

Date : 08/11/21

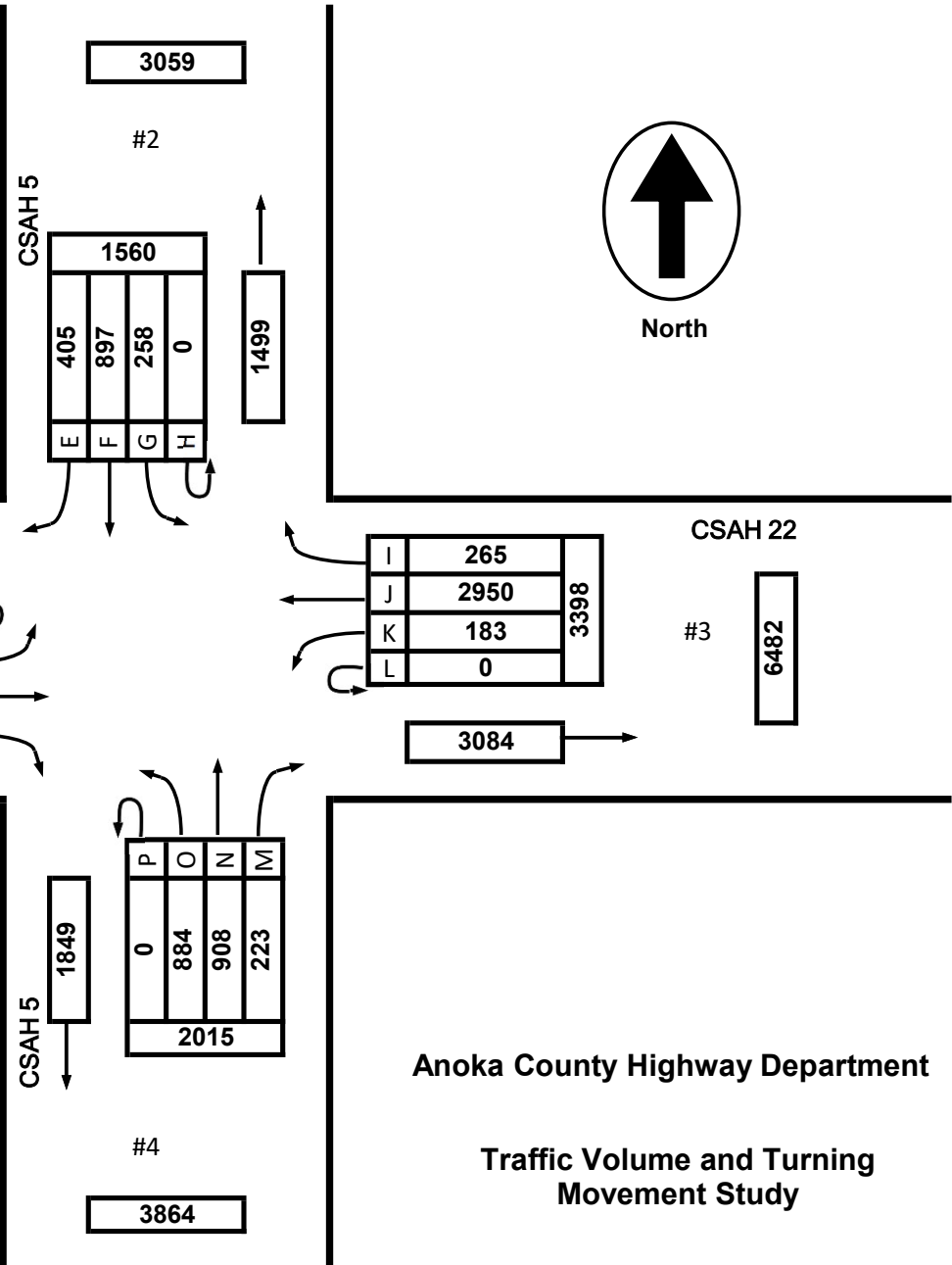
Count Number : TMC 2124

Location : CSAH 22 (Viking Blvd)
@ CSAH 5 (Nowthen Blvd)

Collection Period : 24 Hours



North



EXISTING LANES OF APPROACH				
	RIGHT TURN LANE	LEFT TURN LANE	THRU LANES	TOTAL
#1	1	1	1	3
#2	1	0	1	2
#3	1	1	1	3
#4	1	0	1	2

Anoka County Highway Department

Traffic Volume and Turning Movement Study

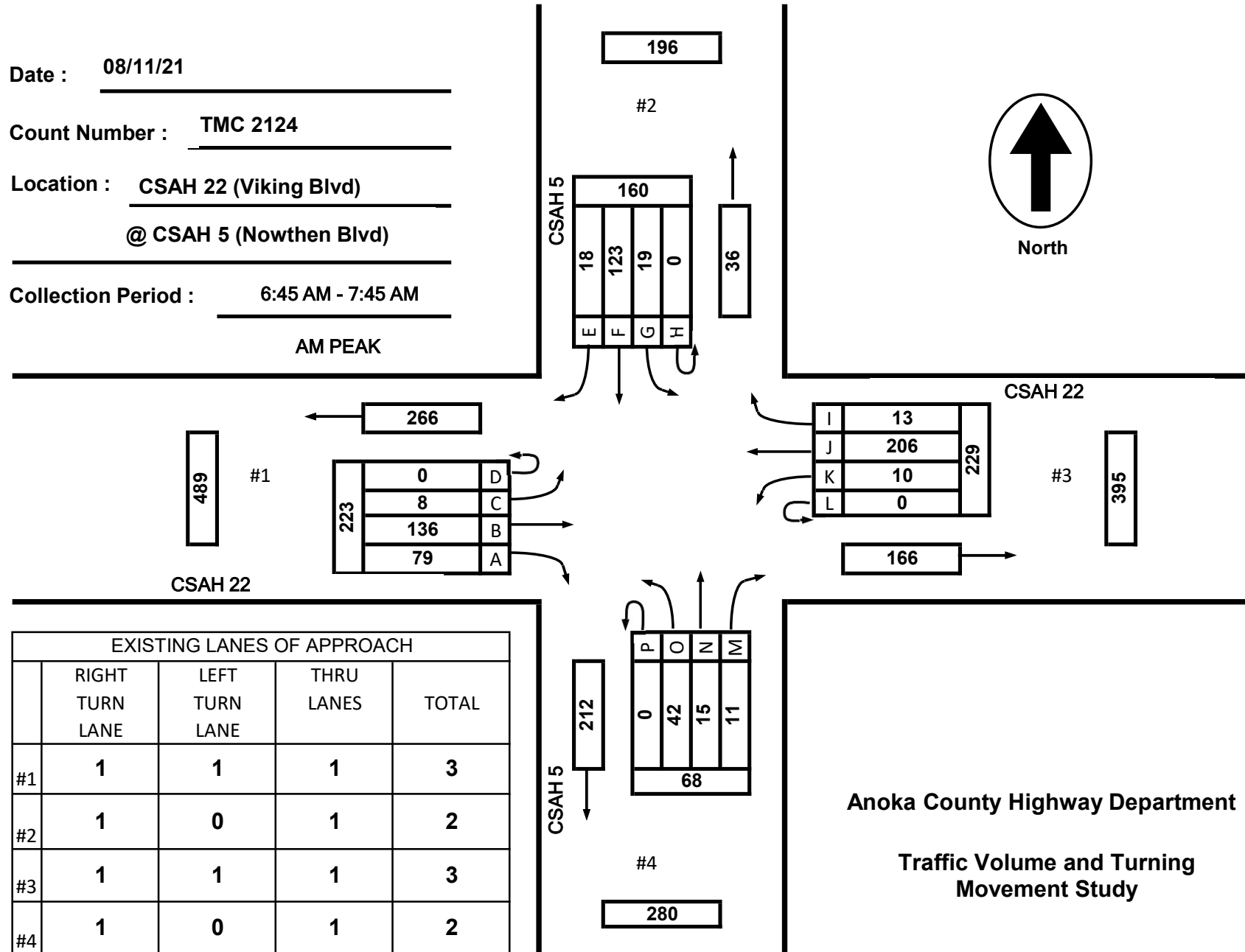
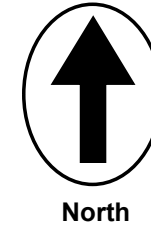
Date : 08/11/21

Count Number : TMC 2124

Location : CSAH 22 (Viking Blvd)
@ CSAH 5 (Nowthen Blvd)

Collection Period : 6:45 AM - 7:45 AM

AM PEAK



EXISTING LANES OF APPROACH				
	RIGHT TURN LANE	LEFT TURN LANE	THRU LANES	TOTAL
#1	1	1	1	3
#2	1	0	1	2
#3	1	1	1	3
#4	1	0	1	2

Anoka County Highway Department

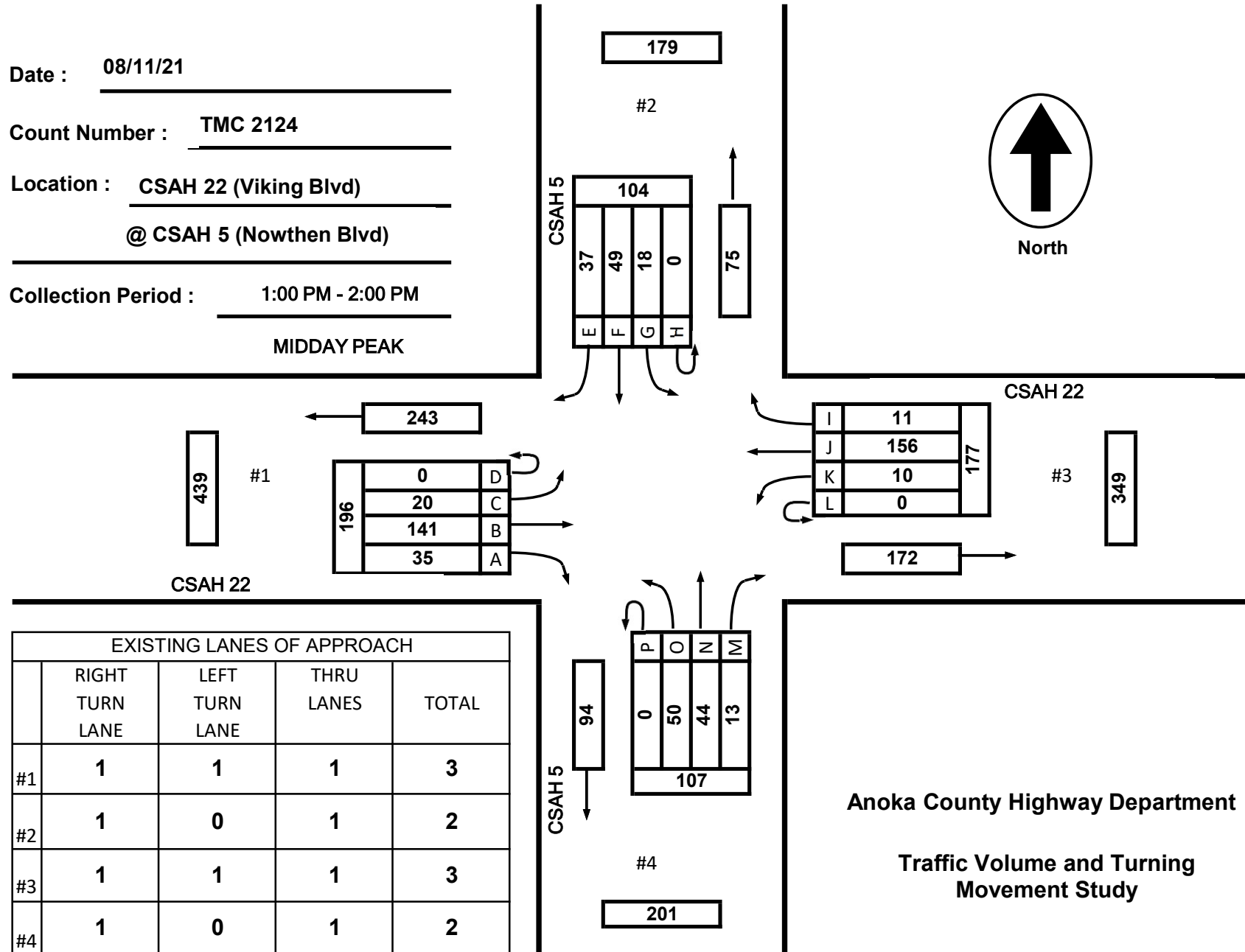
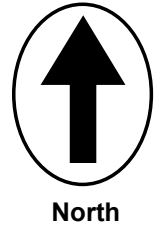
Traffic Volume and Turning Movement Study

Date : 08/11/21

Count Number : TMC 2124

Location : CSAH 22 (Viking Blvd)
@ CSAH 5 (Nowthen Blvd)

Collection Period : 1:00 PM - 2:00 PM
MIDDAY PEAK



EXISTING LANES OF APPROACH				
	RIGHT TURN LANE	LEFT TURN LANE	THRU LANES	TOTAL
#1	1	1	1	3
#2	1	0	1	2
#3	1	1	1	3
#4	1	0	1	2

Anoka County Highway Department

Traffic Volume and Turning Movement Study

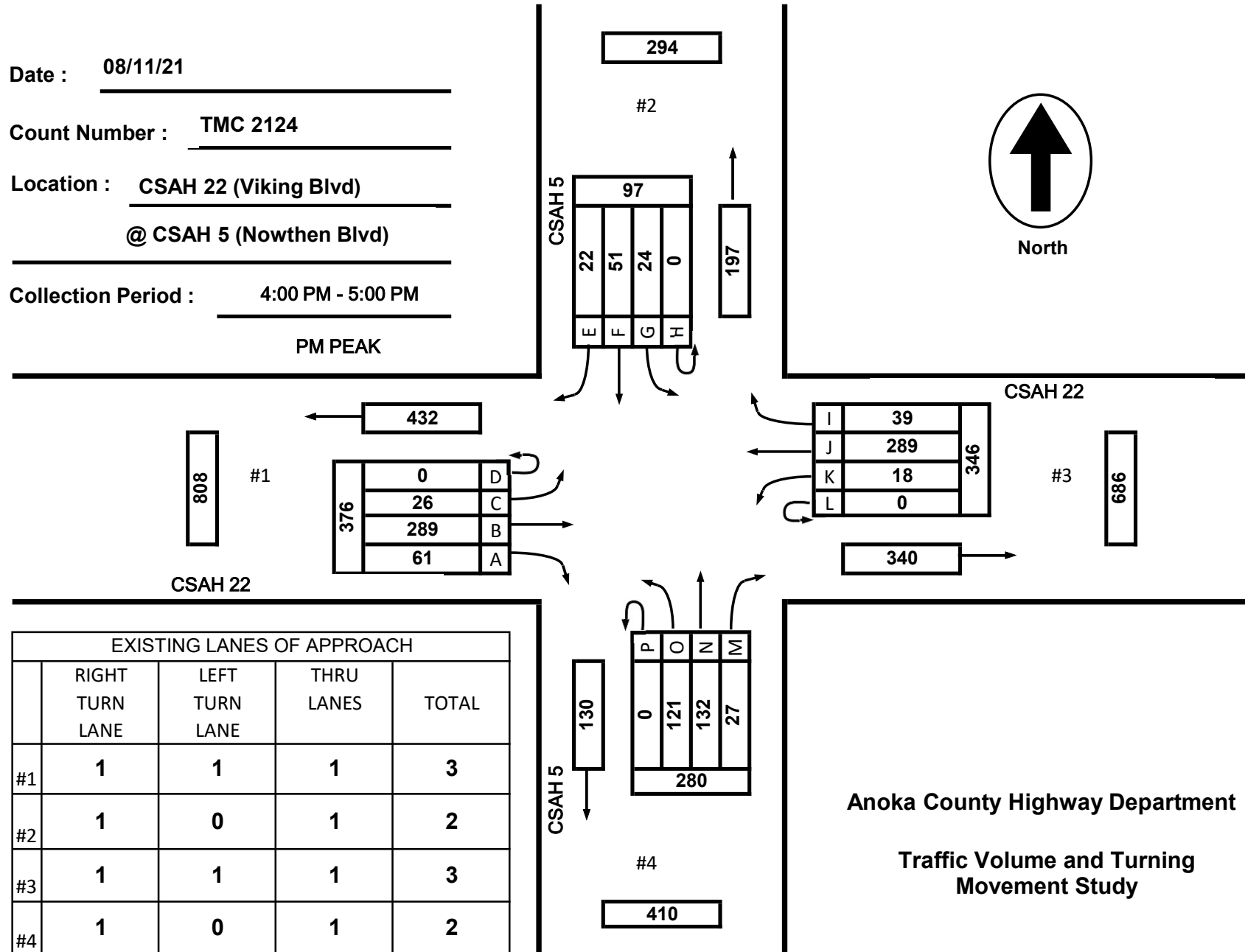
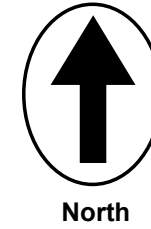
Date : 08/11/21

Count Number : TMC 2124

Location : CSAH 22 (Viking Blvd)
@ CSAH 5 (Nowthen Blvd)

Collection Period : 4:00 PM - 5:00 PM

PM PEAK



EXISTING LANES OF APPROACH				
	RIGHT TURN LANE	LEFT TURN LANE	THRU LANES	TOTAL
#1	1	1	1	3
#2	1	0	1	2
#3	1	1	1	3
#4	1	0	1	2

Anoka County Highway Department
 Traffic Volume and Turning Movement Study



Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

File Name : TMC 2124
 Site Code :
 Start Date : 08/11/2021
 Page No : 1

Weather: Warm & Sunny
 CountCAM 200
 Study Conducted By: Kevin

Groups Printed- Cars + - Trucks

Start Time	CSAH 5 Southbound						CSAH 22 Westbound						CSAH 5 Northbound						CSAH 22 Eastbound						Exclu. Total	Inclu. Total	Int. Total
	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total			
00:00	0	0	1	0	0	1	0	0	4	0	0	4	0	2	4	1	0	7	0	0	6	2	0	8	0	20	20
00:15	0	0	0	0	0	0	0	0	1	0	0	1	0	1	2	0	0	3	0	0	1	1	0	2	0	6	6
00:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	3	0	3	3
00:45	0	1	2	1	0	4	0	0	2	2	0	4	0	0	0	0	0	0	0	1	3	0	0	4	0	12	12
Total	0	1	3	1	0	5	0	0	7	2	0	9	0	3	6	1	0	10	0	2	12	3	0	17	0	41	41
01:00	0	1	1	0	0	2	0	0	1	0	0	1	0	0	1	0	0	1	0	0	0	0	0	0	0	4	4
01:15	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	2	0	0	2	0	3	3
01:30	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1	0	0	1	0	2	2
01:45	0	0	1	0	0	1	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
Total	0	1	2	0	0	3	0	1	3	0	0	4	0	0	1	0	0	1	0	0	3	0	0	3	0	11	11
02:00	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	2	0	0	2	0	4	4
02:15	0	0	1	0	0	1	0	0	1	0	0	1	0	0	1	0	0	1	0	0	3	0	0	3	0	6	6
02:30	0	0	0	0	0	0	0	0	3	0	0	3	0	0	3	1	0	4	0	1	1	0	0	2	0	9	9
02:45	0	0	2	0	0	2	0	0	3	0	0	3	0	0	1	1	0	2	0	1	0	0	0	1	0	8	8
Total	0	0	3	0	0	3	0	0	9	0	0	9	0	0	5	2	0	7	0	2	6	0	0	8	0	27	27
03:00	0	1	0	0	0	1	0	0	1	0	0	1	0	0	1	0	0	1	0	1	0	0	0	1	0	4	4
03:15	0	0	0	1	0	1	0	0	4	0	0	4	0	0	1	0	0	1	0	0	2	0	0	2	0	8	8
03:30	0	1	4	0	0	5	0	0	2	0	0	2	0	0	0	0	0	0	0	0	1	0	0	1	0	8	8
03:45	0	0	0	1	0	1	0	0	2	0	0	2	0	0	0	0	0	0	0	0	2	0	0	2	0	5	5
Total	0	2	4	2	0	8	0	0	9	0	0	9	0	0	2	0	0	2	0	1	5	0	0	6	0	25	25
04:00	0	0	3	0	0	3	0	1	11	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	15	15
04:15	0	2	7	1	0	10	0	1	11	1	0	13	0	0	0	0	0	0	0	0	4	1	0	5	0	28	28
04:30	0	0	1	2	0	3	0	0	18	1	0	19	0	0	1	0	0	1	0	0	4	0	0	4	0	27	27
04:45	0	1	14	1	0	16	0	1	20	1	0	22	0	3	0	0	0	3	0	0	7	1	0	8	0	49	49
Total	0	3	25	4	0	32	0	3	60	3	0	66	0	3	1	0	4	0	0	15	2	0	17	0	119	119	
05:00	0	1	5	2	0	8	0	1	22	2	0	25	0	1	2	2	0	5	0	1	9	3	0	13	0	51	51
05:15	0	1	16	1	0	18	0	1	24	3	0	28	0	2	2	0	0	4	0	0	12	11	0	23	0	73	73
05:30	0	1	23	1	0	25	0	1	53	9	0	63	0	3	4	0	0	7	0	1	18	11	0	30	0	125	125
05:45	0	0	24	4	0	28	0	4	34	7	0	45	0	6	6	2	0	14	0	2	15	12	0	29	0	116	116
Total	0	3	68	8	0	79	0	7	133	21	0	161	0	12	14	4	0	30	0	4	54	37	0	95	0	365	365



Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

File Name : TMC 2124
 Site Code :
 Start Date : 08/11/2021
 Page No : 2

Weather: Warm & Sunny
 CountCAM 200
 Study Conducted By: Kevin

Groups Printed- Cars + - Trucks

Start Time	CSAH 5 Southbound						CSAH 22 Westbound						CSAH 5 Northbound						CSAH 22 Eastbound						Exclu. Total	Inclu. Total	Int. Total
	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total			
06:00	0	1	25	6	0	32	0	5	47	1	0	53	0	6	5	1	0	12	0	2	22	11	0	35	0	132	132
06:15	0	6	23	4	0	33	0	5	51	2	0	58	0	9	10	1	0	20	0	0	25	8	0	33	0	144	144
06:30	0	1	31	4	0	36	0	1	65	6	0	72	0	10	8	1	0	19	0	2	31	10	0	43	0	170	170
06:45	0	6	38	4	0	48	0	2	50	3	0	55	0	12	3	1	0	16	0	1	32	18	0	51	0	170	170
Total	0	14	117	18	0	149	0	13	213	12	0	238	0	37	26	4	0	67	0	5	110	47	0	162	0	616	616
07:00	0	3	38	2	0	43	0	5	57	3	0	65	0	9	6	1	0	16	0	2	36	17	0	55	0	179	179
07:15	0	7	20	4	0	31	0	2	51	2	0	55	0	6	4	3	0	13	0	2	33	21	0	56	0	155	155
07:30	0	3	27	8	0	38	0	1	48	5	0	54	0	15	2	6	0	23	0	3	35	23	0	61	0	176	176
07:45	0	1	22	7	0	30	0	4	51	2	0	57	0	14	6	1	0	21	0	1	42	8	0	51	0	159	159
Total	0	14	107	21	0	142	0	12	207	12	0	231	0	44	18	11	0	73	0	8	146	69	0	223	0	669	669
08:00	0	4	11	3	0	18	0	1	43	2	0	46	0	8	12	4	0	24	0	2	27	14	0	43	0	131	131
08:15	0	7	15	1	0	23	0	5	28	0	0	33	0	9	6	4	0	19	0	7	35	9	0	51	0	126	126
08:30	0	5	20	3	0	28	0	3	40	0	0	43	0	7	5	3	0	15	0	3	27	7	0	37	0	123	123
08:45	0	2	10	9	0	21	0	0	37	2	0	39	0	9	6	5	0	20	0	1	24	5	0	30	0	110	110
Total	0	18	56	16	0	90	0	9	148	4	0	161	0	33	29	16	0	78	0	13	113	35	0	161	0	490	490
09:00	0	5	15	5	0	25	0	1	34	4	0	39	0	8	2	5	0	15	0	5	35	13	0	53	0	132	132
09:15	0	3	8	1	0	12	0	2	34	2	0	38	0	5	5	1	0	11	0	3	31	9	0	43	0	104	104
09:30	0	2	10	7	0	19	0	2	29	2	0	33	0	5	8	2	0	15	0	5	24	7	0	36	0	103	103
09:45	0	1	12	10	0	23	0	1	44	5	0	50	0	11	7	4	0	22	0	2	31	11	0	44	0	139	139
Total	0	11	45	23	0	79	0	6	141	13	0	160	0	29	22	12	0	63	0	15	121	40	0	176	0	478	478
10:00	0	1	8	5	0	14	0	1	36	3	0	40	0	5	7	2	0	14	0	5	30	7	0	42	0	110	110
10:15	0	3	10	13	0	26	0	0	43	4	0	47	0	7	8	1	0	16	0	3	29	7	0	39	0	128	128
10:30	0	4	12	6	0	22	0	2	21	3	0	26	0	15	11	3	0	29	0	7	31	12	0	50	0	127	127
10:45	0	0	8	10	0	18	0	2	33	1	0	36	0	8	12	7	0	27	0	4	24	15	0	43	0	124	124
Total	0	8	38	34	0	80	0	5	133	11	0	149	0	35	38	13	0	86	0	19	114	41	0	174	0	489	489
11:00	0	4	12	9	0	25	0	3	32	3	0	38	0	17	5	2	0	24	0	2	29	6	0	37	0	124	124
11:15	0	5	9	8	0	22	0	0	34	1	0	35	0	14	16	2	0	32	0	4	37	10	0	51	0	140	140
11:30	0	2	9	7	0	18	0	4	38	2	0	44	0	6	12	1	0	19	0	6	34	7	0	47	0	128	128
11:45	0	2	14	4	0	20	0	3	43	5	0	51	0	17	10	2	0	29	0	7	26	7	0	40	0	140	140
Total	0	13	44	28	0	85	0	10	147	11	0	168	0	54	43	7	0	104	0	19	126	30	0	175	0	532	532
12:00	0	0	8	9	0	17	0	1	37	2	0	40	0	13	7	4	0	24	0	5	32	7	0	44	0	125	125



Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

File Name : TMC 2124
 Site Code :
 Start Date : 08/11/2021
 Page No : 3

Weather: Warm & Sunny
 CountCAM 200
 Study Conducted By: Kevin

Groups Printed- Cars + - Trucks

Start Time	CSAH 5 Southbound						CSAH 22 Westbound						CSAH 5 Northbound						CSAH 22 Eastbound						Exclu. Total	Inclu. Total	Int. Total
	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total			
12:15	0	4	13	7	0	24	0	2	33	4	0	39	0	13	11	2	0	26	0	10	25	9	0	44	0	133	133
12:30	0	5	9	3	0	17	0	0	27	3	0	30	0	6	7	3	0	16	0	4	29	22	0	55	0	118	118
12:45	0	1	6	8	0	15	0	4	44	2	0	50	0	9	12	2	0	23	0	4	35	11	0	50	0	138	138
Total	0	10	36	27	0	73	0	7	141	11	0	159	0	41	37	11	0	89	0	23	121	49	0	193	0	514	514
13:00	0	4	6	5	0	15	0	4	27	1	0	32	0	11	9	5	0	25	0	5	29	7	0	41	0	113	113
13:15	0	2	14	8	0	24	0	2	40	3	0	45	0	14	15	0	0	29	0	1	41	6	0	48	0	146	146
13:30	0	7	16	12	0	35	0	2	47	7	0	56	0	14	9	5	0	28	0	9	39	12	0	60	0	179	179
13:45	0	5	13	12	0	30	0	2	42	0	0	44	0	11	11	3	0	25	0	5	32	10	0	47	0	146	146
Total	0	18	49	37	0	104	0	10	156	11	0	177	0	50	44	13	0	107	0	20	141	35	0	196	0	584	584
14:00	0	3	3	9	0	15	0	0	50	6	0	56	0	11	23	6	0	40	0	8	39	11	0	58	0	169	169
14:15	0	4	13	6	0	23	0	4	37	3	0	44	0	11	24	4	0	39	0	3	47	9	0	59	0	165	165
14:30	0	1	12	12	0	25	0	4	50	4	0	58	0	17	20	0	0	37	0	9	43	7	0	59	0	179	179
14:45	0	1	9	7	0	17	0	4	39	2	0	45	0	14	21	4	0	39	0	7	48	7	0	62	0	163	163
Total	0	9	37	34	0	80	0	12	176	15	0	203	0	53	88	14	0	155	0	27	177	34	0	238	0	676	676
15:00	0	4	12	8	0	24	0	4	53	6	0	63	0	17	20	2	0	39	0	14	48	12	0	74	0	200	200
15:15	0	8	10	2	0	20	0	8	44	3	0	55	0	21	24	8	0	53	0	6	62	10	0	78	0	206	206
15:30	0	7	9	8	0	24	0	1	63	4	0	68	0	24	30	8	0	62	0	7	73	8	0	88	0	242	242
15:45	0	6	9	7	0	22	0	1	59	10	0	70	0	25	27	3	0	55	0	6	61	16	0	83	0	230	230
Total	0	25	40	25	0	90	0	14	219	23	0	256	0	87	101	21	0	209	0	33	244	46	0	323	0	878	878
16:00	0	6	11	5	0	22	0	4	70	7	0	81	0	27	35	9	0	71	0	5	79	12	0	96	0	270	270
16:15	0	2	10	9	0	21	0	4	64	5	0	73	0	33	21	5	0	59	0	3	73	17	0	93	0	246	246
16:30	0	11	20	2	0	33	0	4	73	17	0	94	0	30	39	5	0	74	0	6	65	15	0	86	0	287	287
16:45	0	5	10	6	0	21	0	6	82	10	0	98	0	31	37	8	0	76	0	12	72	17	0	101	0	296	296
Total	0	24	51	22	0	97	0	18	289	39	0	346	0	121	132	27	0	280	0	26	289	61	0	376	0	1099	1099
17:00	0	7	9	7	0	23	0	2	82	9	0	93	0	33	27	6	0	66	0	6	67	12	0	85	0	267	267
17:15	0	5	8	5	0	18	0	3	78	9	0	90	0	21	28	5	0	54	0	11	68	7	0	86	0	248	248
17:30	0	11	11	5	0	27	0	5	77	6	0	88	0	25	25	5	0	55	0	3	49	8	0	60	0	230	230
17:45	0	4	10	9	0	23	0	2	49	5	0	56	0	19	18	5	0	42	0	5	44	8	0	57	0	178	178
Total	0	27	38	26	0	91	0	12	286	29	0	327	0	98	98	21	0	217	0	25	228	35	0	288	0	923	923
18:00	0	5	3	10	0	18	0	6	50	7	0	63	0	15	18	3	0	36	0	3	61	16	0	80	0	197	197
18:15	0	6	14	8	0	28	0	5	63	7	0	75	0	26	15	4	0	45	0	8	47	17	0	72	0	220	220



Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

File Name : TMC 2124
 Site Code :
 Start Date : 08/11/2021
 Page No : 4

Weather: Warm & Sunny
 CountCAM 200
 Study Conducted By: Kevin

Groups Printed- Cars + - Trucks

Start Time	CSAH 5 Southbound						CSAH 22 Westbound						CSAH 5 Northbound						CSAH 22 Eastbound						Exclu. Total	Inclu. Total	Int. Total
	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total			
18:30	0	4	6	3	0	13	0	0	45	5	0	50	0	18	22	2	0	42	0	6	34	11	0	51	0	156	156
18:45	0	4	10	2	0	16	0	2	39	1	0	42	0	15	16	2	0	33	0	5	34	5	0	44	0	135	135
Total	0	19	33	23	0	75	0	13	197	20	0	230	0	74	71	11	0	156	0	22	176	49	0	247	0	708	708
19:00	0	3	6	10	0	19	0	0	39	3	0	42	0	15	10	0	0	25	0	4	34	9	0	47	0	133	133
19:15	0	12	1	4	0	17	0	1	29	0	0	30	0	6	7	2	0	15	0	2	32	7	0	41	0	103	103
19:30	0	0	6	6	0	12	0	5	31	4	0	40	0	14	7	4	0	25	0	2	42	11	0	55	0	132	132
19:45	0	4	12	4	0	20	0	4	17	1	0	22	0	12	14	3	0	29	0	4	20	15	0	39	0	110	110
Total	0	19	25	24	0	68	0	10	116	8	0	134	0	47	38	9	0	94	0	12	128	42	0	182	0	478	478
20:00	0	0	9	6	0	15	0	2	19	4	0	25	0	11	12	3	0	26	0	7	26	14	0	47	0	113	113
20:15	0	1	13	4	0	18	0	0	13	3	0	16	0	9	8	2	0	19	0	3	34	14	0	51	0	104	104
20:30	0	3	8	5	0	16	0	0	14	3	0	17	0	8	7	3	0	18	0	6	27	20	0	53	0	104	104
20:45	0	5	7	1	0	13	0	4	23	1	0	28	0	6	11	1	0	18	0	7	28	10	0	45	0	104	104
Total	0	9	37	16	0	62	0	6	69	11	0	86	0	34	38	9	0	81	0	23	115	58	0	196	0	425	425
21:00	0	3	8	3	0	14	0	3	11	1	0	15	0	6	7	4	0	17	0	7	40	14	0	61	0	107	107
21:15	0	1	7	3	0	11	0	1	8	0	0	9	0	5	8	3	0	16	0	6	14	6	0	26	0	62	62
21:30	0	1	9	5	0	15	0	2	13	2	0	17	0	6	3	0	0	9	0	4	21	11	0	36	0	77	77
21:45	0	0	2	3	0	5	0	1	15	0	0	16	0	1	6	0	0	7	0	2	15	8	0	25	0	53	53
Total	0	5	26	14	0	45	0	7	47	3	0	57	0	18	24	7	0	49	0	19	90	39	0	148	0	299	299
22:00	0	2	2	1	0	5	0	1	9	1	0	11	0	2	2	3	0	7	0	1	12	5	0	18	0	41	41
22:15	0	2	1	0	0	3	0	4	7	0	0	11	0	3	9	3	0	15	0	2	16	4	0	22	0	51	51
22:30	0	1	5	0	0	6	0	2	8	2	0	12	0	1	5	4	0	10	0	3	9	2	0	14	0	42	42
22:45	0	0	1	0	0	1	0	1	2	1	0	4	0	4	3	0	0	7	0	1	11	0	0	12	0	24	24
Total	0	5	9	1	0	15	0	8	26	4	0	38	0	10	19	10	0	39	0	7	48	11	0	66	0	158	158
23:00	0	0	2	0	0	2	0	0	7	0	0	7	0	0	7	0	0	7	0	1	7	1	0	9	0	25	25
23:15	0	0	0	0	0	0	0	0	5	1	0	6	0	0	2	0	0	2	0	0	7	4	0	11	0	19	19
23:30	0	0	0	1	0	1	0	0	2	0	0	2	0	1	1	0	0	2	0	0	2	0	0	2	0	7	7
23:45	0	0	2	0	0	2	0	0	4	1	0	5	0	0	3	0	0	3	0	0	5	1	0	6	0	16	16
Total	0	0	4	1	0	5	0	0	18	2	0	20	0	1	13	0	0	14	0	1	21	6	0	28	0	67	67
Grand Total	0	258	897	405	0	1560	0	183	2950	265	0	3398	0	884	908	223	0	2015	0	326	2603	769	0	3698	0	10671	10671
Apprch %	0	16.5	57.5	26			0	5.4	86.8	7.8			0	43.9	45.1	11.1			0	8.8	70.4	20.8					
Total %	0	2.4	8.4	3.8		14.6	0	1.7	27.6	2.5		31.8	0	8.3	8.5	2.1		18.9	0	3.1	24.4	7.2		34.7	0	100	
Cars +	0	221	818	379		1418	0	175	2732	236		3143	0	813	834	213		1860	0	310	2410	723		3443	0	0	9864
% Cars +	0	85.7	91.2	93.6		90.9	0	95.6	92.6	89.1		92.5	0	92	91.9	95.5		92.3	0	95.1	92.6	94		93.1	0	0	92.4
Trucks	0	37	79	26		142	0	8	218	29		255	0	71	74	10		155	0	16	193	46		255	0	0	807
% Trucks	0	14.3	8.8	6.4		9.1	0	4.4	7.4	10.9		7.5	0	8	8.1	4.5		7.7	0	4.9	7.4	6		6.9	0	0	7.6

Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

Start Time	CSAH 5 Southbound					CSAH 22 Westbound					CSAH 5 Northbound					CSAH 22 Eastbound					Int. Total
	UTrn	Left	Thru	Right	App. Total	UTrn	Left	Thru	Right	App. Total	UTrn	Left	Thru	Right	App. Total	UTrn	Left	Thru	Right	App. Total	
Peak Hour Analysis From 00:00 to 09:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 06:45																					
06:45	0	6	38	4	48	0	2	50	3	55	0	12	3	1	16	0	1	32	18	51	170
07:00	0	3	38	2	43	0	5	57	3	65	0	9	6	1	16	0	2	36	17	55	179
07:15	0	7	20	4	31	0	2	51	2	55	0	6	4	3	13	0	2	33	21	56	155
07:30	0	3	27	8	38	0	1	48	5	54	0	15	2	6	23	0	3	35	23	61	176
Total Volume	0	19	123	18	160	0	10	206	13	229	0	42	15	11	68	0	8	136	79	223	680
% App. Total	0	11.9	76.9	11.2		0	4.4	90	5.7		0	61.8	22.1	16.2		0	3.6	61	35.4		
PHF	.000	.679	.809	.563	.833	.000	.500	.904	.650	.881	.000	.700	.625	.458	.739	.000	.667	.944	.859	.914	.950

Peak Hour Analysis From 10:00 to 13:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 13:00																					
13:00	0	4	6	5	15	0	4	27	1	32	0	11	9	5	25	0	5	29	7	41	113
13:15	0	2	14	8	24	0	2	40	3	45	0	14	15	0	29	0	1	41	6	48	146
13:30	0	7	16	12	35	0	2	47	7	56	0	14	9	5	28	0	9	39	12	60	179
13:45	0	5	13	12	30	0	2	42	0	44	0	11	11	3	25	0	5	32	10	47	146
Total Volume	0	18	49	37	104	0	10	156	11	177	0	50	44	13	107	0	20	141	35	196	584
% App. Total	0	17.3	47.1	35.6		0	5.6	88.1	6.2		0	46.7	41.1	12.1		0	10.2	71.9	17.9		
PHF	.000	.643	.766	.771	.743	.000	.625	.830	.393	.790	.000	.893	.733	.650	.922	.000	.556	.860	.729	.817	.816

Peak Hour Analysis From 14:00 to 23:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 16:00																					
16:00	0	6	11	5	22	0	4	70	7	81	0	27	35	9	71	0	5	79	12	96	270
16:15	0	2	10	9	21	0	4	64	5	73	0	33	21	5	59	0	3	73	17	93	246
16:30	0	11	20	2	33	0	4	73	17	94	0	30	39	5	74	0	6	65	15	86	287
16:45	0	5	10	6	21	0	6	82	10	98	0	31	37	8	76	0	12	72	17	101	296
Total Volume	0	24	51	22	97	0	18	289	39	346	0	121	132	27	280	0	26	289	61	376	1099
% App. Total	0	24.7	52.6	22.7		0	5.2	83.5	11.3		0	43.2	47.1	9.6		0	6.9	76.9	16.2		
PHF	.000	.545	.638	.611	.735	.000	.750	.881	.574	.883	.000	.917	.846	.750	.921	.000	.542	.915	.897	.931	.928



Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

File Name : TMC 2124
 Site Code :
 Start Date : 08/11/2021
 Page No : 1

Weather: Warm & Sunny
 CountCAM 200
 Study Conducted By: Kevin

Groups Printed- Trucks

Start Time	CSAH 5 Southbound					CSAH 22 Westbound					CSAH 5 Northbound					CSAH 22 Eastbound					Int. Total	
	UTrn	Left	Thru	Right	App. Total	UTrn	Left	Thru	Right	App. Total	UTrn	Left	Thru	Right	App. Total	UTrn	Left	Thru	Right	App. Total		
00:00	0	0	0	0	0	0	0	1	0	1	0	0	0	1	1	0	0	0	0	0	0	2
00:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	1	0	1	0	0	0	1	1	0	0	0	0	0	0	2
01:00	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1
04:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	1
05:15	0	0	2	0	2	0	1	4	0	5	0	1	0	0	1	0	0	0	0	0	0	8
05:30	0	1	4	0	5	0	0	5	0	5	0	0	0	0	0	0	1	3	1	5	15	15
05:45	0	0	4	1	5	0	0	3	0	3	0	0	0	0	0	0	0	0	1	1	9	9
Total	0	1	10	1	12	0	1	12	0	13	0	1	0	0	1	0	1	4	2	7	33	33
06:00	0	0	7	3	10	0	2	6	0	8	0	0	0	0	0	0	1	2	0	3	21	21
06:15	0	1	4	1	6	0	1	8	0	9	0	0	0	0	0	0	0	4	0	4	19	19
06:30	0	0	5	2	7	0	0	11	2	13	0	1	0	0	1	0	0	1	0	1	22	22
06:45	0	1	4	0	5	0	1	8	0	9	0	1	0	0	1	0	0	6	1	7	22	22
Total	0	2	20	6	28	0	4	33	2	39	0	2	0	0	2	0	1	13	1	15	84	84
07:00	0	1	5	1	7	0	1	6	0	7	0	0	0	0	0	0	1	5	4	10	24	24
07:15	0	0	0	1	1	0	0	4	0	4	0	1	0	0	1	0	0	6	3	9	15	15
07:30	0	1	2	1	4	0	0	5	0	5	0	0	0	0	0	0	0	2	1	3	12	12
07:45	0	1	3	0	4	0	0	8	0	8	0	1	1	0	2	0	0	7	0	7	21	21
Total	0	3	10	3	16	0	1	23	0	24	0	2	1	0	3	0	1	20	8	29	72	72
08:00	0	1	1	0	2	0	0	9	0	9	0	0	3	0	3	0	0	3	1	4	18	18
08:15	0	1	0	0	1	0	0	3	0	3	0	5	0	0	5	0	1	3	0	4	13	13
08:30	0	0	3	0	3	0	0	2	0	2	0	1	2	0	3	0	1	3	2	6	14	14
08:45	0	2	0	1	3	0	0	3	0	3	0	3	1	0	4	0	0	0	0	0	10	10
Total	0	4	4	1	9	0	0	17	0	17	0	9	6	0	15	0	2	9	3	14	55	55



Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

File Name : TMC 2124
 Site Code :
 Start Date : 08/11/2021
 Page No : 2

Weather: Warm & Sunny
 CountCAM 200
 Study Conducted By: Kevin

Groups Printed- Trucks

Start Time	CSAH 5 Southbound					CSAH 22 Westbound					CSAH 5 Northbound					CSAH 22 Eastbound					Int. Total
	UTrn	Left	Thru	Right	App. Total	UTrn	Left	Thru	Right	App. Total	UTrn	Left	Thru	Right	App. Total	UTrn	Left	Thru	Right	App. Total	
09:00	0	1	4	0	5	0	0	5	0	5	0	0	0	0	0	0	1	1	3	5	15
09:15	0	0	1	0	1	0	0	3	0	3	0	1	1	0	2	0	0	7	0	7	13
09:30	0	0	0	0	0	0	0	2	0	2	0	0	0	1	1	0	1	3	0	4	7
09:45	0	0	0	0	0	0	0	2	1	3	0	1	0	2	3	0	0	4	0	4	10
Total	0	1	5	0	6	0	0	12	1	13	0	2	1	3	6	0	2	15	3	20	45
10:00	0	0	0	0	0	0	0	5	1	6	0	0	0	0	0	0	0	4	0	4	10
10:15	0	0	0	0	0	0	0	3	0	3	0	2	0	0	2	0	0	1	1	2	7
10:30	0	1	2	0	3	0	0	4	1	5	0	0	0	1	1	0	0	1	1	2	11
10:45	0	0	2	0	2	0	0	2	1	3	0	2	2	0	4	0	0	3	3	6	15
Total	0	1	4	0	5	0	0	14	3	17	0	4	2	1	7	0	0	9	5	14	43
11:00	0	0	1	1	2	0	0	1	1	2	0	2	1	0	3	0	0	4	0	4	11
11:15	0	2	0	1	3	0	0	5	1	6	0	2	2	1	5	0	0	1	1	2	16
11:30	0	2	0	0	2	0	0	2	0	2	0	0	3	0	3	0	0	1	1	2	9
11:45	0	0	1	0	1	0	0	5	0	5	0	2	0	0	2	0	0	2	2	4	12
Total	0	4	2	2	8	0	0	13	2	15	0	6	6	1	13	0	0	8	4	12	48
12:00	0	0	0	0	0	0	0	1	0	1	0	3	1	0	4	0	0	2	1	3	8
12:15	0	3	0	1	4	0	0	5	1	6	0	2	3	0	5	0	0	3	1	4	19
12:30	0	1	4	1	6	0	0	4	0	4	0	0	1	0	1	0	0	0	3	3	14
12:45	0	0	0	0	0	0	0	4	0	4	0	2	2	0	4	0	0	2	2	4	12
Total	0	4	4	2	10	0	0	14	1	15	0	7	7	0	14	0	0	7	7	14	53
13:00	0	1	1	1	3	0	1	1	0	2	0	2	0	0	2	0	0	1	1	2	9
13:15	0	0	1	1	2	0	0	3	0	3	0	3	1	0	4	0	0	5	0	5	14
13:30	0	1	1	2	4	0	0	7	1	8	0	2	0	0	2	0	0	5	1	6	20
13:45	0	2	3	1	6	0	0	4	0	4	0	1	2	0	3	0	0	1	0	1	14
Total	0	4	6	5	15	0	1	15	1	17	0	8	3	0	11	0	0	12	2	14	57
14:00	0	0	1	0	1	0	0	5	0	5	0	0	1	1	2	0	0	1	1	2	10
14:15	0	0	1	0	1	0	0	4	1	5	0	3	4	0	7	0	0	5	0	5	18
14:30	0	0	1	2	3	0	0	4	1	5	0	0	2	0	2	0	1	3	0	4	14
14:45	0	0	2	0	2	0	0	3	1	4	0	0	2	0	2	0	1	4	1	6	14
Total	0	0	5	2	7	0	0	16	3	19	0	3	9	1	13	0	2	13	2	17	56
15:00	0	1	1	0	2	0	0	1	0	1	0	1	4	0	5	0	2	4	0	6	14
15:15	0	0	1	1	2	0	0	5	1	6	0	1	3	0	4	0	0	4	0	4	16
15:30	0	0	0	1	1	0	0	5	0	5	0	1	2	0	3	0	0	4	2	6	15
15:45	0	0	0	0	0	0	0	6	3	9	0	3	0	0	3	0	0	5	0	5	17
Total	0	1	2	2	5	0	0	17	4	21	0	6	9	0	15	0	2	17	2	21	62
16:00	0	0	1	1	2	0	0	6	1	7	0	0	3	0	3	0	0	6	0	6	18
16:15	0	0	0	0	0	0	0	3	0	3	0	1	1	0	2	0	0	8	2	10	15
16:30	0	1	1	0	2	0	0	2	2	4	0	2	0	0	2	0	0	13	2	15	23
16:45	0	0	0	0	0	0	0	2	0	2	0	1	1	0	2	0	0	5	0	5	9
Total	0	1	2	1	4	0	0	13	3	16	0	4	5	0	9	0	0	32	4	36	65
17:00	0	0	1	0	1	0	0	4	0	4	0	6	1	1	8	0	0	4	0	4	17
17:15	0	1	0	0	1	0	0	3	2	5	0	2	1	0	3	0	1	3	0	4	13
17:30	0	1	1	0	2	0	0	2	2	4	0	0	1	1	2	0	0	1	0	1	9
17:45	0	0	1	0	1	0	0	1	0	1	0	1	1	0	2	0	0	1	0	1	5
Total	0	2	3	0	5	0	0	10	4	14	0	9	4	2	15	0	1	9	0	10	44
18:00	0	1	0	0	1	0	0	1	0	1	0	1	1	0	2	0	0	1	0	1	5
18:15	0	1	0	0	1	0	1	1	1	3	0	1	4	0	5	0	0	1	0	1	10



Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

File Name : TMC 2124
 Site Code :
 Start Date : 08/11/2021
 Page No : 3

Weather: Warm & Sunny
 CountCAM 200
 Study Conducted By: Kevin

Groups Printed- Trucks

Start Time	CSAH 5 Southbound					CSAH 22 Westbound					CSAH 5 Northbound					CSAH 22 Eastbound					Int. Total
	UTrn	Left	Thru	Right	App. Total	UTrn	Left	Thru	Right	App. Total	UTrn	Left	Thru	Right	App. Total	UTrn	Left	Thru	Right	App. Total	
18:30	0	0	0	0	0	0	0	0	1	1	0	1	5	0	6	0	1	2	0	3	10
18:45	0	2	1	0	3	0	0	1	0	1	0	1	2	0	3	0	2	2	0	4	11
Total	0	4	1	0	5	0	1	3	2	6	0	4	12	0	16	0	3	6	0	9	36
19:00	0	0	0	0	0	0	0	0	0	0	0	2	6	0	8	0	0	3	1	4	12
19:15	0	3	0	0	3	0	0	1	0	1	0	1	1	0	2	0	0	3	0	3	9
19:30	0	0	1	0	1	0	0	0	2	2	0	0	0	0	0	0	0	2	0	2	5
19:45	0	1	0	0	1	0	0	0	1	1	0	0	0	1	1	0	0	1	0	1	4
Total	0	4	1	0	5	0	0	1	3	4	0	3	7	1	11	0	0	9	1	10	30
20:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:15	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	3
20:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
20:45	0	1	0	0	1	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	2
Total	0	1	0	1	2	0	0	0	0	0	0	0	1	0	1	0	0	2	1	3	6
21:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
21:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
21:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
21:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Total	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1	2	0	3	4
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:30	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	1	0	1	2
22:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
Total	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	3	0	3	4
23:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	1	0	1	2
23:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	2
23:30	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	1	0	1	2
23:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	1	0	1	0	0	1	0	1	0	0	3	1	4	6
Grand Total	0	37	79	26	142	0	8	218	29	255	0	71	74	10	155	0	16	193	46	255	807
Apprch %	0	26.1	55.6	18.3		0	3.1	85.5	11.4		0	45.8	47.7	6.5		0	6.3	75.7	18		
Total %	0	4.6	9.8	3.2	17.6	0	1	27	3.6	31.6	0	8.8	9.2	1.2	19.2	0	2	23.9	5.7	31.6	

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2124

Study Date : 06/01/2022

Signal Warrants - Summary

Major Street Approaches

Eastbound: CSAH 22

Number of Lanes : 1

Total Approach Volume: 3,698

Westbound: CSAH 22

Number of Lanes : 1

Total Approach Volume: 3,398

Minor Street Approaches

Northbound: CSAH 5

Number of Lanes : 1

Total Approach Volume: 2,015

Southbound: CSAH 5

Number of Lanes : 1

Total Approach Volume: 1,560

Warrant Summary (Rural Values Apply)

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

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

Required volumes reached for 8 hours, 8 are needed

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

Required volumes reached for 3 hours, 8 are needed

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

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

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

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

Number of hours (6) volumes exceed minimum >= minimum required (4).

Warrant 3 - Peak Hour.....Satisfied

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

Number of one hour periods (12) 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 2124

Study Date : 06/01/2022

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

8 one hour periods meet minimums.
Warrant IS met.

Site Data Required

Rural Settings Apply = **True**
Number of Major Lanes = **1**
Number of Minor Lanes = **1**

Volume Requirements

Rural Factor of 70 % applied
Veh/Hr Major = **350**

Veh/Hr Minor = **105**

Time	Major Road				Minor Road			Met?
	Major EB	+	Major WB	=	Total	Minor NB	Minor SB	
16:45 - 17:45	332	+	369	=	701	251	89	Yes
15:45 - 16:45	358	+	318	=	676	259	98	Yes
14:45 - 15:45	302	+	231	=	533	193	85	Yes
17:45 - 18:45	260	+	244	=	504	165	82	Yes
06:45 - 07:45	223	+	229	=	452	68	160	Yes
13:45 - 14:45	223	+	202	=	425	141	93	Yes
12:45 - 13:45	199	+	183	=	382	105	89	Yes
05:45 - 06:45	140	+	228	=	368	65	129	Yes
07:45 - 08:45	182	+	179	=	361	79	99	No
12:00 - 13:00	193	+	159	=	352	89	73	No
11:15 - 12:15	182	+	170	=	352	104	77	No
12:30 - 13:30	194	+	157	=	351	93	71	No
11:30 - 12:30	175	+	174	=	349	98	79	No
05:30 - 06:30	127	+	219	=	346	53	118	No
11:45 - 12:45	183	+	160	=	343	95	78	No
11:00 - 12:00	175	+	168	=	343	104	85	No
12:15 - 13:15	190	+	151	=	341	90	71	No
18:45 - 19:45	187	+	154	=	341	98	64	No
09:45 - 10:45	175	+	163	=	338	81	85	No
09:00 - 10:00	176	+	160	=	336	63	79	No
10:45 - 11:45	178	+	153	=	331	102	83	No
09:30 - 10:30	161	+	170	=	331	67	82	No
09:15 - 10:15	165	+	161	=	326	62	68	No
08:15 - 09:15	171	+	154	=	325	69	97	No
10:00 - 11:00	174		149		323	86	80	No

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2124

Study Date : 06/01/2022

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 3 one hour periods meet minimums.
Warrant is NOT met.

Site Data Required

Rural Settings Apply = **True**
Number of Major Lanes = **1**
Number of Minor Lanes = **1**

Volume Requirements

Rural Factor of 70 % applied
Veh/Hr Major = **525**

Veh/Hr Minor = **52**

Time	Major Road				Total	Minor Road		Met?
	Major EB	+	Major WB	=		Minor NB	Minor SB	
16:45 - 17:45	332	+	369	=	701	251	89	Yes
15:45 - 16:45	358	+	318	=	676	259	98	Yes
14:45 - 15:45	302	+	231	=	533	193	85	Yes
17:45 - 18:45	260	+	244	=	504	165	82	No
14:30 - 15:30	273	+	221	=	494	168	86	No
18:00 - 19:00	247	+	230	=	477	156	75	No
14:15 - 15:15	254	+	210	=	464	154	89	No
07:00 - 08:00	223	+	231	=	454	73	142	No
06:45 - 07:45	223	+	229	=	452	68	160	No
06:30 - 07:30	205	+	247	=	452	64	158	No
14:00 - 15:00	238	+	203	=	441	155	80	No
06:15 - 07:15	182	+	250	=	432	71	160	No
13:45 - 14:45	223	+	202	=	425	141	93	No
13:30 - 14:30	224	+	200	=	424	132	103	No
18:15 - 19:15	214	+	209	=	423	145	76	No
07:15 - 08:15	211	+	212	=	423	81	117	No
13:15 - 14:15	213	+	201	=	414	122	104	No
06:00 - 07:00	162	+	238	=	400	67	149	No
07:30 - 08:30	206	+	190	=	396	87	109	No
12:45 - 13:45	199	+	183	=	382	105	89	No
13:00 - 14:00	196	+	177	=	373	107	104	No
05:45 - 06:45	140	+	228	=	368	65	129	No
07:45 - 08:45	182	+	179	=	361	79	99	No
12:00 - 13:00	193	+	159	=	352	89	73	No
11:15 - 12:15	182		170		352	104	77	No

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2124

Study Date : 06/01/2022

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.
Only 7 hours meet 1B minimums.
Warrant is NOT met.

Site Data Required

Rural Settings Apply = **True**
Number of Major Lanes = **1**
Number of Minor Lanes = **1**

Volume Requirements

Rural Factor of 70% applied
Warrant 1A 1B
Veh/Hr Major = **280 420**

Veh/Hr Minor = **84 42**

Major Road CSAH 22

Minor Road CSAH 5

Time	Major EB	+	Major WB	=	Total	Minor NB	Minor SB	Met1A?
16:45 - 17:45	332	+	369	=	701	251	89	Yes
15:45 - 16:45	358	+	318	=	676	259	98	Yes
14:45 - 15:45	302	+	231	=	533	193	85	Yes
17:45 - 18:45	260	+	244	=	504	165	82	Yes
06:15 - 07:15	182	+	250	=	432	71	160	Yes
13:45 - 14:45	223	+	202	=	425	141	93	Yes
07:15 - 08:15	211	+	212	=	423	81	117	Yes
12:45 - 13:45	199	+	183	=	382	105	89	Yes
11:45 - 12:45	183	+	160	=	343	95	78	Yes
18:45 - 19:45	187	+	154	=	341	98	64	Yes
09:45 - 10:45	175	+	163	=	338	81	85	Yes
10:45 - 11:45	178	+	153	=	331	102	83	Yes

Time	Major EB	+	Major WB	=	Total	Minor NB	Minor SB	Met1B?
16:30 - 17:30	358	+	375	=	733	270	95	Yes
15:30 - 16:30	360	+	292	=	652	247	89	Yes
17:30 - 18:30	269	+	282	=	551	178	96	Yes
14:30 - 15:30	273	+	221	=	494	168	86	Yes
06:15 - 07:15	182	+	250	=	432	71	160	Yes
13:30 - 14:30	224	+	200	=	424	132	103	Yes
07:15 - 08:15	211	+	212	=	423	81	117	Yes
13:15 - 14:15	213	+	201	=	414	122	104	No
06:00 - 07:00	162	+	238	=	400	67	149	No
12:45 - 13:45	199	+	183	=	382	105	89	No
13:00 - 14:00	196	+	177	=	373	107	104	No
05:45 - 06:45	140	+	228	=	368	65	129	No

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2124

Study Date : 06/01/2022

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.

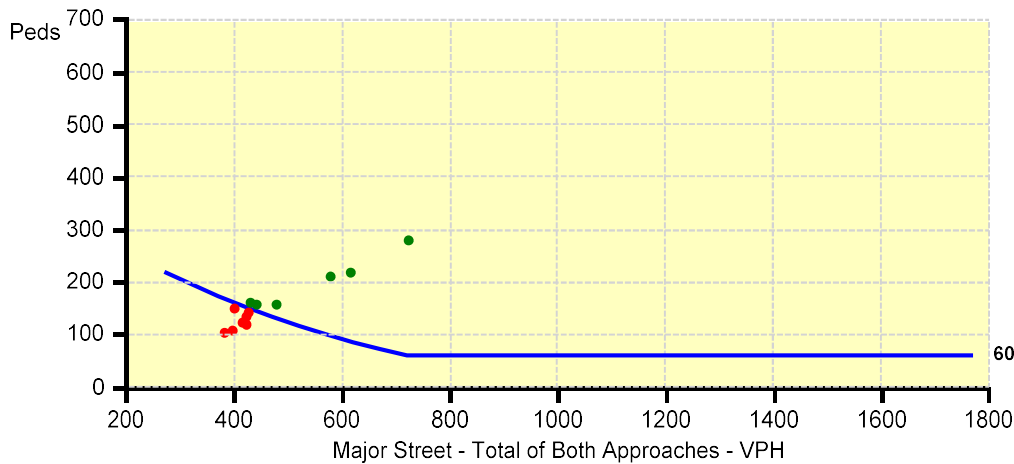
Summary

6 one hour periods meet minimums.
Warrant IS met.

Site Data Required

Rural Settings Apply = **True**
 Number of Major Lanes = **1**
 Number of Minor Lanes = **1**

Time	Major Road CSAH 22				=	Total	Minor Road CSAH 5		Met?
	Major EB	+	Major WB				Minor NB	Minor SB	
16:00 - 17:00	376	+	346	=	722	280	97	Yes	
17:00 - 18:00	288	+	327	=	615	217	91	Yes	
15:00 - 16:00	323	+	256	=	579	209	90	Yes	
18:00 - 19:00	247	+	230	=	477	156	75	Yes	
14:00 - 15:00	238	+	203	=	441	155	80	Yes	
06:15 - 07:15	182	+	250	=	432	71	160	Yes	
13:45 - 14:45	223	+	202	=	425	141	93	No	
13:30 - 14:30	224	+	200	=	424	132	103	No	
07:15 - 08:15	211	+	212	=	423	81	117	No	
13:15 - 14:15	213	+	201	=	414	122	104	No	
06:00 - 07:00	162	+	238	=	400	67	149	No	
							109	No	



ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2124

Study Date : 06/01/2022

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

10 one hour periods meet minimums.
Warrant IS met.

Site Data Required

Rural Settings Apply = **True**
 Number of Major Lanes = **1**
 Number of Minor Lanes = **1**

Time	Major Road CSAH 22				=	Total	Minor Road CSAH 5		Met?
	Major EB	+	Major WB	Minor NB			Minor SB		
16:30 - 17:30	358	+	375	=	733	270	95	Yes	
16:15 - 17:15	365	+	358	=	723	275	98	Yes	
16:00 - 17:00	376	+	346	=	722	280	97	Yes	
16:45 - 17:45	332	+	369	=	701	251	89	Yes	
15:45 - 16:45	358	+	318	=	676	259	98	Yes	
15:30 - 16:30	360	+	292	=	652	247	89	Yes	
15:15 - 16:15	345	+	274	=	619	241	88	Yes	
17:00 - 18:00	288	+	327	=	615	217	91	Yes	
17:15 - 18:15	283	+	297	=	580	187	86	Yes	
15:00 - 16:00	323	+	256	=	579	209	90	Yes	
17:30 - 18:30	269	+	282	=	551	178	96	No	
							85	No	

