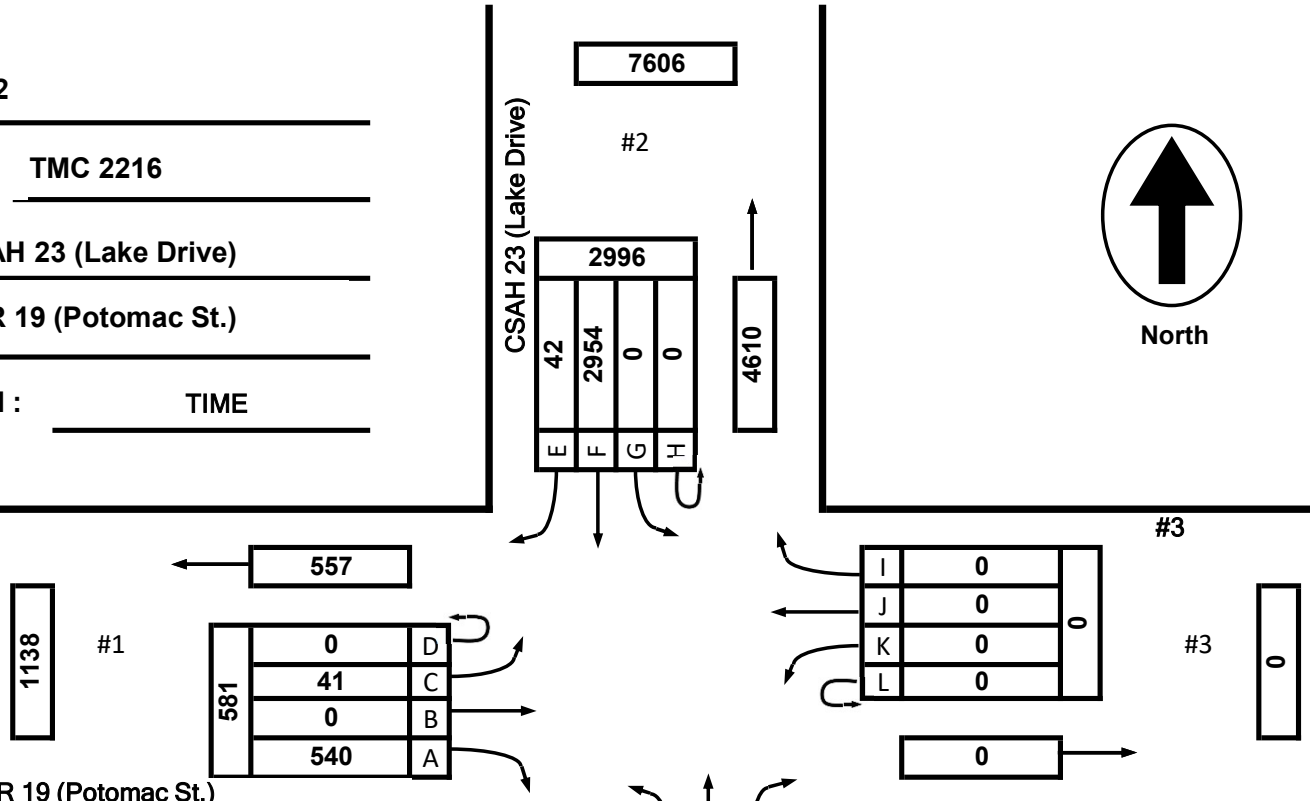
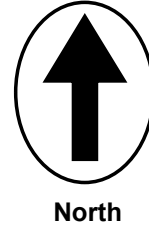


Date : 06/13/22

Count Number : TMC 2216

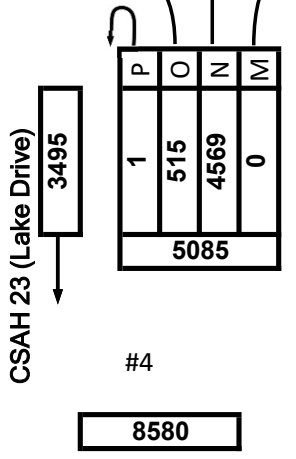
Location : CSAH 23 (Lake Drive)
@ CR 19 (Potomac St.)

Collection Period : _____ TIME _____



CR 19 (Potomac St.)

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



CSAH 23 (Lake Drive)

Anoka County Highway Department

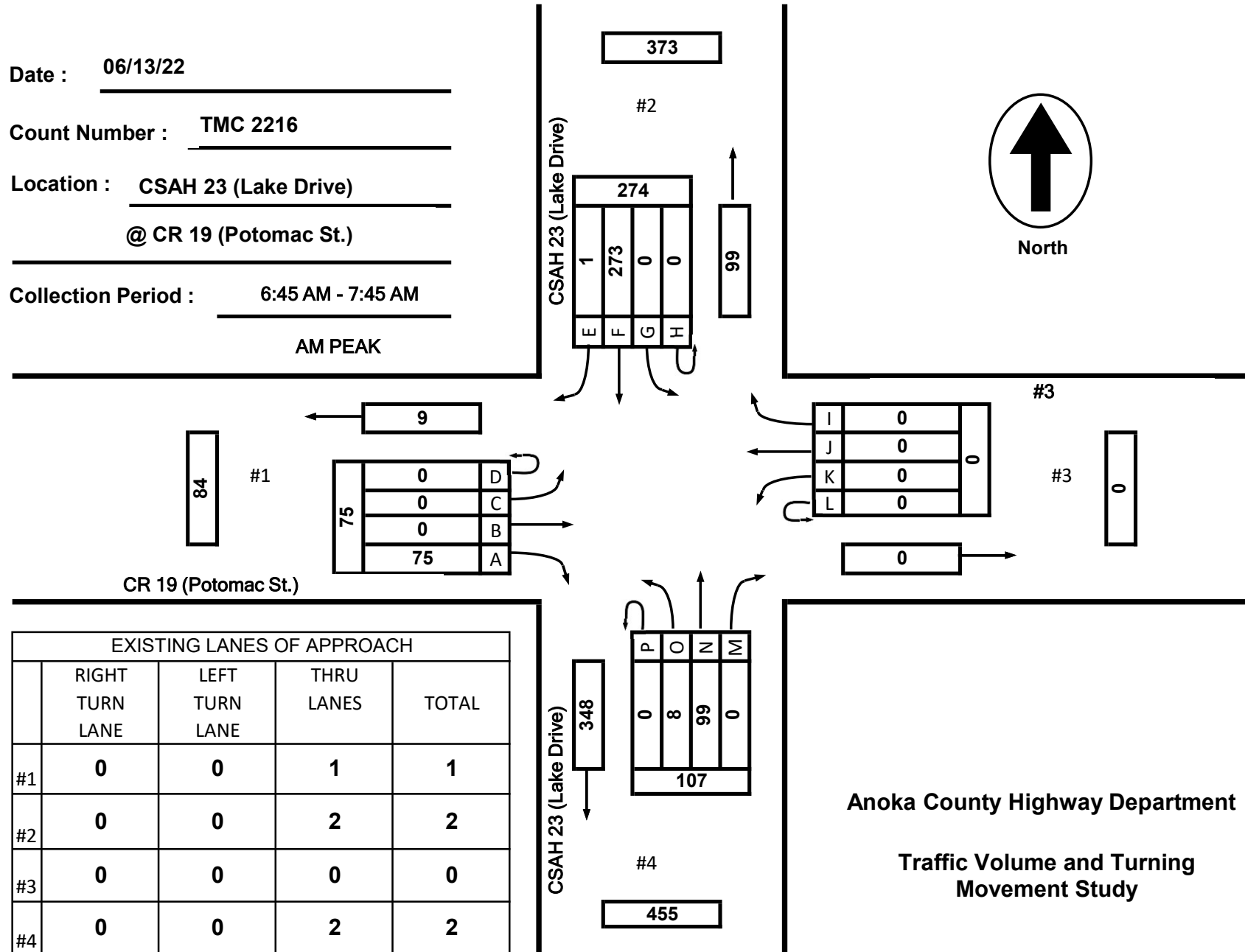
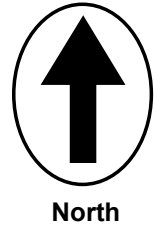
Traffic Volume and Turning Movement Study

Date : 06/13/22

Count Number : TMC 2216

Location : CSAH 23 (Lake Drive)
@ CR 19 (Potomac St.)

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



EXISTING LANES OF APPROACH

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

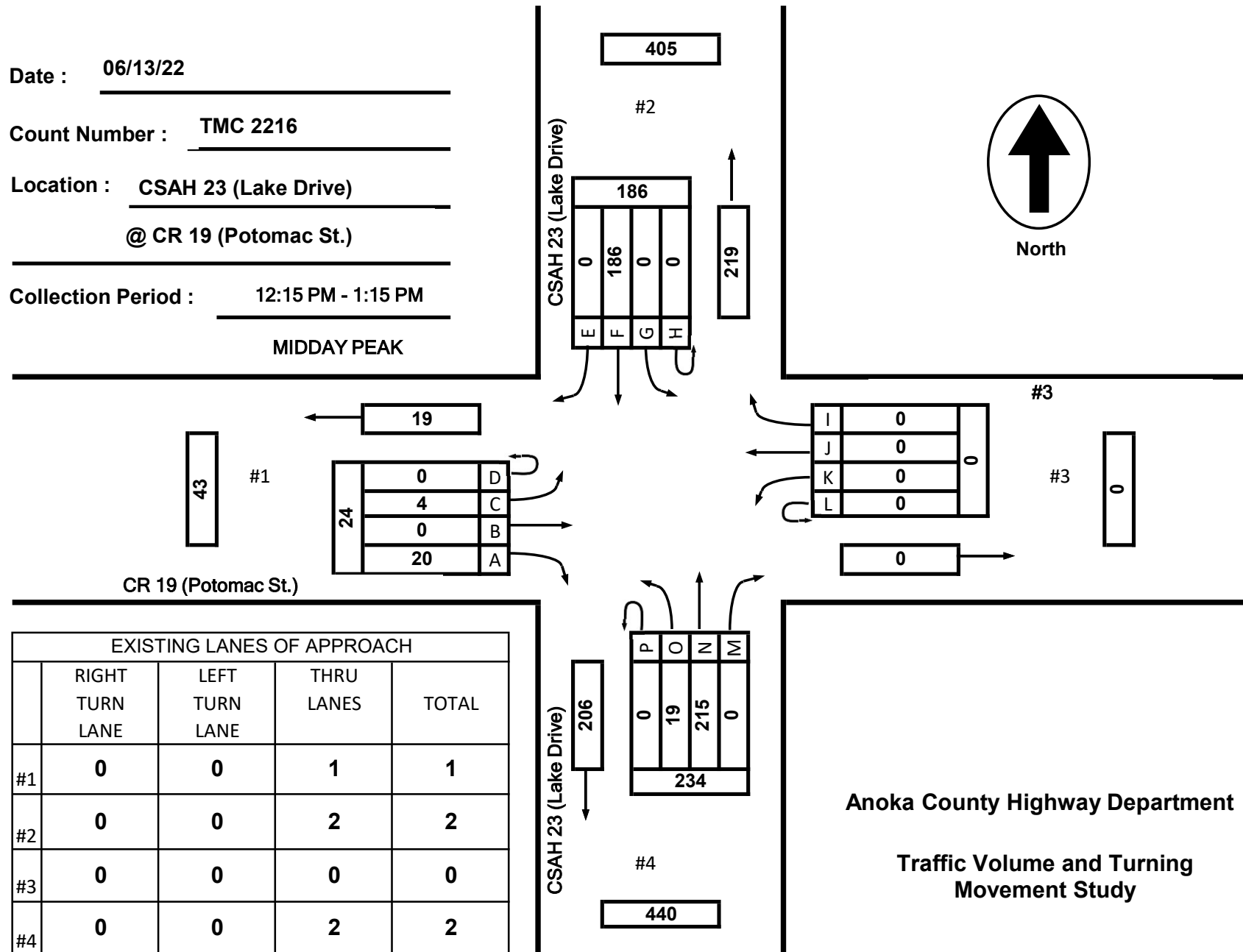
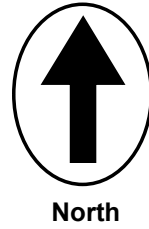
Anoka County Highway Department
Traffic Volume and Turning Movement Study

Date : 06/13/22

Count Number : TMC 2216

Location : CSAH 23 (Lake Drive)
@ CR 19 (Potomac St.)

Collection Period : 12:15 PM - 1:15 PM
MIDDAY PEAK



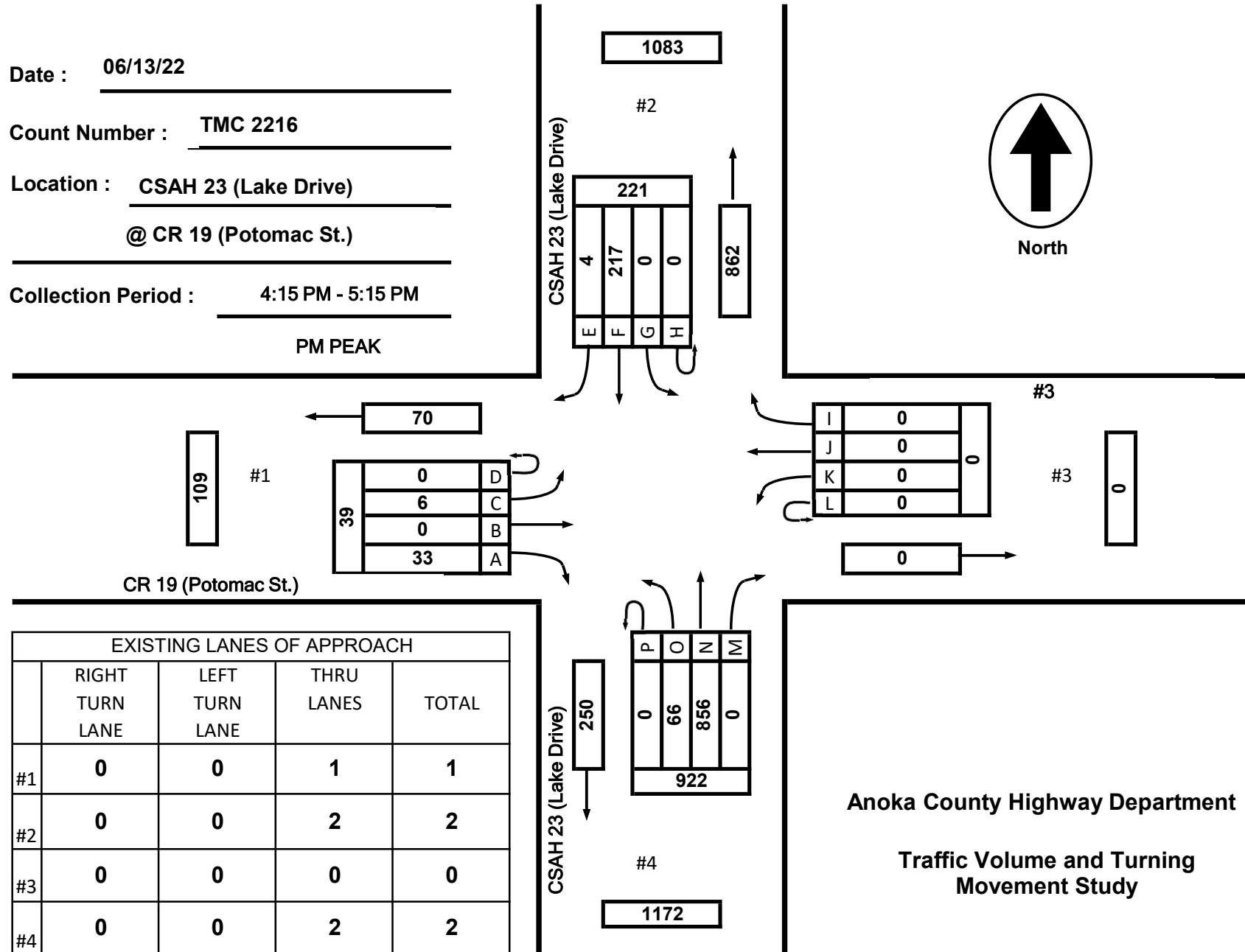
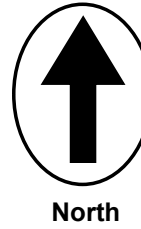
Anoka County Highway Department
Traffic Volume and Turning Movement Study

Date : 06/13/22

Count Number : TMC 2216

Location : CSAH 23 (Lake Drive)
@ CR 19 (Potomac St.)

Collection Period : 4:15 PM - 5:15 PM
PM PEAK



EXISTING LANES OF APPROACH

	RIGHT TURN LANE	LEFT TURN LANE	THRU LANES	TOTAL
#1	0	0	1	1
#2	0	0	2	2
#3	0	0	0	0
#4	0	0	2	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 2216
 Site Code :
 Start Date : 06/13/2022
 Page No : 1

Weather: Hot & Sunny
 CountCAM 2
 Study Conducted By: Sam

Groups Printed- Cars + - Trucks

Start Time	CSAH 23 (Lake Drive) Southbound						Westbound						CSAH 23 (Lake Drive) Northbound						CR 19 (Potomac St.) 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	3	0	0	0	3	0	0	0	0	0	0	0	4	2	0	0	0	6	0	0	0	0	0	0	0	0	9	9
00:15	0	6	0	0	0	6	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	8	8
00:30	0	2	0	0	0	2	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	3	3	
00:45	0	3	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	
Total	0	14	0	0	0	14	0	0	0	0	0	0	0	7	2	0	0	0	9	0	0	0	0	0	0	0	23	23	
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	1	1	
01:15	0	1	0	0	0	1	0	0	0	0	0	0	0	1	1	0	0	0	2	0	0	0	0	0	0	0	3	3	
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2	0	0	0	0	0	0	0	2	2	
01:45	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	
Total	0	2	0	0	0	2	0	0	0	0	0	0	0	3	2	0	0	0	5	0	0	0	0	0	0	0	7	7	
02:00	1	2	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	4	4	
02:15	0	1	0	0	0	1	0	0	0	0	0	0	0	1	1	0	0	0	2	0	0	0	0	0	0	0	3	3	
02:30	0	3	0	0	0	3	0	0	0	0	0	0	0	1	1	0	0	0	2	0	0	0	0	0	0	0	5	5	
02:45	0	3	0	0	0	3	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	4	4	
Total	1	9	0	0	0	10	0	0	0	0	0	0	0	3	2	0	0	0	5	1	0	0	0	0	1	16	16		
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	0	2	0	0	0	2	0	0	0	0	0	0	0	4	0	0	0	0	4	0	0	0	0	0	0	0	6	6	
03:30	0	3	0	0	0	3	0	0	0	0	0	0	0	3	2	0	0	0	5	2	0	0	0	0	2	0	10	10	
03:45	0	7	0	0	0	7	0	0	0	0	0	0	0	2	1	0	0	0	3	0	0	0	0	0	0	0	10	10	
Total	0	12	0	0	0	12	0	0	0	0	0	0	0	9	3	0	0	0	12	2	0	0	0	0	2	0	26	26	
04:00	0	9	0	0	0	9	0	0	0	0	0	0	0	3	0	0	0	0	3	1	0	0	0	0	1	0	13	13	
04:15	0	5	0	0	0	5	0	0	0	0	0	0	0	2	0	0	0	0	2	3	0	0	0	0	3	0	10	10	
04:30	0	9	0	0	0	9	0	0	0	0	0	0	0	3	0	0	0	0	3	3	0	1	0	0	4	0	16	16	
04:45	0	10	0	0	0	10	0	0	0	0	0	0	0	6	0	0	0	0	6	6	0	0	0	0	6	0	22	22	
Total	0	33	0	0	0	33	0	0	0	0	0	0	0	14	0	0	0	0	14	13	0	1	0	0	14	0	61	61	
05:00	0	32	0	0	0	32	0	0	0	0	0	0	0	3	1	0	0	0	4	6	0	1	0	0	7	0	43	43	
05:15	0	48	0	0	0	48	0	0	0	0	0	0	0	5	2	0	0	0	7	7	0	0	0	0	7	0	62	62	
05:30	0	49	0	0	0	49	0	0	0	0	0	0	0	8	1	0	0	0	9	16	0	0	0	0	16	0	74	74	
05:45	0	67	0	0	0	67	0	0	0	0	0	0	0	8	0	0	0	0	8	14	0	0	0	0	14	0	89	89	
Total	0	196	0	0	0	196	0	0	0	0	0	0	0	24	4	0	0	0	28	43	0	1	0	0	44	0	268	268	



Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

File Name : TMC 2216
 Site Code :
 Start Date : 06/13/2022
 Page No : 2

Weather: Hot & Sunny
 CountCAM 2
 Study Conducted By: Sam

Groups Printed- Cars + - Trucks

Start Time	CSAH 23 (Lake Drive) Southbound						Westbound						CSAH 23 (Lake Drive) Northbound						CR 19 (Potomac St.) 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	59	0	0	0	59	0	0	0	0	0	0	0	7	2	0	0	0	9	27	0	1	0	0	28	0	96	96
06:15	0	56	0	0	0	56	0	0	0	0	0	0	0	17	3	0	0	0	20	10	0	1	0	0	11	0	87	87
06:30	1	71	0	0	0	72	0	0	0	0	0	0	0	30	0	0	0	0	30	13	0	0	0	0	13	0	115	115
06:45	0	82	0	0	0	82	0	0	0	0	0	0	0	19	1	0	0	0	20	30	0	0	0	0	30	0	132	132
Total	1	268	0	0	0	269	0	0	0	0	0	0	0	73	6	0	0	79	80	0	2	0	0	82	0	430	430	
07:00	0	64	0	0	0	64	0	0	0	0	0	0	0	16	3	0	0	0	19	17	0	0	0	0	17	0	100	100
07:15	1	65	0	0	0	66	0	0	0	0	0	0	0	21	3	0	0	0	24	7	0	0	0	0	7	0	97	97
07:30	0	62	0	0	0	62	0	0	0	0	0	0	0	43	1	0	0	0	44	21	0	0	0	2	21	2	127	129
07:45	2	45	0	0	0	47	0	0	0	0	0	0	0	38	2	0	0	0	40	11	0	1	0	0	12	0	99	99
Total	3	236	0	0	0	239	0	0	0	0	0	0	0	118	9	0	0	127	56	0	1	0	2	57	2	423	425	
08:00	0	44	0	0	0	44	0	0	0	0	0	0	0	23	0	0	0	0	23	9	0	1	0	0	10	0	77	77
08:15	0	48	0	0	0	48	0	0	0	0	0	0	0	21	5	0	0	0	26	14	0	0	0	0	14	0	88	88
08:30	0	36	0	0	0	36	0	0	0	0	0	0	0	30	4	0	0	0	34	9	0	1	0	0	10	0	80	80
08:45	0	34	0	0	0	34	0	0	0	0	0	0	0	39	6	0	0	0	45	13	0	0	0	0	13	0	92	92
Total	0	162	0	0	0	162	0	0	0	0	0	0	0	113	15	0	0	128	45	0	2	0	0	47	0	337	337	
09:00	0	34	0	0	0	34	0	0	0	0	0	0	0	22	8	0	0	0	30	7	0	1	0	0	8	0	72	72
09:15	0	41	0	0	0	41	0	0	0	0	0	0	0	22	10	0	0	0	32	13	0	1	0	0	14	0	87	87
09:30	2	42	0	0	0	44	0	0	0	0	0	0	0	44	4	0	0	0	48	11	0	0	0	0	11	0	103	103
09:45	0	34	0	0	0	34	0	0	0	0	0	0	0	24	3	0	0	0	27	8	0	0	0	0	8	0	69	69
Total	2	151	0	0	0	153	0	0	0	0	0	0	0	112	25	0	0	137	39	0	2	0	0	41	0	331	331	
10:00	0	45	0	0	0	45	0	0	0	0	0	0	0	42	1	0	0	0	43	3	0	1	0	0	4	0	92	92
10:15	0	38	0	0	0	38	0	0	0	0	0	0	0	39	4	0	0	0	43	5	0	2	0	0	7	0	88	88
10:30	0	42	0	0	0	42	0	0	0	0	0	0	0	33	2	0	0	0	35	6	0	3	0	0	9	0	86	86
10:45	1	34	0	0	0	35	0	0	0	0	0	0	0	34	3	0	0	0	37	9	0	0	0	0	9	0	81	81
Total	1	159	0	0	0	160	0	0	0	0	0	0	0	148	10	0	0	158	23	0	6	0	0	29	0	347	347	
11:00	1	41	0	0	0	42	0	0	0	0	0	0	0	42	5	0	0	0	47	3	0	0	0	0	3	0	92	92
11:15	1	45	0	0	0	46	0	0	0	0	0	0	0	46	4	0	0	0	50	5	0	1	0	0	6	0	102	102
11:30	0	47	0	0	0	47	0	0	0	0	0	0	0	40	2	0	0	0	42	5	0	0	0	0	5	0	94	94
11:45	0	33	0	0	0	33	0	0	0	0	0	0	0	46	9	0	0	0	55	6	0	0	0	0	6	0	94	94
Total	2	166	0	0	0	168	0	0	0	0	0	0	0	174	20	0	0	194	19	0	1	0	0	20	0	382	382	
12:00	0	28	0	0	0	28	0	0	0	0	0	0	0	47	5	0	0	0	52	6	0	0	0	0	6	0	86	86
12:15	0	48	0	0	0	48	0	0	0	0	0	0	0	47	4	0	0	0	51	7	0	0	0	0	7	0	106	106
12:30	0	54	0	0	0	54	0	0	0	0	0	0	0	54	9	0	0	0	63	7	0	1	0	0	8	0	125	125



Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

File Name : TMC 2216
 Site Code :
 Start Date : 06/13/2022
 Page No : 3

Weather: Hot & Sunny
 CountCAM 2
 Study Conducted By: Sam

Groups Printed- Cars + - Trucks

Start Time	CSAH 23 (Lake Drive) Southbound						Westbound						CSAH 23 (Lake Drive) Northbound						CR 19 (Potomac St.) 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	38	0	0	0	38	0	0	0	0	0	0	0	64	2	0	0	66	4	0	3	0	0	7	0	111	111
Total	0	168	0	0	0	168	0	0	0	0	0	0	0	212	20	0	0	232	24	0	4	0	0	28	0	428	428
13:00	0	46	0	0	0	46	0	0	0	0	0	0	0	50	4	0	0	54	2	0	0	0	0	2	0	102	102
13:15	3	30	0	0	0	33	0	0	0	0	0	0	0	42	15	0	0	57	3	0	0	0	0	3	0	93	93
13:30	1	47	0	0	0	48	0	0	0	0	0	0	0	48	4	0	0	52	6	0	0	0	0	6	0	106	106
13:45	1	34	0	0	0	35	0	0	0	0	0	0	0	56	4	0	0	60	5	0	0	0	0	5	0	100	100
Total	5	157	0	0	0	162	0	0	0	0	0	0	0	196	27	0	0	223	16	0	0	0	0	16	0	401	401
14:00	2	41	0	0	0	43	0	0	0	0	0	0	0	63	5	0	0	68	10	0	0	0	0	10	0	121	121
14:15	1	57	0	0	0	58	0	0	0	0	0	0	0	64	12	0	0	76	9	0	0	0	0	9	0	143	143
14:30	0	35	0	0	0	35	0	0	0	0	0	0	0	70	7	0	0	77	9	0	0	0	0	9	0	121	121
14:45	0	29	0	0	0	29	0	0	0	0	0	0	0	73	13	0	0	86	6	0	1	0	0	7	0	122	122
Total	3	162	0	0	0	165	0	0	0	0	0	0	0	270	37	0	0	307	34	0	1	0	0	35	0	507	507
15:00	0	53	0	0	0	53	0	0	0	0	0	0	0	121	11	0	0	132	5	0	1	0	1	6	1	191	192
15:15	0	52	0	0	0	52	0	0	0	0	0	0	0	106	22	0	0	128	6	0	0	0	0	6	0	186	186
15:30	0	43	0	0	0	43	0	0	0	0	0	0	0	197	20	0	0	217	9	0	0	0	0	9	0	269	269
15:45	4	55	0	0	0	59	0	0	0	0	0	0	0	200	15	0	0	215	5	0	0	0	0	5	0	279	279
Total	4	203	0	0	0	207	0	0	0	0	0	0	0	624	68	0	0	692	25	0	1	0	1	26	1	925	926
16:00	2	52	0	0	0	54	0	0	0	0	0	0	0	212	16	0	0	228	5	0	1	0	0	6	0	288	288
16:15	1	54	0	0	0	55	0	0	0	0	0	0	0	206	13	0	0	219	9	0	3	0	0	12	0	286	286
16:30	1	47	0	0	0	48	0	0	0	0	0	0	0	196	25	0	0	221	3	0	3	0	0	6	0	275	275
16:45	2	55	0	0	0	57	0	0	0	0	0	0	0	216	12	0	0	228	11	0	0	0	0	11	0	296	296
Total	6	208	0	0	0	214	0	0	0	0	0	0	0	830	66	0	0	896	28	0	7	0	0	35	0	1145	1145
17:00	0	61	0	0	0	61	0	0	0	0	0	0	0	238	16	0	0	254	10	0	0	0	0	10	0	325	325
17:15	1	41	0	0	0	42	0	0	0	0	0	0	0	197	20	0	0	217	3	0	0	0	0	3	0	262	262
17:30	0	53	0	0	0	53	0	0	0	0	0	0	0	219	18	0	0	237	6	0	0	0	0	6	0	296	296
17:45	0	42	0	0	0	42	0	0	0	0	0	0	0	219	21	0	0	240	4	0	0	0	0	4	0	286	286
Total	1	197	0	0	0	198	0	0	0	0	0	0	0	873	75	0	0	948	23	0	0	0	0	23	0	1169	1169
18:00	4	33	0	0	0	37	0	0	0	0	0	0	0	118	17	0	0	135	3	0	1	0	0	4	0	176	176
18:15	1	39	0	0	0	40	0	0	0	0	0	0	0	124	8	0	0	132	8	0	1	0	0	9	0	181	181
18:30	0	33	0	0	0	33	0	0	0	0	0	0	0	65	12	0	0	77	6	0	2	0	4	8	4	118	122
18:45	0	22	0	0	0	22	0	0	0	0	0	0	0	63	7	0	0	70	3	0	0	0	0	3	0	95	95
Total	5	127	0	0	0	132	0	0	0	0	0	0	0	370	44	0	0	414	20	0	4	0	4	24	4	570	574



Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

File Name : TMC 2216
 Site Code :
 Start Date : 06/13/2022
 Page No : 4

Weather: Hot & Sunny
 CountCAM 2
 Study Conducted By: Sam

Groups Printed- Cars + - Trucks

Start Time	CSAH 23 (Lake Drive) Southbound						Westbound						CSAH 23 (Lake Drive) Northbound						CR 19 (Potomac St.) 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	22	0	0	0	22	0	0	0	0	0	0	0	59	4	0	0	63	1	0	2	0	0	3	0	88	88
19:15	1	28	0	0	0	29	0	0	0	0	0	0	0	36	9	0	0	45	6	0	0	0	1	6	1	80	81
19:30	0	33	0	0	0	33	0	0	0	0	0	0	0	44	10	0	0	54	9	0	0	0	0	9	0	96	96
19:45	0	28	0	0	0	28	0	0	0	0	0	0	0	31	4	0	0	35	7	0	0	0	0	7	0	70	70
Total	1	111	0	0	0	112	0	0	0	0	0	0	0	170	27	0	0	197	23	0	2	0	1	25	1	334	335
20:00	1	23	0	0	0	24	0	0	0	0	0	0	0	23	6	0	0	29	3	0	0	0	0	3	0	56	56
20:15	0	22	0	0	0	22	0	0	0	0	0	0	0	24	4	0	0	28	3	0	1	0	2	4	2	54	56
20:30	0	16	0	0	0	16	0	0	0	0	0	0	0	28	6	0	0	34	5	0	0	0	0	5	0	55	55
20:45	0	20	0	0	0	20	0	0	0	0	0	0	0	22	8	0	0	30	4	0	0	0	0	4	0	54	54
Total	1	81	0	0	0	82	0	0	0	0	0	0	0	97	24	0	0	121	15	0	1	0	2	16	2	219	221
21:00	1	14	0	0	0	15	0	0	0	0	0	0	0	28	10	0	0	38	0	0	0	0	0	0	0	53	53
21:15	2	14	0	0	0	16	0	0	0	0	0	0	0	14	0	0	0	14	1	0	1	0	0	2	0	32	32
21:30	0	19	0	0	0	19	0	0	0	0	0	0	0	20	7	0	0	27	3	0	1	0	0	4	0	50	50
21:45	0	12	0	0	0	12	0	0	0	0	0	0	0	13	0	0	0	13	4	0	0	0	0	4	0	29	29
Total	3	59	0	0	0	62	0	0	0	0	0	0	0	75	17	0	0	92	8	0	2	0	0	10	0	164	164
22:00	1	18	0	0	0	19	0	0	0	0	0	0	0	11	2	0	0	13	1	0	1	0	0	2	0	34	34
22:15	0	13	0	0	0	13	0	0	0	0	0	0	0	7	3	0	0	10	0	0	1	0	0	1	0	24	24
22:30	1	12	0	0	0	13	0	0	0	0	0	0	0	7	1	0	0	8	1	0	0	0	0	1	0	22	22
22:45	0	6	0	0	0	6	0	0	0	0	0	0	0	10	2	1	0	13	0	0	1	0	0	1	0	20	20
Total	2	49	0	0	0	51	0	0	0	0	0	0	0	35	8	1	0	44	2	0	3	0	0	5	0	100	100
23:00	1	4	0	0	0	5	0	0	0	0	0	0	0	6	1	0	0	7	0	0	0	0	0	0	0	12	12
23:15	0	7	0	0	0	7	0	0	0	0	0	0	0	5	0	0	0	5	1	0	0	0	0	1	0	13	13
23:30	0	9	0	0	0	9	0	0	0	0	0	0	0	5	2	0	0	7	0	0	0	0	0	0	0	16	16
23:45	0	4	0	0	0	4	0	0	0	0	0	0	0	3	1	0	0	4	0	0	0	0	0	0	0	8	8
Total	1	24	0	0	0	25	0	0	0	0	0	0	0	19	4	0	0	23	1	0	0	0	0	1	0	49	49
Grand Total	42	2954	0	0	0	2996	0	0	0	0	0	0	0	4569	515	1	0	5085	540	0	41	0	10	581	10	8662	8672
Apprch %	1.4	98.6	0	0	0		0	0	0	0	0	0	0	89.9	10.1	0		92.9	0	7.1	0						
Total %	0.5	34.1	0	0	0	34.6	0	0	0	0	0	0	0	52.7	5.9	0	58.7	6.2	0	0.5	0	6.7		0.1	99.9		
Cars +	33	2683	0	0	0	2716	0	0	0	0	0	0	0	4292	473	1	4766	495	0	38	0	543		0	0	8025	
% Cars +	78.6	90.8	0	0	0	90.7	0	0	0	0	0	0	0	93.9	91.8	100	93.7	91.7	0	92.7	0	100	91.9	0	0	92.5	
Trucks	9	271	0	0	0	280	0	0	0	0	0	0	0	277	42	0	319	45	0	3	0	48		0	0	647	
% Trucks	21.4	9.2	0	0	0	9.3	0	0	0	0	0	0	0	6.1	8.2	0	6.3	8.3	0	7.3	0	8.1		0	0	7.5	



Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

File Name : TMC 2216
 Site Code :
 Start Date : 06/13/2022
 Page No : 5

Weather: Hot & Sunny
 CountCAM 2
 Study Conducted By: Sam

Start Time	CSAH 23 (Lake Drive) Southbound					Westbound					CSAH 23 (Lake Drive) Northbound					CR 19 (Potomac St.) 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 06:45																					
06:45	0	82	0	0	82	0	0	0	0	0	0	19	1	0	20	30	0	0	0	30	132
07:00	0	64	0	0	64	0	0	0	0	0	0	16	3	0	19	17	0	0	0	17	100
07:15	1	65	0	0	66	0	0	0	0	0	0	21	3	0	24	7	0	0	0	7	97
07:30	0	62	0	0	62	0	0	0	0	0	0	43	1	0	44	21	0	0	0	21	127
Total Volume	1	273	0	0	274	0	0	0	0	0	0	99	8	0	107	75	0	0	0	75	456
% App. Total	0.4	99.6	0	0		0	0	0	0		0	92.5	7.5	0		100	0	0	0		
PHF	.250	.832	.000	.000	.835	.000	.000	.000	.000	.000	.000	.576	.667	.000	.608	.625	.000	.000	.000	.625	.864

Peak Hour Analysis From 10:00 to 13:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 12:15																					
12:15	0	48	0	0	48	0	0	0	0	0	0	47	4	0	51	7	0	0	0	7	106
12:30	0	54	0	0	54	0	0	0	0	0	0	54	9	0	63	7	0	1	0	8	125
12:45	0	38	0	0	38	0	0	0	0	0	0	64	2	0	66	4	0	3	0	7	111
13:00	0	46	0	0	46	0	0	0	0	0	0	50	4	0	54	2	0	0	0	2	102
Total Volume	0	186	0	0	186	0	0	0	0	0	0	215	19	0	234	20	0	4	0	24	444
% App. Total	0	100	0	0		0	0	0	0		0	91.9	8.1	0		83.3	0	16.7	0		
PHF	.000	.861	.000	.000	.861	.000	.000	.000	.000	.000	.000	.840	.528	.000	.886	.714	.000	.333	.000	.750	.888

Peak Hour Analysis From 14:00 to 23:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 16:15																					
16:15	1	54	0	0	55	0	0	0	0	0	0	206	13	0	219	9	0	3	0	12	286
16:30	1	47	0	0	48	0	0	0	0	0	0	196	25	0	221	3	0	3	0	6	275
16:45	2	55	0	0	57	0	0	0	0	0	0	216	12	0	228	11	0	0	0	11	296
17:00	0	61	0	0	61	0	0	0	0	0	0	238	16	0	254	10	0	0	0	10	325
Total Volume	4	217	0	0	221	0	0	0	0	0	0	856	66	0	922	33	0	6	0	39	1182
% App. Total	1.8	98.2	0	0		0	0	0	0		0	92.8	7.2	0		84.6	0	15.4	0		
PHF	.500	.889	.000	.000	.906	.000	.000	.000	.000	.000	.000	.899	.660	.000	.907	.750	.000	.500	.000	.813	.909



Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

File Name : TMC 2216
 Site Code :
 Start Date : 06/13/2022
 Page No : 1

Weather: Hot & Sunny
 CountCAM 2
 Study Conducted By: Sam

Groups Printed- Trucks

Start Time	CSAH 23 (Lake Drive) Southbound					Westbound					CSAH 23 (Lake Drive) Northbound					CR 19 (Potomac St.) 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	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
03:30	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1
03:45	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1
Total	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	3
04:00	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
04:15	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
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	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
05:00	0	1	0	0	1	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	2
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	3	0	0	3	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	4
05:45	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2
Total	0	5	0	0	5	0	0	0	0	0	0	1	2	0	3	0	0	0	0	0	0	8
06:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1
06:15	0	4	0	0	4	0	0	0	0	0	0	0	2	0	2	0	0	1	0	1	0	7
06:30	0	5	0	0	5	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	10
06:45	0	3	0	0	3	0	0	0	0	0	0	7	0	0	7	1	0	0	0	1	0	11
Total	0	12	0	0	12	0	0	0	0	0	0	12	3	0	15	1	0	1	0	2	0	29
07:00	0	10	0	0	10	0	0	0	0	0	0	1	1	0	2	1	0	0	0	1	0	13
07:15	1	2	0	0	3	0	0	0	0	0	0	5	1	0	6	0	0	0	0	0	0	9
07:30	0	7	0	0	7	0	0	0	0	0	0	6	1	0	7	3	0	0	0	3	0	17
07:45	0	6	0	0	6	0	0	0	0	0	0	11	2	0	13	0	0	0	0	0	0	19
Total	1	25	0	0	26	0	0	0	0	0	0	23	5	0	28	4	0	0	0	4	0	58
08:00	0	4	0	0	4	0	0	0	0	0	0	4	0	0	4	1	0	0	0	1	0	9
08:15	0	4	0	0	4	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	6
08:30	0	3	0	0	3	0	0	0	0	0	0	8	0	0	8	1	0	0	0	1	0	12
08:45	0	3	0	0	3	0	0	0	0	0	0	9	0	0	9	0	0	0	0	0	0	12
Total	0	14	0	0	14	0	0	0	0	0	0	23	0	0	23	2	0	0	0	2	0	39
09:00	0	1	0	0	1	0	0	0	0	0	0	4	3	0	7	1	0	0	0	1	0	9



Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

File Name : TMC 2216
 Site Code :
 Start Date : 06/13/2022
 Page No : 2

Weather: Hot & Sunny
 CountCAM 2
 Study Conducted By: Sam

Groups Printed- Trucks

Start Time	CSAH 23 (Lake Drive) Southbound					Westbound					CSAH 23 (Lake Drive) Northbound					CR 19 (Potomac St.) 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	7	0	0	7	0	0	0	0	0	0	3	1	0	4	3	0	0	0	3	14
09:30	1	3	0	0	4	0	0	0	0	0	0	7	1	0	8	2	0	0	0	2	14
09:45	0	9	0	0	9	0	0	0	0	0	0	1	1	0	2	2	0	0	0	2	13
Total	1	20	0	0	21	0	0	0	0	0	0	15	6	0	21	8	0	0	0	8	50
10:00	0	10	0	0	10	0	0	0	0	0	0	5	1	0	6	0	0	0	0	0	16
10:15	0	6	0	0	6	0	0	0	0	0	0	3	1	0	4	2	0	0	0	2	12
10:30	0	4	0	0	4	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	11
10:45	0	4	0	0	4	0	0	0	0	0	0	8	1	0	9	4	0	0	0	4	17
Total	0	24	0	0	24	0	0	0	0	0	0	23	3	0	26	6	0	0	0	6	56
11:00	1	4	0	0	5	0	0	0	0	0	0	5	1	0	6	0	0	0	0	0	11
11:15	0	7	0	0	7	0	0	0	0	0	0	10	1	0	11	1	0	0	0	1	19
11:30	0	2	0	0	2	0	0	0	0	0	0	4	0	0	4	1	0	0	0	1	7
11:45	0	5	0	0	5	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	11
Total	1	18	0	0	19	0	0	0	0	0	0	25	2	0	27	2	0	0	0	2	48
12:00	0	4	0	0	4	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	9
12:15	0	9	0	0	9	0	0	0	0	0	0	4	0	0	4	2	0	0	0	2	15
12:30	0	12	0	0	12	0	0	0	0	0	0	10	2	0	12	3	0	0	0	3	27
12:45	0	4	0	0	4	0	0	0	0	0	0	6	1	0	7	0	0	0	0	0	11
Total	0	29	0	0	29	0	0	0	0	0	0	25	3	0	28	5	0	0	0	5	62
13:00	0	6	0	0	6	0	0	0	0	0	0	3	2	0	5	1	0	0	0	1	12
13:15	2	4	0	0	6	0	0	0	0	0	0	7	0	0	7	1	0	0	0	1	14
13:30	1	10	0	0	11	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1	13
13:45	0	7	0	0	7	0	0	0	0	0	0	7	0	0	7	1	0	0	0	1	15
Total	3	27	0	0	30	0	0	0	0	0	0	18	2	0	20	4	0	0	0	4	54
14:00	0	5	0	0	5	0	0	0	0	0	0	8	1	0	9	2	0	0	0	2	16
14:15	0	7	0	0	7	0	0	0	0	0	0	2	1	0	3	0	0	0	0	0	10
14:30	0	3	0	0	3	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	9
14:45	0	4	0	0	4	0	0	0	0	0	0	2	1	0	3	1	0	0	0	1	8
Total	0	19	0	0	19	0	0	0	0	0	0	18	3	0	21	3	0	0	0	3	43
15:00	0	5	0	0	5	0	0	0	0	0	0	11	0	0	11	0	0	0	0	0	16
15:15	0	11	0	0	11	0	0	0	0	0	0	11	1	0	12	2	0	0	0	2	25
15:30	0	3	0	0	3	0	0	0	0	0	0	9	1	0	10	3	0	0	0	3	16
15:45	0	4	0	0	4	0	0	0	0	0	0	8	2	0	10	0	0	0	0	0	14
Total	0	23	0	0	23	0	0	0	0	0	0	39	4	0	43	5	0	0	0	5	71
16:00	0	6	0	0	6	0	0	0	0	0	0	6	0	0	6	0	0	1	0	1	13
16:15	0	11	0	0	11	0	0	0	0	0	0	10	0	0	10	0	0	0	0	0	21
16:30	1	4	0	0	5	0	0	0	0	0	0	3	3	0	6	1	0	0	0	1	12
16:45	1	6	0	0	7	0	0	0	0	0	0	6	0	0	6	1	0	0	0	1	14
Total	2	27	0	0	29	0	0	0	0	0	0	25	3	0	28	2	0	1	0	3	60
17:00	0	5	0	0	5	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	9
17:15	0	4	0	0	4	0	0	0	0	0	0	4	2	0	6	0	0	0	0	0	10
17:30	0	3	0	0	3	0	0	0	0	0	0	3	2	0	5	1	0	0	0	1	9
17:45	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	3
Total	0	13	0	0	13	0	0	0	0	0	0	13	4	0	17	1	0	0	0	1	31
18:00	0	1	0	0	1	0	0	0	0	0	0	5	1	0	6	1	0	0	0	1	8
18:15	0	1	0	0	1	0	0	0	0	0	0	5	0	0	5	1	0	0	0	1	7
18:30	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
18:45	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
Total	0	5	0	0	5	0	0	0	0	0	0	11	1	0	12	2	0	0	0	2	19



Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

File Name : TMC 2216
 Site Code :
 Start Date : 06/13/2022
 Page No : 3

Weather: Hot & Sunny
 CountCAM 2
 Study Conducted By: Sam

Groups Printed- Trucks

Start Time	CSAH 23 (Lake Drive) Southbound					Westbound					CSAH 23 (Lake Drive) Northbound					CR 19 (Potomac St.) 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	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0
19:15	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0
19:30	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0
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	2	0	0	2	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0
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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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	1	0	1	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0
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	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0
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	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0
22:00	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2
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	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2
23:00	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
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	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Total	1	2	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Grand Total	9	271	0	0	280	0	0	0	0	0	0	277	42	0	319	45	0	3	0	48	647
Apprch %	3.2	96.8	0	0		0	0	0	0		0	86.8	13.2	0		93.8	0	6.2	0		
Total %	1.4	41.9	0	0	43.3	0	0	0	0	0	0	42.8	6.5	0	49.3	7	0	0.5	0	7.4	

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name:

Study Date : 07/11/2022

Signal Warrants - Summary

Major Street Approaches

Northbound: CSAH 23 (Lake Drive)

Number of Lanes : 2+

Total Approach Volume: 5,085

Southbound: CSAH 23 (Lake Drive)

Number of Lanes :2+

Total Approach Volume: 2,996

Minor Street Approaches

Eastbound: CR 19 (Potomac St.)

Number of Lanes :1

Total Approach Volume: 581

Warrant Summary (Rural 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 : 07/11/2022

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 = **True**
Number of Major Lanes = **2 or more**
Number of Minor Lanes = **1**

Volume Requirements

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

Veh/Hr Minor = **105**

Time	Major Road				Total	Minor Road		Met?
	Major NB	+	Major SB	=		Minor EB	Minor WB	
	CSAH 23 (Lake Drive)					CR 19 (Potomac St.)		
16:45 - 17:45	936	+	213	=	1149	30	0	No
17:00 - 18:00	948	+	198	=	1146	23	0	No
16:15 - 17:15	922	+	221	=	1143	39	0	No
16:30 - 17:30	920	+	208	=	1128	30	0	No
16:00 - 17:00	896	+	214	=	1110	35	0	No
15:45 - 16:45	883	+	216	=	1099	29	0	No
15:30 - 16:30	879	+	211	=	1090	32	0	No
17:15 - 18:15	829	+	174	=	1003	17	0	No
15:15 - 16:15	788	+	208	=	996	26	0	No
17:30 - 18:30	744	+	172	=	916	23	0	No
15:00 - 16:00	692	+	207	=	899	26	0	No
14:45 - 15:45	563	+	177	=	740	28	0	No
17:45 - 18:45	584	+	152	=	736	25	0	No
14:30 - 15:30	423	+	169	=	592	28	0	No
18:00 - 19:00	414	+	132	=	546	24	0	No
14:15 - 15:15	371	+	175	=	546	31	0	No
14:00 - 15:00	307	+	165	=	472	35	0	No
18:15 - 19:15	342	+	117	=	459	23	0	No
13:45 - 14:45	281	+	171	=	452	33	0	No
13:30 - 14:30	256	+	184	=	440	30	0	No
12:15 - 13:15	234	+	186	=	420	24	0	No
12:30 - 13:30	240	+	171	=	411	20	0	No
12:00 - 13:00	232	+	168	=	400	28	0	No
13:15 - 14:15	237	+	159	=	396	24	0	No
12:45 - 13:45	229		165		394	18	0	No

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name:

Study Date : 07/11/2022

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 = **True**
Number of Major Lanes = **2 or more**
Number of Minor Lanes = **1**

Volume Requirements

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

Veh/Hr Minor = **53**

Time	Major Road				Total	Minor Road		Met?
	Major NB	+	Major SB	=		Minor EB	Minor WB	
	CSAH 23 (Lake Drive)					CR 19 (Potomac St.)		
16:45 - 17:45	936	+	213	=	1149	30	0	No
17:00 - 18:00	948	+	198	=	1146	23	0	No
16:15 - 17:15	922	+	221	=	1143	39	0	No
16:30 - 17:30	920	+	208	=	1128	30	0	No
16:00 - 17:00	896	+	214	=	1110	35	0	No
15:45 - 16:45	883	+	216	=	1099	29	0	No
15:30 - 16:30	879	+	211	=	1090	32	0	No
17:15 - 18:15	829	+	174	=	1003	17	0	No
15:15 - 16:15	788	+	208	=	996	26	0	No
17:30 - 18:30	744	+	172	=	916	23	0	No
15:00 - 16:00	692	+	207	=	899	26	0	No
14:45 - 15:45	563	+	177	=	740	28	0	No
17:45 - 18:45	584	+	152	=	736	25	0	No
14:30 - 15:30	423	+	169	=	592	28	0	No
18:00 - 19:00	414	+	132	=	546	24	0	No
14:15 - 15:15	371	+	175	=	546	31	0	No
14:00 - 15:00	307	+	165	=	472	35	0	No
18:15 - 19:15	342	+	117	=	459	23	0	No
13:45 - 14:45	281	+	171	=	452	33	0	No
13:30 - 14:30	256	+	184	=	440	30	0	No
12:15 - 13:15	234	+	186	=	420	24	0	No
12:30 - 13:30	240	+	171	=	411	20	0	No
12:00 - 13:00	232	+	168	=	400	28	0	No
13:15 - 14:15	237	+	159	=	396	24	0	No
12:45 - 13:45	229		165		394	18	0	No

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name:

Study Date : 07/11/2022

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 = **True**
Number of Major Lanes = **2 or more**
Number of Minor Lanes = **1**

Volume Requirements

Rural Factor of 70% applied
Warrant 1A 1B
Veh/Hr Major = **336 504**

Veh/Hr Minor = **84 42**

Major Road CSAH 23 (Lake Drive)

Minor Road CR 19 (Potomac St.)

Time	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	Met1A?
16:45 - 17:45	936	+	213	=	1149	30	0	No
17:00 - 18:00	948	+	198	=	1146	23	0	No
16:15 - 17:15	922	+	221	=	1143	39	0	No
16:30 - 17:30	920	+	208	=	1128	30	0	No
16:00 - 17:00	896	+	214	=	1110	35	0	No
15:45 - 16:45	883	+	216	=	1099	29	0	No
15:30 - 16:30	879	+	211	=	1090	32	0	No
17:15 - 18:15	829	+	174	=	1003	17	0	No
15:15 - 16:15	788	+	208	=	996	26	0	No
17:30 - 18:30	744	+	172	=	916	23	0	No
15:00 - 16:00	692	+	207	=	899	26	0	No
14:45 - 15:45	563		177		740	28	0	No

Time	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	Met1B?
16:45 - 17:45	936	+	213	=	1149	30	0	No
17:00 - 18:00	948	+	198	=	1146	23	0	No
16:15 - 17:15	922	+	221	=	1143	39	0	No
16:30 - 17:30	920	+	208	=	1128	30	0	No
16:00 - 17:00	896	+	214	=	1110	35	0	No
15:45 - 16:45	883	+	216	=	1099	29	0	No
15:30 - 16:30	879	+	211	=	1090	32	0	No
17:15 - 18:15	829	+	174	=	1003	17	0	No
15:15 - 16:15	788	+	208	=	996	26	0	No
17:30 - 18:30	744	+	172	=	916	23	0	No
15:00 - 16:00	692	+	207	=	899	26	0	No
14:45 - 15:45	563		177		740	28	0	No

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name:

Study Date : 07/11/2022

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.

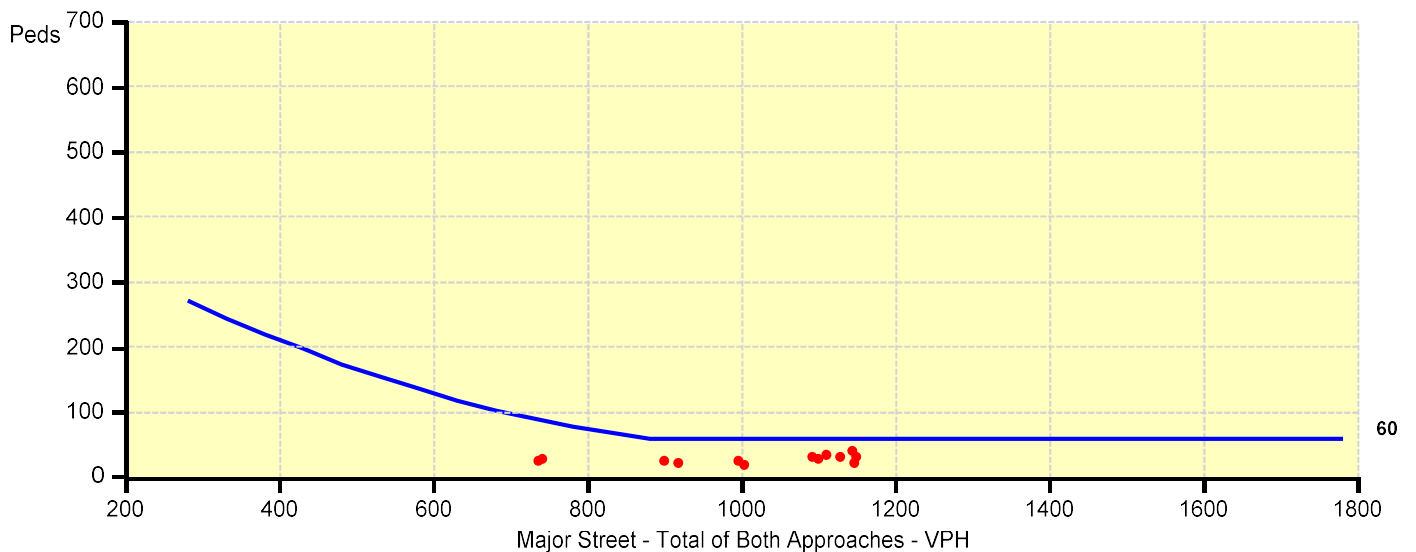
Summary

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

Site Data Required

Rural Settings Apply = **True**
 Number of Major Lanes = **2 or more**
 Number of Minor Lanes = **1**

Time	Major Road CSAH 23 (Lake Drive)					Minor Road CR 19 (Potomac St.)		Met?
	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	
16:45 - 17:45	936	+	213	=	1149	30	0	No
17:00 - 18:00	948	+	198	=	1146	23	0	No
16:15 - 17:15	922	+	221	=	1143	39	0	No
16:30 - 17:30	920	+	208	=	1128	30	0	No
16:00 - 17:00	896	+	214	=	1110	35	0	No
15:45 - 16:45	883	+	216	=	1099	29	0	No
15:30 - 16:30	879	+	211	=	1090	32	0	No
17:15 - 18:15	829	+	174	=	1003	17	0	No
15:15 - 16:15	788	+	208	=	996	26	0	No
17:30 - 18:30	744	+	172	=	916	23	0	No
15:00 - 16:00	692	+	207	=	899	26	0	No
14:45 - 15:45	563		177		740	28	0	No



ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name:

Study Date : 07/11/2022

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 = **True**
 Number of Major Lanes = **2 or more**
 Number of Minor Lanes = **1**

Time	Major Road CSAH 23 (Lake Drive)					Minor Road CR 19 (Potomac St.)		Met?
	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	
16:45 - 17:45	936	+	213	=	1149	30	0	No
17:00 - 18:00	948	+	198	=	1146	23	0	No
16:15 - 17:15	922	+	221	=	1143	39	0	No
16:30 - 17:30	920	+	208	=	1128	30	0	No
16:00 - 17:00	896	+	214	=	1110	35	0	No
15:45 - 16:45	883	+	216	=	1099	29	0	No
15:30 - 16:30	879	+	211	=	1090	32	0	No
17:15 - 18:15	829	+	174	=	1003	17	0	No
15:15 - 16:15	788	+	208	=	996	26	0	No
17:30 - 18:30	744	+	172	=	916	23	0	No
15:00 - 16:00	692	+	207	=	899	26	0	No
14:45 - 15:45	563		177		740	28	0	No

