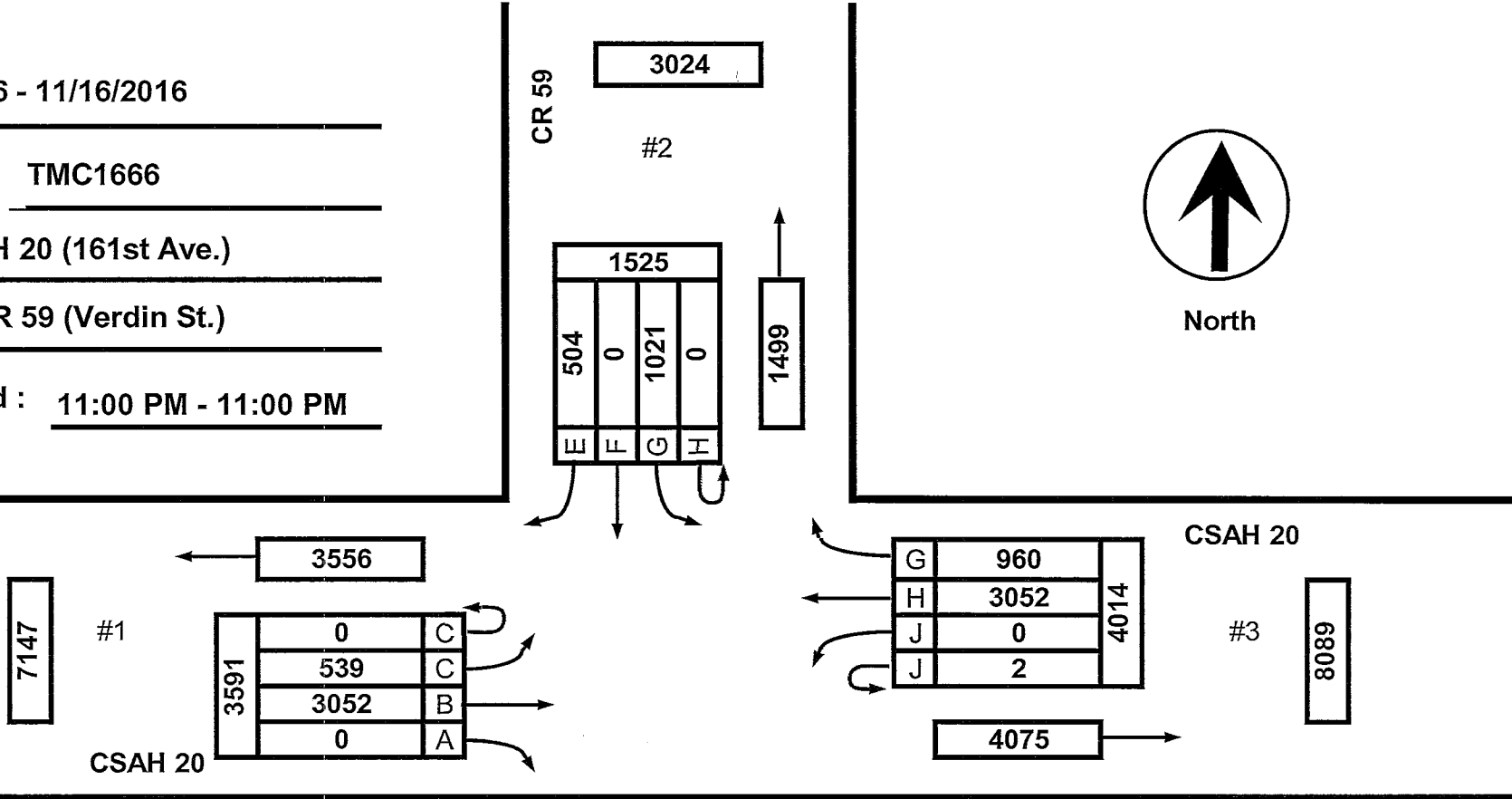


Date : 11/15/16 - 11/16/2016

Count Number : TMC1666

Location : CSAH 20 (161st Ave.)
@ CR 59 (Verdin St.)

Collection Period : 11:00 PM - 11:00 PM



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

Anoka County Highway Department
 Traffic Volume and Turning
 Movement Study

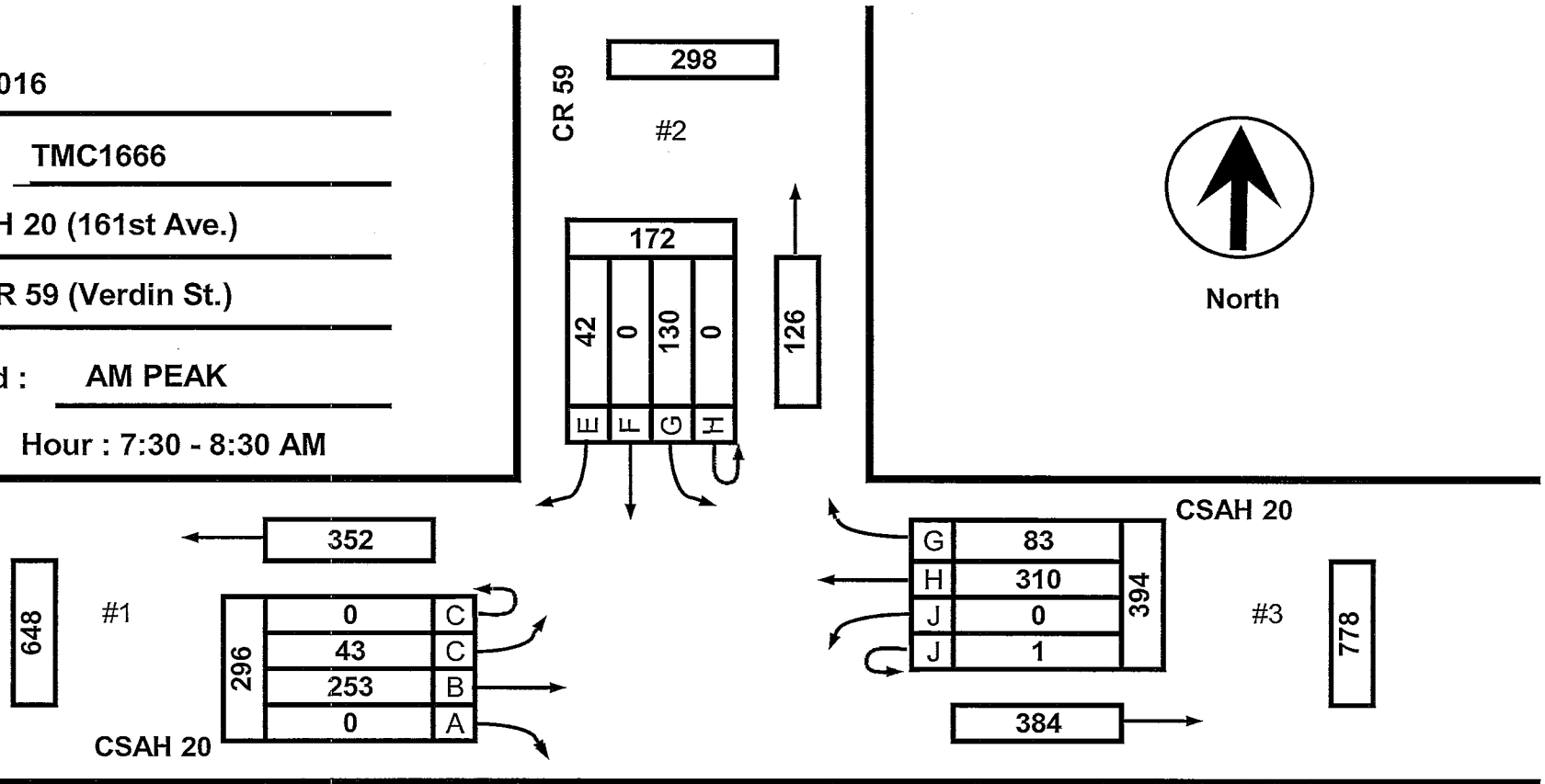
Date : 11/16/2016

Count Number : TMC1666

Location : CSAH 20 (161st Ave.)
@ CR 59 (Verdin St.)

Collection Period : AM PEAK

Hour : 7:30 - 8:30 AM



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

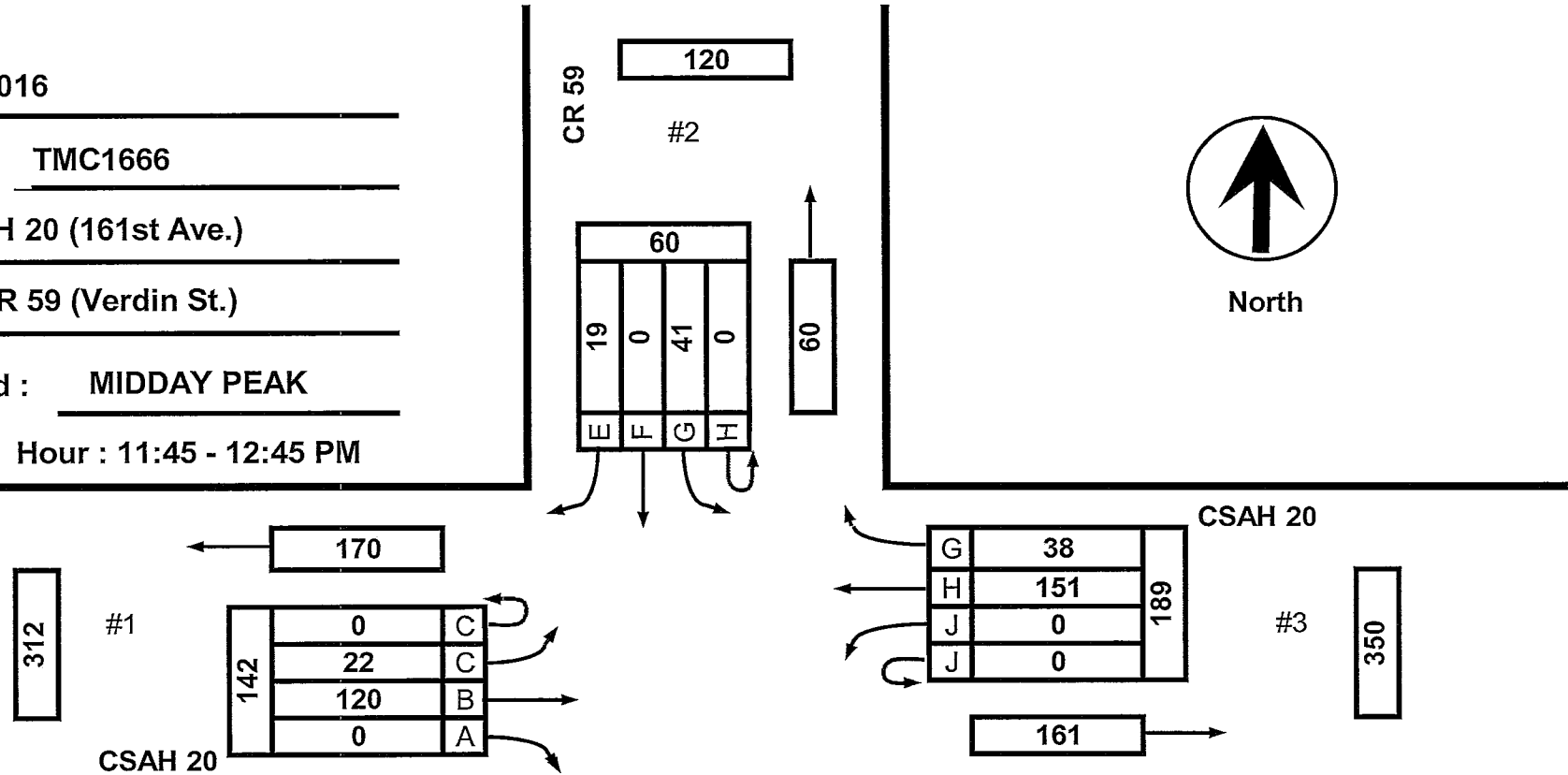
Anoka County Highway Department
 Traffic Volume and Turning
 Movement Study

Date : 11/16/2016

Count Number : TMC1666

Location : CSAH 20 (161st Ave.)
@ CR 59 (Verdin St.)

Collection Period : MIDDAY PEAK
 Hour : 11:45 - 12:45 PM



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

Anoka County Highway Department
Traffic Volume and Turning
Movement Study

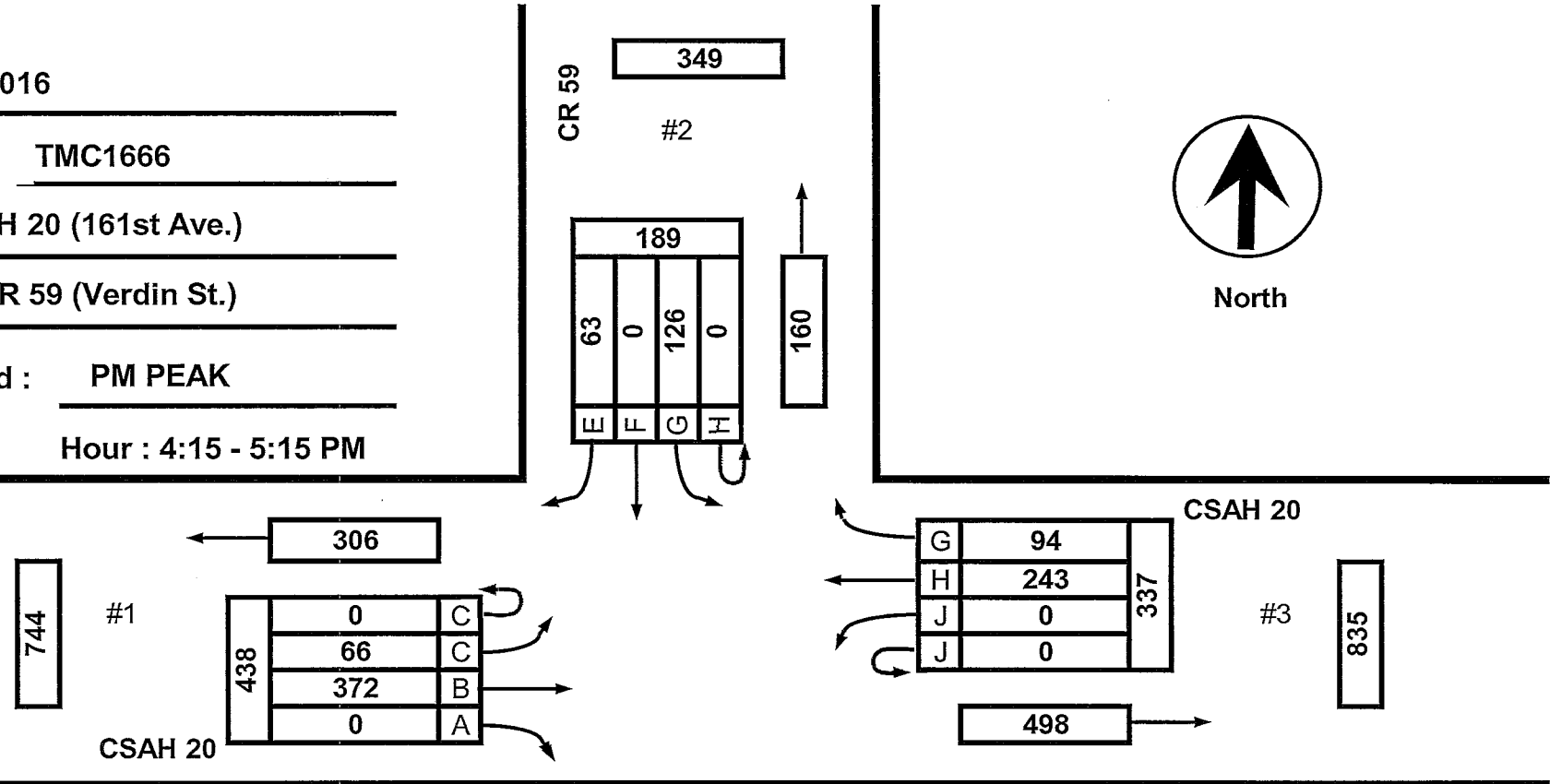
Date : 11/16/2016

Count Number : TMC1666

Location : CSAH 20 (161st Ave.)
@ CR 59 (Verdin St.)

Collection Period : PM PEAK

Hour : 4:15 - 5:15 PM



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

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 : tmc1666
 Site Code :
 Start Date : 11/15/2016
 Page No : 1

Weather: Partly Cloudy and Cool
 CountCam 200
 Study Conducted By: Andrea

Groups Printed- Cars + - Trucks

Start Time	CR 59 Southbound						CSAH 20 Westbound						CSAH 20 Northbound						CSAH 20 Eastbound						Excl. 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			
23:00	0	2	0	0	0	2	0	0	0	1	0	1	0	0	0	0	0	0	0	2	7	0	0	9	0	12	12
23:15	0	0	0	0	0	0	0	0	3	1	0	4	0	0	0	0	0	0	0	1	5	0	0	6	0	10	10
23:30	0	0	0	0	0	0	0	0	2	1	0	3	0	0	0	0	0	0	0	0	5	0	0	5	0	8	8
23:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	8	0	8	8
Total	0	2	0	0	0	2	0	0	5	3	0	8	0	0	0	0	0	0	0	3	25	0	0	28	0	38	38
00:00	0	1	0	2	0	3	0	0	2	0	0	2	0	0	0	0	0	0	0	0	2	0	0	2	0	7	7
00:15	0	1	0	0	0	1	0	0	3	3	0	6	0	0	0	0	0	0	0	0	2	0	0	2	0	9	9
00:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	3	3
00:45	0	0	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	0	0	0	1	0	0	1	0	3	3
Total	0	2	0	2	0	4	0	0	6	4	0	10	0	0	0	0	0	0	0	0	8	0	0	8	0	22	22
01:00	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	2	3	0	0	5	0	6	6
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	2	2
01:30	0	0	0	1	0	1	0	0	4	0	0	4	0	0	0	0	0	0	0	1	2	0	0	3	0	8	8
01:45	0	1	0	0	0	1	0	0	1	0	0	1	0	0	0	0	0	0	0	1	1	0	0	2	0	4	4
Total	0	1	0	1	0	2	0	0	6	0	0	6	0	0	0	0	0	0	0	4	8	0	0	12	0	20	20
02:00	0	1	0	0	0	1	0	0	1	1	0	2	0	0	0	0	0	0	0	0	2	0	0	2	0	5	5
02:15	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	0	2	0	0	2	0	5	5
02:30	0	0	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	0	0	1	0	0	1	0	5	5
02:45	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	4	4
Total	0	1	0	1	0	2	0	0	8	1	0	9	0	0	0	0	0	0	0	0	8	0	0	8	0	19	19
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1	1
03:15	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1	0	0	1	0	2	2
03:30	0	2	0	0	0	2	0	0	5	1	0	6	0	0	0	0	0	0	0	1	2	0	0	3	0	11	11
03:45	0	0	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5	5
Total	0	2	0	0	0	2	0	0	11	1	0	12	0	0	0	0	0	0	0	1	4	0	0	5	0	19	19
04:00	0	1	0	3	0	4	0	0	4	0	0	4	0	0	0	0	0	0	0	1	1	0	0	2	0	10	10
04:15	0	3	0	1	0	4	0	0	15	0	0	15	0	0	0	0	0	0	0	0	1	0	0	1	0	20	20
04:30	0	2	0	2	0	4	0	0	14	0	0	14	0	0	0	0	0	0	0	0	2	0	0	2	0	20	20
04:45	0	4	0	0	0	4	0	0	13	0	0	13	0	0	0	0	0	0	0	0	4	0	0	4	0	21	21
Total	0	10	0	6	0	16	0	0	46	0	0	46	0	0	0	0	0	0	0	1	8	0	0	9	0	71	71
05:00	0	1	0	6	0	7	0	0	14	1	0	15	0	0	0	0	0	0	0	0	4	0	0	4	0	26	26
05:15	0	11	0	1	0	12	0	0	21	0	0	21	0	0	0	0	0	0	0	0	7	0	0	7	0	40	40
05:30	0	14	0	8	0	22	0	0	30	0	0	30	0	0	0	0	0	0	0	1	5	0	0	6	0	58	58
05:45	0	5	0	8	0	13	0	0	43	1	0	44	0	0	0	0	0	0	0	0	11	0	0	11	0	68	68
Total	0	31	0	23	0	54	0	0	108	2	0	110	0	0	0	0	0	0	0	1	27	0	0	28	0	192	192



Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

File Name : tmc1666
 Site Code :
 Start Date : 11/15/2016
 Page No : 2

Weather: Partly Cloudy and Cool
 CountCam 200
 Study Conducted By: Andrea

Groups Printed- Cars + - Trucks

Start Time	CR 59 Southbound						CSAH 20 Westbound						Northbound						CSAH 20 Eastbound						Exclu. Total	Inclu. Total	Int. Total
	UTm	Left	Thru	Right	Peds	App. Total	UTm	Left	Thru	Right	Peds	App. Total	UTm	Left	Thru	Right	Peds	App. Total	UTm	Left	Thru	Right	Peds	App. Total			
06:00	0	14	0	9	0	23	0	0	47	4	0	51	0	0	0	0	0	0	0	2	22	0	0	24	0	98	98
06:15	0	10	0	9	0	19	0	0	64	3	0	67	0	0	0	0	0	0	0	3	20	0	0	23	0	109	109
06:30	0	20	0	16	0	36	0	0	79	8	0	87	0	0	0	0	0	0	0	4	38	0	0	42	0	165	165
06:45	0	36	0	16	0	52	0	0	61	11	0	72	0	0	0	0	0	0	0	11	46	0	0	57	0	181	181
Total	0	80	0	50	0	130	0	0	251	26	0	277	0	0	0	0	0	0	0	20	126	0	0	146	0	553	553
07:00	0	24	0	23	0	47	0	0	75	17	0	92	0	0	0	0	0	0	0	3	50	0	0	53	0	192	192
07:15	0	17	0	25	0	42	0	0	82	16	0	98	0	0	0	0	0	0	0	4	60	0	0	64	0	204	204
07:30	0	40	0	15	0	55	0	0	85	11	0	96	0	0	0	0	0	0	0	10	48	0	0	58	0	209	209
07:45	0	26	0	11	0	37	1	0	71	17	0	89	0	0	0	0	0	0	0	9	76	0	0	85	0	211	211
Total	0	107	0	74	0	181	1	0	313	61	0	375	0	0	0	0	0	0	0	26	234	0	0	260	0	816	816
08:00	0	37	0	9	0	46	0	0	76	23	0	99	0	0	0	0	0	0	0	13	70	0	0	83	0	228	228
08:15	0	27	0	7	0	34	0	0	78	32	0	110	0	0	0	0	0	0	0	11	59	0	0	70	0	214	214
08:30	0	18	0	8	0	26	0	0	44	13	0	57	0	0	0	0	0	0	0	4	37	0	0	41	0	124	124
08:45	0	9	0	4	0	13	0	0	49	7	0	56	0	0	0	0	0	0	0	8	47	0	0	55	0	124	124
Total	0	91	0	28	0	119	0	0	247	75	0	322	0	0	0	0	0	0	0	36	213	0	0	249	0	690	690
09:00	0	15	0	5	0	20	0	0	25	47	0	72	0	0	0	0	0	0	0	16	33	0	0	49	0	141	141
09:15	0	58	0	32	0	90	0	0	37	27	0	64	0	0	0	0	0	0	0	19	39	0	0	58	0	212	212
09:30	0	24	0	12	0	36	0	0	45	8	0	53	0	0	0	0	0	0	0	2	25	0	0	27	0	116	116
09:45	0	13	0	6	0	19	0	0	29	13	0	42	0	0	0	0	0	0	0	4	31	0	0	35	0	96	96
Total	0	110	0	55	0	165	0	0	136	95	0	231	0	0	0	0	0	0	0	41	128	0	0	169	0	565	565
10:00	0	9	0	3	0	12	0	0	26	6	0	32	0	0	0	0	0	0	0	3	28	0	0	31	0	75	75
10:15	0	12	0	4	0	16	0	0	27	7	0	34	0	0	0	0	0	0	0	4	24	0	0	28	0	78	78
10:30	0	13	0	6	0	19	0	0	47	13	0	60	0	0	0	0	0	0	0	0	28	0	0	28	0	107	107
10:45	0	3	0	5	0	8	0	0	31	10	0	41	0	0	0	0	0	0	0	2	26	0	0	28	0	77	77
Total	0	37	0	18	0	55	0	0	131	36	0	167	0	0	0	0	0	0	0	9	106	0	0	115	0	337	337
11:00	0	11	0	3	0	14	0	0	28	12	0	40	0	0	0	0	0	0	0	6	27	0	0	33	0	87	87
11:15	0	9	0	5	0	14	0	0	26	6	0	32	0	0	0	0	0	0	0	5	36	0	0	41	0	87	87
11:30	0	9	0	5	0	14	0	0	31	8	0	39	0	0	0	0	0	0	0	4	23	0	0	27	0	80	80
11:45	0	7	0	7	0	14	0	0	45	7	0	52	0	0	0	0	0	0	0	4	26	0	0	30	0	96	96
Total	0	36	0	20	0	56	0	0	130	33	0	163	0	0	0	0	0	0	0	19	112	0	0	131	0	350	350
12:00	0	12	0	3	0	15	0	0	29	8	0	37	0	0	0	0	0	0	0	5	34	0	0	39	0	91	91
12:15	0	8	0	3	0	11	0	0	36	15	0	51	0	0	0	0	0	0	0	6	28	0	0	34	0	96	96
12:30	0	14	0	6	0	20	0	0	41	8	0	49	0	0	0	0	0	0	0	7	32	0	0	39	0	108	108
12:45	0	7	0	2	0	9	0	0	34	6	0	40	0	0	0	0	0	0	0	10	35	0	0	45	0	94	94
Total	0	41	0	14	0	55	0	0	140	37	0	177	0	0	0	0	0	0	0	28	129	0	0	157	0	389	389



Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

File Name : tmc1666
 Site Code :
 Start Date : 11/15/2016
 Page No : 3

Weather: Partly Cloudy and Cool
 CountCam 200
 Study Conducted By: Andrea

Groups Printed- Cars +- Trucks

Start Time	CR 59 Southbound						CSAH 20 Westbound						CSAH 20 Northbound						CSAH 20 Eastbound						Exclu. Total	Inclu. Total	Int. Total
	UTm	Left	Thru	Right	Peds	App. Total	UTm	Left	Thru	Right	Peds	App. Total	UTm	Left	Thru	Right	Peds	App. Total	UTm	Left	Thru	Right	Peds	App. Total			
13:00	0	9	0	5	0	14	0	0	26	6	0	32	0	0	0	0	0	0	0	7	36	0	0	43	0	89	89
13:15	0	3	0	2	0	5	0	0	38	3	0	41	0	0	0	0	0	0	0	9	33	0	0	42	0	88	88
13:30	0	11	0	7	0	18	0	0	35	6	0	41	0	0	0	0	0	0	0	7	30	0	0	37	0	96	96
13:45	0	14	0	3	0	17	0	0	26	8	0	34	0	0	0	0	0	0	0	5	27	0	0	32	0	83	83
Total	0	37	0	17	0	54	0	0	125	23	0	148	0	0	0	0	0	0	0	28	126	0	0	154	0	356	356
14:00	0	9	0	5	0	14	0	0	35	3	0	38	0	0	0	0	0	0	0	6	40	0	0	46	0	98	98
14:15	0	4	0	4	0	8	0	0	34	9	0	43	0	0	0	0	0	0	0	5	54	0	0	59	0	110	110
14:30	0	17	0	6	0	23	0	0	49	25	0	74	0	0	0	0	0	0	0	9	40	0	0	49	0	146	146
14:45	0	14	0	2	0	16	0	0	46	17	0	63	0	0	0	0	0	0	0	9	54	0	0	63	0	142	142
Total	0	44	0	17	0	61	0	0	164	54	0	218	0	0	0	0	0	0	0	29	188	0	0	217	0	496	496
15:00	0	9	0	9	0	18	0	0	46	17	0	63	0	0	0	0	0	0	0	6	45	0	0	51	0	132	132
15:15	0	6	0	8	0	14	1	0	31	15	0	47	0	0	0	0	0	0	0	14	83	0	0	97	0	158	158
15:30	0	15	0	5	0	20	0	0	59	40	0	99	0	0	0	0	0	0	0	20	50	0	0	70	0	189	189
15:45	0	14	0	7	0	21	0	0	53	48	0	101	0	0	0	0	0	0	0	39	78	0	0	117	0	239	239
Total	0	44	0	29	0	73	1	0	189	120	0	310	0	0	0	0	0	0	0	79	256	0	0	335	0	718	718
16:00	0	62	0	25	0	87	0	0	53	26	0	79	0	0	0	0	0	0	0	24	74	0	0	98	0	264	264
16:15	0	45	0	18	0	63	0	0	66	15	0	81	0	0	0	0	0	0	0	17	89	0	0	106	0	250	250
16:30	0	18	0	12	0	30	0	0	48	25	0	73	0	0	0	0	0	0	0	11	63	0	0	74	0	177	177
16:45	0	33	0	14	0	47	0	0	60	26	0	86	0	0	0	0	0	0	0	22	113	0	0	135	0	268	268
Total	0	158	0	69	0	227	0	0	227	92	0	319	0	0	0	0	0	0	0	74	339	0	0	413	0	959	959
17:00	0	30	0	19	0	49	0	0	69	28	0	97	0	0	0	0	0	0	0	16	107	0	0	123	0	269	269
17:15	0	16	0	11	0	27	0	0	60	21	0	81	0	0	0	0	0	0	0	14	91	0	0	105	0	213	213
17:30	0	19	0	5	0	24	0	0	64	30	0	94	0	0	0	0	0	0	0	12	62	0	0	74	0	192	192
17:45	0	21	0	7	0	28	0	0	45	26	0	71	0	0	0	0	0	0	0	18	75	0	0	93	0	192	192
Total	0	86	0	42	0	128	0	0	238	105	0	343	0	0	0	0	0	0	0	60	335	0	0	395	0	866	866
18:00	0	17	0	11	0	28	0	0	47	19	0	66	0	0	0	0	0	0	0	7	64	0	0	71	0	165	165
18:15	0	6	0	5	0	11	0	0	42	17	0	59	0	0	0	0	0	0	0	9	67	0	0	76	0	146	146
18:30	0	11	0	2	0	13	0	0	41	8	0	49	0	0	0	0	0	0	0	6	64	0	0	70	0	132	132
18:45	0	10	0	1	0	11	0	0	47	14	0	61	0	0	0	0	0	0	0	8	67	0	0	75	0	147	147
Total	0	44	0	19	0	63	0	0	177	58	0	235	0	0	0	0	0	0	0	30	262	0	0	292	0	590	590
19:00	0	3	0	2	0	5	0	0	29	9	0	38	0	0	0	0	0	0	0	7	43	0	0	50	0	93	93
19:15	0	4	0	0	0	4	0	0	25	7	0	32	0	0	0	0	0	0	0	4	55	0	0	59	0	95	95
19:30	0	6	0	2	0	8	0	0	38	14	0	52	0	0	0	0	0	0	0	6	32	0	0	38	0	98	98
19:45	0	5	0	4	0	9	0	0	33	14	0	47	0	0	0	0	0	0	0	3	29	0	0	32	0	88	88
Total	0	18	0	8	0	26	0	0	125	44	0	169	0	0	0	0	0	0	0	20	159	0	0	179	0	374	374



Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

File Name : tmc1666
 Site Code :
 Start Date : 11/15/2016
 Page No : 4

Weather: Partly Cloudy and Cool
 CountCam 200
 Study Conducted By: Andrea

Groups Printed- Cars + - Trucks

Start Time	CR 59 Southbound						CSAH 20 Westbound						Northbound						CSAH 20 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			
20:00	0	12	0	3	0	15	0	0	21	9	0	30	0	0	0	0	0	0	0	4	25	0	0	29	0	74	74
20:15	0	8	0	1	0	9	0	0	39	11	0	50	0	0	0	0	0	0	0	4	37	0	0	41	0	100	100
20:30	0	7	0	1	0	8	0	0	36	14	0	50	0	0	0	0	0	0	0	4	33	0	0	37	0	95	95
20:45	0	2	0	2	0	4	0	0	33	10	0	43	0	0	0	0	0	0	0	5	42	0	0	47	0	94	94
Total	0	29	0	7	0	36	0	0	129	44	0	173	0	0	0	0	0	0	0	17	137	0	0	154	0	363	363
21:00	0	2	0	1	0	3	0	0	33	10	0	43	0	0	0	0	0	0	0	6	27	0	0	33	0	79	79
21:15	0	0	0	0	0	0	0	0	28	9	0	37	0	0	0	0	0	0	0	3	20	0	0	23	0	60	60
21:30	0	1	0	0	0	1	0	0	18	5	0	23	0	0	0	0	0	0	0	2	23	0	0	25	0	49	49
21:45	0	4	0	0	0	4	0	0	13	3	0	16	0	0	0	0	0	0	0	0	14	0	0	14	0	34	34
Total	0	7	0	1	0	8	0	0	92	27	0	119	0	0	0	0	0	0	0	11	84	0	0	95	0	222	222
22:00	0	0	0	1	0	1	0	0	18	5	0	23	0	0	0	0	0	0	0	1	13	0	0	14	0	38	38
22:15	0	1	0	2	0	3	0	0	14	5	0	19	0	0	0	0	0	0	0	1	7	0	0	8	0	30	30
22:30	0	1	0	0	0	1	0	0	7	4	0	11	0	0	0	0	0	0	0	0	4	0	0	4	0	16	16
22:45	0	1	0	0	0	1	0	0	9	5	0	14	0	0	0	0	0	0	0	0	6	0	0	6	0	21	21
Total	0	3	0	3	0	6	0	0	48	19	0	67	0	0	0	0	0	0	0	2	30	0	0	32	0	105	105
Grand Total	0	1021	0	504	0	1525	2	0	3052	960	0	4014	0	0	0	0	0	0	0	539	3052	0	0	3591	0	9130	9130
Apprch %	0	67	0	33			0	0	76	23.9			0	0	0	0			0	15	85	0					
Total %	0	11.2	0	5.5		16.7	0	0	33.4	10.5		44	0	0	0	0		0	0	5.9	33.4	0		39.3	0	100	
Cars +	0	970	0	486		1456	2	0	2953	920		3875	0	0	0	0		0	0	519	2944	0		3463	0	0	8794
% Cars +	0	95	0	96.4	0	95.5	100	0	96.8	95.8	0	96.5	0	0	0	0	0	0	0	96.3	96.5	0	0	96.4	0	0	96.3
Trucks	0	51	0	18		69	0	0	99	40		139	0	0	0	0		0	0	20	108	0		128	0	0	336
% Trucks	0	5	0	3.6	0	4.5	0	0	3.2	4.2	0	3.5	0	0	0	0	0	0	0	3.7	3.5	0	0	3.6	0	0	3.7



Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

File Name : tmc1666_temp
 Site Code :
 Start Date : 11/16/2016
 Page No : 5

Weather: Partly Cloudy and Cool
 CountCam 200
 Study Conducted By: Andrea

Start Time	CR 59 Southbound					CSAH 20 Westbound					Northbound					CSAH 20 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 07:30																					
07:30	0	40	0	15	55	0	0	85	11	96	0	0	0	0	0	0	10	48	0	58	209
07:45	0	26	0	11	37	1	0	71	17	89	0	0	0	0	0	0	9	76	0	85	211
08:00	0	37	0	9	46	0	0	76	23	99	0	0	0	0	0	0	13	70	0	83	228
08:15	0	27	0	7	34	0	0	78	32	110	0	0	0	0	0	0	11	59	0	70	214
Total Volume	0	130	0	42	172	1	0	310	83	394	0	0	0	0	0	0	43	253	0	296	862
% App. Total	0	75.6	0	24.4		0.3	0	78.7	21.1		0	0	0	0	0	0	14.5	85.5	0		
PHF	.000	.813	.000	.700	.782	.250	.000	.912	.648	.895	.000	.000	.000	.000	.000	.000	.827	.832	.000	.871	.945
Peak Hour Analysis From 10:00 to 13:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 11:45																					
11:45	0	7	0	7	14	0	0	45	7	52	0	0	0	0	0	0	4	26	0	30	96
12:00	0	12	0	3	15	0	0	29	8	37	0	0	0	0	0	0	5	34	0	39	91
12:15	0	8	0	3	11	0	0	36	15	51	0	0	0	0	0	0	6	28	0	34	96
12:30	0	14	0	6	20	0	0	41	8	49	0	0	0	0	0	0	7	32	0	39	108
Total Volume	0	41	0	19	60	0	0	151	38	189	0	0	0	0	0	0	22	120	0	142	391
% App. Total	0	68.3	0	31.7		0	0	79.9	20.1		0	0	0	0	0	0	15.5	84.5	0		
PHF	.000	.732	.000	.679	.750	.000	.000	.839	.633	.909	.000	.000	.000	.000	.000	.000	.786	.882	.000	.910	.905
Peak Hour Analysis From 14:00 to 22:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 16:15																					
16:15	0	45	0	18	63	0	0	66	15	81	0	0	0	0	0	0	17	89	0	106	250
16:30	0	18	0	12	30	0	0	48	25	73	0	0	0	0	0	0	11	63	0	74	177
16:45	0	33	0	14	47	0	0	60	26	86	0	0	0	0	0	0	22	113	0	135	268
17:00	0	30	0	19	49	0	0	69	28	97	0	0	0	0	0	0	16	107	0	123	269
Total Volume	0	126	0	63	189	0	0	243	94	337	0	0	0	0	0	0	66	372	0	438	964
% App. Total	0	66.7	0	33.3		0	0	72.1	27.9		0	0	0	0	0	0	15.1	84.9	0		
PHF	.000	.700	.000	.829	.750	.000	.000	.880	.839	.869	.000	.000	.000	.000	.000	.000	.750	.823	.000	.811	.896



Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

File Name : tmc1666
 Site Code :
 Start Date : 11/15/2016
 Page No : 1

Weather: Partly Cloudy and Cool
 CountCam 200
 Study Conducted By: Andrea

Groups Printed- Trucks

Start Time	CR 59 Southbound					CSAH 20 Westbound					Northbound					CSAH 20 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		
23:00	0	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	0
23:30	0	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	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
04:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
05:00	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
05:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
05:30	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	2
05:45	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	1	0	1	2	0	0	2	0	2	0	0	0	0	0	0	0	1	0	0	1	5
06:00	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	1	0	0	1	2
06:15	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	3	0	0	3	4
06:30	0	0	0	1	1	0	0	1	1	2	0	0	0	0	0	0	0	2	0	0	2	5
06:45	0	1	0	1	2	0	0	1	0	1	0	0	0	0	0	0	1	4	0	0	5	8
Total	0	1	0	2	3	0	0	4	1	5	0	0	0	0	0	0	1	10	0	0	11	19
07:00	0	1	0	0	1	0	0	2	2	4	0	0	0	0	0	0	0	5	0	0	5	10
07:15	0	2	0	1	3	0	0	3	1	4	0	0	0	0	0	0	0	2	0	0	2	9
07:30	0	0	0	1	1	0	0	2	0	2	0	0	0	0	0	0	0	1	0	0	1	4
07:45	0	1	0	0	1	0	0	3	0	3	0	0	0	0	0	0	0	8	0	0	8	12
Total	0	4	0	2	6	0	0	10	3	13	0	0	0	0	0	0	0	16	0	0	16	35
08:00	0	1	0	0	1	0	0	1	0	1	0	0	0	0	0	0	0	12	0	0	12	14
08:15	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	3	0	0	3	5
08:30	0	0	0	0	0	0	0	4	0	4	0	0	0	0	0	0	0	2	0	0	2	6
08:45	0	1	0	1	2	0	0	1	0	1	0	0	0	0	0	0	0	3	0	0	3	6
Total	0	2	0	1	3	0	0	8	0	8	0	0	0	0	0	0	0	20	0	0	20	31



Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

File Name : tmc1666
 Site Code :
 Start Date : 11/15/2016
 Page No : 2

Weather: Partly Cloudy and Cool
 CountCam 200
 Study Conducted By: Andrea

Groups Printed- Trucks

Start Time	CR 59 Southbound					CSAH 20 Westbound					Northbound					CSAH 20 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	0	0	0	0	0	1	12	13	0	0	0	0	0	0	4	3	0	7	20
09:15	0	14	0	3	17	0	0	4	0	4	0	0	0	0	0	0	1	0	0	1	22
09:30	0	0	0	0	0	0	0	3	2	5	0	0	0	0	0	0	0	1	0	1	6
09:45	0	1	0	0	1	0	0	1	2	3	0	0	0	0	0	0	0	1	0	1	5
Total	0	15	0	3	18	0	0	9	16	25	0	0	0	0	0	0	5	5	0	10	53
10:00	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	4	0	4	5
10:15	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	2	0	2	3
10:30	0	1	0	1	2	0	0	1	0	1	0	0	0	0	0	0	0	2	0	2	5
10:45	0	0	0	0	0	0	0	2	1	3	0	0	0	0	0	0	0	0	0	0	3
Total	0	2	0	1	3	0	0	4	1	5	0	0	0	0	0	0	0	8	0	8	16
11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	3
11:15	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	1	0	1	2
11:30	0	0	0	1	1	0	0	2	0	2	0	0	0	0	0	0	0	1	0	1	4
11:45	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	2
Total	0	0	0	1	1	0	0	5	0	5	0	0	0	0	0	0	0	5	0	5	11
12:00	0	0	0	0	0	0	0	3	0	3	0	0	0	0	0	0	0	1	0	1	4
12:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	1	1	0	2	4
12:45	0	2	0	0	2	0	0	1	0	1	0	0	0	0	0	0	1	0	0	1	4
Total	0	2	0	0	2	0	0	6	0	6	0	0	0	0	0	0	2	2	0	4	12
13:00	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	1	0	1	2
13:15	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	4
13:30	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	1	0	1	2
13:45	0	0	0	0	0	0	0	3	0	3	0	0	0	0	0	0	0	4	0	4	7
Total	0	1	0	0	1	0	0	5	0	5	0	0	0	0	0	0	0	9	0	9	15
14:00	0	0	0	0	0	0	0	4	0	4	0	0	0	0	0	0	0	0	0	0	4
14:15	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	1	2	0	3	5
14:30	0	3	0	1	4	0	0	4	2	6	0	0	0	0	0	0	0	2	0	2	12
14:45	0	1	0	0	1	0	0	5	0	5	0	0	0	0	0	0	0	6	0	6	12
Total	0	4	0	1	5	0	0	14	3	17	0	0	0	0	0	0	1	10	0	11	33
15:00	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	1	0	1	3
15:15	0	0	0	0	0	0	0	6	3	9	0	0	0	0	0	0	1	3	0	4	13
15:30	0	1	0	1	2	0	0	2	4	6	0	0	0	0	0	0	0	1	0	1	9
15:45	0	0	0	0	0	0	0	1	4	5	0	0	0	0	0	0	3	1	0	4	9
Total	0	1	0	1	2	0	0	11	11	22	0	0	0	0	0	0	4	6	0	10	34
16:00	0	5	0	1	6	0	0	2	2	4	0	0	0	0	0	0	2	2	0	4	14
16:15	0	6	0	2	8	0	0	3	0	3	0	0	0	0	0	0	0	2	0	2	13
16:30	0	2	0	1	3	0	0	2	1	3	0	0	0	0	0	0	1	1	0	2	8
16:45	0	1	0	0	1	0	0	2	0	2	0	0	0	0	0	0	1	5	0	6	9
Total	0	14	0	4	18	0	0	9	3	12	0	0	0	0	0	0	4	10	0	14	44
17:00	0	3	0	0	3	0	0	1	0	1	0	0	0	0	0	0	0	1	0	1	5
17:15	0	0	0	0	0	0	0	3	0	3	0	0	0	0	0	0	0	1	0	1	4
17:30	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	1	0	0	1	3
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
Total	0	3	0	0	3	0	0	6	0	6	0	0	0	0	0	0	2	2	0	4	13
18:00	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	2	0	2	4
18:15	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1
18:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	2
Total	0	0	0	0	0	0	0	3	0	3	0	0	0	0	0	0	1	3	0	4	7



Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

Weather: Partly Cloudy and Cool
 CountCam 200
 Study Conducted By: Andrea

File Name : tmc1666
 Site Code :
 Start Date : 11/15/2016
 Page No : 3

Groups Printed- Trucks

Start Time	CR 59 Southbound					CSAH 20 Westbound					Northbound					CSAH 20 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	
19:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:15	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	1	0	1	2
19:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:45	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	0	1	0	1	3
20:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:15	0	1	0	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	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
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:15	0	0	0	0	0	0	0	1	1	2	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	0	0	0	0	0	1	1	2	0	0	0	0	0	0	0	0	0	0	2
22:00	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1
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	1	0	1	0	0	0	0	0	0	0	0	0	0	1
Grand Total	0	51	0	18	69	0	0	99	40	139	0	0	0	0	0	0	20	108	0	128	336
Apprch %	0	73.9	0	26.1		0	0	71.2	28.8		0	0	0	0		0	15.6	84.4	0		
Total %	0	15.2	0	5.4	20.5	0	0	29.5	11.9	41.4	0	0	0	0	0	0	6	32.1	0	38.1	



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

Study Name : TMC1666
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Signal Warrants - Summary

Major Street Approaches

Eastbound: CSAH 20

Number of Lanes: 1
85% Speed > 40 MPH.
Total Approach Volume: 3,591

Westbound: CSAH 20

Number of Lanes: 2
85% Speed > 40 MPH.
Total Approach Volume: 4,012

Minor Street Approaches

Southbound: CR 59

Number of Lanes: 1

Total Approach Volume: 1,526

Warrant Summary (Rural values apply.)

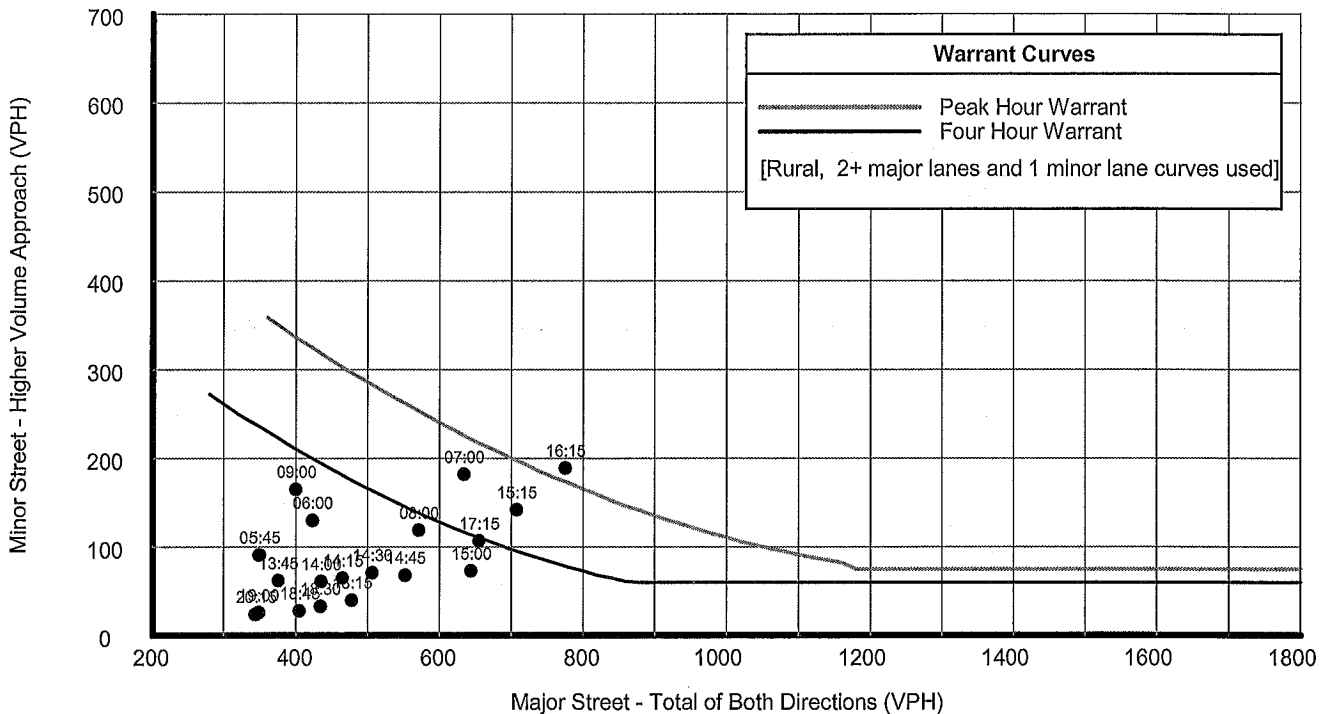
Warrant 1 - Eight Hour Vehicular Volumes	Not Satisfied
Warrant 1A - Minimum Vehicular Volume	Not Satisfied
Required volumes reached for 6 hours, 8 are needed	
Warrant 1B - Interruption of Continuous Traffic	Not Satisfied
Required volumes reached for 4 hours, 8 are needed	
Warrant 1C - Combination of Warrants	Not Satisfied
Required 1A volumes reached for 6 hours, 8 are needed	
Required 1B volumes reached for 6 hours, 8 are needed	
Warrant 2 - Four Hour Volumes	Satisfied
Number of hours (4) volumes exceed minimum >= minimum required (4).	
Warrant 3 - Peak Hour	Satisfied
Warrant 3A - Peak Hour Delay	Satisfied
Number of hours (16) volumes exceed minimum >= required (1). 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

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Signal Warrants - Summary



Analysis of 8-Hour Volume Warrants:

War 1A-Minimum Volume

War 1B-Interruption of Traffic

War 1C-Combination of Warrants

Hour Begin	Major Total	Minor Vol Dir	Maj 420	Min 105	Hour Begin	Major Total	Minor Vol Dir	Maj 630	Min 53	Hour Begin	Major Total	Minor Vol Dir	1A Met	1B Met
16:15	775	189 SB	Yes	Yes	17:00	738	128 SB	Yes	Yes	16:15	775	189 SB	Yes	-
15:15	707	142 SB	Yes	Yes	16:00	732	227 SB	Yes	Yes	16:30	774	153 SB	-	Yes
17:15	655	107 SB	Yes	Yes	15:00	644	73 SB	Yes	Yes	15:30	751	191 SB	-	Yes
07:00	634	182 SB	Yes	Yes	07:00	634	182 SB	Yes	Yes	15:15	707	142 SB	Yes	-
08:00	571	119 SB	Yes	Yes	06:45	590	197 SB	No	Yes	07:30	689	172 SB	-	Yes
06:00	423	130 SB	Yes	Yes	08:00	571	119 SB	No	Yes	17:15	655	107 SB	Yes	-
15:00	644	73 SB	Yes	No	06:30	565	178 SB	No	Yes	07:45	633	143 SB	Yes	-
14:45	552	68 SB	Yes	No	14:45	552	68 SB	No	Yes	17:30	604	91 SB	-	Yes
14:30	506	71 SB	Yes	No	18:00	527	63 SB	No	Yes	06:45	590	197 SB	Yes	-
18:15	478	40 SB	Yes	No	08:15	510	93 SB	No	Yes	06:30	565	178 SB	-	Yes
14:15	465	65 SB	Yes	No	14:30	506	71 SB	No	Yes	14:30	506	71 SB	No	Yes
14:00	435	61 SB	Yes	No	06:15	493	155 SB	No	Yes	08:45	434	159 SB	Yes	No
18:30	434	33 SB	Yes	No	18:15	478	40 SB	No	No	05:45	349	91 SB	Yes	No
18:45	405	28 SB	No	No	14:15	465	65 SB	No	Yes	15:00	644	73 SB	No	-
09:00	400	165 SB	No	Yes	08:30	452	149 SB	No	Yes	14:45	552	68 SB	No	-
13:45	375	62 SB	No	No	14:00	435	61 SB	No	Yes	06:15	493	155 SB	-	No
05:45	349	91 SB	No	No	18:30	434	33 SB	No	No	18:15	478	40 SB	No	-
19:00	348	26 SB	No	No	08:45	434	159 SB	No	Yes	14:15	465	65 SB	No	No
20:15	344	24 SB	No	No	06:00	423	130 SB	No	Yes	08:30	452	149 SB	-	No
09:15	342	157 SB	No	Yes	18:45	405	28 SB	No	No	14:00	435	61 SB	No	No
12:00	334	55 SB	No	No	09:00	400	165 SB	No	Yes	18:30	434	33 SB	No	No
12:15	333	54 SB	No	No	13:45	375	62 SB	No	Yes	06:00	423	130 SB	-	No
12:30	331	48 SB	No	No	05:45	349	91 SB	No	Yes	18:45	405	28 SB	No	No
11:45	331	60 SB	No	No	19:00	348	26 SB	No	No	09:00	400	165 SB	-	No



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

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Multi-Way Stop Warrant Report

Major Street Approaches

Eastbound: CSAH 20
Total Approach Volume: 3,591
85% Speed > 40 MPH.

Westbound: CSAH 20
Total Approach Volume: 4,012
85% Speed > 40 MPH.

Minor Street Approaches

Southbound: CR 59
Total Approach Volume: 1,526

Warrant Summary

- Criteria A - Interim Measure** **Not Evaluated**
If traffic signals are justified, stop signs can be installed as an interim measure.
- Criteria B - Crash Experience** **Not Evaluated**
- Criteria C - Minimum Volumes and Delays** **Not Satisfied**
Delay data not evaluated
Required volumes reached for 5 hours, 8 are needed
- Criteria D - 80% of Volumes, Delays, and Crashes** **Not Evaluated**
Delay data not evaluated
Number of crashes (-1) is less than the minimum required (4).
Required volumes reached for 0 hours, 8 are needed

Analysis of 8-Hour Volume Warrants:

Time	Major Total	Minor Total	Crit C			Crit D		
			Major	Minor Crit	Meets?	Major Crit	Minor Crit	Meets?
06:15 - 07:15	493	155	210-Yes	140-Yes	Both	240-Yes	160-No	Major
07:15 - 08:15	671	180	210-Yes	140-Yes	Both	240-Yes	160-Yes	Both
08:30 - 09:30	452	149	210-Yes	140-Yes	Both	240-Yes	160-No	Major
15:15 - 16:15	707	142	210-Yes	140-Yes	Both	240-Yes	160-No	Major
16:15 - 17:15	775	189	210-Yes	140-Yes	Both	240-Yes	160-Yes	Both
05:30 - 06:30	256	77	210-Yes	140-No	Major	240-Yes	160-No	Major
05:45 - 06:45	349	91	210-Yes	140-No	Major	240-Yes	160-No	Major
06:00 - 07:00	423	130	210-Yes	140-No	Major	240-Yes	160-No	Major
08:15 - 09:15	510	93	210-Yes	140-No	Major	240-Yes	160-No	Major
09:30 - 10:30	282	83	210-Yes	140-No	Major	240-Yes	160-No	Major
09:45 - 10:45	290	66	210-Yes	140-No	Major	240-Yes	160-No	Major
10:00 - 11:00	282	55	210-Yes	140-No	Major	240-Yes	160-No	Major
10:15 - 11:15	292	57	210-Yes	140-No	Major	240-Yes	160-No	Major
10:30 - 11:30	303	55	210-Yes	140-No	Major	240-Yes	160-No	Major
10:45 - 11:45	281	50	210-Yes	140-No	Major	240-Yes	160-No	Major
11:00 - 12:00	294	56	210-Yes	140-No	Major	240-Yes	160-No	Major
11:15 - 12:15	297	57	210-Yes	140-No	Major	240-Yes	160-No	Major
11:30 - 12:30	309	54	210-Yes	140-No	Major	240-Yes	160-No	Major
11:45 - 12:45	331	60	210-Yes	140-No	Major	240-Yes	160-No	Major
12:00 - 13:00	334	55	210-Yes	140-No	Major	240-Yes	160-No	Major
12:15 - 13:15	333	54	210-Yes	140-No	Major	240-Yes	160-No	Major
12:30 - 13:30	331	48	210-Yes	140-No	Major	240-Yes	160-No	Major
12:45 - 13:45	321	46	210-Yes	140-No	Major	240-Yes	160-No	Major
13:00 - 14:00	302	54	210-Yes	140-No	Major	240-Yes	160-No	Major