

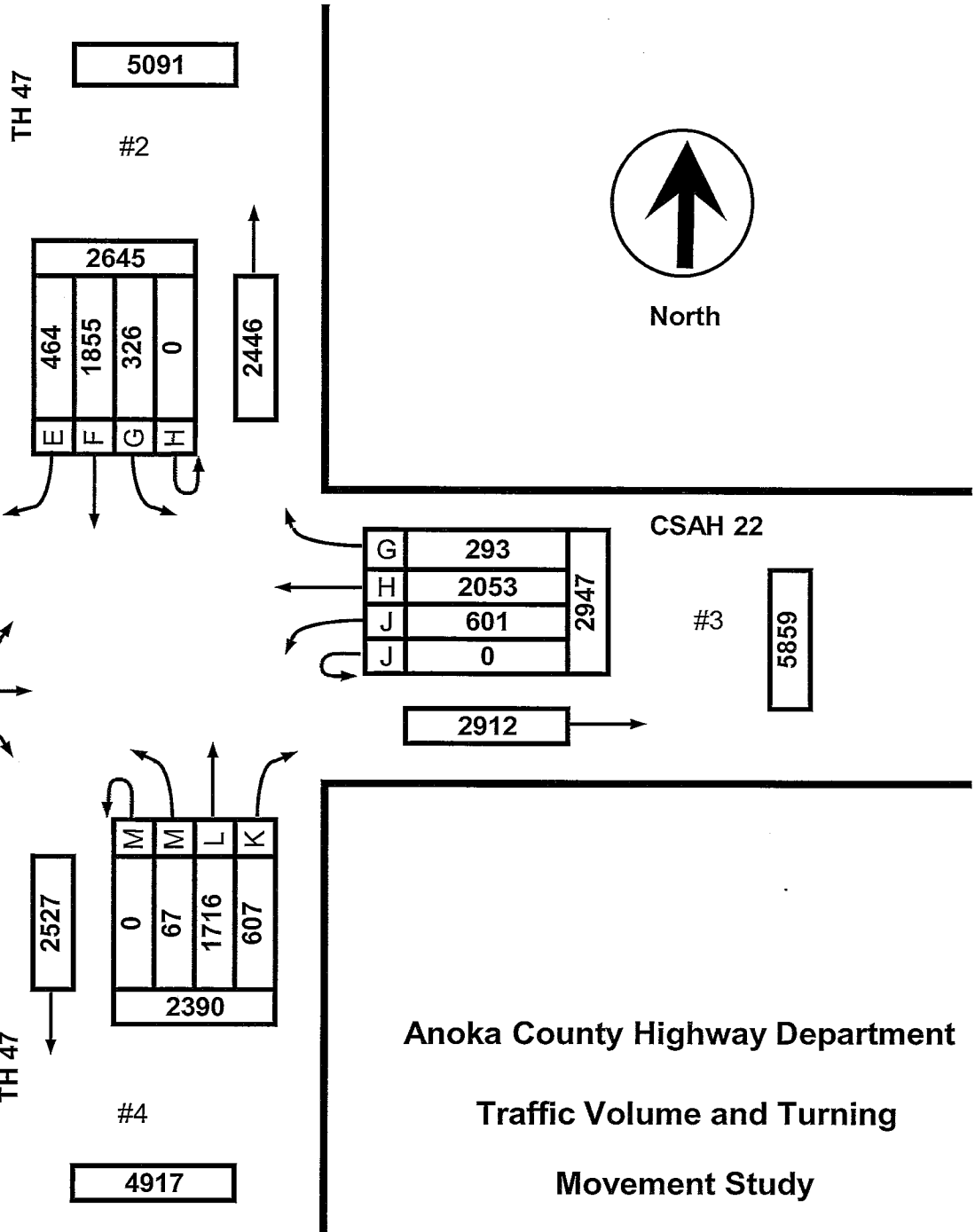
Date : 10/26/16

Count Number : TMC1665

Location : CSAH 22 (Viking Blvd.)

@ TH 47

Collection Period : 12:00 AM - 12:00 AM



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 : 10/26/16

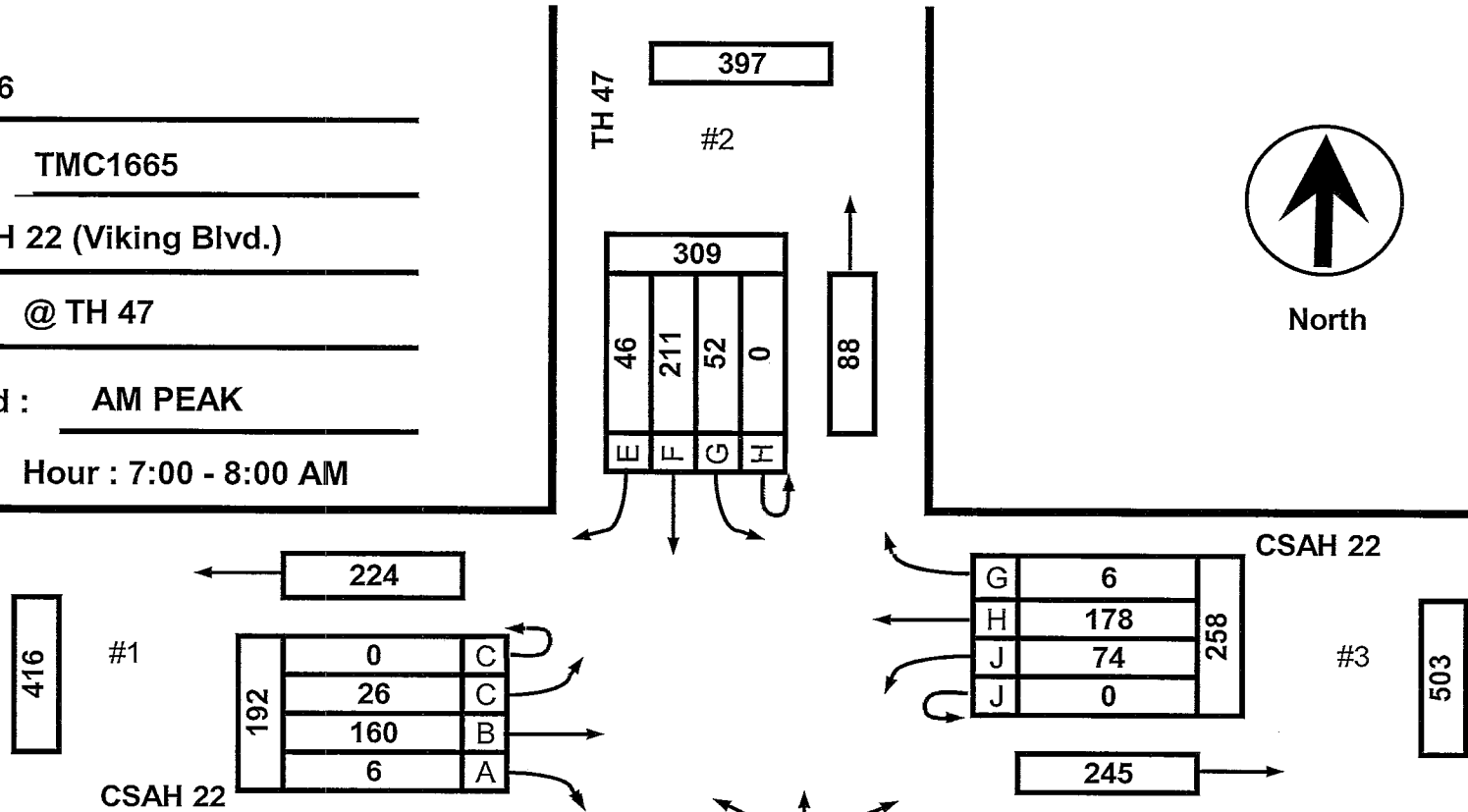
Count Number : TMC1665

Location : CSAH 22 (Viking Blvd.)

@ TH 47

Collection Period : AM PEAK

Hour : 7:00 - 8:00 AM



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

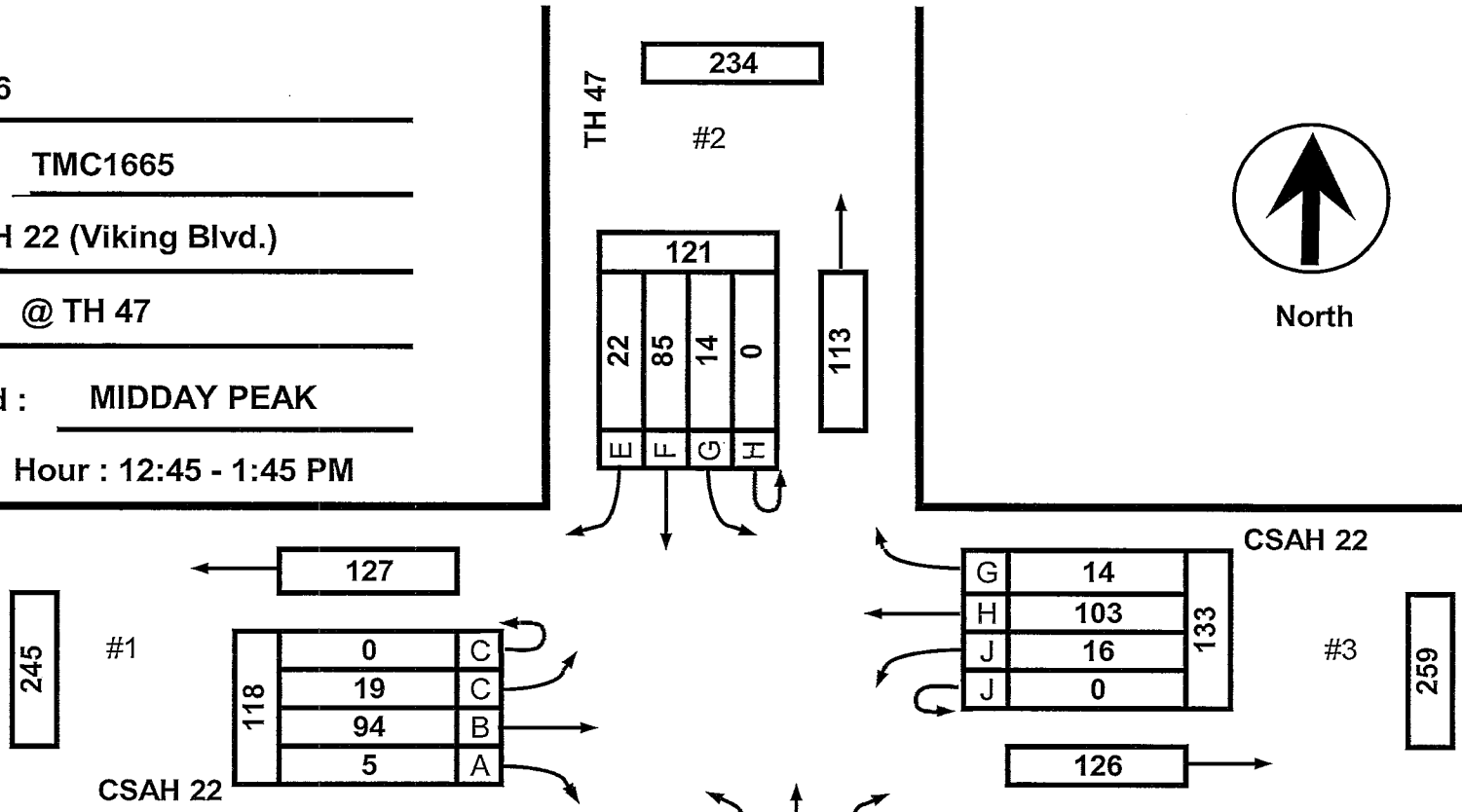
Anoka County Highway Department
 Traffic Volume and Turning
 Movement Study

Date : 10/26/16

Count Number : TMC1665

Location : CSAH 22 (Viking Blvd.)
@ TH 47

Collection Period : MIDDAY PEAK
 Hour : 12:45 - 1:45 PM



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 : 10/26/16

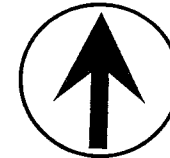
Count Number : TMC1665

Location : CSAH 22 (Viking Blvd.)

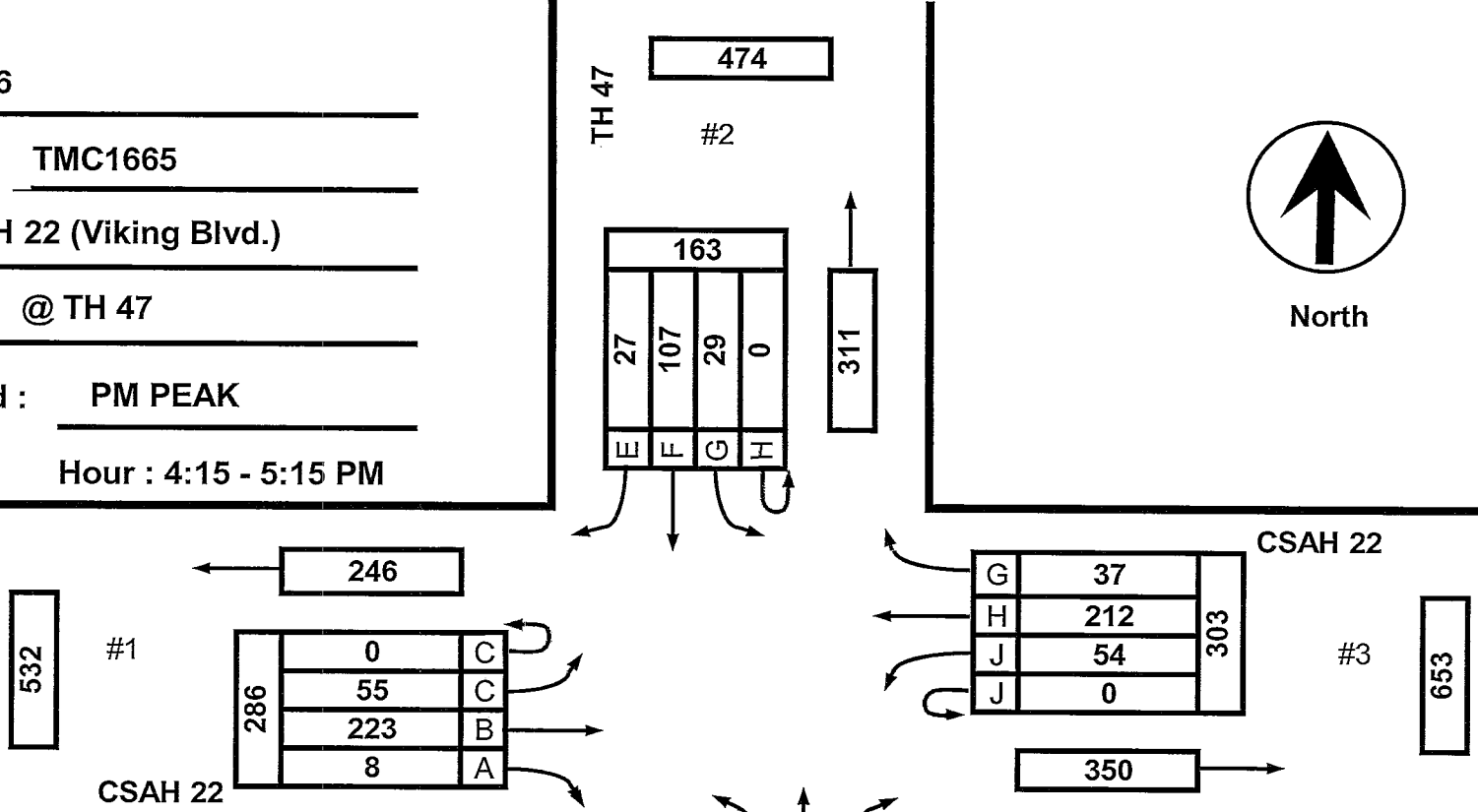
@ TH 47

Collection Period : PM PEAK

Hour : 4:15 - 5:15 PM



North



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

File Name : TMC1665
 Site Code :
 Start Date : 10/26/2016
 Page No : 1

Weather: Chilly and Rainy
 CountCAM 200
 Study Conducted By: Andrea

Groups Printed- Cars + - Trucks

Start Time	TH 47 Southbound						CSAH 22 Westbound						TH 47 Northbound						CSAH 22 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	1	1	0	2	0	0	4	0	0	4	0	0	4	1	0	5	0	0	5	0	0	5	0	16	16
00:15	0	0	1	0	0	1	0	1	1	1	0	3	0	0	0	1	0	1	0	0	2	0	0	2	0	7	7
00:30	0	0	1	0	0	1	0	0	0	1	0	1	0	0	3	0	0	3	0	0	1	0	0	1	0	6	6
00:45	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1	0	0	1	0	2	1	0	0	3	0	5	5
Total	0	0	4	1	0	5	0	1	5	2	0	8	0	0	8	2	0	10	0	2	9	0	0	11	0	34	34
01:00	0	0	0	1	0	1	0	0	1	0	0	1	0	0	2	0	0	2	0	0	1	0	0	1	0	5	5
01:15	0	0	0	0	0	0	0	0	2	0	0	2	0	0	4	0	0	4	0	0	0	0	0	0	0	6	6
01:30	0	0	1	0	0	1	0	1	2	1	0	4	0	0	3	1	0	4	0	0	0	0	0	0	0	9	9
01:45	0	0	0	0	0	0	0	0	2	1	0	3	0	0	2	1	0	3	0	1	0	0	0	1	0	7	7
Total	0	0	1	1	0	2	0	1	7	2	0	10	0	0	11	2	0	13	0	1	1	0	0	2	0	27	27
02:00	0	0	1	0	0	1	0	0	0	0	0	0	0	0	3	2	0	5	0	0	0	0	0	0	0	6	6
02:15	0	0	1	0	0	1	0	1	0	1	0	2	0	0	2	2	0	4	0	0	0	0	0	0	0	7	7
02:30	0	0	2	2	0	4	0	1	1	2	0	4	0	0	0	2	0	2	0	0	1	0	0	1	0	11	11
02:45	0	0	3	1	0	4	0	0	0	0	0	0	0	0	2	0	0	2	0	1	0	0	0	1	0	7	7
Total	0	0	7	3	0	10	0	2	1	3	0	6	0	0	7	6	0	13	0	1	1	0	0	2	0	31	31
03:00	0	0	5	0	0	5	0	0	1	0	0	1	0	0	2	2	0	4	0	0	0	0	0	0	0	10	10
03:15	0	0	6	0	0	6	0	1	3	0	0	4	0	0	1	1	0	2	0	0	2	0	0	2	0	14	14
03:30	0	1	7	1	0	9	0	1	2	0	0	3	0	0	1	0	0	1	0	0	3	0	0	3	0	16	16
03:45	0	0	7	0	0	7	0	0	1	1	0	2	0	0	0	0	0	0	0	0	4	0	0	4	0	13	13
Total	0	1	25	1	0	27	0	2	7	1	0	10	0	0	4	3	0	7	0	0	9	0	0	9	0	53	53
04:00	0	0	7	3	0	10	0	1	3	0	0	4	0	0	3	0	0	3	0	0	2	1	0	3	0	20	20
04:15	0	0	16	4	0	20	0	3	8	0	0	11	0	0	1	0	0	1	0	0	4	0	0	4	0	36	36
04:30	0	0	17	1	0	18	0	7	8	0	0	15	0	0	4	1	0	5	0	0	8	0	0	8	0	46	46
04:45	0	3	23	2	0	28	0	3	10	0	0	13	0	1	4	0	0	5	0	2	8	0	0	10	0	56	56
Total	0	3	63	10	0	76	0	14	29	0	0	43	0	1	12	1	0	14	0	2	22	1	0	25	0	158	158
05:00	0	3	49	2	0	54	0	5	18	2	0	25	0	0	4	0	0	4	0	1	11	0	0	12	0	95	95
05:15	0	1	49	14	0	64	0	7	28	0	0	35	0	0	6	5	0	11	0	1	9	0	0	10	0	120	120
05:30	0	5	57	8	0	70	0	15	15	1	0	31	0	0	6	2	0	8	0	3	18	1	0	22	0	131	131
05:45	0	7	67	6	0	80	0	12	24	3	0	39	0	0	5	3	0	8	0	0	18	1	0	19	0	146	146
Total	0	16	222	30	0	268	0	39	85	6	0	130	0	0	21	10	0	31	0	5	56	2	0	63	0	492	492
06:00	0	5	63	21	0	89	0	13	32	0	0	45	0	0	7	5	0	12	0	3	21	0	0	24	0	170	170
06:15	0	14	57	13	0	84	0	24	38	0	0	62	0	1	9	8	0	18	0	3	18	1	0	22	0	186	186
06:30	0	13	59	18	0	90	0	17	59	0	0	76	0	0	20	7	0	27	0	3	33	1	0	37	0	230	230
06:45	0	5	35	9	0	49	0	17	33	2	0	52	0	0	9	10	0	19	0	6	36	0	0	42	0	162	162
Total	0	37	214	61	0	312	0	71	162	2	0	235	0	1	45	30	0	76	0	15	108	2	0	125	0	748	748



Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

File Name : TMC1665
 Site Code :
 Start Date : 10/26/2016
 Page No : 2

Weather: Chilly and Rainy
 CountCAM 200
 Study Conducted By: Andrea

Groups Printed- Cars + - Trucks

Start Time	TH 47 Southbound						CSAH 22 Westbound						TH 47 Northbound						CSAH 22 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			
07:00	0	13	51	7	0	71	0	14	39	2	0	55	0	0	9	4	0	13	0	5	38	4	0	47	0	186	186
07:15	0	15	48	15	0	78	0	17	47	0	0	64	0	0	11	8	0	19	0	8	35	0	0	43	0	204	204
07:30	0	14	60	17	0	91	0	26	66	2	0	94	0	0	17	12	0	29	0	5	41	0	0	46	0	260	260
07:45	0	10	52	7	0	69	0	17	26	2	0	45	0	0	19	9	0	28	0	8	46	2	0	56	0	198	198
Total	0	52	211	46	0	309	0	74	178	6	0	258	0	0	56	33	0	89	0	26	160	6	0	192	0	848	848
08:00	0	5	33	12	0	50	0	16	36	7	0	59	0	2	18	12	0	32	0	2	36	1	0	39	0	180	180
08:15	0	5	31	8	0	44	0	12	26	1	0	39	0	0	14	8	0	22	0	4	31	0	0	35	0	140	140
08:30	0	6	31	7	0	44	0	15	31	2	0	48	0	2	19	7	0	28	0	4	28	0	0	32	0	152	152
08:45	0	5	36	5	0	46	0	11	19	2	0	32	0	0	17	9	0	26	0	3	28	1	0	32	0	136	136
Total	0	21	131	32	0	184	0	54	112	12	0	178	0	4	68	36	0	108	0	13	123	2	0	138	0	608	608
09:00	0	8	26	1	0	35	0	6	24	1	0	31	0	1	11	10	0	22	0	7	20	3	0	30	0	118	118
09:15	0	2	31	4	0	37	0	10	21	2	0	33	0	1	10	6	0	17	0	4	23	0	0	27	0	114	114
09:30	0	2	22	5	0	29	0	3	36	7	0	46	0	0	21	4	0	25	0	5	15	0	0	20	0	120	120
09:45	0	4	14	4	0	22	0	6	25	1	0	32	0	2	14	6	0	22	0	1	13	0	0	14	0	90	90
Total	0	16	93	14	0	123	0	25	106	11	0	142	0	4	56	26	0	86	0	17	71	3	0	91	0	442	442
10:00	0	3	19	3	0	25	0	4	14	3	0	21	0	2	16	4	0	22	0	4	33	1	0	38	0	106	106
10:15	0	5	19	7	0	31	0	3	18	3	0	24	0	0	8	9	0	17	0	4	27	0	0	31	0	103	103
10:30	0	3	18	2	0	23	0	6	17	4	0	27	0	0	15	8	0	23	0	3	26	2	0	31	0	104	104
10:45	0	2	22	3	0	27	0	8	20	1	0	29	0	1	16	5	0	22	0	2	22	2	0	26	0	104	104
Total	0	13	78	15	0	106	0	21	69	11	0	101	0	3	55	26	0	84	0	13	108	5	0	126	0	417	417
11:00	0	3	24	5	0	32	0	5	26	4	0	35	0	0	14	6	0	20	0	2	20	1	0	23	0	110	110
11:15	0	3	23	7	0	33	0	7	24	0	0	31	0	1	19	6	0	26	0	4	23	2	0	29	0	119	119
11:30	0	7	19	4	0	30	0	5	24	2	0	31	0	0	12	6	0	18	0	1	21	0	0	22	0	101	101
11:45	0	1	17	5	0	23	0	5	22	3	0	30	0	0	12	6	0	18	0	1	29	1	0	31	0	102	102
Total	0	14	83	21	0	118	0	22	96	9	0	127	0	1	57	24	0	82	0	8	93	4	0	105	0	432	432
12:00	0	6	21	10	0	37	0	4	26	3	0	33	0	0	20	6	0	26	0	3	21	1	0	25	0	121	121
12:15	0	5	16	3	0	24	0	2	31	5	0	38	0	1	13	3	0	17	0	1	21	0	0	22	0	101	101
12:30	0	2	27	2	0	31	0	6	24	2	0	32	0	1	17	5	0	23	0	1	20	2	0	23	0	109	109
12:45	0	2	18	5	0	25	0	5	21	3	0	29	0	1	19	2	0	22	0	4	25	2	0	31	0	107	107
Total	0	15	82	20	0	117	0	17	102	13	0	132	0	3	69	16	0	88	0	9	87	5	0	101	0	438	438
13:00	0	3	18	5	0	26	0	6	30	3	0	39	0	0	13	5	0	18	0	5	20	0	0	25	0	108	108
13:15	0	4	29	5	0	38	0	2	28	4	0	34	0	0	24	3	0	27	0	3	27	1	0	31	0	130	130
13:30	0	5	20	7	0	32	0	3	24	4	0	31	0	1	24	8	0	33	0	7	22	2	0	31	0	127	127
13:45	0	1	19	3	0	23	0	4	22	1	0	27	0	2	27	4	0	33	0	5	19	0	0	24	0	107	107
Total	0	13	86	20	0	119	0	15	104	12	0	131	0	3	88	20	0	111	0	20	88	3	0	111	0	472	472



Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

File Name : TMC1665
 Site Code :
 Start Date : 10/26/2016
 Page No : 3

Weather: Chilly and Rainy
 CountCAM 200
 Study Conducted By: Andrea

Groups Printed- Cars + - Trucks

Start Time	TH 47 Southbound						CSAH 22 Westbound						TH 47 Northbound						CSAH 22 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			
14:00	0	3	19	11	0	33	0	4	30	3	0	37	0	0	38	9	0	47	0	8	17	1	0	26	0	143	143
14:15	0	3	17	4	0	24	0	5	27	11	0	43	0	3	32	8	0	43	0	9	37	0	0	46	0	156	156
14:30	0	5	17	6	0	28	0	7	26	5	0	38	0	1	32	8	0	41	0	7	36	2	0	45	0	152	152
14:45	0	2	15	10	0	27	0	3	19	7	0	29	0	2	35	11	0	48	0	11	29	2	0	42	0	146	146
Total	0	13	68	31	0	112	0	19	102	26	0	147	0	6	137	36	0	179	0	35	119	5	0	159	0	597	597
15:00	0	4	22	5	0	31	0	10	43	6	0	59	0	1	57	20	0	78	0	10	40	0	0	50	0	218	218
15:15	0	4	24	13	0	41	0	6	33	7	0	46	0	5	47	16	0	68	0	14	27	2	0	43	0	198	198
15:30	0	5	26	2	0	33	0	6	60	13	0	79	0	3	63	18	0	84	0	12	44	2	0	58	0	254	254
15:45	0	7	16	10	0	33	0	9	31	11	0	51	0	1	43	22	0	66	0	15	46	3	0	64	0	214	214
Total	0	20	88	30	0	138	0	31	167	37	0	235	0	10	210	76	0	296	0	51	157	7	0	215	0	884	884
16:00	0	4	19	8	0	31	0	17	53	8	0	78	0	2	60	13	0	75	0	13	49	0	0	62	0	246	246
16:15	0	4	24	5	0	33	0	20	59	11	0	90	0	1	55	25	0	81	0	14	52	2	0	68	0	272	272
16:30	0	9	26	6	0	41	0	12	52	7	0	71	0	3	66	27	0	96	0	10	60	1	0	71	0	279	279
16:45	0	7	24	10	0	41	0	7	53	8	0	68	0	1	50	19	0	70	0	16	52	5	0	73	0	252	252
Total	0	24	93	29	0	146	0	56	217	34	0	307	0	7	231	84	0	322	0	53	213	8	0	274	0	1049	1049
17:00	0	9	33	6	0	48	0	15	48	11	0	74	0	2	48	27	0	77	0	15	59	0	0	74	0	273	273
17:15	0	2	24	8	0	34	0	16	51	11	0	78	0	3	60	14	0	77	0	20	46	2	0	68	0	257	257
17:30	0	4	26	9	0	39	0	14	44	8	0	66	0	3	42	9	0	54	0	15	51	2	0	68	0	227	227
17:45	0	6	13	8	0	27	0	5	41	10	0	56	0	2	34	12	0	48	0	10	32	1	0	43	0	174	174
Total	0	21	96	31	0	148	0	50	184	40	0	274	0	10	184	62	0	256	0	60	188	5	0	253	0	931	931
18:00	0	4	20	8	0	32	0	4	37	7	0	48	0	2	36	8	0	46	0	6	30	2	0	38	0	164	164
18:15	0	4	19	7	0	30	0	11	26	6	0	43	0	1	34	11	0	46	0	5	37	1	0	43	0	162	162
18:30	0	2	15	5	0	22	0	7	30	4	0	41	0	3	30	15	0	48	0	8	48	0	0	56	0	167	167
18:45	0	4	16	5	0	25	0	8	23	4	0	35	0	1	28	10	0	39	0	11	38	1	0	50	0	149	149
Total	0	14	70	25	0	109	0	30	116	21	0	167	0	7	128	44	0	179	0	30	153	4	0	187	0	642	642
19:00	0	3	14	3	0	20	0	4	23	5	0	32	0	2	21	11	0	34	0	6	22	0	0	28	0	114	114
19:15	0	1	9	10	0	20	0	4	14	2	0	20	0	0	31	4	0	35	0	5	20	0	0	25	0	100	100
19:30	0	2	13	2	0	17	0	4	16	10	0	30	0	0	18	3	0	21	0	8	13	0	0	21	0	89	89
19:45	0	3	8	1	0	12	0	4	13	1	0	18	0	0	19	6	0	25	0	3	18	2	0	23	0	78	78
Total	0	9	44	16	0	69	0	16	66	18	0	100	0	2	89	24	0	115	0	22	73	2	0	97	0	381	381
20:00	0	2	9	0	0	11	0	4	20	3	0	27	0	0	24	6	0	30	0	6	14	0	0	20	0	88	88
20:15	0	3	5	4	0	12	0	3	11	3	0	17	0	1	25	6	0	32	0	7	26	1	0	34	0	95	95
20:30	0	2	11	3	0	16	0	3	13	3	0	19	0	0	15	6	0	21	0	5	13	2	0	20	0	76	76
20:45	0	1	14	6	0	21	0	5	19	2	0	26	0	0	12	5	0	17	0	1	17	1	0	19	0	83	83
Total	0	8	39	13	0	60	0	15	63	11	0	89	0	1	76	23	0	100	0	19	70	4	0	93	0	342	342



Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

File Name : TMC1665
 Site Code :
 Start Date : 10/26/2016
 Page No : 4

Weather: Chilly and Rainy
 CountCAM 200
 Study Conducted By: Andrea

Groups Printed- Cars + - Trucks

Start Time	TH 47 Southbound						CSAH 22 Westbound						TH 47 Northbound						CSAH 22 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				
21:00	0	1	5	3	0	9	0	7	18	2	0	27	0	1	16	4	0	21	0	6	11	0	0	17	0	0	74	74
21:15	0	3	4	1	0	8	0	3	11	2	0	16	0	1	21	1	0	23	0	2	5	1	0	8	0	0	55	55
21:30	0	1	20	2	0	23	0	5	5	3	0	13	0	0	14	7	0	21	0	5	11	0	0	16	0	0	73	73
21:45	0	2	2	1	0	5	0	2	6	2	0	10	0	0	7	0	0	7	0	4	6	0	0	10	0	0	32	32
Total	0	7	31	7	0	45	0	17	40	9	0	66	0	2	58	12	0	72	0	17	33	1	0	51	0	0	234	234
22:00	0	1	7	1	0	9	0	2	9	1	0	12	0	0	10	2	0	12	0	2	11	1	0	14	0	0	47	47
22:15	0	3	11	2	0	16	0	1	7	0	0	8	0	1	10	2	0	13	0	2	8	0	0	10	0	0	47	47
22:30	0	3	3	1	0	7	0	2	5	2	0	9	0	0	6	2	0	8	0	4	7	1	0	12	0	0	36	36
22:45	0	1	2	1	0	4	0	2	1	3	0	6	0	1	5	0	0	6	0	2	0	0	0	2	0	0	18	18
Total	0	8	23	5	0	36	0	7	22	6	0	35	0	2	31	6	0	39	0	10	26	2	0	38	0	0	148	148
23:00	0	0	1	2	0	3	0	1	5	1	0	7	0	0	2	0	0	2	0	5	4	0	0	9	0	0	21	21
23:15	0	0	0	0	0	0	0	0	1	0	0	1	0	0	5	3	0	8	0	1	3	0	0	4	0	0	13	13
23:30	0	0	0	0	0	0	0	1	5	0	0	6	0	0	6	1	0	7	0	2	3	0	0	5	0	0	18	18
23:45	0	1	2	0	0	3	0	0	2	0	0	2	0	0	2	1	0	3	0	0	1	0	0	1	0	0	9	9
Total	0	1	3	2	0	6	0	2	13	1	0	16	0	0	15	5	0	20	0	8	11	0	0	19	0	0	61	61
Grand Total	0	326	1855	464	0	2645	0	601	2053	293	0	2947	0	67	1716	607	0	2390	0	437	1979	71	0	2487	0	0	10469	10469
Apprch %	0	12.3	70.1	17.5			0	20.4	69.7	9.9			0	2.8	71.8	25.4			0	17.6	79.6	2.9						
Total %	0	3.1	17.7	4.4		25.3	0	5.7	19.6	2.8		28.1	0	0.6	16.4	5.8		22.8	0	4.2	18.9	0.7		23.8	0	0	100	
Cars +	0	309	1801	447		2557	0	579	1905	270		2754	0	63	1642	590		2295	0	416	1845	64		2325	0	0	9931	
% Cars +	0	94.8	97.1	96.3	0	96.7	0	96.3	92.8	92.2	0	93.5	0	94	95.7	97.2	0	96	0	95.2	93.2	90.1	0	93.5	0	0	94.9	
Trucks	0	17	54	17		88	0	22	148	23		193	0	4	74	17		95	0	21	134	7		162	0	0	538	
% Trucks	0	5.2	2.9	3.7	0	3.3	0	3.7	7.2	7.8	0	6.5	0	6	4.3	2.8	0	4	0	4.8	6.8	9.9	0	6.5	0	0	5.1	



Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

File Name : TMC1665
 Site Code :
 Start Date : 10/26/2016
 Page No : 5

Weather: Chilly and Rainy
 CountCAM 200
 Study Conducted By: Andrea

Start Time	TH 47 Southbound					CSAH 22 Westbound					TH 47 Northbound					CSAH 22 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	13	51	7	71	0	14	39	2	55	0	0	9	4	13	0	5	38	4	47	186
07:15	0	15	48	15	78	0	17	47	0	64	0	0	11	8	19	0	8	35	0	43	204
07:30	0	14	60	17	91	0	26	66	2	94	0	0	17	12	29	0	5	41	0	46	260
07:45	0	10	52	7	69	0	17	26	2	45	0	0	19	9	28	0	8	46	2	56	198
Total Volume	0	52	211	46	309	0	74	178	6	258	0	0	56	33	89	0	26	160	6	192	848
% App. Total	0	16.8	68.3	14.9		0	28.7	69	2.3		0	0	62.9	37.1		0	13.5	83.3	3.1		
PHF	.000	.867	.879	.676	.849	.000	.712	.674	.750	.686	.000	.000	.737	.688	.767	.000	.813	.870	.375	.857	.815
Peak Hour Analysis From 10:00 to 13:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 12:45																					
12:45	0	2	18	5	25	0	5	21	3	29	0	1	19	2	22	0	4	25	2	31	107
13:00	0	3	18	5	26	0	6	30	3	39	0	0	13	5	18	0	5	20	0	25	108
13:15	0	4	29	5	38	0	2	28	4	34	0	0	24	3	27	0	3	27	1	31	130
13:30	0	5	20	7	32	0	3	24	4	31	0	1	24	8	33	0	7	22	2	31	127
Total Volume	0	14	85	22	121	0	16	103	14	133	0	2	80	18	100	0	19	94	5	118	472
% App. Total	0	11.6	70.2	18.2		0	12	77.4	10.5		0	2	80	18		0	16.1	79.7	4.2		
PHF	.000	.700	.733	.786	.796	.000	.667	.858	.875	.853	.000	.500	.833	.563	.758	.000	.679	.870	.625	.952	.908
Peak Hour Analysis From 14:00 to 23:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 16:15																					
16:15	0	4	24	5	33	0	20	59	11	90	0	1	55	25	81	0	14	52	2	68	272
16:30	0	9	26	6	41	0	12	52	7	71	0	3	66	27	96	0	10	60	1	71	279
16:45	0	7	24	10	41	0	7	53	8	68	0	1	50	19	70	0	16	52	5	73	252
17:00	0	9	33	6	48	0	15	48	11	74	0	2	48	27	77	0	15	59	0	74	273
Total Volume	0	29	107	27	163	0	54	212	37	303	0	7	219	98	324	0	55	223	8	286	1076
% App. Total	0	17.8	65.6	16.6		0	17.8	70	12.2		0	2.2	67.6	30.2		0	19.2	78	2.8		
PHF	.000	.806	.811	.675	.849	.000	.675	.898	.841	.842	.000	.583	.830	.907	.844	.000	.859	.929	.400	.966	.964



Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

File Name : TMC1665
 Site Code :
 Start Date : 10/26/2016
 Page No : 1

Weather: Chilly and Rainy
 CountCAM 200
 Study Conducted By: Andrea

Groups Printed- Trucks

Start Time	TH 47 Southbound					CSAH 22 Westbound					TH 47 Northbound					CSAH 22 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	1	0	1	0	0	0	0	0	0	1
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	1	0	1	0	0	0	0	0	0	1
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	1	0	1	1	1
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	1	0	0	1	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	0	0	0	1	0	0	1	0	0	0	0	0	0	0	1	0	1	1	2
05:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1
05:15	0	0	2	0	2	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	3
05:30	0	0	0	1	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	2
05:45	0	0	0	0	0	0	1	2	0	3	0	0	0	0	0	0	0	1	0	1	1	4
Total	0	0	2	1	3	0	1	4	0	5	0	0	1	0	1	0	0	1	0	1	1	10
06:00	0	0	1	1	2	0	1	3	0	4	0	0	0	1	1	0	1	2	0	3	3	10
06:15	0	0	0	0	0	0	1	2	0	3	0	0	0	1	1	0	0	0	0	0	0	4
06:30	0	2	0	1	3	0	0	7	0	7	0	0	1	1	2	0	0	3	0	3	3	15
06:45	0	0	2	1	3	0	0	5	0	5	0	0	2	0	2	0	0	2	0	2	2	12
Total	0	2	3	3	8	0	2	17	0	19	0	0	3	3	6	0	1	7	0	8	8	41
07:00	0	2	2	0	4	0	1	2	0	3	0	0	2	0	2	0	0	2	0	2	2	11
07:15	0	0	0	0	0	0	0	6	0	6	0	0	0	0	0	0	0	2	0	2	2	8
07:30	0	0	0	1	1	0	1	5	1	7	0	0	0	1	1	0	1	1	0	2	2	11
07:45	0	2	0	0	2	0	1	3	0	4	0	0	2	0	2	0	1	5	1	7	7	15
Total	0	4	2	1	7	0	3	16	1	20	0	0	4	1	5	0	2	10	1	13	13	45
08:00	0	1	4	1	6	0	1	4	0	5	0	0	2	2	4	0	0	6	0	6	6	21
08:15	0	2	2	0	4	0	1	3	0	4	0	0	1	0	1	0	0	3	0	3	3	12
08:30	0	0	1	1	2	0	1	1	0	2	0	0	1	1	2	0	0	4	0	4	4	10
08:45	0	0	5	1	6	0	0	3	0	3	0	0	0	0	0	0	1	3	0	4	4	13
Total	0	3	12	3	18	0	3	11	0	14	0	0	4	3	7	0	1	16	0	17	17	56
09:00	0	0	1	1	2	0	0	1	0	1	0	1	3	0	4	0	2	4	0	6	6	13
09:15	0	0	1	0	1	0	0	0	0	0	0	0	1	1	2	0	0	4	0	4	4	7
09:30	0	0	1	0	1	0	0	5	2	7	0	0	2	0	2	0	0	2	0	2	2	12
09:45	0	0	0	0	0	0	0	2	0	2	0	1	0	0	1	0	1	2	0	3	3	6
Total	0	0	3	1	4	0	0	8	2	10	0	2	6	1	9	0	3	12	0	15	15	38



Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

File Name : TMC1665
 Site Code :
 Start Date : 10/26/2016
 Page No : 2

Weather: Chilly and Rainy
 CountCAM 200
 Study Conducted By: Andrea

Groups Printed- Trucks

Start Time	TH 47 Southbound					CSAH 22 Westbound					TH 47 Northbound					CSAH 22 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	
10:00	0	1	1	0	2	0	0	0	0	0	0	1	3	0	4	0	0	7	0	7	13
10:15	0	0	1	1	2	0	0	1	1	2	0	0	0	0	0	0	0	2	0	2	6
10:30	0	0	1	1	2	0	0	2	1	3	0	0	0	0	0	0	0	4	1	5	10
10:45	0	0	2	0	2	0	1	2	0	3	0	1	2	0	3	0	0	1	1	2	10
Total	0	1	5	2	8	0	1	5	2	8	0	2	5	0	7	0	0	14	2	16	39
11:00	0	0	1	0	1	0	0	4	1	5	0	0	1	1	2	0	0	3	0	3	11
11:15	0	0	0	0	0	0	1	1	0	2	0	0	4	0	4	0	1	3	0	4	10
11:30	0	2	1	0	3	0	0	1	0	1	0	0	2	0	2	0	1	3	0	4	10
11:45	0	0	1	0	1	0	0	6	0	6	0	0	1	0	1	0	0	3	0	3	11
Total	0	2	3	0	5	0	1	12	1	14	0	0	8	1	9	0	2	12	0	14	42
12:00	0	0	2	1	3	0	0	4	1	5	0	0	1	0	1	0	0	2	0	2	11
12:15	0	1	1	0	2	0	0	5	0	5	0	0	2	0	2	0	1	3	0	4	13
12:30	0	0	2	0	2	0	0	1	0	1	0	0	2	1	3	0	0	3	0	3	9
12:45	0	0	2	0	2	0	1	3	0	4	0	0	1	0	1	0	1	4	0	5	12
Total	0	1	7	1	9	0	1	13	1	15	0	0	6	1	7	0	2	12	0	14	45
13:00	0	0	1	0	1	0	1	1	0	2	0	0	0	0	0	0	0	1	0	1	4
13:15	0	0	0	0	0	0	0	5	1	6	0	0	2	0	2	0	0	3	0	3	11
13:30	0	2	2	1	5	0	0	4	1	5	0	0	2	1	3	0	0	0	1	1	14
13:45	0	0	1	0	1	0	0	3	0	3	0	0	3	0	3	0	0	2	0	2	9
Total	0	2	4	1	7	0	1	13	2	16	0	0	7	1	8	0	0	6	1	7	38
14:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1
14:15	0	0	0	0	0	0	0	3	0	3	0	0	2	0	2	0	2	5	0	7	12
14:30	0	0	1	0	1	0	0	2	0	2	0	0	3	0	3	0	0	3	1	4	10
14:45	0	0	2	2	4	0	0	2	0	2	0	0	2	2	4	0	1	1	2	4	14
Total	0	0	3	2	5	0	0	7	0	7	0	0	8	2	10	0	3	9	3	15	37
15:00	0	0	2	0	2	0	0	3	3	6	0	0	1	1	2	0	0	4	0	4	14
15:15	0	0	1	0	1	0	1	1	0	2	0	0	1	0	1	0	0	0	0	0	4
15:30	0	1	1	0	2	0	0	4	3	7	0	0	5	0	5	0	0	1	0	1	15
15:45	0	1	2	0	3	0	1	3	1	5	0	0	2	0	2	0	0	1	0	1	11
Total	0	2	6	0	8	0	2	11	7	20	0	0	9	1	10	0	0	6	0	6	44
16:00	0	0	0	0	0	0	0	4	0	4	0	0	2	0	2	0	0	1	0	1	7
16:15	0	0	1	0	1	0	2	3	0	5	0	0	1	1	2	0	1	6	0	7	15
16:30	0	0	0	1	1	0	0	4	0	4	0	0	1	0	1	0	1	2	0	3	9
16:45	0	0	0	0	0	0	2	2	2	6	0	0	1	0	1	0	0	3	0	3	10
Total	0	0	1	1	2	0	4	13	2	19	0	0	5	1	6	0	2	12	0	14	41
17:00	0	0	0	0	0	0	2	4	0	6	0	0	0	2	2	0	1	0	0	1	9
17:15	0	0	1	0	1	0	0	3	1	4	0	0	1	0	1	0	1	2	0	3	9
17:30	0	0	2	0	2	0	0	2	0	2	0	0	2	0	2	0	0	2	0	2	8
17:45	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	0	2	0	2	4
Total	0	0	3	0	3	0	2	10	2	14	0	0	3	2	5	0	2	6	0	8	30
18:00	0	0	0	0	0	0	0	2	1	3	0	0	0	0	0	0	0	2	0	2	5
18:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
18:30	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	2	1	0	3	4
18:45	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	1	2	0	3	4
Total	0	0	0	0	0	0	0	3	1	4	0	0	1	0	1	0	3	6	0	9	14
19:00	0	0	0	0	0	0	0	1	0	1	0	0	1	0	1	0	0	1	0	1	3
19:15	0	0	0	1	1	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	2
19:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
19:45	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	0	1	1	0	0	2	0	2	0	0	2	0	2	0	0	2	0	2	7



Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

File Name : TMC1665
 Site Code :
 Start Date : 10/26/2016
 Page No : 3

Weather: Chilly and Rainy
 CountCAM 200
 Study Conducted By: Andrea

Groups Printed- Trucks

Start Time	TH 47 Southbound					CSAH 22 Westbound					TH 47 Northbound					CSAH 22 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	
20:00	0	0	0	0	0	0	0	1	0	1	0	0	1	0	1	0	0	0	0	0	0
20:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Total	0	0	0	0	0	0	0	1	0	1	0	0	1	0	1	0	0	1	0	1	3
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	0	1	0	0	0	0	0	0	0	0	0	0	1
21:30	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1
21:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Total	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	0	1	0	1	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	1	1	0	0	0	0	0	0	0	0	0	0	1
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	1	1	0	0	0	0	0	0	0	0	0	0	1
23:00	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1
23:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:45	0	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	17	54	17	88	0	22	148	23	193	0	4	74	17	95	0	21	134	7	162	538
Apprch %	0	19.3	61.4	19.3		0	11.4	76.7	11.9		0	4.2	77.9	17.9		0	13	82.7	4.3		
Total %	0	3.2	10	3.2	16.4	0	4.1	27.5	4.3	35.9	0	0.7	13.8	3.2	17.7	0	3.9	24.9	1.3	30.1	



**ANOKA COUNTY HIGHWAY
PC-WARRANTS
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Signal Warrants - Summary

Major Street Approaches

Eastbound: CSAH 22

Number of Lanes: 2
85% Speed > 40 MPH.
Total Approach Volume: 2,487

Westbound: CSAH 22

Number of Lanes: 2
85% Speed > 40 MPH.
Total Approach Volume: 2,947

Minor Street Approaches

Northbound: TH 47

Number of Lanes: 2

Total Approach Volume: 2,390

Southbound: TH 47

Number of Lanes: 2

Total Approach Volume: 2,645

Warrant Summary (Rural values apply.)

Warrant 1 - Eight Hour Vehicular Volumes	Not Satisfied
Warrant 1A - Minimum Vehicular Volume Not Satisfied	
Required volumes reached for 4 hours, 8 are needed	
Warrant 1B - Interruption of Continuous Traffic Not Satisfied	
Required volumes reached for 0 hours, 8 are needed	
Warrant 1C - Combination of Warrants Not Satisfied	
Required 1A volumes reached for 6 hours, 8 are needed	
Required 1B volumes reached for 2 hours, 8 are needed	
Warrant 2 - Four Hour Volumes	Satisfied
Number of hours (5) volumes exceed minimum >= minimum required (4).	
Warrant 3 - Peak Hour	Satisfied
Warrant 3A - Peak Hour Delay Satisfied	
Number of hours (11) 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



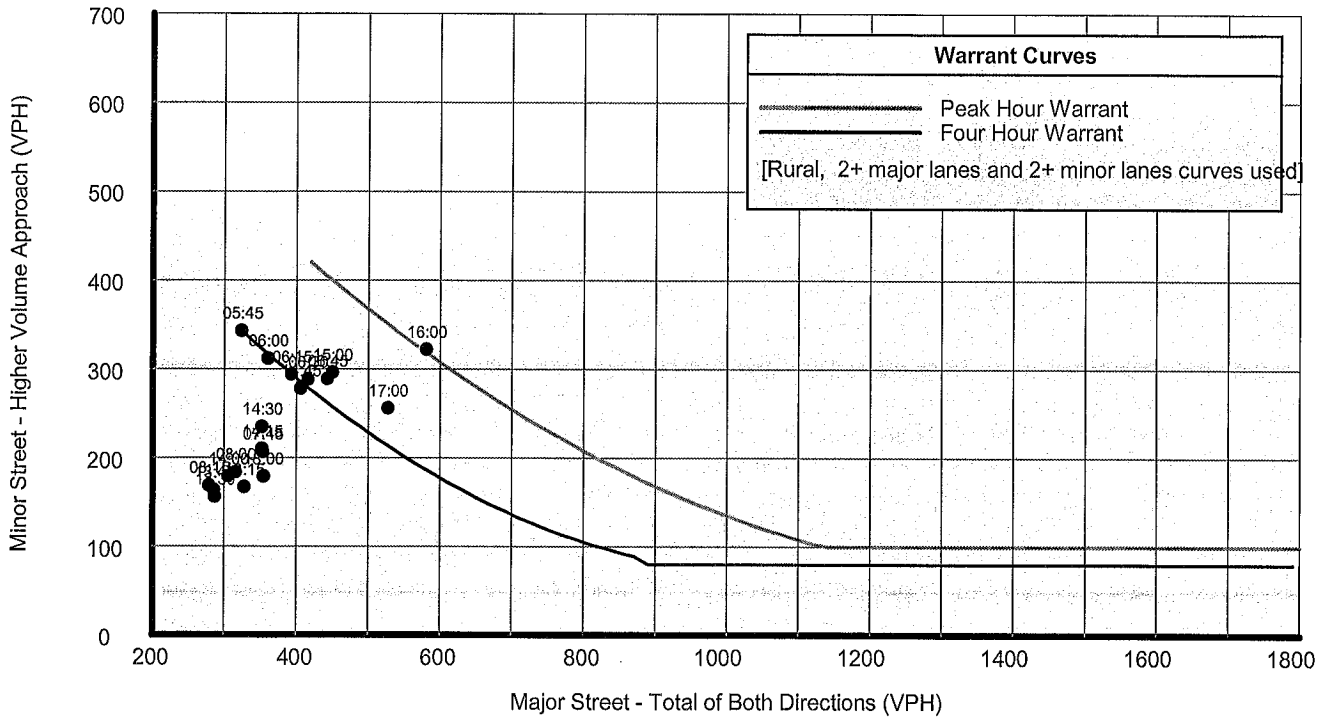
ANOKA COUNTY HIGHWAY

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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 140	Hour Begin	Major Total	Minor Vol	Dir	Maj 630	Min 70	Hour Begin	Major Total	Minor Vol	Dir	1A Met	1B Met
16:00	581	322	NB	Yes	Yes	16:15	589	324	NB	No	Yes	16:15	589	324	NB	Yes	-
17:00	527	256	NB	Yes	Yes	16:00	581	322	NB	No	Yes	16:30	577	320	NB	-	Yes
15:00	450	296	NB	Yes	Yes	16:30	577	320	NB	No	Yes	15:30	550	306	NB	-	Yes
06:45	443	289	SB	Yes	Yes	16:45	569	278	NB	No	Yes	15:15	481	293	NB	Yes	No
06:30	416	288	SB	No	Yes	15:45	555	318	NB	No	Yes	17:15	465	225	NB	Yes	-
14:45	406	278	NB	No	Yes	15:30	550	306	NB	No	Yes	07:00	450	309	SB	Yes	No
06:15	393	294	SB	No	Yes	17:00	527	256	NB	No	Yes	06:00	360	312	SB	Yes	No
06:00	360	312	SB	No	Yes	15:15	481	293	NB	No	Yes	14:15	352	210	NB	Yes	No
18:00	354	179	NB	No	Yes	17:15	465	225	NB	No	Yes	15:00	450	296	NB	-	No
07:45	353	207	SB	No	Yes	15:00	450	296	NB	No	Yes	07:15	446	288	SB	-	No
14:30	352	235	NB	No	Yes	07:00	450	309	SB	No	Yes	06:45	443	289	SB	-	No
14:15	352	210	NB	No	Yes	07:15	446	288	SB	No	Yes	06:30	416	288	SB	-	No
18:15	328	167	NB	No	Yes	06:45	443	289	SB	No	Yes	07:30	413	254	SB	-	No
05:45	324	343	SB	No	Yes	06:30	416	288	SB	No	Yes	14:45	406	278	NB	-	No
08:00	316	184	SB	No	Yes	07:30	413	254	SB	No	Yes	17:30	405	194	NB	-	No
14:00	306	179	NB	No	Yes	14:45	406	278	NB	No	Yes	06:15	393	294	SB	-	No
18:30	287	156	NB	No	Yes	17:30	405	194	NB	No	Yes	17:45	368	188	NB	-	No
13:45	286	164	NB	No	Yes	06:15	393	294	SB	No	Yes	18:00	354	179	NB	-	No
08:15	279	169	SB	No	Yes	17:45	368	188	NB	No	Yes	07:45	353	207	SB	-	No
13:30	265	156	NB	No	Yes	06:00	360	312	SB	No	Yes	14:30	352	235	NB	-	No
08:30	265	162	SB	No	Yes	18:00	354	179	NB	No	Yes	18:15	328	167	NB	No	No
05:30	264	323	SB	No	Yes	07:45	353	207	SB	No	Yes	05:45	324	343	SB	No	No
12:45	251	121	SB	No	No	14:30	352	235	NB	No	Yes	08:00	316	184	SB	No	No
08:45	251	147	SB	No	Yes	14:15	352	210	NB	No	Yes	14:00	306	179	NB	No	No



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Multi-Way Stop Warrant Report

Major Street Approaches

Eastbound: CSAH 22
Total Approach Volume: 2,487
85% Speed > 40 MPH.

Westbound: CSAH 22
Total Approach Volume: 2,947
85% Speed > 40 MPH.

Minor Street Approaches

Northbound: TH 47
Total Approach Volume: 2,390

Southbound: TH 47
Total Approach Volume: 2,645

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** **Satisfied**
Delay data not evaluated
Required volumes reached for 14 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?
05:15 - 06:15	225	342	210-Yes	140-Yes	Both	240-No	160-Yes	Minor
06:15 - 07:15	393	371	210-Yes	140-Yes	Both	240-Yes	160-Yes	Both
07:15 - 08:15	446	396	210-Yes	140-Yes	Both	240-Yes	160-Yes	Both
08:15 - 09:15	279	267	210-Yes	140-Yes	Both	240-Yes	160-Yes	Both
09:15 - 10:15	231	199	210-Yes	140-Yes	Both	240-No	160-Yes	Minor
10:15 - 11:15	226	195	210-Yes	140-Yes	Both	240-No	160-Yes	Minor
11:15 - 12:15	232	211	210-Yes	140-Yes	Both	240-No	160-Yes	Minor
12:15 - 13:15	239	186	210-Yes	140-Yes	Both	240-No	160-Yes	Minor
13:15 - 14:15	241	266	210-Yes	140-Yes	Both	240-Yes	160-Yes	Both
14:15 - 15:15	352	320	210-Yes	140-Yes	Both	240-Yes	160-Yes	Both
15:15 - 16:15	481	431	210-Yes	140-Yes	Both	240-Yes	160-Yes	Both
16:15 - 17:15	589	487	210-Yes	140-Yes	Both	240-Yes	160-Yes	Both
17:15 - 18:15	465	357	210-Yes	140-Yes	Both	240-Yes	160-Yes	Both
18:15 - 19:15	328	264	210-Yes	140-Yes	Both	240-Yes	160-Yes	Both
00:00 - 01:00	19	15	210-No	140-No	No	240-No	160-No	No
00:15 - 01:15	12	11	210-No	140-No	No	240-No	160-No	No
00:30 - 01:30	9	13	210-No	140-No	No	240-No	160-No	No
00:45 - 01:45	11	14	210-No	140-No	No	240-No	160-No	No
01:00 - 02:00	12	15	210-No	140-No	No	240-No	160-No	No
01:15 - 02:15	10	18	210-No	140-No	No	240-No	160-No	No
01:30 - 02:30	10	19	210-No	140-No	No	240-No	160-No	No
01:45 - 02:45	11	20	210-No	140-No	No	240-No	160-No	No
02:00 - 03:00	8	23	210-No	140-No	No	240-No	160-No	No
02:15 - 03:15	9	26	210-No	140-No	No	240-No	160-No	No



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Signal Warrants - Summary

Major Street Approaches

Eastbound: CSAH 22

Number of Lanes: 1
85% Speed > 40 MPH.
Total Approach Volume: 2,416

Westbound: CSAH 22

Number of Lanes: 1
85% Speed > 40 MPH.
Total Approach Volume: 2,654

Minor Street Approaches

Northbound: TH 47

Number of Lanes: 1
Total Approach Volume: 1,783

Southbound: TH 47

Number of Lanes: 1
Total Approach Volume: 2,181

Warrant Summary (Rural values apply.)

Warrant 1 - Eight Hour Vehicular Volumes	Not Satisfied
Warrant 1A - Minimum Vehicular Volume Not Satisfied	
Required volumes reached for 5 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 7 hours, 8 are needed	
Required 1B volumes reached for 3 hours, 8 are needed	
Warrant 2 - Four Hour Volumes	Satisfied
Number of hours (5) volumes exceed minimum >= minimum required (4).	
Warrant 3 - Peak Hour	Satisfied
Warrant 3A - Peak Hour Delay Satisfied	
Number of hours (6) 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



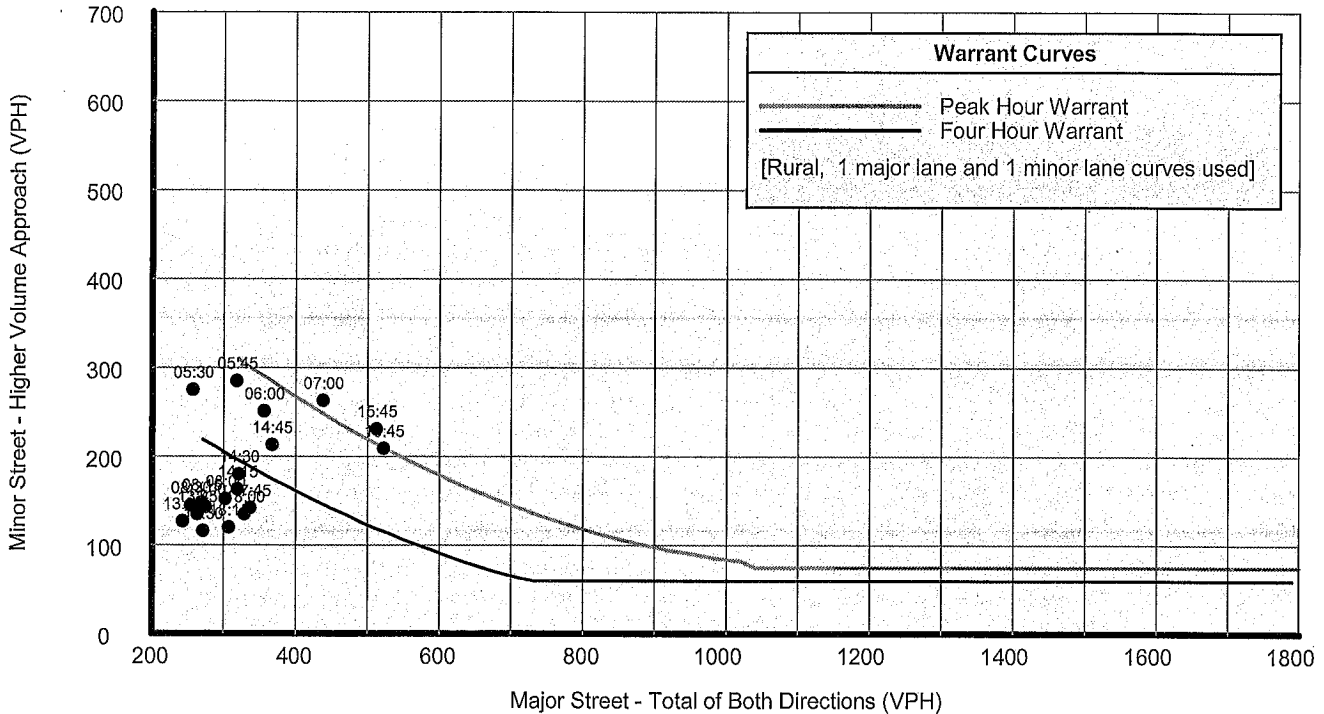
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Signal Warrants - Summary



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 350	Min 105	Hour Begin	Major Total	Minor Vol Dir	Maj 525	Min 53	Hour Begin	Major Total	Minor Vol Dir	1A Met	1B Met
16:45	522	209 NB	Yes	Yes	16:00	539	238 NB	Yes	Yes	16:15	544	226 NB	Yes	Yes
15:45	512	231 NB	Yes	Yes	15:45	512	231 NB	No	Yes	15:15	435	224 NB	Yes	Yes
07:00	438	263 SB	Yes	Yes	15:30	500	228 NB	No	Yes	06:45	433	241 SB	Yes	Yes
14:45	367	213 NB	Yes	Yes	17:00	482	194 NB	No	Yes	17:15	422	182 NB	Yes	Yes
06:00	356	251 SB	Yes	Yes	07:00	438	263 SB	No	Yes	07:45	338	173 SB	Yes	No
17:45	337	142 NB	No	Yes	15:15	435	224 NB	No	Yes	14:15	319	163 NB	Yes	No
18:00	329	135 NB	No	Yes	06:45	433	241 SB	No	Yes	05:45	318	285 SB	Yes	No
14:30	321	180 NB	No	Yes	07:15	432	237 SB	No	Yes	18:15	307	120 NB	Yes	No
14:15	319	163 NB	No	Yes	17:15	422	182 NB	No	Yes	06:30	407	239 SB	-	No
05:45	318	285 SB	No	Yes	06:30	407	239 SB	No	Yes	15:00	406	220 NB	-	No
18:15	307	120 NB	No	Yes	15:00	406	220 NB	No	Yes	06:15	383	247 SB	-	No
08:00	302	152 SB	No	Yes	07:30	398	210 SB	No	Yes	14:45	367	213 NB	-	No
14:00	275	143 NB	No	Yes	06:15	383	247 SB	No	Yes	06:00	356	251 SB	-	No
18:30	271	116 NB	No	Yes	17:30	368	154 NB	No	Yes	14:30	321	180 NB	-	No
08:15	269	148 SB	No	Yes	14:45	367	213 NB	No	Yes	08:00	302	152 SB	-	No
13:45	263	135 NB	No	Yes	06:00	356	251 SB	No	Yes	14:00	275	143 NB	No	No
05:30	257	275 SB	No	Yes	07:45	338	173 SB	No	Yes	18:30	271	116 NB	-	No
08:30	254	145 SB	No	Yes	17:45	337	142 NB	No	Yes	08:15	269	148 SB	-	No
13:30	243	127 NB	No	Yes	18:00	329	135 NB	No	Yes	13:45	263	135 NB	No	No
08:45	235	132 SB	No	Yes	14:30	321	180 NB	No	Yes	05:30	257	275 SB	No	No
12:45	232	99 SB	No	No	14:15	319	163 NB	No	Yes	08:30	254	145 SB	-	No
13:00	227	99 SB	No	No	05:45	318	285 SB	No	Yes	13:30	243	127 NB	No	No
12:30	227	103 SB	No	No	18:15	307	120 NB	No	Yes	08:45	235	132 SB	No	No
13:15	225	116 NB	No	Yes	08:00	302	152 SB	No	Yes	12:45	232	99 SB	No	No