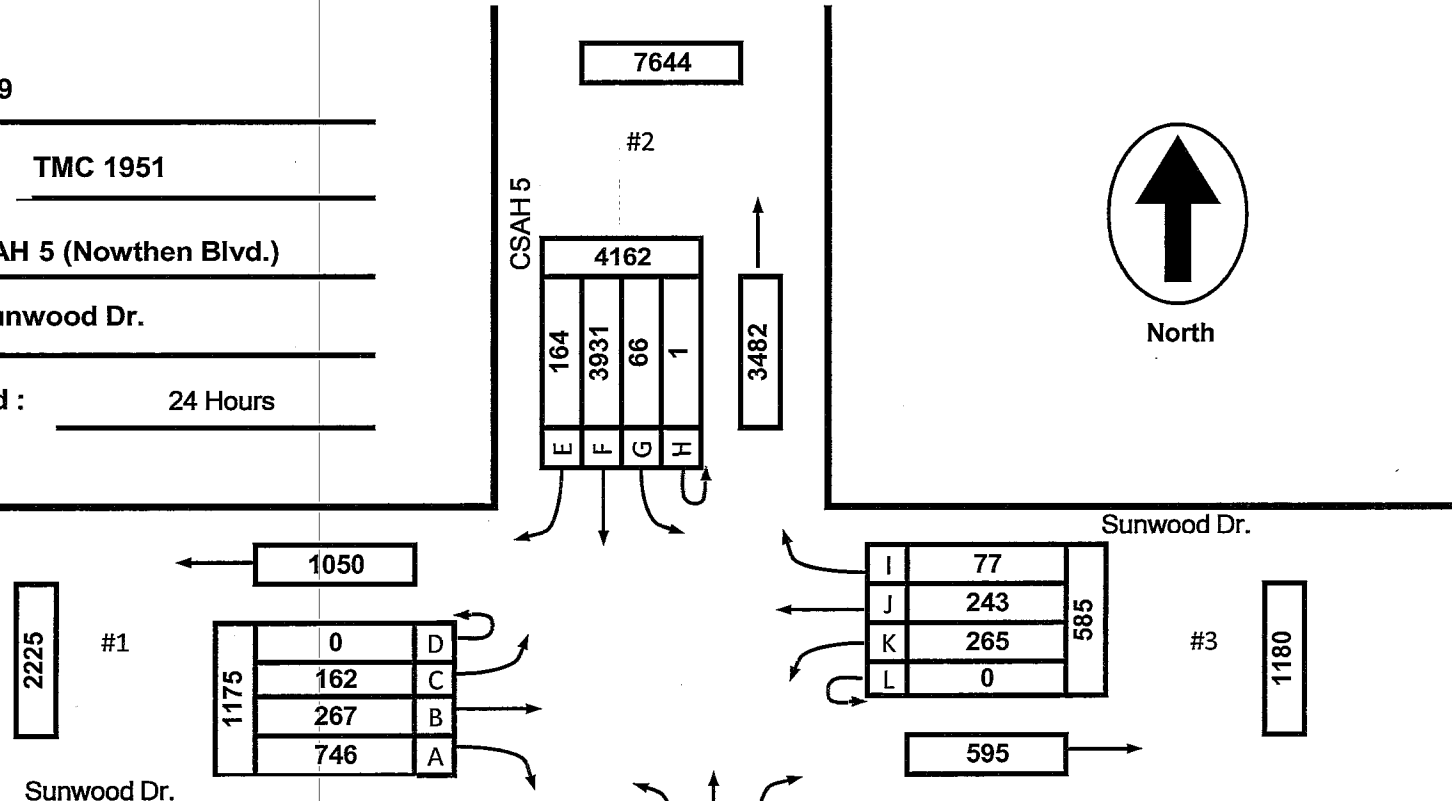
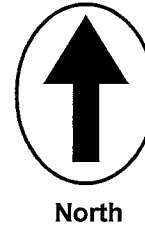


Date : 08/01/19

Count Number : TMC 1951

Location : CSAH 5 (Nowthen Blvd.)
@ Sunwood Dr.

Collection Period : 24 Hours



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

Anoka County Highway Department

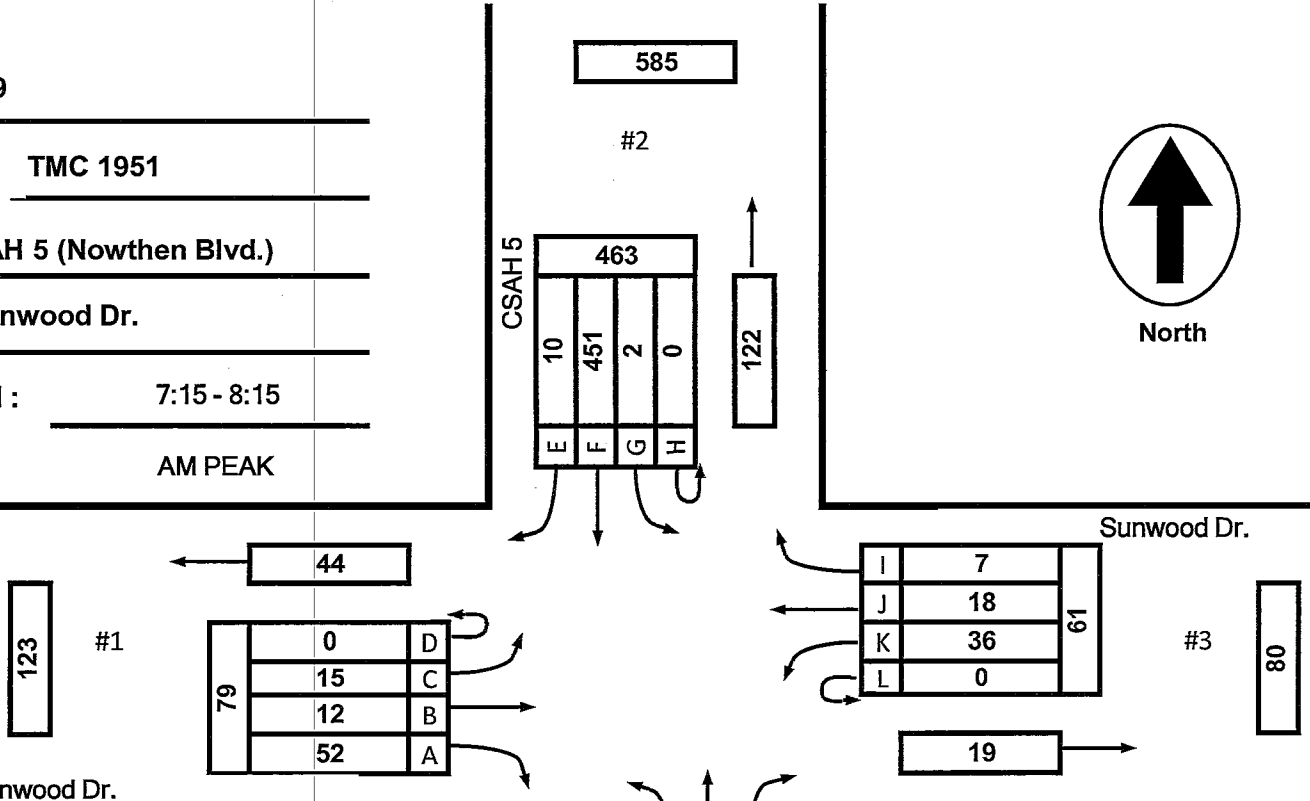
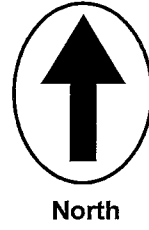
Traffic Volume and Turning Movement Study

Date : 08/01/19

Count Number : TMC 1951

Location : CSAH 5 (Nowthen Blvd.)
@ Sunwood Dr.

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



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

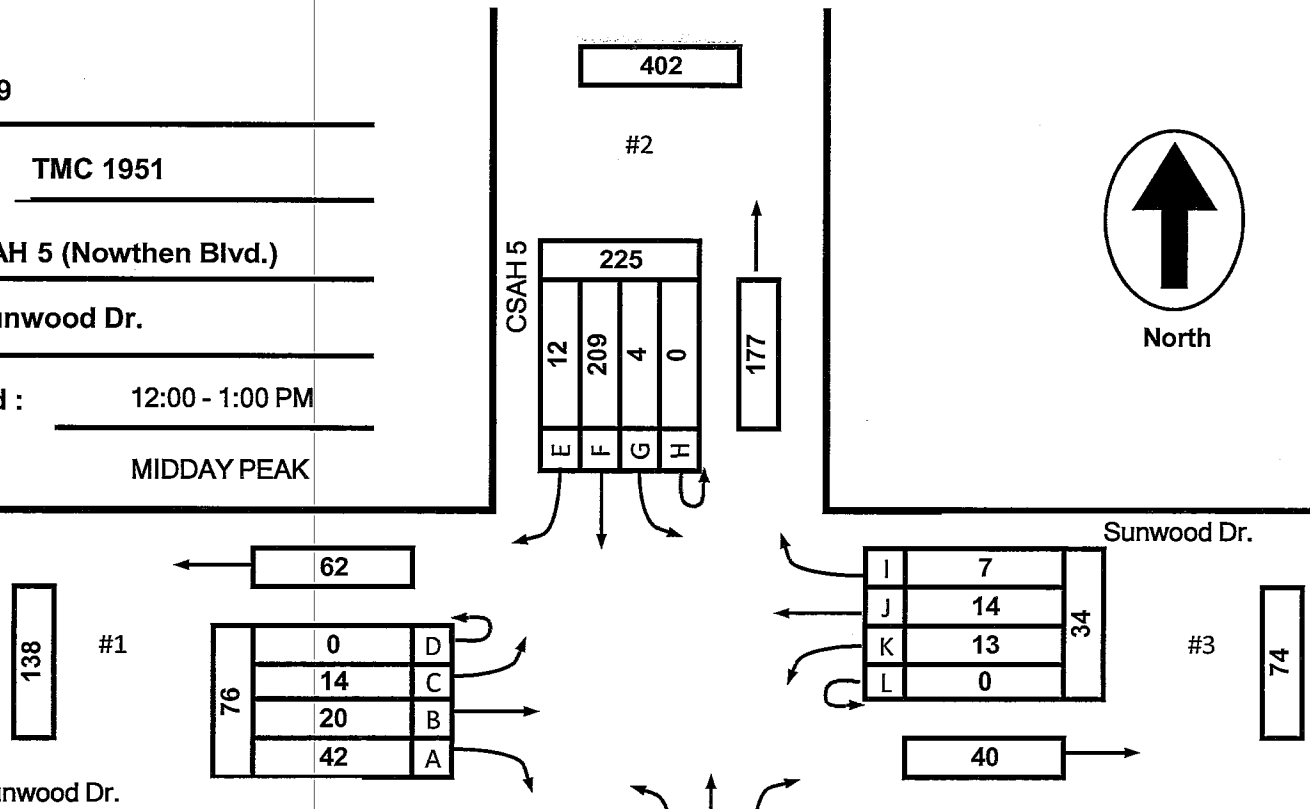
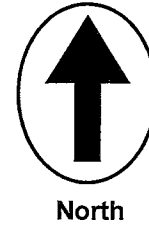
Anoka County Highway Department
 Traffic Volume and Turning Movement Study

Date : 08/01/19

Count Number : TMC 1951

Location : CSAH 5 (Nowthen Blvd.)
@ Sunwood Dr.

Collection Period : 12:00 - 1:00 PM
MIDDAY PEAK



Sunwood Dr.

Sunwood Dr.

CSAH 5

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

Anoka County Highway Department

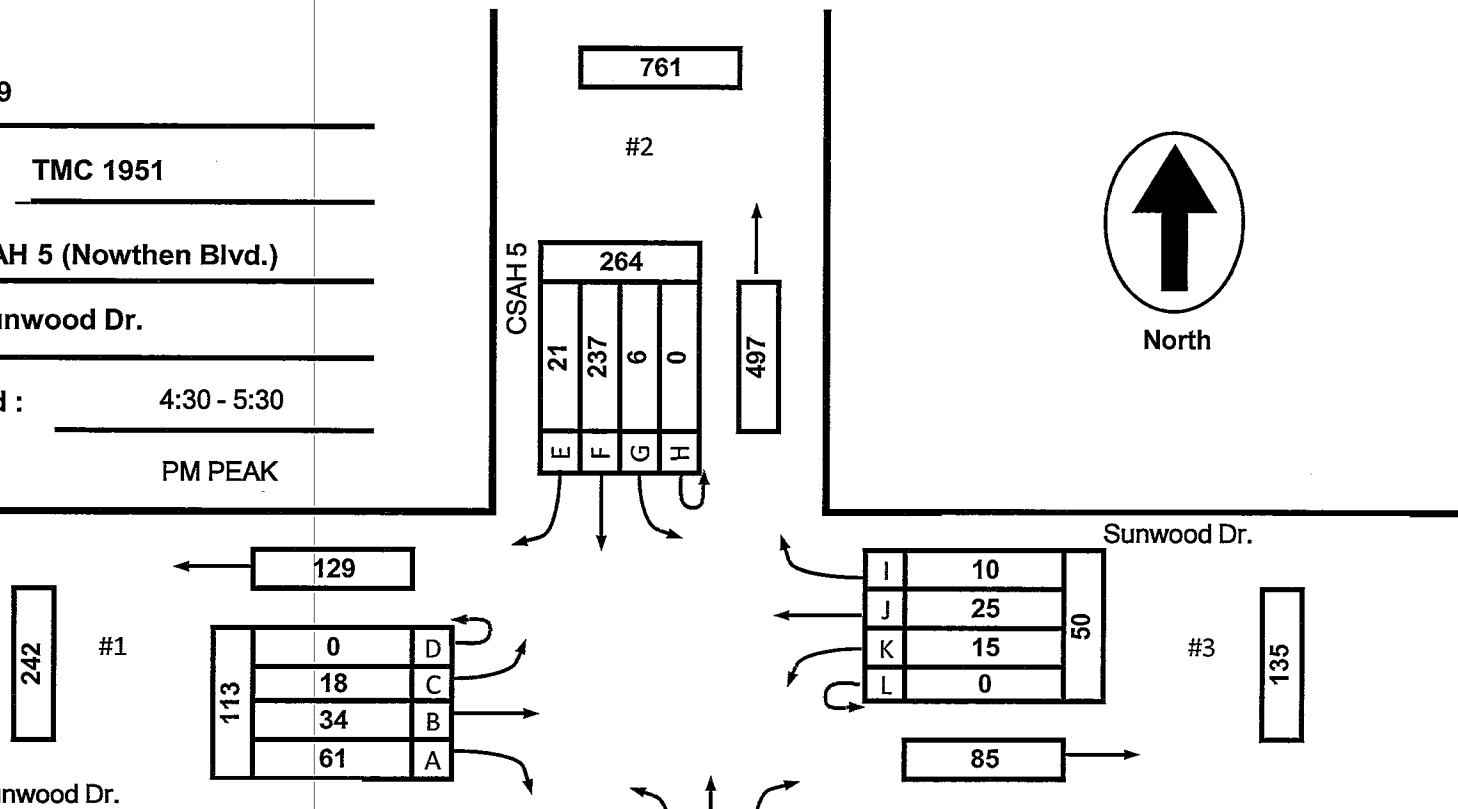
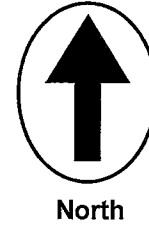
Traffic Volume and Turning Movement Study

Date : 08/01/19

Count Number : TMC 1951

Location : CSAH 5 (Nowthen Blvd.)
@ Sunwood Dr.

Collection Period : 4:30 - 5:30
PM PEAK



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

Anoka County Highway Department
 Traffic Volume and Turning Movement Study

Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

Weather: Hot & Sunny
 CountCAM 200
 Study Conducted By: Andrea

File Name : TMC 1951
 Site Code :
 Start Date : 08/01/2019
 Page No : 1

Groups Printed- Cars + - Trucks

Start Time	CSAH 5 Southbound						Sunwood Dr. Westbound						CSAH 5 Northbound						Sunwood Dr. 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	2	0	0	0	2	0	0	1	0	0	1	0	4	1	0	0	5	0	3	1	0	0	4	0	12	12
00:15	1	3	0	0	0	4	0	1	0	0	1	0	5	1	0	0	6	1	0	0	0	0	1	0	12	12	
00:30	0	3	0	0	0	3	0	0	1	0	1	0	4	1	0	0	5	0	0	0	0	0	0	0	9	9	
00:45	0	3	0	0	0	3	0	0	1	0	1	0	4	0	0	0	4	0	0	0	0	0	0	0	8	8	
Total	1	11	0	0	0	12	0	1	3	0	4	0	17	3	0	0	20	1	3	1	0	0	5	0	41	41	
01:00	0	1	0	0	0	1	0	0	0	0	0	0	3	1	0	0	4	0	0	0	0	0	0	0	5	5	
01:15	0	3	0	0	0	3	0	0	1	0	1	0	2	1	0	0	3	0	0	0	0	0	0	0	7	7	
01:30	0	3	0	0	0	3	0	0	1	0	1	0	8	1	0	0	10	0	2	0	0	0	2	0	16	16	
01:45	0	2	0	0	0	2	0	2	0	0	2	2	0	0	0	2	2	0	0	0	0	0	0	0	6	6	
Total	0	9	0	0	0	9	0	2	2	0	4	6	11	2	0	0	19	0	2	0	0	0	2	0	34	34	
02:00	0	3	1	0	0	4	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	6	6	
02:15	0	0	0	0	0	0	0	0	0	0	0	0	3	2	1	0	6	0	0	1	0	0	1	0	7	7	
02:30	0	3	0	0	0	3	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	5	5	
02:45	0	3	0	0	0	3	0	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	0	0	5	5	
Total	0	9	1	0	0	10	0	1	0	0	1	3	6	2	0	0	11	0	0	1	0	0	1	0	23	23	
03:00	0	3	0	0	0	3	0	1	0	0	1	0	3	0	0	0	3	0	0	0	0	0	0	0	7	7	
03:15	0	7	0	0	0	7	0	0	2	0	2	0	3	0	0	0	3	0	1	0	0	0	1	0	13	13	
03:30	0	2	0	0	0	2	0	0	1	0	1	0	1	1	0	0	2	2	0	0	0	0	2	0	7	7	
03:45	0	2	0	0	0	2	0	2	1	0	3	0	1	1	0	0	2	0	0	0	0	0	0	0	7	7	
Total	0	14	0	0	0	14	0	3	4	0	7	0	8	2	0	0	10	2	1	0	0	0	3	0	34	34	
04:00	0	9	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	1	2	1	11	12	
04:15	0	13	0	0	0	13	0	0	0	0	0	0	2	0	0	0	2	2	1	0	0	0	3	0	18	18	
04:30	0	23	0	0	0	23	0	1	2	0	3	0	1	0	0	1	5	0	0	0	0	0	5	0	32	32	
04:45	0	25	0	0	0	25	0	0	8	0	8	0	3	2	0	0	5	4	0	0	0	0	4	0	42	42	
Total	0	70	0	0	0	70	0	1	10	0	11	0	6	2	0	8	12	1	1	0	1	14	1	103	104		
05:00	0	37	0	0	0	37	0	1	4	0	5	0	4	0	0	4	4	0	1	0	0	5	0	51	51		
05:15	1	47	0	0	0	48	1	3	2	0	6	0	4	1	0	5	3	0	0	0	0	3	0	62	62		
05:30	0	54	0	0	0	54	0	1	5	0	6	0	8	2	0	10	17	0	0	0	0	17	0	87	87		
05:45	1	80	0	0	0	81	0	5	5	0	10	0	13	1	0	14	9	0	1	0	0	10	0	115	115		
Total	2	218	0	0	0	220	1	10	16	0	27	0	29	4	0	33	33	0	2	0	0	35	0	315	315		

Anoka County Highway Department

Traffic Engineering Section
Traffic Volume and Turning Movement Study

Weather: Hot & Sunny
CountCAM 200
Study Conducted By: Andrea

File Name : TMC 1951
Site Code :
Start Date : 08/01/2019
Page No : 2

Groups Printed- Cars + - Trucks

Start Time	CSAH 5 Southbound						Sunwood Dr. Westbound						CSAH 5 Northbound						Sunwood Dr. 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	103	0	0	0	103	0	3	2	0	0	5	0	9	3	0	0	12	14	0	0	0	0	14	0	134	134
06:15	0	98	0	0	0	98	0	0	4	0	0	4	1	13	1	0	0	15	14	1	0	0	1	15	1	132	133
06:30	1	131	0	0	0	132	1	5	8	0	1	14	0	23	2	0	0	25	18	2	2	0	0	22	1	193	194
06:45	3	124	1	0	0	128	1	5	6	0	0	12	0	14	1	0	0	15	11	1	2	0	0	14	0	169	169
Total	4	456	1	0	0	461	2	13	20	0	1	35	1	59	7	0	0	67	57	4	4	0	1	65	2	628	630
07:00	3	103	0	0	0	106	0	1	7	0	1	8	1	15	2	0	0	18	12	3	2	0	0	17	1	149	150
07:15	2	114	0	0	0	116	2	4	10	0	0	16	1	26	3	0	0	30	15	4	6	0	0	25	0	187	187
07:30	2	108	0	0	0	110	1	4	12	0	1	17	1	23	5	0	0	29	10	2	6	0	0	18	1	174	175
07:45	5	136	1	0	0	142	1	7	6	0	0	14	0	22	4	0	0	26	16	5	3	0	0	24	0	206	206
Total	12	461	1	0	0	474	4	16	35	0	2	55	3	86	14	0	0	103	53	14	17	0	0	84	2	716	718
08:00	1	93	1	0	0	95	3	3	8	0	0	14	3	29	4	0	0	36	11	1	0	0	0	12	0	157	157
08:15	2	79	2	0	0	83	2	0	3	0	1	5	1	22	4	0	0	27	17	4	1	0	0	22	1	137	138
08:30	0	56	0	0	0	56	0	5	3	0	0	8	3	38	0	0	0	41	14	1	3	0	0	18	0	123	123
08:45	0	52	1	0	0	53	1	2	8	0	0	11	1	31	3	0	0	35	11	2	5	0	0	18	0	117	117
Total	3	280	4	0	0	287	6	10	22	0	1	38	8	120	11	0	0	139	53	8	9	0	0	70	1	534	535
09:00	3	57	2	0	1	62	2	1	3	0	0	6	3	20	3	0	0	26	15	2	0	0	0	17	1	111	112
09:15	2	67	1	0	0	70	0	3	1	0	0	4	2	31	3	0	0	36	15	1	2	0	0	18	0	128	128
09:30	1	46	4	0	0	51	2	1	3	0	0	6	1	19	7	0	0	27	11	1	1	0	0	13	0	97	97
09:45	3	50	1	0	1	54	1	0	1	0	1	2	0	33	5	0	0	38	11	1	3	0	0	15	2	109	111
Total	9	220	8	0	2	237	5	5	8	0	1	18	6	103	18	0	0	127	52	5	6	0	0	63	3	445	448
10:00	1	52	1	0	3	54	1	3	3	0	1	7	1	28	7	0	0	36	12	1	1	0	0	14	4	111	115
10:15	2	55	0	0	0	57	4	5	2	0	2	11	3	17	6	0	0	26	13	3	1	0	0	17	2	111	113
10:30	0	45	1	0	0	46	2	3	3	0	2	8	3	28	9	0	0	40	8	4	1	0	0	13	2	107	109
10:45	3	49	0	0	4	52	0	7	3	0	0	10	2	27	7	0	0	36	12	6	2	0	0	20	4	118	122
Total	6	201	2	0	7	209	7	18	11	0	5	36	9	100	29	0	0	138	45	14	5	0	0	64	12	447	459
11:00	0	50	0	0	0	50	0	3	2	0	0	5	2	38	3	0	0	43	12	2	1	0	0	15	0	113	113
11:15	3	44	1	0	1	48	1	2	2	0	1	5	2	24	7	0	0	33	11	5	3	0	2	19	4	105	109
11:30	3	50	2	0	0	55	0	5	0	0	2	5	3	32	10	0	0	45	14	6	0	0	0	20	2	125	127
11:45	2	49	1	0	1	52	2	4	3	0	1	9	1	35	5	0	0	41	11	2	4	0	0	17	2	119	121
Total	8	193	4	0	2	205	3	14	7	0	4	24	8	129	25	0	0	162	48	15	8	0	2	71	8	462	470
12:00	2	55	1	0	1	58	2	2	2	0	0	6	5	40	10	0	0	55	13	2	5	0	0	20	1	139	140
12:15	4	48	1	0	0	53	2	3	1	0	1	6	6	36	7	0	0	49	10	4	0	0	0	14	1	122	123
12:30	2	62	2	0	4	66	1	4	5	0	4	10	2	44	9	0	0	55	10	6	2	0	2	18	10	149	159

Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

Weather: Hot & Sunny
 CountCAM 200
 Study Conducted By: Andrea

File Name : TMC 1951
 Site Code :
 Start Date : 08/01/2019
 Page No : 3

Groups Printed- Cars + - Trucks

Start Time	CSAH 5 Southbound						Sunwood Dr. Westbound						CSAH 5 Northbound						Sunwood Dr. 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	4	44	0	0	0	48	2	5	0	0	12	3	36	10	0	0	49	9	8	7	0	0	24	0	133	133	
Total	12	209	4	0	5	225	7	14	13	0	5	34	16	156	36	0	0	208	42	20	14	0	2	76	12	543	555
13:00	2	46	0	0	3	48	0	4	7	0	0	11	4	44	10	0	0	58	16	3	0	0	0	19	3	136	139
13:15	6	30	1	0	1	37	2	5	2	0	0	9	3	48	6	0	0	57	10	3	1	0	0	14	1	117	118
13:30	3	37	1	0	0	41	0	3	2	0	0	5	4	35	5	0	0	44	9	4	3	0	0	16	0	106	106
13:45	1	37	0	0	1	38	0	0	3	0	0	3	3	40	7	0	0	50	8	2	3	0	0	13	1	104	105
Total	12	150	2	0	5	164	2	12	14	0	0	28	14	167	28	0	0	209	43	12	7	0	0	62	5	463	468
14:00	2	40	0	0	5	42	0	4	1	0	2	5	3	54	10	0	0	67	6	4	0	0	0	10	7	124	131
14:15	1	46	1	0	1	48	2	4	3	0	0	9	1	45	8	0	0	54	6	2	2	0	0	10	1	121	122
14:30	2	59	0	0	0	61	0	4	5	0	0	9	5	61	3	0	0	69	8	7	3	0	0	18	0	157	157
14:45	1	57	2	0	0	60	0	3	5	0	1	8	10	41	14	0	0	65	10	5	1	0	0	16	1	149	150
Total	6	202	3	0	6	211	2	15	14	0	3	31	19	201	35	0	0	255	30	18	6	0	0	54	9	551	560
15:00	0	41	0	0	2	41	1	5	0	0	2	6	4	90	13	0	0	107	6	7	2	0	0	15	4	169	173
15:15	3	52	1	0	4	56	1	4	2	0	1	7	5	71	13	0	0	89	10	9	1	0	0	20	5	172	177
15:30	2	73	2	0	0	77	1	0	4	0	0	5	4	84	12	0	0	100	13	4	6	0	2	23	2	205	207
15:45	2	45	2	0	0	49	1	4	5	0	0	10	3	102	14	0	0	119	13	3	2	0	0	18	0	196	196
Total	7	211	5	0	6	223	4	13	11	0	3	28	16	347	52	0	0	415	42	23	11	0	2	76	11	742	753
16:00	10	63	2	0	0	75	4	4	2	0	0	10	9	85	15	0	0	109	8	9	4	0	2	21	2	215	217
16:15	5	48	1	0	0	54	0	4	5	0	3	9	4	84	23	0	0	111	13	4	4	0	0	21	3	195	198
16:30	7	60	0	0	0	67	2	4	5	0	0	11	13	133	31	0	0	177	18	10	4	0	0	32	0	287	287
16:45	6	69	4	0	0	79	4	6	3	0	0	13	11	118	17	0	0	146	14	5	6	0	0	25	0	263	263
Total	28	240	7	0	0	275	10	18	15	0	3	43	37	420	86	0	0	543	53	28	18	0	2	99	5	960	965
17:00	4	55	0	0	3	59	0	8	4	0	5	12	8	117	19	0	0	144	14	11	5	0	0	30	8	245	253
17:15	4	53	2	0	2	59	4	7	3	0	0	14	13	101	16	0	0	130	15	8	3	0	0	26	2	229	231
17:30	5	66	0	0	0	71	3	5	4	0	1	12	10	94	28	0	0	132	10	3	4	0	0	17	1	232	233
17:45	7	46	0	0	2	53	1	3	2	0	2	6	2	89	16	0	0	107	13	6	7	0	0	26	4	192	196
Total	20	220	2	0	7	242	8	23	13	0	8	44	33	401	79	0	0	513	52	28	19	0	0	99	15	898	913
18:00	4	44	3	0	4	51	1	5	5	0	3	11	8	77	28	0	0	113	9	5	1	0	0	15	7	190	197
18:15	2	48	0	0	1	50	0	5	5	0	2	10	7	82	14	0	0	103	10	2	2	0	0	14	3	177	180
18:30	0	37	2	0	2	39	2	8	6	0	2	16	5	57	12	0	0	74	4	5	3	0	0	12	4	141	145
18:45	4	51	1	0	3	56	1	3	3	0	0	7	4	42	13	0	0	59	10	2	3	0	0	15	3	137	140
Total	10	180	6	0	10	196	4	21	19	0	7	44	24	258	67	0	0	349	33	14	9	0	0	56	17	645	662

Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

Weather: Hot & Sunny
 CountCAM 200
 Study Conducted By: Andrea

File Name : TMC 1951
 Site Code :
 Start Date : 08/01/2019
 Page No : 4

Groups Printed- Cars + - Trucks

Start Time	CSAH 5 Southbound						Sunwood Dr. Westbound						CSAH 5 Northbound						Sunwood Dr. 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	1	49	0	0	0	50	0	4	3	0	1	7	6	58	14	0	0	78	10	4	1	0	0	15	1	150	151
19:15	1	31	0	0	5	32	2	4	1	0	3	7	8	43	9	0	0	60	10	5	3	0	0	18	8	117	125
19:30	2	21	2	0	1	25	0	2	0	0	0	2	6	48	13	0	0	67	11	3	1	0	1	15	2	109	111
19:45	3	31	2	0	0	36	3	2	1	0	0	6	4	48	11	0	0	63	11	10	4	0	0	25	0	130	130
Total	7	132	4	0	6	143	5	12	5	0	4	22	24	197	47	0	0	268	42	22	9	0	1	73	11	506	517
20:00	4	31	0	0	5	35	1	3	3	0	0	7	4	37	8	0	0	49	5	6	1	0	1	12	6	103	109
20:15	2	32	2	1	4	37	0	1	0	0	0	1	3	40	7	0	0	50	6	1	2	0	0	9	4	97	101
20:30	1	26	0	0	3	27	0	2	1	0	0	3	5	32	15	0	0	52	7	1	3	0	0	11	3	93	96
20:45	0	26	0	0	2	26	2	6	5	0	0	13	1	40	9	0	0	50	9	5	0	0	0	14	2	103	105
Total	7	115	2	1	14	125	3	12	9	0	0	24	13	149	39	0	0	201	27	13	6	0	1	46	15	396	411
21:00	0	18	0	0	3	18	1	0	2	0	0	3	1	54	7	0	0	62	4	4	1	0	0	9	3	92	95
21:15	1	18	0	0	0	19	0	2	2	0	0	4	3	40	8	0	0	51	4	6	0	0	0	10	0	84	84
21:30	1	11	0	0	0	12	0	0	3	0	0	3	4	27	5	0	0	36	4	1	3	0	0	8	0	59	59
21:45	0	18	1	0	0	19	1	3	2	0	0	6	3	32	4	0	0	39	5	1	0	0	0	6	0	70	70
Total	2	65	1	0	3	68	2	5	9	0	0	16	11	153	24	0	0	188	17	12	4	0	0	33	3	305	308
22:00	0	12	2	0	0	14	0	1	1	0	0	2	2	17	3	0	0	22	2	1	1	0	0	4	0	42	42
22:15	1	10	1	0	0	12	0	1	1	0	0	2	2	29	2	0	0	33	1	2	0	0	0	3	0	50	50
22:30	1	8	2	0	0	11	2	2	0	0	0	4	2	14	8	0	0	24	2	1	2	0	0	5	0	44	44
22:45	4	7	1	0	0	12	0	0	0	0	0	0	1	20	6	0	0	27	3	2	0	0	0	5	0	44	44
Total	6	37	6	0	0	49	2	4	2	0	0	8	7	80	19	0	0	106	8	6	3	0	0	17	0	180	180
23:00	0	3	1	0	0	4	0	0	0	0	0	0	0	8	1	0	0	9	0	0	0	0	0	0	0	13	13
23:15	0	13	2	0	0	15	0	0	0	0	0	0	0	6	2	0	0	8	0	2	1	0	0	3	0	26	26
23:30	2	8	0	0	0	10	0	0	1	0	0	1	2	18	5	0	0	25	0	0	0	0	0	0	0	36	36
23:45	0	4	0	0	0	4	0	0	2	0	0	2	2	7	4	0	0	13	1	2	1	0	0	4	0	23	23
Total	2	28	3	0	0	33	0	0	3	0	0	3	4	39	12	0	0	55	1	4	2	0	0	7	0	98	98
Grand Total	164	3931	66	1	73	4162	77	243	265	0	47	585	262	3242	643	0	0	4147	746	267	162	0	12	1175	132	10069	10201
Apprch %	3.9	94.4	1.6	0			13.2	41.5	45.3	0			6.3	78.2	15.5	0			63.5	22.7	13.8	0					
Total %	1.6	39	0.7	0		41.3	0.8	2.4	2.6	0	5.8	2.6	32.2	6.4	0	41.2	7.4	2.7	1.6	0	11.7	1.3	98.7				
Cars +	162	3759	63	1		4058	75	238	263	0	623	260	3090	641	0	3991	736	263	158	0	1169	0	0	9841			
% Cars +	98.8	95.6	95.5	100	100	95.8	97.4	97.9	99.2	0	100	98.6	99.2	95.3	99.7	0	96.2	98.7	98.5	97.5	0	100	98.5	0	0	96.5	
Trucks	2	172	3	0		177	2	5	2	0	9	2	152	2	0	156	10	4	4	0	18	0	0	360			
% Trucks	1.2	4.4	4.5	0	0	4.2	2.6	2.1	0.8	0	1.4	0.8	4.7	0.3	0	3.8	1.3	1.5	2.5	0	1.5	0	0	3.5			

Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

Weather: Hot & Sunny
 CountCAM 200
 Study Conducted By: Andrea

File Name : TMC 1951
 Site Code :
 Start Date : 08/01/2019
 Page No : 5

Start Time	CSAH 5 Southbound					Sunwood Dr. Westbound					CSAH 5 Northbound					Sunwood Dr. 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	2	114	0	0	116	2	4	10	0	16	1	26	3	0	30	15	4	6	0	25	187
07:30	2	108	0	0	110	1	4	12	0	17	1	23	5	0	29	10	2	6	0	18	174
07:45	5	136	1	0	142	1	7	6	0	14	0	22	4	0	26	16	5	3	0	24	206
08:00	1	93	1	0	95	3	3	8	0	14	3	29	4	0	36	11	1	0	0	12	157
Total Volume	10	451	2	0	463	7	18	36	0	61	5	100	16	0	121	52	12	15	0	79	724
% App. Total	2.2	97.4	0.4	0		11.5	29.5	59	0		4.1	82.6	13.2	0		65.8	15.2	19	0		
PHF	.500	.829	.500	.000	.815	.583	.643	.750	.000	.897	.417	.862	.800	.000	.840	.813	.600	.625	.000	.790	.879
Peak Hour Analysis From 10:00 to 13:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 12:00																					
12:00	2	55	1	0	58	2	2	2	0	6	5	40	10	0	55	13	2	5	0	20	139
12:15	4	48	1	0	53	2	3	1	0	6	6	36	7	0	49	10	4	0	0	14	122
12:30	2	62	2	0	66	1	4	5	0	10	2	44	9	0	55	10	6	2	0	18	149
12:45	4	44	0	0	48	2	5	5	0	12	3	36	10	0	49	9	8	7	0	24	133
Total Volume	12	209	4	0	225	7	14	13	0	34	16	156	36	0	208	42	20	14	0	76	543
% App. Total	5.3	92.9	1.8	0		20.6	41.2	38.2	0		7.7	75	17.3	0		55.3	26.3	18.4	0		
PHF	.750	.843	.500	.000	.852	.875	.700	.650	.000	.708	.667	.886	.900	.000	.945	.808	.625	.500	.000	.792	.911
Peak Hour Analysis From 14:00 to 23:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 16:30																					
16:30	7	60	0	0	67	2	4	5	0	11	13	133	31	0	177	18	10	4	0	32	287
16:45	6	69	4	0	79	4	6	3	0	13	11	118	17	0	146	14	5	6	0	25	263
17:00	4	55	0	0	59	0	8	4	0	12	8	117	19	0	144	14	11	5	0	30	245
17:15	4	53	2	0	59	4	7	3	0	14	13	101	16	0	130	15	8	3	0	26	229
Total Volume	21	237	6	0	264	10	25	15	0	50	45	469	83	0	597	61	34	18	0	113	1024
% App. Total	8	89.8	2.3	0		20	50	30	0		7.5	78.6	13.9	0		54	30.1	15.9	0		
PHF	.750	.859	.375	.000	.835	.625	.781	.750	.000	.893	.865	.882	.669	.000	.843	.847	.773	.750	.000	.883	.892

Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

Weather: Hot & Sunny
 CountCAM 200
 Study Conducted By: Andrea

File Name : TMC 1951
 Site Code :
 Start Date : 08/01/2019
 Page No : 1

Groups Printed- Trucks

Start Time	CSAH 5 Southbound					Sunwood Dr. Westbound					CSAH 5 Northbound					Sunwood Dr. 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	1	0	0	1	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	3
01:45	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	2	0	0	2	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	4
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	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	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	0	0	0	0	0	0	0	0	0	0	2
05:00	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
05:15	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
05:30	0	6	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
05:45	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Total	0	12	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
06:00	0	6	0	0	6	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	9
06:15	0	9	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
06:30	0	7	0	0	7	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	8
06:45	0	11	0	0	11	0	0	0	0	0	0	4	0	0	4	1	0	0	0	1	0	16
Total	0	33	0	0	33	0	0	0	0	0	0	8	0	0	8	1	0	0	0	1	0	42
07:00	1	6	0	0	7	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	8
07:15	0	3	0	0	3	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	4
07:30	0	8	0	0	8	0	0	0	0	0	0	5	0	0	5	1	0	0	0	1	0	14
07:45	0	6	0	0	6	0	1	0	0	1	0	2	0	0	2	0	0	0	0	0	0	9
Total	1	23	0	0	24	0	1	0	0	1	0	9	0	0	9	1	0	0	0	1	0	35
08:00	0	7	0	0	7	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	10
08:15	0	3	0	0	3	0	0	0	0	0	0	2	0	0	2	0	1	0	0	1	0	6
08:30	0	2	0	0	2	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	6
08:45	0	2	0	0	2	0	0	0	0	0	0	2	0	0	2	1	0	2	0	3	0	7
Total	0	14	0	0	14	0	0	0	0	0	0	11	0	0	11	1	1	2	0	4	0	29
09:00	0	3	0	0	3	0	0	1	0	1	0	4	0	0	4	0	0	0	0	0	0	8

Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

Weather: Hot & Sunny
 CountCAM 200
 Study Conducted By: Andrea

File Name : TMC 1951
 Site Code :
 Start Date : 08/01/2019
 Page No : 2

Groups Printed- Trucks

Start Time	CSAH 5 Southbound					Sunwood Dr. Westbound					CSAH 5 Northbound					Sunwood Dr. 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	2	0	0	2	0	0	0	0	0	0	3	0	0	3	0	1	0	0	1	6
09:30	0	3	0	0	3	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	8
09:45	0	2	0	0	2	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	4
Total	0	10	0	0	10	0	0	1	0	1	0	14	0	0	14	0	1	0	0	1	26
10:00	0	3	0	0	3	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	9
10:15	0	6	0	0	6	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	7
10:30	0	3	0	0	3	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	6
10:45	0	2	0	0	2	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	4
Total	0	14	0	0	14	0	0	0	0	0	0	12	0	0	12	0	0	0	0	0	26
11:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1	2
11:15	0	2	0	0	2	0	0	0	0	0	0	1	1	0	2	1	0	0	0	1	5
11:30	0	2	0	0	2	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	4
11:45	0	3	1	0	4	0	0	0	0	0	0	2	0	0	2	0	0	1	0	1	7
Total	0	7	1	0	8	0	1	0	0	1	0	5	1	0	6	2	0	1	0	3	18
12:00	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	2
12:15	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	3
12:30	0	4	1	0	5	1	0	0	0	1	0	3	0	0	3	0	0	0	0	0	9
12:45	0	3	0	0	3	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	4
Total	0	9	1	0	10	1	0	0	0	1	0	7	0	0	7	0	0	0	0	0	18
13:00	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	0	1	0	0	1	4
13:15	1	3	0	0	4	0	1	0	0	1	0	2	0	0	2	0	0	0	0	0	7
13:30	0	0	1	0	1	0	1	0	0	1	0	2	0	0	2	0	0	0	0	0	4
13:45	0	1	0	0	1	0	0	0	0	0	0	3	0	0	3	1	0	0	0	1	5
Total	1	5	1	0	7	0	2	0	0	2	0	9	0	0	9	1	1	0	0	2	20
14:00	0	2	0	0	2	0	0	0	0	0	0	4	0	0	4	1	0	0	0	1	7
14:15	0	4	0	0	4	0	1	0	0	1	0	5	0	0	5	0	0	0	0	0	10
14:30	0	2	0	0	2	0	0	0	0	0	0	2	0	0	2	0	1	1	0	2	6
14:45	0	2	0	0	2	0	0	1	0	1	0	2	1	0	3	0	0	0	0	0	6
Total	0	10	0	0	10	0	1	1	0	2	0	13	1	0	14	1	1	1	0	3	29
15:00	0	3	0	0	3	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	8
15:15	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1	2
15:30	0	3	0	0	3	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	9
15:45	0	2	0	0	2	0	0	0	0	0	1	3	0	0	4	0	0	0	0	0	6
Total	0	8	0	0	8	0	0	0	0	0	1	15	0	0	16	1	0	0	0	1	25
16:00	0	1	0	0	1	1	0	0	0	1	0	2	0	0	2	0	0	0	0	0	4
16:15	0	3	0	0	3	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	5
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45	0	7	0	0	7	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	9
Total	0	11	0	0	11	1	0	0	0	1	0	6	0	0	6	0	0	0	0	0	18
17:00	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	4
17:15	0	1	0	0	1	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	2
17:30	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	2
17:45	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	3
Total	0	1	0	0	1	0	0	0	0	0	1	9	0	0	10	0	0	0	0	0	11
18:00	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	3
18:15	0	0	0	0	0	0	0	0	0	0	0	8	0	0	8	0	0	0	0	0	8
18:30	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	4
18:45	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	3
Total	0	2	0	0	2	0	0	0	0	0	0	16	0	0	16	0	0	0	0	0	18

Anoka County Highway Department
 Traffic Engineering Section
 Traffic Volume and Turning Movement Study

Weather: Hot & Sunny
 CountCAM 200
 Study Conducted By: Andrea

File Name : TMC 1951
 Site Code :
 Start Date : 08/01/2019
 Page No : 3

Groups Printed- Trucks

Start Time	CSAH 5 Southbound					Sunwood Dr. Westbound					CSAH 5 Northbound					Sunwood Dr. 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	5	0	0	5	1	0	0	0	1	7
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	0	0	0	0	1	0	0	1	0	0	0	0	0	1
19:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
Total	0	1	0	0	1	0	0	0	0	0	0	6	0	0	6	2	0	0	0	2	9
20:00	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
20:15	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	3
20:30	0	3	0	0	3	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	4
20:45	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
Total	0	6	0	0	6	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	10
21:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
21:15	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	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	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
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	2	0	0	2	0	0	0	0	0	2
22:30	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
22:45	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	2
Total	0	0	0	0	0	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	5
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	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
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	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Grand Total	2	172	3	0	177	2	5	2	0	9	2	152	2	0	156	10	4	4	0	18	360
Apprch %	1.1	97.2	1.7	0		22.2	55.6	22.2	0		1.3	97.4	1.3	0		55.6	22.2	22.2	0		
Total %	0.6	47.8	0.8	0	49.2	0.6	1.4	0.6	0	2.5	0.6	42.2	0.6	0	43.3	2.8	1.1	1.1	0	5	

**ANOKA COUNTY HIGHWAY
PC-WARRANTS
TRAFFIC SIGNAL WARRANT ANALYSIS**

Study Name: TMC 1951
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Signal Warrants - Summary

Major Street Approaches

Northbound: CSAH 5
Number of Lanes : 1

Total Approach Volume: 4,147

Southbound: CSAH 5
Number of Lanes : 1

Total Approach Volume: 4,162

Minor Street Approaches

Eastbound: Sunwood Dr.
Number of Lanes : 1

Total Approach Volume: 1,175

Westbound: Sunwood Dr.
Number of Lanes : 1

Total Approach Volume: 585

Warrant Summary (Rural Values Apply)

- Warrant 1 - Eight Hour Vehicular Volumes**.....**Not Satisfied**
 Warrant 1A - Minimum Vehicular Volume.....**Not Satisfied**
 Required volumes reached for 1 hours, 8 are needed
- Warrant 1B - Interruption of Continuous Traffic**.....**Not Satisfied**
 Required volumes reached for 6 hours, 8 are needed
- Warrant 1C - Combination of Warrants**.....**Not Satisfied**
 Required 1A volumes reached for 3 hours, 8 are needed
 Required 1B volumes reached for 10 hours, 8 are needed
- Warrant 2 - Four Hour Volumes**.....**Not Satisfied**
 Number of hours (3) volumes exceed minimum < minimum required (4).
- Warrant 3 - Peak Hour**.....**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**.....**Satisfied**
 Volumes exceed minimums for at least one 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 PC-WARRANTS TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: **TMC 1951**

Study Date: **04/17/2020**

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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 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 = **350**
Veh/Hr Minor = **105**

Time	Major Road CSAH 5				Total	Minor Road Sunwood Dr.		Met?
	Major NB	+	Major SB	=		Minor EB	Minor WB	
16:15 - 17:15	578	+	259	=	837	108	45	Yes
16:00 - 17:00	543	+	275	=	818	99	43	No
15:45 - 16:45	516	+	245	=	761	92	40	No
17:15 - 18:15	482	+	234	=	716	84	43	No
15:30 - 16:30	439	+	255	=	694	83	34	No
17:30 - 18:30	455	+	225	=	680	72	39	No
15:15 - 16:15	417	+	257	=	674	82	32	No
15:00 - 16:00	415	+	223	=	638	76	28	No
14:45 - 15:45	361	+	234	=	595	74	26	No
17:45 - 18:45	397	+	193	=	590	67	43	No
07:15 - 08:15	121	+	463	=	584	79	61	No
07:00 - 08:00	103	+	474	=	577	84	55	No
06:30 - 07:30	88	+	482	=	570	78	50	No
06:45 - 07:45	92	+	460	=	552	74	53	No
14:30 - 15:30	330	+	218	=	548	69	30	No
07:30 - 08:30	118	+	430	=	548	76	50	No
18:00 - 19:00	349	+	196	=	545	56	44	No
06:15 - 07:15	73	+	464	=	537	68	38	No
06:00 - 07:00	67	+	461	=	528	65	35	No
18:15 - 19:15	314	+	195	=	509	56	40	No
07:45 - 08:45	130	+	376	=	506	76	41	No
14:15 - 15:15	295	+	210	=	505	59	32	No
05:45 - 06:45	66	+	414	=	480	61	33	No
14:00 - 15:00	255	+	211	=	466	54	31	No
18:30 - 19:30	271	+	177	=	448	60	37	No

ANOKA COUNTY HIGHWAY PC-WARRANTS TRAFFIC SIGNAL WARRANT ANALYSIS

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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 6 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 CSAH 5				Total	Minor Road Sunwood Dr.		Met?
	Major NB	+	Major SB	=		Minor EB	Minor WB	
16:30 - 17:30	597	+	264	=	861	113	50	Yes
15:30 - 16:30	439	+	255	=	694	83	34	Yes
17:30 - 18:30	455	+	225	=	680	72	39	Yes
07:00 - 08:00	103	+	474	=	577	84	55	Yes
14:30 - 15:30	330	+	218	=	548	69	30	Yes
06:00 - 07:00	67	+	461	=	528	65	35	Yes
14:15 - 15:15	295	+	210	=	505	59	32	No
05:45 - 06:45	66	+	414	=	480	61	33	No
14:00 - 15:00	255	+	211	=	466	54	31	No
18:30 - 19:30	271	+	177	=	448	60	37	No
12:00 - 13:00	208	+	225	=	433	76	34	No
13:45 - 14:45	240	+	189	=	429	51	26	No
11:45 - 12:45	200	+	229	=	429	69	31	No
18:45 - 19:45	264	+	163	=	427	63	23	No
12:15 - 13:15	211	+	215	=	426	75	39	No
08:00 - 09:00	139	+	287	=	426	70	38	No
12:30 - 13:30	219	+	199	=	418	75	42	No
19:00 - 20:00	268	+	143	=	411	73	22	No
11:30 - 12:30	190	+	218	=	408	71	26	No
11:15 - 12:15	174	+	213	=	387	76	25	No
05:30 - 06:30	51	+	336	=	387	56	25	No
13:30 - 14:30	215	+	169	=	384	49	22	No
08:15 - 09:15	129	+	254	=	383	75	30	No
12:45 - 13:45	208	+	174	=	382	73	37	No
08:30 - 09:30	138	+	241	=	379	71	29	No

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

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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 3 hours meet 1A minimums.
10 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 5						Minor Road Sunwood Dr.		
Time	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	Met1A?
16:45 - 17:45	552	+	268	=	820	98	51	Yes
15:45 - 16:45	516	+	245	=	761	92	40	Yes
07:00 - 08:00	103	+	474	=	577	84	55	Yes
15:30 - 16:30	439	+	255	=	694	83	34	No
15:15 - 16:15	417	+	257	=	674	82	32	No
15:00 - 16:00	415	+	223	=	638	76	28	No
14:45 - 15:45	361	+	234	=	595	74	26	No
17:45 - 18:45	397	+	193	=	590	67	43	No
06:30 - 07:30	88	+	482	=	570	78	50	No
06:45 - 07:45	92	+	460	=	552	74	53	No
14:30 - 15:30	330	+	218	=	548	69	30	No
18:00 - 19:00	349		196		545	56	44	No

Time	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	Met1B?
16:45 - 17:45	552	+	268	=	820	98	51	Yes
15:45 - 16:45	516	+	245	=	761	92	40	Yes
14:45 - 15:45	361	+	234	=	595	74	26	Yes
17:45 - 18:45	397	+	193	=	590	67	43	Yes
06:45 - 07:45	92	+	460	=	552	74	53	Yes
07:45 - 08:45	130	+	376	=	506	76	41	Yes
05:45 - 06:45	66	+	414	=	480	61	33	Yes
11:45 - 12:45	200	+	229	=	429	69	31	Yes
13:45 - 14:45	240	+	189	=	429	51	26	Yes
18:45 - 19:45	264	+	163	=	427	63	23	Yes
11:30 - 12:30	190	+	218	=	408	71	26	No
11:15 - 12:15	174		213		387	76	25	No

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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.

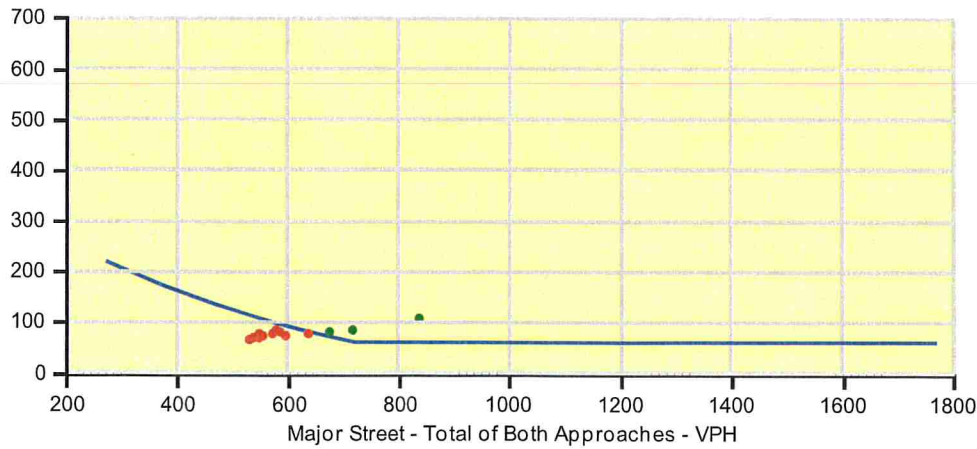
Summary

Only 3 hours meet minimums.
 Warrant is NOT met.

Site Data Required

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

Time	Major Road CSAH 5				Total	Minor Road Sunwood Dr.		Met?
	Major NB	+	Major SB	=		Minor EB	Minor WB	
16:15 - 17:15	578	+	259	=	837	108	45	Yes
17:15 - 18:15	482	+	234	=	716	84	43	Yes
15:15 - 16:15	417	+	257	=	674	82	32	Yes
15:00 - 16:00	415	+	223	=	638	76	28	No
14:45 - 15:45	361	+	234	=	595	74	26	No
07:15 - 08:15	121	+	463	=	584	79	61	No
07:00 - 08:00	103	+	474	=	577	84	55	No
06:30 - 07:30	88	+	482	=	570	78	50	No
06:45 - 07:45	92	+	460	=	552	74	53	No
14:30 - 15:30	330	+	218	=	548	69	30	No
07:30 - 08:30	118	+	430	=	548	76	50	No
							38	No



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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

1 hours meet minimums.
Warrant IS met.

Site Data Required

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

Time	Major Road CSAH 5				Total	Minor Road Sunwood Dr.		Met?
	Major NB	+	Major SB	=		Minor EB	Minor WB	
16:30 - 17:30	597	+	264	=	861	113	50	Yes
16:15 - 17:15	578	+	259	=	837	108	45	No
16:45 - 17:45	552	+	268	=	820	98	51	No
16:00 - 17:00	543	+	275	=	818	99	43	No
15:45 - 16:45	516	+	245	=	761	92	40	No
17:00 - 18:00	513	+	242	=	755	99	44	No
17:15 - 18:15	482	+	234	=	716	84	43	No
15:30 - 16:30	439	+	255	=	694	83	34	No
17:30 - 18:30	455	+	225	=	680	72	39	No
15:15 - 16:15	417	+	257	=	674	82	32	No
15:00 - 16:00	415	+	223	=	638	76	28	No
							26	No

