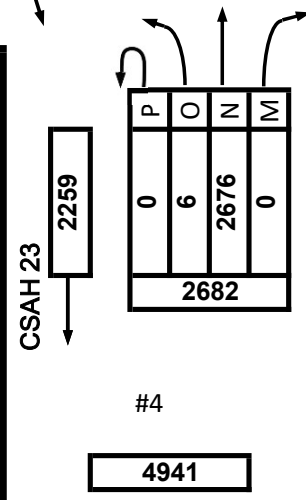
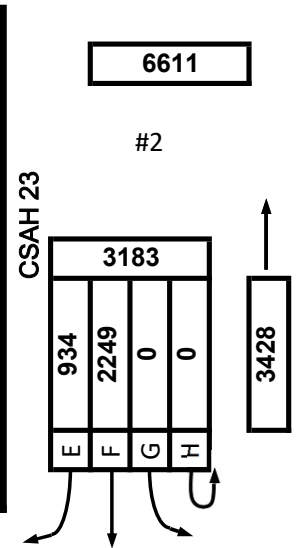
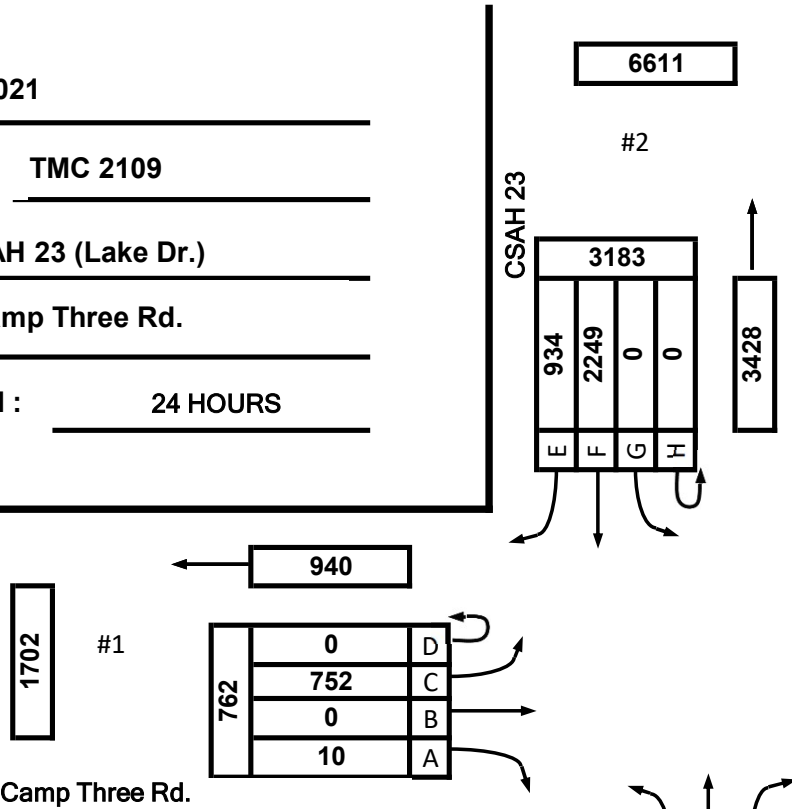


Date : 06/09/2021

Count Number : TMC 2109

Location : CSAH 23 (Lake Dr.)
@ Camp Three Rd.

Collection Period : 24 HOURS



Camp Three Rd.

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

Anoka County Highway Department

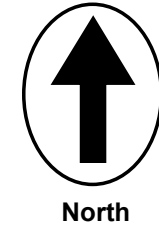
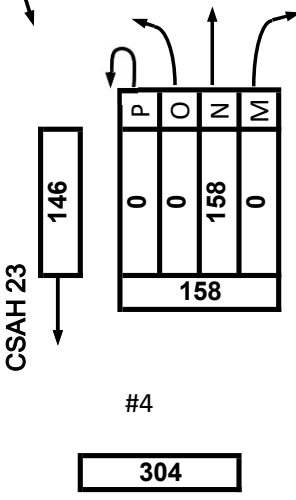
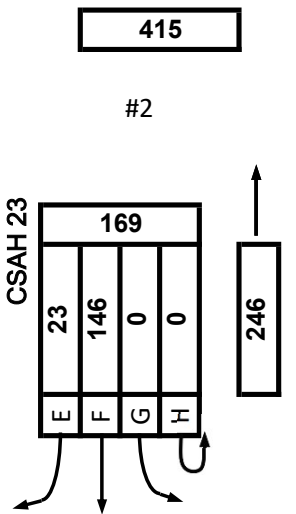
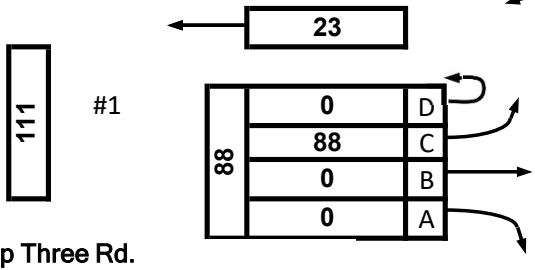
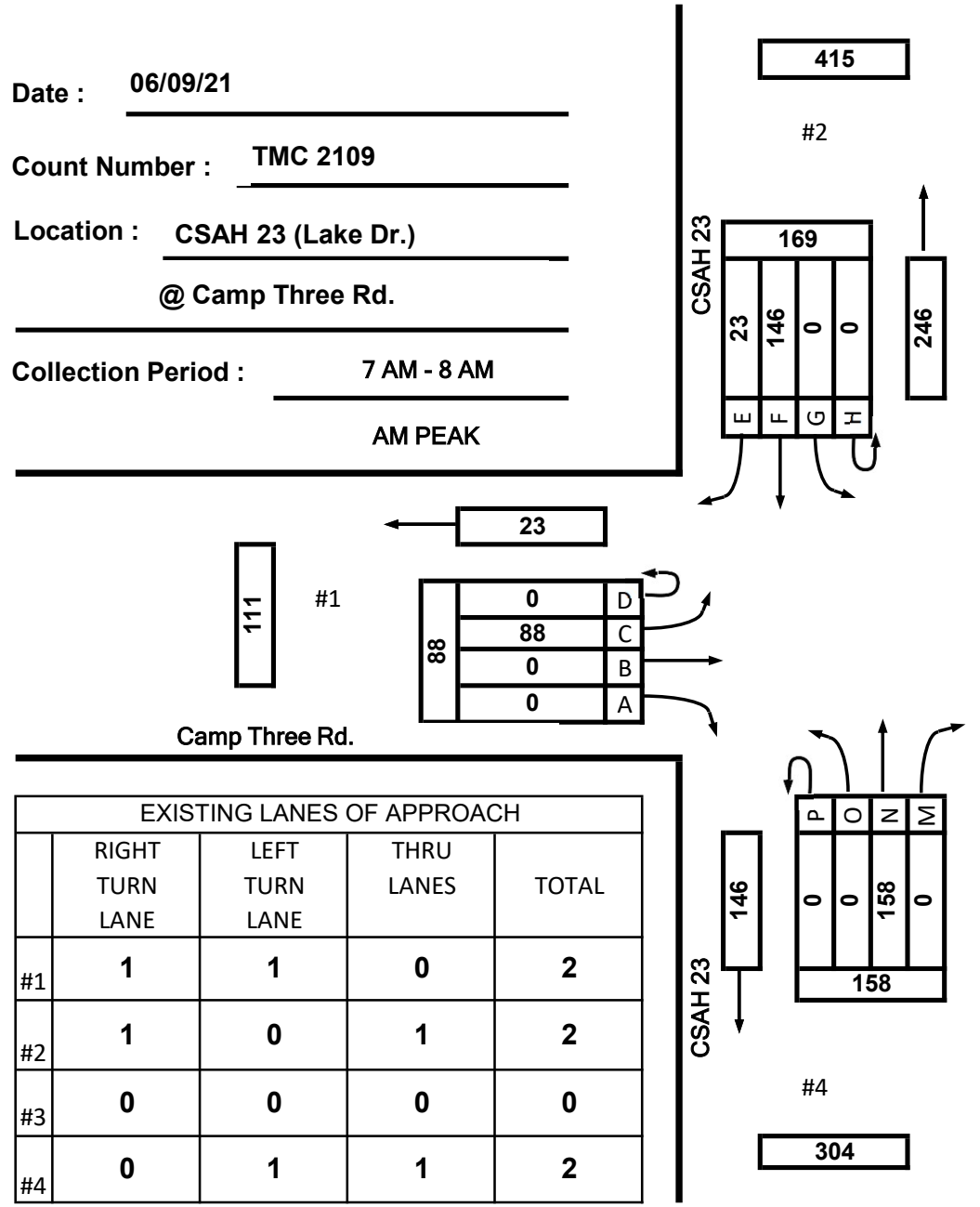
Traffic Volume and Turning Movement Study

Date : 06/09/21

Count Number : TMC 2109

Location : CSAH 23 (Lake Dr.)
@ Camp Three Rd.

Collection Period : 7 AM - 8 AM
AM PEAK



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

Anoka County Highway Department
 Traffic Volume and Turning
 Movement Study

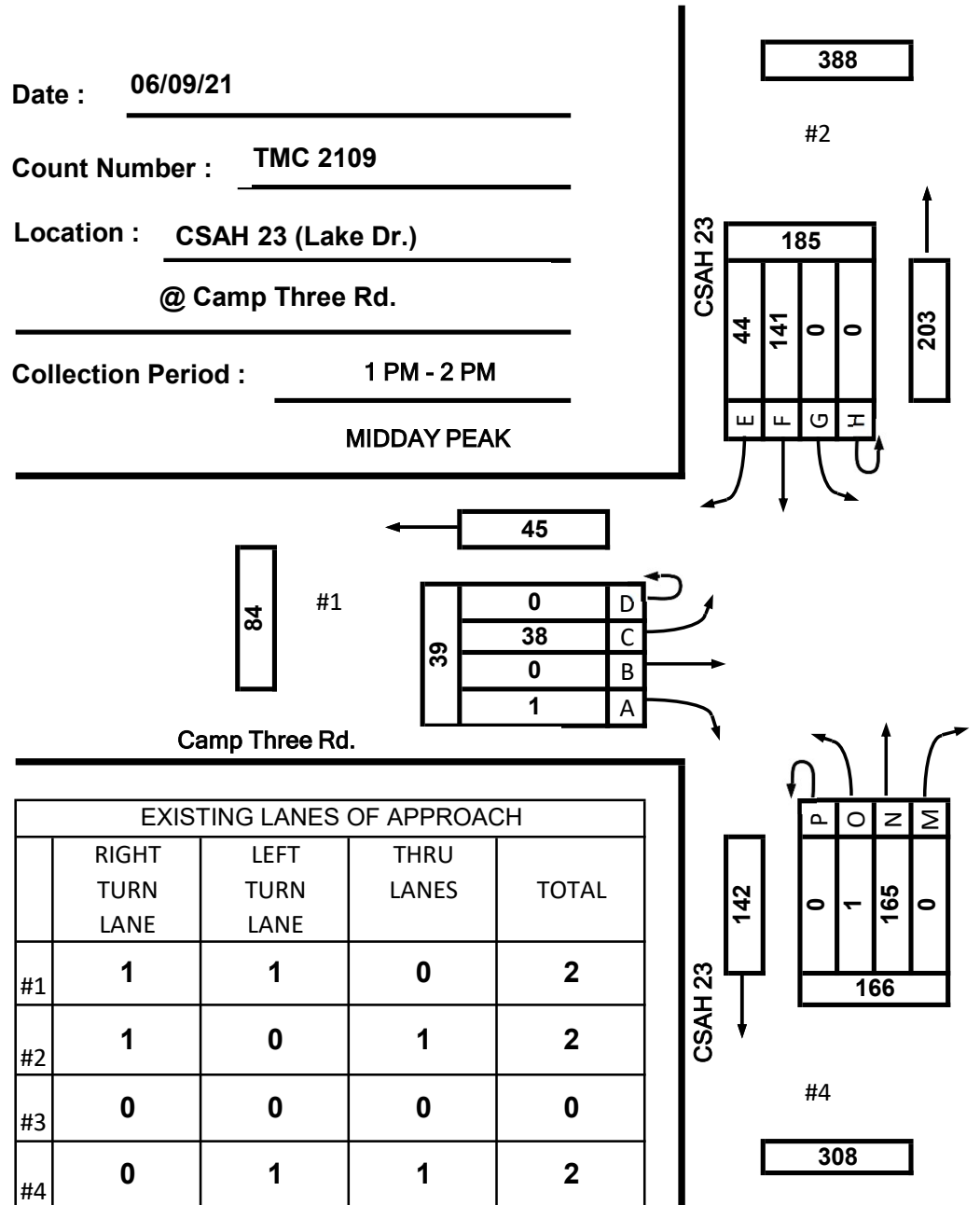
Date : 06/09/21

Count Number : TMC 2109

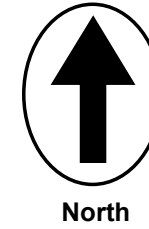
Location : CSAH 23 (Lake Dr.)
@ Camp Three Rd.

Collection Period : 1 PM - 2 PM

MIDDAY PEAK



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



Anoka County Highway Department

Traffic Volume and Turning Movement Study

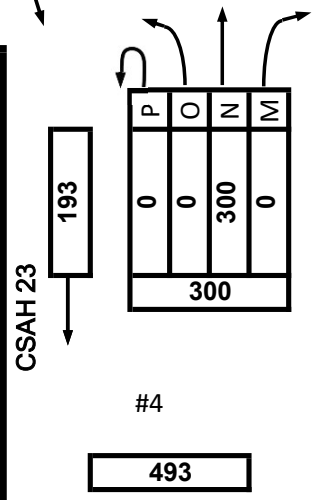
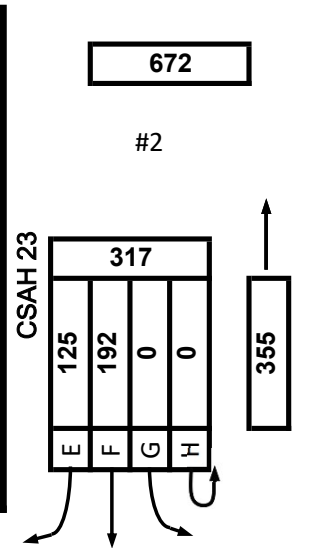
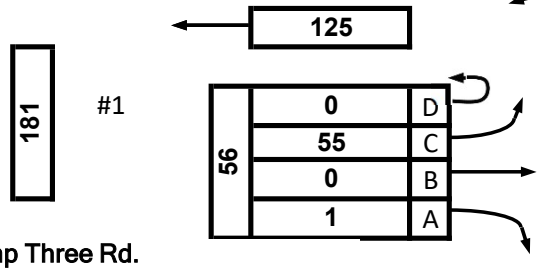
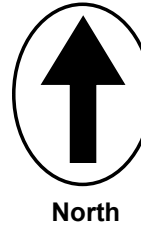
Date : 06/09/21

Count Number : TMC 2109

Location : CSAH 23 (Lake Dr.)
@ Camp Three Rd.

Collection Period : 3:45 PM - 4:45 PM

PM PEAK



Camp Three Rd.

CSAH 23

EXISTING LANES OF APPROACH				
	RIGHT TURN LANE	LEFT TURN LANE	THRU LANES	TOTAL
#1	1	1	0	2
#2	1	0	1	2
#3	0	0	0	0
#4	0	1	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 2109
 Site Code :
 Start Date : 06/09/2021
 Page No : 1

Weather: Hot & Cloudy
 CountCAM 2
 Study Conducted By: Will

Groups Printed- Cars + - Trucks

Start Time	CSAH 23 (Lake Dr.) Southbound						Westbound						CSAH 23 (Lake Dr.) Northbound						Camp Three Rd. 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	3	2	0	5	0	0	0	0	0	0	0	1	2	0	0	3	0	0	0	0	0	0	0	0	8	8
00:15	0	0	1	3	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4
00:30	0	0	2	4	0	6	0	0	0	0	0	0	0	0	2	0	0	2	0	2	0	0	0	2	0	0	10	10
00:45	0	0	1	0	0	1	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	3	3
Total	0	0	7	9	0	16	0	0	0	0	0	0	0	1	6	0	0	7	0	2	0	0	0	2	0	25	25	
01:00	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2	2
01:15	0	0	5	2	0	7	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	8	8
01:30	0	0	1	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
01:45	0	0	1	0	0	1	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	0	4	4
Total	0	0	8	2	0	10	0	0	0	0	0	0	0	0	3	1	0	4	0	1	0	0	0	1	0	15	15	
02:00	0	0	2	3	0	5	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	6	6
02:15	0	0	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
02:30	0	0	1	0	0	1	0	1	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	3	3
02:45	0	0	2	2	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4
Total	0	0	6	6	0	12	0	1	0	0	0	1	0	0	1	0	0	1	0	1	0	0	0	1	0	15	15	
03:00	0	0	4	1	0	5	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	7	7
03:15	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	4	4
03:30	0	0	1	1	0	2	0	2	0	0	0	2	0	0	1	0	0	1	0	2	0	0	0	2	0	0	7	7
03:45	0	0	3	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	0	8	4	0	12	0	2	0	0	0	2	0	0	5	0	0	5	0	2	0	0	0	2	0	21	21	
04:00	0	0	5	1	0	6	0	1	0	0	0	1	0	0	2	0	0	2	0	1	0	0	0	1	0	0	10	10
04:15	0	0	5	0	0	5	0	5	0	0	0	5	0	0	4	0	0	4	0	5	0	0	0	5	0	0	19	19
04:30	0	0	5	0	0	5	0	1	0	0	0	1	0	0	14	0	0	14	0	1	0	0	0	1	0	0	21	21
04:45	0	0	11	1	0	12	0	5	0	0	0	5	0	0	11	0	0	11	0	5	0	0	0	5	0	0	33	33
Total	0	0	26	2	0	28	0	12	0	0	0	12	0	0	31	0	0	31	0	12	0	0	0	12	0	83	83	
05:00	0	0	8	3	0	11	0	0	0	0	0	0	0	0	8	0	0	8	0	2	0	0	0	2	0	0	21	21
05:15	0	0	19	2	0	21	0	0	0	0	0	0	0	0	9	0	0	9	0	9	0	0	0	9	0	0	39	39
05:30	0	0	38	3	0	41	0	0	0	0	0	0	0	0	12	0	0	12	0	11	0	0	0	11	0	0	64	64
05:45	0	0	46	2	0	48	0	0	0	0	0	0	0	0	10	0	0	10	0	12	0	0	0	12	0	0	70	70
Total	0	0	111	10	0	121	0	0	0	0	0	0	0	0	39	0	0	39	0	34	0	0	0	34	0	194	194	



Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

File Name : TMC 2109
 Site Code :
 Start Date : 06/09/2021
 Page No : 2

Weather: Hot & Cloudy
 CountCAM 2
 Study Conducted By: Will

Groups Printed- Cars + - Trucks

Start Time	CSAH 23 (Lake Dr.) Southbound						Westbound						CSAH 23 (Lake Dr.) Northbound						Camp Three Rd. 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	0	37	1	0	38	0	0	0	0	0	0	0	0	15	0	0	15	0	14	0	0	0	14	0	67	67
06:15	0	0	42	4	0	46	0	0	0	0	0	0	0	0	32	0	0	32	0	10	0	0	0	10	0	88	88
06:30	0	0	46	4	0	50	0	0	0	0	0	0	0	0	24	0	0	24	0	19	0	0	0	19	0	93	93
06:45	0	0	34	3	0	37	0	0	0	0	0	0	0	0	37	0	0	37	0	25	0	0	0	25	0	99	99
Total	0	0	159	12	0	171	0	0	0	0	0	0	0	0	108	0	0	108	0	68	0	0	0	68	0	347	347
07:00	0	0	29	4	0	33	0	0	0	0	0	0	0	0	39	0	0	39	0	16	0	0	0	16	0	88	88
07:15	0	0	41	7	0	48	0	0	0	0	0	0	0	0	34	0	0	34	0	31	0	0	0	31	0	113	113
07:30	0	0	37	5	0	42	0	0	0	0	0	0	0	0	50	0	0	50	0	19	0	0	0	19	0	111	111
07:45	0	0	39	7	0	46	0	0	0	0	0	0	0	0	35	0	0	35	0	22	0	0	0	22	0	103	103
Total	0	0	146	23	0	169	0	0	0	0	0	0	0	0	158	0	0	158	0	88	0	0	0	88	0	415	415
08:00	0	0	35	6	0	41	0	0	0	0	0	0	0	0	25	0	0	25	0	19	0	1	0	20	0	86	86
08:15	0	0	31	14	0	45	0	0	0	0	0	0	0	0	33	0	0	33	0	12	0	0	0	12	0	90	90
08:30	0	0	35	11	0	46	0	0	0	0	0	0	0	0	30	0	0	30	0	12	0	0	0	12	0	88	88
08:45	0	0	35	9	0	44	0	0	0	0	0	0	0	0	26	0	0	26	0	9	0	1	0	10	0	80	80
Total	0	0	136	40	0	176	0	0	0	0	0	0	0	0	114	0	0	114	0	52	0	2	0	54	0	344	344
09:00	0	0	26	6	0	32	0	0	0	0	0	0	0	0	55	0	0	55	0	11	0	0	0	11	0	98	98
09:15	0	0	29	6	0	35	0	0	0	0	0	0	0	0	33	0	0	33	0	9	0	1	0	10	0	78	78
09:30	0	0	25	8	0	33	0	0	0	0	0	0	0	0	23	0	0	23	0	14	0	0	0	14	0	70	70
09:45	0	0	23	7	0	30	0	0	0	0	0	0	0	0	33	0	0	33	0	11	0	0	0	11	0	74	74
Total	0	0	103	27	0	130	0	0	0	0	0	0	0	0	144	0	0	144	0	45	0	1	0	46	0	320	320
10:00	0	0	28	4	0	32	0	0	0	0	0	0	0	0	45	0	0	45	0	10	0	0	0	10	0	87	87
10:15	0	0	29	9	0	38	0	0	0	0	0	0	0	0	41	0	0	41	0	6	0	1	0	7	0	86	86
10:30	0	0	19	9	0	28	0	0	0	0	0	0	0	0	22	0	0	22	0	7	0	0	0	7	0	57	57
10:45	0	0	22	9	0	31	0	0	0	0	0	0	0	0	31	0	0	31	0	7	0	0	0	7	0	69	69
Total	0	0	98	31	0	129	0	0	0	0	0	0	0	0	139	0	0	139	0	30	0	1	0	31	0	299	299
11:00	0	0	39	12	0	51	0	0	0	0	0	0	0	0	39	0	0	39	0	12	0	0	0	12	0	102	102
11:15	0	0	36	12	0	48	0	0	0	0	0	0	0	0	37	0	0	37	0	8	0	0	0	8	0	93	93
11:30	0	0	26	10	0	36	0	0	0	0	0	0	0	0	33	0	0	33	0	7	0	0	0	7	0	76	76
11:45	0	0	35	11	0	46	0	0	0	0	0	0	0	0	35	0	0	35	0	3	0	0	0	3	0	84	84
Total	0	0	136	45	0	181	0	0	0	0	0	0	0	0	144	0	0	144	0	30	0	0	0	30	0	355	355
12:00	0	0	27	15	0	42	0	0	0	0	0	0	0	0	46	0	0	46	0	7	0	0	0	7	0	95	95



Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

File Name : TMC 2109
 Site Code :
 Start Date : 06/09/2021
 Page No : 3

Weather: Hot & Cloudy
 CountCAM 2
 Study Conducted By: Will

Groups Printed- Cars + - Trucks

Start Time	CSAH 23 (Lake Dr.) Southbound						Westbound						CSAH 23 (Lake Dr.) Northbound						Camp Three Rd. 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	0	29	13	0	42	0	0	0	0	0	0	0	0	31	0	0	31	0	4	0	0	0	4	0	77	77
12:30	0	0	32	11	0	43	0	0	0	0	0	0	0	0	38	0	0	38	0	8	0	0	0	8	0	89	89
12:45	0	0	32	11	0	43	0	0	0	0	0	0	0	0	39	0	0	39	0	6	0	0	0	6	0	88	88
Total	0	0	120	50	0	170	0	0	0	0	0	0	0	0	154	0	0	154	0	25	0	0	0	25	0	349	349
13:00	0	0	37	12	0	49	0	0	0	0	0	0	0	0	41	0	0	41	0	6	0	0	0	6	0	96	96
13:15	0	0	37	13	0	50	0	0	0	0	0	0	0	1	37	0	0	38	0	11	0	1	0	12	0	100	100
13:30	0	0	26	10	0	36	0	0	0	0	0	0	0	0	42	0	0	42	0	11	0	0	0	11	0	89	89
13:45	0	0	41	9	0	50	0	0	0	0	0	0	0	0	45	0	0	45	0	10	0	0	0	10	0	105	105
Total	0	0	141	44	0	185	0	0	0	0	0	0	0	1	165	0	0	166	0	38	0	1	0	39	0	390	390
14:00	0	0	30	7	0	37	0	0	0	0	0	0	0	0	36	0	0	36	0	6	0	0	0	6	0	79	79
14:15	0	0	46	12	0	58	0	0	0	0	0	0	0	0	42	0	0	42	0	5	0	0	0	5	0	105	105
14:30	0	0	38	21	0	59	0	0	0	0	0	0	0	1	45	0	0	46	0	15	0	0	0	15	0	120	120
14:45	0	0	43	29	0	72	0	0	0	0	0	0	0	0	54	0	0	54	0	9	0	0	0	9	0	135	135
Total	0	0	157	69	0	226	0	0	0	0	0	0	0	1	177	0	0	178	0	35	0	0	0	35	0	439	439
15:00	0	0	35	20	0	55	0	0	0	0	0	0	0	1	53	0	0	54	0	8	0	0	0	8	0	117	117
15:15	0	0	58	22	0	80	0	0	0	0	0	0	0	0	56	0	0	56	0	16	0	1	0	17	0	153	153
15:30	0	0	35	23	0	58	0	0	0	0	0	0	0	0	65	0	0	65	0	11	0	0	0	11	0	134	134
15:45	0	0	42	31	0	73	0	0	0	0	0	0	0	0	81	0	0	81	0	19	0	1	0	20	0	174	174
Total	0	0	170	96	0	266	0	0	0	0	0	0	0	1	255	0	0	256	0	54	0	2	0	56	0	578	578
16:00	0	0	52	32	0	84	0	0	0	0	0	0	0	0	80	0	0	80	0	12	0	0	0	12	0	176	176
16:15	0	0	53	30	0	83	0	0	0	0	0	0	0	0	67	0	0	67	0	12	0	0	0	12	0	162	162
16:30	0	0	45	32	0	77	0	0	0	0	0	0	0	0	72	0	0	72	0	12	0	0	0	12	0	161	161
16:45	0	0	35	39	0	74	0	0	0	0	0	0	0	0	85	0	0	85	0	14	0	0	0	14	0	173	173
Total	0	0	185	133	0	318	0	0	0	0	0	0	0	0	304	0	0	304	0	50	0	0	0	50	0	672	672
17:00	0	0	44	25	0	69	0	0	0	0	0	0	0	0	53	0	0	53	0	4	0	0	0	4	0	126	126
17:15	0	0	41	30	0	71	0	0	0	0	0	0	0	0	56	0	0	56	0	11	0	0	0	11	0	138	138
17:30	0	0	40	31	0	71	0	0	0	0	0	0	0	0	71	0	0	71	0	9	0	0	0	9	0	151	151
17:45	0	0	38	35	0	73	0	0	0	0	0	0	0	0	63	0	0	63	0	15	0	0	0	15	0	151	151
Total	0	0	163	121	0	284	0	0	0	0	0	0	0	0	243	0	0	243	0	39	0	0	0	39	0	566	566
18:00	0	0	37	15	0	52	0	0	0	0	0	0	0	0	42	0	0	42	0	13	0	1	0	14	0	108	108
18:15	0	0	26	13	0	39	0	0	0	0	0	0	0	0	39	0	0	39	0	11	0	0	0	11	0	89	89



Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

File Name : TMC 2109
 Site Code :
 Start Date : 06/09/2021
 Page No : 4

Weather: Hot & Cloudy
 CountCAM 2
 Study Conducted By: Will

Groups Printed- Cars + - Trucks

Start Time	CSAH 23 (Lake Dr.) Southbound						Westbound						CSAH 23 (Lake Dr.) Northbound						Camp Three Rd. 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	0	19	25	0	44	0	0	0	0	0	0	0	0	56	0	0	56	0	6	0	0	0	6	0	106	106
18:45	0	0	17	22	0	39	0	0	0	0	0	0	0	0	26	0	0	26	0	6	0	0	0	6	0	71	71
Total	0	0	99	75	0	174	0	0	0	0	0	0	0	0	163	0	0	163	0	36	0	1	0	37	0	374	374
19:00	0	0	19	11	0	30	0	0	0	0	0	0	0	1	29	0	0	30	0	10	0	0	0	10	0	70	70
19:15	0	0	12	9	0	21	0	0	0	0	0	0	0	0	23	0	0	23	0	10	0	0	0	10	0	54	54
19:30	0	0	19	14	0	33	0	0	0	0	0	0	0	1	19	0	0	20	0	7	0	0	0	7	0	60	60
19:45	0	0	12	14	0	26	0	0	0	0	0	0	0	0	27	0	0	27	0	12	0	0	0	12	0	65	65
Total	0	0	62	48	0	110	0	0	0	0	0	0	0	2	98	0	0	100	0	39	0	0	0	39	0	249	249
20:00	0	0	12	8	0	20	0	0	0	0	0	0	0	0	38	0	0	38	0	8	0	0	0	8	0	66	66
20:15	0	0	20	17	0	37	0	0	0	0	0	0	0	0	28	0	0	28	0	17	0	1	0	18	0	83	83
20:30	0	0	21	11	0	32	0	0	0	0	0	0	0	0	18	0	0	18	0	9	0	0	0	9	0	59	59
20:45	0	0	21	7	0	28	0	0	0	0	0	0	0	0	23	0	0	23	0	7	0	1	0	8	0	59	59
Total	0	0	74	43	0	117	0	0	0	0	0	0	0	0	107	0	0	107	0	41	0	2	0	43	0	267	267
21:00	0	0	31	7	0	38	0	0	0	0	0	0	0	0	13	0	0	13	0	1	0	0	0	1	0	52	52
21:15	0	0	15	6	0	21	0	0	0	0	0	0	0	0	9	0	0	9	0	5	0	0	0	5	0	35	35
21:30	0	0	9	7	0	16	0	0	0	0	0	0	0	0	10	0	0	10	0	2	0	0	0	2	0	28	28
21:45	0	0	15	4	0	19	0	0	0	0	0	0	0	0	21	0	0	21	0	2	0	0	0	2	0	42	42
Total	0	0	70	24	0	94	0	0	0	0	0	0	0	0	53	0	0	53	0	10	0	0	0	10	0	157	157
22:00	0	0	18	3	0	21	0	0	0	0	0	0	0	0	16	0	0	16	0	4	0	0	0	4	0	41	41
22:15	0	0	9	5	0	14	0	0	0	0	0	0	0	0	14	0	0	14	0	3	0	0	0	3	0	31	31
22:30	0	0	6	1	0	7	0	0	0	0	0	0	0	0	5	0	0	5	0	2	0	0	0	2	0	14	14
22:45	0	0	12	4	0	16	0	0	0	0	0	0	0	0	10	0	0	10	0	3	0	0	0	3	0	29	29
Total	0	0	45	13	0	58	0	0	0	0	0	0	0	0	45	0	0	45	0	12	0	0	0	12	0	115	115
23:00	0	0	7	1	0	8	0	0	0	0	0	0	0	0	5	0	0	5	0	4	0	0	0	4	0	17	17
23:15	0	0	2	1	0	3	0	0	0	0	0	0	0	0	5	0	0	5	0	1	0	0	0	1	0	9	9
23:30	0	0	8	2	0	10	0	0	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	0	0	16	16
23:45	0	0	2	3	0	5	0	0	0	0	0	0	0	0	4	0	0	4	0	1	0	0	0	1	0	10	10
Total	0	0	19	7	0	26	0	0	0	0	0	0	0	0	20	0	0	20	0	6	0	0	0	6	0	52	52
Grand Total	0	0	2249	934	0	3183	0	15	0	0	0	15	0	6	2676	1	0	2683	0	750	0	10	0	760	0	6641	6641
Apprch %	0	0	70.7	29.3			0	100	0	0			0	0.2	99.7	0			0	98.7	0	1.3					
Total %	0	0	33.9	14.1		47.9	0	0.2	0	0		0.2	0	0.1	40.3	0		40.4	0	11.3	0	0.2		11.4	0	100	
Cars +	0	0	2021	885		2906	0	15	0	0		15	0	6	2493	1		2500	0	725	0	9		734	0	0	6155
% Cars +	0	0	89.9	94.8		91.3	0	100	0	0		100	0	100	93.2	100		93.2	0	96.7	0	90		96.6	0	0	92.7
Trucks	0	0	228	49		277	0	0	0	0		0	0	0	183	0		183	0	25	0	1		26	0	0	486
% Trucks	0	0	10.1	5.2		8.7	0	0	0	0		0	0	0	6.8	0		6.8	0	3.3	0	10		3.4	0	0	7.3

Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

Start Time	CSAH 23 (Lake Dr.) Southbound					Westbound					CSAH 23 (Lake Dr.) Northbound					Camp Three Rd. 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 07:00																					
07:00	0	0	29	4	33	0	0	0	0	0	0	0	39	0	39	0	16	0	0	16	88
07:15	0	0	41	7	48	0	0	0	0	0	0	0	34	0	34	0	31	0	0	31	113
07:30	0	0	37	5	42	0	0	0	0	0	0	0	50	0	50	0	19	0	0	19	111
07:45	0	0	39	7	46	0	0	0	0	0	0	0	35	0	35	0	22	0	0	22	103
Total Volume	0	0	146	23	169	0	0	0	0	0	0	0	158	0	158	0	88	0	0	88	415
% App. Total	0	0	86.4	13.6		0	0	0	0	0	0	0	100	0		0	100	0	0		
PHF	.000	.000	.890	.821	.880	.000	.000	.000	.000	.000	.000	.000	.790	.000	.790	.000	.710	.000	.000	.710	.918

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	0	37	12	49	0	0	0	0	0	0	0	41	0	41	0	6	0	0	6	96
13:15	0	0	37	13	50	0	0	0	0	0	0	1	37	0	38	0	11	0	1	12	100
13:30	0	0	26	10	36	0	0	0	0	0	0	0	42	0	42	0	11	0	0	11	89
13:45	0	0	41	9	50	0	0	0	0	0	0	0	45	0	45	0	10	0	0	10	105
Total Volume	0	0	141	44	185	0	0	0	0	0	0	1	165	0	166	0	38	0	1	39	390
% App. Total	0	0	76.2	23.8		0	0	0	0	0	0	0.6	99.4	0		0	97.4	0	2.6		
PHF	.000	.000	.860	.846	.925	.000	.000	.000	.000	.000	.000	.250	.917	.000	.922	.000	.864	.000	.250	.813	.929

Peak Hour Analysis From 14:00 to 23:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 15:45																					
15:45	0	0	42	31	73	0	0	0	0	0	0	0	81	0	81	0	19	0	1	20	174
16:00	0	0	52	32	84	0	0	0	0	0	0	0	80	0	80	0	12	0	0	12	176
16:15	0	0	53	30	83	0	0	0	0	0	0	0	67	0	67	0	12	0	0	12	162
16:30	0	0	45	32	77	0	0	0	0	0	0	0	72	0	72	0	12	0	0	12	161
Total Volume	0	0	192	125	317	0	0	0	0	0	0	0	300	0	300	0	55	0	1	56	673
% App. Total	0	0	60.6	39.4		0	0	0	0	0	0	0	100	0		0	98.2	0	1.8		
PHF	.000	.000	.906	.977	.943	.000	.000	.000	.000	.000	.000	.000	.926	.000	.926	.000	.724	.000	.250	.700	.956



Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

File Name : TMC 2109
 Site Code :
 Start Date : 06/09/2021
 Page No : 1

Weather: Hot & Cloudy
 CountCAM 2
 Study Conducted By: Will

Groups Printed- Trucks

Start Time	CSAH 23 (Lake Dr.) Southbound					Westbound					CSAH 23 (Lake Dr.) Northbound					Camp Three Rd. 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	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	1	0	1	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	2
Total	0	0	1	0	1	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	2
05:00	0	0	1	1	2	0	0	0	0	0	0	0	0	0	0	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	0	2	0	2	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	3
05:45	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	4	1	5	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	6
06:00	0	0	9	0	9	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	10
06:15	0	0	2	0	2	0	0	0	0	0	0	0	4	0	4	0	0	0	0	0	0	6
06:30	0	0	1	0	1	0	0	0	0	0	0	0	5	0	5	0	2	0	0	0	2	8
06:45	0	0	2	1	3	0	0	0	0	0	0	0	6	0	6	0	2	0	0	0	2	11
Total	0	0	14	1	15	0	0	0	0	0	0	0	15	0	15	0	5	0	0	0	5	35
07:00	0	0	2	0	2	0	0	0	0	0	0	0	7	0	7	0	1	0	0	0	1	10
07:15	0	0	3	0	3	0	0	0	0	0	0	0	3	0	3	0	3	0	0	0	3	9
07:30	0	0	2	0	2	0	0	0	0	0	0	0	7	0	7	0	0	0	0	0	0	9
07:45	0	0	2	1	3	0	0	0	0	0	0	0	4	0	4	0	0	0	0	0	0	7
Total	0	0	9	1	10	0	0	0	0	0	0	0	21	0	21	0	4	0	0	0	4	35
08:00	0	0	3	0	3	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	5
08:15	0	0	3	1	4	0	0	0	0	0	0	0	2	0	2	0	1	0	0	0	1	7
08:30	0	0	5	1	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
08:45	0	0	7	1	8	0	0	0	0	0	0	0	3	0	3	0	1	0	0	0	1	12
Total	0	0	18	3	21	0	0	0	0	0	0	0	7	0	7	0	2	0	0	0	2	30



Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

File Name : TMC 2109
 Site Code :
 Start Date : 06/09/2021
 Page No : 2

Weather: Hot & Cloudy
 CountCAM 2
 Study Conducted By: Will

Groups Printed- Trucks

Start Time	CSAH 23 (Lake Dr.) Southbound					Westbound					CSAH 23 (Lake Dr.) Northbound					Camp Three Rd. 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	0	5	0	5	0	0	0	0	0	0	0	10	0	10	0	0	0	0	0	15
09:15	0	0	4	0	4	0	0	0	0	0	0	0	5	0	5	0	0	0	0	0	9
09:30	0	0	2	0	2	0	0	0	0	0	0	0	4	0	4	0	1	0	0	0	7
09:45	0	0	4	0	4	0	0	0	0	0	0	0	3	0	3	0	0	0	0	0	7
Total	0	0	15	0	15	0	0	0	0	0	0	0	22	0	22	0	1	0	0	1	38
10:00	0	0	4	0	4	0	0	0	0	0	0	0	6	0	6	0	1	0	0	1	11
10:15	0	0	5	1	6	0	0	0	0	0	0	0	3	0	3	0	0	0	0	0	9
10:30	0	0	3	0	3	0	0	0	0	0	0	0	2	0	2	0	1	0	0	1	6
10:45	0	0	2	1	3	0	0	0	0	0	0	0	3	0	3	0	0	0	0	0	6
Total	0	0	14	2	16	0	0	0	0	0	0	0	14	0	14	0	2	0	0	2	32
11:00	0	0	4	0	4	0	0	0	0	0	0	0	5	0	5	0	0	0	0	0	9
11:15	0	0	6	1	7	0	0	0	0	0	0	0	7	0	7	0	0	0	0	0	14
11:30	0	0	3	1	4	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	6
11:45	0	0	9	2	11	0	0	0	0	0	0	0	3	0	3	0	0	0	0	0	14
Total	0	0	22	4	26	0	0	0	0	0	0	0	17	0	17	0	0	0	0	0	43
12:00	0	0	4	0	4	0	0	0	0	0	0	0	9	0	9	0	0	0	0	0	13
12:15	0	0	7	3	10	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	11
12:30	0	0	2	2	4	0	0	0	0	0	0	0	6	0	6	0	1	0	0	1	11
12:45	0	0	8	1	9	0	0	0	0	0	0	0	3	0	3	0	0	0	0	0	12
Total	0	0	21	6	27	0	0	0	0	0	0	0	19	0	19	0	1	0	0	1	47
13:00	0	0	4	1	5	0	0	0	0	0	0	0	5	0	5	0	1	0	0	1	11
13:15	0	0	7	3	10	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	11
13:30	0	0	5	1	6	0	0	0	0	0	0	0	5	0	5	0	0	0	0	0	11
13:45	0	0	6	3	9	0	0	0	0	0	0	0	4	0	4	0	0	0	0	0	13
Total	0	0	22	8	30	0	0	0	0	0	0	0	14	0	14	0	2	0	0	2	46
14:00	0	0	3	0	3	0	0	0	0	0	0	0	4	0	4	0	0	0	0	0	7
14:15	0	0	10	1	11	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	13
14:30	0	0	9	3	12	0	0	0	0	0	0	0	3	0	3	0	0	0	0	0	15
14:45	0	0	10	4	14	0	0	0	0	0	0	0	3	0	3	0	0	0	0	0	17
Total	0	0	32	8	40	0	0	0	0	0	0	0	12	0	12	0	0	0	0	0	52
15:00	0	0	6	0	6	0	0	0	0	0	0	0	6	0	6	0	1	0	0	1	13
15:15	0	0	5	0	5	0	0	0	0	0	0	0	2	0	2	0	1	0	0	1	8
15:30	0	0	4	0	4	0	0	0	0	0	0	0	3	0	3	0	0	0	0	0	7
15:45	0	0	5	4	9	0	0	0	0	0	0	0	5	0	5	0	1	0	0	1	15
Total	0	0	20	4	24	0	0	0	0	0	0	0	16	0	16	0	3	0	0	3	43
16:00	0	0	5	1	6	0	0	0	0	0	0	0	3	0	3	0	1	0	0	1	10
16:15	0	0	7	1	8	0	0	0	0	0	0	0	3	0	3	0	1	0	0	1	12
16:30	0	0	5	2	7	0	0	0	0	0	0	0	4	0	4	0	0	0	0	0	11
16:45	0	0	4	0	4	0	0	0	0	0	0	0	3	0	3	0	0	0	0	0	7
Total	0	0	21	4	25	0	0	0	0	0	0	0	13	0	13	0	2	0	0	2	40
17:00	0	0	1	1	2	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	4
17:15	0	0	2	0	2	0	0	0	0	0	0	0	3	0	3	0	1	0	0	1	6
17:30	0	0	3	2	5	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	6
17:45	0	0	1	2	3	0	0	0	0	0	0	0	3	0	3	0	0	0	0	0	6
Total	0	0	7	5	12	0	0	0	0	0	0	0	8	0	8	0	2	0	0	2	22
18:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1
18:15	0	0	1	0	1	0	0	0	0	0	0	0	1	0	1	0	1	0	0	1	3



Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

File Name : TMC 2109
 Site Code :
 Start Date : 06/09/2021
 Page No : 3

Weather: Hot & Cloudy
 CountCAM 2
 Study Conducted By: Will

Groups Printed- Trucks

Start Time	CSAH 23 (Lake Dr.) Southbound					Westbound					CSAH 23 (Lake Dr.) Northbound					Camp Three Rd. 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	0	0	0	0	1	0	1	0	0	0	0	0	0
18:45	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	1	1	2	0	0	0	0	0	0	0	3	0	3	0	1	0	0	1	6
19:00	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	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	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
19:45	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	3	1	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
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	1	0	1	0	0	0	0	0	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	1	1	1
Total	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2
21:00	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
21:15	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
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	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
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	0	0	228	49	277	0	0	0	0	0	0	0	183	0	183	0	25	0	1	26	486
Apprch %	0	0	82.3	17.7		0	0	0	0		0	0	100	0		0	96.2	0	3.8		
Total %	0	0	46.9	10.1	57	0	0	0	0	0	0	0	37.7	0	37.7	0	5.1	0	0.2	5.3	

ANOKA COUNTY HIGHWAY DEPARTMENT

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2109

Study Date: 07/16/2021

Page No: 1

Signal Warrants - Summary

Major Street Approaches

Northbound: CSAH 23 (Lake Dr.)

Number of Lanes : 1

Total Approach Volume: 2,683

Southbound: CSAH 23 (Lake Dr.)

Number of Lanes : 1

Total Approach Volume: 3,183

Minor Street Approaches

Eastbound: Camp Three Rd.

Number of Lanes : 1

Total Approach Volume: 760

Westbound:

Number of Lanes : 2

Total Approach Volume: 15

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 1 hours, 8 are needed

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

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

Required 1B volumes reached for 3 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 hour. Delay data not evaluated.

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

Volumes do not exceed minimums for any hour.

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 DEPARTMENT

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: **TMC 2109**

Study Date: **07/16/2021**

Page No: **2**

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 hours 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 = **350**

Veh/Hr Minor = **105**

Time	Major Road				Total	Minor Road		Met?
	Major NB	+	Major SB	=		Minor EB	Minor WB	
16:00 - 17:00	304	+	318	=	622	50	0	No
15:45 - 16:45	300	+	317	=	617	56	0	No
15:30 - 16:30	293	+	298	=	591	55	0	No
16:15 - 17:15	277	+	303	=	580	42	0	No
15:15 - 16:15	282	+	295	=	577	60	0	No
16:30 - 17:30	266	+	291	=	557	41	0	No
16:45 - 17:45	265	+	285	=	550	38	0	No
17:00 - 18:00	243	+	284	=	527	39	0	No
15:00 - 16:00	256	+	266	=	522	56	0	No
17:15 - 18:15	232	+	267	=	499	49	0	No
14:45 - 15:45	229	+	265	=	494	45	0	No
14:30 - 15:30	210	+	266	=	476	49	0	No
17:30 - 18:30	215	+	235	=	450	49	0	No
14:15 - 15:15	196	+	244	=	440	37	0	No
17:45 - 18:45	200	+	208	=	408	46	0	No
14:00 - 15:00	178	+	226	=	404	35	0	No
13:45 - 14:45	169	+	204	=	373	36	0	No
13:00 - 14:00	166	+	185	=	351	39	0	No
13:30 - 14:30	165	+	181	=	346	32	0	No
12:30 - 13:30	156	+	185	=	341	32	0	No
12:45 - 13:45	160	+	178	=	338	35	0	No
18:00 - 19:00	163	+	174	=	337	37	0	No
13:15 - 14:15	161	+	173	=	334	39	0	No
07:00 - 08:00	158	+	169	=	327	88	0	No
12:15 - 13:15	149		177		326	24	0	No

ANOKA COUNTY HIGHWAY DEPARTMENT

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: **TMC 2109**

Study Date: **07/16/2021**

Page No: **3**

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 1 hours 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 = **53**

Time	Major Road				Total	Minor Road		Met?
	Major NB	+	Major SB	=		Minor EB	Minor WB	
	CSAH 23 (Lake Dr.)					Camp Three Rd.		
15:15 - 16:15	282	+	295	=	577	60	0	Yes
16:15 - 17:15	277	+	303	=	580	42	0	No
16:30 - 17:30	266	+	291	=	557	41	0	No
16:45 - 17:45	265	+	285	=	550	38	0	No
17:00 - 18:00	243	+	284	=	527	39	0	No
15:00 - 16:00	256	+	266	=	522	56	0	No
17:15 - 18:15	232	+	267	=	499	49	0	No
14:45 - 15:45	229	+	265	=	494	45	0	No
14:30 - 15:30	210	+	266	=	476	49	0	No
17:30 - 18:30	215	+	235	=	450	49	0	No
14:15 - 15:15	196	+	244	=	440	37	0	No
17:45 - 18:45	200	+	208	=	408	46	0	No
14:00 - 15:00	178	+	226	=	404	35	0	No
13:45 - 14:45	169	+	204	=	373	36	0	No
13:00 - 14:00	166	+	185	=	351	39	0	No
13:30 - 14:30	165	+	181	=	346	32	0	No
12:30 - 13:30	156	+	185	=	341	32	0	No
12:45 - 13:45	160	+	178	=	338	35	0	No
18:00 - 19:00	163	+	174	=	337	37	0	No
13:15 - 14:15	161	+	173	=	334	39	0	No
07:00 - 08:00	158	+	169	=	327	88	0	No
12:15 - 13:15	149	+	177	=	326	24	0	No
11:00 - 12:00	144	+	181	=	325	30	0	No
12:00 - 13:00	154	+	170	=	324	25	0	No
11:15 - 12:15	151		172		323	25	0	No

ANOKA COUNTY HIGHWAY DEPARTMENT

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: **TMC 2109**

Study Date: **07/16/2021**

Page No: **4**

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 1 hours meet 1A minimums.
Only 3 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 23 (Lake Dr.)

Minor Road Camp Three Rd.

Time	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	Met1A?
06:30 - 07:30	134	+	168	=	302	91	0	Yes
16:00 - 17:00	304	+	318	=	622	50	0	No
15:45 - 16:45	300	+	317	=	617	56	0	No
15:30 - 16:30	293	+	298	=	591	55	0	No
16:15 - 17:15	277	+	303	=	580	42	0	No
15:15 - 16:15	282	+	295	=	577	60	0	No
16:30 - 17:30	266	+	291	=	557	41	0	No
16:45 - 17:45	265	+	285	=	550	38	0	No
17:00 - 18:00	243	+	284	=	527	39	0	No
15:00 - 16:00	256	+	266	=	522	56	0	No
17:15 - 18:15	232	+	267	=	499	49	0	No
14:45 - 15:45	229	+	265	=	494	45	0	No

Time	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	Met1B?
15:30 - 16:30	293	+	298	=	591	55	0	Yes
17:15 - 18:15	232	+	267	=	499	49	0	Yes
14:30 - 15:30	210	+	266	=	476	49	0	Yes
16:30 - 17:30	266	+	291	=	557	41	0	No
16:45 - 17:45	265	+	285	=	550	38	0	No
17:00 - 18:00	243	+	284	=	527	39	0	No
14:15 - 15:15	196	+	244	=	440	37	0	No
14:00 - 15:00	178	+	226	=	404	35	0	No
13:45 - 14:45	169	+	204	=	373	36	0	No
13:00 - 14:00	166	+	185	=	351	39	0	No
13:30 - 14:30	165	+	181	=	346	32	0	No
12:30 - 13:30	156	+	185	=	341	32	0	No