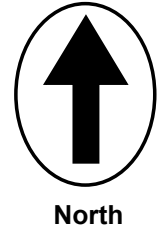


Date : 07/15/21

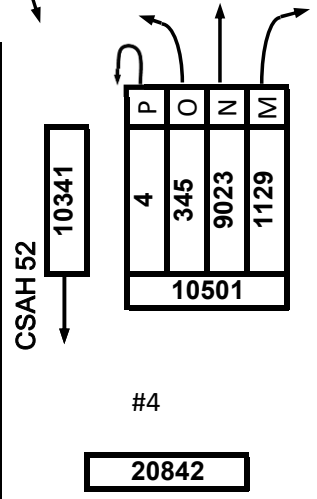
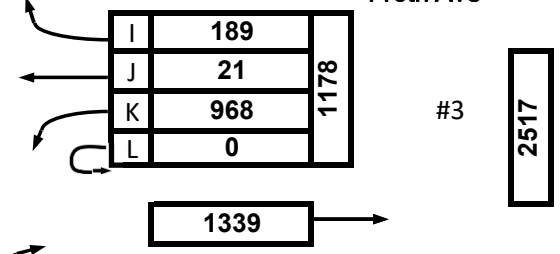
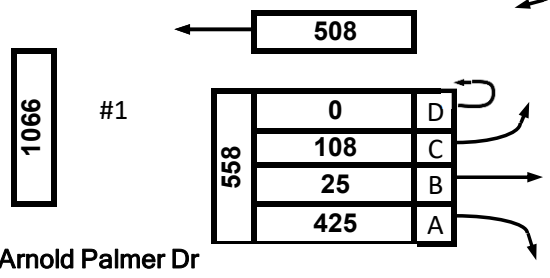
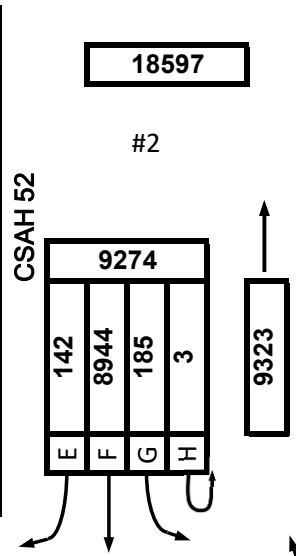
Count Number : TMC 2127

Location : CSAH 52 (Radisson Rd)  
Arnold Palmer Dr/116th Ave

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

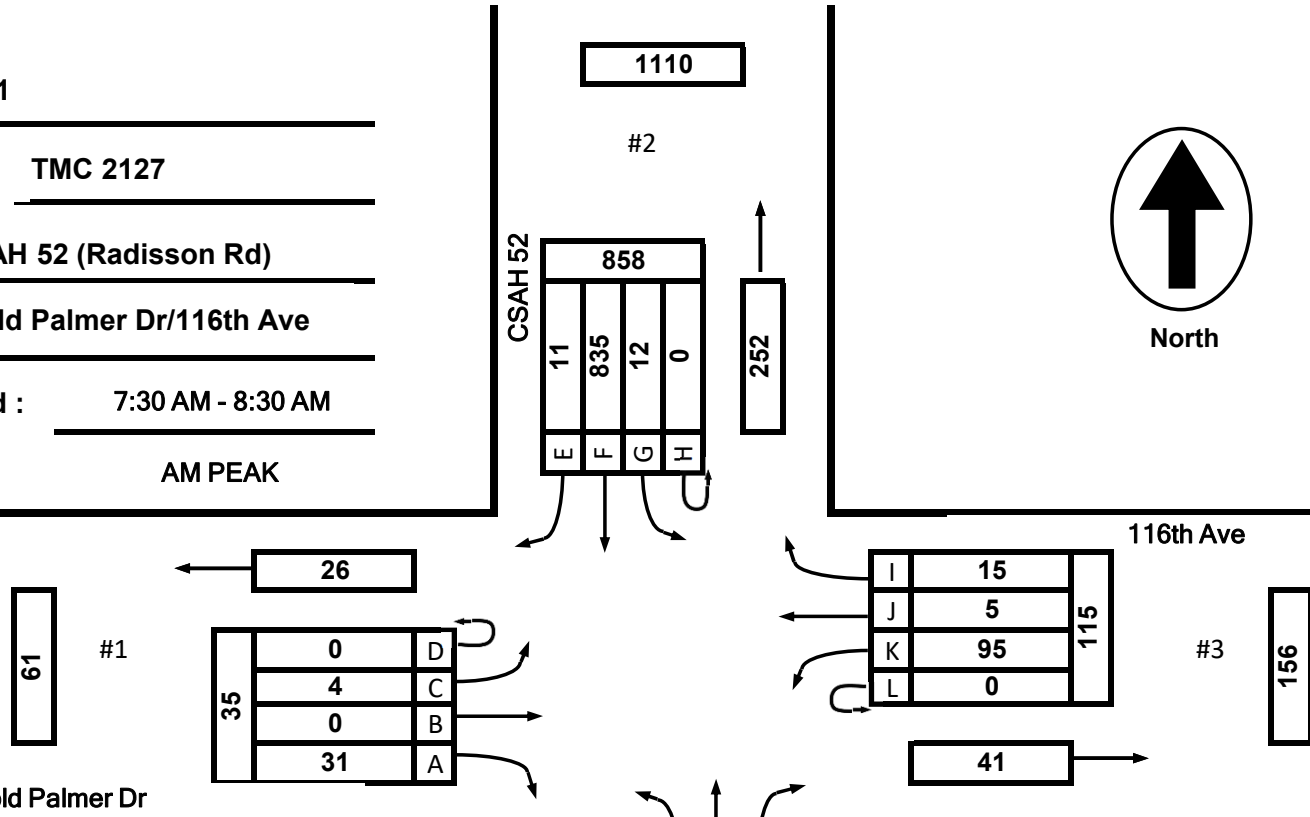
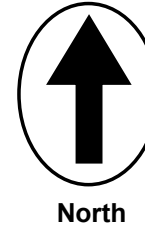
Date : 07/15/21

Count Number : TMC 2127

Location : CSAH 52 (Radisson Rd)  
Arnold Palmer Dr/116th Ave

Collection Period : 7:30 AM - 8:30 AM

AM PEAK



Arnold Palmer Dr

116th Ave

CSAH 52

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

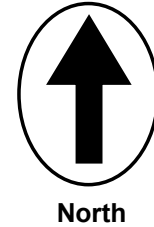
Traffic Volume and Turning Movement Study

Date : 07/15/21

Count Number : TMC 2127

Location : CSAH 52 (Radisson Rd)  
Arnold Palmer Dr/116th Ave

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



1103

#2

CSAH 52

514			
2	502	10	0
E	F	G	H

589

116th Ave

I	14	66
J	2	
K	50	
L	0	

#3

161

95

54

#1

28	0	D
	7	C
	1	B
	20	A

Arnold Palmer Dr

574

CSAH 52

P	O	N	M
2	22	568	84
676			

#4

1250

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

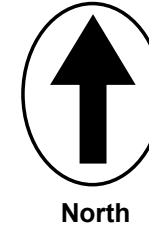
Date : 07/15/21

Count Number : TMC 2127

Location : CSAH 52 (Radisson Rd)  
Arnold Palmer Dr/116th Ave

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

PM PEAK



North

93

#1

38	0	D
	6	C
	1	B
	31	A

Arnold Palmer Dr

1773

#2

674			
14	647	13	0
E	F	G	H

CSAH 52

1099

116th Ave

I	11	74
J	2	
K	61	
L	0	

#3

202

128

739

CSAH 52

P	O	N	M
0	39	1082	114
1235			

#4

1974

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 2127  
 Site Code :  
 Start Date : 07/15/2021  
 Page No : 1

Weather: Hot & P Cloudy  
 CountCAM200  
 Study Conducted By: Kevin

Groups Printed- Cars + - Trucks

Start Time	CSAH 52 Southbound						Arnold Palmer Drive NE Westbound						CSAH 52 Northbound						116th Avenue NE 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	2	4	0	0	6	0	1	0	0	0	1	0	1	16	4	0	21	0	0	0	1	0	1	0	0	29	29
00:15	0	1	5	0	0	6	0	0	0	0	0	0	0	0	9	4	0	13	0	0	0	0	0	0	0	0	19	19
00:30	0	0	3	0	0	3	0	0	0	1	0	1	0	1	10	1	0	12	0	0	0	0	0	0	0	0	16	16
00:45	0	0	2	1	0	3	0	0	0	0	0	0	0	0	8	0	0	8	0	0	0	0	0	0	0	0	11	11
<b>Total</b>	<b>0</b>	<b>3</b>	<b>14</b>	<b>1</b>	<b>0</b>	<b>18</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>43</b>	<b>9</b>	<b>0</b>	<b>54</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>75</b>	<b>75</b>	
01:00	0	0	1	0	0	1	0	1	0	0	0	1	0	0	7	1	0	8	0	0	0	0	0	0	0	0	10	10
01:15	0	0	2	0	0	2	0	0	0	0	0	0	0	0	8	1	0	9	0	0	0	0	0	0	0	0	11	11
01:30	0	0	6	0	0	6	0	0	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	0	0	10	10
01:45	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	1	1
<b>Total</b>	<b>0</b>	<b>0</b>	<b>9</b>	<b>0</b>	<b>0</b>	<b>9</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>19</b>	<b>2</b>	<b>0</b>	<b>22</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>32</b>	<b>32</b>	
02:00	0	0	3	0	0	3	0	0	0	0	0	0	0	1	1	1	3	0	0	0	0	0	0	0	0	0	6	6
02:15	0	0	2	0	0	2	0	0	0	0	0	0	0	0	1	0	1	0	0	0	1	0	1	0	1	0	4	4
02:30	0	0	4	0	0	4	0	0	0	0	0	0	0	0	2	0	2	0	0	0	1	0	1	0	1	0	7	7
02:45	0	0	5	0	0	5	0	0	0	0	0	0	0	1	3	0	4	0	0	0	0	0	0	0	0	0	9	9
<b>Total</b>	<b>0</b>	<b>0</b>	<b>14</b>	<b>0</b>	<b>0</b>	<b>14</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>7</b>	<b>1</b>	<b>10</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>26</b>	<b>26</b>	
03:00	0	0	2	0	0	2	0	1	0	0	0	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	4	4
03:15	0	0	7	1	0	8	0	1	0	1	0	2	1	0	1	1	3	0	0	0	0	0	0	0	0	0	13	13
03:30	0	0	6	0	0	6	0	1	0	0	0	1	0	1	6	0	7	0	0	0	0	0	0	0	0	0	14	14
03:45	0	0	12	0	0	12	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	14	14
<b>Total</b>	<b>0</b>	<b>0</b>	<b>27</b>	<b>1</b>	<b>0</b>	<b>28</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>4</b>	<b>1</b>	<b>1</b>	<b>10</b>	<b>1</b>	<b>13</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>45</b>	<b>45</b>	
04:00	0	0	12	0	0	12	0	1	0	0	0	1	0	0	8	0	8	0	0	0	0	0	0	0	0	0	21	21
04:15	0	0	26	0	0	26	0	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	0	0	0	28	28
04:30	0	0	42	0	0	42	0	10	0	1	0	11	0	1	5	0	6	0	0	0	1	0	1	0	1	0	60	60
04:45	0	0	57	0	0	57	0	4	0	0	0	4	0	0	4	0	4	0	0	0	2	0	2	0	2	0	67	67
<b>Total</b>	<b>0</b>	<b>0</b>	<b>137</b>	<b>0</b>	<b>0</b>	<b>137</b>	<b>0</b>	<b>15</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>16</b>	<b>0</b>	<b>1</b>	<b>18</b>	<b>1</b>	<b>20</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>3</b>	<b>176</b>	<b>176</b>	
05:00	0	0	52	1	0	53	0	2	0	1	0	3	0	0	11	0	11	0	0	1	0	1	0	1	0	68	68	
05:15	0	0	66	0	0	66	0	4	0	0	0	4	0	0	4	2	6	0	0	0	2	0	2	0	2	0	78	78
05:30	0	0	99	0	0	99	0	6	0	1	0	7	0	1	12	0	13	0	0	0	2	0	2	0	2	0	121	121
05:45	0	0	138	0	0	138	0	7	0	0	0	7	0	0	18	1	19	0	1	0	5	0	6	0	6	0	170	170
<b>Total</b>	<b>0</b>	<b>0</b>	<b>355</b>	<b>1</b>	<b>0</b>	<b>356</b>	<b>0</b>	<b>19</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>21</b>	<b>0</b>	<b>1</b>	<b>45</b>	<b>3</b>	<b>49</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>10</b>	<b>0</b>	<b>11</b>	<b>0</b>	<b>11</b>	<b>437</b>	<b>437</b>	



# Anoka County Highway Department

## Traffic Engineering Section

### Traffic Volume and Turning Movement Study

File Name : TMC 2127  
 Site Code :  
 Start Date : 07/15/2021  
 Page No : 2

Weather: Hot & P Cloudy  
 CountCAM200  
 Study Conducted By: Kevin

Groups Printed- Cars + - Trucks

Start Time	CSAH 52 Southbound						Arnold Palmer Drive NE Westbound						CSAH 52 Northbound						116th Avenue NE 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	2	129	0	1	131	0	9	0	0	0	9	0	0	7	0	0	7	0	2	0	3	0	5	1	152	153
06:15	0	2	155	1	0	158	0	9	0	0	0	9	0	1	21	2	0	24	0	0	0	7	0	7	0	198	198
06:30	0	0	167	0	1	167	0	20	0	1	0	21	0	2	19	2	0	23	0	2	0	4	0	6	1	217	218
06:45	0	1	179	0	0	180	0	22	0	2	0	24	0	3	35	5	0	43	0	1	0	9	0	10	0	257	257
<b>Total</b>	0	5	630	1	2	636	0	60	0	3	0	63	0	6	82	9	0	97	0	5	0	23	0	28	2	824	826
07:00	0	1	172	1	0	174	0	24	0	2	0	26	0	1	38	4	0	43	0	1	0	10	0	11	0	254	254
07:15	0	0	208	3	1	211	0	16	0	2	0	18	0	2	48	5	0	55	0	0	1	10	0	11	1	295	296
07:30	0	4	236	2	0	242	0	23	1	4	0	28	0	1	53	6	0	60	0	0	0	9	0	9	0	339	339
07:45	0	2	219	2	1	223	0	23	0	3	0	26	0	5	57	11	0	73	0	1	0	6	0	7	1	329	330
<b>Total</b>	0	7	835	8	2	850	0	86	1	11	0	98	0	9	196	26	0	231	0	2	1	35	0	38	2	1217	1219
08:00	0	4	165	2	0	171	0	28	2	6	0	36	0	4	59	8	0	71	0	3	0	9	0	12	0	290	290
08:15	0	2	215	5	2	222	0	21	2	2	0	25	0	0	64	4	0	68	0	0	0	7	0	7	2	322	324
08:30	0	1	173	2	0	176	0	20	0	8	0	28	0	1	71	16	0	88	0	2	1	12	0	15	0	307	307
08:45	0	2	160	1	0	163	0	12	0	3	0	15	0	3	74	11	0	88	0	0	1	7	0	8	0	274	274
<b>Total</b>	0	9	713	10	2	732	0	81	4	19	0	104	0	8	268	39	0	315	0	5	2	35	0	42	2	1193	1195
09:00	0	4	124	2	0	130	0	14	0	0	0	14	0	6	59	16	0	81	0	0	1	7	0	8	0	233	233
09:15	0	3	133	3	0	139	0	19	0	5	0	24	0	2	83	10	0	95	0	2	0	11	0	13	0	271	271
09:30	0	3	109	0	2	112	0	20	0	4	0	24	0	1	67	9	0	77	0	3	0	5	0	8	2	221	223
09:45	0	1	129	4	0	134	0	23	0	3	0	26	0	4	77	17	0	98	0	0	0	9	0	9	0	267	267
<b>Total</b>	0	11	495	9	2	515	0	76	0	12	0	88	0	13	286	52	0	351	0	5	1	32	0	38	2	992	994
10:00	0	3	121	1	0	125	0	15	0	4	0	19	0	4	87	21	0	112	0	2	0	12	0	14	0	270	270
10:15	1	2	116	0	1	119	0	16	1	4	0	21	0	4	84	12	0	100	0	5	0	5	1	10	2	250	252
10:30	1	2	148	2	1	153	0	18	1	3	0	22	0	2	90	14	0	106	0	0	1	7	0	8	1	289	290
10:45	0	8	137	3	0	148	0	24	0	5	0	29	0	1	95	13	0	109	0	2	0	11	0	13	0	299	299
<b>Total</b>	2	15	522	6	2	545	0	73	2	16	0	91	0	11	356	60	0	427	0	9	1	35	1	45	3	1108	1111
11:00	0	3	101	3	0	107	0	17	0	1	0	18	0	6	104	9	0	119	0	1	0	9	0	10	0	254	254
11:15	0	3	123	0	0	126	0	12	0	1	0	13	0	9	90	15	0	114	0	1	0	5	0	6	0	259	259
11:30	0	5	129	5	0	139	0	25	0	5	0	30	0	5	98	15	0	118	0	1	0	4	0	5	0	292	292
11:45	0	3	142	0	0	145	0	10	0	1	0	11	0	4	124	27	0	155	0	2	0	5	0	7	0	318	318
<b>Total</b>	0	14	495	8	0	517	0	64	0	8	0	72	0	24	416	66	0	506	0	5	0	23	0	28	0	1123	1123
12:00	0	4	103	2	0	109	0	8	0	2	0	10	0	3	137	13	0	153	0	2	0	7	0	9	0	281	281



# Anoka County Highway Department

## Traffic Engineering Section

### Traffic Volume and Turning Movement Study

File Name : TMC 2127  
 Site Code :  
 Start Date : 07/15/2021  
 Page No : 3

Weather: Hot & P Cloudy  
 CountCAM200  
 Study Conducted By: Kevin

Groups Printed- Cars + - Trucks

Start Time	CSAH 52 Southbound						Arnold Palmer Drive NE Westbound						CSAH 52 Northbound						116th Avenue NE 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	5	128	2	0	135	0	14	1	3	0	18	2	7	147	28	0	184	0	1	0	7	2	8	2	345	347
12:30	0	1	145	0	0	146	0	12	0	3	0	15	0	6	152	11	0	169	0	3	0	4	0	7	0	337	337
12:45	0	1	116	0	0	117	0	12	0	3	0	15	0	5	145	21	0	171	0	1	1	4	1	6	1	309	310
<b>Total</b>	0	11	492	4	0	507	0	46	1	11	0	58	2	21	581	73	0	677	0	7	1	22	3	30	3	1272	1275
13:00	0	3	113	0	0	116	0	12	1	5	0	18	0	4	124	24	0	152	0	2	0	5	2	7	2	293	295
13:15	0	3	132	2	0	137	0	17	1	2	0	20	1	3	135	17	0	156	0	1	0	6	2	7	2	320	322
13:30	0	3	123	1	0	127	0	12	0	2	0	14	0	8	158	13	0	179	0	0	0	3	0	3	0	323	323
13:45	0	0	106	4	0	110	0	12	1	4	0	17	0	7	158	14	0	179	0	7	0	5	0	12	0	318	318
<b>Total</b>	0	9	474	7	0	490	0	53	3	13	0	69	1	22	575	68	0	666	0	10	0	19	4	29	4	1254	1258
14:00	0	3	115	1	1	119	0	12	0	2	0	14	0	2	152	20	0	174	0	2	0	7	0	9	1	316	317
14:15	0	2	131	1	0	134	0	13	0	6	0	19	0	3	156	17	0	176	0	2	1	9	0	12	0	341	341
14:30	0	3	122	2	0	127	0	10	0	5	0	15	0	4	185	10	0	199	0	2	1	6	0	9	0	350	350
14:45	1	3	129	3	1	136	0	15	0	1	0	16	0	6	153	17	0	176	0	1	2	3	0	6	1	334	335
<b>Total</b>	1	11	497	7	2	516	0	50	0	14	0	64	0	15	646	64	0	725	0	7	4	25	0	36	2	1341	1343
15:00	0	3	110	4	0	117	0	19	0	4	0	23	0	11	197	25	0	233	0	3	0	8	0	11	0	384	384
15:15	0	4	130	0	0	134	0	13	0	4	0	17	0	7	196	16	0	219	0	2	0	9	0	11	0	381	381
15:30	0	2	149	0	0	151	0	14	0	3	0	17	0	3	243	17	0	263	0	2	0	7	0	9	0	440	440
15:45	0	3	156	1	0	160	0	11	0	4	0	15	0	5	242	19	0	266	0	2	1	6	0	9	0	450	450
<b>Total</b>	0	12	545	5	0	562	0	57	0	15	0	72	0	26	878	77	0	981	0	9	1	30	0	40	0	1655	1655
16:00	0	0	135	4	0	139	0	21	1	8	0	30	0	8	301	33	0	342	0	0	2	7	1	9	1	520	521
16:15	0	2	137	1	0	140	0	15	2	2	0	19	0	12	298	26	0	336	0	0	0	10	0	10	0	505	505
16:30	0	5	157	6	0	168	0	16	0	4	0	20	0	9	266	40	0	315	0	3	1	6	0	10	0	513	513
16:45	0	1	179	4	0	184	0	21	0	3	0	24	0	9	229	23	0	261	0	0	0	6	0	6	0	475	475
<b>Total</b>	0	8	608	15	0	631	0	73	3	17	0	93	0	38	1094	122	0	1254	0	3	3	29	1	35	1	2013	2014
17:00	0	5	174	3	0	182	0	9	0	2	0	11	0	9	289	25	0	323	0	3	0	9	0	12	0	528	528
17:15	0	4	156	7	0	167	0	11	0	2	0	13	0	11	222	30	0	263	0	4	0	6	0	10	0	453	453
17:30	0	6	167	2	0	175	0	18	0	5	0	23	0	5	239	28	0	272	0	0	0	8	0	8	0	478	478
17:45	0	5	154	1	0	160	0	18	1	5	0	24	0	12	253	24	0	289	0	2	0	5	0	7	0	480	480
<b>Total</b>	0	20	651	13	0	684	0	56	1	14	0	71	0	37	1003	107	0	1147	0	9	0	28	0	37	0	1939	1939
18:00	0	1	144	6	0	151	0	8	0	2	0	10	0	8	209	25	0	242	0	2	1	7	0	10	0	413	413
18:15	0	5	129	4	0	138	0	11	2	3	0	16	0	11	171	21	0	203	0	4	0	6	0	10	0	367	367



# Anoka County Highway Department

## Traffic Engineering Section

### Traffic Volume and Turning Movement Study

File Name : TMC 2127  
 Site Code :  
 Start Date : 07/15/2021  
 Page No : 4

Weather: Hot & P Cloudy  
 CountCAM200  
 Study Conducted By: Kevin

Groups Printed- Cars + - Trucks

Start Time	CSAH 52 Southbound						Arnold Palmer Drive NE Westbound						CSAH 52 Northbound						116th Avenue NE 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	2	134	1	0	137	0	21	0	1	0	22	0	4	205	17	0	226	0	2	2	4	0	8	0	393	393
18:45	0	1	104	2	0	107	0	10	0	5	0	15	0	6	165	18	0	189	0	2	1	4	0	7	0	318	318
<b>Total</b>	<b>0</b>	<b>9</b>	<b>511</b>	<b>13</b>	<b>0</b>	<b>533</b>	<b>0</b>	<b>50</b>	<b>2</b>	<b>11</b>	<b>0</b>	<b>63</b>	<b>0</b>	<b>29</b>	<b>750</b>	<b>81</b>	<b>0</b>	<b>860</b>	<b>0</b>	<b>10</b>	<b>4</b>	<b>21</b>	<b>0</b>	<b>35</b>	<b>0</b>	<b>1491</b>	<b>1491</b>
19:00	0	1	91	2	1	94	0	10	0	0	0	10	0	6	150	16	0	172	0	3	0	4	0	7	1	283	284
19:15	0	5	88	7	0	100	0	14	0	3	0	17	0	5	146	19	0	170	0	0	0	4	0	4	0	291	291
19:30	0	3	83	2	1	88	0	7	0	1	0	8	0	3	162	22	0	187	0	1	0	3	0	4	1	287	288
19:45	0	5	75	0	3	80	0	10	0	2	0	12	0	3	140	23	0	166	0	1	0	4	0	5	3	263	266
<b>Total</b>	<b>0</b>	<b>14</b>	<b>337</b>	<b>11</b>	<b>5</b>	<b>362</b>	<b>0</b>	<b>41</b>	<b>0</b>	<b>6</b>	<b>0</b>	<b>47</b>	<b>0</b>	<b>17</b>	<b>598</b>	<b>80</b>	<b>0</b>	<b>695</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>15</b>	<b>0</b>	<b>20</b>	<b>5</b>	<b>1124</b>	<b>1129</b>
20:00	0	5	77	1	1	83	0	6	0	3	0	9	0	6	123	14	0	143	0	2	0	5	0	7	1	242	243
20:15	0	3	71	2	1	76	0	9	1	0	0	10	0	3	118	14	0	135	0	0	0	2	1	2	2	223	225
20:30	0	1	77	3	0	81	0	3	1	2	0	6	0	5	110	21	0	136	0	1	1	1	0	3	0	226	226
20:45	0	4	58	3	0	65	0	8	1	1	0	10	0	11	110	17	0	138	0	2	1	4	0	7	0	220	220
<b>Total</b>	<b>0</b>	<b>13</b>	<b>283</b>	<b>9</b>	<b>2</b>	<b>305</b>	<b>0</b>	<b>26</b>	<b>3</b>	<b>6</b>	<b>0</b>	<b>35</b>	<b>0</b>	<b>25</b>	<b>461</b>	<b>66</b>	<b>0</b>	<b>552</b>	<b>0</b>	<b>5</b>	<b>2</b>	<b>12</b>	<b>1</b>	<b>19</b>	<b>3</b>	<b>911</b>	<b>914</b>
21:00	0	0	46	3	0	49	0	5	0	2	0	7	0	0	117	17	0	134	0	2	0	3	0	5	0	195	195
21:15	0	7	44	2	0	53	0	4	1	0	0	5	0	5	112	22	0	139	0	1	0	2	0	3	0	200	200
21:30	0	3	45	1	0	49	0	4	0	0	0	4	0	3	111	20	0	134	0	0	1	3	0	4	0	191	191
21:45	0	2	32	3	0	37	0	6	0	2	0	8	0	6	71	10	0	87	0	2	1	2	0	5	0	137	137
<b>Total</b>	<b>0</b>	<b>12</b>	<b>167</b>	<b>9</b>	<b>0</b>	<b>188</b>	<b>0</b>	<b>19</b>	<b>1</b>	<b>4</b>	<b>0</b>	<b>24</b>	<b>0</b>	<b>14</b>	<b>411</b>	<b>69</b>	<b>0</b>	<b>494</b>	<b>0</b>	<b>5</b>	<b>2</b>	<b>10</b>	<b>0</b>	<b>17</b>	<b>0</b>	<b>723</b>	<b>723</b>
22:00	0	0	24	1	0	25	0	1	0	0	0	1	0	4	55	10	0	69	0	0	2	2	0	4	0	99	99
22:15	0	1	23	1	0	25	0	3	0	1	0	4	0	4	48	6	0	58	0	0	0	1	0	1	0	88	88
22:30	0	1	19	0	0	20	0	4	0	2	0	6	0	4	43	8	0	55	0	1	0	5	0	6	0	87	87
22:45	0	0	20	0	0	20	0	4	0	0	0	4	0	2	42	8	0	52	0	2	0	0	0	2	0	78	78
<b>Total</b>	<b>0</b>	<b>2</b>	<b>86</b>	<b>2</b>	<b>0</b>	<b>90</b>	<b>0</b>	<b>12</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>15</b>	<b>0</b>	<b>14</b>	<b>188</b>	<b>32</b>	<b>0</b>	<b>234</b>	<b>0</b>	<b>3</b>	<b>2</b>	<b>8</b>	<b>0</b>	<b>13</b>	<b>0</b>	<b>352</b>	<b>352</b>
23:00	0	0	11	0	0	11	0	2	0	1	0	3	0	3	29	9	0	41	0	3	0	0	0	3	0	58	58
23:15	0	0	20	0	0	20	0	2	0	0	0	2	0	0	26	4	0	30	0	0	0	3	0	3	0	55	55
23:30	0	0	13	1	0	14	0	0	0	0	0	0	0	2	19	3	0	24	0	0	0	3	0	3	0	41	41
23:45	0	0	3	1	0	4	0	2	0	0	0	2	0	3	18	5	0	26	0	0	1	1	0	2	0	34	34
<b>Total</b>	<b>0</b>	<b>0</b>	<b>47</b>	<b>2</b>	<b>0</b>	<b>49</b>	<b>0</b>	<b>6</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>7</b>	<b>0</b>	<b>8</b>	<b>92</b>	<b>21</b>	<b>0</b>	<b>121</b>	<b>0</b>	<b>3</b>	<b>1</b>	<b>7</b>	<b>0</b>	<b>11</b>	<b>0</b>	<b>188</b>	<b>188</b>
<b>Grand Total</b>	<b>3</b>	<b>185</b>	<b>8944</b>	<b>142</b>	<b>19</b>	<b>9274</b>	<b>0</b>	<b>968</b>	<b>21</b>	<b>189</b>	<b>0</b>	<b>1178</b>	<b>4</b>	<b>345</b>	<b>9023</b>	<b>1129</b>	<b>0</b>	<b>10501</b>	<b>0</b>	<b>108</b>	<b>25</b>	<b>425</b>	<b>10</b>	<b>558</b>	<b>29</b>	<b>21511</b>	<b>21540</b>
<b>Apprch %</b>	<b>0</b>	<b>2</b>	<b>96.4</b>	<b>1.5</b>			<b>0</b>	<b>82.2</b>	<b>1.8</b>	<b>16</b>			<b>0</b>	<b>3.3</b>	<b>85.9</b>	<b>10.8</b>			<b>0</b>	<b>19.4</b>	<b>4.5</b>	<b>76.2</b>					
<b>Total %</b>	<b>0</b>	<b>0.9</b>	<b>41.6</b>	<b>0.7</b>		<b>43.1</b>	<b>0</b>	<b>4.5</b>	<b>0.1</b>	<b>0.9</b>		<b>5.5</b>	<b>0</b>	<b>1.6</b>	<b>41.9</b>	<b>5.2</b>		<b>48.8</b>	<b>0</b>	<b>0.5</b>	<b>0.1</b>	<b>2</b>		<b>2.6</b>	<b>0.1</b>	<b>99.9</b>	
<b>Cars +</b>	<b>3</b>	<b>181</b>	<b>8789</b>	<b>133</b>		<b>9125</b>	<b>0</b>	<b>964</b>	<b>18</b>	<b>180</b>		<b>1162</b>	<b>4</b>	<b>338</b>	<b>8853</b>	<b>1112</b>		<b>10307</b>	<b>0</b>	<b>104</b>	<b>25</b>	<b>407</b>		<b>546</b>	<b>0</b>	<b>0</b>	<b>21140</b>
<b>% Cars +</b>	<b>100</b>	<b>97.8</b>	<b>98.3</b>	<b>93.7</b>	<b>100</b>	<b>98.2</b>	<b>0</b>	<b>99.6</b>	<b>85.7</b>	<b>95.2</b>	<b>0</b>	<b>98.6</b>	<b>100</b>	<b>98</b>	<b>98.1</b>	<b>98.5</b>	<b>0</b>	<b>98.2</b>	<b>0</b>	<b>96.3</b>	<b>100</b>	<b>95.8</b>	<b>100</b>	<b>96.1</b>	<b>0</b>	<b>0</b>	<b>98.1</b>
<b>Trucks</b>	<b>0</b>	<b>4</b>	<b>155</b>	<b>9</b>		<b>168</b>	<b>0</b>	<b>4</b>	<b>3</b>	<b>9</b>		<b>16</b>	<b>0</b>	<b>7</b>	<b>170</b>	<b>17</b>		<b>194</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>18</b>		<b>22</b>	<b>0</b>	<b>0</b>	<b>400</b>
<b>% Trucks</b>	<b>0</b>	<b>2.2</b>	<b>1.7</b>	<b>6.3</b>	<b>0</b>	<b>1.8</b>	<b>0</b>	<b>0.4</b>	<b>14.3</b>	<b>4.8</b>	<b>0</b>	<b>1.4</b>	<b>0</b>	<b>2</b>	<b>1.9</b>	<b>1.5</b>	<b>0</b>	<b>1.8</b>	<b>0</b>	<b>3.7</b>	<b>0</b>	<b>4.2</b>	<b>0</b>	<b>3.9</b>	<b>0</b>	<b>0</b>	<b>1.9</b>



# Anoka County Highway Department

## Traffic Engineering Section

### Traffic Volume and Turning Movement Study

Start Time	CSAH 52 Southbound					Arnold Palmer Drive NE Westbound					CSAH 52 Northbound					116th Avenue NE Eastbound					Int. Total
	UTrn	Left	Thru	Right	App. Total	UTrn	Left	Thru	Right	App. Total	UTrn	Left	Thru	Right	App. Total	UTrn	Left	Thru	Right	App. Total	
Peak Hour Analysis From 00:00 to 09:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30																					
07:30	0	4	236	2	242	0	23	1	4	28	0	1	53	6	60	0	0	0	9	9	339
07:45	0	2	219	2	223	0	23	0	3	26	0	5	57	11	73	0	1	0	6	7	329
08:00	0	4	165	2	171	0	28	2	6	36	0	4	59	8	71	0	3	0	9	12	290
08:15	0	2	215	5	222	0	21	2	2	25	0	0	64	4	68	0	0	0	7	7	322
Total Volume	0	12	835	11	858	0	95	5	15	115	0	10	233	29	272	0	4	0	31	35	1280
% App. Total	0	1.4	97.3	1.3		0	82.6	4.3	13		0	3.7	85.7	10.7		0	11.4	0	88.6		
PHF	.000	.750	.885	.550	.886	.000	.848	.625	.625	.799	.000	.500	.910	.659	.932	.000	.333	.000	.861	.729	.944

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	5	128	2	135	0	14	1	3	18	2	7	147	28	184	0	1	0	7	8	345
12:30	0	1	145	0	146	0	12	0	3	15	0	6	152	11	169	0	3	0	4	7	337
12:45	0	1	116	0	117	0	12	0	3	15	0	5	145	21	171	0	1	1	4	6	309
13:00	0	3	113	0	116	0	12	1	5	18	0	4	124	24	152	0	2	0	5	7	293
Total Volume	0	10	502	2	514	0	50	2	14	66	2	22	568	84	676	0	7	1	20	28	1284
% App. Total	0	1.9	97.7	0.4		0	75.8	3	21.2		0.3	3.3	84	12.4		0	25	3.6	71.4		
PHF	.000	.500	.866	.250	.880	.000	.893	.500	.700	.917	.250	.786	.934	.750	.918	.000	.583	.250	.714	.875	.930

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	2	137	1	140	0	15	2	2	19	0	12	298	26	336	0	0	0	10	10	505
16:30	0	5	157	6	168	0	16	0	4	20	0	9	266	40	315	0	3	1	6	10	513
16:45	0	1	179	4	184	0	21	0	3	24	0	9	229	23	261	0	0	0	6	6	475
17:00	0	5	174	3	182	0	9	0	2	11	0	9	289	25	323	0	3	0	9	12	528
Total Volume	0	13	647	14	674	0	61	2	11	74	0	39	1082	114	1235	0	6	1	31	38	2021
% App. Total	0	1.9	96	2.1		0	82.4	2.7	14.9		0	3.2	87.6	9.2		0	15.8	2.6	81.6		
PHF	.000	.650	.904	.583	.916	.000	.726	.250	.688	.771	.000	.813	.908	.713	.919	.000	.500	.250	.775	.792	.957



# Anoka County Highway Department

## Traffic Engineering Section

### Traffic Volume and Turning Movement Study

File Name : TMC 2127  
 Site Code :  
 Start Date : 07/15/2021  
 Page No : 1

Weather: Hot & P Cloudy  
 CountCAM200  
 Study Conducted By: Kevin

Groups Printed- Trucks

Start Time	CSAH 52 Southbound					Arnold Palmer Drive NE Westbound					CSAH 52 Northbound					116th Avenue NE 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	1	1	2	0	0	0	0	0	0	2
00:30	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1
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	1	1	0	0	1	1	2	0	0	0	0	0	0	3
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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	1	0	1	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	2
05:00	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
05:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
05:45	0	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Total	0	0	5	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
06:00	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
06:15	0	0	2	0	2	0	0	0	0	0	0	0	4	0	4	0	0	0	0	0	0	6
06:30	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
06:45	0	1	3	0	4	0	0	0	0	0	0	1	2	1	4	0	0	0	0	0	0	8
Total	0	1	8	0	9	0	0	0	0	0	0	1	6	1	8	0	0	0	0	0	0	17
07:00	0	0	1	0	1	0	0	0	1	1	0	0	5	1	6	0	0	0	0	0	0	8
07:15	0	0	5	0	5	0	1	0	0	1	0	0	2	0	2	0	0	0	0	0	0	8
07:30	0	0	1	0	1	0	0	0	0	0	0	0	4	0	4	0	0	0	0	0	0	5
07:45	0	0	4	1	5	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	6
Total	0	0	11	1	12	0	1	0	1	2	0	0	12	1	13	0	0	0	0	0	0	27
08:00	0	0	3	0	3	0	0	1	0	1	0	0	3	1	4	0	0	0	0	0	0	8
08:15	0	0	1	1	2	0	0	1	0	1	0	0	3	0	3	0	0	0	0	0	0	6
08:30	0	0	5	0	5	0	0	0	0	0	0	0	4	0	4	0	0	0	0	0	0	9
08:45	0	0	4	0	4	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	0	6
Total	0	0	13	1	14	0	0	2	0	2	0	1	11	1	13	0	0	0	0	0	0	29



# Anoka County Highway Department

## Traffic Engineering Section

### Traffic Volume and Turning Movement Study

File Name : TMC 2127  
 Site Code :  
 Start Date : 07/15/2021  
 Page No : 2

Weather: Hot & P Cloudy  
 CountCAM200  
 Study Conducted By: Kevin

Groups Printed- Trucks

Start Time	CSAH 52 Southbound					Arnold Palmer Drive NE Westbound					CSAH 52 Northbound					116th Avenue NE Eastbound					Int. Total	
	UTrn	Left	Thru	Right	App. Total	UTrn	Left	Thru	Right	App. Total	UTrn	Left	Thru	Right	App. Total	UTrn	Left	Thru	Right	App. Total		
09:00	0	0	4	1	5	0	0	0	0	0	0	0	4	1	5	0	0	0	0	0	0	10
09:15	0	0	5	1	6	0	0	0	0	0	0	0	2	2	4	0	0	0	0	0	0	10
09:30	0	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	5
09:45	0	0	1	1	2	0	0	0	0	0	0	1	3	0	4	0	0	0	1	0	1	7
<b>Total</b>	<b>0</b>	<b>0</b>	<b>13</b>	<b>3</b>	<b>16</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>9</b>	<b>3</b>	<b>13</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>2</b>	<b>3</b>	<b>32</b>	
10:00	0	0	2	0	2	0	0	0	0	0	0	0	3	1	4	0	0	0	0	0	0	6
10:15	0	0	5	0	5	0	0	0	1	1	0	0	3	0	3	0	0	0	0	0	0	9
10:30	0	0	7	1	8	0	0	0	0	0	0	0	4	0	4	0	0	0	0	0	0	12
10:45	0	0	5	0	5	0	1	0	0	1	0	0	6	0	6	0	0	0	3	0	3	15
<b>Total</b>	<b>0</b>	<b>0</b>	<b>19</b>	<b>1</b>	<b>20</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>16</b>	<b>1</b>	<b>17</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>3</b>	<b>42</b>	
11:00	0	0	3	1	4	0	0	0	0	0	0	0	8	1	9	0	0	0	0	0	0	13
11:15	0	0	3	0	3	0	0	0	0	0	0	0	2	0	2	0	0	0	1	0	1	6
11:30	0	0	4	0	4	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	6
11:45	0	0	3	0	3	0	0	0	0	0	0	1	4	0	5	0	1	0	0	0	1	9
<b>Total</b>	<b>0</b>	<b>0</b>	<b>13</b>	<b>1</b>	<b>14</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>16</b>	<b>1</b>	<b>18</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>34</b>	
12:00	0	0	1	1	2	0	0	0	0	0	0	0	4	0	4	0	0	0	0	0	0	6
12:15	0	0	3	0	3	0	0	0	0	0	0	0	3	1	4	0	0	0	1	0	1	8
12:30	0	0	4	0	4	0	0	0	0	0	0	0	2	0	2	0	0	0	1	1	1	7
12:45	0	0	6	0	6	0	0	0	0	0	0	1	7	1	9	0	0	0	0	0	0	15
<b>Total</b>	<b>0</b>	<b>0</b>	<b>14</b>	<b>1</b>	<b>15</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>16</b>	<b>2</b>	<b>19</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>2</b>	<b>36</b>	
13:00	0	0	3	0	3	0	0	0	1	1	0	0	1	0	1	0	0	0	0	0	0	5
13:15	0	0	4	0	4	0	0	1	0	1	0	0	2	0	2	0	1	0	1	0	2	9
13:30	0	1	1	0	2	0	0	0	1	1	0	0	6	1	7	0	0	0	0	0	0	10
13:45	0	0	3	0	3	0	1	0	0	1	0	0	2	0	2	0	0	0	0	0	0	6
<b>Total</b>	<b>0</b>	<b>1</b>	<b>11</b>	<b>0</b>	<b>12</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>11</b>	<b>1</b>	<b>12</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>30</b>	
14:00	0	0	4	0	4	0	0	0	0	0	0	0	5	2	7	0	0	0	1	0	1	12
14:15	0	0	1	0	1	0	0	0	1	1	0	0	3	1	4	0	0	0	2	0	2	8
14:30	0	0	1	0	1	0	0	0	0	0	0	0	3	0	3	0	0	0	0	0	0	4
14:45	0	0	2	0	2	0	0	0	0	0	0	1	3	1	5	0	0	0	1	0	1	8
<b>Total</b>	<b>0</b>	<b>0</b>	<b>8</b>	<b>0</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>14</b>	<b>4</b>	<b>19</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>4</b>	<b>32</b>	
15:00	0	0	5	0	5	0	0	0	1	1	0	0	4	0	4	0	1	0	1	0	2	12
15:15	0	0	5	0	5	0	0	0	0	0	0	0	3	0	3	0	0	0	3	0	3	11
15:30	0	0	4	0	4	0	0	0	0	0	0	0	4	0	4	0	0	0	0	0	0	8
15:45	0	0	1	0	1	0	0	0	0	0	0	0	7	1	8	0	0	0	0	0	0	9
<b>Total</b>	<b>0</b>	<b>0</b>	<b>15</b>	<b>0</b>	<b>15</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>18</b>	<b>1</b>	<b>19</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>4</b>	<b>5</b>	<b>40</b>	
16:00	0	0	3	0	3	0	0	0	0	0	0	0	3	0	3	0	0	0	0	0	0	6
16:15	0	0	4	0	4	0	0	0	0	0	0	0	11	0	11	0	0	0	0	0	0	15
16:30	0	0	3	0	3	0	0	0	0	0	0	0	7	0	7	0	0	0	0	0	0	10
16:45	0	0	0	1	1	0	0	0	0	0	0	0	3	0	3	0	0	0	0	0	0	4
<b>Total</b>	<b>0</b>	<b>0</b>	<b>10</b>	<b>1</b>	<b>11</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>24</b>	<b>0</b>	<b>24</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>35</b>
17:00	0	0	1	0	1	0	0	0	0	0	0	0	4	0	4	0	0	0	0	0	0	5
17:15	0	0	1	0	1	0	0	0	0	0	0	0	3	0	3	0	0	0	0	0	0	4
17:30	0	0	1	0	1	0	0	0	1	1	0	0	1	0	1	0	0	0	0	0	0	3
17:45	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	0	2
<b>Total</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>9</b>	<b>0</b>	<b>10</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>14</b>
18:00	0	0	2	0	2	0	0	0	0	0	0	0	3	0	3	0	0	0	0	0	0	5
18:15	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	0	1	2



# Anoka County Highway Department

## Traffic Engineering Section

### Traffic Volume and Turning Movement Study

File Name : TMC 2127  
 Site Code :  
 Start Date : 07/15/2021  
 Page No : 3

Weather: Hot & P Cloudy  
 CountCAM200  
 Study Conducted By: Kevin

Groups Printed- Trucks

Start Time	CSAH 52 Southbound					Arnold Palmer Drive NE Westbound					CSAH 52 Northbound					116th Avenue NE 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	0	0	0	0	0	0	0	0	0	0
18:45	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	0	0	5	0	5	0	0	0	1	1	0	0	3	0	3	0	0	0	1	1	10
19:00	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
19:15	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
19:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
20:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:15	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
20:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:45	0	0	1	0	1	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	3
<b>Total</b>	0	1	1	0	2	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	4
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	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:30	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
21:45	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2
<b>Total</b>	0	1	1	0	2	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	3
22:00	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
22:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:45	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1
<b>Total</b>	0	0	1	0	1	0	0	0	0	0	0	0	1	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	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
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
<b>Total</b>	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
<b>Grand Total</b>	0	4	155	9	168	0	4	3	9	16	0	7	170	17	194	0	4	0	18	22	400
<b>Apprch %</b>	0	2.4	92.3	5.4		0	25	18.8	56.2		0	3.6	87.6	8.8		0	18.2	0	81.8		
<b>Total %</b>	0	1	38.8	2.2	42	0	1	0.8	2.2	4	0	1.8	42.5	4.2	48.5	0	1	0	4.5	5.5	

# ANOKA COUNTY HIGHWAY

## PC-WARRANTS

### TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2127

Study Date : 01/04/2024

## Signal Warrants - Summary

### Major Street Approaches

Northbound: CSAH 52

Number of Lanes : 2+

Total Approach Volume: 10,501

Southbound: CSAH 52

Number of Lanes :2+

Total Approach Volume: 9,274

### Minor Street Approaches

Eastbound: 116th Avenue NE

Number of Lanes :1

Total Approach Volume: 558

Westbound: Arnold Palmer Drive NE

Number of Lanes :1

Total Approach Volume: 1,178

### 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 13 hours, 8 are needed

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

Required 1A volumes reached for 5 hours, 8 are needed

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

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

Number of hours (13) volumes exceed minimum >= minimum required (4).

Warrant 3 - Peak Hour.....Satisfied

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

Number of one hour periods (4) 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: TMC 2127

Study Date : 01/04/2024

## 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

13 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	
	<b>CSAH 52</b>					<b>116th Avenue NE</b>		
16:00 - 17:00	1254	+	631	=	1885	35	93	Yes
17:00 - 18:00	1147	+	684	=	1831	37	71	Yes
15:00 - 16:00	981	+	562	=	1543	40	72	Yes
18:00 - 19:00	860	+	533	=	1393	35	63	Yes
14:00 - 15:00	725	+	516	=	1241	36	64	Yes
12:00 - 13:00	677	+	507	=	1184	30	58	Yes
13:00 - 14:00	666	+	490	=	1156	29	69	Yes
07:00 - 08:00	231	+	850	=	1081	38	98	Yes
08:00 - 09:00	315	+	732	=	1047	42	104	Yes
11:00 - 12:00	506	+	517	=	1023	28	72	Yes
10:00 - 11:00	427	+	545	=	972	45	91	Yes
09:00 - 10:00	351	+	515	=	866	38	88	Yes
06:00 - 07:00	97	+	636	=	733	28	63	Yes
19:00 - 20:00	695	+	362	=	1057	20	47	No
19:15 - 20:15	666	+	351	=	1017	20	46	No
19:30 - 20:30	631	+	327	=	958	18	39	No
19:45 - 20:45	580	+	320	=	900	17	37	No
20:00 - 21:00	552	+	305	=	857	19	35	No
20:15 - 21:15	543	+	271	=	814	17	33	No
20:30 - 21:30	547	+	248	=	795	18	28	No
20:45 - 21:45	545	+	216	=	761	19	26	No
21:00 - 22:00	494	+	188	=	682	17	24	No
05:45 - 06:45	73	+	594	=	667	24	46	No
21:15 - 22:15	429	+	164	=	593	16	18	No
05:30 - 06:30	63		526		589	20	32	No

# ANOKA COUNTY HIGHWAY

## PC-WARRANTS

### TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2127

Study Date : 01/04/2024

## 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 5 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

#### Minor Road 116th Avenue NE

Time	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	Met1A?
15:45 - 16:45	1259	+	607	=	1866	38	84	Yes
07:30 - 08:30	272	+	858	=	1130	35	115	Yes
10:00 - 11:00	427	+	545	=	972	45	91	Yes
06:30 - 07:30	164	+	732	=	896	38	89	Yes
09:00 - 10:00	351	+	515	=	866	38	88	Yes
17:00 - 18:00	1147	+	684	=	1831	37	71	No
16:45 - 17:45	1119	+	708	=	1827	36	71	No
15:30 - 16:30	1207	+	590	=	1797	37	81	No
17:15 - 18:15	1066	+	653	=	1719	35	70	No
15:15 - 16:15	1090	+	584	=	1674	38	79	No
17:30 - 18:30	1006	+	624	=	1630	35	73	No
17:45 - 18:45	960	+	586	=	1546	35	72	No

Time	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	Met1B?
15:45 - 16:45	1259	+	607	=	1866	38	84	Yes
16:45 - 17:45	1119	+	708	=	1827	36	71	Yes
17:45 - 18:45	960	+	586	=	1546	35	72	Yes
14:45 - 15:45	891	+	538	=	1429	37	73	Yes
13:45 - 14:45	728	+	490	=	1218	42	65	Yes
11:45 - 12:45	661	+	535	=	1196	31	54	Yes
12:45 - 13:45	658	+	497	=	1155	23	67	Yes
18:45 - 19:45	718	+	389	=	1107	22	50	Yes
07:45 - 08:45	300	+	792	=	1092	41	115	Yes
06:45 - 07:45	201	+	807	=	1008	41	96	Yes
10:45 - 11:45	460	+	520	=	980	34	90	Yes
09:45 - 10:45	416	+	531	=	947	41	88	Yes



# ANOKA COUNTY HIGHWAY

## PC-WARRANTS

### TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2127

Study Date : 01/04/2024

## 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.

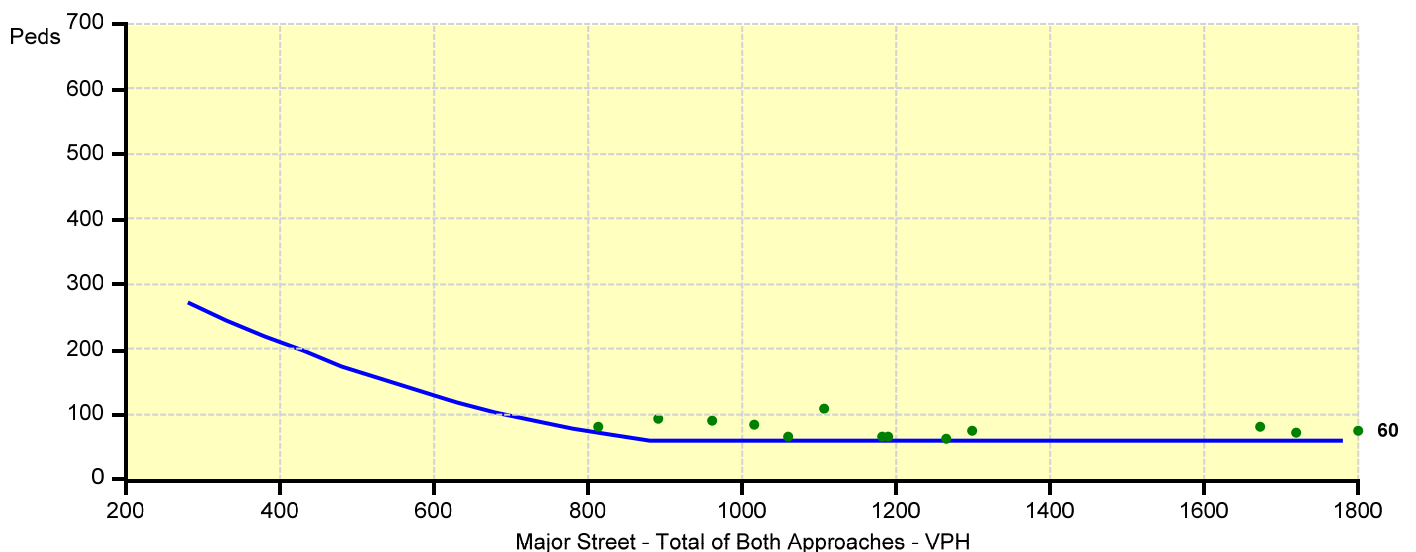
#### Summary

13 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				Total	Minor Road 116th Avenue NE		Met?
	Major NB	+	Major SB	=		Minor EB	Minor WB	
16:15 - 17:15	1235	+	674	=	1909	38	74	Yes
17:15 - 18:15	1066	+	653	=	1719	35	70	Yes
15:15 - 16:15	1090	+	584	=	1674	38	79	Yes
14:15 - 15:15	784	+	514	=	1298	38	73	Yes
18:15 - 19:15	790	+	476	=	1266	32	63	Yes
12:15 - 13:15	676	+	514	=	1190	28	66	Yes
13:15 - 14:15	688	+	493	=	1181	31	65	Yes
07:15 - 08:15	259	+	847	=	1106	39	108	Yes
11:15 - 12:15	540	+	519	=	1059	27	64	Yes
08:15 - 09:15	325	+	691	=	1016	38	82	Yes
10:15 - 11:15	434	+	527	=	961	41	90	Yes
09:15 - 10:15	382		510		892	44	93	Yes



# ANOKA COUNTY HIGHWAY

## PC-WARRANTS

### TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2127

Study Date : 01/04/2024

## 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

9 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					116th Avenue NE			
16:00 - 17:00	1254	+	631	=	1885	35	93	Yes	
15:45 - 16:45	1259	+	607	=	1866	38	84	Yes	
15:30 - 16:30	1207	+	590	=	1797	37	81	Yes	
15:15 - 16:15	1090	+	584	=	1674	38	79	Yes	
07:30 - 08:30	272	+	858	=	1130	35	115	Yes	
07:15 - 08:15	259	+	847	=	1106	39	108	Yes	
07:45 - 08:45	300	+	792	=	1092	41	115	Yes	
07:00 - 08:00	231	+	850	=	1081	38	98	Yes	
08:00 - 09:00	315	+	732	=	1047	42	104	Yes	
16:15 - 17:15	1235	+	674	=	1909	38	74	No	
16:30 - 17:30	1162	+	701	=	1863	38	68	No	
17:00 - 18:00	1147		684		1831	37	71	No	

