
8:00 PM	2	54	82	19	0	157	0	24	76	22	0	122	1	10	126	17	0	154	2	36	105	6	0	149	582
8:15 PM	1	32	99	21	0	153	0	28	100	36	0	164	1	5	159	21	0	186	0	44	89	15	0	148	651
8:30 PM	2	40	81	20	0	143	0	29	69	27	0	125	2	7	163	17	0	189	0	19	85	6	0	110	567
8:45 PM	2	17	97	12	0	128	1	25	69	13	0	108	0	8	128	20	0	156	0	31	104	7	0	142	534
Hourly Total	7	143	359	72	0	581	1	106	314	98	0	519	4	30	576	75	0	685	2	130	383	34	0	549	2334
9:00 PM	1	27	73	15	0	116	0	13	54	32	0	99	0	7	118	13	0	138	0	22	70	7	0	99	452
9:15 PM	4	26	60	4	0	94	1	19	57	31	0	108	0	3	115	11	0	129	0	18	54	3	0	75	406
9:30 PM	1	16	62	6	0	85	0	18	47	16	0	81	1	5	85	7	0	98	0	14	57	6	0	77	341
9:45 PM	2	11	40	5	0	58	0	11	53	27	0	91	0	2	89	15	0	106	0	16	54	4	0	74	329
Hourly Total	8	80	235	30	0	353	1	61	211	106	0	379	1	17	407	46	0	471	0	70	235	20	0	325	1528
10:00 PM	0	14	46	7	0	67	0	6	48	19	0	73	0	5	82	8	0	95	0	8	26	4	0	38	273
10:15 PM	0	8	36	7	0	51	0	9	38	21	0	68	0	2	68	6	0	76	0	3	31	1	0	35	230
10:30 PM	0	3	28	3	0	34	0	8	26	10	0	44	0	6	64	4	0	74	0	3	19	2	0	24	176
10:45 PM	1	4	16	1	0	22	0	8	27	7	0	42	0	0	42	6	0	48	0	3	25	1	0	29	141
Hourly Total	1	29	126	18	0	174	0	31	139	57	0	227	0	13	256	24	0	293	0	17	101	8	0	126	820
11:00 PM	0	5	19	3	0	27	0	4	22	6	0	32	0	5	48	3	0	56	0	7	31	5	0	43	158
11:15 PM	0	3	14	2	0	19	0	7	13	7	0	27	0	3	40	6	0	49	0	3	15	0	0	18	113
11:30 PM	0	2	12	2	0	16	0	4	13	3	0	20	0	3	45	3	0	51	0	1	17	3	0	21	108
11:45 PM	0	5	11	2	0	18	0	3	13	3	0	19	0	1	30	2	0	33	0	1	18	1	0	20	90
Hourly Total	0	15	56	9	0	80	0	18	61	19	0	98	0	12	163	14	0	189	0	12	81	9	0	102	469
DAILY TOTAL	117	2827	11763	1765	3	16472	39	2357	8395	3052	7	13843	30	730	12607	1626	15	14993	6	2255	8198	602	6	11061	56369
Cars	117	2670	11487	1722	3	15996	39	2313	8238	2899	5	13489	29	711	12278	1582	3	14600	6	2217	8040	589	6	10852	54937
Heavy Vehicles	0	157	276	43	0	476	0	44	157	153	2	354	1	19	329	44	12	393	0	38	158	13	0	209	1432
Heavy Vehicle %	0.00%	5.55%	2.35%	2.44%	0.00%	2.89%	0.00%	1.87%	1.87%	5.01%	28.57%	2.56%	3.33%	2.60%	2.61%	2.71%	80.00%	2.62%	0.00%	1.69%	1.93%	2.16%	0.00%	1.89%	2.54%

TMC 2551 - CSAH 78 @ CSAH 14
Coon Rapids MN
Tuesday, May 13, 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	
7:00 AM	2	39	410	19	0	470	0	54	106	30	1	190	0	3	104	20	0	127	0	14	80	5	0	99	886
7:15 AM	0	56	341	22	1	419	0	72	148	51	0	271	0	4	106	26	0	136	0	24	134	17	0	175	1001
7:30 AM	0	44	375	26	0	445	0	62	173	39	1	274	1	4	144	26	0	175	0	15	106	12	0	133	1027
7:45 AM	0	68	377	30	0	475	1	62	175	36	0	274	4	4	151	25	0	184	0	36	110	13	0	159	1092
Peak Hour Total	2	207	1503	97	1	1809	1	250	602	156	2	1009	5	15	505	97	0	622	0	89	430	47	0	566	4006
Peak Hour Heavy Vehicles	0	15	30	5	0	50	0	5	14	14	1	33	0	0	19	5	0	24	0	6	25	1	0	32	139
Peak Hour Heavy Vehicles %	0.00%	7.25%	2.00%	5.15%	0.00%	2.76%	0.00%	2.00%	2.33%	8.97%	50.00%	3.27%	0.00%	0.00%	3.76%	5.15%	0.00%	3.86%	0.00%	6.74%	5.81%	2.13%	0.00%	5.65%	3.47%
PHF	0.250	0.761	0.916	0.808	0.250	0.952	0.250	0.868	0.860	0.765	0.500	0.921	0.313	0.938	0.836	0.933	0.000	0.845	0.000	0.618	0.802	0.691	0.000	0.809	0.917

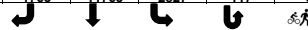
Mid Peak Hour (10:00 - 14:00)

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	3	55	127	34	0	219	0	21	137	36	0	194	0	4	185	29	0	218	1	58	139	6	0	204	835
1:00 PM	1	27	143	35	0	206	1	24	126	29	0	180	0	12	149	28	0	189	0	48	134	11	0	193	768
1:15 PM	0	33	119	34	0	186	4	26	119	38	0	187	0	5	164	34	0	203	0	40	143	13	0	196	772
1:30 PM	2	38	137	37	0	214	2	23	135	49	0	209	0	15	199	23	0	237	0	41	104	11	0	156	816
Peak Hour Total	6	153	526	140	0	825	7	94	517	152	0	770	0	36	697	114	0	847	1	187	520	41	0	749	3191
Peak Hour Heavy Vehicles	0	8	26	4	0	38	0	0	13	5	0	18	0	1	22	1	0	24	0	1	16	0	0	17	97
Peak Hour Heavy Vehicles %	0.00%	5.23%	4.94%	2.86%	0.00%	4.61%	0.00%	0.00%	2.51%	3.29%	0.00%	2.34%	0.00%	2.78%	3.16%	0.88%	0.00%	2.83%	0.00%	0.53%	3.08%	0.00%	0.00%	2.27%	3.04%
PHF	0.500	0.695	0.920	0.946	0.000	0.942	0.438	0.904	0.943	0.776	0.000	0.921	0.000	0.600	0.876	0.838	0.000	0.893	0.250	0.806	0.909	0.788	0.000	0.918	0.955

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	
4:15 PM	3	67	176	22	0	268	2	47	205	114	0	368	1	29	331	35	1	396	0	63	222	13	0	298	1330
4:30 PM	1	64	172	31	0	268	1	32	156	101	0	290	1	26	353	27	0	407	0	45	201	13	1	259	1224
4:45 PM	2	47	165	30	0	244	0	52	227	110	0	389	1	19	388	31	0	439	0	45	217	9	1	271	1343
5:00 PM	5	63	208	23	0	299	0	33	144	88	0	265	0	21	437	37	1	495	0	31	189	2	0	222	1281
Peak Hour Total	11	241	721	106	0	1079	3	164	732	413	0	1312	3	95	1509	130	2	1737	0	184	829	37	2	1050	5178
Peak Hour Heavy Vehicles	0	0	4	2	0	6	0	3	16	32	0	51	0	2	24	3	0	29	0	2	5	0	0	7	93
Peak Hour Heavy Vehicles %	0.00%	0.00%	0.55%	1.89%	0.00%	0.56%	0.00%	1.83%	2.19%	7.75%	0.00%	3.89%	0.00%	2.11%	1.59%	2.31%	0.00%	1.67%	0.00%	1.09%	0.60%	0.00%	0.00%	0.67%	1.80%
PHF	0.550	0.899	0.867	0.855	0.000	0.902	0.375	0.788	0.806	0.906	0.000	0.843	0.750	0.819	0.863	0.878	0.500	0.877	0.000	0.730	0.934	0.712	0.500	0.881	0.964

Total Vehicles On Leg			34503		
Vehicles Entering Intersection 16472			Vehicles Exiting Intersection 18031		
Southbound					
Cars	1722	11487	2670	117	3
Heavy	43	276	157	0	0
Total	1765	11763	2827	117	3



Total Vehicles on Leg 21957	Vehicles Entering Intersection n 11061	Eastbound	Cars	Heavy	Total
	Exiting Intersection n 10896		6	0	6
			6	0	6
			2217	38	2255
			8040	158	8198
			589	13	602

Daily Volumes

Cars	Heavy	Total	Westbound	Vehicles Entering Intersection 13843	Total Vehicles on Leg 26533
2899	153	3052			
8238	157	8395			
2313	44	2357		Exiting Intersection 12690	
39	0	39			
5	2	7			

Cars	3	29	711	12278	1582
Heavy	12	1	19	329	44
Total	15	30	730	12607	1626
Northbound					
Vehicles Entering Intersection 14993			Vehicles Exiting Intersection 14752		
Total Vehicles On Leg			29745		

TMC 2551 - CSAH 78 @ CSAH 14
Coon Rapids MN
Tuesday, May 13, 2025

Time	Southbound Heavy CSAH 78						Westbound Heavy CSAH 14						Northbound Heavy CSAH 78						Eastbound Heavy CSAH 14						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	1	0	0	1	1
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	1	0	0	1	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	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	1	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	2
Hourly 'Heavy Vehicles'	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
2:00 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	1	0	1	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
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	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Hourly 'Heavy Vehicles'	0	0	0	1	0	1	0	0	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	3
3:00 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
3:15 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
3:30 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
3:45 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	3	0	0	3	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	4
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	1	1	0	0	2	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3
4:30 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
4:45 AM	0	1	1	0	0	2	0	0	0	0	0	0	0	0	1	0	0	1	0	0	1	0	0	1	4
Hourly 'Heavy Vehicles'	0	2	2	0	0	4	0	0	0	2	0	2	0	0	2	0	0	2	0	0	1	0	0	1	9
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	4	0	0	4	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	5
5:30 AM	0	1	2	1	0	4	0	0	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	0	6
5:45 AM	0	1	4	0	0	5	0	1	1	0	0	2	0	0	0	0	0	0	0	1	1	0	0	2	9
Hourly 'Heavy Vehicles'	0	2	10	1	0	13	0	1	1	0	0	2	0	0	2	1	0	3	0	1	1	0	0	2	20
6:00 AM	0	3	7	1	0	11	0	0	1	0	0	1	0	1	5	1	1	7	0	0	3	0	0	3	22
6:15 AM	0	4	11	1	0	16	0	0	2	0	0	2	0	0	3	0	0	3	0	0	4	0	0	4	25
6:30 AM	0	18	18	1	0	37	0	1	4	1	0	6	0	0	7	0	0	7	0	1	3	0	0	4	54
6:45 AM	0	10	7	1	0	18	0	1	4	1	0	6	0	0	3	1	0	4	0	0	1	1	0	2	30
Hourly 'Heavy Vehicles'	0	35	43	4	0	82	0	2	11	2	0	15	0	1	18	2	1	21	0	1	11	1	0	13	131
7:00 AM	0	2	10	1	0	13	0	1	3	6	0	10	0	0	1	1	0	2	0	4	12	0	0	16	41
7:15 AM	0	4	5	1	0	10	0	0	4	3	0	7	0	0	4	2	0	6	0	1	3	0	0	4	27
7:30 AM	0	4	10	0	0	14	0	3	4	3	1	10	0	0	3	2	0	5	0	0	7	0	0	7	36
7:45 AM	0	5	5	3	0	13	0	1	3	2	0	6	0	0	11	0	0	11	0	1	3	1	0	5	35
Hourly 'Heavy Vehicles'	0	15	30	5	0	50	0	5	14	14	1	33	0	0	19	5	0	24	0	6	25	1	0	32	139

TMC 2551 - CSAH 78 @ CSAH 14
Coon Rapids MN
Tuesday, May 13, 2025

Time	Southbound Heavy CSAH 78						Westbound Heavy CSAH 14						Northbound Heavy CSAH 78						Eastbound Heavy CSAH 14						VEHICLE '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'	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach 'Heavy Vehicles'	
8:00 AM	0	2	9	2	0	13	0	4	0	1	0	5	0	0	2	0	0	2	0	0	5	1	0	6	26
8:15 AM	0	3	4	2	0	9	0	1	5	4	0	10	0	2	15	1	0	18	0	2	4	0	0	6	43
8:30 AM	0	1	0	0	0	1	0	0	2	0	0	2	0	0	7	2	0	9	0	2	4	2	0	8	20
8:45 AM	0	0	10	0	0	10	0	1	3	3	0	7	0	0	6	1	0	7	0	1	4	1	0	6	30
Hourly 'Heavy Vehicles'	0	6	23	4	0	33	0	6	10	8	0	24	0	2	30	4	0	36	0	5	17	4	0	26	119
9:00 AM	0	3	7	1	0	11	0	1	1	1	0	3	0	0	6	1	0	7	0	3	2	0	0	5	26
9:15 AM	0	0	4	2	0	6	0	0	0	20	0	20	0	0	18	0	0	18	0	0	1	0	0	1	45
9:30 AM	0	0	3	0	0	3	0	0	9	16	0	25	0	0	13	0	0	13	0	2	1	0	0	3	44
9:45 AM	0	2	4	2	0	8	0	1	5	0	0	6	0	0	6	0	1	6	0	1	4	0	0	5	25
Hourly 'Heavy Vehicles'	0	5	18	5	0	28	0	2	15	37	0	54	0	0	43	1	1	44	0	6	8	0	0	14	140
10:00 AM	0	0	2	2	0	4	0	1	2	3	0	6	0	0	2	1	1	3	0	2	4	0	0	6	19
10:15 AM	0	1	4	1	0	6	0	0	1	1	0	2	0	0	6	2	0	8	0	1	0	0	0	1	17
10:30 AM	0	0	7	0	0	7	0	2	1	0	0	3	0	0	8	1	0	9	0	1	4	1	0	6	25
10:45 AM	0	2	5	2	0	9	0	0	5	1	0	6	0	1	9	2	0	12	0	0	3	0	0	3	30
Hourly 'Heavy Vehicles'	0	3	18	5	0	26	0	3	9	5	0	17	0	1	25	6	1	32	0	4	11	1	0	16	91
11:00 AM	0	4	10	0	0	14	0	2	2	0	0	4	0	0	5	0	1	5	0	0	3	1	0	4	27
11:15 AM	0	5	2	0	0	7	0	1	0	3	0	4	0	0	5	2	0	7	0	1	3	0	0	4	22
11:30 AM	0	3	6	2	0	11	0	1	4	1	0	6	0	0	6	0	0	6	0	0	4	1	0	5	28
11:45 AM	0	2	2	0	0	4	0	1	6	2	0	9	0	0	5	0	0	5	0	1	2	0	0	3	21
Hourly 'Heavy Vehicles'	0	14	20	2	0	36	0	5	12	6	0	23	0	0	21	2	1	23	0	2	12	2	0	16	98
12:00 PM	0	3	2	0	0	5	0	1	5	4	0	10	0	2	8	1	0	11	0	0	4	0	0	4	30
12:15 PM	0	1	2	2	0	5	0	2	1	1	0	4	0	2	9	1	0	12	0	0	1	0	0	1	22
12:30 PM	0	1	1	0	0	2	0	1	1	4	0	6	0	1	9	1	0	11	0	1	2	0	0	3	22
12:45 PM	0	2	7	1	0	10	0	0	5	0	0	5	0	0	7	0	0	7	0	1	6	0	0	7	29
Hourly 'Heavy Vehicles'	0	7	12	3	0	22	0	4	12	9	0	25	0	5	33	3	0	41	0	2	13	0	0	15	103
1:00 PM	0	0	3	1	0	4	0	0	4	1	0	5	0	0	9	1	0	10	0	0	2	0	0	2	21
1:15 PM	0	1	7	1	0	9	0	0	1	2	0	3	0	0	2	0	0	2	0	0	4	0	0	4	18
1:30 PM	0	5	9	1	0	15	0	0	3	2	0	5	0	1	4	0	0	5	0	0	4	0	0	4	29
1:45 PM	0	20	18	0	0	38	0	0	1	1	0	2	1	0	7	1	0	9	0	1	5	0	0	6	55
Hourly 'Heavy Vehicles'	0	26	37	3	0	66	0	0	9	6	0	15	1	1	22	2	0	26	0	1	15	0	0	16	123
2:00 PM	0	16	19	1	0	36	0	0	2	2	0	4	0	0	5	1	0	6	0	1	8	1	0	10	56
2:15 PM	0	4	3	0	0	7	0	3	3	1	0	7	0	0	7	3	0	10	0	0	4	2	0	6	30
2:30 PM	0	1	5	1	0	7	0	0	9	1	0	10	0	1	9	1	0	11	0	0	1	0	0	1	29
2:45 PM	0	5	3	0	0	8	0	3	5	2	0	10	0	0	11	3	1	14	0	3	6	0	0	9	41
Hourly 'Heavy Vehicles'	0	26	30	2	0	58	0	6	19	6	0	31	0	1	32	8	1	41	0	4	19	3	0	26	156
3:00 PM	0	1	2	2	0	5	0	0	4	4	0	8	0	0	6	0	0	6	0	1	1	0	0	2	21
3:15 PM	0	2	3	3	0	8	0	1	5	2	0	8	0	1	6	1	0	8	0	1	5	0	0	6	30
3:30 PM	0	5	2	0	0	7	0	3	1	5	0	9	0	0	9	1	1	10	0	0	3	0	0	3	29
3:45 PM	0	3	4	0	0	7	0	1	5	0	0	6	0	1	3	0	0	4	0	0	1	0	0	1	18
Hourly 'Heavy Vehicles'	0	11	11	5	0	27	0	5	15	11	0	31	0	2	24	2	1	28	0	2	10	0	0	12	98

TMC 2551 - CSAH 78 @ CSAH 14
Coon Rapids MN
Tuesday, May 13, 2025

Time	Southbound Heavy CSAH 78						Westbound Heavy CSAH 14						Northbound Heavy CSAH 78						Eastbound Heavy CSAH 14						VEHICLE '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'	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach 'Heavy Vehicles'	
4:00 PM	0	0	1	0	0	1	0	1	3	3	0	7	0	1	8	1	1	10	0	0	1	0	0	1	19
4:15 PM	0	0	0	0	0	0	0	0	8	7	0	15	0	1	3	1	0	5	0	1	3	0	0	4	24
4:30 PM	0	0	2	0	0	2	0	1	2	11	0	14	0	1	10	1	0	12	0	1	1	0	0	2	30
4:45 PM	0	0	2	1	0	3	0	2	3	11	0	16	0	0	5	1	0	6	0	0	1	0	0	1	26
Hourly 'Heavy Vehicles'	0	0	5	1	0	6	0	4	16	32	0	52	0	3	26	4	1	33	0	3	5	0	0	8	99
5:00 PM	0	0	0	1	0	1	0	0	3	3	0	6	0	0	6	0	1	6	0	0	0	0	0	0	13
5:15 PM	0	0	1	0	0	1	0	0	1	0	0	1	0	0	2	0	0	2	0	0	0	0	0	0	4
5:30 PM	0	1	0	1	0	2	0	0	2	1	0	3	0	1	1	0	0	2	0	1	0	0	0	1	8
5:45 PM	0	1	1	0	0	2	0	0	0	1	0	1	0	0	4	0	1	4	0	0	0	0	0	0	7
Hourly 'Heavy Vehicles'	0	2	2	2	0	6	0	0	6	5	0	11	0	1	13	0	2	14	0	1	0	0	0	1	32
6:00 PM	0	0	2	0	0	2	0	0	0	1	0	1	0	0	2	1	2	3	0	0	0	0	0	0	6
6:15 PM	0	1	0	0	0	1	0	0	2	1	0	3	0	0	0	0	0	0	0	0	1	0	0	1	5
6:30 PM	0	0	1	0	0	1	0	0	0	1	0	1	0	0	3	0	0	3	0	0	0	0	0	0	5
6:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	1	2	0	1	3	0	0	2	0	0	2	6
Hourly 'Heavy Vehicles'	0	1	3	0	0	4	0	0	2	4	0	6	0	1	7	1	3	9	0	0	3	0	0	3	22
7:00 PM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	2	0	0	2	0	0	0	0	0	0	4
7:15 PM	0	0	2	0	0	2	0	0	1	1	1	2	0	1	2	1	0	4	0	0	0	0	0	0	8
7:30 PM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1	0	0	1	0	0	1	0	0	1	3
7:45 PM	0	1	1	0	0	2	0	0	0	1	0	1	0	0	0	0	0	0	0	0	2	0	0	2	5
Hourly 'Heavy Vehicles'	0	1	4	0	0	5	0	0	1	4	1	5	0	1	5	1	0	7	0	0	3	0	0	3	20
8:00 PM	0	1	1	0	0	2	0	0	1	0	0	1	0	0	0	1	0	1	0	0	0	0	0	0	4
8:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	1	0	0	1	3
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	3	0	0	3	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	4
Hourly 'Heavy Vehicles'	0	1	4	0	0	5	0	0	2	0	0	2	0	0	2	1	0	3	0	0	1	0	0	1	11
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	1	0	0	1	0	0	0	0	0	0	1
9:45 PM	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
Hourly 'Heavy Vehicles'	0	0	0	0	0	0	0	0	1	0	0	1	0	0	1	0	0	1	0	0	0	0	0	0	2
10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	0	0	0	1	0	1	3
10:15 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	1
10:30 PM	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
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	1	1	0	2	0	0	1	1	0	2	0	0	0	1	0	1	5
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	2	0	0	2	2
11:30 PM	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
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	2	0	0	2	0	0	2	0	0	2	4
DAILY 'Heavy Vehicles'	0	157	276	43	0	476	0	44	157	153	2	354	1	19	329	44	12	393	0	38	158	13	0	209	1432

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2551

Study Date : 05/29/2025

Signal Warrants - Summary

Major Street Approaches

Northbound: CSAH 78

Number of Lanes : 2+

Total Approach Volume: 14,993

Southbound: CSAH 78

Number of Lanes :2+

Total Approach Volume: 16,472

Minor Street Approaches

Eastbound: CSAH 14

Number of Lanes :2+

Total Approach Volume: 10,459

Westbound: CSAH 14

Number of Lanes :2+

Total Approach Volume: 10,791

Warrant Summary (Rural Values Apply)

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

Warrant 1A - Minimum Vehicular Volume.....Satisfied

Required volumes reached for 18 hours, 8 are needed

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

Required volumes reached for 17 hours, 8 are needed

Warrant 1C - Combination of Warrants.....Satisfied

Required 1A volumes reached for 18 hours, 8 are needed

Required 1B volumes reached for 18 hours, 8 are needed

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

Number of hours (18) volumes exceed minimum >= minimum required (4).

Warrant 3 - Peak Hour.....Satisfied

Warrant 3A - Peak Hour Delay.....Satisfied

Number of one hour periods (69) volumes exceed minimum >= required (1). Delay data not evaluated.

Warrant 3B - Peak Hour Volumes.....Satisfied

Volumes exceed minimums for at least 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 2551

Study Date : 05/29/2025

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

18 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 = **2 or more**

Volume Requirements

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

Veh/Hr Minor = **140**

Major Road						Minor Road		
CSAH 78						CSAH 14		
Time	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	Met?
16:30 - 17:30	1732	+	1066	=	2798	980	858	Yes
15:30 - 16:30	1547	+	1015	=	2562	969	878	Yes
07:30 - 08:30	667	+	1644	=	2311	535	811	Yes
14:30 - 15:30	1444	+	864	=	2308	793	732	Yes
17:30 - 18:30	1319	+	961	=	2280	764	732	Yes
06:30 - 07:30	500	+	1696	=	2196	450	681	Yes
13:30 - 14:30	950	+	895	=	1845	727	634	Yes
18:30 - 19:30	906	+	803	=	1709	608	576	Yes
08:30 - 09:30	625	+	1037	=	1662	423	620	Yes
12:30 - 13:30	802	+	796	=	1598	705	613	Yes
11:30 - 12:30	718	+	819	=	1537	690	694	Yes
09:30 - 10:30	593	+	922	=	1515	481	620	Yes
10:30 - 11:30	656	+	809	=	1465	631	607	Yes
19:30 - 20:30	682	+	630	=	1312	589	481	Yes
05:30 - 06:30	255	+	970	=	1225	196	275	Yes
20:30 - 21:30	612	+	481	=	1093	403	337	Yes
21:30 - 22:30	375	+	261	=	636	209	230	Yes
04:30 - 05:30	73	+	415	=	488	76	153	Yes
04:15 - 05:15	49	+	311	=	360	53	104	No
22:30 - 23:30	227	+	102	=	329	106	115	No
22:45 - 23:45	204	+	84	=	288	102	98	No
23:00 - 00:00	189	+	80	=	269	93	79	No
04:00 - 05:00	47	+	217	=	264	42	79	No
03:45 - 04:45	42	+	161	=	203	27	55	No
23:15 - 00:15	133		53		186	55	53	No

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2551

Study Date : 05/29/2025

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

17 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 = **2 or more**

Volume Requirements

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

Veh/Hr Minor = **70**

Major Road						Minor Road		
CSAH 78						CSAH 14		
Time	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	Met?
16:45 - 17:45	1732	+	1064	=	2796	936	898	Yes
15:45 - 16:45	1561	+	1051	=	2612	1022	857	Yes
14:45 - 15:45	1505	+	884	=	2389	787	743	Yes
06:45 - 07:45	562	+	1732	=	2294	481	797	Yes
07:45 - 08:45	654	+	1453	=	2107	518	736	Yes
17:45 - 18:45	1107	+	912	=	2019	741	638	Yes
13:45 - 14:45	1045	+	893	=	1938	781	673	Yes
12:45 - 13:45	847	+	825	=	1672	708	618	Yes
08:45 - 09:45	610	+	1058	=	1668	424	614	Yes
18:45 - 19:45	878	+	753	=	1631	603	565	Yes
11:45 - 12:45	717	+	790	=	1507	672	673	Yes
10:45 - 11:45	696	+	809	=	1505	654	633	Yes
05:45 - 06:45	315	+	1182	=	1497	256	339	Yes
09:45 - 10:45	599	+	861	=	1460	513	616	Yes
19:45 - 20:45	704	+	606	=	1310	519	455	Yes
20:45 - 21:45	521	+	423	=	944	370	304	Yes
04:45 - 05:45	112	+	548	=	660	95	182	Yes
21:45 - 22:45	351	+	210	=	561	160	199	No
04:30 - 05:30	73	+	415	=	488	76	153	No
22:00 - 23:00	293	+	174	=	467	118	170	No
22:15 - 23:15	254	+	134	=	388	122	142	No
04:15 - 05:15	49	+	311	=	360	53	104	No
22:30 - 23:30	227	+	102	=	329	106	115	No
22:45 - 23:45	204	+	84	=	288	102	98	No
23:00 - 00:00	189		80		269	93	79	No

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2551

Study Date : 05/29/2025

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

18 hours meet 1A minimums.
18 hours meet 1B minimums.
Warrant IS met.

Site Data Required

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

Volume Requirements

Rural Factor of 70% applied
Warrant 1A 1B
Veh/Hr Major = **336 504**
Veh/Hr Minor = **112 56**

Major Road						Minor Road				
CSAH 78						CSAH 14				
Time	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	Met1A?		
16:30 - 17:30	1732	+	1066	=	2798	980	858	Yes		
15:30 - 16:30	1547	+	1015	=	2562	969	878	Yes		
07:30 - 08:30	667	+	1644	=	2311	535	811	Yes		
14:30 - 15:30	1444	+	864	=	2308	793	732	Yes		
17:30 - 18:30	1319	+	961	=	2280	764	732	Yes		
06:30 - 07:30	500	+	1696	=	2196	450	681	Yes		
13:30 - 14:30	950	+	895	=	1845	727	634	Yes		
18:30 - 19:30	906	+	803	=	1709	608	576	Yes		
08:30 - 09:30	625	+	1037	=	1662	423	620	Yes		
12:30 - 13:30	802	+	796	=	1598	705	613	Yes		
11:30 - 12:30	718	+	819	=	1537	690	694	Yes		
09:30 - 10:30	593		922		1515	481	620	Yes		

Time	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	Met1B?		
16:45 - 17:45	1732	+	1064	=	2796	936	898	Yes		
15:45 - 16:45	1561	+	1051	=	2612	1022	857	Yes		
14:45 - 15:45	1505	+	884	=	2389	787	743	Yes		
06:45 - 07:45	562	+	1732	=	2294	481	797	Yes		
07:45 - 08:45	654	+	1453	=	2107	518	736	Yes		
17:45 - 18:45	1107	+	912	=	2019	741	638	Yes		
13:45 - 14:45	1045	+	893	=	1938	781	673	Yes		
12:45 - 13:45	847	+	825	=	1672	708	618	Yes		
08:45 - 09:45	610	+	1058	=	1668	424	614	Yes		
18:45 - 19:45	878	+	753	=	1631	603	565	Yes		
11:45 - 12:45	717	+	790	=	1507	672	673	Yes		
10:45 - 11:45	696		809		1505	654	633	Yes		

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2551

Study Date : 05/29/2025

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.

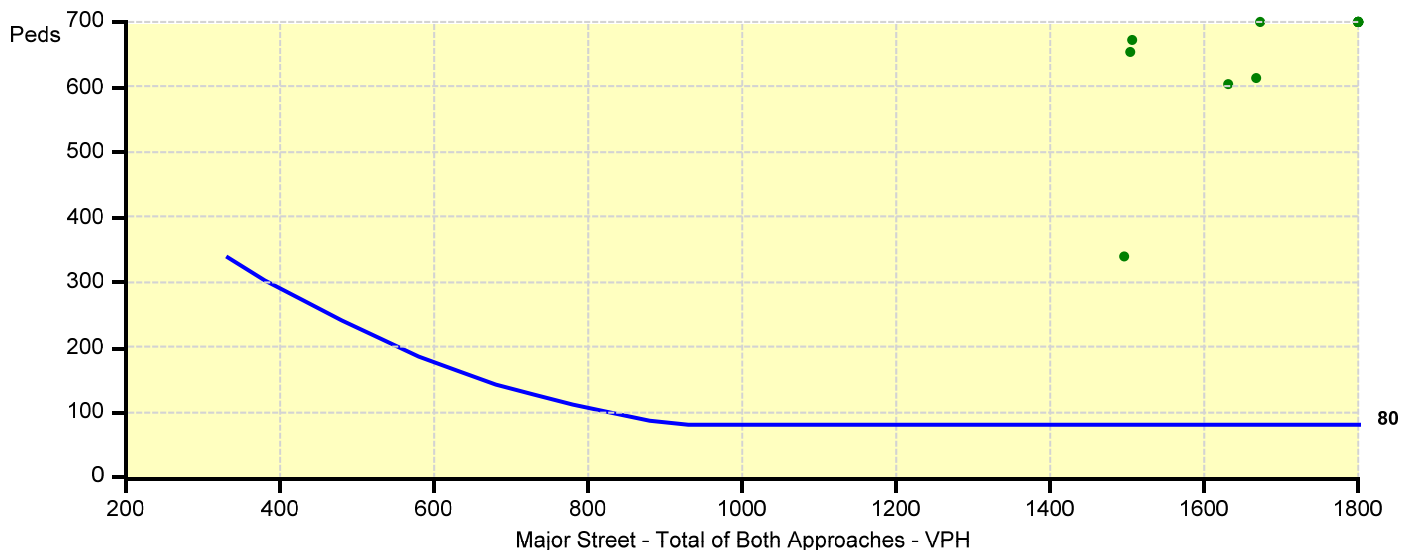
Summary

18 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 = **2 or more**

Major Road CSAH 78						Minor Road CSAH 14		
Time	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	Met?
16:45 - 17:45	1732	+	1064	=	2796	936	898	Yes
15:45 - 16:45	1561	+	1051	=	2612	1022	857	Yes
14:45 - 15:45	1505	+	884	=	2389	787	743	Yes
06:45 - 07:45	562	+	1732	=	2294	481	797	Yes
07:45 - 08:45	654	+	1453	=	2107	518	736	Yes
17:45 - 18:45	1107	+	912	=	2019	741	638	Yes
13:45 - 14:45	1045	+	893	=	1938	781	673	Yes
12:45 - 13:45	847	+	825	=	1672	708	618	Yes
08:45 - 09:45	610	+	1058	=	1668	424	614	Yes
18:45 - 19:45	878	+	753	=	1631	603	565	Yes
11:45 - 12:45	717	+	790	=	1507	672	673	Yes
10:45 - 11:45	696	+	809	=	1505	654	633	Yes



ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2551

Study Date : 05/29/2025

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

66 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 = **2 or more**

Major Road CSAH 78						Minor Road CSAH 14		
Time	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	Met?
16:15 - 17:15	1737	+	1079	=	2816	1013	899	Yes
16:30 - 17:30	1732	+	1066	=	2798	980	858	Yes
16:45 - 17:45	1732	+	1064	=	2796	936	898	Yes
17:00 - 18:00	1631	+	1078	=	2709	867	795	Yes
16:00 - 17:00	1616	+	1063	=	2679	1029	914	Yes
15:45 - 16:45	1561	+	1051	=	2612	1022	857	Yes
15:30 - 16:30	1547	+	1015	=	2562	969	878	Yes
15:15 - 16:15	1570	+	965	=	2535	905	800	Yes
15:00 - 16:00	1548	+	898	=	2446	860	775	Yes
07:00 - 08:00	622	+	1809	=	2431	519	853	Yes
17:15 - 18:15	1421	+	1006	=	2427	823	777	Yes
14:45 - 15:45	1505		884		2389	787	743	Yes

