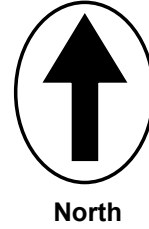


Date : 09/08/22

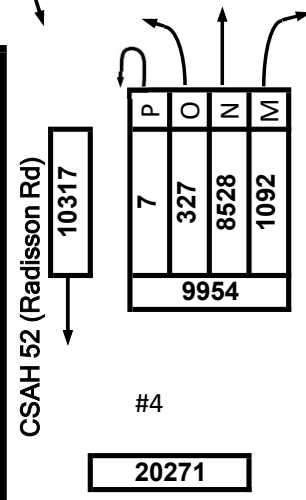
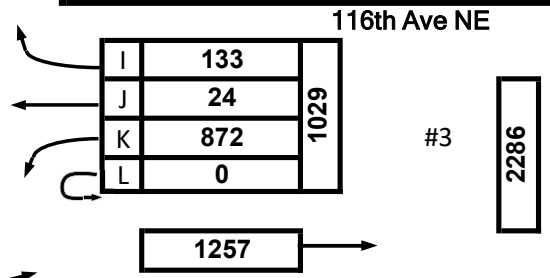
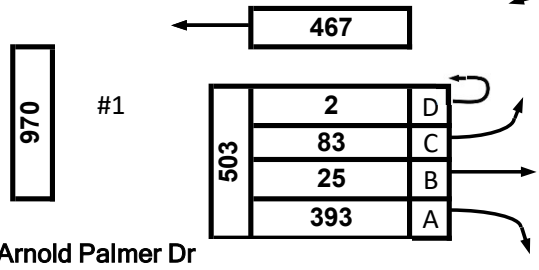
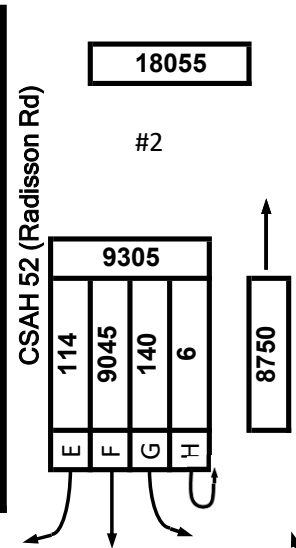
Count Number : TMC 2257

Location : CSAH 52 (Radisson Rd)
@ 116th Ave NE

Collection Period : 24 HR



North



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

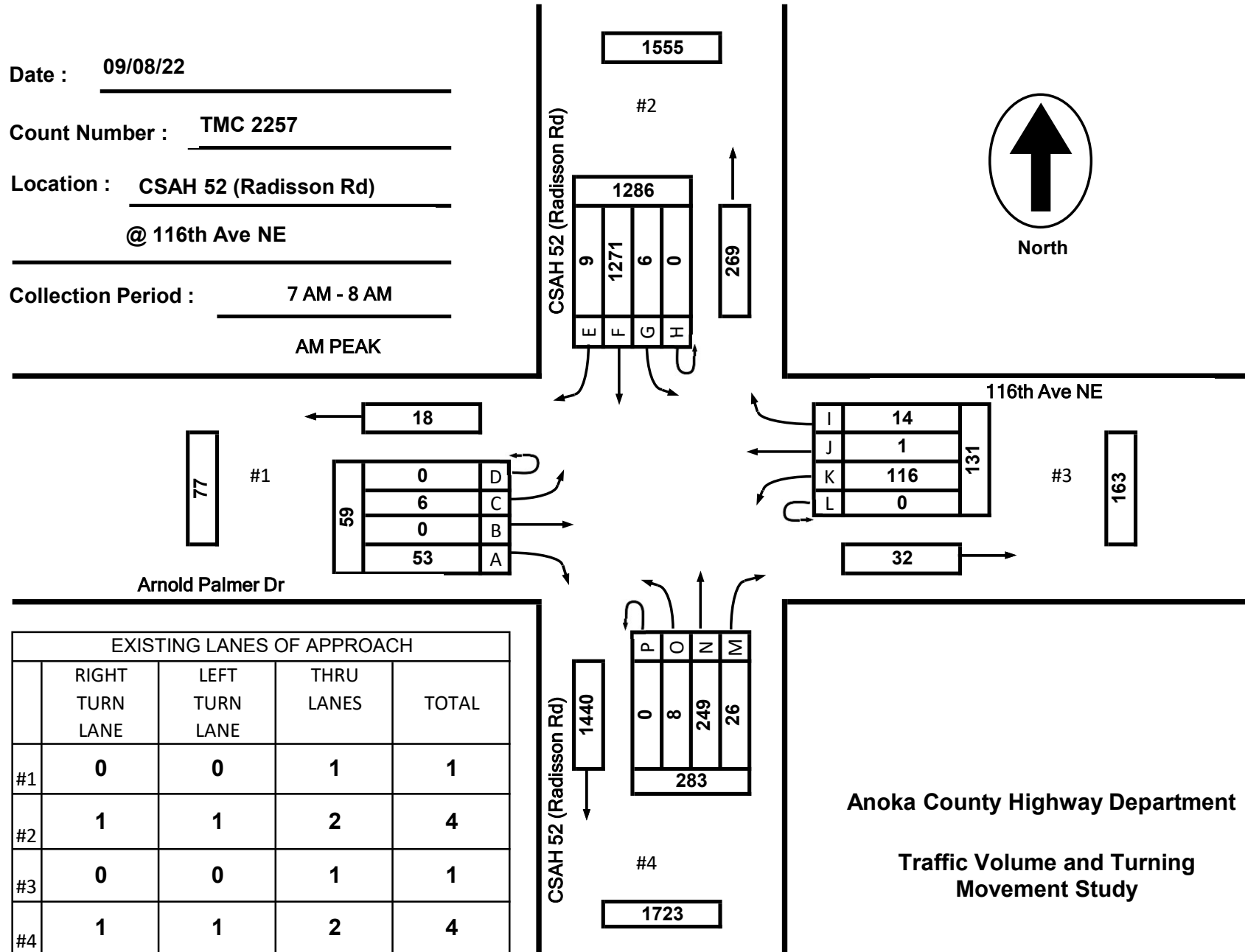
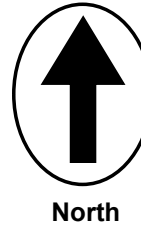
Anoka County Highway Department
 Traffic Volume and Turning Movement Study

Date : 09/08/22

Count Number : TMC 2257

Location : CSAH 52 (Radisson Rd)
@ 116th Ave NE

Collection Period : 7 AM - 8 AM
AM PEAK



Anoka County Highway Department

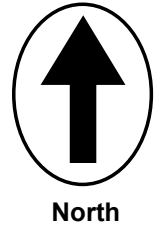
Traffic Volume and Turning Movement Study

Date : 09/08/22

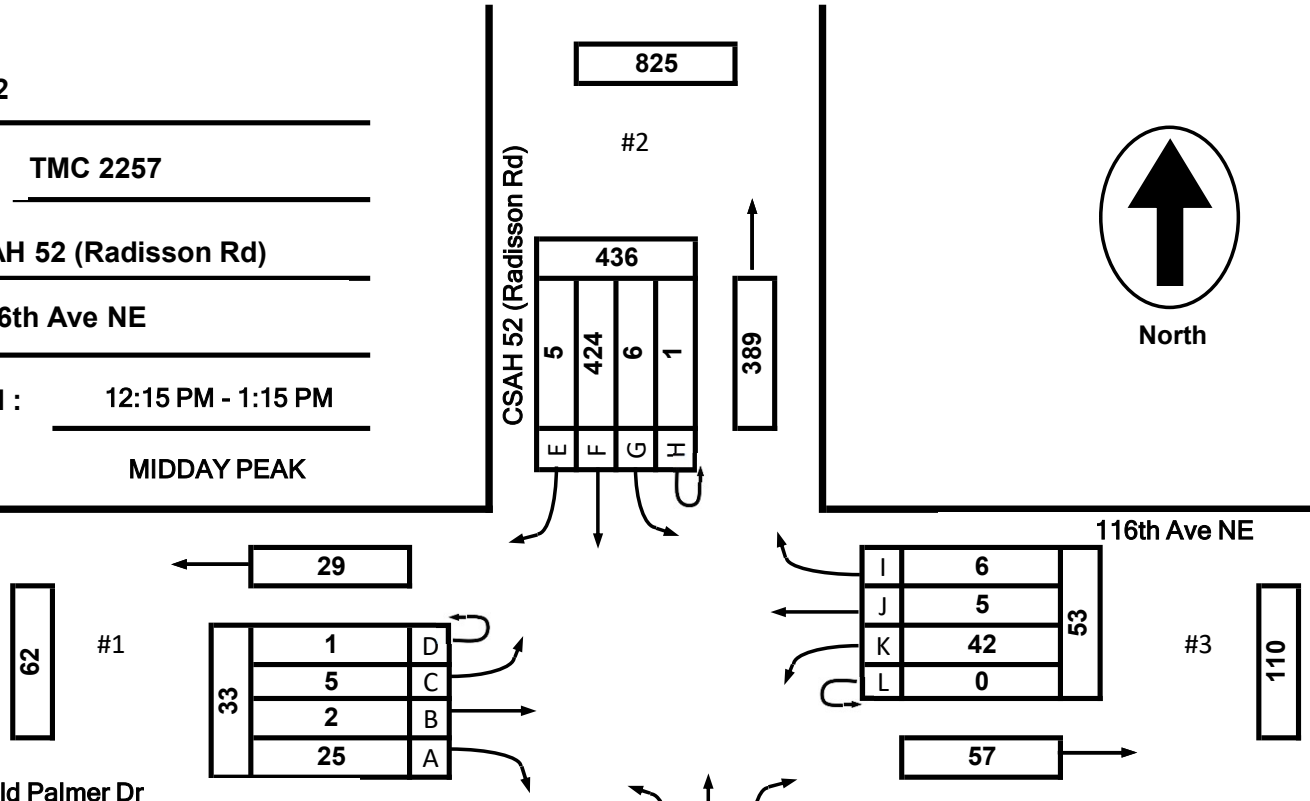
Count Number : TMC 2257

Location : CSAH 52 (Radisson Rd)
@ 116th Ave NE

Collection Period : 12:15 PM - 1:15 PM
MIDDAY PEAK



North



Arnold Palmer Dr

116th Ave NE

CSAH 52 (Radisson Rd)

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

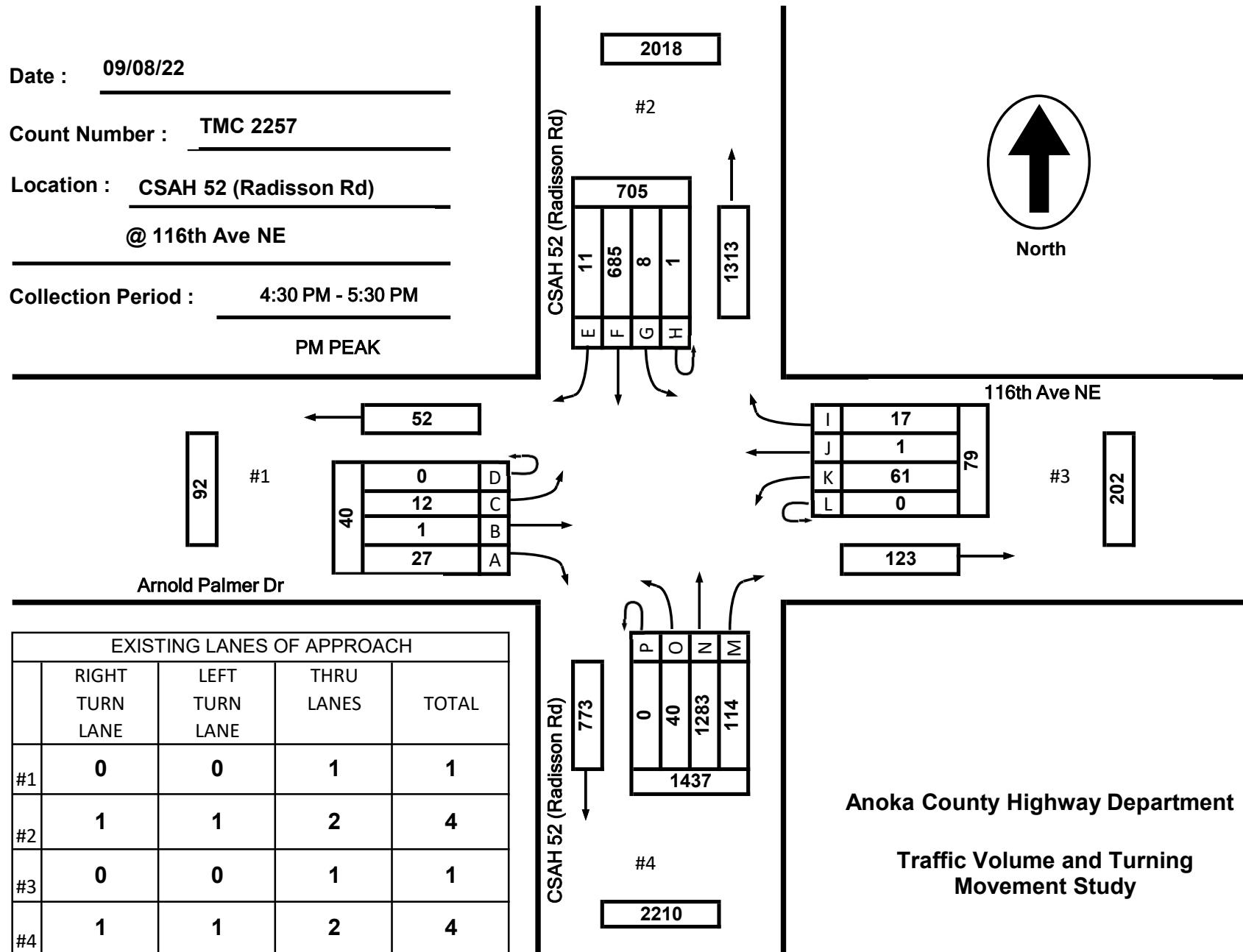
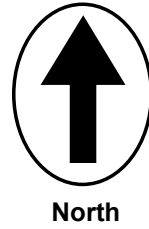
935

Date : 09/08/22

Count Number : TMC 2257

Location : CSAH 52 (Radisson Rd)
@ 116th Ave NE

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



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 2257-t
 Site Code :
 Start Date : 09/08/2022
 Page No : 1

Weather: Warm & Sunny
 CountCAM 2
 Study Conducted by: Kevin

Groups Printed- Cars + - Trucks

Start Time	CSAH 52 (Radisson Rd) Southbound						116th Ave NE Westbound						CSAH 52 (Radisson Rd) Northbound						Arnold Palmer Dr Eastbound						Exclu. Total	Inclu. Total	Int. Total	
	Right	Thru	Left	UTrn	Peds	App. Total	Right	Thru	Left	UTrn	Peds	App. Total	Right	Thru	Left	UTrn	Peds	App. Total	Right	Thru	Left	UTrn	Peds	App. Total				
00:00	0	1	0	0	0	1	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	9	9
00:15	0	4	0	0	0	4	0	0	0	0	0	0	1	12	0	0	0	0	0	0	0	0	0	0	0	0	17	17
00:30	0	3	0	0	0	3	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	7	7
00:45	0	3	1	0	0	4	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	11	11
Total	0	11	1	0	0	12	0	0	0	0	0	0	1	31	0	0	0	0	0	0	0	0	0	0	0	0	44	44
01:00	0	3	0	0	0	3	0	0	0	0	0	0	1	2	0	0	0	0	3	1	0	0	0	0	1	0	7	7
01:15	0	2	0	0	0	2	0	0	0	0	0	0	0	3	0	0	0	0	3	0	0	0	0	0	0	0	5	5
01:30	0	2	0	0	0	2	0	0	0	0	0	0	0	4	0	0	0	0	4	0	0	0	0	0	0	0	6	6
01:45	0	2	0	0	0	2	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	4	4
Total	0	9	0	0	0	9	0	0	0	0	0	0	1	11	0	0	0	0	12	1	0	0	0	0	1	0	22	22
02:00	0	2	0	0	0	2	0	0	0	0	0	0	1	4	1	0	0	0	6	0	0	0	0	0	0	0	8	8
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	3	1	0	0	0	0	1	0	4	4
02:30	0	3	0	0	0	3	0	0	0	0	0	0	0	4	0	0	0	0	4	0	0	0	0	0	0	0	7	7
02:45	0	3	0	0	0	3	0	1	1	0	0	2	1	1	0	0	0	0	2	0	0	0	0	0	0	0	7	7
Total	0	8	0	0	0	8	0	1	1	0	0	2	2	11	2	0	0	0	15	1	0	0	0	0	1	0	26	26
03:00	0	4	0	0	0	4	0	0	0	0	0	0	0	2	1	0	0	0	3	0	0	0	0	0	0	0	7	7
03:15	0	9	0	0	0	9	0	0	0	0	0	0	0	4	0	0	0	0	4	0	0	0	0	0	0	0	13	13
03:30	0	8	0	0	0	8	0	0	0	0	0	0	0	4	0	0	0	0	4	0	0	0	0	0	0	0	12	12
03:45	0	9	0	0	0	9	0	0	0	0	0	0	1	2	0	0	0	0	3	0	0	0	0	0	0	0	12	12
Total	0	30	0	0	0	30	0	0	0	0	0	0	1	12	1	0	0	0	14	0	0	0	0	0	0	0	44	44
04:00	0	14	0	0	0	14	0	0	1	0	0	1	0	2	0	0	0	0	2	1	0	0	0	0	1	0	18	18
04:15	0	30	0	0	0	30	0	0	1	0	0	1	0	1	0	0	0	0	1	0	0	0	0	0	0	0	32	32
04:30	0	46	0	0	0	46	0	0	3	0	0	3	0	5	0	0	0	0	5	0	0	0	0	0	0	0	54	54
04:45	0	45	0	0	0	45	0	0	0	0	0	0	0	2	0	0	0	0	2	1	0	0	0	0	1	0	48	48
Total	0	135	0	0	0	135	0	0	5	0	0	5	0	10	0	0	0	10	2	0	0	0	0	2	0	152	152	
05:00	0	58	0	0	0	58	0	0	5	0	0	5	0	9	0	0	0	0	9	3	0	0	0	0	3	0	75	75
05:15	0	83	0	0	0	83	0	0	2	0	0	2	0	11	0	0	0	0	11	3	0	0	0	0	3	0	99	99
05:30	0	111	0	0	0	111	1	0	10	0	0	11	1	16	0	0	0	0	17	2	0	0	0	0	2	0	141	141
05:45	0	109	0	0	0	109	2	0	7	0	0	9	1	13	0	0	0	0	14	3	0	0	0	0	3	0	135	135
Total	0	361	0	0	0	361	3	0	24	0	0	27	2	49	0	0	0	0	51	11	0	0	0	0	11	0	450	450



Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

File Name : TMC 2257-t
 Site Code :
 Start Date : 09/08/2022
 Page No : 2

Weather: Warm & Sunny
 CountCAM 2
 Study Conducted by: Kevin

Groups Printed- Cars + - Trucks

Start Time	CSAH 52 (Radisson Rd) Southbound						116th Ave NE Westbound						CSAH 52 (Radisson Rd) Northbound						Arnold Palmer Dr Eastbound						Exclu. Total	Inclu. Total	Int. Total
	Right	Thru	Left	UTrn	Peds	App. Total	Right	Thru	Left	UTrn	Peds	App. Total	Right	Thru	Left	UTrn	Peds	App. Total	Right	Thru	Left	UTrn	Peds	App. Total			
06:00	1	144	0	0	0	145	0	0	7	0	0	7	1	12	0	0	0	13	5	0	0	0	0	5	0	170	170
06:15	1	182	1	0	0	184	2	0	12	0	0	14	2	16	2	0	0	20	6	0	0	0	0	6	0	224	224
06:30	0	211	0	0	0	211	1	0	14	0	0	15	3	26	1	0	0	30	8	0	0	0	0	8	0	264	264
06:45	2	258	1	0	0	261	3	0	21	0	0	24	2	37	1	0	0	40	6	1	0	0	1	7	1	332	333
Total	4	795	2	0	0	801	6	0	54	0	0	60	8	91	4	0	0	103	25	1	0	0	1	26	1	990	991
07:00	1	243	4	0	0	248	2	0	31	0	0	33	7	58	1	0	0	66	17	0	1	0	0	18	0	365	365
07:15	1	332	0	0	0	333	7	1	26	0	0	34	4	66	0	0	0	70	9	0	1	0	0	10	0	447	447
07:30	3	367	0	0	0	370	4	0	33	0	0	37	5	60	1	0	0	66	12	0	4	0	0	16	0	489	489
07:45	4	329	2	0	0	335	1	0	26	0	0	27	10	65	6	0	0	81	15	0	0	0	0	15	0	458	458
Total	9	1271	6	0	0	1286	14	1	116	0	0	131	26	249	8	0	0	283	53	0	6	0	0	59	0	1759	1759
08:00	3	217	1	1	0	222	2	1	14	0	0	17	10	65	1	1	0	77	12	0	1	0	0	13	0	329	329
08:15	0	186	4	0	1	190	0	0	22	0	0	22	12	55	2	0	0	69	9	1	0	0	0	10	1	291	292
08:30	2	185	0	1	0	188	2	0	24	0	0	26	10	64	4	0	1	78	14	0	1	0	0	15	1	307	308
08:45	3	173	2	1	0	179	1	0	16	0	0	17	16	72	2	0	0	90	12	0	1	0	0	13	0	299	299
Total	8	761	7	3	1	779	5	1	76	0	0	82	48	256	9	1	1	314	47	1	3	0	0	51	2	1226	1228
09:00	0	168	1	0	1	169	2	0	12	0	0	14	4	59	2	0	0	65	8	0	0	0	0	8	1	256	257
09:15	1	132	0	0	0	133	2	0	16	0	0	18	12	64	4	0	0	80	3	0	2	0	0	5	0	236	236
09:30	0	107	1	0	0	108	2	0	14	0	0	16	4	66	3	1	0	74	11	1	3	0	0	15	0	213	213
09:45	1	129	1	0	0	131	2	1	10	0	0	13	9	76	3	0	0	88	4	0	1	0	0	5	0	237	237
Total	2	536	3	0	1	541	8	1	52	0	0	61	29	265	12	1	0	307	26	1	6	0	0	33	1	942	943
10:00	1	100	2	0	0	103	1	0	14	0	0	15	10	86	5	1	0	102	8	0	2	0	0	10	0	230	230
10:15	0	101	1	0	0	102	4	0	11	0	0	15	6	64	4	0	0	74	14	0	2	0	0	16	0	207	207
10:30	2	105	2	0	0	109	0	0	16	0	0	16	6	69	1	0	0	76	8	0	0	0	0	8	0	209	209
10:45	1	115	1	0	0	117	2	1	8	0	0	11	11	66	3	0	0	80	4	0	0	0	0	4	0	212	212
Total	4	421	6	0	0	431	7	1	49	0	0	57	33	285	13	1	0	332	34	0	4	0	0	38	0	858	858
11:00	0	100	1	0	0	101	0	0	10	0	0	10	3	72	1	0	0	76	4	2	0	0	0	6	0	193	193
11:15	2	104	1	0	0	107	4	1	11	0	0	16	9	71	4	0	0	84	3	0	0	0	0	3	0	210	210
11:30	1	99	4	0	0	104	1	0	12	0	0	13	15	95	3	0	0	113	2	0	2	0	0	4	0	234	234
11:45	5	95	0	0	0	100	4	0	13	0	0	17	9	80	2	0	0	91	1	0	2	0	0	3	0	211	211
Total	8	398	6	0	0	412	9	1	46	0	0	56	36	318	10	0	0	364	10	2	4	0	0	16	0	848	848
12:00	1	105	1	0	1	107	1	0	8	0	0	9	14	91	5	0	0	110	10	0	0	1	0	11	1	237	238
12:15	0	109	3	0	0	112	4	0	9	0	0	13	12	94	4	0	0	110	1	0	1	0	0	2	0	237	237
12:30	3	111	1	1	0	116	1	2	8	0	0	11	15	99	2	0	0	116	8	0	0	1	0	9	0	252	252



Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

File Name : TMC 2257-t
 Site Code :
 Start Date : 09/08/2022
 Page No : 3

Weather: Warm & Sunny
 CountCAM 2
 Study Conducted by: Kevin

Groups Printed- Cars + - Trucks

Start Time	CSAH 52 (Radisson Rd) Southbound						116th Ave NE Westbound						CSAH 52 (Radisson Rd) Northbound						Arnold Palmer Dr Eastbound						Exclu. Total	Inclu. Total	Int. Total
	Right	Thru	Left	UTrn	Peds	App. Total	Right	Thru	Left	UTrn	Peds	App. Total	Right	Thru	Left	UTrn	Peds	App. Total	Right	Thru	Left	UTrn	Peds	App. Total			
12:45	1	98	2	0	0	101	0	2	11	0	0	13	10	93	8	0	0	111	10	0	3	0	0	13	0	238	238
Total	5	423	7	1	1	436	6	4	36	0	0	46	51	377	19	0	0	447	29	0	4	2	0	35	1	964	965
13:00	1	106	0	0	0	107	1	1	14	0	0	16	12	91	4	0	0	107	6	2	1	0	0	9	0	239	239
13:15	0	100	3	0	0	103	2	0	3	0	0	5	14	96	4	1	0	115	4	0	1	0	0	5	0	228	228
13:30	1	96	0	0	0	97	2	1	10	0	0	13	12	90	10	0	0	112	5	1	2	0	0	8	0	230	230
13:45	1	89	3	0	0	93	1	0	3	0	0	4	9	111	3	0	0	123	4	0	2	0	0	6	0	226	226
Total	3	391	6	0	0	400	6	2	30	0	0	38	47	388	21	1	0	457	19	3	6	0	0	28	0	923	923
14:00	0	88	1	0	0	89	0	0	14	0	0	14	14	127	3	1	0	145	2	0	1	0	0	3	0	251	251
14:15	1	108	3	0	0	112	1	0	14	0	0	15	13	133	7	0	0	153	6	0	1	0	0	7	0	287	287
14:30	2	117	3	0	0	122	1	1	13	0	0	15	11	162	5	0	0	178	0	0	1	0	0	1	0	316	316
14:45	0	118	4	0	0	122	3	1	9	0	0	13	23	168	5	0	0	196	6	0	1	0	0	7	0	338	338
Total	3	431	11	0	0	445	5	2	50	0	0	57	61	590	20	1	0	672	14	0	4	0	0	18	0	1192	1192
15:00	1	112	3	0	0	116	4	2	6	0	0	12	33	217	9	0	0	259	4	1	1	0	0	6	0	393	393
15:15	3	134	1	0	0	138	3	0	14	0	0	17	36	239	5	1	0	281	5	1	0	0	0	6	0	442	442
15:30	1	136	5	0	0	142	2	0	16	0	0	18	24	250	6	0	0	280	4	0	4	0	0	8	0	448	448
15:45	3	131	3	0	0	137	3	1	11	0	0	15	23	294	9	0	0	326	1	1	1	0	0	3	0	481	481
Total	8	513	12	0	0	533	12	3	47	0	0	62	116	1000	29	1	0	1146	14	3	6	0	0	23	0	1764	1764
16:00	2	138	9	0	0	149	4	1	18	0	0	23	25	281	6	0	0	312	9	1	1	0	0	11	0	495	495
16:15	5	142	6	0	0	153	6	0	18	0	0	24	28	323	8	1	0	360	4	0	0	0	0	4	0	541	541
16:30	0	148	4	1	0	153	7	0	12	0	0	19	25	327	9	0	0	361	6	0	2	0	0	8	0	541	541
16:45	6	150	2	0	0	158	3	0	13	0	0	16	33	361	10	0	0	404	2	0	1	0	0	3	0	581	581
Total	13	578	21	1	0	613	20	1	61	0	0	82	111	1292	33	1	0	1437	21	1	4	0	0	26	0	2158	2158
17:00	1	195	0	0	0	196	3	1	16	0	0	20	30	304	8	0	0	342	13	1	3	0	0	17	0	575	575
17:15	4	192	2	0	0	198	4	0	20	0	0	24	26	291	13	0	0	330	6	0	6	0	1	12	1	564	565
17:30	6	193	3	0	0	202	5	0	13	0	0	18	21	256	11	0	0	288	5	0	0	0	0	5	0	513	513
17:45	2	147	7	0	0	156	4	1	18	0	0	23	28	234	5	0	0	267	3	0	2	0	0	5	0	451	451
Total	13	727	12	0	0	752	16	2	67	0	0	85	105	1085	37	0	0	1227	27	1	11	0	1	39	1	2103	2104
18:00	2	131	2	0	0	135	0	0	10	0	0	10	34	217	10	0	0	261	6	0	3	0	0	9	0	415	415
18:15	2	147	3	0	3	152	1	0	15	0	0	16	23	174	9	0	0	206	2	0	2	0	0	4	3	378	381
18:30	0	99	3	0	0	102	1	1	20	0	0	22	21	169	9	0	0	199	6	1	0	0	0	7	0	330	330
18:45	6	119	3	1	0	129	1	0	20	0	0	21	26	154	9	0	0	189	4	0	2	0	0	6	0	345	345
Total	10	496	11	1	3	518	3	1	65	0	0	69	104	714	37	0	0	855	18	1	7	0	0	26	3	1468	1471



Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

File Name : TMC 2257-t
 Site Code :
 Start Date : 09/08/2022
 Page No : 4

Weather: Warm & Sunny
 CountCAM 2
 Study Conducted by: Kevin

Groups Printed- Cars + - Trucks

Start Time	CSAH 52 (Radisson Rd) Southbound						116th Ave NE Westbound						CSAH 52 (Radisson Rd) Northbound						Arnold Palmer Dr Eastbound						Exclu. Total	Inclu. Total	Int. Total
	Right	Thru	Left	UTrn	Peds	App. Total	Right	Thru	Left	UTrn	Peds	App. Total	Right	Thru	Left	UTrn	Peds	App. Total	Right	Thru	Left	UTrn	Peds	App. Total			
19:00	1	105	5	0	0	111	2	0	15	0	0	17	34	168	5	0	0	207	5	1	2	0	0	8	0	343	343
19:15	3	86	5	0	0	94	2	0	11	0	0	13	22	152	9	0	0	183	7	1	1	0	0	9	0	299	299
19:30	1	100	1	0	0	102	1	0	12	0	0	13	15	129	4	0	0	148	4	1	0	0	0	5	0	268	268
19:45	0	54	0	0	0	54	0	1	5	0	0	6	20	130	8	0	0	158	1	1	5	0	0	7	0	225	225
Total	5	345	11	0	0	361	5	1	43	0	0	49	91	579	26	0	0	696	17	4	8	0	0	29	0	1135	1135
20:00	2	64	2	0	1	68	0	0	12	0	0	12	24	120	7	0	0	151	4	0	0	0	0	4	1	235	236
20:15	4	51	4	0	0	59	4	0	8	0	0	12	17	120	6	0	0	143	5	1	4	0	0	10	0	224	224
20:30	4	51	2	0	0	57	0	0	6	0	0	6	19	86	7	0	0	112	1	0	1	0	0	2	0	177	177
20:45	0	35	0	0	0	35	0	0	7	0	0	7	18	79	1	0	0	98	3	1	0	0	0	4	0	144	144
Total	10	201	8	0	1	219	4	0	33	0	0	37	78	405	21	0	0	504	13	2	5	0	0	20	1	780	781
21:00	2	39	0	0	0	41	0	0	8	0	0	8	19	64	2	0	0	85	3	0	0	0	0	3	0	137	137
21:15	0	31	2	0	0	33	0	0	2	0	0	2	17	63	3	0	0	83	0	2	2	0	0	4	0	122	122
21:30	1	30	3	0	0	34	0	0	1	0	0	1	23	82	6	0	0	111	1	0	0	0	0	1	0	147	147
21:45	2	16	1	0	0	19	1	0	2	0	0	3	24	70	3	0	0	97	2	0	1	0	0	3	0	122	122
Total	5	116	6	0	0	127	1	0	13	0	0	14	83	279	14	0	0	376	6	2	3	0	0	11	0	528	528
22:00	1	23	0	0	0	24	2	1	1	0	0	4	13	45	1	0	0	59	1	1	0	0	0	2	0	89	89
22:15	0	17	2	0	0	19	0	1	2	0	0	3	17	49	2	0	0	68	0	0	0	0	0	0	0	90	90
22:30	0	17	0	0	0	17	1	0	0	0	0	1	11	33	2	0	0	46	0	0	1	0	0	1	0	65	65
22:45	0	7	1	0	0	8	0	0	1	0	0	1	4	20	0	0	0	24	3	1	1	0	0	5	0	38	38
Total	1	64	3	0	0	68	3	2	4	0	0	9	45	147	5	0	0	197	4	2	2	0	0	8	0	282	282
23:00	1	3	1	0	0	5	0	0	0	0	0	0	5	25	4	0	0	34	0	1	0	0	0	1	0	40	40
23:15	0	9	0	0	0	9	0	0	0	0	0	0	1	19	1	0	0	21	0	0	0	0	0	0	0	30	30
23:30	1	7	0	0	0	8	0	0	0	0	0	0	4	23	1	0	0	28	1	0	0	0	0	1	0	37	37
23:45	1	5	0	0	0	6	0	0	0	0	0	0	3	17	0	0	0	20	0	0	0	0	0	0	0	26	26
Total	3	24	1	0	0	28	0	0	0	0	0	0	13	84	6	0	0	103	1	1	0	0	0	2	0	133	133
Grand Total	114	9045	140	6	7	9305	133	24	872	0	0	1029	1092	8528	327	7	1	9954	393	25	83	2	2	503	10	20791	20801
Apprch %	1.2	97.2	1.5	0.1			12.9	2.3	84.7	0			11	85.7	3.3	0.1			78.1	5	16.5	0.4					
Total %	0.5	43.5	0.7	0		44.8	0.6	0.1	4.2	0		4.9	5.3	41	1.6	0		47.9	1.9	0.1	0.4	0		2.4	0	100	
Cars +	108	8759	135	6		9015	130	22	857	0		1009	1070	8326	320	7		9724	377	25	78	1		483	0	0	20231
% Cars +	94.7	96.8	96.4	100	100	96.8	97.7	91.7	98.3	0	0	98.1	98	97.6	97.9	100	100	97.7	95.9	100	94	50	100	95.6	0	0	97.3
Trucks	6	286	5	0		297	3	2	15	0		20	22	202	7	0		231	16	0	5	1		22	0	0	570
% Trucks	5.3	3.2	3.6	0	0	3.2	2.3	8.3	1.7	0	0	1.9	2	2.4	2.1	0	0	2.3	4.1	0	6	50	0	4.4	0	0	2.7



Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

File Name : TMC 2257-t
 Site Code :
 Start Date : 09/08/2022
 Page No : 5

Weather: Warm & Sunny
 CountCAM 2
 Study Conducted by: Kevin

Start Time	CSAH 52 (Radisson Rd) Southbound					116th Ave NE Westbound					CSAH 52 (Radisson Rd) Northbound					Arnold Palmer Dr Eastbound					Int. Total
	Right	Thru	Left	UTrn	App. Total	Right	Thru	Left	UTrn	App. Total	Right	Thru	Left	UTrn	App. Total	Right	Thru	Left	UTrn	App. Total	
Peak Hour Analysis From 00:00 to 09:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00																					
07:00	1	243	4	0	248	2	0	31	0	33	7	58	1	0	66	17	0	1	0	18	365
07:15	1	332	0	0	333	7	1	26	0	34	4	66	0	0	70	9	0	1	0	10	447
07:30	3	367	0	0	370	4	0	33	0	37	5	60	1	0	66	12	0	4	0	16	489
07:45	4	329	2	0	335	1	0	26	0	27	10	65	6	0	81	15	0	0	0	15	458
Total Volume	9	1271	6	0	1286	14	1	116	0	131	26	249	8	0	283	53	0	6	0	59	1759
% App. Total	0.7	98.8	0.5	0		10.7	0.8	88.5	0		9.2	88	2.8	0		89.8	0	10.2	0		
PHF	.563	.866	.375	.000	.869	.500	.250	.879	.000	.885	.650	.943	.333	.000	.873	.779	.000	.375	.000	.819	.899

Peak Hour Analysis From 10:00 to 13:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 12:15																					
12:15	0	109	3	0	112	4	0	9	0	13	12	94	4	0	110	1	0	1	0	2	237
12:30	3	111	1	1	116	1	2	8	0	11	15	99	2	0	116	8	0	0	1	9	252
12:45	1	98	2	0	101	0	2	11	0	13	10	93	8	0	111	10	0	3	0	13	238
13:00	1	106	0	0	107	1	1	14	0	16	12	91	4	0	107	6	2	1	0	9	239
Total Volume	5	424	6	1	436	6	5	42	0	53	49	377	18	0	444	25	2	5	1	33	966
% App. Total	1.1	97.2	1.4	0.2		11.3	9.4	79.2	0		11	84.9	4.1	0		75.8	6.1	15.2	3		
PHF	.417	.955	.500	.250	.940	.375	.625	.750	.000	.828	.817	.952	.563	.000	.957	.625	.250	.417	.250	.635	.958

Peak Hour Analysis From 14:00 to 23:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 16:30																					
16:30	0	148	4	1	153	7	0	12	0	19	25	327	9	0	361	6	0	2	0	8	541
16:45	6	150	2	0	158	3	0	13	0	16	33	361	10	0	404	2	0	1	0	3	581
17:00	1	195	0	0	196	3	1	16	0	20	30	304	8	0	342	13	1	3	0	17	575
17:15	4	192	2	0	198	4	0	20	0	24	26	291	13	0	330	6	0	6	0	12	564
Total Volume	11	685	8	1	705	17	1	61	0	79	114	1283	40	0	1437	27	1	12	0	40	2261
% App. Total	1.6	97.2	1.1	0.1		21.5	1.3	77.2	0		7.9	89.3	2.8	0		67.5	2.5	30	0		
PHF	.458	.878	.500	.250	.890	.607	.250	.763	.000	.823	.864	.889	.769	.000	.889	.519	.250	.500	.000	.588	.973



Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

File Name : TMC 2257-t
 Site Code :
 Start Date : 09/08/2022
 Page No : 1

Weather: Warm & Sunny
 CountCAM 2
 Study Conducted by: Kevin

Groups Printed- Trucks

Start Time	CSAH 52 (Radisson Rd) Southbound					116th Ave NE Westbound					CSAH 52 (Radisson Rd) Northbound					Arnold Palmer Dr Eastbound					Int. Total	
	Right	Thru	Left	UTrn	App. Total	Right	Thru	Left	UTrn	App. Total	Right	Thru	Left	UTrn	App. Total	Right	Thru	Left	UTrn	App. Total		
00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30	0	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	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
04:15	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
04:30	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1
04:45	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Total	0	6	0	0	6	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	7
05:00	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
05:15	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
05:30	0	1	0	0	1	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	0	3
05:45	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2
Total	0	4	0	0	4	0	0	1	0	1	0	2	0	0	2	0	0	0	0	0	0	7
06:00	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
06:15	0	8	0	0	8	0	0	0	0	0	1	2	0	0	3	0	0	0	0	0	0	11
06:30	0	6	0	0	6	0	0	0	0	0	1	2	0	0	3	0	0	0	0	0	0	9
06:45	0	4	0	0	4	0	0	0	0	0	0	4	1	0	5	0	0	0	0	0	0	9
Total	0	21	0	0	21	0	0	0	0	0	2	8	1	0	11	0	0	0	0	0	0	32
07:00	0	8	1	0	9	0	0	1	0	1	1	6	0	0	7	0	0	0	0	0	0	17
07:15	0	6	0	0	6	0	1	2	0	3	1	2	0	0	3	1	0	0	0	0	1	13
07:30	0	6	0	0	6	0	0	1	0	1	1	3	0	0	4	1	0	0	0	0	1	12
07:45	0	9	0	0	9	0	0	0	0	0	2	7	1	0	10	0	0	0	0	0	0	19
Total	0	29	1	0	30	0	1	4	0	5	5	18	1	0	24	2	0	0	0	0	2	61
08:00	1	6	0	0	7	0	0	2	0	2	1	3	0	0	4	0	0	0	0	0	0	13
08:15	0	5	0	0	5	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	8
08:30	0	8	0	0	8	0	0	1	0	1	1	7	1	0	9	0	0	0	0	0	0	18
08:45	0	9	0	0	9	0	0	0	0	0	1	8	1	0	10	1	0	0	0	0	1	20
Total	1	28	0	0	29	0	0	3	0	3	3	21	2	0	26	1	0	0	0	0	1	59
09:00	0	4	0	0	4	1	0	0	0	1	0	4	0	0	4	0	0	0	0	0	0	9



Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

File Name : TMC 2257-t
 Site Code :
 Start Date : 09/08/2022
 Page No : 2

Weather: Warm & Sunny
 CountCAM 2
 Study Conducted by: Kevin

Groups Printed- Trucks

Start Time	CSAH 52 (Radisson Rd) Southbound					116th Ave NE Westbound					CSAH 52 (Radisson Rd) Northbound					Arnold Palmer Dr Eastbound					Int. Total
	Right	Thru	Left	UTrn	App. Total	Right	Thru	Left	UTrn	App. Total	Right	Thru	Left	UTrn	App. Total	Right	Thru	Left	UTrn	App. Total	
09:15	0	11	0	0	11	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	16
09:30	0	3	0	0	3	0	0	0	0	0	1	5	0	0	6	1	0	0	0	1	10
09:45	0	3	0	0	3	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	5
Total	0	21	0	0	21	1	0	0	0	1	1	16	0	0	17	1	0	0	0	1	40
10:00	0	4	0	0	4	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	9
10:15	0	5	0	0	5	0	0	0	0	0	0	2	0	0	2	1	0	0	0	1	8
10:30	0	0	0	0	0	0	0	0	0	0	1	4	0	0	5	0	0	0	0	0	5
10:45	0	3	0	0	3	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	4
Total	0	12	0	0	12	0	0	0	0	0	1	12	0	0	13	1	0	0	0	1	26
11:00	0	6	0	0	6	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	7
11:15	1	5	0	0	6	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	10
11:30	0	4	0	0	4	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	6
11:45	0	5	0	0	5	0	0	0	0	0	1	4	0	0	5	0	0	1	0	1	11
Total	1	20	0	0	21	0	0	0	0	0	1	11	0	0	12	0	0	1	0	1	34
12:00	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	4
12:15	0	5	0	0	5	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	7
12:30	0	2	0	0	2	0	0	0	0	0	0	2	0	0	2	1	0	0	1	2	6
12:45	0	6	0	0	6	0	1	0	0	1	0	4	0	0	4	1	0	0	0	1	12
Total	0	16	0	0	16	0	1	0	0	1	0	8	0	0	8	3	0	0	1	4	29
13:00	0	9	0	0	9	0	0	0	0	0	0	3	0	0	3	2	0	0	0	2	14
13:15	0	2	0	0	2	1	0	0	0	1	0	7	0	0	7	0	0	0	0	0	10
13:30	0	5	0	0	5	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	8
13:45	0	2	0	0	2	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	5
Total	0	18	0	0	18	1	0	0	0	1	0	16	0	0	16	2	0	0	0	2	37
14:00	0	6	0	0	6	0	0	0	0	0	2	4	0	0	6	1	0	0	0	1	13
14:15	0	8	0	0	8	0	0	2	0	2	1	0	0	0	1	0	0	0	0	0	11
14:30	0	8	0	0	8	0	0	0	0	0	0	9	0	0	9	0	0	0	0	0	17
14:45	0	12	0	0	12	0	0	0	0	0	1	8	0	0	9	1	0	0	0	1	22
Total	0	34	0	0	34	0	0	2	0	2	4	21	0	0	25	2	0	0	0	2	63
15:00	0	12	0	0	12	0	0	0	0	0	0	5	0	0	5	1	0	1	0	2	19
15:15	1	4	0	0	5	1	0	1	0	2	1	4	0	0	5	0	0	0	0	0	12
15:30	0	7	2	0	9	0	0	0	0	0	1	10	1	0	12	1	0	1	0	2	23
15:45	1	8	0	0	9	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	12
Total	2	31	2	0	35	1	0	1	0	2	2	22	1	0	25	2	0	2	0	4	66
16:00	1	13	2	0	16	0	0	2	0	2	1	4	0	0	5	0	0	1	0	1	24
16:15	1	8	0	0	9	0	0	1	0	1	1	5	1	0	7	1	0	0	0	1	18
16:30	0	8	0	0	8	0	0	0	0	0	0	8	0	0	8	0	0	0	0	0	16
16:45	0	1	0	0	1	0	0	1	0	1	0	7	0	0	7	0	0	1	0	1	10
Total	2	30	2	0	34	0	0	4	0	4	2	24	1	0	27	1	0	2	0	3	68
17:00	0	6	0	0	6	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	11
17:15	0	2	0	0	2	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	5
17:30	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	3
17:45	0	1	0	0	1	0	0	0	0	0	0	2	1	0	3	0	0	0	0	0	4
Total	0	10	0	0	10	0	0	0	0	0	0	12	1	0	13	0	0	0	0	0	23
18:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
18:15	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
18:30	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
18:45	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
Total	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	4



Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

File Name : TMC 2257-t
 Site Code :
 Start Date : 09/08/2022
 Page No : 3

Weather: Warm & Sunny
 CountCAM 2
 Study Conducted by: Kevin

Groups Printed- Trucks

Start Time	CSAH 52 (Radisson Rd) Southbound					116th Ave NE Westbound					CSAH 52 (Radisson Rd) Northbound					Arnold Palmer Dr Eastbound					Int. Total
	Right	Thru	Left	UTrn	App. Total	Right	Thru	Left	UTrn	App. Total	Right	Thru	Left	UTrn	App. Total	Right	Thru	Left	UTrn	App. Total	
19:00	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0
19:15	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	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	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
Total	0	2	0	0	2	0	0	0	0	0	1	1	0	0	2	1	0	0	0	1	5
20:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:15	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	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	1	0	0	1	0	0	0	0	0	1
Total	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	2
21:00	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	3
21:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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	1	0	0	1	0	0	0	0	0	1
Total	0	2	0	0	2	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	4
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	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
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	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:30	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
23:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Grand Total	6	286	5	0	297	3	2	15	0	20	22	202	7	0	231	16	0	5	1	22	570
Apprch %	2	96.3	1.7	0		15	10	75	0		9.5	87.4	3	0		72.7	0	22.7	4.5		
Total %	1.1	50.2	0.9	0	52.1	0.5	0.4	2.6	0	3.5	3.9	35.4	1.2	0	40.5	2.8	0	0.9	0.2	3.9	

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name:

Study Date : 09/08/2022

Signal Warrants - Summary

Major Street Approaches

Northbound: CSAH 52 (Radisson Rd)

Number of Lanes : 2+

Total Approach Volume: 9,954

Southbound: CSAH 52 (Radisson Rd)

Number of Lanes :2+

Total Approach Volume: 9,305

Minor Street Approaches

Eastbound: Arnold Palmer Dr

Number of Lanes :1

Total Approach Volume: 503

Westbound: 116th Ave NE

Number of Lanes :1

Total Approach Volume: 1,029

Warrant Summary (Rural Values Apply)

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

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

Required volumes reached for 1 hours, 8 are needed

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

Required volumes reached for 12 hours, 8 are needed

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

Required 1A volumes reached for 3 hours, 8 are needed

Required 1B volumes reached for 14 hours, 8 are needed

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

Number of hours (8) volumes exceed minimum >= minimum required (4).

Warrant 3 - Peak Hour.....Satisfied

Warrant 3A - Peak Hour Delay.....Satisfied

Number of one hour periods (5) volumes exceed minimum >= required (1). 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:

Study Date : 09/08/2022

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 1 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				Total	Minor Road		Met?
	Major NB	+	Major SB	=		Minor EB	Minor WB	
	CSAH 52 (Radisson Rd)					Arnold Palmer Dr		
06:30 - 07:30	206	+	1053	=	1259	43	106	Yes
16:30 - 17:30	1437	+	705	=	2142	40	79	No
16:15 - 17:15	1467	+	660	=	2127	32	79	No
16:45 - 17:45	1364	+	754	=	2118	37	78	No
16:00 - 17:00	1437	+	613	=	2050	26	82	No
17:00 - 18:00	1227	+	752	=	1979	39	85	No
15:45 - 16:45	1359	+	592	=	1951	26	81	No
15:30 - 16:30	1278	+	581	=	1859	26	80	No
17:15 - 18:15	1146	+	691	=	1837	31	75	No
15:15 - 16:15	1199	+	566	=	1765	28	73	No
15:00 - 16:00	1146	+	533	=	1679	23	62	No
17:30 - 18:30	1022	+	645	=	1667	23	67	No
14:45 - 15:45	1016	+	518	=	1534	27	60	No
17:45 - 18:45	933	+	545	=	1478	25	71	No
14:30 - 15:30	914	+	498	=	1412	20	57	No
07:30 - 08:30	293	+	1117	=	1410	54	103	No
18:00 - 19:00	855	+	518	=	1373	26	69	No
18:15 - 19:15	801	+	494	=	1295	25	76	No
14:15 - 15:15	786	+	472	=	1258	21	55	No
07:45 - 08:45	305	+	935	=	1240	53	92	No
18:30 - 19:30	778	+	436	=	1214	30	73	No
18:45 - 19:45	727	+	436	=	1163	28	64	No
14:00 - 15:00	672	+	445	=	1117	18	57	No
08:00 - 09:00	314	+	779	=	1093	51	82	No
06:15 - 07:15	156		904		1060	39	86	No

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name:

Study Date : 09/08/2022

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

12 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				Total	Minor Road		Met?
	Major NB	+	Major SB	=		Minor EB	Minor WB	
	CSAH 52 (Radisson Rd)					Arnold Palmer Dr		
16:00 - 17:00	1437	+	613	=	2050	26	82	Yes
17:00 - 18:00	1227	+	752	=	1979	39	85	Yes
15:00 - 16:00	1146	+	533	=	1679	23	62	Yes
07:00 - 08:00	283	+	1286	=	1569	59	131	Yes
18:00 - 19:00	855	+	518	=	1373	26	69	Yes
14:00 - 15:00	672	+	445	=	1117	18	57	Yes
08:00 - 09:00	314	+	779	=	1093	51	82	Yes
06:00 - 07:00	103	+	801	=	904	26	60	Yes
12:15 - 13:15	444	+	436	=	880	33	53	Yes
09:00 - 10:00	307	+	541	=	848	33	61	Yes
11:00 - 12:00	364	+	412	=	776	16	56	Yes
10:00 - 11:00	332	+	431	=	763	38	57	Yes
19:00 - 20:00	696	+	361	=	1057	29	49	No
13:45 - 14:45	599	+	416	=	1015	17	48	No
19:15 - 20:15	640	+	318	=	958	25	44	No
13:30 - 14:30	533	+	391	=	924	24	46	No
19:30 - 20:30	600	+	283	=	883	26	43	No
12:00 - 13:00	447	+	436	=	883	35	46	No
13:15 - 14:15	495	+	382	=	877	22	36	No
19:45 - 20:45	564	+	238	=	802	23	36	No
05:45 - 06:45	77	+	649	=	726	22	45	No
20:00 - 21:00	504	+	219	=	723	20	37	No
20:15 - 21:15	438	+	192	=	630	19	33	No
05:30 - 06:30	64	+	549	=	613	16	41	No
20:30 - 21:30	378		166		544	13	23	No

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name:

Study Date : 09/08/2022

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 3 hours meet 1A minimums.
14 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 52 (Radisson Rd)

Minor Road Arnold Palmer Dr

Time	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	Met1A?
17:00 - 18:00	1227	+	752	=	1979	39	85	Yes
07:15 - 08:15	294	+	1260	=	1554	54	115	Yes
06:15 - 07:15	156	+	904	=	1060	39	86	Yes
16:30 - 17:30	1437	+	705	=	2142	40	79	No
16:15 - 17:15	1467	+	660	=	2127	32	79	No
16:45 - 17:45	1364	+	754	=	2118	37	78	No
16:00 - 17:00	1437	+	613	=	2050	26	82	No
15:45 - 16:45	1359	+	592	=	1951	26	81	No
15:30 - 16:30	1278	+	581	=	1859	26	80	No
15:15 - 16:15	1199	+	566	=	1765	28	73	No
15:00 - 16:00	1146	+	533	=	1679	23	62	No
14:45 - 15:45	1016	+	518	=	1534	27	60	No

Time	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	Met1B?
16:45 - 17:45	1364	+	754	=	2118	37	78	Yes
15:45 - 16:45	1359	+	592	=	1951	26	81	Yes
14:45 - 15:45	1016	+	518	=	1534	27	60	Yes
17:45 - 18:45	933	+	545	=	1478	25	71	Yes
06:45 - 07:45	242	+	1212	=	1454	51	128	Yes
07:45 - 08:45	305	+	935	=	1240	53	92	Yes
18:45 - 19:45	727	+	436	=	1163	28	64	Yes
13:45 - 14:45	599	+	416	=	1015	17	48	Yes
08:45 - 09:45	309	+	589	=	898	41	65	Yes
11:45 - 12:45	427	+	435	=	862	25	50	Yes
12:45 - 13:45	445	+	408	=	853	35	47	Yes
09:45 - 10:45	340	+	445	=	785	39	59	Yes

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name:

Study Date : 09/08/2022

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.

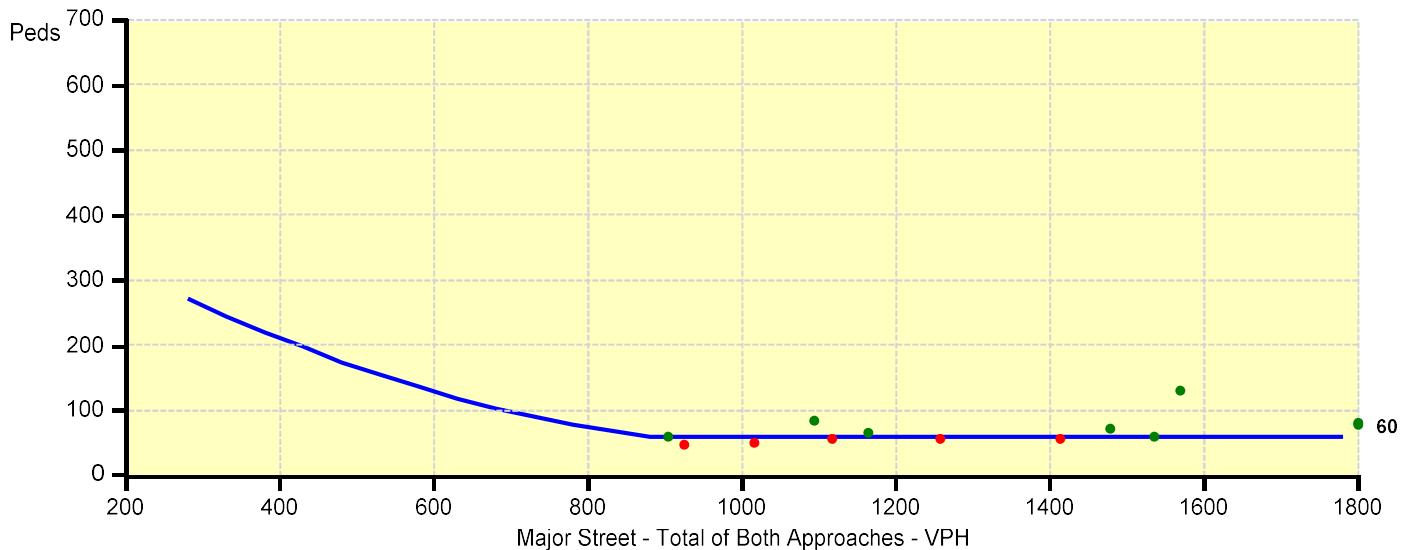
Summary

8 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 52 (Radisson Rd)				Total	Minor Road Arnold Palmer Dr		Met?
	Major NB	+	Major SB	=		Minor EB	Minor WB	
16:45 - 17:45	1364	+	754	=	2118	37	78	Yes
15:45 - 16:45	1359	+	592	=	1951	26	81	Yes
07:00 - 08:00	283	+	1286	=	1569	59	131	Yes
14:45 - 15:45	1016	+	518	=	1534	27	60	Yes
17:45 - 18:45	933	+	545	=	1478	25	71	Yes
18:45 - 19:45	727	+	436	=	1163	28	64	Yes
08:00 - 09:00	314	+	779	=	1093	51	82	Yes
06:00 - 07:00	103	+	801	=	904	26	60	Yes
14:30 - 15:30	914	+	498	=	1412	20	57	No
14:15 - 15:15	786	+	472	=	1258	21	55	No
14:00 - 15:00	672	+	445	=	1117	18	57	No
13:45 - 14:45	599	+	416	=	1015	17	48	No



ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name:

Study Date : 09/08/2022

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

15 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				Total	Minor Road			Met?
	Major NB	+	Major SB	=		Minor EB	Minor WB		
	CSAH 52 (Radisson Rd)					Arnold Palmer Dr			
16:30 - 17:30	1437	+	705	=	2142	40	79	Yes	
16:15 - 17:15	1467	+	660	=	2127	32	79	Yes	
16:45 - 17:45	1364	+	754	=	2118	37	78	Yes	
16:00 - 17:00	1437	+	613	=	2050	26	82	Yes	
17:00 - 18:00	1227	+	752	=	1979	39	85	Yes	
15:45 - 16:45	1359	+	592	=	1951	26	81	Yes	
15:30 - 16:30	1278	+	581	=	1859	26	80	Yes	
17:15 - 18:15	1146	+	691	=	1837	31	75	Yes	
07:00 - 08:00	283	+	1286	=	1569	59	131	Yes	
07:15 - 08:15	294	+	1260	=	1554	54	115	Yes	
06:45 - 07:45	242	+	1212	=	1454	51	128	Yes	
07:30 - 08:30	293		1117		1410	54	103	Yes	

