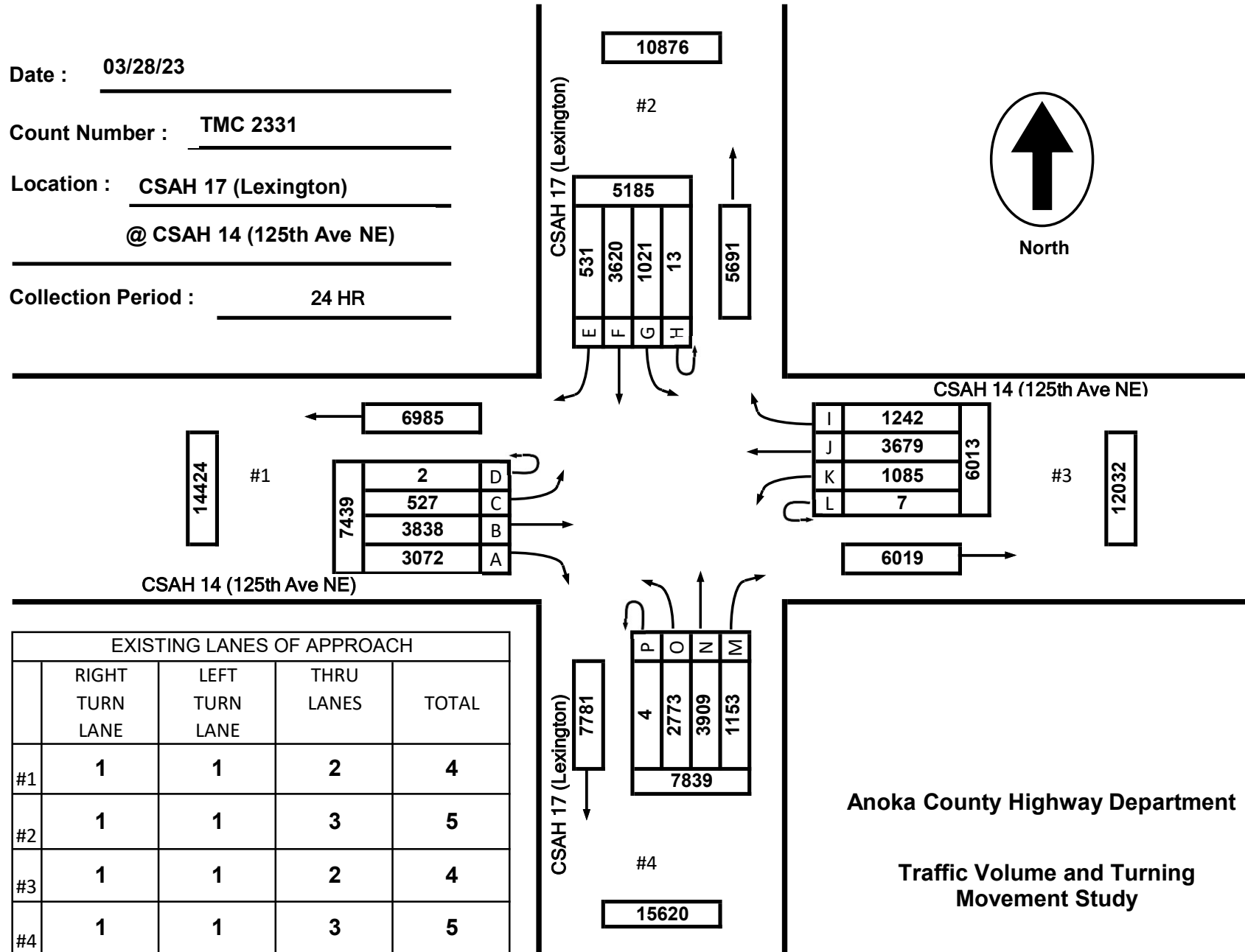


Date : 03/28/23

Count Number : TMC 2331

Location : CSAH 17 (Lexington)
@ CSAH 14 (125th Ave NE)

Collection Period : 24 HR



CSAH 14 (125th Ave NE)

CSAH 17 (Lexington)

CSAH 14 (125th Ave NE)



North

EXISTING LANES OF APPROACH				
	RIGHT TURN LANE	LEFT TURN LANE	THRU LANES	TOTAL
#1	1	1	2	4
#2	1	1	3	5
#3	1	1	2	4
#4	1	1	3	5

Anoka County Highway Department

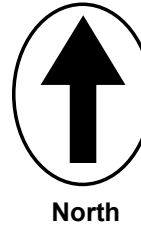
Traffic Volume and Turning Movement Study

Date : 03/28/23

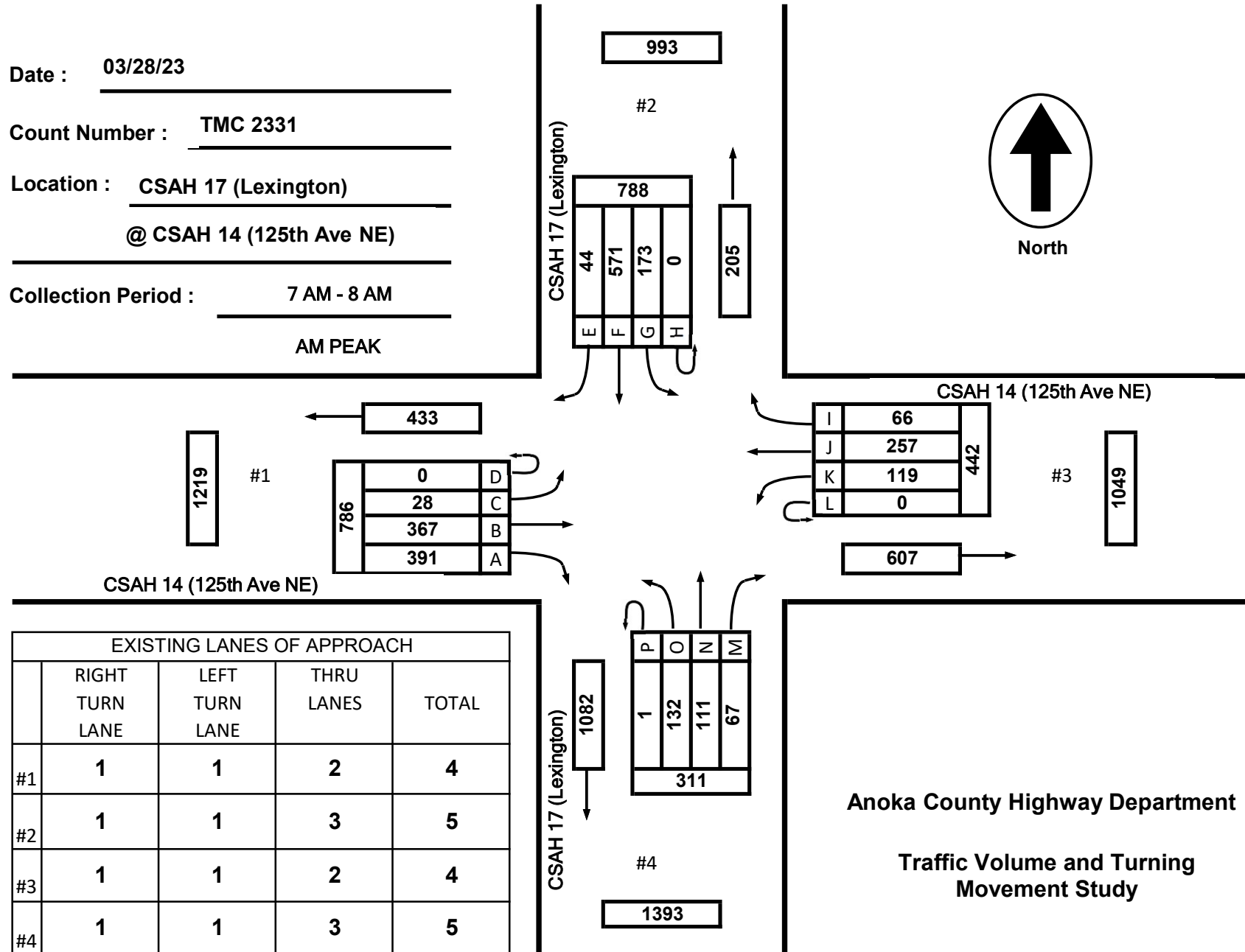
Count Number : TMC 2331

Location : CSAH 17 (Lexington)
@ CSAH 14 (125th Ave NE)

Collection Period : 7 AM - 8 AM
AM PEAK



North



CSAH 14 (125th Ave NE)

CSAH 17 (Lexington)

CSAH 14 (125th Ave NE)

CSAH 17 (Lexington)

EXISTING LANES OF APPROACH				
	RIGHT TURN LANE	LEFT TURN LANE	THRU LANES	TOTAL
#1	1	1	2	4
#2	1	1	3	5
#3	1	1	2	4
#4	1	1	3	5

Anoka County Highway Department

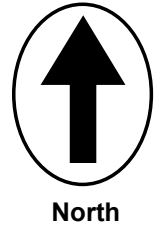
Traffic Volume and Turning Movement Study

Date : 03/28/23

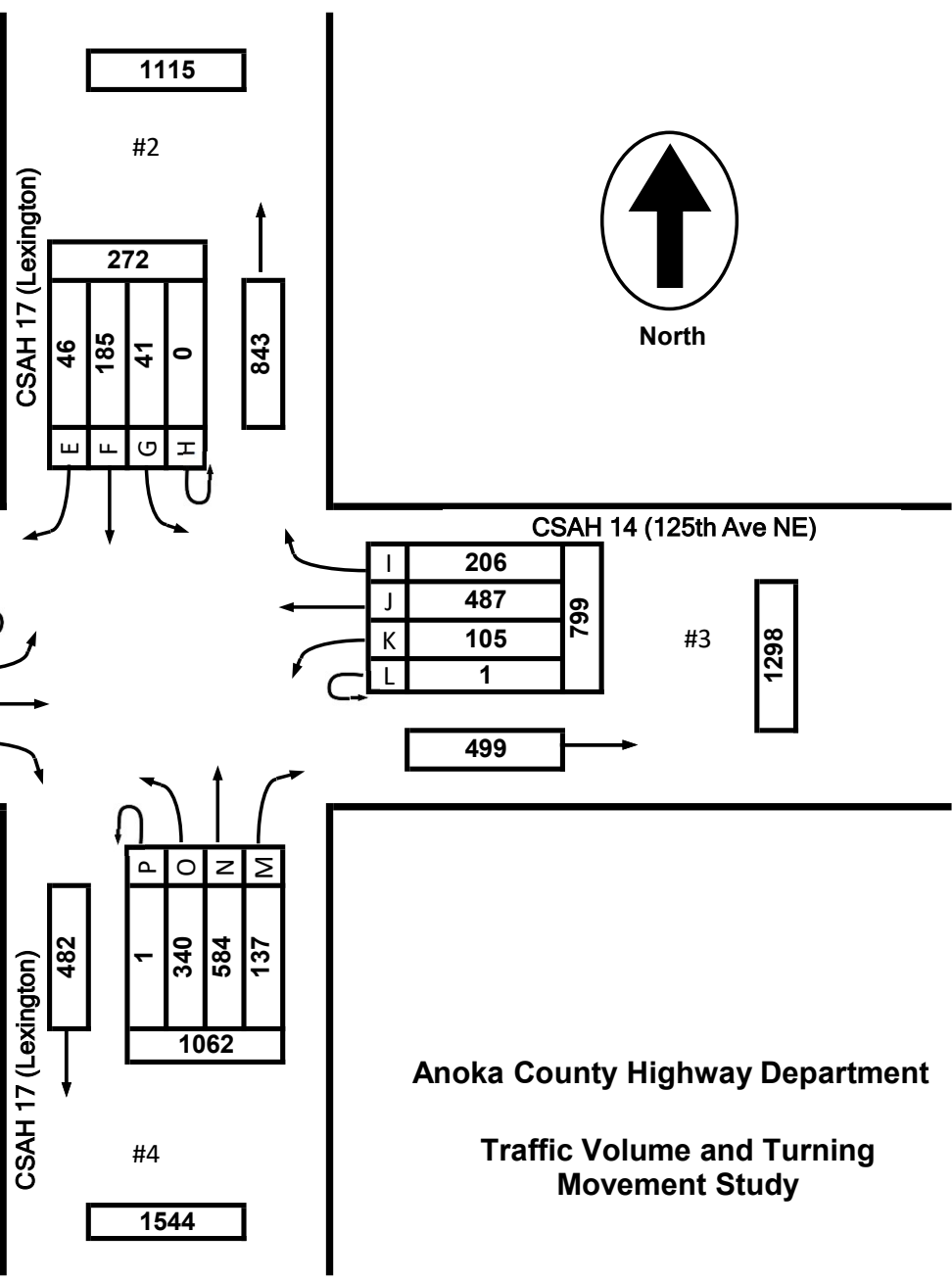
Count Number : TMC 2331

Location : CSAH 17 (Lexington)
@ CSAH 14 (125th Ave NE)

Collection Period : 4 PM - 5 PM
PM PEAK



North



CSAH 14 (125th Ave NE)

CSAH 14 (125th Ave NE)

CSAH 17 (Lexington)

EXISTING LANES OF APPROACH

	RIGHT TURN LANE	LEFT TURN LANE	THRU LANES	TOTAL
#1	1	1	2	4
#2	1	1	3	5
#3	1	1	2	4
#4	1	1	3	5

Anoka County Highway Department

Traffic Volume and Turning Movement Study

TMC 2331 - CSAH 14 @ CSAH 17

0 0

Tuesday, March 28, 2023

Time	Southbound 0						Westbound 0						Northbound 0						Eastbound 0						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	0	0	1	0	2	5	0	0	7	0	6	6	0	0	12	0	0	3	1	0	4	
12:15 AM	0	0	1	0	0	1	0	0	4	0	0	4	0	3	3	2	0	8	0	1	4	0	0	5	
12:30 AM	0	0	1	0	0	1	0	0	2	2	0	4	0	0	3	2	0	5	0	0	1	2	0	3	
12:45 AM	0	0	0	0	0	0	1	0	1	1	0	3	0	1	6	2	0	9	0	0	2	1	0	3	
Hourly Total	0	0	3	0	0	3	1	2	12	3	0	18	0	10	18	6	0	34	0	1	10	4	0	15	70
1:00 AM	0	1	3	0	0	4	0	2	1	0	0	3	0	2	3	1	0	6	0	0	3	1	0	4	
1:15 AM	0	0	1	0	0	1	0	0	4	0	0	4	0	2	2	0	0	4	0	0	0	0	0	0	
1:30 AM	0	0	1	0	0	1	0	1	3	0	0	4	0	5	2	3	0	10	0	0	2	0	0	2	
1:45 AM	0	0	1	0	0	1	0	0	1	0	0	1	0	5	4	2	0	11	0	0	4	1	0	5	
Hourly Total	0	1	6	0	0	7	0	3	9	0	0	12	0	14	11	6	0	31	0	0	9	2	0	11	61
2:00 AM	0	1	1	0	0	2	0	1	0	0	0	1	0	3	3	1	0	7	0	0	2	1	0	3	
2:15 AM	0	0	1	0	0	1	0	3	2	0	0	5	0	0	0	2	0	2	0	1	1	0	0	2	
2:30 AM	0	0	3	0	0	3	0	1	3	0	0	4	0	2	3	1	0	6	0	0	2	0	0	2	
2:45 AM	0	0	7	0	0	7	0	0	1	1	0	2	0	2	0	0	0	2	0	0	1	0	0	1	
Hourly Total	0	1	12	0	0	13	0	5	6	1	0	12	0	7	6	4	0	17	0	1	6	1	0	8	50
3:00 AM	0	3	6	0	0	9	0	0	0	0	0	0	0	2	2	0	0	4	0	0	0	2	0	2	
3:15 AM	0	3	6	0	0	9	0	0	2	0	0	2	0	0	0	0	0	0	0	0	1	3	0	4	
3:30 AM	0	2	8	0	0	10	0	0	1	0	0	1	0	0	1	1	0	2	0	1	3	1	0	5	
3:45 AM	0	4	10	0	0	14	0	1	4	1	0	6	0	0	4	0	0	4	1	0	2	1	0	4	
Hourly Total	0	12	30	0	0	42	0	1	7	1	0	9	0	2	7	1	0	10	1	1	6	7	0	15	76
4:00 AM	0	0	11	0	0	11	0	4	1	1	0	6	0	0	2	1	0	3	0	0	3	2	0	5	
4:15 AM	0	5	15	1	0	21	0	0	3	0	0	3	0	2	3	0	0	5	0	1	8	3	0	12	
4:30 AM	0	3	31	1	0	35	0	2	8	0	0	10	0	5	0	2	0	7	0	0	8	11	0	19	
4:45 AM	0	6	28	1	0	35	0	4	4	3	0	11	0	4	3	1	0	8	0	0	8	8	0	16	
Hourly Total	0	14	85	3	0	102	0	10	16	4	0	30	0	11	8	4	0	23	0	1	27	24	0	52	207
5:00 AM	0	7	36	2	0	45	0	3	11	1	0	15	0	2	3	0	0	5	0	0	6	12	0	18	
5:15 AM	0	9	59	6	0	74	0	8	13	0	0	21	0	5	6	0	0	11	0	0	18	22	0	40	
5:30 AM	0	9	62	2	0	73	0	7	18	0	0	25	0	10	2	3	0	15	0	0	22	34	0	56	
5:45 AM	0	20	64	3	0	87	0	13	13	2	0	28	0	6	5	4	0	15	0	0	31	31	0	62	
Hourly Total	0	45	221	13	0	279	0	31	55	3	0	89	0	23	16	7	0	46	0	0	77	99	0	176	590
6:00 AM	0	16	47	2	0	65	0	4	31	7	0	42	0	10	3	4	0	17	0	5	58	44	0	107	
6:15 AM	0	13	82	2	0	97	0	21	27	3	0	51	0	8	9	7	0	24	0	3	48	53	0	104	
6:30 AM	0	23	94	6	0	123	0	20	36	6	0	62	0	11	18	4	0	33	0	3	78	66	0	147	
6:45 AM	0	26	93	1	0	120	0	16	48	8	0	72	0	16	18	10	0	44	0	3	71	75	0	149	
Hourly Total	0	78	316	11	0	405	0	61	142	24	0	227	0	45	48	25	0	118	0	14	255	238	0	507	1257
7:00 AM	0	37	113	15	0	165	0	24	52	15	0	91	0	21	16	12	0	49	0	4	73	86	0	163	
7:15 AM	0	45	161	12	0	218	0	32	57	10	0	99	0	31	18	11	0	60	0	7	86	108	0	201	
7:30 AM	0	51	145	7	0	203	0	34	63	15	0	112	0	43	33	16	0	92	0	9	104	108	0	221	
7:45 AM	0	50	159	13	0	222	0	32	69	18	0	119	1	29	29	21	0	80	0	7	107	100	0	214	
Hourly Total	0	183	578	47	0	808	0	122	241	58	0	421	1	124	96	60	0	281	0	27	370	402	0	799	2309

TMC 2331 - CSAH 14 @ CSAH 17

0 0

Tuesday, March 28, 2023

Time	Southbound 0						Westbound 0						Northbound 0						Eastbound 0						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	27	106	12	0	145	0	21	68	23	0	112	0	29	31	19	0	79	0	5	70	75	0	150	486
8:15 AM	0	32	89	5	0	126	0	25	68	14	0	107	0	25	27	18	0	70	0	7	98	64	0	169	472
8:30 AM	0	26	87	11	0	124	0	24	51	7	0	82	0	22	25	26	0	73	0	7	62	51	0	120	399
8:45 AM	0	22	76	12	0	110	0	11	41	12	0	64	0	27	19	21	0	67	0	3	54	63	0	120	361
Hourly Total	0	107	358	40	0	505	0	81	228	56	0	365	0	103	102	84	0	289	0	22	284	253	0	559	1718
9:00 AM	0	33	59	6	0	98	1	25	51	15	0	92	0	46	28	21	0	95	0	6	74	53	0	133	418
9:15 AM	0	18	61	8	0	87	0	38	102	28	0	168	0	34	40	19	0	93	0	5	72	54	0	131	479
9:30 AM	0	17	51	5	0	73	0	14	38	10	0	62	0	35	24	20	0	79	0	6	49	55	0	110	324
9:45 AM	1	10	37	9	0	57	0	20	35	7	0	62	0	34	35	14	0	83	0	7	41	47	0	95	297
Hourly Total	1	78	208	28	0	315	1	97	226	60	0	384	0	149	127	74	0	350	0	24	236	209	0	469	1518
10:00 AM	0	16	53	4	0	73	0	17	32	11	0	60	0	32	28	17	0	77	0	8	40	43	0	91	301
10:15 AM	1	14	39	8	0	62	0	13	43	16	0	72	0	29	42	11	0	82	0	7	45	46	0	98	314
10:30 AM	0	12	38	10	0	60	0	21	29	11	0	61	0	25	34	14	0	73	0	7	51	44	0	102	296
10:45 AM	1	11	58	7	0	77	0	15	40	10	0	65	0	19	37	8	0	64	0	5	36	41	0	82	288
Hourly Total	2	53	188	29	0	272	0	66	144	48	0	258	0	105	141	50	0	296	0	27	172	174	0	373	1199
11:00 AM	0	11	48	5	0	64	0	10	50	14	0	74	0	30	34	10	0	74	0	4	36	53	0	93	305
11:15 AM	0	12	42	10	0	64	0	17	46	16	0	79	0	25	39	11	0	75	0	4	48	49	0	101	319
11:30 AM	0	14	51	7	0	72	0	24	51	8	0	83	0	30	38	10	0	78	0	4	39	42	0	85	318
11:45 AM	0	13	57	5	0	75	0	17	29	10	0	56	0	30	40	10	0	80	0	5	32	41	0	78	289
Hourly Total	0	50	198	27	0	275	0	68	176	48	0	292	0	115	151	41	0	307	0	17	155	185	0	357	1231
12:00 PM	0	4	53	6	0	63	0	14	29	8	0	51	0	48	43	13	0	104	0	10	31	35	0	76	294
12:15 PM	0	13	39	12	0	64	0	17	40	14	0	71	0	42	36	17	0	95	0	9	49	32	0	90	320
12:30 PM	0	14	41	10	0	65	0	11	54	13	0	78	0	32	56	15	0	103	0	7	35	33	0	75	321
12:45 PM	0	9	40	6	0	55	0	12	37	21	0	70	0	42	56	15	0	113	1	9	37	30	0	77	315
Hourly Total	0	40	173	34	0	247	0	54	160	56	0	270	0	164	191	60	0	415	1	35	152	130	0	318	1250
1:00 PM	0	8	42	8	0	58	0	11	43	16	0	70	0	31	50	15	0	96	0	7	52	43	0	102	326
1:15 PM	0	13	37	4	0	54	0	11	33	11	0	55	0	39	38	19	0	96	0	8	50	34	0	92	297
1:30 PM	0	14	38	8	0	60	0	15	49	14	0	78	1	27	56	19	0	103	0	6	50	45	0	101	342
1:45 PM	0	14	29	9	0	52	0	12	58	20	0	90	0	45	64	15	0	124	0	12	52	41	0	105	371
Hourly Total	0	49	146	29	0	224	0	49	183	61	0	293	1	142	208	68	0	419	0	33	204	163	0	400	1336
2:00 PM	0	8	40	5	0	53	0	9	43	18	0	70	0	49	66	15	0	130	0	10	59	52	0	121	374
2:15 PM	0	14	29	1	0	44	0	14	55	23	0	92	0	39	70	13	0	122	0	5	54	35	0	94	352
2:30 PM	0	17	43	11	0	71	0	15	57	20	0	92	0	52	81	16	0	149	0	6	47	39	0	92	404
2:45 PM	0	8	35	11	0	54	0	27	88	26	0	141	0	50	94	19	0	163	0	10	59	37	0	106	464
Hourly Total	0	47	147	28	0	222	0	65	243	87	0	395	0	190	311	63	0	564	0	31	219	163	0	413	1594
3:00 PM	0	6	48	7	0	61	0	7	62	31	0	100	0	69	119	21	0	209	0	8	52	28	0	88	458
3:15 PM	2	11	46	10	0	69	1	11	82	33	0	127	0	65	133	29	0	227	0	8	98	46	0	152	575
3:30 PM	0	15	50	13	0	78	0	10	79	27	0	116	0	68	128	21	0	217	0	10	107	61	0	178	589
3:45 PM	1	12	46	10	0	69	0	16	97	50	0	163	0	84	157	29	0	270	0	17	97	42	0	156	658
Hourly Total	3	44	190	40	0	277	1	44	320	141	0	506	0	286	537	100	0	923	0	43	354	177	0	574	2280

TMC 2331 - CSAH 14 @ CSAH 17

0 0

Tuesday, March 28, 2023

Time	Southbound 0						Westbound 0						Northbound 0						Eastbound 0						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	11	33	11	0	55	0	23	151	57	0	231	0	73	137	34	0	244	0	16	69	53	0	138	668
4:15 PM	0	12	54	12	0	78	0	31	128	53	0	212	0	89	144	26	0	259	0	11	75	39	0	125	674
4:30 PM	0	6	50	6	0	62	0	25	115	50	0	190	0	68	165	40	0	273	0	11	79	53	0	143	668
4:45 PM	0	12	48	17	0	77	1	26	93	46	0	166	1	110	138	37	0	286	0	15	97	46	0	158	687
Hourly Total	0	41	185	46	0	272	1	105	487	206	0	799	1	340	584	137	0	1062	0	53	320	191	0	564	2697
5:00 PM	0	16	51	17	0	84	0	26	85	40	0	151	0	88	124	34	0	246	0	18	89	49	0	156	637
5:15 PM	1	9	62	9	0	81	0	16	105	40	0	161	1	70	163	38	0	272	0	11	94	53	0	158	672
5:30 PM	0	15	51	15	0	81	0	17	103	46	0	166	0	78	132	23	0	233	0	8	75	45	0	128	608
5:45 PM	1	6	39	6	0	52	0	16	69	34	0	119	0	60	79	21	0	160	0	16	76	39	0	131	462
Hourly Total	2	46	203	47	0	298	0	75	362	160	0	597	1	296	498	116	0	911	0	53	334	186	0	573	2379
6:00 PM	0	10	29	10	0	49	1	16	57	22	0	96	0	68	77	23	0	168	0	8	44	36	0	88	401
6:15 PM	0	12	42	12	0	66	0	13	60	22	0	95	0	56	78	21	0	155	0	9	63	47	0	119	435
6:30 PM	1	11	29	9	0	50	0	18	53	19	0	90	0	38	65	16	0	119	0	6	52	41	0	99	358
6:45 PM	2	6	38	5	0	51	0	9	32	15	0	56	0	51	63	18	0	132	0	12	36	37	0	85	324
Hourly Total	3	39	138	36	0	216	1	56	202	78	0	337	0	213	283	78	0	574	0	35	195	161	0	391	1518
7:00 PM	0	4	22	3	0	29	0	10	45	18	0	73	0	43	66	14	0	123	0	15	40	25	0	80	305
7:15 PM	0	9	24	6	0	39	1	8	34	9	0	52	0	41	55	21	0	117	0	10	27	38	0	75	283
7:30 PM	1	9	25	8	0	43	0	11	32	15	0	58	0	28	45	14	0	87	0	5	41	19	0	65	253
7:45 PM	1	9	16	6	0	32	0	9	42	15	0	66	0	28	37	16	0	81	0	9	40	22	0	71	250
Hourly Total	2	31	87	23	0	143	1	38	153	57	0	249	0	140	203	65	0	408	0	39	148	104	0	291	1091
8:00 PM	0	8	19	5	0	32	0	4	48	6	0	58	0	29	53	18	0	100	0	7	37	15	0	59	249
8:15 PM	0	9	12	6	0	27	0	9	40	15	0	64	0	30	48	12	0	90	0	4	42	23	0	69	250
8:30 PM	0	6	20	9	0	35	1	5	35	8	0	49	0	35	26	12	0	73	0	9	25	18	0	52	209
8:45 PM	0	2	18	3	0	23	0	5	37	9	0	51	0	29	34	7	0	70	0	5	38	20	0	63	207
Hourly Total	0	25	69	23	0	117	1	23	160	38	0	222	0	123	161	49	0	333	0	25	142	76	0	243	915
9:00 PM	0	6	12	5	0	23	0	2	30	17	0	49	0	38	34	6	0	78	0	8	21	23	0	52	202
9:15 PM	0	8	8	6	0	22	0	4	23	8	0	35	0	25	26	4	0	55	0	3	31	20	0	54	166
9:30 PM	0	9	13	6	0	28	0	11	24	3	0	38	0	16	33	6	0	55	0	5	24	7	0	36	157
9:45 PM	0	2	8	1	0	11	0	1	11	3	0	15	0	15	19	8	0	42	0	7	12	9	0	28	96
Hourly Total	0	25	41	18	0	84	0	18	88	31	0	137	0	94	112	24	0	230	0	23	88	59	0	170	621
10:00 PM	0	3	12	4	0	19	0	1	16	6	0	23	0	19	16	5	0	40	0	5	12	16	0	33	115
10:15 PM	0	1	4	1	0	6	0	2	5	1	0	8	0	10	10	5	0	25	0	5	17	12	0	34	73
10:30 PM	0	2	4	0	0	6	0	1	9	2	0	12	0	9	14	2	0	25	0	3	22	14	0	39	82
10:45 PM	0	1	8	1	0	10	0	2	6	5	0	13	0	7	11	1	0	19	0	4	5	7	0	16	58
Hourly Total	0	7	28	6	0	41	0	6	36	14	0	56	0	45	51	13	0	109	0	17	56	49	0	122	328
11:00 PM	0	3	3	2	0	8	0	1	6	3	0	10	0	7	7	11	0	25	0	0	5	4	0	9	52
11:15 PM	0	1	1	0	0	2	0	3	6	4	0	13	0	10	13	4	0	27	0	1	7	4	0	12	54
11:30 PM	0	0	2	1	0	3	0	0	6	0	0	6	0	12	10	1	0	23	0	4	4	3	0	11	43
11:45 PM	0	1	4	0	0	5	0	1	5	0	0	6	0	3	9	2	0	14	0	0	3	4	0	7	32
Hourly Total	0	5	10	3	0	18	0	5	23	7	0	35	0	32	39	18	0	89	0	5	19	15	0	39	181
DAILY TOTAL	13	1021	3620	531	0	5185	7	1085	3679	1242	0	6013	4	2773	3909	1153	0	7839	2	527	3838	3072	0	7439	26476
Cars	13	983	3567	506	0	5069	7	1059	3572	1197	0	5835	4	2731	3851	1115	0	7701	2	508	3730	3030	0	7270	25875
Heavy Vehicles	0	38	53	25	0	116	0	26	107	45	0	178	0	42	58	38	0	138	0	19	108	42	0	169	601
Heavy Vehicle %	0.00%	3.72%	1.46%	4.71%	0.00%	2.24%	0.00%	2.40%	2.91%	3.62%	0.00%	2.96%	0.00%	1.51%	1.48%	3.30%	0.00%	1.76%	0.00%	3.61%	2.81%	1.37%	0.00%	2.27%	2.27%

TMC 2331 - CSAH 14 @ CSAH 17

0 0

Tuesday, March 28, 2023

AM Peak Hour

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	45	161	12	0	218	0	32	57	10	0	99	0	31	18	11	0	60	0	7	86	108	0	201	578
7:30 AM	0	51	145	7	0	203	0	34	63	15	0	112	0	43	33	16	0	92	0	9	104	108	0	221	628
7:45 AM	0	50	159	13	0	222	0	32	69	18	0	119	1	29	29	21	0	80	0	7	107	100	0	214	635
8:00 AM	0	27	106	12	0	145	0	21	68	23	0	112	0	29	31	19	0	79	0	5	70	75	0	150	486
Peak Hour Total	0	173	571	44	0	788	0	119	257	66	0	442	1	132	111	67	0	311	0	28	367	391	0	786	2327
PHF	0.000	0.848	0.887	0.846	0.000	0.887	0.000	0.875	0.931	0.717	0.000	0.929	0.250	0.767	0.841	0.798	0.000	0.845	0.000	0.778	0.857	0.905	0.000	0.889	0.916

PM Peak Hour

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	
4:00 PM	0	11	33	11	0	55	0	23	151	57	0	231	0	73	137	34	0	244	0	16	69	53	0	138	668
4:15 PM	0	12	54	12	0	78	0	31	128	53	0	212	0	89	144	26	0	259	0	11	75	39	0	125	674
4:30 PM	0	6	50	6	0	62	0	25	115	50	0	190	0	68	165	40	0	273	0	11	79	53	0	143	668
4:45 PM	0	12	48	17	0	77	1	26	93	46	0	166	1	110	138	37	0	286	0	15	97	46	0	158	687
Peak Hour Total	0	41	185	46	0	272	1	105	487	206	0	799	1	340	584	137	0	1062	0	53	320	191	0	564	2697
PHF	0.000	0.854	0.856	0.676	0.000	0.872	0.250	0.847	0.806	0.904	0.000	0.865	0.250	0.773	0.885	0.856	0.000	0.928	0.000	0.828	0.825	0.901	0.000	0.892	0.981

Total Vehicles On Leg				10876	
Vehicles Entering Intersection		5185	Vehicles Exiting Intersection		5691
Southbound					
Cars	506	3567	983	13	0
Heavy	25	53	38	0	0
Total	531	3620	1021	13	0

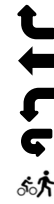


Total Vehicles on Leg 14424	Vehicles Entering Intersection 7439	Eastbound	Cars	Heavy	Total
			0	0	0
			2	0	2
	508		19	527	
	Vehicles Exiting Intersection 6985		3730	108	3838
3030	42	3072			



Daily Volumes

Cars	Heavy	Total	Westbound	Vehicles Entering Intersection 6013	Total Vehicles on Leg 12032
1197	45	1242			
3572	107	3679			
1059	26	1085			
7	0	7			
0	0	0	Vehicles Exiting Intersection 6019		



Cars	0	4	2731	3851	1115
Heavy	0	0	42	58	38
Total	0	4	2773	3909	1153
Northbound					
Vehicles Entering Intersection			7839		
Vehicles Exiting Intersection			7781		
Total Vehicles On Leg			15620		



Heavy Vehicles

Date	Time	Southbound						Westbound						Northbound						Eastbound						
		U Turns	Left Turns	Straight Through	Right Turns	EB Bicycles in Crosswalk	WB Bicycles in Crosswalk	U Turns	Left Turns	Straight Through	Right Turns	NB Bicycles in Crosswalk	SB Bicycles in Crosswalk	U Turns	Left Turns	Straight Through	Right Turns	EB Bicycles in Crosswalk	WB Bicycles in Crosswalk	U Turns	Left Turns	Straight Through	Right Turns	NB Bicycles in Crosswalk	SB Bicycles in Crosswalk	
03/28/2023	0:00	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	
	0:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0:45	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	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	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	
	1:45	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	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	
	2:15	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2:30	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2:45	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	
	3:15	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	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4:00	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	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	
	4:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	
	5:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	
	5:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	
	5:30	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	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:00	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	
	6:15	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	2	0	2	0	0
	6:30	0	0	0	1	0	0	0	2	2	0	0	0	0	0	1	1	0	0	0	1	0	1	0	0	
	6:45	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	1	0	0	0	0	2	2	0	0	
	7:00	0	0	0	1	0	0	0	1	2	1	0	0	0	0	2	1	0	0	0	0	2	1	0	0	
	7:15	0	1	1	0	0	0	0	1	2	1	0	0	0	2	1	0	0	0	0	1	0	2	0	0	
	7:30	0	2	1	2	0	0	0	0	1	1	0	0	0	1	0	1	0	0	0	0	3	0	0	0	
	7:45	0	0	2	2	0	0	0	0	0	2	0	0	0	1	0	2	0	0	0	0	2	2	0	0	
	8:00	0	2	1	0	0	0	0	0	1	2	0	0	0	1	2	0	0	0	0	0	4	3	0	0	
	8:15	0	0	1	2	0	0	0	0	3	1	0	0	0	1	1	2	0	0	0	2	3	1	0	0	
	8:30	0	0	4	0	0	0	0	2	2	1	0	0	0	2	0	2	0	0	0	0	3	1	0	0	
	8:45	0	3	2	0	0	0	0	0	4	2	0	0	0	3	0	1	0	0	0	0	4	1	0	0	
	9:00	0	5	2	1	0	0	0	1	2	0	0	0	0	2	1	2	0	0	0	1	13	1	0	0	
	9:15	0	3	1	0	0	0	0	0	19	4	0	0	0	0	4	1	0	0	0	0	2	0	0	0	
	9:30	0	0	1	0	0	0	0	0	3	0	0	0	0	1	0	0	0	0	0	1	4	2	0	0	
	9:45	0	1	0	1	0	0	0	2	3	0	0	0	0	0	2	1	0	0	0	0	2	0	0	0	
	10:00	0	1	2	0	0	0	0	3	1	0	0	0	0	0	1	1	0	0	0	1	3	0	0	0	
	10:15	0	1	0	0	0	0	0	1	0	1	0	0	0	0	3	1	0	0	0	0	2	1	0	0	
	10:30	0	0	1	0	0	0	0	3	0	1	0	0	0	0	1	3	0	0	0	1	4	1	0	0	
	10:45	0	0	3	0	0	0	0	3	1	1	0	0	0	0	1	0	0	0	0	2	4	0	0	0	
	11:00	0	1	4	0	0	0	0	1	3	0	0	0	0	1	1	0	0	0	0	0	3	1	0	0	
	11:15	0	1	6	0	0	0	0	1	5	2	0	0	0	0	1	1	0	0	0	0	1	1	0	0	
	11:30	0	0	0	1	0	0	0	0	1	0	0	0	0	1	2	2	0	0	0	0	0	0	0	0	
	11:45	0	0	1	0	0	0	0	1	1	2	0	0	0	1	1	0	0	0	0	0	2	0	0	0	

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2331

Study Date : 04/19/2023

Signal Warrants - Summary

Major Street Approaches

Eastbound: CSAH 14

Number of Lanes : 2+

Total Approach Volume: 7,439

Westbound: CSAH 14

Number of Lanes :2+

Total Approach Volume: 6,013

Minor Street Approaches

Northbound: CSAH 17

Number of Lanes :2+

Total Approach Volume: 7,839

Southbound: CSAH 17

Number of Lanes :2+

Total Approach Volume: 5,185

Warrant Summary (Rural Values Apply)

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

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

Required volumes reached for 15 hours, 8 are needed

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

Required volumes reached for 13 hours, 8 are needed

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

Required 1A volumes reached for 16 hours, 8 are needed

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

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

Number of hours (15) volumes exceed minimum >= minimum required (4).

Warrant 3 - Peak Hour.....Satisfied

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

Number of one hour periods (60) 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 2331

Study Date : 04/19/2023

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

15 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**

Time	Major Road				Total	Minor Road		Met?
	Major EB	+	Major WB	=		Minor NB	Minor SB	
15:30 - 16:30	597	+	722	=	1319	990	280	Yes
16:30 - 17:30	615	+	668	=	1283	1077	304	Yes
07:30 - 08:30	754	+	450	=	1204	321	696	Yes
06:30 - 07:30	660	+	324	=	984	186	626	Yes
17:30 - 18:30	466	+	476	=	942	716	248	Yes
08:30 - 09:30	504	+	406	=	910	328	419	Yes
14:30 - 15:30	438	+	460	=	898	748	255	Yes
13:30 - 14:30	421	+	330	=	751	479	209	Yes
10:30 - 11:30	378	+	279	=	657	286	265	Yes
09:30 - 10:30	394	+	256	=	650	321	265	Yes
12:30 - 13:30	346	+	273	=	619	408	232	Yes
18:30 - 19:30	339	+	271	=	610	491	169	Yes
11:30 - 12:30	329	+	261	=	590	357	274	Yes
19:30 - 20:30	264	+	246	=	510	358	134	Yes
05:30 - 06:30	329	+	146	=	475	71	322	Yes
20:30 - 21:30	221	+	184	=	405	276	103	No
05:15 - 06:15	265	+	116	=	381	58	299	No
20:45 - 21:45	205	+	173	=	378	258	96	No
21:00 - 22:00	170	+	137	=	307	230	84	No
05:00 - 06:00	176	+	89	=	265	46	279	No
21:15 - 22:15	151	+	111	=	262	192	80	No
21:30 - 22:30	131	+	84	=	215	162	64	No
04:45 - 05:45	130	+	72	=	202	39	227	No
21:45 - 22:45	134	+	58	=	192	132	42	No
22:00 - 23:00	122		56		178	109	41	No

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2331

Study Date : 04/19/2023

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

13 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**

Time	Major Road				Total	Minor Road		Met?
	Major EB	+	Major WB	=		Minor NB	Minor SB	
16:15 - 17:15	582	+	719	=	1301	1064	301	Yes
15:15 - 16:15	624	+	637	=	1261	958	271	Yes
07:00 - 08:00	799	+	421	=	1220	281	808	Yes
17:15 - 18:15	505	+	542	=	1047	833	263	Yes
08:00 - 09:00	559	+	365	=	924	289	505	Yes
09:00 - 10:00	469	+	384	=	853	350	315	Yes
14:15 - 15:15	380	+	425	=	805	643	230	Yes
06:00 - 07:00	507	+	227	=	734	118	405	Yes
13:15 - 14:15	419	+	293	=	712	453	219	Yes
18:15 - 19:15	383	+	314	=	697	529	196	Yes
11:00 - 12:00	357	+	292	=	649	307	275	Yes
12:15 - 13:15	344	+	289	=	633	407	242	Yes
10:00 - 11:00	373	+	258	=	631	296	272	Yes
05:45 - 06:45	420	+	183	=	603	89	372	No
12:00 - 13:00	318	+	270	=	588	415	247	No
19:30 - 20:30	264	+	246	=	510	358	134	No
19:15 - 20:15	270	+	234	=	504	385	146	No
19:45 - 20:45	251	+	237	=	488	344	126	No
05:30 - 06:30	329	+	146	=	475	71	322	No
20:00 - 21:00	243	+	222	=	465	333	117	No
20:15 - 21:15	236	+	213	=	449	311	108	No
20:30 - 21:30	221	+	184	=	405	276	103	No
05:15 - 06:15	265	+	116	=	381	58	299	No
20:45 - 21:45	205	+	173	=	378	258	96	No
21:00 - 22:00	170		137		307	230	84	No

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2331

Study Date : 04/19/2023

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

16 hours meet 1A minimums.
14 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 CSAH 14

Minor Road CSAH 17

Time	Major EB	+	Major WB	=	Total	Minor NB	Minor SB	Met1A?
16:15 - 17:15	582	+	719	=	1301	1064	301	Yes
15:15 - 16:15	624	+	637	=	1261	958	271	Yes
07:15 - 08:15	786	+	442	=	1228	311	788	Yes
17:15 - 18:15	505	+	542	=	1047	833	263	Yes
08:15 - 09:15	542	+	345	=	887	305	458	Yes
06:15 - 07:15	563	+	276	=	839	150	505	Yes
14:15 - 15:15	380	+	425	=	805	643	230	Yes
09:15 - 10:15	427	+	352	=	779	332	290	Yes
13:15 - 14:15	419	+	293	=	712	453	219	Yes
18:15 - 19:15	383	+	314	=	697	529	196	Yes
10:15 - 11:15	375	+	272	=	647	293	263	Yes
12:15 - 13:15	344	+	289	=	633	407	242	Yes

Time	Major EB	+	Major WB	=	Total	Minor NB	Minor SB	Met1B?
15:45 - 16:45	562	+	796	=	1358	1046	264	Yes
16:45 - 17:45	600	+	644	=	1244	1037	323	Yes
06:45 - 07:45	734	+	374	=	1108	245	706	Yes
07:45 - 08:45	653	+	420	=	1073	302	617	Yes
14:45 - 15:45	524	+	484	=	1008	816	262	Yes
08:45 - 09:45	494	+	386	=	880	334	368	Yes
17:45 - 18:45	437	+	400	=	837	602	217	Yes
13:45 - 14:45	412	+	344	=	756	525	220	Yes
10:45 - 11:45	361	+	301	=	662	291	277	Yes
12:45 - 13:45	372	+	273	=	645	408	227	Yes
09:45 - 10:45	386	+	255	=	641	315	252	Yes
05:45 - 06:45	420	+	183	=	603	89	372	Yes

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2331

Study Date : 04/19/2023

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.

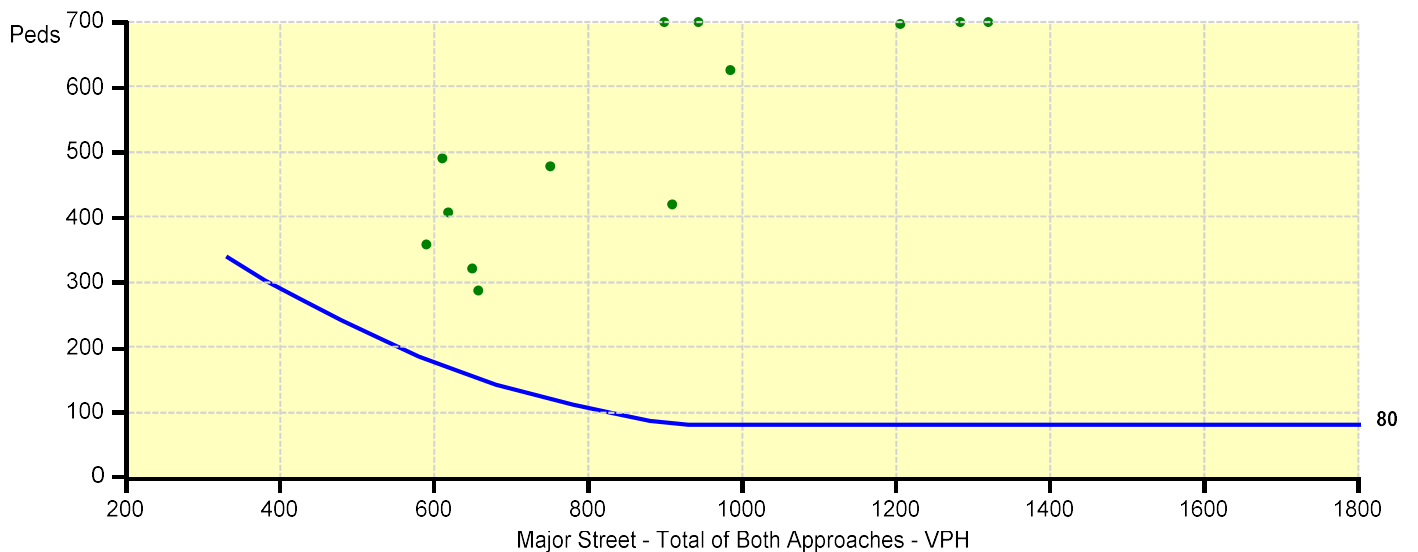
Summary

15 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**

Time	Major Road CSAH 14				Total	Minor Road CSAH 17		Met?
	Major EB	+	Major WB	=		Minor NB	Minor SB	
15:30 - 16:30	597	+	722	=	1319	990	280	Yes
16:30 - 17:30	615	+	668	=	1283	1077	304	Yes
07:30 - 08:30	754	+	450	=	1204	321	696	Yes
06:30 - 07:30	660	+	324	=	984	186	626	Yes
17:30 - 18:30	466	+	476	=	942	716	248	Yes
08:30 - 09:30	504	+	406	=	910	328	419	Yes
14:30 - 15:30	438	+	460	=	898	748	255	Yes
13:30 - 14:30	421	+	330	=	751	479	209	Yes
10:30 - 11:30	378	+	279	=	657	286	265	Yes
09:30 - 10:30	394	+	256	=	650	321	265	Yes
12:30 - 13:30	346	+	273	=	619	408	232	Yes
18:30 - 19:30	339	+	271	=	610	491	169	Yes



ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2331

Study Date : 04/19/2023

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

55 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**

Time	Major Road CSAH 14				Total	Minor Road CSAH 17		Met?
	Major EB	+	Major WB	=		Minor NB	Minor SB	
16:00 - 17:00	564	+	799	=	1363	1062	272	Yes
15:45 - 16:45	562	+	796	=	1358	1046	264	Yes
15:30 - 16:30	597	+	722	=	1319	990	280	Yes
16:15 - 17:15	582	+	719	=	1301	1064	301	Yes
16:30 - 17:30	615	+	668	=	1283	1077	304	Yes
15:15 - 16:15	624	+	637	=	1261	958	271	Yes
16:45 - 17:45	600	+	644	=	1244	1037	323	Yes
07:15 - 08:15	786	+	442	=	1228	311	788	Yes
07:00 - 08:00	799	+	421	=	1220	281	808	Yes
07:30 - 08:30	754	+	450	=	1204	321	696	Yes
17:00 - 18:00	573	+	597	=	1170	911	298	Yes
06:45 - 07:45	734	+	374	=	1108	245	706	Yes

