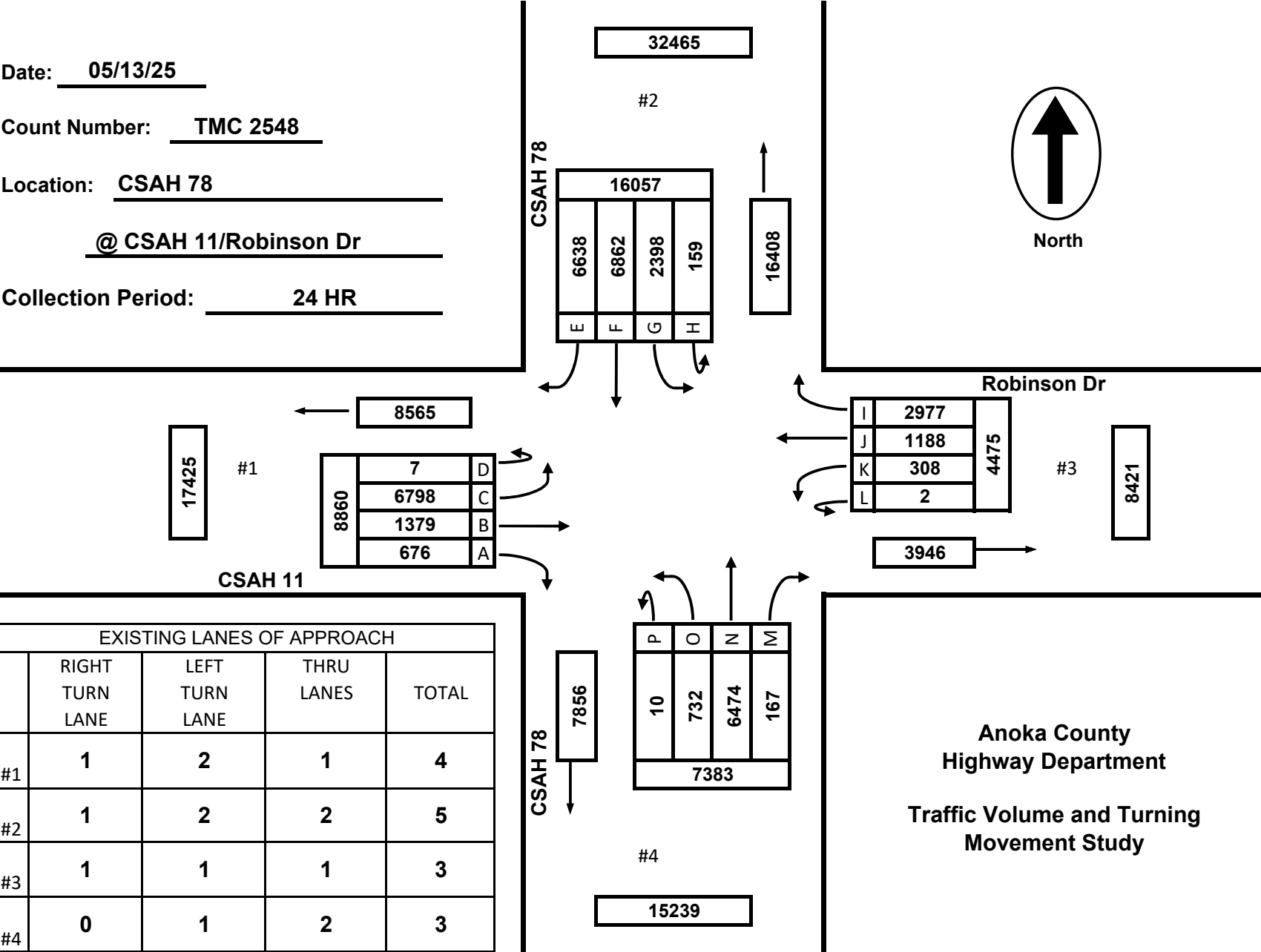


Date: 05/13/25
Count Number: TMC 2548
Location: CSAH 78
@ CSAH 11/Robinson Dr
Collection Period: 24 HR



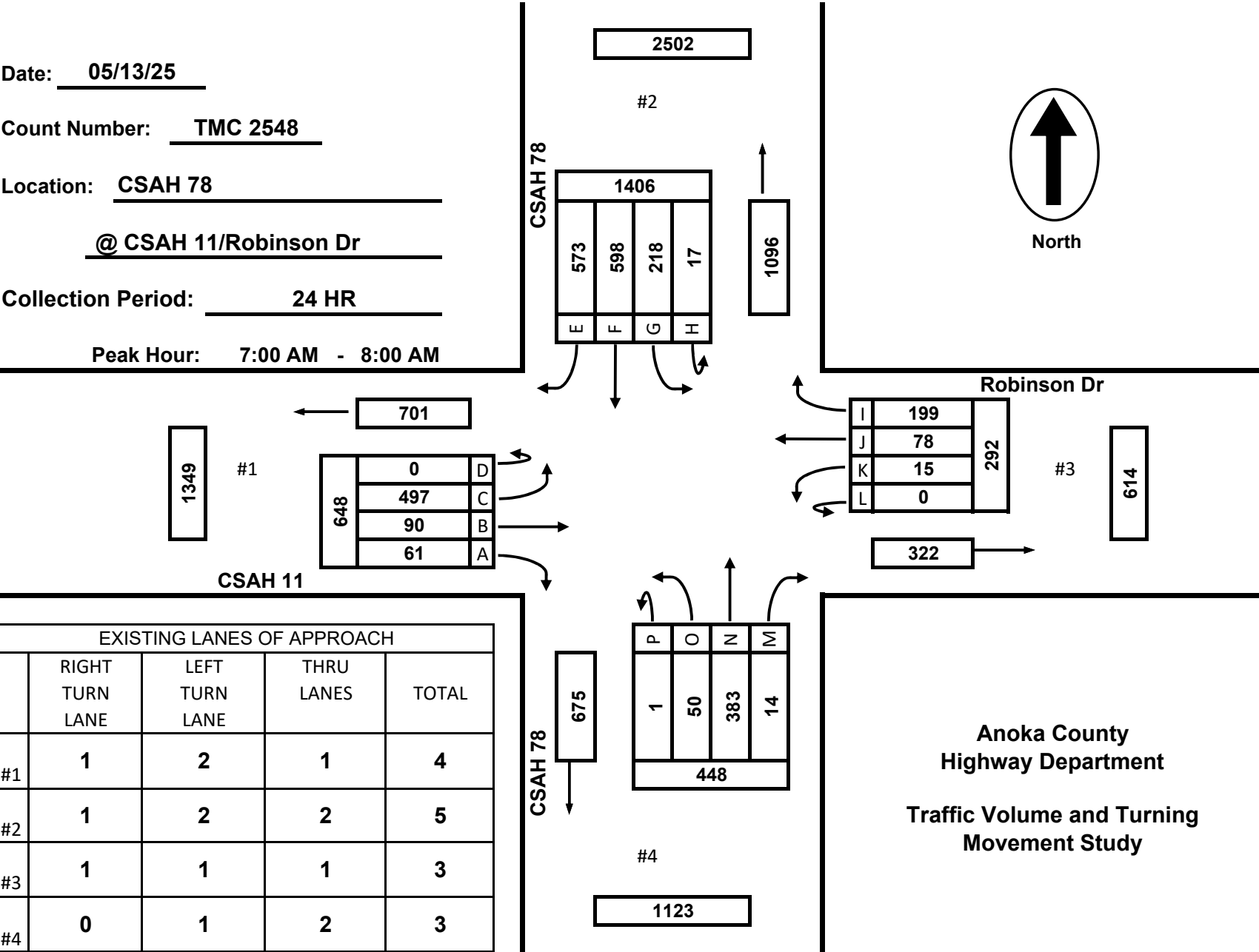
Date: 05/13/25

Count Number: TMC 2548

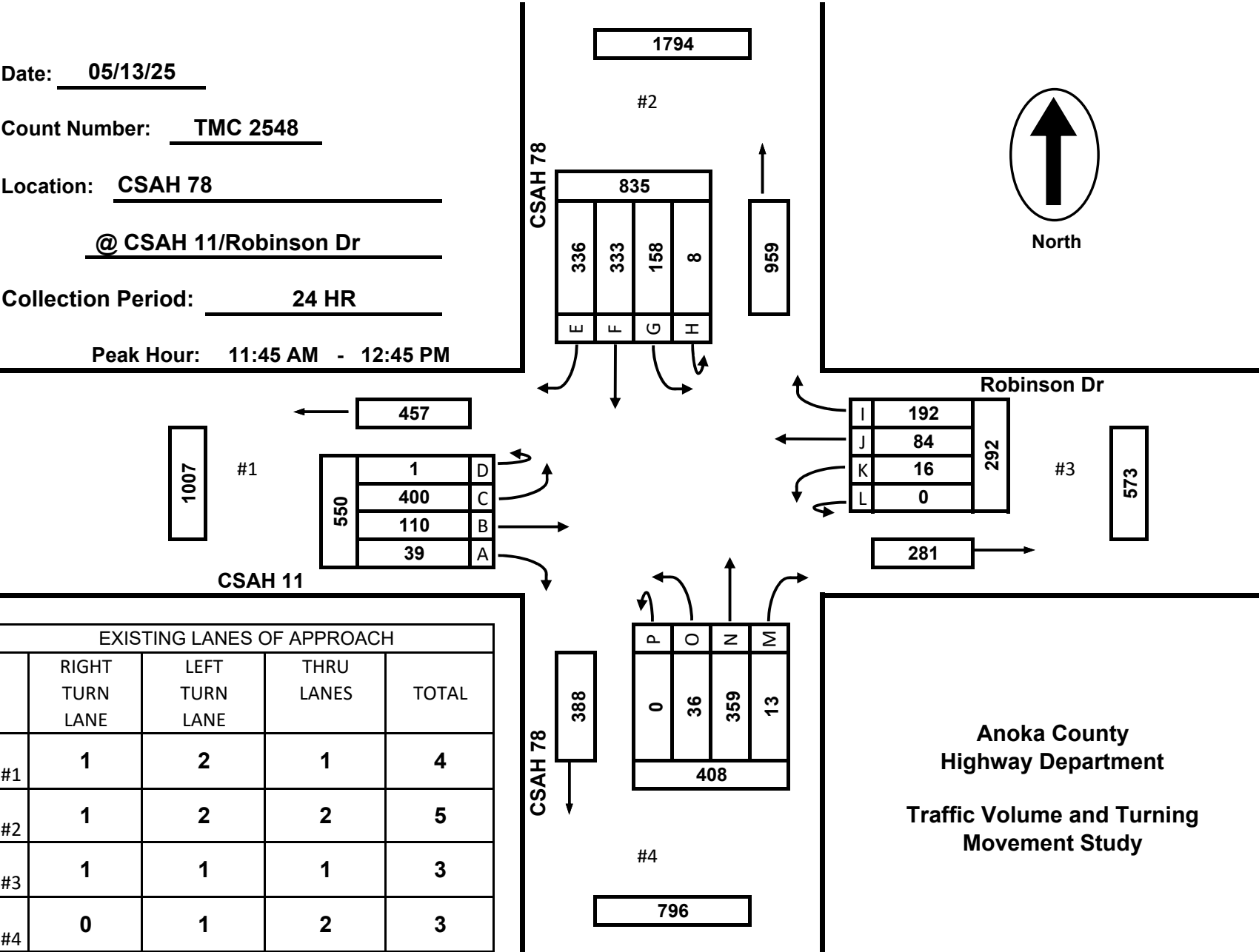
Location: CSAH 78
@ CSAH 11/Robinson Dr

Collection Period: 24 HR

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



Date: 05/13/25
Count Number: TMC 2548
Location: CSAH 78
@ CSAH 11/Robinson Dr
Collection Period: 24 HR
Peak Hour: 11:45 AM - 12:45 PM



Anoka County
Highway Department
Traffic Volume and Turning
Movement Study

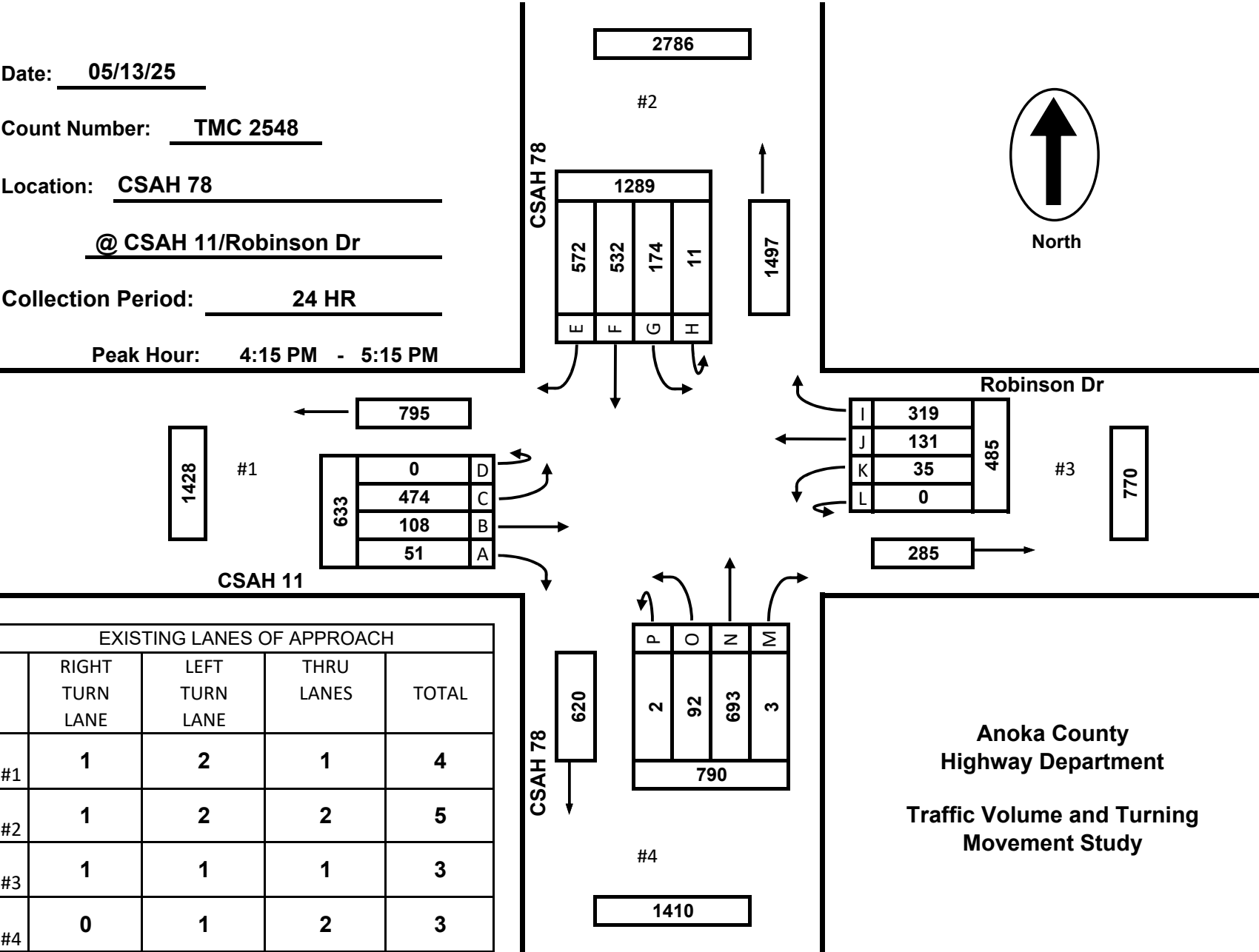
Date: 05/13/25

Count Number: TMC 2548

Location: CSAH 78
@ CSAH 11/Robinson Dr

Collection Period: 24 HR

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



CSAH 78 - CSAH 11/Robinson Dr
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	5	38	111	162	0	316	0	3	15	53	0	71	0	13	84	2	0	99	0	94	5	5	0	104	590
7:15 AM	6	48	160	166	1	380	0	3	28	35	0	66	1	8	113	5	1	127	0	143	19	27	0	189	762
7:30 AM	2	59	151	140	0	352	0	4	24	56	0	84	0	15	116	4	0	135	0	155	32	18	0	205	776
7:45 AM	4	73	176	105	2	358	0	5	11	55	0	71	0	14	70	3	0	87	0	105	34	11	0	150	666
Peak Hour Total	17	218	598	573	3	1406	0	15	78	199	0	292	1	50	383	14	1	448	0	497	90	61	0	648	2794
Peak Hour Heavy Vehicles	0	6	10	21	0	37	0	0	7	7	0	14	0	7	7	2	0	16	0	25	3	11	0	39	106
Peak Hour Heavy Vehicles %	0.00%	2.75%	1.67%	3.66%	0.00%	2.63%	0.00%	0.00%	8.97%	3.52%	0.00%	4.79%	0.00%	14.00%	1.83%	14.29%	0.00%	3.57%	0.00%	5.03%	3.33%	18.03%	0.00%	6.02%	3.79%
PHF	0.708	0.747	0.849	0.863	0.375	0.925	0.000	0.750	0.696	0.888	0.000	0.869	0.250	0.833	0.825	0.700	0.250	0.830	0.000	0.802	0.662	0.565	0.000	0.790	0.900

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	
11:45 AM	1	40	80	88	0	209	0	5	16	56	0	77	0	8	88	4	0	100	0	102	33	11	0	146	532
12:00 PM	0	32	78	85	0	195	0	4	26	44	0	74	0	12	82	4	1	98	1	111	24	10	0	146	513
12:15 PM	6	38	85	86	0	215	0	3	23	42	0	68	0	8	109	1	4	118	0	88	31	9	0	128	529
12:30 PM	1	48	90	77	2	216	0	4	19	50	0	73	0	8	80	4	0	92	0	99	22	9	0	130	511
Peak Hour Total	8	158	333	336	2	835	0	16	84	192	0	292	0	36	359	13	5	408	1	400	110	39	0	550	2085
Peak Hour Heavy Vehicles	0	2	12	7	2	21	0	0	1	10	0	11	0	3	10	0	2	13	0	14	3	2	0	19	64
Peak Hour Heavy Vehicles %	0.00%	1.27%	3.60%	2.08%	100.00%	2.51%	0.00%	0.00%	1.19%	5.21%	0.00%	3.77%	0.00%	8.33%	2.79%	0.00%	40.00%	3.19%	0.00%	3.50%	2.73%	5.13%	0.00%	3.45%	3.07%
PHF	0.333	0.823	0.925	0.955	0.250	0.966	0.000	0.800	0.808	0.857	0.000	0.948	0.000	0.750	0.823	0.813	0.313	0.864	0.250	0.901	0.833	0.886	0.000	0.942	0.980

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	1	39	151	161	1	352	0	9	45	65	0	119	0	21	172	1	1	194	0	118	28	19	2	165	830
4:30 PM	3	45	127	134	0	309	0	12	36	81	2	129	1	27	158	1	2	187	0	124	29	13	1	166	791
4:45 PM	4	41	140	138	2	323	0	8	21	80	0	109	0	28	188	0	1	216	0	117	23	8	0	148	796
5:00 PM	3	49	114	139	1	305	0	6	29	93	1	128	1	16	175	1	1	193	0	115	28	11	0	154	780
Peak Hour Total	11	174	532	572	4	1289	0	35	131	319	3	485	2	92	693	3	5	790	0	474	108	51	3	633	3197
Peak Hour Heavy Vehicles	0	3	9	3	2	15	0	0	3	6	2	9	0	1	12	0	2	13	0	3	2	1	1	6	43
Peak Hour Heavy Vehicles %	0.00%	1.72%	1.69%	0.52%	50.00%	1.16%	0.00%	0.00%	2.29%	1.88%	66.67%	1.86%	0.00%	1.09%	1.73%	0.00%	40.00%	1.65%	0.00%	0.63%	1.85%	1.96%	33.33%	0.95%	1.35%
PHF	0.688	0.888	0.881	0.888	0.500	0.915	0.000	0.729	0.728	0.858	0.375	0.940	0.500	0.821	0.922	0.750	0.625	0.914	0.000	0.956	0.931	0.671	0.375	0.953	0.963

Total Vehicles On Leg			32465		
Vehicles Entering Intersection		16057	Vehicles Exiting Intersection		16408
Southbound					
Cars	6497	6717	2358	159	9
Heavy	141	145	40	0	17
Total	6638	6862	2398	159	26



Total Vehicles on Leg 17425	Vehicles Entering Intersection 8860	Eastbound	Cars	Heavy	Total	
			25	27	52	
			7	0	7	
	Vehicles Exiting Intersection 8565		6636	162	6798	
			1350	29	1379	
			643	33	676	

Daily Volumes

Cars	Heavy	Total	Westbound	Vehicles Entering Intersection 4475	Total Vehicles on Leg 8421
2882	95	2977			
1144	44	1188			
306	2	308		Vehicles Exiting Intersection 3946	
2	0	2			
5	19	24			

Cars	36	10	711	6352	157
Heavy	22	0	21	122	10
Total	58	10	732	6474	167
Northbound					
Vehicles Entering Intersection 7383			Vehicles Exiting Intersection 7856		
Total Vehicles On Leg			15239		

**CSAH 78 - CSAH 11/Robinson Dr
Coon Rapids MN
Tuesday, May 13, 2025**

Time	Southbound CSAH 78						Westbound Robinson Dr						Northbound CSAH 78						Eastbound CSAH 11						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	5	9	11	0	25	0	0	0	7	0	7	1	0	11	0	0	12	0	8	1	2	0	11	55
12:15 AM	1	3	9	13	0	26	0	2	1	1	0	4	0	1	9	1	0	11	0	5	3	0	0	8	49
12:30 AM	0	4	6	13	0	23	0	1	0	1	0	2	0	0	3	0	0	3	0	4	2	0	0	6	34
12:45 AM	0	0	8	6	0	14	0	0	0	3	0	3	0	1	0	0	0	1	0	9	0	0	0	9	27
Hourly Total	1	12	32	43	0	88	0	3	1	12	0	16	1	2	23	1	0	27	0	26	6	2	0	34	165
1:00 AM	0	5	8	6	0	19	0	0	0	0	0	0	0	2	6	1	0	9	0	6	0	1	0	7	35
1:15 AM	0	5	10	10	0	25	0	0	0	2	0	2	0	1	4	0	0	5	0	0	0	1	0	1	33
1:30 AM	0	2	4	2	0	8	0	0	0	0	0	0	0	0	3	0	0	3	0	4	0	1	0	5	16
1:45 AM	1	4	5	5	0	15	0	1	0	4	0	5	0	0	1	0	0	1	0	5	0	1	0	6	27
Hourly Total	1	16	27	23	0	67	0	1	0	6	0	7	0	3	14	1	0	18	0	15	0	4	0	19	111
2:00 AM	0	3	4	4	0	11	0	1	0	0	0	1	0	0	2	0	0	2	0	2	4	0	0	6	20
2:15 AM	1	2	8	2	0	13	0	0	0	2	0	2	0	1	9	0	0	10	0	1	1	1	0	3	28
2:30 AM	0	1	3	6	0	10	0	0	1	2	0	3	0	0	0	0	0	0	0	3	1	0	0	4	17
2:45 AM	0	0	5	3	0	8	0	0	0	2	0	2	0	0	3	0	0	3	0	1	0	0	0	1	14
Hourly Total	1	6	20	15	0	42	0	1	1	6	0	8	0	1	14	0	0	15	0	7	6	1	0	14	79
3:00 AM	0	1	2	3	0	6	0	0	0	1	0	1	0	0	5	0	0	5	0	1	1	1	0	3	15
3:15 AM	1	1	4	7	0	13	0	0	0	1	0	1	0	0	2	0	0	2	0	6	0	0	0	6	22
3:30 AM	0	1	3	2	0	6	0	0	0	6	0	6	0	0	4	0	0	4	0	4	1	0	0	5	21
3:45 AM	0	1	4	5	0	10	0	0	1	5	0	6	0	0	2	0	0	2	0	12	0	0	0	12	30
Hourly Total	1	4	13	17	0	35	0	0	1	13	0	14	0	0	13	0	0	13	0	23	2	1	0	26	88
4:00 AM	0	1	6	3	0	10	0	0	0	5	0	5	0	0	6	0	0	6	0	8	0	3	0	11	32
4:15 AM	0	2	8	6	0	16	0	1	1	7	0	9	0	2	9	0	0	11	0	11	1	1	0	13	49
4:30 AM	0	1	4	11	0	16	0	0	1	7	0	8	0	0	13	0	0	13	0	16	2	0	0	18	55
4:45 AM	0	1	6	25	0	32	0	0	3	17	0	20	0	1	16	0	0	17	0	22	1	1	0	24	93
Hourly Total	0	5	24	45	0	74	0	1	5	36	0	42	0	3	44	0	0	47	0	57	4	5	0	66	229
5:00 AM	1	2	11	13	0	27	0	0	0	5	0	5	0	0	13	1	0	14	0	23	1	0	0	24	70
5:15 AM	0	5	20	20	0	45	0	1	0	22	0	23	0	0	21	0	0	21	0	29	2	1	0	32	121
5:30 AM	0	7	22	24	0	53	0	0	1	30	0	31	0	1	43	0	0	44	0	47	1	0	0	48	176
5:45 AM	0	7	32	36	0	75	0	0	2	24	0	26	0	1	46	1	0	48	0	48	4	1	0	53	202
Hourly Total	1	21	85	93	0	200	0	1	3	81	0	85	0	2	123	2	0	127	0	147	8	2	0	157	569
6:00 AM	0	14	46	21	1	81	0	2	3	16	0	21	0	3	42	0	0	45	0	50	1	5	1	56	203
6:15 AM	5	22	64	46	0	137	0	2	4	41	0	47	0	2	62	0	0	64	0	61	4	2	0	67	315
6:30 AM	1	23	56	67	1	147	0	1	10	36	0	47	0	4	80	0	0	84	0	82	5	5	0	92	370
6:45 AM	2	28	93	101	0	224	0	2	9	48	0	59	0	4	83	0	1	87	1	82	11	6	0	100	470
Hourly Total	8	87	259	235	2	589	0	7	26	141	0	174	0	13	267	0	1	280	1	275	21	18	1	315	1358
7:00 AM	5	38	111	162	0	316	0	3	15	53	0	71	0	13	84	2	0	99	0	94	5	5	0	104	590
7:15 AM	6	48	160	166	1	380	0	3	28	35	0	66	1	8	113	5	1	127	0	143	19	27	0	189	762
7:30 AM	2	59	151	140	0	352	0	4	24	56	0	84	0	15	116	4	0	135	0	155	32	18	0	205	776
7:45 AM	4	73	176	105	2	358	0	5	11	55	0	71	0	14	70	3	0	87	0	105	34	11	0	150	666
Hourly Total	17	218	598	573	3	1406	0	15	78	199	0	292	1	50	383	14	1	448	0	497	90	61	0	648	2794

**CSAH 78 - CSAH 11/Robinson Dr
Coon Rapids MN
Tuesday, May 13, 2025**

Time	Southbound CSAH 78						Westbound Robinson Dr						Northbound CSAH 78						Eastbound CSAH 11						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	1	34	124	95	0	254	0	5	17	36	0	58	0	9	69	6	0	84	0	113	17	14	1	144	540
8:15 AM	6	33	96	97	0	232	0	5	9	40	0	54	0	4	68	7	0	79	0	92	20	5	0	117	482
8:30 AM	0	36	104	81	0	221	1	2	9	45	0	57	0	10	70	5	1	85	0	67	13	5	0	85	448
8:45 AM	0	35	105	90	0	230	0	2	16	52	0	70	0	10	97	3	0	110	0	81	20	7	0	108	518
Hourly Total	7	138	429	363	0	937	1	14	51	173	0	239	0	33	304	21	1	358	0	353	70	31	1	454	1988
9:00 AM	1	23	99	75	0	198	0	4	16	33	0	53	0	8	100	5	0	113	0	67	19	8	0	94	458
9:15 AM	1	49	107	119	1	276	0	8	10	35	2	53	0	9	89	2	1	100	1	65	13	7	0	86	515
9:30 AM	2	50	110	86	0	248	0	2	11	50	0	63	0	10	93	4	0	107	0	73	20	7	0	100	518
9:45 AM	4	58	100	106	0	268	0	4	19	36	1	59	1	10	80	2	2	93	0	68	15	7	0	90	510
Hourly Total	8	180	416	386	1	990	0	18	56	154	3	228	1	37	362	13	3	413	1	273	67	29	0	370	2001
10:00 AM	1	38	88	64	0	191	0	2	10	35	0	47	0	6	80	2	1	88	0	84	13	2	0	99	425
10:15 AM	1	28	84	77	0	190	0	5	13	43	0	61	0	8	60	5	0	73	0	68	18	6	1	92	416
10:30 AM	1	28	79	49	0	157	0	3	18	28	0	49	0	5	70	7	0	82	0	81	17	10	0	108	396
10:45 AM	0	32	78	73	0	183	0	7	21	41	0	69	0	5	73	3	0	81	0	89	17	7	1	113	446
Hourly Total	3	126	329	263	0	721	0	17	62	147	0	226	0	24	283	17	1	324	0	322	65	25	2	412	1683
11:00 AM	5	37	95	74	0	211	0	5	17	52	0	74	0	14	99	1	0	114	0	95	15	10	0	120	519
11:15 AM	3	28	88	85	0	204	0	5	15	43	0	63	1	11	86	5	0	103	0	108	23	7	0	138	508
11:30 AM	2	23	89	97	0	211	0	4	34	38	0	76	1	17	66	1	1	84	1	101	16	9	0	127	498
11:45 AM	1	40	80	88	0	209	0	5	16	56	0	77	0	8	88	4	0	100	0	102	33	11	0	146	532
Hourly Total	11	128	352	344	0	835	0	19	82	189	0	290	1	50	339	11	1	401	1	406	87	37	0	531	2057
12:00 PM	0	32	78	85	0	195	0	4	26	44	0	74	0	12	82	4	1	98	1	111	24	10	0	146	513
12:15 PM	6	38	85	86	0	215	0	3	23	42	0	68	0	8	109	1	4	118	0	88	31	9	0	128	529
12:30 PM	1	48	90	77	2	216	0	4	19	50	0	73	0	8	80	4	0	92	0	99	22	9	0	130	511
12:45 PM	1	47	97	82	0	227	1	5	15	48	0	69	0	10	76	5	3	91	0	94	30	11	0	135	522
Hourly Total	8	165	350	330	2	853	1	16	83	184	0	284	0	38	347	14	8	399	1	392	107	39	0	539	2075
1:00 PM	3	37	64	78	0	182	0	4	25	31	0	60	0	8	96	3	0	107	0	118	16	10	2	144	493
1:15 PM	2	34	84	64	1	184	0	4	19	54	0	77	0	12	86	3	1	101	0	90	20	10	0	120	482
1:30 PM	1	34	86	76	1	197	0	4	19	58	1	81	0	10	92	2	0	104	1	89	23	11	1	124	506
1:45 PM	4	53	107	106	0	270	0	5	11	36	0	52	0	7	81	2	0	90	0	87	22	10	0	119	531
Hourly Total	10	158	341	324	2	833	0	17	74	179	1	270	0	37	355	10	1	402	1	384	81	41	3	507	2012
2:00 PM	0	43	114	136	0	293	0	4	18	41	0	63	0	18	93	1	1	112	0	109	22	11	0	142	610
2:15 PM	0	50	146	129	0	325	0	4	27	45	0	76	0	4	104	2	3	110	0	131	29	10	0	170	681
2:30 PM	2	37	131	104	0	274	0	3	25	61	0	89	2	15	127	1	1	145	0	176	37	14	4	227	735
2:45 PM	2	42	130	150	0	324	0	10	31	70	0	111	0	19	134	5	1	158	0	98	35	14	2	147	740
Hourly Total	4	172	521	519	0	1216	0	21	101	217	0	339	2	56	458	9	6	525	0	514	123	49	6	686	2766
3:00 PM	1	35	121	137	1	294	0	8	29	77	0	114	0	21	153	6	0	180	0	132	22	6	2	160	748
3:15 PM	1	44	126	140	0	311	0	8	23	46	0	77	0	19	128	3	0	150	0	161	38	12	2	211	749
3:30 PM	6	42	111	162	0	321	0	5	31	68	0	104	0	16	131	2	3	149	0	110	27	11	3	148	722
3:45 PM	3	39	99	139	0	280	0	15	38	65	1	118	0	30	169	6	2	205	0	112	38	17	0	167	770
Hourly Total	11	160	457	578	1	1206	0	36	121	256	1	413	0	86	581	17	5	684	0	515	125	46	7	686	2989

**CSAH 78 - CSAH 11/Robinson Dr
Coon Rapids MN
Tuesday, May 13, 2025**

Time	Southbound CSAH 78						Westbound Robinson Dr						Northbound CSAH 78						Eastbound CSAH 11						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	35	97	142	0	274	0	6	24	63	2	93	1	21	183	1	0	206	0	109	22	8	7	139	712
4:15 PM	1	39	151	161	1	352	0	9	45	65	0	119	0	21	172	1	1	194	0	118	28	19	2	165	830
4:30 PM	3	45	127	134	0	309	0	12	36	81	2	129	1	27	158	1	2	187	0	124	29	13	1	166	791
4:45 PM	4	41	140	138	2	323	0	8	21	80	0	109	0	28	188	0	1	216	0	117	23	8	0	148	796
Hourly Total	8	160	515	575	3	1258	0	35	126	289	4	450	2	97	701	3	4	803	0	468	102	48	10	618	3129
5:00 PM	3	49	114	139	1	305	0	6	29	93	1	128	1	16	175	1	1	193	0	115	28	11	0	154	780
5:15 PM	3	41	140	132	3	316	0	5	22	56	1	83	0	12	145	4	4	161	1	131	32	14	1	178	738
5:30 PM	1	37	168	139	0	345	0	7	28	47	0	82	0	12	113	0	2	125	0	112	25	18	1	155	707
5:45 PM	5	38	142	151	0	336	0	9	13	40	0	62	0	16	123	5	3	144	0	104	25	27	0	156	698
Hourly Total	12	165	564	561	4	1302	0	27	92	236	2	355	1	56	556	10	10	623	1	462	110	70	2	643	2923
6:00 PM	4	36	129	124	1	293	0	6	23	35	2	64	0	16	106	0	3	122	1	144	31	17	3	193	672
6:15 PM	6	31	104	112	0	253	0	9	13	32	0	54	0	10	101	4	0	115	0	115	23	13	1	151	573
6:30 PM	2	31	99	117	1	249	0	4	17	30	4	51	0	10	76	1	0	87	0	125	22	11	2	158	545
6:45 PM	3	22	119	102	1	246	0	3	17	30	1	50	0	12	82	2	0	96	0	104	15	20	2	139	531
Hourly Total	15	120	451	455	3	1041	0	22	70	127	7	219	0	48	365	7	3	420	1	488	91	61	8	641	2321
7:00 PM	0	26	113	79	1	218	0	5	19	34	6	58	0	4	94	0	8	98	0	157	24	18	1	199	573
7:15 PM	3	24	72	83	0	182	0	2	14	31	0	47	0	19	89	1	0	109	0	120	19	9	2	148	486
7:30 PM	0	16	88	69	4	173	0	5	12	17	0	34	0	10	71	1	0	82	0	95	15	11	1	121	410
7:45 PM	2	17	95	66	0	180	0	3	6	17	0	26	0	8	89	3	0	100	0	70	22	12	0	104	410
Hourly Total	5	83	368	297	5	753	0	15	51	99	6	165	0	41	343	5	8	389	0	442	80	50	4	572	1879
8:00 PM	2	27	72	71	0	172	0	4	11	14	0	29	0	7	67	2	1	76	0	65	16	8	3	89	366
8:15 PM	3	22	84	72	0	181	0	2	18	30	0	50	0	20	82	1	0	103	0	53	9	3	3	65	399
8:30 PM	1	30	70	60	0	161	0	1	17	29	0	47	0	5	69	2	3	76	0	85	10	9	0	104	388
8:45 PM	3	28	66	63	0	160	0	3	14	18	0	35	0	3	50	3	1	56	0	75	15	7	0	97	348
Hourly Total	9	107	292	266	0	674	0	10	60	91	0	161	0	35	268	8	5	311	0	278	50	27	6	355	1501
9:00 PM	3	21	73	49	0	146	0	1	10	24	0	35	0	5	37	0	0	42	0	73	19	3	0	95	318
9:15 PM	3	20	44	38	0	105	0	2	7	14	0	23	0	5	38	0	0	43	0	66	15	8	0	89	260
9:30 PM	5	14	48	39	0	106	0	0	8	12	0	20	0	0	41	1	0	42	0	82	14	5	0	101	269
9:45 PM	2	15	31	36	0	84	0	2	2	17	0	21	0	1	38	0	0	39	0	45	8	1	1	54	198
Hourly Total	13	70	196	162	0	441	0	5	27	67	0	99	0	11	154	1	0	166	0	266	56	17	1	339	1045
10:00 PM	1	21	41	25	0	88	0	0	2	16	0	18	0	2	44	0	0	46	0	39	7	2	0	48	200
10:15 PM	2	10	36	34	0	82	0	2	3	11	0	16	1	1	19	1	0	22	0	39	1	1	0	41	161
10:30 PM	1	14	28	31	0	74	0	1	3	11	0	15	0	1	34	0	0	35	0	22	4	1	0	27	151
10:45 PM	0	7	31	16	0	54	0	1	3	8	0	12	0	1	22	1	0	24	0	23	3	0	0	26	116
Hourly Total	4	52	136	106	0	298	0	4	11	46	0	61	1	5	119	2	0	127	0	123	15	4	0	142	628
11:00 PM	1	13	20	26	0	60	0	0	2	12	0	14	0	1	17	0	0	18	0	42	4	3	0	49	141
11:15 PM	0	14	29	15	0	58	0	1	2	4	0	7	0	2	20	0	0	22	0	12	6	3	0	21	108
11:30 PM	0	11	25	11	0	47	0	0	1	5	0	6	0	1	10	1	0	12	0	6	1	1	0	8	73
11:45 PM	0	7	13	13	0	33	0	2	1	8	0	11	0	0	11	0	0	11	0	5	2	1	1	8	63
Hourly Total	1	45	87	65	0	198	0	3	6	29	0	38	0	4	58	1	0	63	0	65	13	8	1	86	385
DAILY TOTAL	159	2398	6862	6638	26	16057	2	308	1188	2977	24	4475	10	732	6474	167	58	7383	7	6798	1379	676	52	8860	36775
Cars	159	2358	6717	6497	9	15731	2	306	1144	2882	5	4334	10	711	6352	157	36	7230	7	6636	1350	643	25	8636	35931
Heavy Vehicles	0	40	145	141	17	326	0	2	44	95	19	141	0	21	122	10	22	153	0	162	29	33	27	224	844
Heavy Vehicle %	0.00%	1.67%	2.11%	2.12%	65.38%	2.03%	0.00%	0.65%	3.70%	3.19%	79.17%	3.15%	0.00%	2.87%	1.88%	5.99%	37.93%	2.07%	0.00%	2.38%	2.10%	4.88%	51.92%	2.53%	2.30%

CSAH 78 - CSAH 11/Robinson Dr
Coon Rapids MN
Tuesday, May 13, 2025

Time	Southbound Heavy CSAH 78						Westbound Heavy Robinson Dr						Northbound Heavy CSAH 78						Eastbound Heavy CSAH 11						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	1	0	1	0	0	0	0	0	0	0	0	1	0	0	0	1	2
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	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	0
12:45 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	0	1
Hourly 'Heavy Vehicles'	0	0	0	1	0	1	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1	0	0	0	1	3
1:00 AM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
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	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	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	0
Hourly 'Heavy Vehicles'	0	1	0	0	0	1	0	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	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	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	0
2:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
2:45 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	0	1
Hourly 'Heavy Vehicles'	0	0	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	3
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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	0
3:30 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	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	0
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	0	1
4:00 AM	0	1	2	0	0	3	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	4
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	0
4:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
Hourly 'Heavy Vehicles'	0	1	2	0	0	3	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1	0	0	0	1	5
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	0	1
5:15 AM	0	0	1	0	0	1	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	3
5:30 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	0	1
5:45 AM	0	0	3	1	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2	6
Hourly 'Heavy Vehicles'	0	0	5	1	0	6	0	0	0	2	0	2	0	0	1	0	0	1	0	2	0	0	0	2	2	11
6:00 AM	0	0	1	1	1	2	0	1	0	1	0	2	0	0	1	0	0	1	0	3	0	0	1	3	3	8
6:15 AM	0	1	1	0	0	2	0	0	0	1	0	1	0	0	1	0	0	1	0	0	0	0	0	0	0	4
6:30 AM	0	3	9	3	0	15	0	0	1	0	0	1	0	0	1	0	0	1	0	1	1	0	0	2	2	19
6:45 AM	0	0	3	0	0	3	0	0	0	2	0	2	0	0	2	0	0	2	0	0	0	1	0	1	1	8
Hourly 'Heavy Vehicles'	0	4	14	4	1	22	0	1	1	4	0	6	0	0	5	0	0	5	0	4	1	1	1	6	6	39
7:00 AM	0	0	2	13	0	15	0	0	3	2	0	5	0	5	4	1	0	10	0	2	1	0	0	3	3	33
7:15 AM	0	1	1	4	0	6	0	0	3	1	0	4	0	0	0	0	1	0	0	11	1	7	0	19	29	
7:30 AM	0	2	6	4	0	12	0	0	1	3	0	4	0	1	1	0	0	2	0	7	1	1	0	9	27	
7:45 AM	0	3	1	0	0	4	0	0	0	1	0	1	0	1	2	1	0	4	0	5	0	3	0	8	17	
Hourly 'Heavy Vehicles'	0	6	10	21	0	37	0	0	7	7	0	14	0	7	7	2	1	16	0	25	3	11	0	39	106	

**CSAH 78 - CSAH 11/Robinson Dr
Coon Rapids MN
Tuesday, May 13, 2025**

Time	Southbound Heavy CSAH 78						Westbound Heavy Robinson Dr						Northbound Heavy CSAH 78						Eastbound Heavy CSAH 11						VEHICLE 'Heavy Vehicles'
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach 'Heavy Vehicles' 13	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach 'Heavy Vehicles' 10	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach 'Heavy Vehicles' 3	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach 'Heavy Vehicles' 12	
8:00 AM	0	2	2	9	0	13	0	0	5	5	0	10	0	0	2	1	0	3	0	10	2	0	1	1	38
8:15 AM	0	0	6	1	0	7	0	0	0	4	0	4	0	0	0	0	0	0	0	8	0	0	0	0	19
8:30 AM	0	0	5	1	0	6	0	0	2	6	0	8	0	0	1	1	1	2	0	0	1	0	0	1	17
8:45 AM	0	1	4	2	0	7	0	0	4	2	0	6	0	0	3	0	0	3	0	3	0	1	0	4	20
Hourly 'Heavy Vehicles'	0	3	17	13	0	33	0	0	11	17	0	28	0	0	6	2	1	8	0	21	3	1	1	25	94
9:00 AM	0	0	9	0	0	9	0	0	0	2	0	2	0	0	3	0	0	3	0	2	0	0	0	2	16
9:15 AM	0	0	3	1	0	4	0	0	0	3	2	3	0	1	10	0	1	11	0	1	0	0	0	1	19
9:30 AM	0	1	2	1	0	4	0	0	0	2	0	2	0	1	4	0	0	5	0	2	1	0	0	3	14
9:45 AM	0	1	1	4	0	6	0	0	1	0	1	1	0	1	3	0	1	4	0	1	0	0	0	1	12
Hourly 'Heavy Vehicles'	0	2	15	6	0	23	0	0	1	7	3	8	0	3	20	0	2	23	0	6	1	0	0	7	61
10:00 AM	0	3	3	1	0	7	0	0	0	3	0	3	0	1	3	0	0	4	0	2	0	1	0	3	17
10:15 AM	0	3	2	3	0	8	0	0	0	3	0	3	0	0	3	1	0	4	0	1	0	0	0	1	16
10:30 AM	0	1	3	0	0	4	0	0	1	1	0	2	0	0	4	0	0	4	0	4	1	1	0	6	16
10:45 AM	0	0	3	2	0	5	0	0	1	2	0	3	0	0	1	0	0	1	0	3	0	0	0	3	12
Hourly 'Heavy Vehicles'	0	7	11	6	0	24	0	0	2	9	0	11	0	1	11	1	0	13	0	10	1	2	0	13	61
11:00 AM	0	0	6	2	0	8	0	0	0	1	0	1	0	1	3	0	0	4	0	2	0	1	0	3	16
11:15 AM	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
11:30 AM	0	1	2	2	0	5	0	0	2	0	0	2	0	1	0	0	0	1	0	2	1	0	0	3	11
11:45 AM	0	0	2	2	0	4	0	0	0	2	0	2	0	0	3	0	0	3	0	4	1	0	0	5	14
Hourly 'Heavy Vehicles'	0	1	12	8	0	21	0	0	2	3	0	5	0	2	8	0	0	10	0	8	2	1	0	11	47
12:00 PM	0	1	4	3	0	8	0	0	0	3	0	3	0	3	4	0	0	7	0	1	0	1	0	2	20
12:15 PM	0	1	4	2	0	7	0	0	0	2	0	2	0	0	2	0	1	2	0	5	0	0	0	5	16
12:30 PM	0	0	2	0	2	2	0	0	1	3	0	4	0	0	1	0	0	1	0	4	2	1	0	7	14
12:45 PM	0	2	3	0	0	5	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	2	0	2	8
Hourly 'Heavy Vehicles'	0	4	13	5	2	22	0	0	1	8	0	9	0	3	8	0	1	11	0	10	2	4	0	16	58
1:00 PM	0	1	3	2	0	6	0	0	0	2	0	2	0	0	5	0	0	5	0	2	0	0	2	2	15
1:15 PM	0	0	2	0	0	2	0	0	1	2	0	3	0	0	1	0	1	1	0	3	0	0	0	3	9
1:30 PM	0	0	3	1	1	4	0	0	1	2	1	3	0	1	1	1	0	3	0	1	0	0	1	1	11
1:45 PM	0	1	3	7	0	11	0	0	0	0	0	0	0	0	3	1	0	4	0	4	2	0	0	6	21
Hourly 'Heavy Vehicles'	0	2	11	10	1	23	0	0	2	6	1	8	0	1	10	2	1	13	0	10	2	0	3	12	56
2:00 PM	0	0	2	24	0	26	0	0	1	2	0	3	0	0	3	0	0	3	0	2	0	0	0	2	34
2:15 PM	0	2	0	7	0	9	0	0	0	1	0	1	0	0	3	0	0	3	0	4	3	2	0	9	22
2:30 PM	0	0	5	1	0	6	0	0	2	0	0	2	0	0	1	0	0	1	0	18	1	4	2	23	32
2:45 PM	0	0	2	8	0	10	0	0	3	2	0	5	0	0	1	0	1	1	0	2	1	0	1	3	19
Hourly 'Heavy Vehicles'	0	2	9	40	0	51	0	0	6	5	0	11	0	0	8	0	1	8	0	26	5	6	3	37	107
3:00 PM	0	2	2	6	1	10	0	0	0	2	0	2	0	0	2	1	0	3	0	2	0	1	2	3	18
3:15 PM	0	0	3	2	0	5	0	0	1	0	0	1	0	0	3	1	0	4	0	14	3	1	0	18	28
3:30 PM	0	1	3	5	0	9	0	0	0	1	0	1	0	1	4	1	0	6	0	0	0	0	2	0	16
3:45 PM	0	0	0	3	0	3	0	0	2	0	0	2	0	2	2	0	2	4	0	2	1	2	0	5	14
Hourly 'Heavy Vehicles'	0	3	8	16	1	27	0	0	3	3	0	6	0	3	11	3	2	17	0	18	4	4	4	26	76

CSAH 78 - CSAH 11/Robinson Dr
Coon Rapids MN
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Time	Southbound Heavy CSAH 78						Westbound Heavy Robinson Dr						Northbound Heavy CSAH 78						Eastbound Heavy CSAH 11						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	0	1	0	1	0	0	0	0	1	0	0	0	5	0	0	0	5	0	4	0	1	4	5	11	
4:15 PM	0	2	2	0	0	4	0	0	0	1	0	1	0	0	6	0	0	0	6	0	0	0	1	0	1	12	
4:30 PM	0	0	4	1	0	5	0	0	1	2	1	3	0	1	5	0	0	0	6	0	1	0	0	1	1	15	
4:45 PM	0	1	3	2	1	6	0	0	2	2	0	4	0	0	1	0	0	0	1	0	1	1	0	0	2	13	
Hourly 'Heavy Vehicles'	0	3	9	4	1	16	0	0	3	5	2	8	0	1	17	0	0	0	18	0	6	1	2	5	9	51	
5:00 PM	0	0	0	0	1	0	0	0	0	1	1	1	0	0	0	0	1	0	0	0	1	1	0	0	2	3	
5:15 PM	0	0	1	0	3	1	0	0	1	2	1	3	0	0	2	0	2	2	2	0	1	0	0	1	1	7	
5:30 PM	0	0	0	0	0	0	0	0	2	0	0	2	0	0	1	0	0	1	0	0	0	0	0	0	0	3	
5:45 PM	0	1	1	0	0	2	0	1	0	0	0	1	0	0	0	0	1	0	0	0	0	1	1	0	2	5	
Hourly 'Heavy Vehicles'	0	1	2	0	4	3	0	1	3	3	2	7	0	0	3	0	4	3	3	0	2	2	1	1	5	18	
6:00 PM	0	0	1	0	1	1	0	0	0	0	0	0	0	0	2	0	0	2	2	0	1	0	0	1	1	4	
6:15 PM	0	0	1	2	0	3	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	5	
6:30 PM	0	0	0	0	0	0	0	0	1	0	4	1	0	0	0	0	0	0	0	0	1	0	0	2	1	2	
6:45 PM	0	0	0	0	1	0	0	0	0	0	1	0	0	0	1	0	0	1	0	0	1	1	0	1	2	3	
Hourly 'Heavy Vehicles'	0	0	2	2	2	4	0	0	1	0	5	1	0	0	5	0	0	5	5	0	3	1	0	4	4	14	
7:00 PM	0	0	0	0	1	0	0	0	0	0	6	0	0	0	0	0	7	0	0	0	1	0	0	0	1	1	
7:15 PM	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	1	4	5	
7:30 PM	0	0	0	0	4	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	2	0	0	1	2	3	
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	0	1	5	1	0	0	1	0	6	1	0	0	0	0	7	0	0	0	7	0	0	0	2	7	9
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	0	0	0	1	0	1	
8:15 PM	0	0	1	0	0	1	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	1	0	3	
8:30 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1	0	0	0	1	0	0	0	1	2	
8:45 PM	0	0	1	1	0	2	0	0	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	5	
Hourly 'Heavy Vehicles'	0	0	2	1	0	3	0	0	0	6	0	6	0	0	1	0	2	1	1	0	1	0	0	2	1	11	
9:00 PM	0	0	0	1	0	1	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1	0	0	1	3	
9:15 PM	0	0	0	0	0	0	0	0	0	2	0	2	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	0	0	0	0	0	0	0	0	0	0	0	0	
9:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	
Hourly 'Heavy Vehicles'	0	0	0	1	0	1	0	0	0	3	0	3	0	0	0	0	0	0	0	0	0	1	0	1	1	5	
10:00 PM	0	0	1	0	0	1	0	0	0	1	0	1	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	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	0	
10:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	1	0	0	1	0	0	0	0	0	0	0	2	
Hourly 'Heavy Vehicles'	0	0	1	0	0	1	0	0	0	2	0	2	0	0	1	0	0	1	1	0	0	0	0	0	0	4	
11:00 PM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
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	0	
11:30 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	
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	0	0	0	0	0	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3	
DAILY 'Heavy Vehicles'	0	40	145	141	17	326	0	2	44	95	19	141	0	21	122	10	22	153	0	162	29	33	27	224	844		

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2548

Study Date : 05/29/2025

Signal Warrants - Summary

Major Street Approaches

Northbound: CSAH 78

Number of Lanes : 2+

Total Approach Volume: 7,383

Southbound: CSAH 78

Number of Lanes :2+

Total Approach Volume: 16,057

Minor Street Approaches

Eastbound: CSAH 11

Number of Lanes :2+

Total Approach Volume: 8,184

Westbound: Robinson Dr

Number of Lanes :2+

Total Approach Volume: 1,498

Warrant Summary (Rural Values Apply)

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

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

Required volumes reached for 17 hours, 8 are needed

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

Required volumes reached for 16 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 17 hours, 8 are needed

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

Number of hours (17) volumes exceed minimum >= minimum required (4).

Warrant 3 - Peak Hour.....Satisfied

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

Number of one hour periods (63) 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 2548

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

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 = **420**

Veh/Hr Minor = **140**

Major Road						Minor Road			
CSAH 78						CSAH 11			
Time	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	Met?	
16:30 - 17:30	757	+	1253	=	2010	600	139	Yes	
15:30 - 16:30	754	+	1227	=	1981	564	173	Yes	
14:30 - 15:30	633	+	1203	=	1836	699	137	Yes	
17:30 - 18:30	506	+	1227	=	1733	580	108	Yes	
07:30 - 08:30	385	+	1196	=	1581	568	80	Yes	
13:30 - 14:30	416	+	1085	=	1501	513	92	Yes	
06:30 - 07:30	397	+	1067	=	1464	442	71	Yes	
08:30 - 09:30	408	+	925	=	1333	346	68	Yes	
18:30 - 19:30	390	+	895	=	1285	586	81	Yes	
09:30 - 10:30	361	+	897	=	1258	359	66	Yes	
11:30 - 12:30	400	+	830	=	1230	508	115	Yes	
12:30 - 13:30	391	+	809	=	1200	489	96	Yes	
10:30 - 11:30	380	+	755	=	1135	445	91	Yes	
19:30 - 20:30	361	+	706	=	1067	345	61	Yes	
20:30 - 21:30	217	+	572	=	789	358	55	Yes	
05:30 - 06:30	201	+	346	=	547	216	14	Yes	
21:30 - 22:30	149	+	360	=	509	235	19	Yes	
05:15 - 06:15	158	+	254	=	412	182	9	No	
22:30 - 23:30	99	+	246	=	345	116	13	No	
05:00 - 06:00	127	+	200	=	327	155	4	No	
22:45 - 23:45	76	+	219	=	295	97	10	No	
23:00 - 00:00	63	+	198	=	261	78	9	No	
04:45 - 05:45	96	+	157	=	253	126	5	No	
04:30 - 05:30	65	+	120	=	185	96	5	No	
23:15 - 00:15	45		138		183	32	7	No	

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2548

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

16 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 11			
Time	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	Met?	
15:45 - 16:45	792	+	1215	=	2007	580	185	Yes	
16:45 - 17:45	695	+	1289	=	1984	584	126	Yes	
14:45 - 15:45	637	+	1250	=	1887	623	145	Yes	
06:45 - 07:45	448	+	1272	=	1720	542	88	Yes	
13:45 - 14:45	457	+	1162	=	1619	613	97	Yes	
17:45 - 18:45	468	+	1131	=	1599	590	94	Yes	
07:45 - 08:45	335	+	1065	=	1400	461	64	Yes	
08:45 - 09:45	430	+	952	=	1382	359	69	Yes	
11:45 - 12:45	408	+	835	=	1243	511	100	Yes	
18:45 - 19:45	385	+	819	=	1204	549	77	Yes	
12:45 - 13:45	403	+	790	=	1193	481	96	Yes	
10:45 - 11:45	382	+	809	=	1191	465	108	Yes	
09:45 - 10:45	336	+	806	=	1142	364	74	Yes	
19:45 - 20:45	355	+	694	=	1049	330	62	Yes	
20:45 - 21:45	183	+	517	=	700	359	45	Yes	
05:45 - 06:45	241	+	440	=	681	255	24	Yes	
05:30 - 06:30	201	+	346	=	547	216	14	No	
21:45 - 22:45	142	+	328	=	470	165	15	No	
22:00 - 23:00	127	+	298	=	425	138	15	No	
05:15 - 06:15	158	+	254	=	412	182	9	No	
22:15 - 23:15	99	+	270	=	369	138	15	No	
22:30 - 23:30	99	+	246	=	345	116	13	No	
05:00 - 06:00	127	+	200	=	327	155	4	No	
22:45 - 23:45	76	+	219	=	295	97	10	No	
23:00 - 00:00	63		198		261	78	9	No	

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2548

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.
17 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 11					
Time	Major NB	+	Major SB	=	Total		Minor EB		Minor WB		Met1A?
16:15 - 17:15	790	+	1289	=	2079		582		166		Yes
15:15 - 16:15	710	+	1186	=	1896		617		150		Yes
17:15 - 18:15	552	+	1290	=	1842		606		113		Yes
14:15 - 15:15	593	+	1217	=	1810		660		137		Yes
07:15 - 08:15	433	+	1344	=	1777		618		97		Yes
09:15 - 10:15	388	+	983	=	1371		352		66		Yes
18:15 - 19:15	396	+	966	=	1362		585		87		Yes
13:15 - 14:15	407	+	944	=	1351		463		84		Yes
08:15 - 09:15	387	+	881	=	1268		379		64		Yes
12:15 - 13:15	408	+	840	=	1248		498		99		Yes
11:15 - 12:15	385	+	819	=	1204		520		109		Yes
06:15 - 07:15	334		824		1158		345		46		Yes

Time	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	Met1B?
16:30 - 17:30	757	+	1253	=	2010	600	139	Yes
15:30 - 16:30	754	+	1227	=	1981	564	173	Yes
14:30 - 15:30	633	+	1203	=	1836	699	137	Yes
17:30 - 18:30	506	+	1227	=	1733	580	108	Yes
07:30 - 08:30	385	+	1196	=	1581	568	80	Yes
13:30 - 14:30	416	+	1085	=	1501	513	92	Yes
06:30 - 07:30	397	+	1067	=	1464	442	71	Yes
08:30 - 09:30	408	+	925	=	1333	346	68	Yes
18:30 - 19:30	390	+	895	=	1285	586	81	Yes
09:30 - 10:30	361	+	897	=	1258	359	66	Yes
11:30 - 12:30	400	+	830	=	1230	508	115	Yes
12:30 - 13:30	391		809		1200	489	96	Yes

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2548

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.

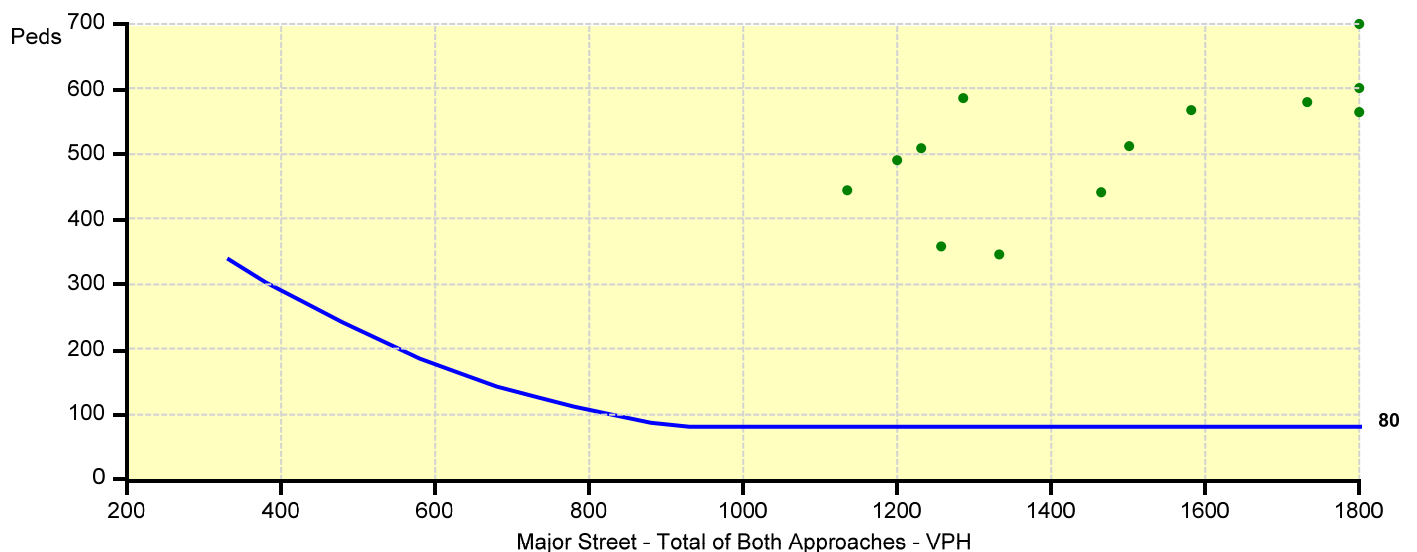
Summary

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**

Major Road						Minor Road		
CSAH 78						CSAH 11		
Time	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	Met?
16:30 - 17:30	757	+	1253	=	2010	600	139	Yes
15:30 - 16:30	754	+	1227	=	1981	564	173	Yes
14:30 - 15:30	633	+	1203	=	1836	699	137	Yes
17:30 - 18:30	506	+	1227	=	1733	580	108	Yes
07:30 - 08:30	385	+	1196	=	1581	568	80	Yes
13:30 - 14:30	416	+	1085	=	1501	513	92	Yes
06:30 - 07:30	397	+	1067	=	1464	442	71	Yes
08:30 - 09:30	408	+	925	=	1333	346	68	Yes
18:30 - 19:30	390	+	895	=	1285	586	81	Yes
09:30 - 10:30	361	+	897	=	1258	359	66	Yes
11:30 - 12:30	400	+	830	=	1230	508	115	Yes
12:30 - 13:30	391	+	809	=	1200	489	96	Yes



ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2548

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

61 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						Minor Road		
CSAH 78						CSAH 11		
Time	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	Met?
16:15 - 17:15	790	+	1289	=	2079	582	166	Yes
16:00 - 17:00	803	+	1258	=	2061	570	161	Yes
16:30 - 17:30	757	+	1253	=	2010	600	139	Yes
15:45 - 16:45	792	+	1215	=	2007	580	185	Yes
16:45 - 17:45	695	+	1289	=	1984	584	126	Yes
15:30 - 16:30	754	+	1227	=	1981	564	173	Yes
17:00 - 18:00	623	+	1302	=	1925	573	119	Yes
15:15 - 16:15	710	+	1186	=	1896	617	150	Yes
15:00 - 16:00	684	+	1206	=	1890	640	157	Yes
14:45 - 15:45	637	+	1250	=	1887	623	145	Yes
07:00 - 08:00	448	+	1406	=	1854	587	93	Yes
17:15 - 18:15	552	+	1290	=	1842	606	113	Yes

