

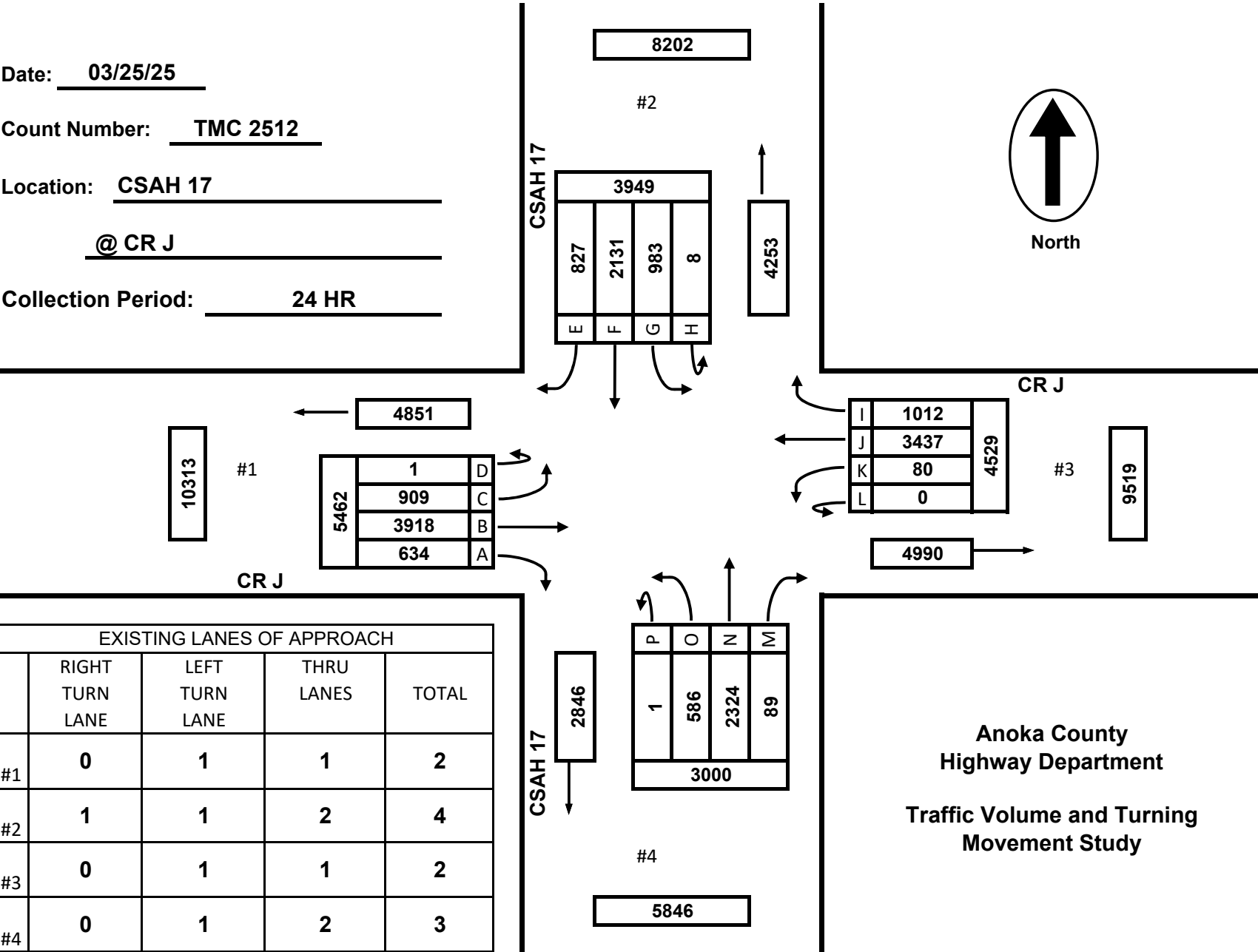
Date: 03/25/25

Count Number: TMC 2512

Location: CSAH 17

@ CR J

Collection Period: 24 HR



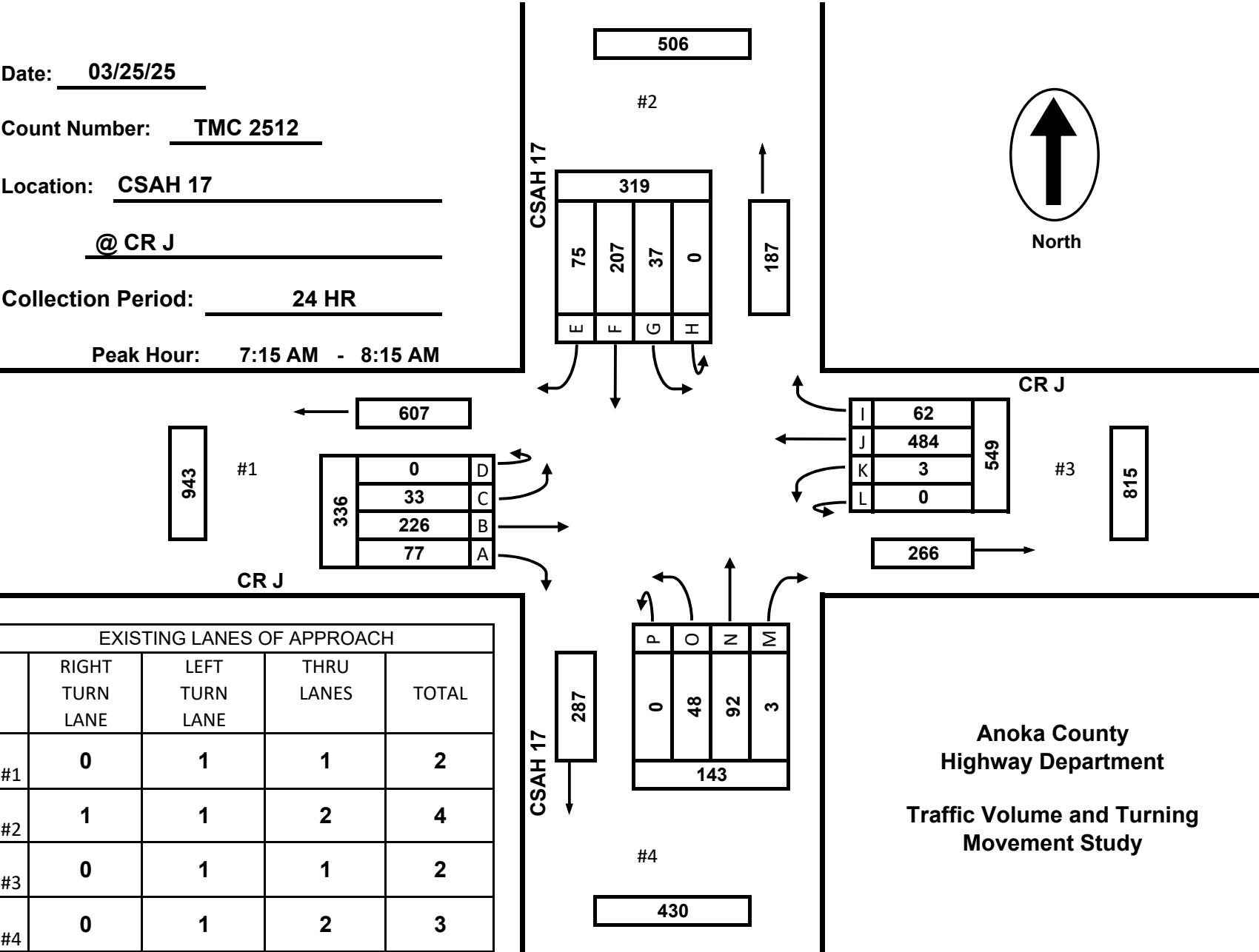
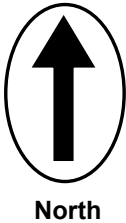
Date: 03/25/25

Count Number: TMC 2512

Location: CSAH 17
@ CR J

Collection Period: 24 HR

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



Anoka County
Highway Department
Traffic Volume and Turning
Movement Study

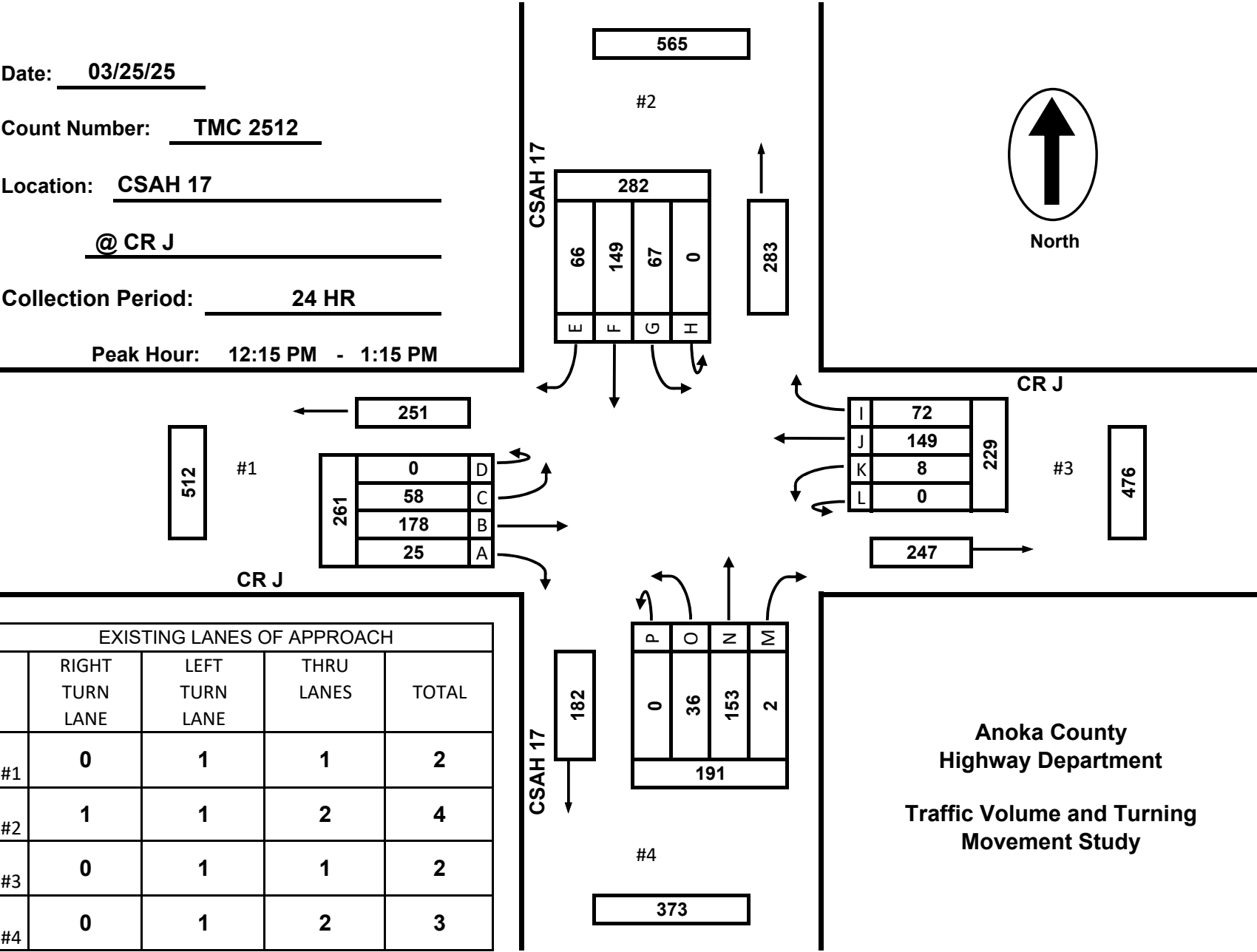
Date: 03/25/25

Count Number: TMC 2512

Location: CSAH 17
@ CR J

Collection Period: 24 HR

Peak Hour: 12:15 PM - 1:15 PM



Date: 03/25/25

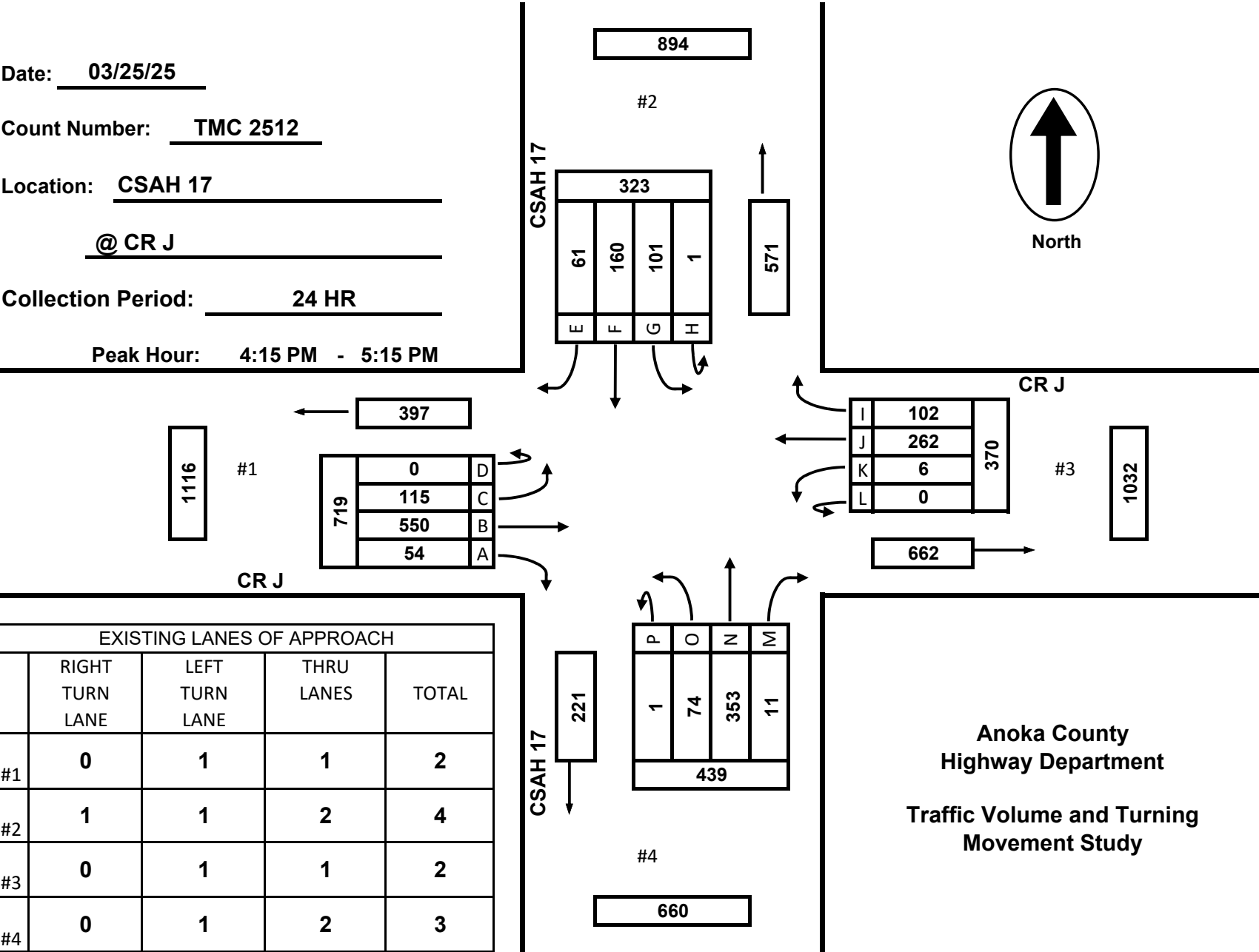
Count Number: TMC 2512

Location: CSAH 17

@ CR J

Collection Period: 24 HR

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



Anoka County
Highway Department

Traffic Volume and Turning
Movement Study

TMC 2512 - CSAH 17 @ CR J
Blaine MN
Tuesday, March 25, 2025

Time	Southbound CSAH 17						Westbound CR J						Northbound CSAH 17						Eastbound CR J						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	1	1	0	2	0	0	1	0	0	1	0	1	1	0	0	2	0	1	6	0	0	7	12
12:15 AM	0	0	2	0	0	2	0	0	3	0	0	3	0	0	0	0	0	0	0	1	1	0	0	2	7
12:30 AM	0	1	0	1	0	2	0	0	1	1	0	2	0	0	0	0	0	0	0	1	6	0	0	7	11
12:45 AM	0	0	1	0	0	1	0	0	1	0	0	1	0	0	1	0	0	1	0	1	5	2	0	8	11
Hourly Total	0	1	4	2	0	7	0	0	6	1	0	7	0	1	2	0	0	3	0	4	18	2	0	24	41
1:00 AM	0	1	1	0	0	2	0	0	1	1	0	2	0	0	1	0	0	1	0	0	5	0	0	5	10
1:15 AM	1	0	1	0	0	2	0	0	2	0	0	2	0	0	0	0	0	0	0	1	2	1	0	4	8
1:30 AM	0	0	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	0	0	0	2	0	0	2	4
1:45 AM	0	1	1	0	0	2	0	0	3	0	0	3	0	0	0	0	0	0	0	0	5	0	0	5	10
Hourly Total	1	2	3	0	0	6	0	0	7	2	0	9	0	0	1	0	0	1	0	1	14	1	0	16	32
2:00 AM	0	0	1	0	0	1	0	0	0	1	0	1	0	1	0	0	0	1	0	0	4	0	0	4	7
2:15 AM	0	1	0	0	0	1	0	0	1	0	0	1	0	0	0	0	0	0	0	0	4	0	0	4	6
2:30 AM	0	0	1	1	0	2	0	0	0	0	0	0	0	0	2	0	0	2	0	0	2	0	0	2	6
2:45 AM	0	0	0	0	0	0	0	0	2	0	0	2	0	0	2	0	0	2	0	1	2	0	0	3	7
Hourly Total	0	1	2	1	0	4	0	0	3	1	0	4	0	1	4	0	0	5	0	1	12	0	0	13	26
3:00 AM	0	1	2	0	0	3	0	0	1	0	0	1	0	0	0	0	0	0	0	0	3	0	0	3	7
3:15 AM	0	0	1	0	0	1	0	1	2	2	0	5	0	0	0	0	0	0	0	1	2	0	0	3	9
3:30 AM	0	0	1	1	0	2	0	0	2	1	0	3	0	1	0	0	0	1	0	0	4	0	0	4	10
3:45 AM	0	0	0	0	0	0	0	0	3	0	0	3	0	0	2	1	0	3	0	1	2	3	0	6	12
Hourly Total	0	1	4	1	0	6	0	1	8	3	0	12	0	1	2	1	0	4	0	2	11	3	0	16	38
4:00 AM	0	0	5	1	0	6	0	0	3	2	0	5	0	0	0	0	0	0	0	0	3	0	0	3	14
4:15 AM	0	0	2	2	0	4	0	0	8	2	0	10	0	3	1	0	0	4	0	1	2	1	0	4	22
4:30 AM	0	1	3	2	0	6	0	0	11	2	0	13	0	0	0	0	0	0	0	0	10	0	0	10	29
4:45 AM	0	1	9	2	0	12	0	0	9	1	0	10	0	2	1	0	0	3	0	1	4	1	0	6	31
Hourly Total	0	2	19	7	0	28	0	0	31	7	0	38	0	5	2	0	0	7	0	2	19	2	0	23	96
5:00 AM	0	2	8	5	0	15	0	1	10	2	0	13	0	1	0	2	0	3	0	1	2	0	0	3	34
5:15 AM	0	4	11	11	0	26	0	0	24	0	0	24	0	2	8	1	0	11	0	0	15	2	0	17	78
5:30 AM	0	6	21	6	0	33	0	0	41	4	0	45	0	5	9	0	0	14	0	3	14	3	0	20	112
5:45 AM	0	2	14	10	0	26	0	0	39	4	0	43	0	2	3	0	0	5	0	2	22	6	0	30	104
Hourly Total	0	14	54	32	0	100	0	1	114	10	0	125	0	10	20	3	0	33	0	6	53	11	0	70	328
6:00 AM	0	4	26	3	0	33	0	0	26	10	0	36	0	3	7	1	0	11	0	5	17	5	0	27	107
6:15 AM	0	8	35	11	0	54	0	0	53	1	0	54	0	2	8	2	0	12	0	7	40	5	0	52	172
6:30 AM	0	7	43	28	0	78	0	1	84	9	0	94	0	9	14	1	0	24	0	7	31	9	0	47	243
6:45 AM	0	3	29	17	0	49	0	0	89	10	0	99	0	9	10	0	0	19	0	4	43	10	0	57	224
Hourly Total	0	22	133	59	0	214	0	1	252	30	0	283	0	23	39	4	0	66	0	23	131	29	0	183	746
7:00 AM	0	9	43	14	0	66	0	3	108	5	0	116	0	13	17	1	0	31	0	8	33	14	0	55	268
7:15 AM	0	9	45	24	0	78	0	0	118	14	0	132	0	11	19	0	0	30	0	7	59	14	0	80	320
7:30 AM	0	7	65	24	0	96	0	2	103	13	0	118	0	14	26	1	0	41	0	13	52	27	0	92	347
7:45 AM	0	12	52	18	0	82	0	1	149	17	2	167	0	14	21	0	1	35	0	6	76	18	1	100	384
Hourly Total	0	37	205	80	0	322	0	6	478	49	2	533	0	52	83	2	1	137	0	34	220	73	1	327	1319

TMC 2512 - CSAH 17 @ CR J
Blaine MN
Tuesday, March 25, 2025

Time	Southbound CSAH 17						Westbound CR J						Northbound CSAH 17						Eastbound CR J						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	9	45	9	0	63	0	0	114	18	0	132	0	9	26	2	0	37	0	7	39	18	0	64	296
8:15 AM	0	9	43	12	0	64	0	0	95	9	0	104	0	10	15	0	0	25	0	14	49	11	0	74	267
8:30 AM	0	13	36	12	0	61	0	0	64	15	0	79	0	8	18	1	1	27	0	16	47	13	0	76	243
8:45 AM	1	10	30	11	0	52	0	2	72	12	0	86	0	8	20	0	0	28	0	13	56	15	0	84	250
Hourly Total	1	41	154	44	0	240	0	2	345	54	0	401	0	35	79	3	1	117	0	50	191	57	0	298	1056
9:00 AM	0	9	30	10	0	49	0	0	71	15	0	86	0	9	16	0	0	25	0	14	51	6	0	71	231
9:15 AM	0	15	27	13	0	55	0	1	55	11	0	67	0	11	18	1	0	30	0	7	40	5	1	52	204
9:30 AM	0	9	35	12	1	56	0	0	56	23	0	79	0	10	15	0	0	25	0	7	42	3	0	52	212
9:45 AM	0	9	28	8	1	45	0	2	50	10	2	62	0	6	29	0	0	35	0	10	27	11	0	48	190
Hourly Total	0	42	120	43	2	205	0	3	232	59	2	294	0	36	78	1	0	115	0	38	160	25	1	223	837
10:00 AM	0	12	34	8	0	54	0	2	34	14	2	50	0	7	26	1	0	34	0	10	37	8	0	55	193
10:15 AM	0	11	30	7	0	48	0	0	33	16	1	49	0	4	18	1	0	23	0	10	29	14	0	53	173
10:30 AM	0	11	28	15	1	54	0	1	43	9	1	53	0	12	29	1	0	42	0	11	38	12	1	61	210
10:45 AM	0	11	32	10	0	53	0	5	32	14	1	51	0	10	25	1	0	36	0	10	30	8	0	48	188
Hourly Total	0	45	124	40	1	209	0	8	142	53	5	203	0	33	98	4	0	135	0	41	134	42	1	217	764
11:00 AM	0	11	36	10	0	57	0	3	41	19	0	63	0	5	32	1	0	38	0	14	29	6	0	49	207
11:15 AM	0	16	21	12	0	49	0	1	28	9	0	38	0	7	29	7	0	43	0	18	42	7	1	67	197
11:30 AM	1	9	33	10	0	53	0	2	38	16	1	56	0	9	27	2	0	38	0	13	34	12	2	59	206
11:45 AM	0	14	37	16	0	67	0	4	40	22	0	66	0	3	38	0	0	41	0	12	46	5	0	63	237
Hourly Total	1	50	127	48	0	226	0	10	147	66	1	223	0	24	126	10	0	160	0	57	151	30	3	238	847
12:00 PM	0	13	20	12	0	45	0	0	43	14	0	57	0	9	37	1	0	47	0	14	37	9	0	60	209
12:15 PM	0	12	34	21	1	67	0	1	35	18	4	54	0	9	44	0	0	53	0	16	49	8	1	73	247
12:30 PM	0	16	49	16	0	81	0	3	41	10	0	54	0	8	38	0	0	46	0	10	55	5	2	70	251
12:45 PM	0	18	35	14	1	67	0	2	39	21	0	62	0	10	34	2	0	46	0	17	39	8	0	64	239
Hourly Total	0	59	138	63	2	260	0	6	158	63	4	227	0	36	153	3	0	192	0	57	180	30	3	267	946
1:00 PM	0	21	31	15	0	67	0	2	34	23	0	59	0	9	37	0	0	46	0	15	35	4	3	54	226
1:15 PM	0	16	30	10	0	56	0	2	36	19	0	57	0	5	36	0	0	41	0	11	50	9	0	70	224
1:30 PM	0	13	40	10	1	63	0	4	42	20	0	66	0	10	41	0	0	51	0	12	38	11	0	61	241
1:45 PM	0	22	37	10	0	69	0	2	26	20	6	48	0	10	34	3	0	47	0	15	50	14	0	79	243
Hourly Total	0	72	138	45	1	255	0	10	138	82	6	230	0	34	148	3	0	185	0	53	173	38	3	264	934
2:00 PM	0	19	40	11	0	70	0	2	53	20	2	75	0	12	44	2	0	58	0	22	61	7	0	90	293
2:15 PM	0	17	27	15	0	59	0	1	46	20	1	67	0	4	49	0	0	53	0	18	56	8	0	82	261
2:30 PM	0	20	25	12	0	57	0	2	58	22	1	82	0	10	60	2	0	72	0	19	67	15	0	101	312
2:45 PM	0	26	40	8	0	74	0	0	49	13	2	62	0	14	51	3	0	68	0	24	74	16	0	114	318
Hourly Total	0	82	132	46	0	260	0	5	206	75	6	286	0	40	204	7	0	251	0	83	258	46	0	387	1184
3:00 PM	0	28	34	16	0	78	0	0	46	14	0	60	0	10	50	3	0	63	0	17	96	9	0	122	323
3:15 PM	0	14	35	12	0	61	0	0	59	21	0	80	0	17	82	2	0	101	0	24	92	13	0	129	371
3:30 PM	0	22	40	21	1	83	0	1	66	25	1	92	0	15	71	3	0	89	0	34	90	23	0	147	411
3:45 PM	0	19	47	25	0	91	0	0	60	27	0	87	0	13	72	4	0	89	0	31	112	10	1	153	420
Hourly Total	0	83	156	74	1	313	0	1	231	87	1	319	0	55	275	12	0	342	0	106	390	55	1	551	1525

TMC 2512 - CSAH 17 @ CR J
Blaine MN
Tuesday, March 25, 2025

Time	Southbound CSAH 17						Westbound CR J						Northbound CSAH 17						Eastbound CR J						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	21	35	21	0	77	0	6	66	23	1	95	0	18	74	0	0	92	0	33	125	24	0	182	446
4:15 PM	0	26	42	22	0	90	0	1	61	22	0	84	0	17	85	3	0	105	0	28	128	19	1	175	454
4:30 PM	1	14	47	11	0	73	0	3	51	33	0	87	1	23	78	6	0	108	0	28	147	13	1	188	456
4:45 PM	0	31	38	20	0	89	0	1	72	31	0	104	0	17	71	1	1	89	0	40	140	13	0	193	475
Hourly Total	1	92	162	74	0	329	0	11	250	109	1	370	1	75	308	10	1	394	0	129	540	69	2	738	1831
5:00 PM	0	30	33	8	0	71	0	1	78	16	0	95	0	17	119	1	0	137	0	19	135	9	0	163	466
5:15 PM	0	35	37	16	2	88	0	4	65	22	1	91	0	17	78	3	0	98	0	29	123	9	0	161	438
5:30 PM	0	23	37	9	0	69	0	0	48	32	1	80	0	23	65	2	0	90	0	21	91	11	2	123	362
5:45 PM	0	20	30	14	0	64	0	3	62	22	1	87	0	8	59	3	0	70	0	17	93	6	0	116	337
Hourly Total	0	108	137	47	2	292	0	8	253	92	3	353	0	65	321	9	0	395	0	86	442	35	2	563	1603
6:00 PM	0	15	33	15	0	63	0	0	40	20	0	60	0	9	41	2	0	52	0	8	77	9	0	94	269
6:15 PM	1	16	30	9	0	56	0	1	48	13	0	62	0	5	43	0	0	48	0	15	52	10	0	77	243
6:30 PM	0	9	31	9	2	49	0	3	27	17	0	47	0	5	29	1	0	35	0	3	69	5	0	77	208
6:45 PM	0	19	19	8	0	46	0	0	18	19	0	37	0	4	38	1	1	43	0	11	45	5	0	61	187
Hourly Total	1	59	113	41	2	214	0	4	133	69	0	206	0	23	151	4	1	178	0	37	243	29	0	309	907
7:00 PM	0	27	32	5	0	64	0	1	31	13	3	45	0	5	26	1	0	32	0	9	45	8	0	62	203
7:15 PM	0	26	26	9	0	61	0	0	21	14	0	35	0	4	30	0	0	34	1	13	54	8	0	76	206
7:30 PM	0	10	20	6	0	36	0	0	33	3	0	36	0	2	24	0	1	26	0	6	51	5	0	62	160
7:45 PM	0	15	14	11	0	40	0	0	27	7	0	34	0	2	13	1	0	16	0	8	68	4	0	80	170
Hourly Total	0	78	92	31	0	201	0	1	112	37	3	150	0	13	93	2	1	108	1	36	218	25	0	280	739
8:00 PM	0	9	10	2	0	21	0	0	26	12	0	38	0	3	12	1	0	16	0	8	42	5	0	55	130
8:15 PM	0	13	17	8	0	38	0	0	30	6	0	36	0	3	16	0	0	19	0	7	48	3	0	58	151
8:30 PM	0	9	13	2	0	24	0	0	15	10	0	25	0	5	7	3	0	15	0	10	34	2	0	46	110
8:45 PM	0	9	14	5	0	28	0	0	18	7	0	25	0	4	19	0	0	23	0	6	39	3	0	48	124
Hourly Total	0	40	54	17	0	111	0	0	89	35	0	124	0	15	54	4	0	73	0	31	163	13	0	207	515
9:00 PM	0	8	8	2	0	18	0	0	15	8	0	23	0	0	19	1	0	20	0	6	29	3	0	38	99
9:15 PM	0	7	6	1	0	14	0	1	18	2	0	21	0	0	7	0	0	7	0	4	31	2	0	37	79
9:30 PM	0	9	8	4	0	21	0	0	10	6	0	16	0	1	9	0	0	10	0	5	24	0	0	29	76
9:45 PM	2	3	10	3	0	18	0	1	10	3	0	14	0	3	9	1	0	13	0	2	29	1	0	32	77
Hourly Total	2	27	32	10	0	71	0	2	53	19	0	74	0	4	44	2	0	50	0	17	113	6	0	136	331
10:00 PM	0	11	5	2	0	18	0	0	10	0	0	10	0	2	14	0	0	16	0	2	24	2	0	28	72
10:15 PM	0	10	10	11	0	31	0	0	11	2	0	13	0	1	7	1	0	9	0	4	18	2	0	24	77
10:30 PM	0	2	3	4	0	9	0	0	7	4	0	11	0	0	5	1	0	6	0	4	16	2	0	22	48
10:45 PM	0	1	2	1	0	4	0	0	8	2	0	10	0	1	3	0	0	4	0	0	9	0	0	9	27
Hourly Total	0	24	20	18	0	62	0	0	36	8	0	44	0	4	29	2	0	35	0	10	67	6	0	83	224
11:00 PM	0	0	1	1	0	2	0	0	4	0	0	4	0	1	4	1	0	6	0	3	3	3	0	9	21
11:15 PM	0	1	3	0	0	4	0	0	7	0	0	7	0	0	3	1	0	4	0	1	4	3	0	8	23
11:30 PM	1	0	2	1	0	4	0	0	1	1	0	2	0	0	2	1	0	3	0	0	3	0	0	3	12
11:45 PM	0	0	2	2	0	4	0	0	1	0	0	1	0	0	1	0	0	1	0	1	7	1	0	9	15
Hourly Total	1	1	8	4	0	14	0	0	13	1	0	14	0	1	10	3	0	14	0	5	17	7	0	29	71
DAILY TOTAL	8	983	2131	827	11	3949	0	80	3437	1012	34	4529	1	586	2324	89	5	3000	1	909	3918	634	17	5462	16940
Cars	8	969	2121	810	8	3908	0	77	3386	991	30	4454	1	571	2316	88	2	2976	1	895	3858	608	14	5362	16700
Heavy Vehicles	0	14	10	17	3	41	0	3	51	21	4	75	0	15	8	1	3	24	0	14	60	26	3	100	240
Heavy Vehicle %	0.00%	1.42%	0.47%	2.06%	27.27%	1.04%	0.00%	3.75%	1.48%	2.08%	11.76%	1.66%	0.00%	2.56%	0.34%	1.12%	60.00%	0.80%	0.00%	1.54%	1.53%	4.10%	17.65%	1.83%	1.42%

TMC 2512 - CSAH 17 @ CR J
Blaine MN
Tuesday, March 25, 2025
AM Peak Hour (00:00 to 10:00)

Time	Southbound						Westbound						Northbound						Eastbound						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	
7:15 AM	0	9	45	24	0	78	0	0	118	14	0	132	0	11	19	0	0	30	0	7	59	14	0	80	320
7:30 AM	0	7	65	24	0	96	0	2	103	13	0	118	0	14	26	1	0	41	0	13	52	27	0	92	347
7:45 AM	0	12	52	18	0	82	0	1	149	17	2	167	0	14	21	0	1	35	0	6	76	18	1	100	384
8:00 AM	0	9	45	9	0	63	0	0	114	18	0	132	0	9	26	2	0	37	0	7	39	18	0	64	296
Peak Hour Total	0	37	207	75	0	319	0	3	484	62	2	549	0	48	92	3	1	143	0	33	226	77	1	336	1347
Peak Hour Heavy Vehicles	0	0	0	0	0	0	0	0	6	3	0	9	0	1	1	0	0	2	0	0	6	6	1	12	23
Peak Hour Heavy Vehicles PHF	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.24%	4.84%	0.00%	1.64%	0.00%	2.08%	1.09%	0.00%	0.00%	1.40%	0.00%	0.00%	2.65%	7.79%	100.00%	3.57%	1.71%
	0.000	0.771	0.796	0.781	0.000	0.831	0.000	0.375	0.812	0.861	0.250	0.822	0.000	0.857	0.885	0.375	0.250	0.872	0.000	0.635	0.743	0.713	0.250	0.840	0.877

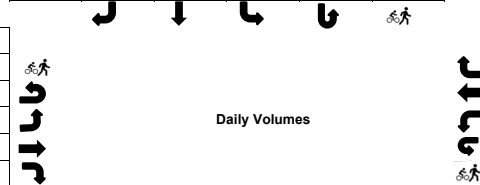
Mid Peak Hour (10:00 - 14:00)

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	
12:15 PM	0	12	34	21	1	67	0	1	35	18	4	54	0	9	44	0	0	53	0	16	49	8	1	73	247
12:30 PM	0	16	49	16	0	81	0	3	41	10	0	54	0	8	38	0	0	46	0	10	55	5	2	70	251
12:45 PM	0	18	35	14	1	67	0	2	39	21	0	62	0	10	34	2	0	46	0	17	39	8	0	64	239
1:00 PM	0	21	31	15	0	67	0	2	34	23	0	59	0	9	37	0	0	46	0	15	35	4	3	54	226
Peak Hour Total	0	67	149	66	2	282	0	8	149	72	4	229	0	36	153	2	0	191	0	58	178	25	6	261	963
Peak Hour Heavy Vehicles	0	0	2	0	1	2	0	0	2	1	0	3	0	1	1	0	1	2	0	2	4	3	0	9	16
Peak Hour Heavy Vehicles PHF	0.00%	0.00%	1.34%	0.00%	50.00%	0.71%	0.00%	0.00%	1.34%	1.39%	0.00%	1.31%	0.00%	2.78%	0.65%	0.00%	0.00%	1.05%	0.00%	3.45%	2.25%	12.00%	0.00%	3.45%	1.66%
	0.000	0.798	0.760	0.786	0.500	0.870	0.000	0.667	0.909	0.783	0.250	0.923	0.000	0.900	0.869	0.250	0.000	0.901	0.000	0.853	0.809	0.781	0.500	0.894	0.959

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	0	26	42	22	0	90	0	1	61	22	0	84	0	17	85	3	0	105	0	28	128	19	1	175	454
4:30 PM	1	14	47	11	0	73	0	3	51	33	0	87	1	23	78	6	0	108	0	28	147	13	1	188	456
4:45 PM	0	31	38	20	0	89	0	1	72	31	0	104	0	17	71	1	1	89	0	40	140	13	0	193	475
5:00 PM	0	30	33	8	0	71	0	1	78	16	0	95	0	17	119	1	0	137	0	19	135	9	0	163	466
Peak Hour Total	1	101	160	61	0	323	0	6	262	102	0	370	1	74	353	11	1	439	0	115	550	54	2	719	1851
Peak Hour Heavy Vehicles	0	1	0	4	0	5	0	0	4	0	0	4	0	1	0	0	0	1	0	1	4	0	0	5	15
Peak Hour Heavy Vehicles PHF	0.00%	0.99%	0.00%	6.56%	0.00%	1.55%	0.00%	0.00%	1.53%	0.00%	0.00%	1.08%	0.00%	1.35%	0.00%	0.00%	0.00%	0.23%	0.00%	0.87%	0.73%	0.00%	0.00%	0.70%	0.81%
	0.250	0.815	0.851	0.693	0.000	0.897	0.000	0.500	0.840	0.773	0.000	0.889	0.250	0.804	0.742	0.458	0.250	0.801	0.000	0.719	0.935	0.711	0.500	0.931	0.974

Total Vehicles On Leg			8202		
Vehicles Entering Intersection			Vehicles Exiting Intersection		
Southbound			Northbound		
Cars	810	2121	969	8	8
Heavy	17	10	14	0	3
Total	827	2131	983	8	11



Total Vehicles on Leg 10313	Entering Intersection 5462	Eastbound	Cars	Heavy	Total
	Exiting Intersection 4851		14	3	17
			1	0	1
			895	14	909
			3858	60	3918
			608	26	634

Cars	Heavy	Total	Westbound	Entering Intersection 4529	Total Vehicles on Leg 9519
991	21	1012		Exiting Intersection 4990	
3386	51	3437			
77	3	80			
0	0	0			
30	4	34			

Cars	2	1	571	2316	88
Heavy	3	0	15	8	1
Total	5	1	586	2324	89
Northbound					
Vehicles Entering Intersection			Vehicles Exiting Intersection		
Total Vehicles On Leg			2846		
			5846		

TMC 2512 - CSAH 17 @ CR J
Blaine MN
Tuesday, March 25, 2025

Time	Southbound Heavy CSAH 17						Westbound Heavy CR J						Northbound Heavy CSAH 17						Eastbound Heavy CR J						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly 'Heavy Vehicles'	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly 'Heavy Vehicles'	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly 'Heavy Vehicles'	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Hourly 'Heavy Vehicles'	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly 'Heavy Vehicles'	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 AM	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2
Hourly 'Heavy Vehicles'	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2
6:00 AM	0	0	1	0	0	1	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1	0	1	3
6:15 AM	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
6:30 AM	0	0	0	1	0	1	0	0	2	1	0	3	0	0	1	0	0	1	0	0	1	2	0	3	8
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3	0	5	5
Hourly 'Heavy Vehicles'	0	0	1	1	0	2	0	0	2	2	0	4	0	0	1	0	0	1	0	0	6	5	0	11	18
7:00 AM	0	0	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	0	0	0	1	0	0	1	3
7:15 AM	0	0	0	0	0	0	0	0	1	2	0	3	0	0	0	0	0	0	0	0	2	1	0	3	6
7:30 AM	0	0	0	0	0	0	0	0	2	1	0	3	0	0	1	0	0	1	0	0	1	0	0	1	5
7:45 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0	0	0	1	0	0	2	3	1	5	7
Hourly 'Heavy Vehicles'	0	0	0	0	0	0	0	1	5	3	0	9	0	1	1	0	0	2	0	0	6	4	1	10	21

TMC 2512 - CSAH 17 @ CR J
Blaine MN
Tuesday, March 25, 2025

	Southbound Heavy CSAH 17						Westbound Heavy CR J						Northbound Heavy CSAH 17						Eastbound Heavy CR J						VEHICLE 'Heavy Vehicles'	
Time	U Turns	Left Turns	Straight Through	Right Turns	Crosswalks Crossings	Vehicle Approach 'Heavy Vehicles'	U Turns	Left Turns	Straight Through	Right Turns	Crosswalks Crossings	Vehicle Approach 'Heavy Vehicles'	U Turns	Left Turns	Straight Through	Right Turns	Crosswalks Crossings	Vehicle Approach 'Heavy Vehicles'	U Turns	Left Turns	Straight Through	Right Turns	Crosswalks Crossings	Vehicle Approach 'Heavy Vehicles'		
8:00 AM	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	1	2	0	3	5
8:15 AM	0	2	0	0	0	2	0	0	1	0	0	1	0	2	0	0	0	2	0	0	0	1	0	0	1	6
8:30 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	1	1	1	0	2	2	0	0	0	4	6
8:45 AM	0	0	0	0	0	0	0	0	2	1	0	3	0	0	1	0	0	1	0	0	2	2	0	4	8	
Hourly 'Heavy Vehicles'	0	2	0	0	0	2	0	0	6	1	0	7	0	2	1	1	1	4	0	2	6	4	0	12	25	
9:00 AM	0	0	1	0	0	1	0	0	2	0	0	2	0	0	0	0	0	0	0	1	3	0	0	4	7	
9:15 AM	0	4	1	0	0	5	0	0	2	0	0	2	0	0	0	0	0	0	0	0	1	0	1	1	8	
9:30 AM	0	0	0	0	0	0	0	0	2	2	0	4	0	0	0	0	0	0	0	1	1	0	0	2	6	
9:45 AM	0	0	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	0	0	0	1	0	0	1	3	
Hourly 'Heavy Vehicles'	0	4	2	0	0	6	0	1	7	2	0	10	0	0	0	0	0	0	0	2	6	0	1	8	24	
10:00 AM	0	1	1	0	0	2	0	0	0	0	0	0	0	1	0	0	0	1	0	1	2	0	0	3	6	
10:15 AM	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	2	3	
10:30 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1	0	0	1	2	
10:45 AM	0	0	0	1	0	1	0	1	2	1	0	4	0	1	0	0	0	1	0	1	2	0	0	3	9	
Hourly 'Heavy Vehicles'	0	1	1	2	0	4	0	1	3	1	0	5	0	2	0	0	0	2	0	3	5	1	0	9	20	
11:00 AM	0	0	0	0	0	0	0	0	2	1	0	3	0	1	0	0	0	1	0	0	0	2	0	2	6	
11:15 AM	0	1	0	1	0	2	0	0	1	1	0	2	0	0	0	0	0	0	0	0	2	1	0	3	7	
11:30 AM	0	0	0	0	0	0	0	0	2	0	1	2	0	0	0	0	0	0	0	0	1	0	1	1	3	
11:45 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	1	2	1	0	4	5	
Hourly 'Heavy Vehicles'	0	1	0	1	0	2	0	0	6	2	1	8	0	1	0	0	0	1	0	1	5	4	1	10	21	
12:00 PM	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2	
12:15 PM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2	
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	2	2	1	0	5	6	
12:45 PM	0	0	1	0	1	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2	0	0	2	4	
Hourly 'Heavy Vehicles'	0	0	2	0	1	2	0	0	2	0	0	2	0	1	1	0	0	2	0	2	4	2	0	8	14	
1:00 PM	0	0	0	0	0	0	0	0	2	1	0	3	0	0	0	0	0	0	0	0	0	1	0	1	4	
1:15 PM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	3	
1:30 PM	0	0	0	1	1	1	0	0	0	2	0	2	0	0	1	0	0	1	0	0	0	0	0	0	4	
1:45 PM	0	0	0	0	0	0	0	0	0	2	1	2	0	0	0	0	0	0	0	1	1	2	0	4	6	
Hourly 'Heavy Vehicles'	0	0	1	1	1	2	0	0	2	5	1	7	0	0	1	0	0	1	0	1	2	4	0	7	17	
2:00 PM	0	0	0	0	0	0	0	0	2	1	1	3	0	0	0	0	0	0	0	1	1	0	0	2	5	
2:15 PM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
2:30 PM	0	0	0	1	0	1	0	0	2	0	0	2	0	0	0	0	0	0	0	0	2	0	0	2	5	
2:45 PM	0	0	0	0	0	0	0	0	2	1	0	3	0	0	0	0	0	0	0	0	2	0	0	2	5	
Hourly 'Heavy Vehicles'	0	0	1	1	0	2	0	0	6	2	1	8	0	0	0	0	0	0	0	1	5	0	0	6	16	
3:00 PM	0	1	0	2	0	3	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	4	
3:15 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0	0	0	1	0	0	1	1	0	2	4	
3:30 PM	0	1	0	1	0	2	0	0	1	1	0	2	0	0	1	0	0	1	0	0	0	0	0	0	5	
3:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1	0	0	1	2	
Hourly 'Heavy Vehicles'	0	2	0	3	0	5	0	0	1	3	0	4	0	1	2	0	0	3	0	0	2	1	0	3	15	

TMC 2512 - CSAH 17 @ CR J
Blaine MN
Tuesday, March 25, 2025

Time	Southbound Heavy CSAH 17						Westbound Heavy CR J						Northbound Heavy CSAH 17						Eastbound Heavy CR J						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	1	0	2	0	3	0	0	3	0	0	3	0	1	0	0	0	0	1	0	0	1	0	0	1	8
4:15 PM	0	1	0	0	0	1	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1	2	0	0	3	5
4:30 PM	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	2
4:45 PM	0	0	0	1	0	1	0	0	3	0	0	3	0	1	0	0	1	1	1	0	0	0	0	0	0	5
Hourly 'Heavy Vehicles'	0	2	0	4	0	6	0	0	7	0	0	7	0	2	0	0	1	2	0	1	4	0	0	0	5	20
5:00 PM	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	3
5:15 PM	0	0	1	0	0	1	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	1	3
5:30 PM	0	1	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2	0	0	0	2	4
5:45 PM	0	1	0	0	0	1	0	0	1	0	0	1	0	1	0	0	0	1	0	0	1	0	0	0	1	4
Hourly 'Heavy Vehicles'	0	2	1	2	0	5	0	0	2	0	0	2	0	2	0	0	0	2	0	0	5	0	0	0	5	14
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	1
6:30 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
6:45 PM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	3
Hourly 'Heavy Vehicles'	0	0	1	0	1	1	0	0	0	0	0	0	0	1	0	0	0	1	0	1	2	0	0	0	3	5
7:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	1	0	0	0	0	0	0	0	1
7:15 PM	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	2
7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly 'Heavy Vehicles'	0	0	0	1	0	1	0	0	0	0	1	0	0	1	1	0	0	1	2	0	0	0	0	0	0	3
8:00 PM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	1	2
8:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	1
8:30 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	0	1
8:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly 'Heavy Vehicles'	0	0	0	0	0	0	0	0	2	0	0	2	0	1	0	0	0	1	0	0	1	0	0	0	1	4
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	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	0
9:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly 'Heavy Vehicles'	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly 'Heavy Vehicles'	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly 'Heavy Vehicles'	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DAILY 'Heavy Vehicles'	0	14	10	17	3	41	0	3	51	21	4	75	0	15	8	1	3	24	0	14	60	26	3	100	240	

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2512

Study Date : 03/28/2025

Signal Warrants - Summary

Major Street Approaches

Eastbound: CR J

Number of Lanes : 2+

Total Approach Volume: 5,462

Westbound: CR J

Number of Lanes :2+

Total Approach Volume: 4,529

Minor Street Approaches

Northbound: CSAH 17

Number of Lanes :2+

Total Approach Volume: 2,911

Southbound: CSAH 17

Number of Lanes :2+

Total Approach Volume: 3,122

Warrant Summary (Rural Values Apply)

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

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

Required volumes reached for 14 hours, 8 are needed

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

Required volumes reached for 6 hours, 8 are needed

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

Required 1A volumes reached for 14 hours, 8 are needed

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

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

Number of hours (7) volumes exceed minimum >= minimum required (4).

Warrant 3 - Peak Hour.....Satisfied

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

Number of one hour periods (39) 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 2512

Study Date : 03/28/2025

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

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 = **2 or more**

Volume Requirements

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

Veh/Hr Minor = **140**

Major Road						Minor Road		
CR J						CSAH 17		
Time	Major EB	+	Major WB	=	Total	Minor NB	Minor SB	Met?
16:00 - 17:00	738	+	370	=	1108	384	255	Yes
17:00 - 18:00	563	+	353	=	916	386	245	Yes
15:00 - 16:00	551	+	319	=	870	330	239	Yes
07:00 - 08:00	327	+	533	=	860	135	242	Yes
08:00 - 09:00	298	+	401	=	699	114	196	Yes
14:00 - 15:00	387	+	286	=	673	244	214	Yes
09:00 - 10:00	223	+	294	=	517	114	162	Yes
18:00 - 19:00	309	+	206	=	515	174	173	Yes
12:00 - 13:00	267	+	227	=	494	189	197	Yes
13:00 - 14:00	264	+	230	=	494	182	210	Yes
06:00 - 07:00	183	+	283	=	466	62	155	Yes
11:00 - 12:00	238	+	223	=	461	150	178	Yes
19:00 - 20:00	280	+	150	=	430	106	170	Yes
10:00 - 11:00	217	+	203	=	420	131	169	Yes
05:45 - 06:45	156	+	227	=	383	48	139	No
20:00 - 21:00	207	+	124	=	331	69	94	No
05:30 - 06:30	129	+	178	=	307	39	116	No
20:15 - 21:15	190	+	109	=	299	73	91	No
20:30 - 21:30	169	+	94	=	263	61	74	No
05:15 - 06:15	94	+	148	=	242	39	88	No
20:45 - 21:45	152	+	85	=	237	59	69	No
21:00 - 22:00	136	+	74	=	210	48	61	No
05:00 - 06:00	70	+	125	=	195	30	68	No
21:15 - 22:15	126	+	61	=	187	45	61	No
21:30 - 22:30	113		53		166	46	68	No

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2512

Study Date : 03/28/2025

Warrant 1B - Interruption of Continuous Traffic

Description

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

Summary

Only 6 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 = **2 or more**

Volume Requirements

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

Veh/Hr Minor = **70**

Major Road						Minor Road		
CR J						CSAH 17		
Time	Major EB	+	Major WB	=	Total	Minor NB	Minor SB	Met?
16:00 - 17:00	738	+	370	=	1108	384	255	Yes
17:00 - 18:00	563	+	353	=	916	386	245	Yes
15:00 - 16:00	551	+	319	=	870	330	239	Yes
07:30 - 08:30	330	+	521	=	851	135	242	Yes
06:30 - 07:30	239	+	441	=	680	102	188	Yes
14:00 - 15:00	387	+	286	=	673	244	214	Yes
13:45 - 14:45	352	+	272	=	624	223	207	No
08:30 - 09:30	283	+	318	=	601	108	171	No
08:45 - 09:45	259	+	318	=	577	107	166	No
06:15 - 07:15	211	+	363	=	574	82	177	No
13:30 - 14:30	312	+	256	=	568	204	215	No
13:15 - 14:15	300	+	246	=	546	192	217	No
09:00 - 10:00	223	+	294	=	517	114	162	No
18:00 - 19:00	309	+	206	=	515	174	173	No
11:45 - 12:45	266	+	231	=	497	186	195	No
12:00 - 13:00	267	+	227	=	494	189	197	No
13:00 - 14:00	264	+	230	=	494	182	210	No
12:45 - 13:45	249	+	244	=	493	182	204	No
12:15 - 13:15	261	+	229	=	490	189	216	No
12:30 - 13:30	258	+	232	=	490	177	216	No
11:30 - 12:30	255	+	233	=	488	176	173	No
18:15 - 19:15	277	+	191	=	468	155	184	No
11:15 - 12:15	249	+	217	=	466	159	164	No
06:00 - 07:00	183	+	283	=	466	62	155	No
09:15 - 10:15	207		258		465	122	169	No

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2512

Study Date : 03/28/2025

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

14 hours meet 1A minimums.
8 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 CR J						Minor Road CSAH 17				
Time	Major EB	+	Major WB	=	Total	Minor NB	Minor SB	Met1A?		
15:45 - 16:45	698	+	353	=	1051	381	252	Yes		
16:45 - 17:45	640	+	370	=	1010	407	264	Yes		
14:45 - 15:45	512	+	294	=	806	310	239	Yes		
07:45 - 08:45	314	+	482	=	796	121	219	Yes		
06:45 - 07:45	284	+	465	=	749	119	210	Yes		
13:45 - 14:45	352	+	272	=	624	223	207	Yes		
17:45 - 18:45	364	+	256	=	620	199	185	Yes		
08:45 - 09:45	259	+	318	=	577	107	166	Yes		
11:45 - 12:45	266	+	231	=	497	186	195	Yes		
12:45 - 13:45	249	+	244	=	493	182	204	Yes		
10:45 - 11:45	223	+	208	=	431	144	170	Yes		
09:45 - 10:45	217	+	214	=	431	131	163	Yes		

Time	Major EB	+	Major WB	=	Total	Minor NB	Minor SB	Met1B?		
16:15 - 17:15	719	+	370	=	1089	428	262	Yes		
15:15 - 16:15	611	+	354	=	965	362	233	Yes		
07:15 - 08:15	336	+	549	=	885	140	244	Yes		
17:15 - 18:15	494	+	318	=	812	300	230	Yes		
14:15 - 15:15	419	+	271	=	690	248	217	Yes		
08:15 - 09:15	305	+	355	=	660	104	181	Yes		
06:15 - 07:15	211	+	363	=	574	82	177	Yes		
13:15 - 14:15	300	+	246	=	546	192	217	Yes		
11:45 - 12:45	266	+	231	=	497	186	195	No		
12:00 - 13:00	267	+	227	=	494	189	197	No		
13:00 - 14:00	264	+	230	=	494	182	210	No		
12:45 - 13:45	249	+	244	=	493	182	204	No		

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2512

Study Date : 03/28/2025

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.

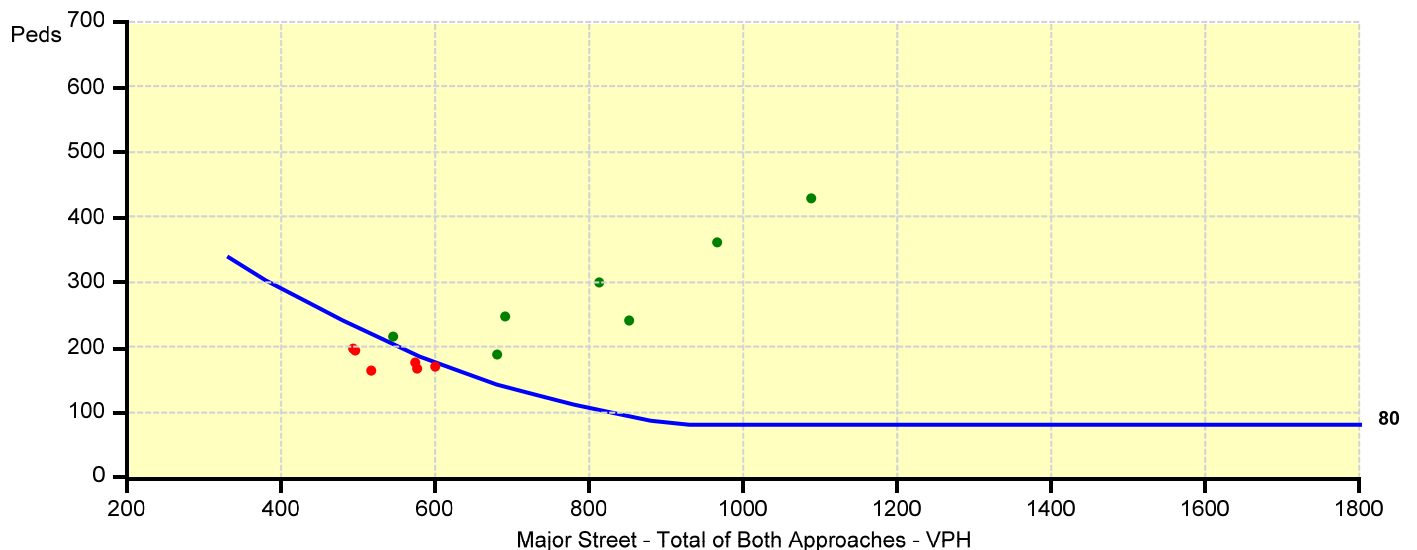
Summary

7 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 CR J						Minor Road CSAH 17		
Time	Major EB	+	Major WB	=	Total	Minor NB	Minor SB	Met?
16:15 - 17:15	719	+	370	=	1089	428	262	Yes
15:15 - 16:15	611	+	354	=	965	362	233	Yes
07:30 - 08:30	330	+	521	=	851	135	242	Yes
17:15 - 18:15	494	+	318	=	812	300	230	Yes
14:15 - 15:15	419	+	271	=	690	248	217	Yes
06:30 - 07:30	239	+	441	=	680	102	188	Yes
13:15 - 14:15	300	+	246	=	546	192	217	Yes
08:30 - 09:30	283	+	318	=	601	108	171	No
08:45 - 09:45	259	+	318	=	577	107	166	No
06:15 - 07:15	211	+	363	=	574	82	177	No
09:00 - 10:00	223	+	294	=	517	114	162	No
11:45 - 12:45	266	+	231	=	497	186	195	No



ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2512

Study Date : 03/28/2025

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

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**

Major Road CR J						Minor Road CSAH 17		
Time	Major EB	+	Major WB	=	Total	Minor NB	Minor SB	Met?
16:00 - 17:00	738	+	370	=	1108	384	255	Yes
16:15 - 17:15	719	+	370	=	1089	428	262	Yes
16:30 - 17:30	705	+	377	=	1082	421	266	Yes
15:45 - 16:45	698	+	353	=	1051	381	252	Yes
15:30 - 16:30	657	+	358	=	1015	365	252	Yes
16:45 - 17:45	640	+	370	=	1010	407	264	Yes
15:15 - 16:15	611	+	354	=	965	362	233	Yes
17:00 - 18:00	563	+	353	=	916	386	245	Yes
07:15 - 08:15	336	+	549	=	885	140	244	Yes
15:00 - 16:00	551	+	319	=	870	330	239	Yes
07:00 - 08:00	327	+	533	=	860	135	242	Yes
07:30 - 08:30	330		521		851	135	242	Yes

