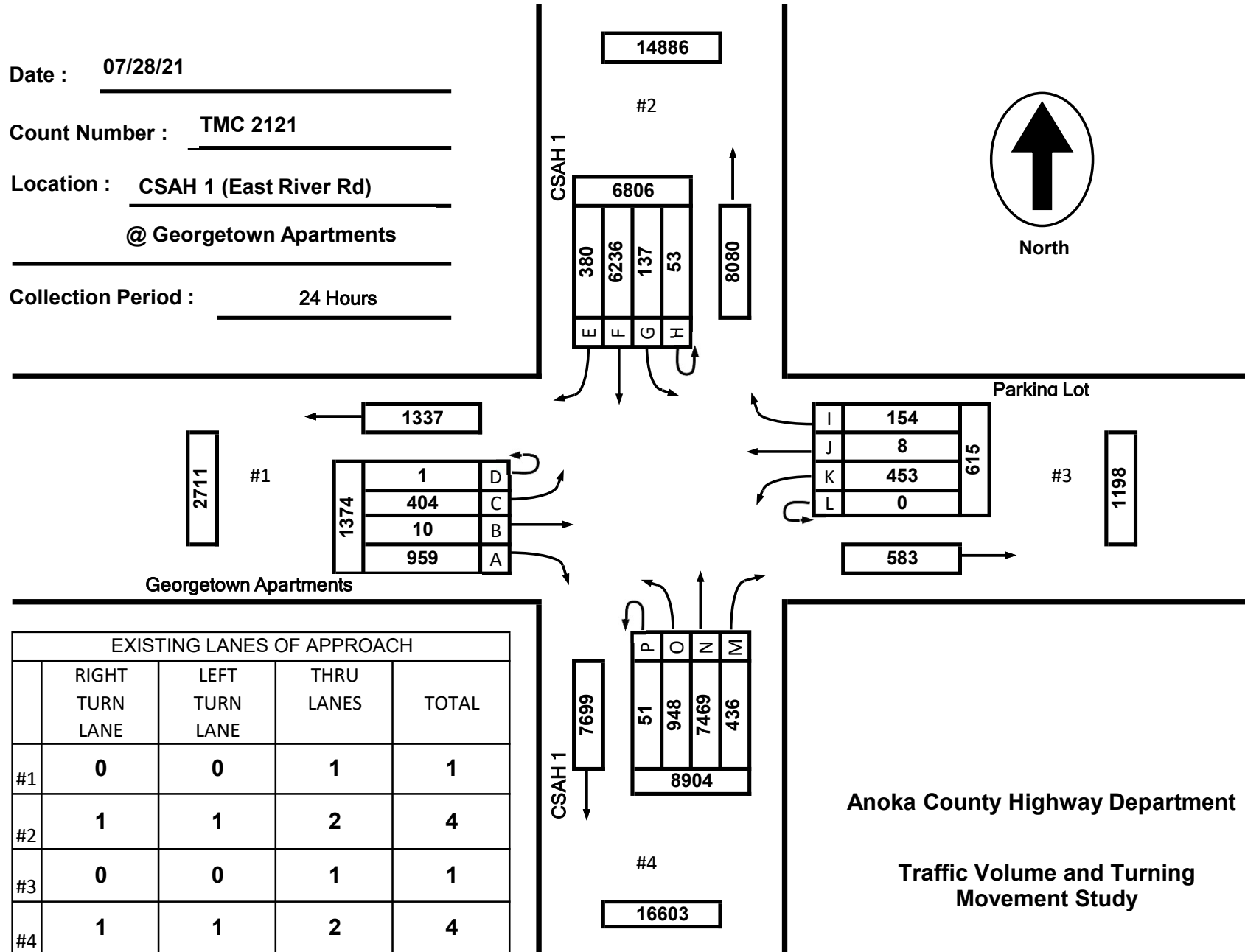


Date : 07/28/21

Count Number : TMC 2121

Location : CSAH 1 (East River Rd)
@ Georgetown Apartments

Collection Period : 24 Hours



Georgetown Apartments

Parking Lot

North

Anoka County Highway Department

Traffic Volume and Turning
Movement Study

EXISTING LANES OF APPROACH

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

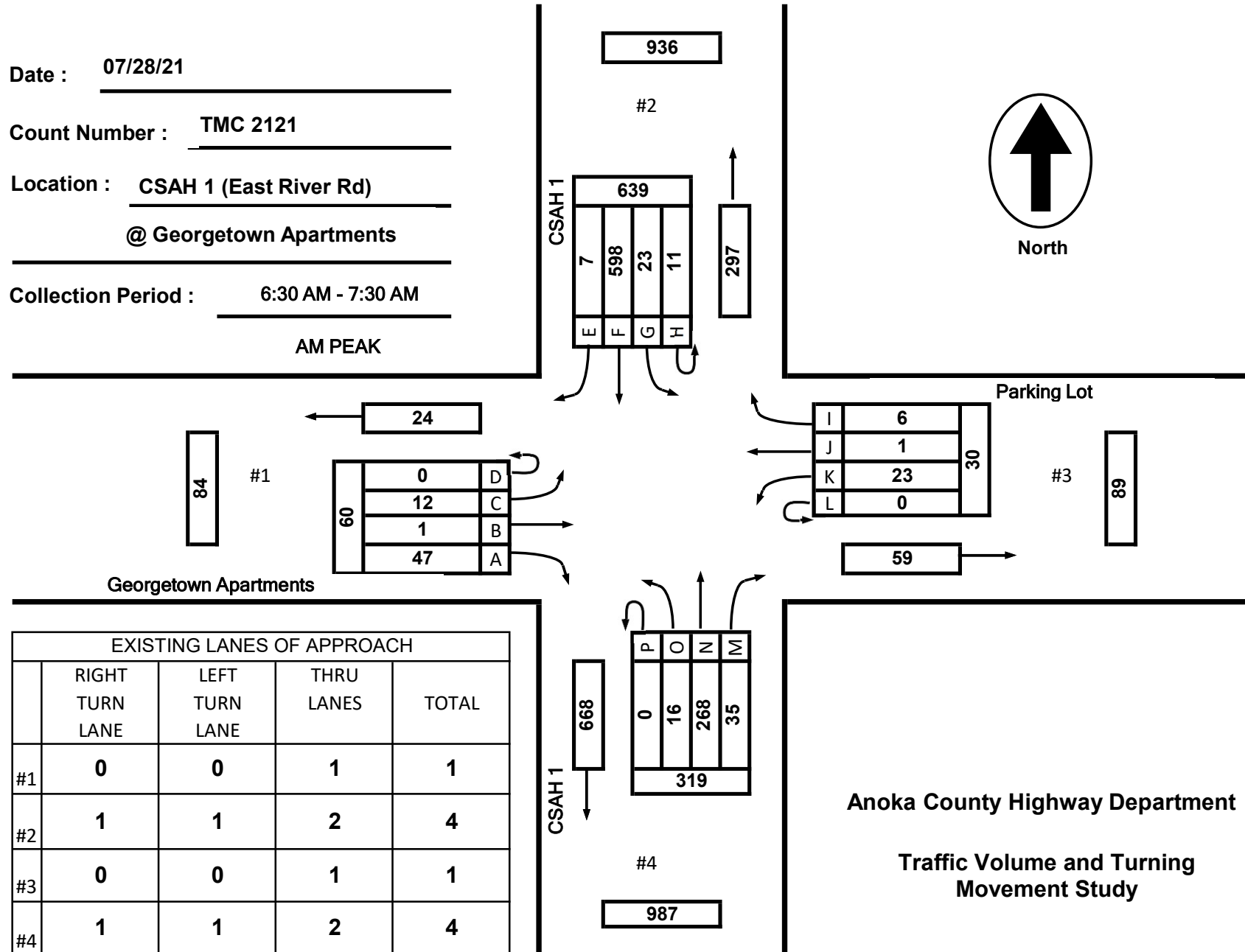
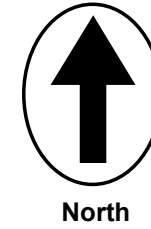
Date : 07/28/21

Count Number : TMC 2121

Location : CSAH 1 (East River Rd)
@ Georgetown Apartments

Collection Period : 6:30 AM - 7:30 AM

AM PEAK



Georgetown Apartments

Parking Lot

Anoka County Highway Department

Traffic Volume and Turning
Movement Study

EXISTING LANES OF APPROACH

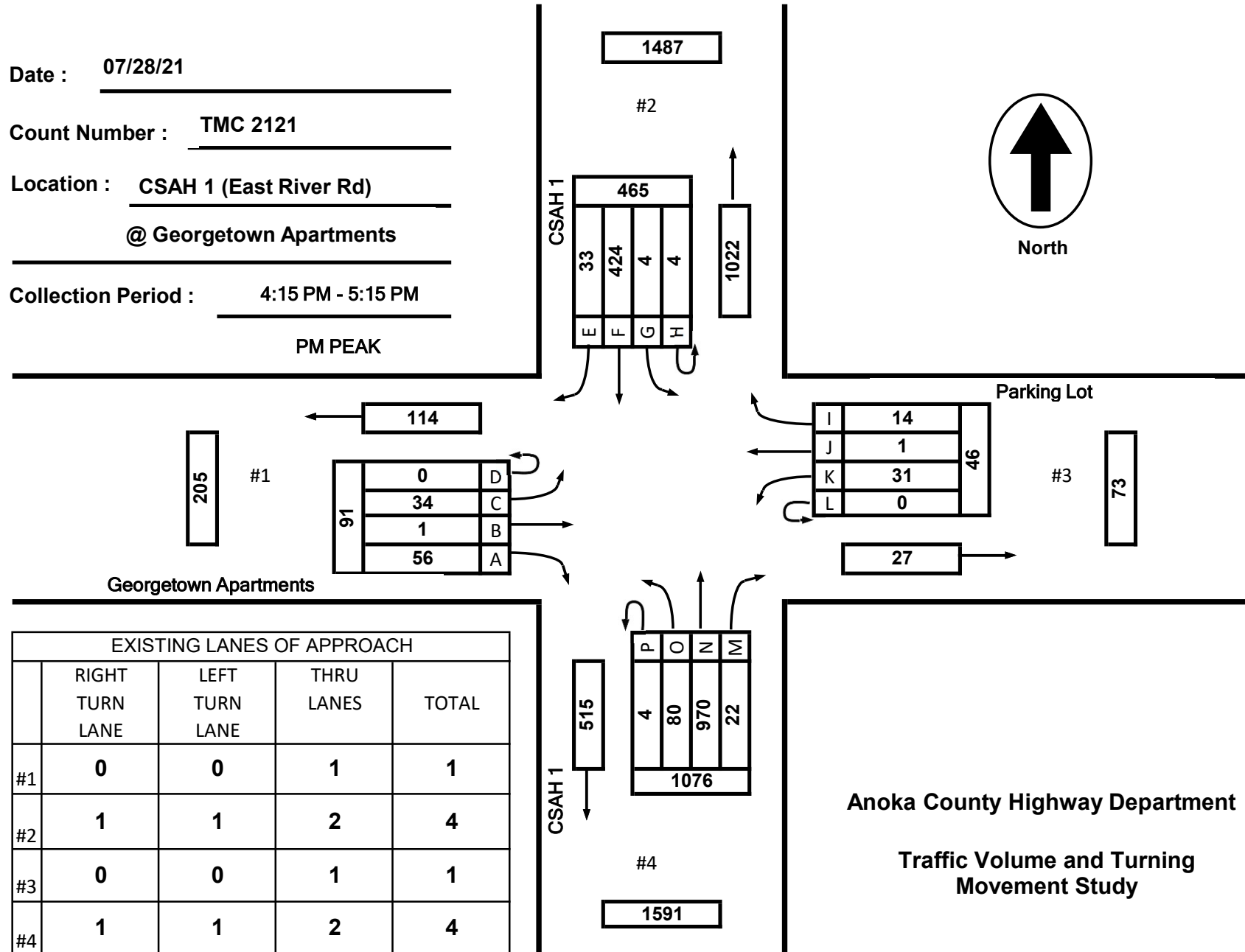
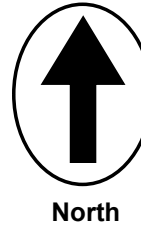
	RIGHT TURN LANE	LEFT TURN LANE	THRU LANES	TOTAL
#1	0	0	1	1
#2	1	1	2	4
#3	0	0	1	1
#4	1	1	2	4

Date : 07/28/21

Count Number : TMC 2121

Location : CSAH 1 (East River Rd)
@ Georgetown Apartments

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



Georgetown Apartments

Parking Lot

EXISTING LANES OF APPROACH

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

Anoka County Highway Department

Traffic Volume and Turning Movement Study



Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

File Name : TMC 2121
 Site Code :
 Start Date : 07/28/2021
 Page No : 1

Weather: Hot & Cloudy
 CountCAM 200
 Study Conducted By: Kevin

Groups Printed- Cars + - Trucks

Start Time	CSAH 1 Southbound						Parking Lot Westbound						CSAH 1 Northbound						Georgetown Apartments 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	6	1	0	7	0	0	0	0	0	0	0	3	14	0	0	17	0	0	0	6	0	6	0	30	30
00:15	0	0	6	1	0	7	0	2	0	0	0	2	0	3	13	0	0	16	0	0	0	3	0	3	0	28	28
00:30	0	0	2	2	0	4	0	0	0	0	0	0	0	3	10	0	0	13	0	0	0	5	0	5	0	22	22
00:45	0	0	9	0	0	9	0	1	0	0	0	1	0	2	11	0	0	13	0	0	0	3	0	3	0	26	26
Total	0	0	23	4	0	27	0	3	0	0	0	3	0	11	48	0	0	59	0	0	0	17	0	17	0	106	106
01:00	0	0	6	1	0	7	0	0	0	0	0	0	0	6	14	1	0	21	0	1	0	3	0	4	0	32	32
01:15	0	0	3	0	0	3	0	0	0	1	0	1	0	5	10	1	0	16	0	4	0	2	0	6	0	26	26
01:30	0	0	6	3	0	9	0	0	0	0	0	0	0	1	3	0	0	4	0	2	0	1	0	3	0	16	16
01:45	0	0	2	1	0	3	0	0	0	0	0	0	0	3	11	0	0	14	0	0	0	5	0	5	0	22	22
Total	0	0	17	5	0	22	0	0	0	1	0	1	0	15	38	2	0	55	0	7	0	11	0	18	0	96	96
02:00	0	0	10	1	0	11	0	0	0	0	0	0	0	4	5	1	0	10	0	0	0	1	0	1	0	22	22
02:15	1	0	5	2	0	8	0	0	0	0	0	0	0	0	8	0	0	8	0	0	0	0	0	0	0	16	16
02:30	1	0	8	0	0	9	0	0	0	0	0	0	0	1	10	0	0	11	0	0	0	1	0	1	0	21	21
02:45	0	1	4	0	0	5	0	0	0	0	0	0	0	3	6	0	0	9	0	2	0	2	0	4	0	18	18
Total	2	1	27	3	0	33	0	0	0	0	0	0	0	8	29	1	0	38	0	2	0	4	0	6	0	77	77
03:00	0	0	8	1	0	9	0	0	0	0	0	0	0	0	9	0	0	9	0	1	0	0	0	1	0	19	19
03:15	0	1	9	0	0	10	0	0	0	0	0	0	0	0	5	0	0	5	0	0	0	1	0	1	0	16	16
03:30	0	0	11	1	0	12	0	0	0	0	0	0	0	2	5	1	0	8	0	1	0	1	0	2	0	22	22
03:45	0	0	15	2	0	17	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	20	20
Total	0	1	43	4	0	48	0	0	0	0	0	0	0	2	22	1	0	25	0	2	0	2	0	4	0	77	77
04:00	0	0	18	0	0	18	0	0	0	0	0	0	0	1	2	0	0	3	0	0	0	4	0	4	0	25	25
04:15	0	2	31	1	0	34	0	0	0	0	0	0	0	0	12	1	0	13	0	1	0	6	0	7	0	54	54
04:30	0	1	28	0	0	29	0	0	0	0	0	0	0	3	19	6	0	28	0	1	0	6	0	7	0	64	64
04:45	0	0	29	2	0	31	0	0	0	0	0	0	0	0	23	3	0	26	0	1	0	12	0	13	0	70	70
Total	0	3	106	3	0	112	0	0	0	0	0	0	0	4	56	10	0	70	0	3	0	28	0	31	0	213	213
05:00	0	3	47	1	0	51	0	0	0	0	0	0	0	3	13	4	0	20	0	3	0	7	0	10	0	81	81
05:15	1	5	61	2	0	69	0	2	0	0	0	2	0	2	22	12	0	36	0	1	0	8	0	9	0	116	116
05:30	0	6	96	2	1	104	0	2	0	1	0	3	0	3	53	21	0	77	0	8	0	17	0	25	1	209	210
05:45	3	5	87	0	0	95	0	3	0	0	0	3	0	2	16	5	0	23	0	2	0	12	0	14	0	135	135
Total	4	19	291	5	1	319	0	7	0	1	0	8	0	10	104	42	0	156	0	14	0	44	0	58	1	541	542



Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

Weather: Hot & Cloudy
 CountCAM 200
 Study Conducted By: Kevin

File Name : TMC 2121
 Site Code :
 Start Date : 07/28/2021
 Page No : 2

Groups Printed- Cars + - Trucks

Start Time	CSAH 1 Southbound						Parking Lot Westbound						CSAH 1 Northbound						Georgetown Apartments Eastbound						Exclu. Total	Inclu. Total	Int. Total
	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total			
06:00	0	3	91	2	1	96	0	3	0	0	0	3	0	4	30	3	0	37	0	4	0	8	1	12	2	148	150
06:15	0	6	123	5	1	134	0	0	0	0	0	0	0	2	46	6	1	54	0	4	0	13	0	17	2	205	207
06:30	4	8	170	0	0	182	0	4	0	2	0	6	0	1	76	10	0	87	0	2	0	15	0	17	0	292	292
06:45	3	6	136	2	0	147	0	4	0	1	0	5	0	5	73	10	0	88	0	4	1	10	1	15	1	255	256
Total	7	23	520	9	2	559	0	11	0	3	0	14	0	12	225	29	1	266	0	14	1	46	2	61	5	900	905
07:00	1	5	146	3	0	155	0	8	0	1	0	9	0	1	57	9	0	67	0	2	0	11	2	13	2	244	246
07:15	3	4	146	2	0	155	0	7	1	2	0	10	0	9	62	6	0	77	0	4	0	11	0	15	0	257	257
07:30	0	3	142	4	0	149	0	4	0	2	1	6	0	8	81	5	0	94	0	7	0	11	0	18	1	267	268
07:45	1	3	131	5	0	140	0	5	0	0	0	5	0	8	91	14	0	113	0	6	0	14	0	20	0	278	278
Total	5	15	565	14	0	599	0	24	1	5	1	30	0	26	291	34	0	351	0	19	0	47	2	66	3	1046	1049
08:00	0	3	97	7	0	107	0	8	0	0	0	8	0	11	68	10	0	89	0	3	0	7	0	10	0	214	214
08:15	1	1	106	1	0	109	0	8	0	0	0	8	0	5	72	9	0	86	0	3	0	10	0	13	0	216	216
08:30	1	2	102	4	0	109	0	6	0	0	0	6	1	4	66	11	0	82	0	6	0	12	0	18	0	215	215
08:45	1	3	92	6	0	102	0	8	0	0	0	8	0	3	61	14	0	78	0	3	1	11	1	15	1	203	204
Total	3	9	397	18	0	427	0	30	0	0	0	30	1	23	267	44	0	335	0	15	1	40	1	56	1	848	849
09:00	0	2	89	3	0	94	0	8	0	1	0	9	0	5	53	11	0	69	0	7	1	11	0	19	0	191	191
09:15	0	1	85	2	0	88	0	7	0	2	0	9	1	0	66	12	0	79	0	0	0	9	0	9	0	185	185
09:30	0	4	71	3	0	78	0	7	0	3	0	10	0	9	65	12	0	86	0	7	0	8	0	15	0	189	189
09:45	2	1	103	4	1	110	0	8	0	1	0	9	2	3	67	9	0	81	0	6	0	12	0	18	1	218	219
Total	2	8	348	12	1	370	0	30	0	7	0	37	3	17	251	44	0	315	0	20	1	40	0	61	1	783	784
10:00	1	1	66	5	0	73	0	4	0	3	0	7	1	7	74	7	0	89	0	2	1	5	1	8	1	177	178
10:15	0	5	78	4	0	87	0	3	0	1	0	4	0	5	80	3	0	88	0	3	0	7	0	10	0	189	189
10:30	1	0	80	5	0	86	0	4	1	2	1	7	3	7	61	7	1	78	0	7	0	20	0	27	2	198	200
10:45	0	3	50	1	0	54	0	11	0	0	0	11	0	9	82	11	0	102	0	8	0	15	2	23	2	190	192
Total	2	9	274	15	0	300	0	22	1	6	1	29	4	28	297	28	1	357	0	20	1	47	3	68	5	754	759
11:00	0	0	69	3	0	72	0	13	0	2	1	15	1	9	78	10	0	98	0	6	0	14	0	20	1	205	206
11:15	0	0	75	7	1	82	0	9	0	6	0	15	4	11	83	8	0	106	0	3	0	10	0	13	1	216	217
11:30	1	1	87	7	0	96	0	6	0	4	0	10	0	12	122	6	0	140	0	9	0	20	0	29	0	275	275
11:45	0	4	74	5	0	83	0	9	0	2	0	11	2	10	86	6	0	104	0	3	1	9	0	13	0	211	211
Total	1	5	305	22	1	333	0	37	0	14	1	51	7	42	369	30	0	448	0	21	1	53	0	75	2	907	909
12:00	1	1	83	9	0	94	0	8	0	4	0	12	1	9	94	8	0	112	0	6	0	16	1	22	1	240	241



Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

Weather: Hot & Cloudy
 CountCAM 200
 Study Conducted By: Kevin

File Name : TMC 2121
 Site Code :
 Start Date : 07/28/2021
 Page No : 3

Groups Printed- Cars + - Trucks

Start Time	CSAH 1 Southbound						Parking Lot Westbound						CSAH 1 Northbound						Georgetown Apartments Eastbound						Exclu. Total	Inclu. Total	Int. Total
	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total			
12:15	0	4	85	6	0	95	0	5	0	5	0	10	4	9	88	9	0	110	0	3	0	13	1	16	1	231	232
12:30	0	2	77	2	0	81	0	7	0	1	0	8	1	14	85	11	0	111	0	10	1	18	0	29	0	229	229
12:45	0	3	93	3	0	99	0	3	0	6	0	9	0	20	109	8	0	137	0	5	0	12	1	17	1	262	263
Total	1	10	338	20	0	369	0	23	0	16	0	39	6	52	376	36	0	470	0	24	1	59	3	84	3	962	965
13:00	1	5	91	3	0	100	0	6	0	3	1	9	1	7	88	7	1	103	0	2	0	13	0	15	2	227	229
13:15	0	2	92	6	0	100	0	7	0	2	0	9	1	7	108	4	0	120	0	8	0	11	2	19	2	248	250
13:30	0	5	101	6	0	112	0	10	0	2	1	12	0	17	138	6	1	161	1	5	0	16	0	22	2	307	309
13:45	0	1	92	4	0	97	0	9	0	2	0	11	1	15	99	12	0	127	0	8	0	16	0	24	0	259	259
Total	1	13	376	19	0	409	0	32	0	9	2	41	3	46	433	29	2	511	1	23	0	56	2	80	6	1041	1047
14:00	0	1	90	6	0	97	0	20	0	3	0	23	1	12	123	4	0	140	0	6	0	12	2	18	2	278	280
14:15	0	2	76	5	0	83	0	5	0	5	0	10	1	13	177	8	0	199	0	9	0	13	3	22	3	314	317
14:30	3	1	109	8	0	121	0	8	0	6	0	14	0	17	167	5	0	189	0	7	0	8	0	15	0	339	339
14:45	1	0	82	6	1	89	0	6	0	6	0	12	1	21	151	7	0	180	0	5	0	8	1	13	2	294	296
Total	4	4	357	25	1	390	0	39	0	20	0	59	3	63	618	24	0	708	0	27	0	41	6	68	7	1225	1232
15:00	0	2	121	5	0	128	0	20	1	5	1	26	1	14	223	4	0	242	0	4	1	17	1	22	2	418	420
15:15	1	1	89	6	0	97	0	7	1	9	0	17	0	23	210	6	0	239	0	5	0	16	1	21	1	374	375
15:30	1	1	113	13	0	128	0	11	0	2	0	13	1	20	202	3	0	226	0	9	0	15	0	24	0	391	391
15:45	0	1	86	9	0	96	0	4	0	2	0	6	2	27	221	9	0	259	0	7	0	10	1	17	1	378	379
Total	2	5	409	33	0	449	0	42	2	18	1	62	4	84	856	22	0	966	0	25	1	58	3	84	4	1561	1565
16:00	2	0	111	5	1	118	0	11	1	3	0	15	1	11	258	5	0	275	0	6	0	12	0	18	1	426	427
16:15	1	2	107	9	1	119	0	7	0	5	0	12	1	14	222	3	0	240	0	10	0	12	2	22	3	393	396
16:30	0	1	108	9	2	118	0	10	0	4	0	14	3	21	233	3	1	260	0	11	0	12	1	23	4	415	419
16:45	2	1	103	9	1	115	0	3	0	0	0	3	0	21	241	5	0	267	0	10	0	13	1	23	2	408	410
Total	5	4	429	32	5	470	0	31	1	12	0	44	5	67	954	16	1	1042	0	37	0	49	4	86	10	1642	1652
17:00	1	0	106	6	0	113	0	11	1	5	0	17	0	24	274	11	0	309	0	3	1	19	1	23	1	462	463
17:15	0	0	105	7	0	112	0	13	0	10	0	23	1	16	200	2	0	219	0	3	0	18	3	21	3	375	378
17:30	0	0	100	7	1	107	0	4	0	4	0	8	1	21	164	3	0	189	0	3	1	12	0	16	1	320	321
17:45	0	0	71	4	1	75	0	7	0	3	1	10	2	14	141	9	1	166	0	9	0	15	0	24	3	275	278
Total	1	0	382	24	2	407	0	35	1	22	1	58	4	75	779	25	1	883	0	18	2	64	4	84	8	1432	1440
18:00	0	0	79	7	0	86	0	19	0	3	1	22	1	14	114	2	0	131	0	8	0	16	1	24	2	263	265
18:15	1	0	68	4	0	73	0	8	0	0	1	8	1	16	102	0	1	119	0	6	0	11	3	17	5	217	222



Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

File Name : TMC 2121
 Site Code :
 Start Date : 07/28/2021
 Page No : 4

Weather: Hot & Cloudy
 CountCAM 200
 Study Conducted By: Kevin

Groups Printed- Cars + - Trucks

Start Time	CSAH 1 Southbound						Parking Lot Westbound						CSAH 1 Northbound						Georgetown Apartments Eastbound						Exclu. Total	Inclu. Total	Int. Total
	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total			
18:30	0	0	74	6	0	80	0	8	0	1	1	9	2	19	88	0	1	109	0	3	0	12	3	15	5	213	218
18:45	0	0	88	8	0	96	0	2	0	5	0	7	2	16	87	1	0	106	0	7	0	14	2	21	2	230	232
Total	1	0	309	25	0	335	0	37	0	9	3	46	6	65	391	3	2	465	0	24	0	53	9	77	14	923	937
19:00	1	0	60	7	0	68	0	3	0	1	0	4	0	17	81	2	0	100	0	8	0	17	0	25	0	197	197
19:15	0	3	56	4	0	63	0	6	0	0	0	6	2	16	91	1	0	110	0	10	0	20	0	30	0	209	209
19:30	0	1	52	5	0	58	0	5	0	1	0	6	0	13	78	0	0	91	0	5	0	12	0	17	0	172	172
19:45	0	0	45	6	0	51	0	3	0	1	1	4	0	15	82	1	1	98	0	4	0	12	1	16	3	169	172
Total	1	4	213	22	0	240	0	17	0	3	1	20	2	61	332	4	1	399	0	27	0	61	1	88	3	747	750
20:00	1	0	48	7	0	56	0	0	0	1	0	1	0	17	75	2	0	94	0	7	0	12	1	19	1	170	171
20:15	2	1	46	2	0	51	0	1	0	0	0	1	0	17	64	0	0	81	0	8	0	15	0	23	0	156	156
20:30	1	0	36	10	0	47	0	1	0	1	0	2	1	25	54	0	0	80	0	7	0	6	1	13	1	142	143
20:45	0	0	48	4	0	52	0	2	0	0	0	2	0	15	59	3	0	77	0	5	0	6	0	11	0	142	142
Total	4	1	178	23	0	206	0	4	0	2	0	6	1	74	252	5	0	332	0	27	0	39	2	66	2	610	612
21:00	2	0	38	5	0	45	0	0	1	1	0	2	0	17	39	4	0	60	0	7	0	6	3	13	3	120	123
21:15	1	0	43	8	0	52	0	3	1	1	0	5	0	10	81	0	0	91	0	4	1	9	0	14	0	162	162
21:30	1	1	35	7	0	44	0	4	0	0	0	4	0	16	61	0	0	77	0	6	0	12	0	18	0	143	143
21:45	0	0	31	4	0	35	0	4	0	1	0	5	1	21	58	1	0	81	0	3	0	9	0	12	0	133	133
Total	4	1	147	24	0	176	0	11	2	3	0	16	1	64	239	5	0	309	0	20	1	36	3	57	3	558	561
22:00	0	1	29	1	0	31	0	4	0	1	0	5	0	20	41	0	1	61	0	3	0	16	0	19	1	116	117
22:15	1	0	35	3	0	39	0	1	0	1	0	2	0	22	36	0	0	58	0	2	0	8	0	10	0	109	109
22:30	2	1	31	6	0	40	0	1	0	1	0	2	1	9	37	0	1	47	0	5	0	5	0	10	1	99	100
22:45	0	0	29	1	0	30	0	0	0	0	0	0	0	10	30	0	0	40	0	0	0	7	0	7	0	77	77
Total	3	2	124	11	0	140	0	6	0	3	0	9	1	61	144	0	2	206	0	10	0	36	0	46	2	401	403
23:00	0	0	21	2	0	23	0	7	0	0	0	7	0	15	32	0	0	47	0	1	0	8	0	9	0	86	86
23:15	0	0	17	0	0	17	0	3	0	0	0	3	0	9	24	2	0	35	0	3	0	8	0	11	0	66	66
23:30	0	0	13	3	0	16	0	1	0	0	0	1	0	6	33	0	0	39	0	1	0	5	0	6	0	62	62
23:45	0	0	7	3	0	10	0	1	0	0	0	1	0	8	9	0	0	17	0	0	0	7	0	7	0	35	35
Total	0	0	58	8	0	66	0	12	0	0	0	12	0	38	98	2	0	138	0	5	0	28	0	33	0	249	249
Grand Total	53	137	6236	380	13	6806	0	453	8	154	11	615	51	948	7469	436	11	8904	1	404	10	959	45	1374	80	17699	17779
Apprch %	0.8	2	91.6	5.6			0	73.7	1.3	25			0.6	10.6	83.9	4.9			0.1	29.4	0.7	69.8					
Total %	0.3	0.8	35.2	2.1		38.5	0	2.6	0	0.9		3.5	0.3	5.4	42.2	2.5		50.3	0	2.3	0.1	5.4		7.8	0.4	99.6	
Cars +	53	127	5960	380		6533	0	343	6	135		495	51	932	7037	321		8352	1	403	10	949		1408	0	0	16788
% Cars +	100	92.7	95.6	100	100	95.8	0	75.7	75	87.7	100	79.1	100	98.3	94.2	73.6	100	93.7	100	99.8	100	99	100	99.2	0	0	94.4
Trucks	0	10	276	0		286	0	110	2	19		131	0	16	432	115		563	0	1	0	10		11	0	0	991
% Trucks	0	7.3	4.4	0	0	4.2	0	24.3	25	12.3	0	20.9	0	1.7	5.8	26.4	0	6.3	0	0.2	0	1	0	0.8	0	0	5.6

Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

Start Time	CSAH 1 Southbound					Parking Lot Westbound					CSAH 1 Northbound					Georgetown Apartments 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 06:30																					
06:30	4	8	170	0	182	0	4	0	2	6	0	1	76	10	87	0	2	0	15	17	292
06:45	3	6	136	2	147	0	4	0	1	5	0	5	73	10	88	0	4	1	10	15	255
07:00	1	5	146	3	155	0	8	0	1	9	0	1	57	9	67	0	2	0	11	13	244
07:15	3	4	146	2	155	0	7	1	2	10	0	9	62	6	77	0	4	0	11	15	257
Total Volume	11	23	598	7	639	0	23	1	6	30	0	16	268	35	319	0	12	1	47	60	1048
% App. Total	1.7	3.6	93.6	1.1		0	76.7	3.3	20		0	5	84	11		0	20	1.7	78.3		
PHF	.688	.719	.879	.583	.878	.000	.719	.250	.750	.750	.000	.444	.882	.875	.906	.000	.750	.250	.783	.882	.897

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	3	93	3	99	0	3	0	6	9	0	20	109	8	137	0	5	0	12	17	262
13:00	1	5	91	3	100	0	6	0	3	9	1	7	88	7	103	0	2	0	13	15	227
13:15	0	2	92	6	100	0	7	0	2	9	1	7	108	4	120	0	8	0	11	19	248
13:30	0	5	101	6	112	0	10	0	2	12	0	17	138	6	161	1	5	0	16	22	307
Total Volume	1	15	377	18	411	0	26	0	13	39	2	51	443	25	521	1	20	0	52	73	1044
% App. Total	0.2	3.6	91.7	4.4		0	66.7	0	33.3		0.4	9.8	85	4.8		1.4	27.4	0	71.2		
PHF	.250	.750	.933	.750	.917	.000	.650	.000	.542	.813	.500	.638	.803	.781	.809	.250	.625	.000	.813	.830	.850

Peak Hour Analysis From 14:00 to 23:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 16:15																					
16:15	1	2	107	9	119	0	7	0	5	12	1	14	222	3	240	0	10	0	12	22	393
16:30	0	1	108	9	118	0	10	0	4	14	3	21	233	3	260	0	11	0	12	23	415
16:45	2	1	103	9	115	0	3	0	0	3	0	21	241	5	267	0	10	0	13	23	408
17:00	1	0	106	6	113	0	11	1	5	17	0	24	274	11	309	0	3	1	19	23	462
Total Volume	4	4	424	33	465	0	31	1	14	46	4	80	970	22	1076	0	34	1	56	91	1678
% App. Total	0.9	0.9	91.2	7.1		0	67.4	2.2	30.4		0.4	7.4	90.1	2		0	37.4	1.1	61.5		
PHF	.500	.500	.981	.917	.977	.000	.705	.250	.700	.676	.333	.833	.885	.500	.871	.000	.773	.250	.737	.989	.908



Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

File Name : TMC 2121
 Site Code :
 Start Date : 07/28/2021
 Page No : 1

Weather: Hot & Cloudy
 CountCAM 200
 Study Conducted By: Kevin

Groups Printed- Trucks

Start Time	CSAH 1 Southbound					Parking Lot Westbound					CSAH 1 Northbound					Georgetown Apartments 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	1	0	1	0	0	0	0	0	0	1
00:15	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1
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	2	0	2	0	0	0	0	0	0	2
01:00	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	2
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	2	0	2	0	0	0	0	0	0	2
02:00	0	0	1	0	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	2
02:15	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1
02:30	0	0	1	0	1	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	3
02:45	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	3	0	3	0	0	0	0	0	0	0	3	1	4	0	0	0	0	0	0	7
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	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
04:00	0	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
04:15	0	0	2	0	2	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	3
04:30	0	0	1	0	1	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	2
04:45	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	7	0	7	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	9
05:00	0	0	4	0	4	0	0	0	0	0	0	1	2	1	4	0	0	0	1	1	1	9
05:15	0	0	0	0	0	0	2	0	0	2	0	0	1	0	1	0	0	0	0	0	0	3
05:30	0	0	3	0	3	0	0	0	0	0	0	0	3	1	4	0	0	0	0	0	0	7
05:45	0	0	1	0	1	0	1	0	0	1	0	0	1	2	3	0	0	0	0	0	0	5
Total	0	0	8	0	8	0	3	0	0	3	0	1	7	4	12	0	0	0	1	1	1	24
06:00	0	0	2	0	2	0	0	0	0	0	0	1	2	0	3	0	0	0	0	0	0	5
06:15	0	1	3	0	4	0	0	0	0	0	0	1	3	1	5	0	0	0	1	1	1	10
06:30	0	0	7	0	7	0	2	0	0	2	0	0	7	3	10	0	0	0	1	1	1	20
06:45	0	0	7	0	7	0	3	0	0	3	0	0	6	0	6	0	0	0	1	1	1	17
Total	0	1	19	0	20	0	5	0	0	5	0	2	18	4	24	0	0	0	3	3	3	52
07:00	0	0	6	0	6	0	3	0	1	4	0	1	8	2	11	0	0	0	0	0	0	21
07:15	0	0	6	0	6	0	4	0	1	5	0	0	3	1	4	0	0	0	0	0	0	15
07:30	0	0	7	0	7	0	1	0	1	2	0	0	7	0	7	0	0	0	0	0	0	16
07:45	0	0	6	0	6	0	1	0	0	1	0	0	4	1	5	0	0	0	0	0	0	12
Total	0	0	25	0	25	0	9	0	3	12	0	1	22	4	27	0	0	0	0	0	0	64
08:00	0	0	5	0	5	0	1	0	0	1	0	0	12	4	16	0	0	0	0	0	0	22
08:15	0	0	5	0	5	0	3	0	0	3	0	1	9	2	12	0	1	0	0	1	1	21
08:30	0	0	7	0	7	0	3	0	0	3	0	0	9	3	12	0	0	0	0	0	0	22
08:45	0	0	5	0	5	0	4	0	0	4	0	0	10	2	12	0	0	0	0	0	0	21
Total	0	0	22	0	22	0	11	0	0	11	0	1	40	11	52	0	1	0	0	1	1	86



Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

File Name : TMC 2121
 Site Code :
 Start Date : 07/28/2021
 Page No : 2

Weather: Hot & Cloudy
 CountCAM 200
 Study Conducted By: Kevin

Groups Printed- Trucks

Start Time	CSAH 1 Southbound					Parking Lot Westbound					CSAH 1 Northbound					Georgetown Apartments 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	1	7	0	8	0	4	0	0	4	0	1	3	3	7	0	0	0	2	2	21
09:15	0	0	5	0	5	0	2	0	0	2	0	0	10	2	12	0	0	0	0	0	19
09:30	0	0	5	0	5	0	1	0	2	3	0	0	8	7	15	0	0	0	0	0	23
09:45	0	0	7	0	7	0	4	0	0	4	0	0	11	3	14	0	0	0	0	0	25
Total	0	1	24	0	25	0	11	0	2	13	0	1	32	15	48	0	0	0	2	2	88
10:00	0	0	6	0	6	0	2	0	1	3	0	0	13	3	16	0	0	0	1	1	26
10:15	0	2	6	0	8	0	1	0	0	1	0	0	10	1	11	0	0	0	0	0	20
10:30	0	0	5	0	5	0	1	1	0	2	0	0	7	1	8	0	0	0	0	0	15
10:45	0	0	8	0	8	0	4	0	0	4	0	1	9	5	15	0	0	0	0	0	27
Total	0	2	25	0	27	0	8	1	1	10	0	1	39	10	50	0	0	0	1	1	88
11:00	0	0	7	0	7	0	3	0	1	4	0	0	11	5	16	0	0	0	0	0	27
11:15	0	0	9	0	9	0	6	0	0	6	0	0	8	4	12	0	0	0	0	0	27
11:30	0	0	2	0	2	0	5	0	0	5	0	0	9	1	10	0	0	0	0	0	17
11:45	0	1	6	0	7	0	3	0	1	4	0	0	7	1	8	0	0	0	0	0	19
Total	0	1	24	0	25	0	17	0	2	19	0	0	35	11	46	0	0	0	0	0	90
12:00	0	0	2	0	2	0	1	0	0	1	0	0	5	2	7	0	0	0	0	0	10
12:15	0	1	5	0	6	0	1	0	0	1	0	0	9	2	11	0	0	0	0	0	18
12:30	0	0	4	0	4	0	2	0	0	2	0	0	7	6	13	0	0	0	0	0	19
12:45	0	0	7	0	7	0	2	0	3	5	0	0	11	1	12	0	0	0	0	0	24
Total	0	1	18	0	19	0	6	0	3	9	0	0	32	11	43	0	0	0	0	0	71
13:00	0	0	5	0	5	0	1	0	1	2	0	2	10	2	14	0	0	0	0	0	21
13:15	0	0	3	0	3	0	1	0	0	1	0	0	7	2	9	0	0	0	1	1	14
13:30	0	1	6	0	7	0	2	0	1	3	0	1	12	1	14	0	0	0	0	0	24
13:45	0	0	3	0	3	0	1	0	0	1	0	0	7	5	12	0	0	0	0	0	16
Total	0	1	17	0	18	0	5	0	2	7	0	3	36	10	49	0	0	0	1	1	75
14:00	0	0	4	0	4	0	2	0	0	2	0	0	9	1	10	0	0	0	0	0	16
14:15	0	0	6	0	6	0	2	0	0	2	0	0	15	3	18	0	0	0	0	0	26
14:30	0	0	5	0	5	0	2	0	0	2	0	0	8	2	10	0	0	0	0	0	17
14:45	0	0	3	0	3	0	3	0	1	4	0	1	8	5	14	0	0	0	0	0	21
Total	0	0	18	0	18	0	9	0	1	10	0	1	40	11	52	0	0	0	0	0	80
15:00	0	0	6	0	6	0	2	0	0	2	0	0	8	1	9	0	0	0	0	0	17
15:15	0	1	1	0	2	0	1	0	1	2	0	0	12	0	12	0	0	0	0	0	16
15:30	0	1	7	0	8	0	1	0	0	1	0	0	6	1	7	0	0	0	0	0	16
15:45	0	0	7	0	7	0	0	0	0	0	0	0	7	2	9	0	0	0	0	0	16
Total	0	2	21	0	23	0	4	0	1	5	0	0	33	4	37	0	0	0	0	0	65
16:00	0	0	2	0	2	0	3	1	0	4	0	0	12	2	14	0	0	0	0	0	20
16:15	0	0	3	0	3	0	1	0	1	2	0	0	10	1	11	0	0	0	0	0	16
16:30	0	0	4	0	4	0	3	0	0	3	0	0	8	1	9	0	0	0	0	0	16
16:45	0	0	0	0	0	0	0	0	0	0	0	0	8	1	9	0	0	0	0	0	9
Total	0	0	9	0	9	0	7	1	1	9	0	0	38	5	43	0	0	0	0	0	61
17:00	0	0	4	0	4	0	1	0	0	1	0	0	8	3	11	0	0	0	0	0	16
17:15	0	0	0	0	0	0	3	0	1	4	0	0	7	1	8	0	0	0	0	0	12
17:30	0	0	0	0	0	0	1	0	0	1	0	0	2	2	4	0	0	0	0	0	5
17:45	0	0	5	0	5	0	1	0	0	1	0	0	4	4	8	0	0	0	0	0	14
Total	0	0	9	0	9	0	6	0	1	7	0	0	21	10	31	0	0	0	0	0	47
18:00	0	0	1	0	1	0	4	0	1	5	0	0	5	1	6	0	0	0	0	0	12
18:15	0	0	1	0	1	0	2	0	0	2	0	0	1	0	1	0	0	0	0	0	4



Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

Weather: Hot & Cloudy
 CountCAM 200
 Study Conducted By: Kevin

File Name : TMC 2121
 Site Code :
 Start Date : 07/28/2021
 Page No : 3

Groups Printed- Trucks

Start Time	CSAH 1 Southbound					Parking Lot Westbound					CSAH 1 Northbound					Georgetown Apartments Eastbound					Int. Total
	UTrn	Left	Thru	Right	App. Total	UTrn	Left	Thru	Right	App. Total	UTrn	Left	Thru	Right	App. Total	UTrn	Left	Thru	Right	App. Total	
18:30	0	0	1	0	1	0	0	0	0	0	0	1	2	0	3	0	0	0	0	0	4
18:45	0	0	3	0	3	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	5
Total	0	0	6	0	6	0	6	0	1	7	0	1	10	1	12	0	0	0	0	0	25
19:00	0	0	1	0	1	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	3
19:15	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
19:30	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
19:45	0	0	2	0	2	0	0	0	0	0	0	0	3	0	3	0	0	0	0	0	5
Total	0	1	4	0	5	0	0	0	0	0	0	0	5	0	5	0	0	0	0	0	10
20:00	0	0	0	0	0	0	0	0	0	0	0	1	1	1	3	0	0	0	0	0	3
20:15	0	0	1	0	1	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	3
20:30	0	0	1	0	1	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	2
20:45	0	0	1	0	1	0	0	0	0	0	0	1	1	0	2	0	0	0	1	1	4
Total	0	0	3	0	3	0	0	0	0	0	0	2	5	1	8	0	0	0	1	1	12
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	1	0	1	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	3
21:30	0	0	2	0	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	3
21:45	0	0	2	0	2	0	0	0	1	1	0	0	0	1	1	0	0	0	0	0	4
Total	0	0	5	0	5	0	0	0	1	1	0	1	2	1	4	0	0	0	0	0	10
22:00	0	0	0	0	0	0	2	0	0	2	0	1	3	0	4	0	0	0	0	0	6
22:15	0	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	4
22:30	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1
22:45	0	0	3	0	3	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	4
Total	0	0	6	0	6	0	2	0	0	2	0	1	5	0	6	0	0	0	1	1	15
23:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1
23:15	0	0	1	0	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2
23:30	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	2
23:45	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2
Total	0	0	2	0	2	0	1	0	0	1	0	0	3	1	4	0	0	0	0	0	7
Grand Total	0	10	276	0	286	0	110	2	19	131	0	16	432	115	563	0	1	0	10	11	991
Apprch %	0	3.5	96.5	0		0	84	1.5	14.5		0	2.8	76.7	20.4		0	9.1	0	90.9		
Total %	0	1	27.9	0	28.9	0	11.1	0.2	1.9	13.2	0	1.6	43.6	11.6	56.8	0	0.1	0	1	1.1	

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2121

Study Date : 06/01/2022

Signal Warrants - Summary

Major Street Approaches

Northbound: CSAH 1

Number of Lanes : 2+

Total Approach Volume: 8,904

Southbound: CSAH 1

Number of Lanes :2+

Total Approach Volume: 6,806

Minor Street Approaches

Eastbound: Georgetown Apartments

Number of Lanes :1

Total Approach Volume: 1,374

Westbound: Parking Lot

Number of Lanes :1

Total Approach Volume: 615

Warrant Summary (Rural Values Apply)

Warrant 1 - Eight Hour Vehicular Volumes.....Satisfied

Warrant 1A - Minimum Vehicular Volume.....Not Satisfied

Required volumes reached for 0 hours, 8 are needed

Warrant 1B - Interruption of Continuous Traffic.....Satisfied

Required volumes reached for 14 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 16 hours, 8 are needed

Warrant 2 - Four Hour Volumes.....Satisfied

Number of hours (10) 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 one hour period. Delay data not evaluated.

Warrant 3B - Peak Hour Volumes.....Satisfied

Volumes exceed minimums for at least one hour period.

Warrant 4 - Pedestrian Volumes.....Not Evaluated

Warrant 5 - School Crossing.....Not Evaluated

Warrant 6 - Coordinated Signal System.....Not Evaluated

Warrant 7 - Crash Experience.....Not Evaluated

Warrant 8 - Roadway Network.....Not Evaluated

Warrant 9 - Intersection Near a Grade Crossing.....Not Evaluated

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2121

Study Date : 06/01/2022

Warrant 1A - Minimum Volumes

Description

Intended for sites where the volume of intersecting traffic is the principal reason for consideration of a signal installation.

Summary

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

Site Data Required

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

Volume Requirements

Rural Factor of 70 % applied
 Veh/Hr Major = **420**
 Veh/Hr Minor = **105**

Time	Major Road CSAH 1				Total	Minor Road Georgetown Apartments		Met?
	Major NB	+	Major SB	=		Minor EB	Minor WB	
16:15 - 17:15	1076	+	465	=	1541	91	46	No
16:30 - 17:30	1055	+	458	=	1513	90	57	No
16:00 - 17:00	1042	+	470	=	1512	86	44	No
15:45 - 16:45	1034	+	451	=	1485	80	47	No
15:30 - 16:30	1000	+	461	=	1461	81	46	No
15:15 - 16:15	999	+	439	=	1438	80	51	No
16:45 - 17:45	984	+	447	=	1431	83	51	No
15:00 - 16:00	966	+	449	=	1415	84	62	No
14:45 - 15:45	887	+	442	=	1329	80	68	No
17:00 - 18:00	883	+	407	=	1290	84	58	No
14:30 - 15:30	850	+	435	=	1285	71	69	No
14:15 - 15:15	810	+	421	=	1231	72	62	No
14:00 - 15:00	708	+	390	=	1098	68	59	No
17:15 - 18:15	705	+	380	=	1085	85	63	No
13:45 - 14:45	655	+	398	=	1053	79	58	No
13:30 - 14:30	627	+	389	=	1016	86	56	No
06:30 - 07:30	319	+	639	=	958	60	30	No
13:15 - 14:15	548	+	406	=	954	83	55	No
07:00 - 08:00	351	+	599	=	950	66	30	No
17:30 - 18:30	605	+	341	=	946	81	48	No
12:45 - 13:45	521	+	411	=	932	73	39	No
06:45 - 07:45	326	+	606	=	932	61	30	No
07:15 - 08:15	373	+	551	=	924	63	29	No
13:00 - 14:00	511	+	409	=	920	80	41	No
06:15 - 07:15	296		618		914	62	20	No

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2121

Study Date : 06/01/2022

Warrant 1B - Interruption of Continuous Traffic

Description

Intended for sites where the volume of the major street is so heavy that traffic on the minor street suffers excessive delay or hazard.

Summary

14 one hour periods meet minimums.
Warrant IS met.

Site Data Required

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

Volume Requirements

Rural Factor of 70 % applied
 Veh/Hr Major = **630**
 Veh/Hr Minor = **53**

Time	Major Road				Minor Road			Met?
	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	
15:45 - 16:45	1034	+	451	=	1485	80	47	Yes
16:45 - 17:45	984	+	447	=	1431	83	51	Yes
14:45 - 15:45	887	+	442	=	1329	80	68	Yes
13:45 - 14:45	655	+	398	=	1053	79	58	Yes
12:45 - 13:45	521	+	411	=	932	73	39	Yes
06:45 - 07:45	326	+	606	=	932	61	30	Yes
17:45 - 18:45	525	+	314	=	839	80	49	Yes
07:45 - 08:45	370	+	465	=	835	61	27	Yes
11:45 - 12:45	437	+	353	=	790	80	41	Yes
10:45 - 11:45	446	+	304	=	750	85	51	Yes
05:45 - 06:45	201	+	507	=	708	60	12	Yes
18:45 - 19:45	407	+	285	=	692	93	23	Yes
09:45 - 10:45	336	+	356	=	692	63	27	Yes
08:45 - 09:45	312	+	362	=	674	58	36	Yes
05:30 - 06:30	191	+	429	=	620	68	9	No
19:45 - 20:45	353	+	205	=	558	71	8	No
20:00 - 21:00	332	+	206	=	538	66	6	No
05:15 - 06:15	173	+	364	=	537	60	11	No
20:30 - 21:30	308	+	196	=	504	51	11	No
20:45 - 21:45	305	+	193	=	498	56	13	No
20:15 - 21:15	298	+	195	=	493	60	7	No
21:00 - 22:00	309	+	176	=	485	57	16	No
05:00 - 06:00	156	+	319	=	475	58	8	No
21:15 - 22:15	310	+	162	=	472	63	19	No
21:30 - 22:30	277		149		426	59	16	No

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2121

Study Date : 06/01/2022

Warrant 1C Combination of Warrants

Description

Intended for sites where the traffic volumes don't meet individual warrants but where Warrants 1A and 1B are both met to 80% of their stated values.

Summary

Only 7 hours meet 1A minimums.
16 hours meet 1B minimums.
Warrant is NOT met.

Site Data Required

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

Volume Requirements

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

Veh/Hr Minor = **84 42**

Major Road CSAH 1

Minor Road Georgetown Apartments

Time	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	Met1A?
16:00 - 17:00	1042	+	470	=	1512	86	44	Yes
15:00 - 16:00	966	+	449	=	1415	84	62	Yes
17:00 - 18:00	883	+	407	=	1290	84	58	Yes
13:30 - 14:30	627	+	389	=	1016	86	56	Yes
12:00 - 13:00	470	+	369	=	839	84	39	Yes
10:45 - 11:45	446	+	304	=	750	85	51	Yes
18:30 - 19:30	425	+	307	=	732	91	26	Yes
14:45 - 15:45	887	+	442	=	1329	80	68	No
14:30 - 15:30	850	+	435	=	1285	71	69	No
06:30 - 07:30	319	+	639	=	958	60	30	No
13:15 - 14:15	548	+	406	=	954	83	55	No
07:00 - 08:00	351	+	599	=	950	66	30	No

Time	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	Met1B?
16:15 - 17:15	1076	+	465	=	1541	91	46	Yes
15:15 - 16:15	999	+	439	=	1438	80	51	Yes
14:15 - 15:15	810	+	421	=	1231	72	62	Yes
17:15 - 18:15	705	+	380	=	1085	85	63	Yes
13:15 - 14:15	548	+	406	=	954	83	55	Yes
07:15 - 08:15	373	+	551	=	924	63	29	Yes
06:15 - 07:15	296	+	618	=	914	62	20	Yes
12:15 - 13:15	461	+	375	=	836	77	36	Yes
11:15 - 12:15	462	+	355	=	817	77	48	Yes
18:15 - 19:15	434	+	317	=	751	78	28	Yes
08:15 - 09:15	315	+	414	=	729	65	31	Yes
09:15 - 10:15	335	+	349	=	684	50	35	Yes

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2121

Study Date : 06/01/2022

Warrant 2 - Four Hour Volumes

Description

Intended for sites where the volume of intersecting traffic during any four hours of the day is the principal reason for consideration of a signal installation.

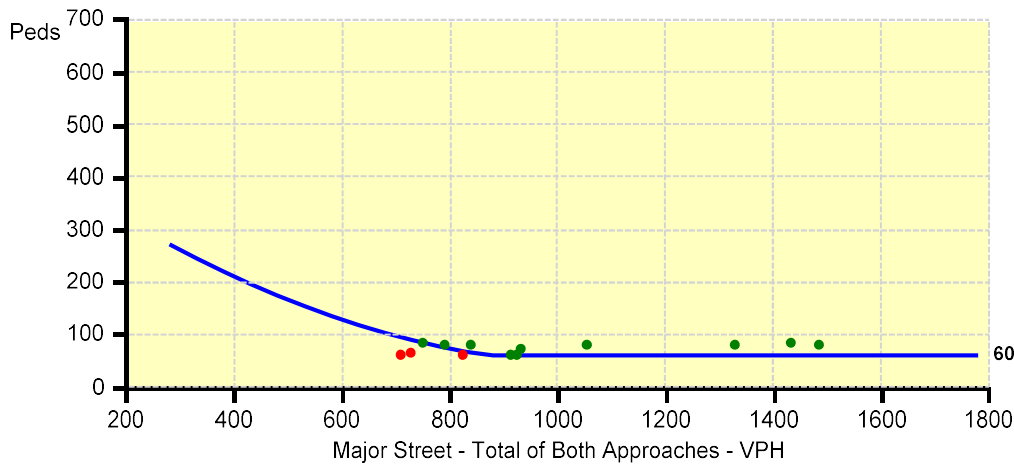
Summary

10 one hour periods meet minimums.
Warrant IS met.

Site Data Required

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

Time	Major Road CSAH 1				Total	Minor Road Georgetown Apartments		Met?
	Major NB	+	Major SB	=		Minor EB	Minor WB	
15:45 - 16:45	1034	+	451	=	1485	80	47	Yes
16:45 - 17:45	984	+	447	=	1431	83	51	Yes
14:45 - 15:45	887	+	442	=	1329	80	68	Yes
13:45 - 14:45	655	+	398	=	1053	79	58	Yes
12:45 - 13:45	521	+	411	=	932	73	39	Yes
07:15 - 08:15	373	+	551	=	924	63	29	Yes
06:15 - 07:15	296	+	618	=	914	62	20	Yes
17:45 - 18:45	525	+	314	=	839	80	49	Yes
11:45 - 12:45	437	+	353	=	790	80	41	Yes
10:45 - 11:45	446	+	304	=	750	85	51	Yes
06:00 - 07:00	266	+	559	=	825	61	14	No
							31	No



ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2121

Study Date : 06/01/2022

Warrant 3B - Peak Hour Volumes

Description

Intended for sites where the volume of intersecting traffic during one hour of the day is the principal reason for consideration of a signal installation.

Summary

10 one hour periods meet minimums.
Warrant IS met.

Site Data Required

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

Time	Major Road CSAH 1				Total	Minor Road Georgetown Apartments		Met?
	Major NB	+	Major SB	=		Minor EB	Minor WB	
16:15 - 17:15	1076	+	465	=	1541	91	46	Yes
16:30 - 17:30	1055	+	458	=	1513	90	57	Yes
16:00 - 17:00	1042	+	470	=	1512	86	44	Yes
15:45 - 16:45	1034	+	451	=	1485	80	47	Yes
15:30 - 16:30	1000	+	461	=	1461	81	46	Yes
15:15 - 16:15	999	+	439	=	1438	80	51	Yes
16:45 - 17:45	984	+	447	=	1431	83	51	Yes
15:00 - 16:00	966	+	449	=	1415	84	62	Yes
14:45 - 15:45	887	+	442	=	1329	80	68	Yes
17:00 - 18:00	883	+	407	=	1290	84	58	Yes
14:30 - 15:30	850	+	435	=	1285	71	69	No
							62	No

