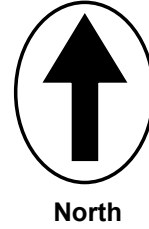


Date : 11/09/22

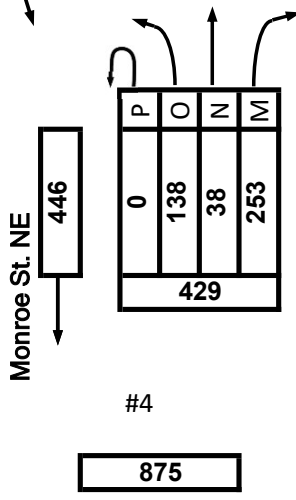
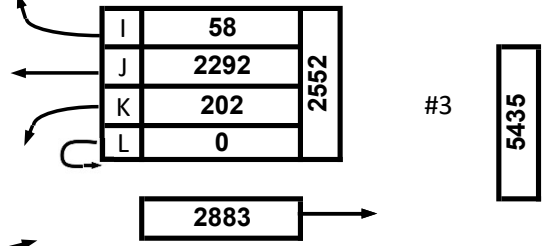
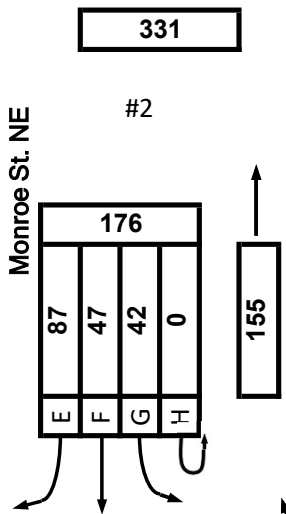
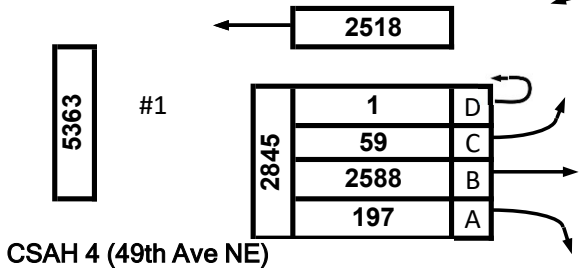
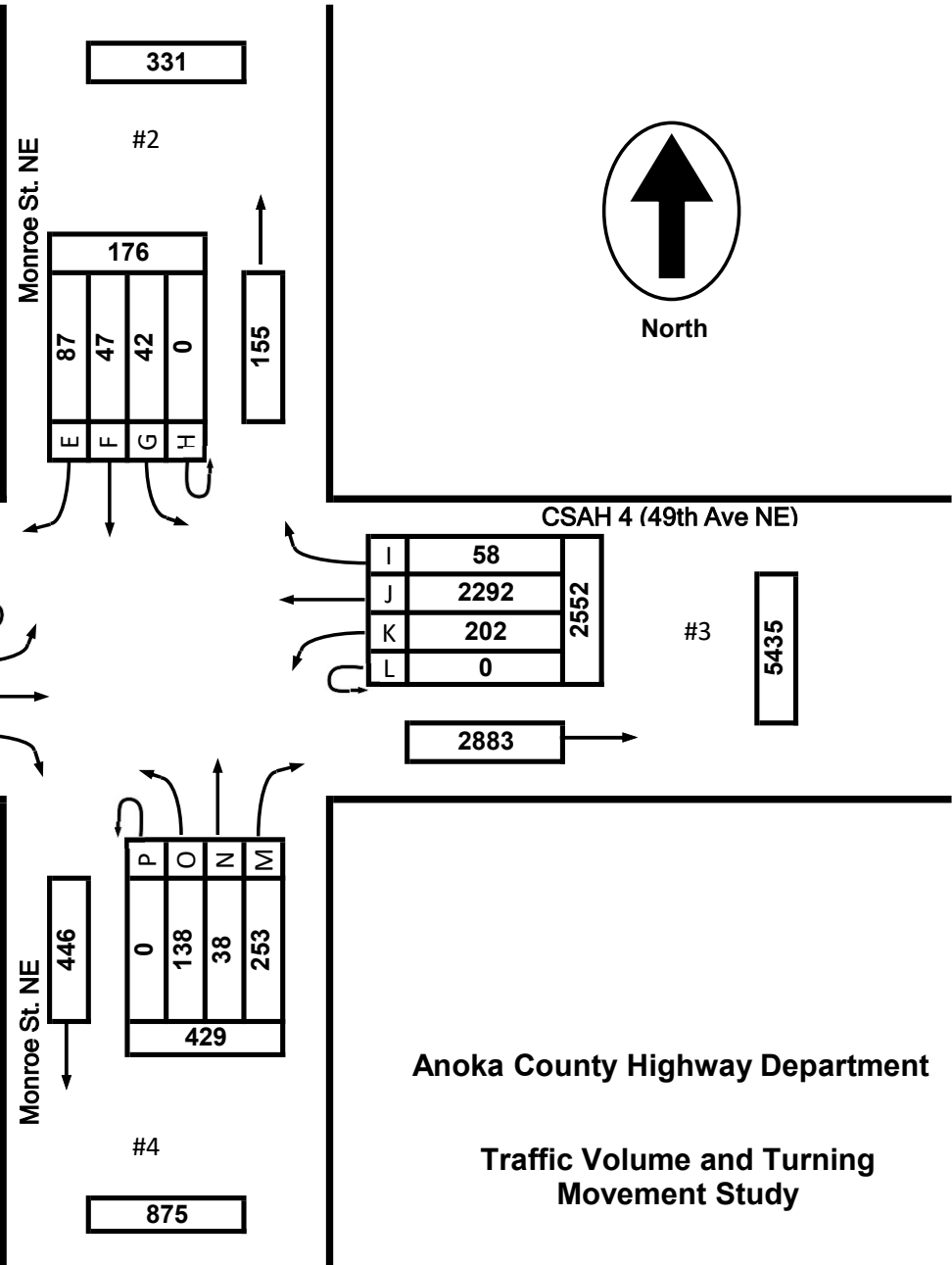
Count Number : TMC 2271

Location : Monroe St. NE
@ CSAH 4 (49th Ave NE)

Collection Period : 24 HR



North



EXISTING LANES OF APPROACH

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

Anoka County Highway Department

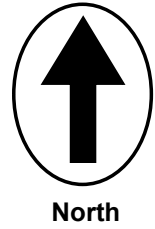
Traffic Volume and Turning Movement Study

Date : 11/09/22

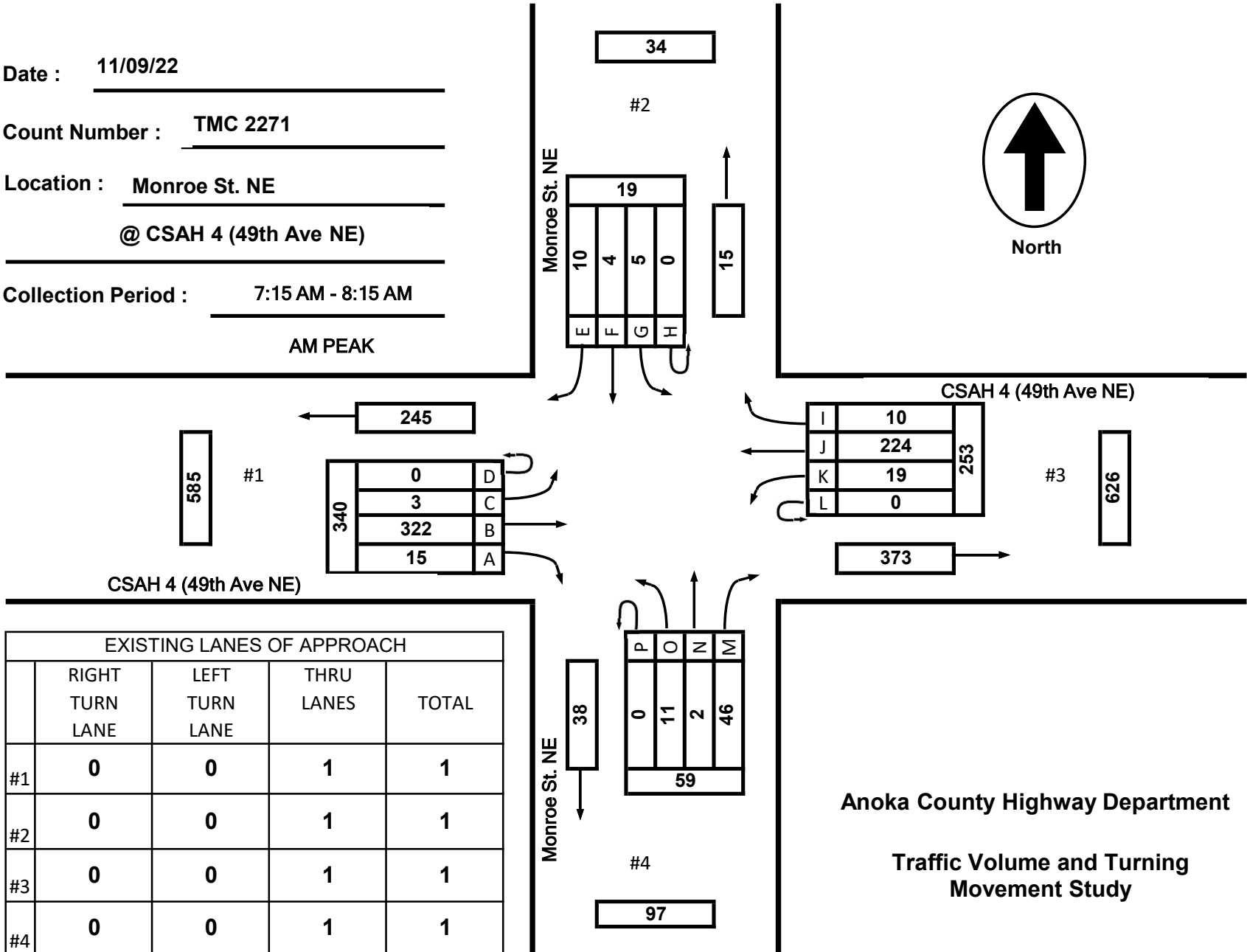
Count Number : TMC 2271

Location : Monroe St. NE
@ CSAH 4 (49th Ave NE)

Collection Period : 7:15 AM - 8:15 AM
AM PEAK



North



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

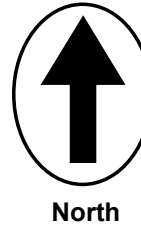
Anoka County Highway Department
Traffic Volume and Turning Movement Study

Date : 11/09/22

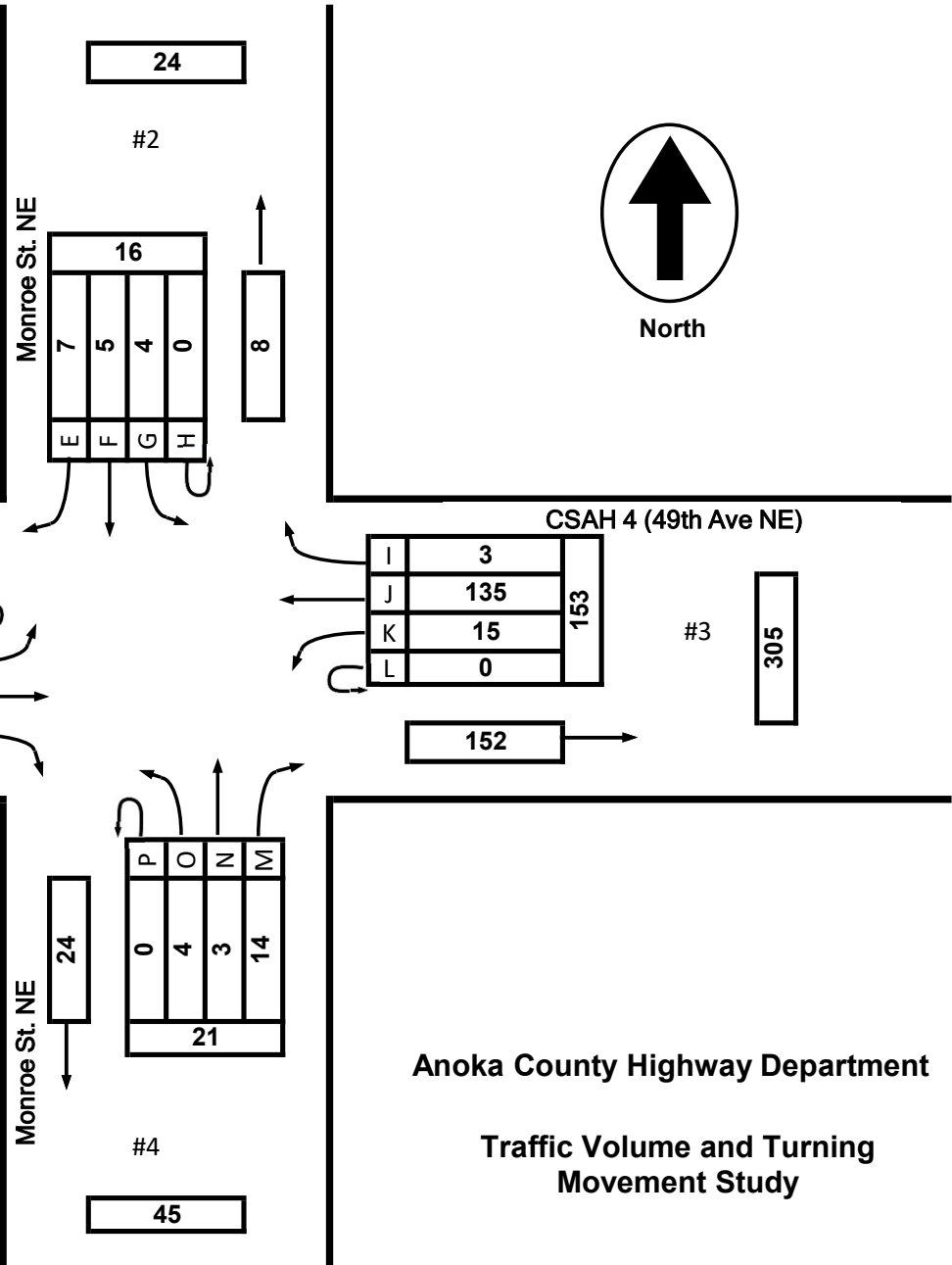
Count Number : TMC 2271

Location : Monroe St. NE
@ CSAH 4 (49th Ave NE)

Collection Period : 11:00 AM - 12:00 PM
MIDDAY PEAK



North



CSAH 4 (49th Ave NE)

Monroe St. NE

CSAH 4 (49th Ave NE)

Monroe St. NE

EXISTING LANES OF APPROACH

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

Anoka County Highway Department

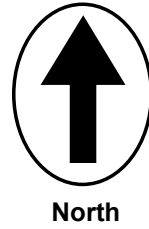
Traffic Volume and Turning Movement Study

Date : 11/09/22

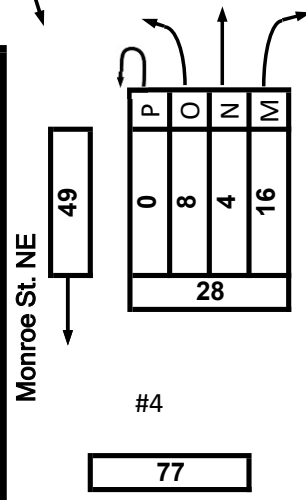
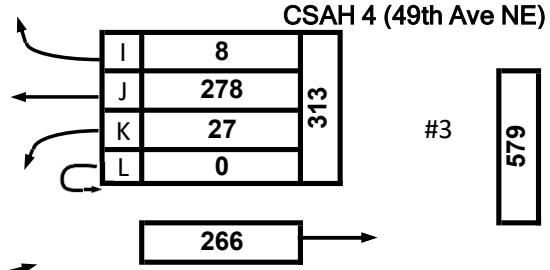
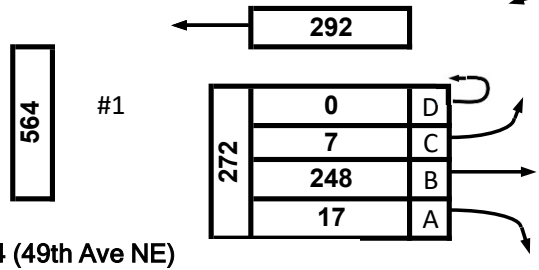
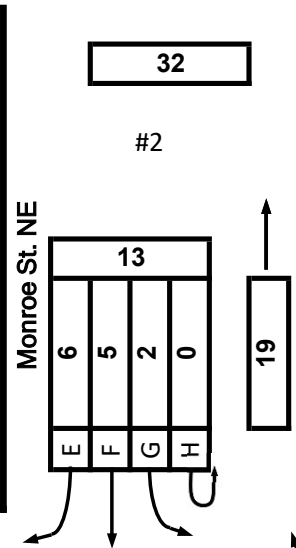
Count Number : TMC 2271

Location : Monroe St. NE
@ CSAH 4 (49th Ave NE)

Collection Period : 3:15 PM - 4:15 PM
PM PEAK



North



CSAH 4 (49th Ave NE)

Monroe St. NE

CSAH 4 (49th Ave NE)

Monroe St. NE

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

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 2271-t
 Site Code :
 Start Date : 11/09/2022
 Page No : 1

Weather: Cool & Cloudy
 CounCAM 2
 Study Conducted by: Kevin

Groups Printed- Cars + - Trucks

Start Time	Monroe St NE Southbound						CSAH 4 (49th Ave NE) Westbound						Monroe St NE Northbound						CSAH 4 (49th Ave NE) Eastbound						Exclu. Total	Inclu. Total	Int. Total
	Right	Thru	Left	UTrn	Peds	App. Total	Right	Thru	Left	UTrn	Peds	App. Total	Right	Thru	Left	UTrn	Peds	App. Total	Right	Thru	Left	UTrn	Peds	App. Total			
00:00	0	0	0	0	0	0	1	4	0	0	0	5	0	0	0	0	0	0	0	3	0	0	0	3	0	8	8
00:15	0	0	0	0	0	0	0	4	0	0	0	4	0	0	0	0	0	0	1	5	0	0	0	6	0	10	10
00:30	0	0	0	0	0	0	0	2	1	0	0	3	0	0	0	0	0	0	0	3	0	0	0	3	0	6	6
00:45	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
Total	0	0	0	0	0	0	1	12	1	0	0	14	0	0	0	0	0	0	1	11	0	0	0	12	0	26	26
01:00	0	0	0	0	0	0	0	2	0	0	0	2	0	0	1	0	0	1	0	2	0	0	0	2	0	5	5
01:15	0	0	0	0	0	0	0	3	0	0	0	3	0	0	0	0	0	0	0	2	0	0	0	2	0	5	5
01:30	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	2	1	0	0	0	3	0	5	5
01:45	0	0	0	0	0	0	0	2	1	0	0	3	0	0	1	0	0	1	1	3	0	0	0	4	0	8	8
Total	0	0	0	0	0	0	0	9	1	0	0	10	0	0	2	0	0	2	3	8	0	0	0	11	0	23	23
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3	0	3	3
02:15	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	1	0	0	0	0	1	0	3	3
02:30	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	2	0	0	0	2	0	3	3
02:45	0	0	0	0	0	0	0	2	1	0	0	3	0	0	0	0	0	0	1	1	0	0	0	2	0	5	5
Total	0	0	0	0	0	0	0	3	3	0	0	6	0	0	0	0	0	0	2	6	0	0	0	8	0	14	14
03:00	0	0	0	0	0	0	0	1	0	0	0	1	0	0	1	0	0	1	0	4	0	0	0	4	0	6	6
03:15	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	1	1
03:45	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	0	0	1	0	1	0	0	0	1	0	3	3
Total	0	0	0	0	0	0	0	3	0	0	0	3	1	0	1	0	0	2	0	6	0	0	0	6	0	11	11
04:00	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	2	0	0	0	2	0	3	3
04:15	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	3	0	0	0	3	0	4	4
04:30	0	0	0	0	0	0	1	1	0	0	0	2	0	0	0	0	0	0	0	2	0	0	0	2	0	4	4
04:45	0	0	0	0	0	0	0	1	0	0	0	1	3	0	1	0	0	4	0	5	0	0	0	5	0	10	10
Total	0	0	0	0	0	0	1	4	0	0	0	5	3	0	1	0	0	4	0	12	0	0	0	12	0	21	21
05:00	0	0	0	0	0	0	0	2	0	0	0	2	0	0	2	0	0	2	1	2	0	0	0	3	0	7	7
05:15	0	0	0	0	0	0	0	4	0	0	0	4	1	0	2	0	0	3	2	3	0	0	0	5	0	12	12
05:30	1	0	0	0	0	1	1	13	0	0	0	14	0	0	3	0	0	3	0	10	0	0	0	10	0	28	28
05:45	1	0	0	0	0	1	0	4	2	0	0	6	2	1	1	0	0	4	1	3	0	0	0	4	0	15	15
Total	2	0	0	0	0	2	1	23	2	0	0	26	3	1	8	0	0	12	4	18	0	0	0	22	0	62	62



Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

File Name : TMC 2271-t
 Site Code :
 Start Date : 11/09/2022
 Page No : 2

Weather: Cool & Cloudy
 CounCAM 2
 Study Conducted by: Kevin

Groups Printed- Cars + - Trucks

Start Time	Monroe St NE Southbound						CSAH 4 (49th Ave NE) Westbound						Monroe St NE Northbound						CSAH 4 (49th Ave NE) Eastbound						Exclu. Total	Inclu. Total	Int. Total
	Right	Thru	Left	UTrn	Peds	App. Total	Right	Thru	Left	UTrn	Peds	App. Total	Right	Thru	Left	UTrn	Peds	App. Total	Right	Thru	Left	UTrn	Peds	App. Total			
06:00	0	0	0	0	0	0	0	2	0	0	0	2	2	1	0	0	0	3	0	7	1	0	0	8	0	13	13
06:15	2	0	0	0	0	2	0	8	2	0	1	10	0	1	2	0	0	3	2	15	1	0	0	18	1	33	34
06:30	1	0	0	0	0	1	0	12	0	0	0	12	5	0	2	0	0	7	1	18	0	0	0	19	0	39	39
06:45	0	0	0	0	1	0	0	12	0	0	0	12	1	0	3	0	0	4	0	24	0	0	0	24	1	40	41
Total	3	0	0	0	1	3	0	34	2	0	1	36	8	2	7	0	0	17	3	64	2	0	0	69	2	125	127
07:00	0	0	2	0	0	2	0	15	0	0	2	15	4	0	0	0	1	4	1	46	1	0	0	48	3	69	72
07:15	4	2	2	0	0	8	3	41	5	0	4	49	13	0	2	0	0	15	2	71	0	0	0	73	4	145	149
07:30	2	0	1	0	0	3	3	64	6	0	9	73	16	1	4	0	3	21	4	71	0	0	1	75	13	172	185
07:45	2	1	0	0	3	3	2	62	5	0	9	69	9	1	0	0	10	10	2	89	1	0	0	92	22	174	196
Total	8	3	5	0	3	16	8	182	16	0	24	206	42	2	6	0	14	50	9	277	2	0	1	288	42	560	602
08:00	2	1	2	0	0	5	2	57	3	0	1	62	8	0	5	0	7	13	7	91	2	0	0	100	8	180	188
08:15	0	0	0	0	0	0	0	44	4	0	0	48	9	0	3	0	2	12	2	48	1	0	0	51	2	111	113
08:30	1	0	2	0	0	3	0	22	5	0	0	27	7	0	1	0	1	8	2	22	0	0	0	24	1	62	63
08:45	0	0	1	0	1	1	1	19	0	0	0	20	1	0	4	0	0	5	2	32	0	0	0	34	1	60	61
Total	3	1	5	0	1	9	3	142	12	0	1	157	25	0	13	0	10	38	13	193	3	0	0	209	12	413	425
09:00	2	0	2	0	0	4	0	28	3	0	0	31	2	1	1	0	2	4	1	21	0	0	0	22	2	61	63
09:15	0	1	1	0	0	2	1	24	2	0	0	27	4	2	4	0	0	10	1	21	0	0	0	22	0	61	61
09:30	0	1	0	0	0	1	0	19	0	0	0	19	3	0	1	0	0	4	2	21	1	0	0	24	0	48	48
09:45	1	1	0	0	0	2	0	18	0	0	0	18	3	0	3	0	0	6	1	24	0	0	0	25	0	51	51
Total	3	3	3	0	0	9	1	89	5	0	0	95	12	3	9	0	2	24	5	87	1	0	0	93	2	221	223
10:00	1	0	0	0	0	1	0	21	1	0	0	22	0	0	1	0	1	1	2	29	0	0	0	31	1	55	56
10:15	1	0	0	0	0	1	0	25	1	0	0	26	5	1	1	0	1	7	0	27	0	0	0	27	1	61	62
10:30	1	0	0	0	0	1	1	19	1	0	1	21	3	0	2	0	0	5	4	27	0	0	0	31	1	58	59
10:45	1	0	0	0	0	1	1	18	2	0	0	21	3	1	4	0	3	8	0	31	1	0	0	32	3	62	65
Total	4	0	0	0	0	4	2	83	5	0	1	90	11	2	8	0	5	21	6	114	1	0	0	121	6	236	242
11:00	1	2	0	0	0	3	0	34	5	0	0	39	5	0	0	0	1	5	2	39	0	0	0	41	1	88	89
11:15	2	1	3	0	0	6	2	35	5	0	0	42	2	0	3	0	1	5	0	32	1	0	0	33	1	86	87
11:30	3	1	0	0	0	4	1	35	4	0	0	40	3	2	0	0	2	5	1	24	1	0	0	26	2	75	77
11:45	1	1	1	0	0	3	0	31	1	0	0	32	4	1	1	0	0	6	1	39	0	0	0	40	0	81	81
Total	7	5	4	0	0	16	3	135	15	0	0	153	14	3	4	0	4	21	4	134	2	0	0	140	4	330	334
12:00	2	0	0	0	0	2	0	31	3	0	0	34	3	0	4	0	3	7	0	34	1	0	0	35	3	78	81
12:15	2	2	1	0	0	5	0	27	1	0	1	28	3	0	2	0	2	5	2	39	1	0	0	42	3	80	83
12:30	3	1	0	0	0	4	1	31	1	0	0	33	5	1	1	0	3	7	0	37	1	0	0	38	3	82	85



Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

File Name : TMC 2271-t
 Site Code :
 Start Date : 11/09/2022
 Page No : 3

Weather: Cool & Cloudy
 CounCAM 2
 Study Conducted by: Kevin

Groups Printed- Cars + - Trucks

Start Time	Monroe St NE Southbound						CSAH 4 (49th Ave NE) Westbound						Monroe St NE Northbound						CSAH 4 (49th Ave NE) Eastbound						Exclu. Total	Inclu. Total	Int. Total
	Right	Thru	Left	UTrn	Peds	App. Total	Right	Thru	Left	UTrn	Peds	App. Total	Right	Thru	Left	UTrn	Peds	App. Total	Right	Thru	Left	UTrn	Peds	App. Total			
12:45	0	1	0	0	0	1	0	39	1	0	0	40	3	1	3	0	1	7	2	37	0	0	0	39	1	87	88
Total	7	4	1	0	0	12	1	128	6	0	1	135	14	2	10	0	9	26	4	147	3	0	0	154	10	327	337
13:00	1	1	0	0	1	2	1	22	1	0	1	24	3	1	3	0	1	7	1	28	0	0	1	29	4	62	66
13:15	0	0	0	0	0	0	1	28	5	0	0	34	4	1	0	0	0	5	2	40	0	0	0	42	0	81	81
13:30	1	2	0	0	0	3	2	26	2	0	0	30	2	0	1	0	2	3	1	27	2	0	0	30	2	66	68
13:45	3	0	3	0	0	6	0	26	1	0	0	27	2	0	2	0	0	4	4	53	0	0	0	57	0	94	94
Total	5	3	3	0	1	11	4	102	9	0	1	115	11	2	6	0	3	19	8	148	2	0	1	158	6	303	309
14:00	1	1	0	0	0	2	2	35	7	0	10	44	3	1	2	0	0	6	13	54	3	0	0	70	10	122	132
14:15	2	0	1	0	0	3	5	63	5	0	23	73	11	1	10	0	5	22	6	49	4	0	0	59	28	157	185
14:30	3	0	0	0	0	3	0	52	6	0	0	58	5	1	3	0	2	9	7	52	2	0	0	61	2	131	133
14:45	2	0	4	0	1	6	0	34	4	0	0	38	7	0	1	0	2	8	6	52	2	0	0	60	3	112	115
Total	8	1	5	0	1	14	7	184	22	0	33	213	26	3	16	0	9	45	32	207	11	0	0	250	43	522	565
15:00	4	0	3	0	1	7	1	49	1	0	0	51	7	1	1	0	2	9	0	59	1	0	0	60	3	127	130
15:15	1	1	2	0	0	4	3	83	11	0	7	97	6	2	2	0	25	10	5	57	3	0	1	65	33	176	209
15:30	3	1	0	0	0	4	2	67	4	0	2	73	4	1	2	0	7	7	3	60	1	0	0	64	9	148	157
15:45	0	2	0	0	0	2	0	61	8	0	0	69	2	0	2	0	2	4	6	80	2	0	0	88	2	163	165
Total	8	4	5	0	1	17	6	260	24	0	9	290	19	4	7	0	36	30	14	256	7	0	1	277	47	614	661
16:00	2	1	0	0	0	3	3	67	4	0	2	74	4	1	2	0	3	7	3	51	1	0	1	55	6	139	145
16:15	4	4	1	0	0	9	2	41	7	0	0	50	4	1	3	0	1	8	6	71	5	0	0	82	1	149	150
16:30	4	1	0	0	0	5	0	60	3	0	0	63	7	1	0	0	1	8	6	59	0	0	0	65	1	141	142
16:45	3	2	2	0	0	7	1	67	2	0	0	70	2	2	3	0	0	7	4	60	1	0	0	65	0	149	149
Total	13	8	3	0	0	24	6	235	16	0	2	257	17	5	8	0	5	30	19	241	7	0	1	267	8	578	586
17:00	1	1	1	0	0	3	0	55	3	0	0	58	6	0	3	0	2	9	2	63	0	0	0	65	2	135	137
17:15	1	0	0	0	0	1	1	71	4	0	0	76	4	1	4	0	0	9	4	68	0	0	0	72	0	158	158
17:30	3	3	0	0	0	6	2	60	5	0	0	67	1	1	4	0	0	6	1	50	0	0	0	51	0	130	130
17:45	1	1	0	0	0	2	2	37	4	0	0	43	7	1	2	0	0	10	2	43	2	0	0	47	0	102	102
Total	6	5	1	0	0	12	5	223	16	0	0	244	18	3	13	0	2	34	9	224	2	0	0	235	2	525	527
18:00	1	3	0	0	0	4	1	55	3	0	0	59	3	2	2	0	1	7	3	47	2	0	0	52	1	122	123
18:15	1	0	2	0	0	3	0	39	3	0	0	42	1	0	1	0	0	2	9	51	0	0	0	60	0	107	107
18:30	0	1	0	0	0	1	0	35	4	0	0	39	2	0	0	0	0	2	5	35	1	0	0	41	0	83	83
18:45	0	0	0	0	0	0	2	31	3	0	0	36	4	1	0	0	0	5	4	26	1	0	0	31	0	72	72
Total	2	4	2	0	0	8	3	160	13	0	0	176	10	3	3	0	1	16	21	159	4	0	0	184	1	384	385



Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

File Name : TMC 2271-t
 Site Code :
 Start Date : 11/09/2022
 Page No : 4

Weather: Cool & Cloudy
 CounCAM 2
 Study Conducted by: Kevin

Groups Printed- Cars + - Trucks

Start Time	Monroe St NE Southbound						CSAH 4 (49th Ave NE) Westbound						Monroe St NE Northbound						CSAH 4 (49th Ave NE) Eastbound						Exclu. Total	Inclu. Total	Int. Total
	Right	Thru	Left	UTrn	Peds	App. Total	Right	Thru	Left	UTrn	Peds	App. Total	Right	Thru	Left	UTrn	Peds	App. Total	Right	Thru	Left	UTrn	Peds	App. Total			
19:00	0	1	0	0	0	1	0	20	3	0	0	23	2	1	2	0	0	5	2	24	2	0	0	28	0	57	57
19:15	1	0	0	0	0	1	1	23	4	0	0	28	2	0	1	0	0	3	4	24	1	0	0	29	0	61	61
19:30	0	0	0	0	0	0	1	21	6	0	0	28	0	0	1	0	0	1	4	24	0	0	0	28	0	57	57
19:45	3	1	1	0	0	5	1	22	2	0	0	25	3	0	1	0	0	4	0	23	1	0	0	24	0	58	58
Total	4	2	1	0	0	7	3	86	15	0	0	104	7	1	5	0	0	13	10	95	4	0	0	109	0	233	233
20:00	0	0	1	0	0	1	0	20	2	0	0	22	1	0	1	0	0	2	1	19	2	0	0	22	0	47	47
20:15	0	1	0	0	0	1	0	14	3	0	0	17	2	1	2	0	0	5	4	21	0	0	0	25	0	48	48
20:30	1	0	0	0	0	1	1	19	3	0	0	23	1	1	0	0	0	2	4	16	1	0	0	21	0	47	47
20:45	0	0	2	0	0	2	1	21	1	0	0	23	1	0	1	0	0	2	4	15	0	0	0	19	0	46	46
Total	1	1	3	0	0	5	2	74	9	0	0	85	5	2	4	0	0	11	13	71	3	0	0	87	0	188	188
21:00	2	0	0	0	0	2	0	14	0	0	0	14	0	0	1	0	0	1	1	13	0	0	0	14	0	31	31
21:15	1	0	0	0	0	1	0	14	1	0	0	15	0	0	0	0	0	0	0	13	2	0	0	15	0	31	31
21:30	0	1	0	0	0	1	0	14	1	0	0	15	0	0	1	0	0	1	1	7	0	0	0	8	0	25	25
21:45	0	0	0	0	0	0	0	13	1	0	0	14	2	0	1	0	0	3	0	16	0	1	0	17	0	34	34
Total	3	1	0	0	0	4	0	55	3	0	0	58	2	0	3	0	0	5	2	49	2	1	0	54	0	121	121
22:00	0	0	0	0	0	0	0	17	3	0	0	20	2	0	0	0	0	2	3	18	0	0	0	21	0	43	43
22:15	0	1	1	0	0	2	0	11	2	0	0	13	0	0	1	0	0	1	0	12	0	0	0	12	0	28	28
22:30	0	0	0	0	0	0	0	6	1	0	0	7	1	0	2	0	0	3	4	2	0	0	0	6	0	16	16
22:45	0	0	0	0	0	0	0	4	0	0	0	4	0	0	1	0	0	1	2	4	1	0	0	7	0	12	12
Total	0	1	1	0	0	2	0	38	6	0	0	44	3	0	4	0	0	7	9	36	1	0	0	46	0	99	99
23:00	0	0	0	0	0	0	0	11	1	0	0	12	1	0	0	0	0	1	1	5	1	0	0	7	0	20	20
23:15	0	0	0	0	0	0	0	5	0	0	0	5	0	0	0	0	0	0	4	6	1	0	0	11	0	16	16
23:30	0	0	0	0	0	0	1	5	0	0	0	6	1	0	0	0	0	1	1	8	0	0	0	9	0	16	16
23:45	0	1	0	0	0	1	0	7	0	0	0	7	0	0	0	0	0	0	0	6	0	0	0	6	0	14	14
Total	0	1	0	0	0	1	1	28	1	0	0	30	2	0	0	0	0	2	6	25	2	0	0	33	0	66	66
Grand Total	87	47	42	0	8	176	58	2292	202	0	73	2552	253	38	138	0	100	429	197	2588	59	1	4	2845	185	6002	6187
Apprch %	49.4	26.7	23.9	0	0	0	2.3	89.8	7.9	0	0	0	59	8.9	32.2	0	0	0	6.9	91	2.1	0	0	0	0	0	0
Total %	1.4	0.8	0.7	0	0	2.9	1	38.2	3.4	0	0	42.5	4.2	0.6	2.3	0	0	7.1	3.3	43.1	1	0	0	47.4	3	97	0
Cars +	84	45	42	0	0	179	54	2233	197	0	0	2557	244	37	137	0	518	195	2531	58	1	0	2789	0	0	6043	
% Cars +	96.6	95.7	100	0	100	97.3	93.1	97.4	97.5	0	100	97.4	96.4	97.4	99.3	0	100	97.9	99	97.8	98.3	100	100	97.9	0	0	97.7
Trucks	3	2	0	0	0	5	4	59	5	0	0	68	9	1	1	0	11	2	57	1	0	0	60	0	0	144	
% Trucks	3.4	4.3	0	0	0	2.7	6.9	2.6	2.5	0	0	2.6	3.6	2.6	0.7	0	0	2.1	1	2.2	1.7	0	0	2.1	0	0	2.3



Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

File Name : TMC 2271-t
 Site Code :
 Start Date : 11/09/2022
 Page No : 5

Weather: Cool & Cloudy
 CounCAM 2
 Study Conducted by: Kevin

Start Time	Monroe St NE Southbound					CSAH 4 (49th Ave NE) Westbound					Monroe St NE Northbound					CSAH 4 (49th Ave NE) Eastbound					Int. Total
	Right	Thru	Left	UTrn	App. Total	Right	Thru	Left	UTrn	App. Total	Right	Thru	Left	UTrn	App. Total	Right	Thru	Left	UTrn	App. Total	
Peak Hour Analysis From 00:00 to 09:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15																					
07:15	4	2	2	0	8	3	41	5	0	49	13	0	2	0	15	2	71	0	0	73	145
07:30	2	0	1	0	3	3	64	6	0	73	16	1	4	0	21	4	71	0	0	75	172
07:45	2	1	0	0	3	2	62	5	0	69	9	1	0	0	10	2	89	1	0	92	174
08:00	2	1	2	0	5	2	57	3	0	62	8	0	5	0	13	7	91	2	0	100	180
Total Volume	10	4	5	0	19	10	224	19	0	253	46	2	11	0	59	15	322	3	0	340	671
% App. Total	52.6	21.1	26.3	0		4	88.5	7.5	0		78	3.4	18.6	0		4.4	94.7	0.9	0		
PHF	.625	.500	.625	.000	.594	.833	.875	.792	.000	.866	.719	.500	.550	.000	.702	.536	.885	.375	.000	.850	.932

Peak Hour Analysis From 10:00 to 13:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 11:00																					
11:00	1	2	0	0	3	0	34	5	0	39	5	0	0	0	5	2	39	0	0	41	88
11:15	2	1	3	0	6	2	35	5	0	42	2	0	3	0	5	0	32	1	0	33	86
11:30	3	1	0	0	4	1	35	4	0	40	3	2	0	0	5	1	24	1	0	26	75
11:45	1	1	1	0	3	0	31	1	0	32	4	1	1	0	6	1	39	0	0	40	81
Total Volume	7	5	4	0	16	3	135	15	0	153	14	3	4	0	21	4	134	2	0	140	330
% App. Total	43.8	31.2	25	0		2	88.2	9.8	0		66.7	14.3	19	0		2.9	95.7	1.4	0		
PHF	.583	.625	.333	.000	.667	.375	.964	.750	.000	.911	.700	.375	.333	.000	.875	.500	.859	.500	.000	.854	.938

Peak Hour Analysis From 14:00 to 23:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 15:15																					
15:15	1	1	2	0	4	3	83	11	0	97	6	2	2	0	10	5	57	3	0	65	176
15:30	3	1	0	0	4	2	67	4	0	73	4	1	2	0	7	3	60	1	0	64	148
15:45	0	2	0	0	2	0	61	8	0	69	2	0	2	0	4	6	80	2	0	88	163
16:00	2	1	0	0	3	3	67	4	0	74	4	1	2	0	7	3	51	1	0	55	139
Total Volume	6	5	2	0	13	8	278	27	0	313	16	4	8	0	28	17	248	7	0	272	626
% App. Total	46.2	38.5	15.4	0		2.6	88.8	8.6	0		57.1	14.3	28.6	0		6.2	91.2	2.6	0		
PHF	.500	.625	.250	.000	.813	.667	.837	.614	.000	.807	.667	.500	1.00	.000	.700	.708	.775	.583	.000	.773	.889



Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

File Name : TMC 2271-t
 Site Code :
 Start Date : 11/09/2022
 Page No : 1

Weather: Cool & Cloudy
 CounCAM 2
 Study Conducted by: Kevin

Groups Printed- Trucks

Start Time	Monroe St NE Southbound					CSAH 4 (49th Ave NE) Westbound					Monroe St NE Northbound					CSAH 4 (49th Ave NE) Eastbound					Int. Total	
	Right	Thru	Left	UTrn	App. Total	Right	Thru	Left	UTrn	App. Total	Right	Thru	Left	UTrn	App. Total	Right	Thru	Left	UTrn	App. Total		
00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45	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
06:00	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	1
06:15	0	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	0	0	0	0	0	2
06:30	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	4	0	0	0	4	5
06:45	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2	0	0	0	2	3
Total	0	0	0	0	0	0	0	3	1	0	4	1	0	0	1	0	6	0	0	0	6	11
07:00	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	5	0	0	0	5	6
07:15	0	1	0	0	1	1	4	0	0	5	0	0	0	0	0	0	3	0	0	0	3	9
07:30	0	0	0	0	0	0	6	1	0	7	0	0	0	0	0	0	1	0	0	0	1	8
07:45	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	2
Total	0	2	0	0	2	1	10	1	0	12	1	0	0	0	1	0	10	0	0	0	10	25
08:00	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	1	7	0	0	0	8	11
08:15	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	0	1	2
08:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45	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	4	0	0	4	0	0	0	0	0	1	8	0	0	0	9	13
09:00	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1	0	0	0	1	2



Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

File Name : TMC 2271-t
 Site Code :
 Start Date : 11/09/2022
 Page No : 2

Weather: Cool & Cloudy
 CounCAM 2
 Study Conducted by: Kevin

Groups Printed- Trucks

Start Time	Monroe St NE Southbound					CSAH 4 (49th Ave NE) Westbound					Monroe St NE Northbound					CSAH 4 (49th Ave NE) Eastbound					Int. Total	
	Right	Thru	Left	UTrn	App. Total	Right	Thru	Left	UTrn	App. Total	Right	Thru	Left	UTrn	App. Total	Right	Thru	Left	UTrn	App. Total		
09:15	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
09:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:45	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	1	1	0	2	0	0	0	0	0	0	1	0	0	0	1	3
10:00	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
10:15	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1	0	0	0	0	0	0	2
10:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
10:45	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	3	0	0	0	0	3	4
Total	0	0	0	0	0	0	2	0	0	2	1	0	1	0	2	0	4	0	0	4	8	
11:00	1	0	0	0	1	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	2
11:15	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1	0	0	0	0	1	2
11:30	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2
11:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
Total	1	0	0	0	1	0	3	0	0	3	1	0	0	0	1	0	3	0	0	3	8	
12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
12:30	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1	0	1	0	0	0	1	3
12:45	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	1	0	0	1	1	0	0	0	1	0	2	0	0	2	4	
13:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:30	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1	0	1	0	0	0	1	3
13:45	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	3
Total	1	0	0	0	1	0	1	0	0	1	1	0	0	0	1	0	3	0	0	3	6	
14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	3	3	3
14:15	1	0	0	0	1	1	5	0	0	6	0	0	0	0	0	1	0	0	0	1	8	8
14:30	0	0	0	0	0	0	4	0	0	4	1	0	0	0	1	0	1	0	0	1	6	6
14:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	4	4	4
Total	1	0	0	0	1	1	9	0	0	10	1	0	0	0	1	1	7	1	0	9	21	
15:00	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	1	0	0	0	1	3	3
15:15	0	0	0	0	0	0	8	0	0	8	0	1	0	0	1	0	1	0	0	1	10	10
15:30	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1	0	0	0	1	2	2
15:45	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1	0	0	0	1	2	2
Total	0	0	0	0	0	0	12	0	0	12	0	1	0	0	1	0	4	0	0	4	17	
16:00	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	3	3
16:15	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1	0	0	0	1	2	2
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	1
16:45	0	0	0	0	0	0	3	0	0	3	1	0	0	0	1	0	0	0	0	0	4	4
Total	0	0	0	0	0	0	7	0	0	7	1	0	0	0	1	0	2	0	0	2	10	
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	1
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	2	2
17:30	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	1	0	0	0	1	3	3
17:45	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1	0	0	0	0	0	2	2
Total	0	0	0	0	0	1	2	0	0	3	1	0	0	0	1	0	4	0	0	4	8	
18:00	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	1
18:15	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	2	2
18:30	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1	1
18:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	1
Total	0	0	0	0	0	1	3	0	0	4	0	0	0	0	0	1	0	0	0	1	5	



Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

File Name : TMC 2271-t
 Site Code :
 Start Date : 11/09/2022
 Page No : 3

Weather: Cool & Cloudy
 CounCAM 2
 Study Conducted by: Kevin

Groups Printed- Trucks

Start Time	Monroe St NE Southbound					CSAH 4 (49th Ave NE) Westbound					Monroe St NE Northbound					CSAH 4 (49th Ave NE) Eastbound					Int. Total
	Right	Thru	Left	UTrn	App. Total	Right	Thru	Left	UTrn	App. Total	Right	Thru	Left	UTrn	App. Total	Right	Thru	Left	UTrn	App. Total	
19:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
19:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:30	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	2
19:45	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	2	0	2	0	0	0	0	0	0	1	0	0	0	3
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	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
20:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:45	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	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
21:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:45	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	0	0	0	0	0	0	0	0	0	1	0	0	0	1
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	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:45	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	3	2	0	0	5	4	59	5	0	68	9	1	1	0	11	2	57	1	0	60	144
Apprch %	60	40	0	0		5.9	86.8	7.4	0		81.8	9.1	9.1	0		3.3	95	1.7	0		
Total %	2.1	1.4	0	0	3.5	2.8	41	3.5	0	47.2	6.2	0.7	0.7	0	7.6	1.4	39.6	0.7	0	41.7	

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name:

Study Date : 11/09/2022

Signal Warrants - Summary

Major Street Approaches

Eastbound: CSAH 4 (49th Ave NE)

Number of Lanes : 1

Total Approach Volume: 2,845

Westbound: CSAH 4 (49th Ave NE)

Number of Lanes : 1

Total Approach Volume: 2,552

Minor Street Approaches

Northbound: Monroe St NE

Number of Lanes : 1

Total Approach Volume: 429

Southbound: Monroe St NE

Number of Lanes : 1

Total Approach Volume: 176

Warrant Summary (Urban Values Apply)

Warrant 1 - Eight Hour Vehicular Volumes.....Not Satisfied

Warrant 1A - Minimum Vehicular Volume.....Not Satisfied

Required volumes reached for 0 hours, 8 are needed

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

Required volumes reached for 0 hours, 8 are needed

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

Required 1A volumes reached for 0 hours, 8 are needed

Required 1B volumes reached for 0 hours, 8 are needed

Warrant 2 - Four Hour Volumes.....Not Satisfied

Number of hours (0) volumes exceed minimum < minimum required (4).

Warrant 3 - Peak Hour.....Not Satisfied

Warrant 3A - Peak Hour Delay.....Not Satisfied

Approach volumes on minor street don't exceed minimums for any one hour period. Delay data not evaluated.

Warrant 3B - Peak Hour Volumes.....Not Satisfied

Volumes do not exceed minimums for any 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:

Study Date : 11/09/2022

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

Only 0 one hour periods meet minimums.
Warrant is NOT met.

Site Data Required

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

Volume Requirements

Veh/Hr Major = **500**

Veh/Hr Minor = **150**

Time	Major Road				Total	Minor Road		Met?
	Major EB	+	Major WB	=		Minor NB	Minor SB	
	CSAH 4 (49th Ave NE)					Monroe St NE		
07:15 - 08:15	340	+	253	=	593	59	19	No
15:15 - 16:15	272	+	313	=	585	28	13	No
07:30 - 08:30	318	+	252	=	570	56	11	No
15:00 - 16:00	277	+	290	=	567	30	17	No
15:30 - 16:30	289	+	266	=	555	26	18	No
15:45 - 16:45	290	+	256	=	546	27	19	No
16:30 - 17:30	267	+	267	=	534	33	16	No
16:00 - 17:00	267	+	257	=	524	30	24	No
16:45 - 17:45	253	+	271	=	524	31	17	No
16:15 - 17:15	277	+	241	=	518	32	24	No
14:45 - 15:45	249	+	259	=	508	34	21	No
07:00 - 08:00	288	+	206	=	494	50	16	No
14:30 - 15:30	246	+	244	=	490	36	20	No
17:00 - 18:00	235	+	244	=	479	34	12	No
07:45 - 08:45	267	+	206	=	473	43	11	No
17:15 - 18:15	222	+	245	=	467	32	13	No
14:00 - 15:00	250	+	213	=	463	45	14	No
14:15 - 15:15	240	+	220	=	460	48	19	No
13:45 - 14:45	247	+	202	=	449	41	14	No
17:30 - 18:30	210	+	211	=	421	25	15	No
13:30 - 14:30	216	+	174	=	390	35	14	No
17:45 - 18:45	200	+	183	=	383	21	10	No
06:45 - 07:45	220	+	149	=	369	44	13	No
08:00 - 09:00	209	+	157	=	366	38	9	No
18:00 - 19:00	184		176		360	16	8	No

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name:

Study Date : 11/09/2022

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

Site Data Required

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

Volume Requirements

Veh/Hr Major = **750**

Veh/Hr Minor = **75**

Time	Major Road				Total	Minor Road		Met?
	Major EB	+	Major WB	=		Minor NB	Minor SB	
	CSAH 4 (49th Ave NE)					Monroe St NE		
07:15 - 08:15	340	+	253	=	593	59	19	No
15:15 - 16:15	272	+	313	=	585	28	13	No
07:30 - 08:30	318	+	252	=	570	56	11	No
15:00 - 16:00	277	+	290	=	567	30	17	No
15:30 - 16:30	289	+	266	=	555	26	18	No
15:45 - 16:45	290	+	256	=	546	27	19	No
16:30 - 17:30	267	+	267	=	534	33	16	No
16:00 - 17:00	267	+	257	=	524	30	24	No
16:45 - 17:45	253	+	271	=	524	31	17	No
16:15 - 17:15	277	+	241	=	518	32	24	No
14:45 - 15:45	249	+	259	=	508	34	21	No
07:00 - 08:00	288	+	206	=	494	50	16	No
14:30 - 15:30	246	+	244	=	490	36	20	No
17:00 - 18:00	235	+	244	=	479	34	12	No
07:45 - 08:45	267	+	206	=	473	43	11	No
17:15 - 18:15	222	+	245	=	467	32	13	No
14:00 - 15:00	250	+	213	=	463	45	14	No
14:15 - 15:15	240	+	220	=	460	48	19	No
13:45 - 14:45	247	+	202	=	449	41	14	No
17:30 - 18:30	210	+	211	=	421	25	15	No
13:30 - 14:30	216	+	174	=	390	35	14	No
17:45 - 18:45	200	+	183	=	383	21	10	No
06:45 - 07:45	220	+	149	=	369	44	13	No
08:00 - 09:00	209	+	157	=	366	38	9	No
18:00 - 19:00	184		176		360	16	8	No

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name:

Study Date : 11/09/2022

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

Only 0 hours meet 1A minimums.
Only 0 hours meet 1B minimums.
Warrant is NOT met.

Site Data Required

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

Volume Requirements

Warrant 1A 1B
Veh/Hr Major = **400 600**

Veh/Hr Minor = **120 60**

Major Road CSAH 4 (49th Ave NE)

Minor Road Monroe St NE

Time	Major EB	+	Major WB	=	Total	Minor NB	Minor SB	Met1A?
07:15 - 08:15	340	+	253	=	593	59	19	No
15:15 - 16:15	272	+	313	=	585	28	13	No
07:30 - 08:30	318	+	252	=	570	56	11	No
15:00 - 16:00	277	+	290	=	567	30	17	No
15:30 - 16:30	289	+	266	=	555	26	18	No
15:45 - 16:45	290	+	256	=	546	27	19	No
16:30 - 17:30	267	+	267	=	534	33	16	No
16:45 - 17:45	253	+	271	=	524	31	17	No
16:00 - 17:00	267	+	257	=	524	30	24	No
16:15 - 17:15	277	+	241	=	518	32	24	No
14:45 - 15:45	249	+	259	=	508	34	21	No
07:00 - 08:00	288		206		494	50	16	No

Time	Major EB	+	Major WB	=	Total	Minor NB	Minor SB	Met1B?
07:15 - 08:15	340	+	253	=	593	59	19	No
15:15 - 16:15	272	+	313	=	585	28	13	No
07:30 - 08:30	318	+	252	=	570	56	11	No
15:00 - 16:00	277	+	290	=	567	30	17	No
15:30 - 16:30	289	+	266	=	555	26	18	No
15:45 - 16:45	290	+	256	=	546	27	19	No
16:30 - 17:30	267	+	267	=	534	33	16	No
16:45 - 17:45	253	+	271	=	524	31	17	No
16:00 - 17:00	267	+	257	=	524	30	24	No
16:15 - 17:15	277	+	241	=	518	32	24	No
14:45 - 15:45	249	+	259	=	508	34	21	No
07:00 - 08:00	288		206		494	50	16	No

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name:

Study Date : 11/09/2022

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.

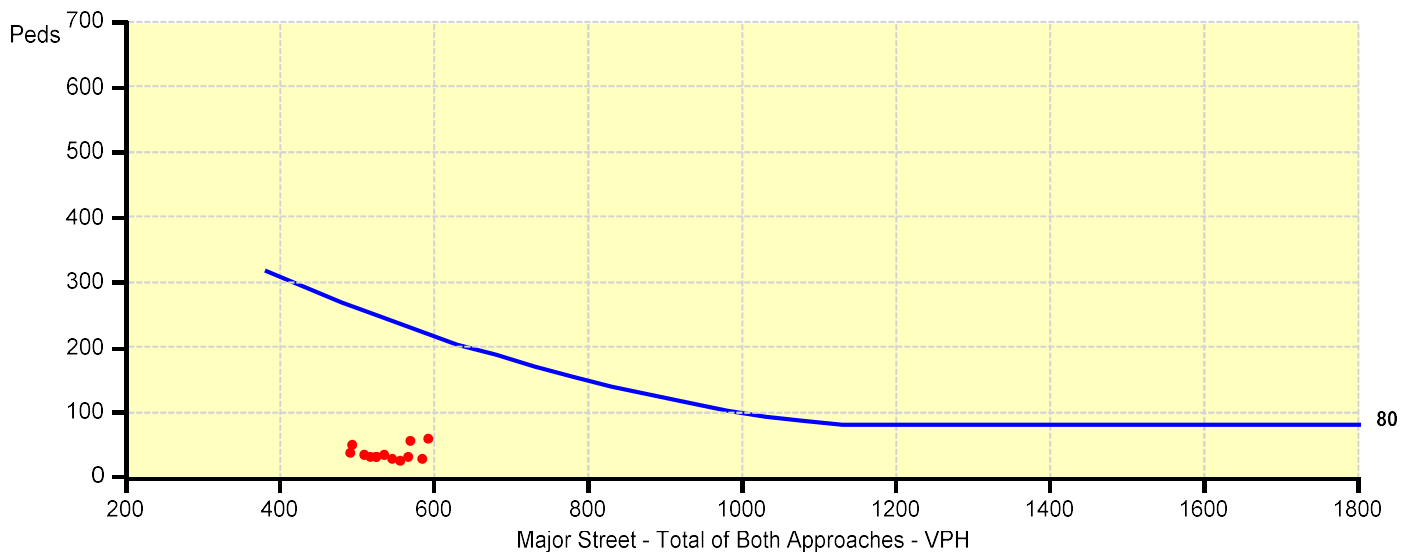
Summary

Only 0 one hour periods meet minimums.
Warrant is NOT met.

Site Data Required

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

Time	Major Road CSAH 4 (49th Ave NE)				Total	Minor Road Monroe St NE		Met?
	Major EB	+	Major WB	=		Minor NB	Minor SB	
07:15 - 08:15	340	+	253	=	593	59	19	No
15:15 - 16:15	272	+	313	=	585	28	13	No
07:30 - 08:30	318	+	252	=	570	56	11	No
15:00 - 16:00	277	+	290	=	567	30	17	No
15:30 - 16:30	289	+	266	=	555	26	18	No
15:45 - 16:45	290	+	256	=	546	27	19	No
16:30 - 17:30	267	+	267	=	534	33	16	No
16:00 - 17:00	267	+	257	=	524	30	24	No
16:45 - 17:45	253	+	271	=	524	31	17	No
16:15 - 17:15	277	+	241	=	518	32	24	No
14:45 - 15:45	249	+	259	=	508	34	21	No
07:00 - 08:00	288		206		494	50	16	No



ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name:

Study Date : 11/09/2022

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

Only 0 one hour periods meet minimums.
Warrant is NOT met.

Site Data Required

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

Time	Major Road CSAH 4 (49th Ave NE)				Total	Minor Road Monroe St NE		Met?
	Major EB	+	Major WB	=		Minor NB	Minor SB	
07:15 - 08:15	340	+	253	=	593	59	19	No
15:15 - 16:15	272	+	313	=	585	28	13	No
07:30 - 08:30	318	+	252	=	570	56	11	No
15:00 - 16:00	277	+	290	=	567	30	17	No
15:30 - 16:30	289	+	266	=	555	26	18	No
15:45 - 16:45	290	+	256	=	546	27	19	No
16:30 - 17:30	267	+	267	=	534	33	16	No
16:00 - 17:00	267	+	257	=	524	30	24	No
16:45 - 17:45	253	+	271	=	524	31	17	No
16:15 - 17:15	277	+	241	=	518	32	24	No
14:45 - 15:45	249	+	259	=	508	34	21	No
07:00 - 08:00	288		206		494	50	16	No

