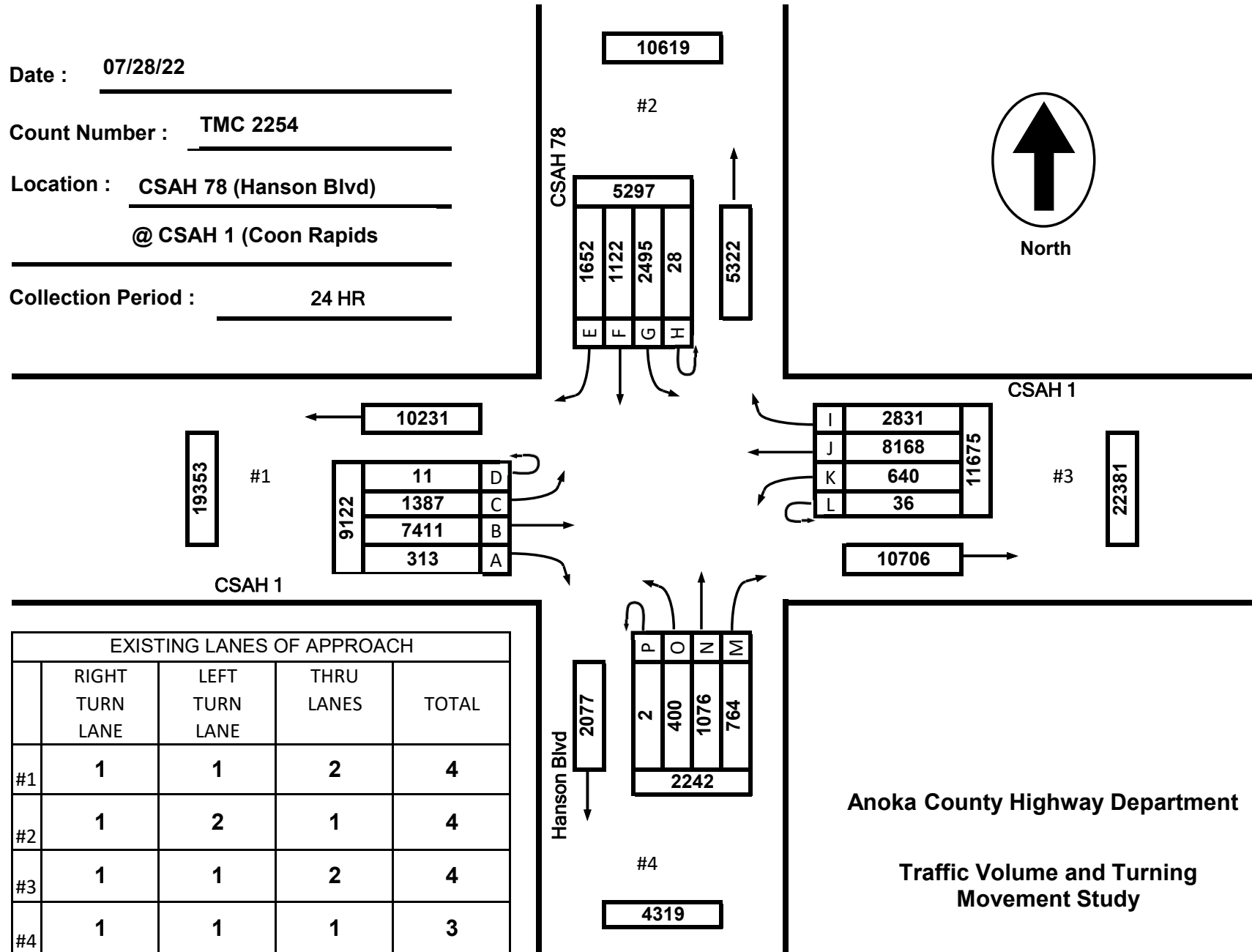


Date : 07/28/22

Count Number : TMC 2254

Location : CSAH 78 (Hanson Blvd)  
@ CSAH 1 (Coon Rapids)

Collection Period : 24 HR



EXISTING LANES OF APPROACH

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

Anoka County Highway Department

Traffic Volume and Turning Movement Study

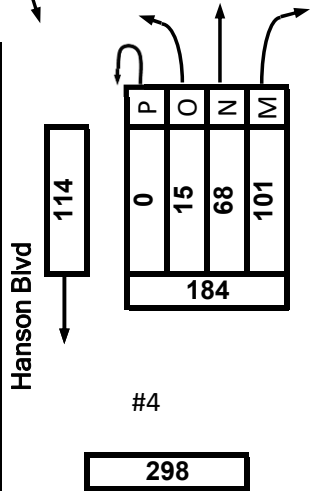
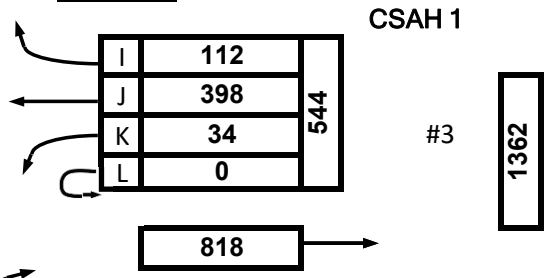
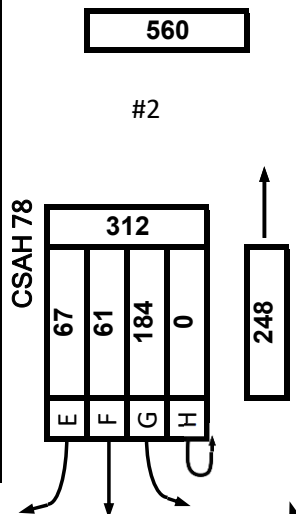
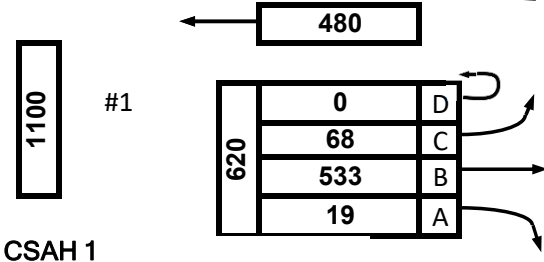
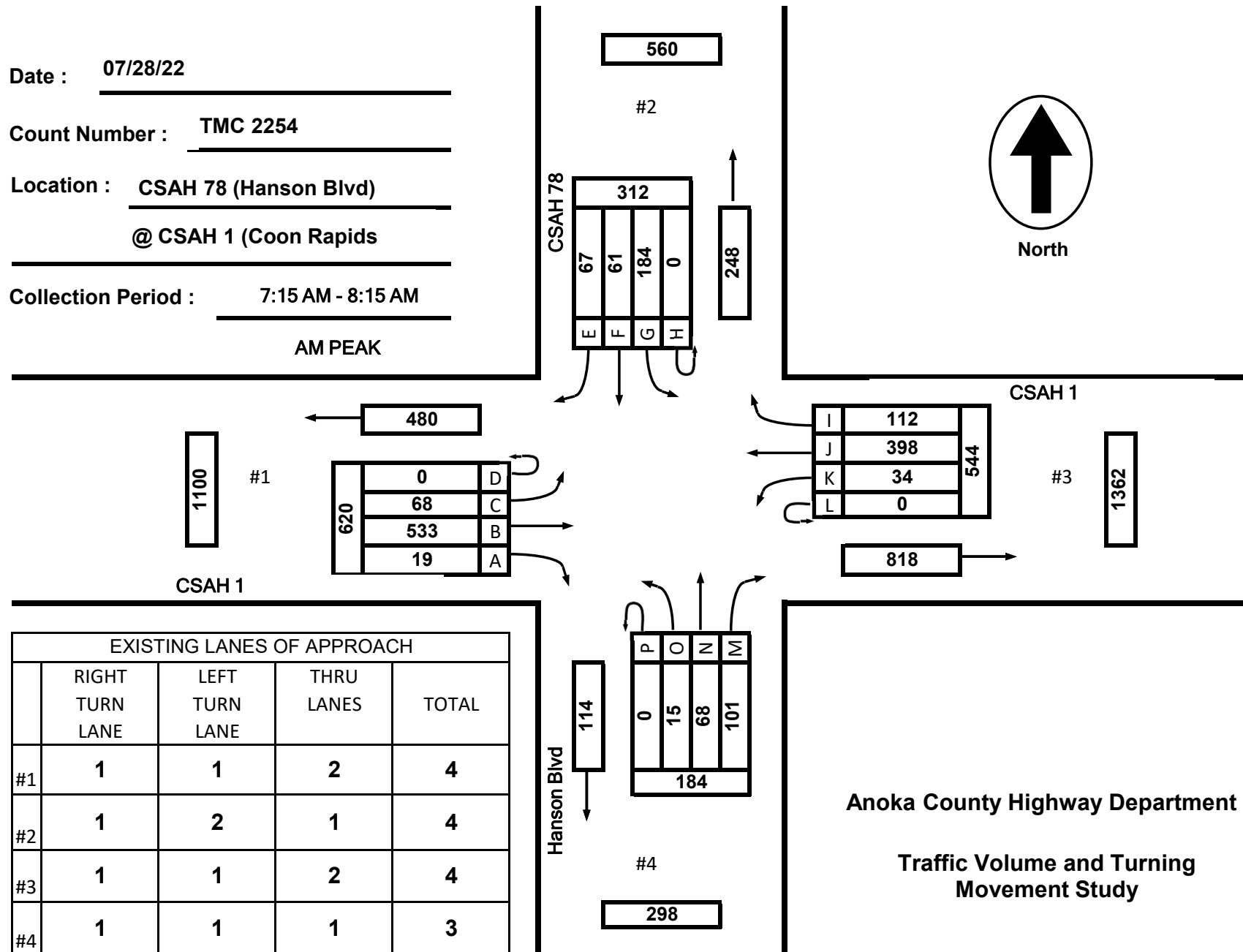
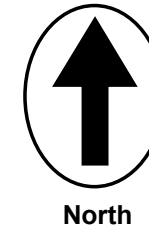
Date : 07/28/22

Count Number : TMC 2254

Location : CSAH 78 (Hanson Blvd)  
@ CSAH 1 (Coon Rapids)

Collection Period : 7:15 AM - 8:15 AM

AM PEAK



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

Anoka County Highway Department

Traffic Volume and Turning Movement Study

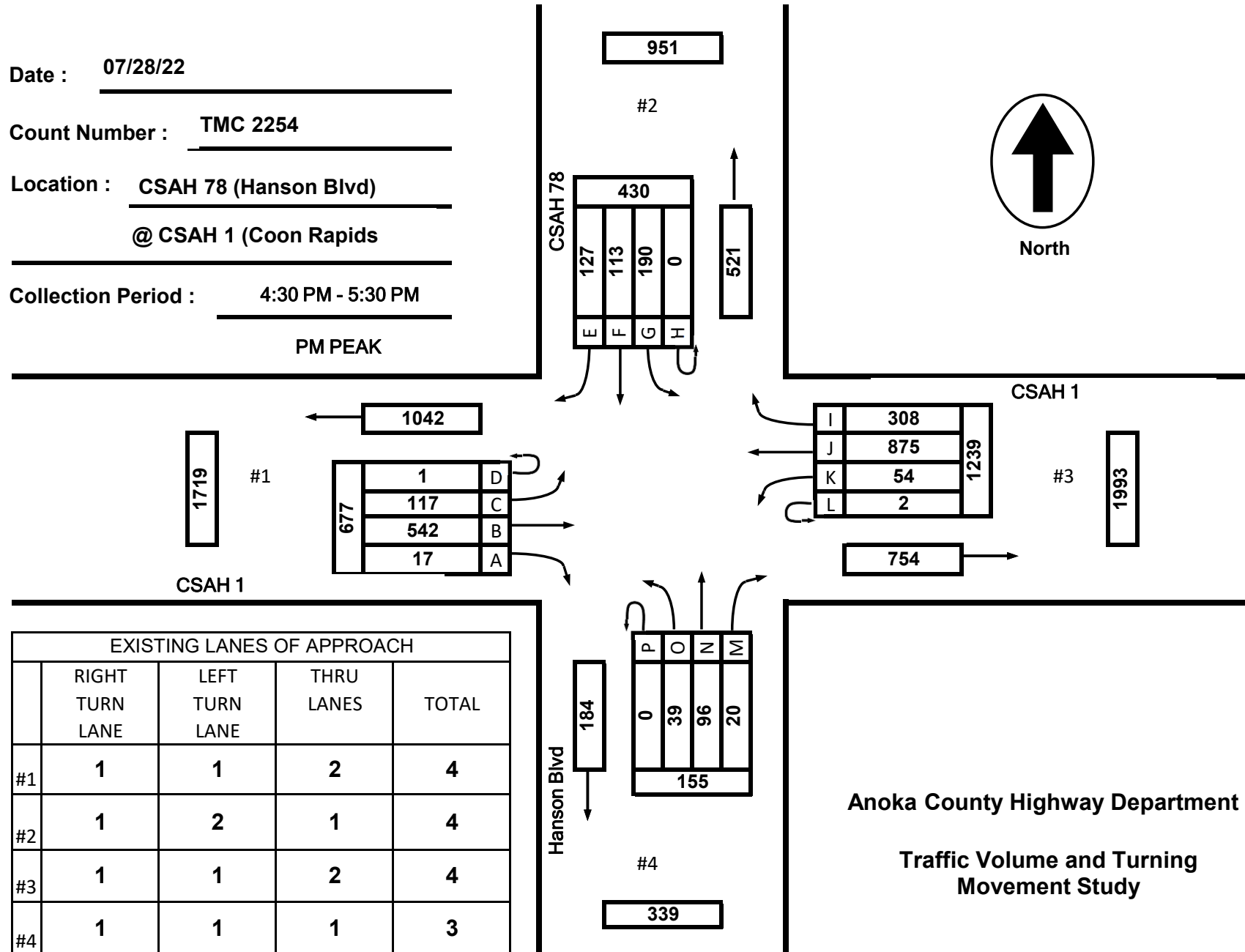
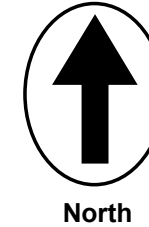
Date : 07/28/22

Count Number : TMC 2254

Location : CSAH 78 (Hanson Blvd)  
@ CSAH 1 (Coon Rapids)

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

PM PEAK



Anoka County Highway Department

Traffic Volume and Turning Movement Study



File Name : TMC 2254  
 Site Code :  
 Start Date : 07/28/2022  
 Page No : 1

Groups Printed- Cars + - Trucks

	CSAH 78 (Hanson Blvd.) Southbound					CSAH 1 (Coon Rapids Blvd.) Westbound					Northbound					CSAH 1 (Coon Rapids Blvd.) Eastbound					
		Left					Left					Left					Left				
00:00	0	3	1	4	8	0	0	14	8	22	0	0	2	0	2	0	5	8	0	13	45
00:15	0	1	3	0	4	0	2	13	7	22	0	0	1	1	2	0	0	9	3	12	40
00:30	0	7	2	1	10	0	1	10	12	23	0	0	0	2	2	0	0	8	1	9	44
00:45	0	0	4	2	6	0	4	7	2	13	0	0	4	0	4	0	1	5	1	7	30
Total	0	11	10	7	28	0	7	44	29	80	0	0	7	3	10	0	6	30	5	41	159
01:00	0	4	3	1	8	0	1	12	5	18	0	0	1	2	3	0	0	10	1	11	40
01:15	0	2	2	1	5	0	1	9	9	19	0	0	0	0	0	0	0	9	1	10	34
01:30	0	1	0	2	3	0	1	3	3	7	0	0	1	1	2	0	0	10	0	10	22
01:45	1	2	1	2	6	0	0	16	7	23	0	0	0	0	0	0	0	7	0	7	36
Total	1	9	6	6	22	0	3	40	24	67	0	0	2	3	5	0	0	36	2	38	132
02:00	0	2	1	0	3	0	2	6	6	14	0	0	0	0	0	0	0	11	0	11	28
02:15	0	2	0	0	2	0	1	6	4	11	0	0	2	1	3	0	0	8	0	8	24
02:30	0	4	0	3	7	0	1	7	2	10	0	0	0	1	1	0	0	5	0	5	23
02:45	0	7	1	1	9	0	0	3	5	8	0	0	0	0	0	0	1	4	0	5	22
Total	0	15	2	4	21	0	4	22	17	43	0	0	2	2	4	0	1	28	0	29	97
03:00	0	4	0	1	5	0	2	6	2	10	0	0	0	1	1	0	0	6	2	8	24
03:15	0	2	0	0	2	0	1	9	0	10	0	1	0	4	5	0	1	7	3	11	28
03:30	0	2	1	0	3	1	0	9	3	13	0	0	0	2	2	0	1	11	0	12	30
03:45	0	4	0	0	4	0	0	8	1	9	0	0	1	3	4	0	0	15	0	15	32
Total	0	12	1	1	14	1	3	32	6	42	0	1	1	10	12	0	2	39	5	46	114
04:00	0	3	1	1	5	0	1	10	4	15	0	1	2	4	7	0	1	9	0	10	37
04:15	0	9	1	1	11	0	0	11	1	12	0	0	1	9	10	0	1	24	0	25	58
04:30	0	6	0	2	8	0	0	15	5	20	0	1	3	10	14	0	1	26	1	28	70
04:45	0	13	3	1	17	0	0	8	7	15	0	0	3	6	9	0	0	41	0	41	82
Total	0	31	5	5	41	0	1	44	17	62	0	2	9	29	40	0	3	100	1	104	247
05:00	0	12	3	0	15	0	2	17	2	21	0	0	3	8	11	1	3	37	1	42	89
05:15	0	9	1	2	12	0	1	21	7	29	0	2	5	11	18	0	5	65	0	70	129
05:30	0	29	3	3	35	0	1	17	14	32	0	1	3	12	16	0	4	91	0	95	178
05:45	0	28	6	5	39	0	2	20	12	34	0	2	5	15	22	0	3	73	2	78	173
Total	0	78	13	10	101	0	6	75	35	116	0	5	16	46	67	1	15	266	3	285	569
06:00	0	24	4	6	34	0	4	41	13	58	0	2	5	12	19	0	10	75	1	86	197
06:15	0	46	4	5	55	0	1	43	15	59	0	2	8	22	32	0	2	97	0	99	245
06:30	0	49	11	13	73	0	5	71	16	92	0	3	9	20	32	0	5	120	2	127	324
06:45	0	39	10	11	60	0	3	71	30	104	0	3	13	18	34	0	6	123	2	131	329
Total	0	158	29	35	222	0	13	226	74	313	0	10	35	72	117	0	23	415	5	443	1095
07:00	0	48	13	17	78	1	3	70	26	100	0	2	12	23	37	0	21	109	2	132	347
07:15	0	44	26	14	84	0	10	105	19	134	0	3	18	30	51	0	13	157	6	176	445
07:30	0	47	9	20	76	0	2	81	31	114	0	2	17	31	50	0	22	134	4	160	400
07:45	0	56	16	18	90	0	13	125	35	173	0	7	17	17	41	0	19	131	2	152	456
Total	0	195	64	69	328	1	28	381	111	521	0	14	64	101	179	0	75	531	14	620	1648
08:00	0	37	10	15	62	0	9	87	27	123	0	3	16	23	42	0	14	111	7	132	359
08:15	0	24	10	20	54	0	5	119	19	143	0	6	14	31	51	1	15	113	1	130	378
08:30	0	40	8	44	92	0	14	101	24	139	0	9	17	14	40	0	19	121	0	140	411
08:45	0	33	12	27	72	0	3	90	27	120	0	3	12	20	35	1	28	102	4	135	362
Total	0	134	40	106	280	0	31	397	97	525	0	21	59	88	168	2	76	447	12	537	1510



# Anoka County Highway Department

## Traffic Engineering Section

### Traffic Volume and Turning Movement Study

File Name : TMC 2254  
 Site Code :  
 Start Date : 07/28/2022  
 Page No : 2

Groups Printed- Cars + - Trucks

Start Time	CSAH 78 (Hanson Blvd.) Southbound					CSAH 1 (Coon Rapids Blvd.) Westbound					Northbound					CSAH 1 (Coon Rapids Blvd.) 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	31	8	25	64	1	6	85	30	122	0	9	16	14	39	0	29	96	4	129	354
09:15	0	35	14	18	67	0	7	91	36	134	0	3	13	9	25	0	16	93	4	113	339
09:30	0	37	9	16	62	0	4	86	44	134	0	5	21	6	32	1	16	88	2	107	335
09:45	0	30	12	31	73	1	6	112	40	159	0	5	17	6	28	1	23	93	4	121	381
Total	0	133	43	90	266	2	23	374	150	549	0	22	67	35	124	2	84	370	14	470	1409
10:00	0	35	9	20	64	0	8	85	36	129	0	6	17	11	34	0	15	86	4	105	332
10:15	0	37	18	15	70	0	6	85	38	129	0	5	14	11	30	1	15	93	3	112	341
10:30	0	26	10	19	55	0	7	101	29	137	2	5	16	11	34	0	12	122	4	138	364
10:45	0	31	16	24	71	1	12	77	38	128	0	8	14	8	30	0	17	84	2	103	332
Total	0	129	53	78	260	1	33	348	141	523	2	24	61	41	128	1	59	385	13	458	1369
11:00	5	37	13	28	83	0	6	96	33	135	0	8	12	12	32	0	20	84	1	105	355
11:15	1	32	18	24	75	0	5	101	40	146	0	5	25	10	40	0	24	102	1	127	388
11:30	0	38	21	24	83	0	4	92	35	131	0	5	18	9	32	0	28	99	3	130	376
11:45	1	37	9	37	84	2	6	96	26	130	0	3	16	9	28	0	25	114	1	140	382
Total	7	144	61	113	325	2	21	385	134	542	0	21	71	40	132	0	97	399	6	502	1501
12:00	1	45	20	35	101	0	11	133	35	179	0	7	14	9	30	0	32	101	5	138	448
12:15	0	31	18	29	78	0	9	103	29	141	0	12	19	9	40	0	35	100	7	142	401
12:30	1	26	20	25	72	0	7	109	46	162	0	6	17	11	34	1	17	121	2	141	409
12:45	0	43	16	35	94	0	7	136	43	186	0	7	16	6	29	0	32	105	4	141	450
Total	2	145	74	124	345	0	34	481	153	668	0	32	66	35	133	1	116	427	18	562	1708
13:00	3	38	13	23	77	1	4	124	25	154	0	7	13	17	37	0	31	125	6	162	430
13:15	1	42	17	28	88	1	5	130	40	176	0	6	15	19	40	0	19	107	5	131	435
13:30	1	53	18	21	93	1	3	126	35	165	0	7	16	8	31	0	27	108	5	140	429
13:45	0	39	15	33	87	2	7	126	40	175	0	6	7	5	18	0	27	112	3	142	422
Total	5	172	63	105	345	5	19	506	140	670	0	26	51	49	126	0	104	452	19	575	1716
14:00	0	41	16	40	97	0	15	150	54	219	0	6	6	2	14	0	20	109	8	137	467
14:15	2	52	19	37	110	0	13	134	52	199	0	10	9	3	22	0	36	110	4	150	481
14:30	0	38	17	31	86	3	14	169	56	242	0	11	26	8	45	0	41	111	10	162	535
14:45	1	35	20	27	83	1	14	172	45	232	0	5	12	6	23	1	28	115	9	153	491
Total	3	166	72	135	376	4	56	625	207	892	0	32	53	19	104	1	125	445	31	602	1974
15:00	0	30	17	36	83	0	12	145	66	223	0	6	20	4	30	0	19	115	6	140	476
15:15	0	36	18	38	92	2	16	151	70	239	0	9	23	11	43	1	28	139	4	172	546
15:30	1	41	14	31	87	1	14	198	56	269	0	13	20	4	37	0	26	142	6	174	567
15:45	0	38	36	37	111	2	17	179	59	257	0	11	25	1	37	0	30	135	7	172	577
Total	1	145	85	142	373	5	59	673	251	988	0	39	88	20	147	1	103	531	23	658	2166
16:00	1	35	23	35	94	0	12	178	53	243	0	7	15	11	33	0	33	142	6	181	551
16:15	2	30	24	31	87	1	9	224	62	296	0	10	27	2	39	0	21	134	11	166	588
16:30	0	38	32	37	107	0	18	227	59	304	0	7	28	2	37	0	33	142	6	181	629
16:45	0	54	23	33	110	1	13	247	86	347	0	10	28	5	43	0	21	125	4	150	650
Total	3	157	102	136	398	2	52	876	260	1190	0	34	98	20	152	0	108	543	27	678	2418
17:00	0	47	35	30	112	0	14	190	73	277	0	13	22	7	42	0	43	126	7	176	607
17:15	0	51	23	29	103	1	9	211	90	311	0	9	18	6	33	1	20	149	0	170	617
17:30	0	48	17	39	104	1	20	181	71	273	0	6	17	3	26	0	20	103	6	129	532
17:45	0	40	10	32	82	1	17	188	61	267	0	7	14	8	29	0	17	122	5	144	522
Total	0	186	85	130	401	3	60	770	295	1128	0	35	71	24	130	1	100	500	18	619	2278
18:00	0	43	28	27	98	1	8	145	52	206	0	15	16	5	36	1	29	103	8	141	481
18:15	0	31	15	33	79	0	14	165	56	235	0	11	22	3	36	0	7	103	8	118	468



# Anoka County Highway Department

## Traffic Engineering Section

### Traffic Volume and Turning Movement Study

File Name : TMC 2254  
 Site Code :  
 Start Date : 07/28/2022  
 Page No : 3

Groups Printed- Cars + - Trucks

Start Time	CSAH 78 (Hanson Blvd.) Southbound					CSAH 1 (Coon Rapids Blvd.) Westbound					Northbound					CSAH 1 (Coon Rapids Blvd.) 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	1	38	21	25	85	0	8	122	32	162	0	3	15	7	25	0	21	93	3	117	389
18:45	0	27	20	36	83	3	19	124	42	188	0	5	18	6	29	0	19	78	4	101	401
<b>Total</b>	<b>1</b>	<b>139</b>	<b>84</b>	<b>121</b>	<b>345</b>	<b>4</b>	<b>49</b>	<b>556</b>	<b>182</b>	<b>791</b>	<b>0</b>	<b>34</b>	<b>71</b>	<b>21</b>	<b>126</b>	<b>1</b>	<b>76</b>	<b>377</b>	<b>23</b>	<b>477</b>	<b>1739</b>
19:00	0	31	24	14	69	1	11	102	30	144	0	8	17	13	38	0	14	87	2	103	354
19:15	1	22	24	15	62	1	10	94	34	139	0	3	10	5	18	0	17	101	7	125	344
19:30	0	18	19	19	56	0	8	112	32	152	0	1	11	6	18	0	16	71	5	92	318
19:45	2	28	12	20	62	1	10	82	34	127	0	3	10	9	22	0	15	79	2	96	307
<b>Total</b>	<b>3</b>	<b>99</b>	<b>79</b>	<b>68</b>	<b>249</b>	<b>3</b>	<b>39</b>	<b>390</b>	<b>130</b>	<b>562</b>	<b>0</b>	<b>15</b>	<b>48</b>	<b>33</b>	<b>96</b>	<b>0</b>	<b>62</b>	<b>338</b>	<b>16</b>	<b>416</b>	<b>1323</b>
20:00	0	22	17	15	54	0	8	73	29	110	0	8	14	3	25	0	16	77	5	98	287
20:15	0	25	14	22	61	0	5	93	34	132	0	4	15	1	20	0	17	72	5	94	307
20:30	0	27	18	5	50	1	8	86	34	129	0	6	13	2	21	0	13	64	3	80	280
20:45	0	16	13	25	54	0	8	78	46	132	0	4	22	8	34	0	10	67	2	79	299
<b>Total</b>	<b>0</b>	<b>90</b>	<b>62</b>	<b>67</b>	<b>219</b>	<b>1</b>	<b>29</b>	<b>330</b>	<b>143</b>	<b>503</b>	<b>0</b>	<b>22</b>	<b>64</b>	<b>14</b>	<b>100</b>	<b>0</b>	<b>56</b>	<b>280</b>	<b>15</b>	<b>351</b>	<b>1173</b>
21:00	2	16	8	17	43	1	14	55	35	105	0	3	6	17	26	0	12	66	2	80	254
21:15	0	20	17	13	50	0	6	71	28	105	0	2	16	3	21	0	23	70	5	98	274
21:30	0	15	7	9	31	0	9	66	32	107	0	0	6	2	8	0	11	58	4	73	219
21:45	0	19	12	10	41	0	6	59	21	86	0	1	1	4	6	0	10	39	3	52	185
<b>Total</b>	<b>2</b>	<b>70</b>	<b>44</b>	<b>49</b>	<b>165</b>	<b>1</b>	<b>35</b>	<b>251</b>	<b>116</b>	<b>403</b>	<b>0</b>	<b>6</b>	<b>29</b>	<b>26</b>	<b>61</b>	<b>0</b>	<b>56</b>	<b>233</b>	<b>14</b>	<b>303</b>	<b>932</b>
22:00	0	12	10	9	31	0	7	52	9	68	0	2	11	5	18	0	2	39	6	47	164
22:15	0	12	7	8	27	0	2	76	21	99	0	0	12	2	14	0	2	38	8	48	188
22:30	0	8	6	6	20	0	7	51	15	73	0	2	5	4	11	0	4	26	0	30	134
22:45	0	13	11	8	32	0	3	45	26	74	0	0	5	8	13	0	8	31	1	40	159
<b>Total</b>	<b>0</b>	<b>45</b>	<b>34</b>	<b>31</b>	<b>110</b>	<b>0</b>	<b>19</b>	<b>224</b>	<b>71</b>	<b>314</b>	<b>0</b>	<b>4</b>	<b>33</b>	<b>19</b>	<b>56</b>	<b>0</b>	<b>16</b>	<b>134</b>	<b>15</b>	<b>165</b>	<b>645</b>
23:00	0	9	4	5	18	0	4	30	15	49	0	0	3	6	9	0	10	38	7	55	131
23:15	0	13	4	5	22	0	5	31	17	53	0	0	1	2	3	0	5	17	3	25	103
23:30	0	6	1	4	11	1	2	21	10	34	0	1	4	4	9	0	7	31	1	39	93
23:45	0	4	2	6	12	0	5	36	6	47	0	0	2	2	4	0	2	19	3	24	87
<b>Total</b>	<b>0</b>	<b>32</b>	<b>11</b>	<b>20</b>	<b>63</b>	<b>1</b>	<b>16</b>	<b>118</b>	<b>48</b>	<b>183</b>	<b>0</b>	<b>1</b>	<b>10</b>	<b>14</b>	<b>25</b>	<b>0</b>	<b>24</b>	<b>105</b>	<b>14</b>	<b>143</b>	<b>414</b>
<b>Grand Total</b>	<b>28</b>	<b>2495</b>	<b>1122</b>	<b>1652</b>	<b>5297</b>	<b>36</b>	<b>640</b>	<b>8168</b>	<b>2831</b>	<b>11675</b>	<b>2</b>	<b>400</b>	<b>1076</b>	<b>764</b>	<b>2242</b>	<b>11</b>	<b>1387</b>	<b>7411</b>	<b>313</b>	<b>9122</b>	<b>28336</b>
<b>Apprch %</b>	<b>0.5</b>	<b>47.1</b>	<b>21.2</b>	<b>31.2</b>		<b>0.3</b>	<b>5.5</b>	<b>70</b>	<b>24.2</b>		<b>0.1</b>	<b>17.8</b>	<b>48</b>	<b>34.1</b>		<b>0.1</b>	<b>15.2</b>	<b>81.2</b>	<b>3.4</b>		
<b>Total %</b>	<b>0.1</b>	<b>8.8</b>	<b>4</b>	<b>5.8</b>	<b>18.7</b>	<b>0.1</b>	<b>2.3</b>	<b>28.8</b>	<b>10</b>	<b>41.2</b>	<b>0</b>	<b>1.4</b>	<b>3.8</b>	<b>2.7</b>	<b>7.9</b>	<b>0</b>	<b>4.9</b>	<b>26.2</b>	<b>1.1</b>	<b>32.2</b>	
<b>Cars +</b>	<b>28</b>	<b>2413</b>	<b>1109</b>	<b>1589</b>	<b>5139</b>	<b>36</b>	<b>614</b>	<b>7997</b>	<b>2743</b>	<b>11390</b>	<b>2</b>	<b>385</b>	<b>1063</b>	<b>747</b>	<b>2197</b>	<b>11</b>	<b>1345</b>	<b>7237</b>	<b>302</b>	<b>8895</b>	<b>27621</b>
<b>% Cars +</b>	<b>100</b>	<b>96.7</b>	<b>98.8</b>	<b>96.2</b>	<b>97</b>	<b>100</b>	<b>95.9</b>	<b>97.9</b>	<b>96.9</b>	<b>97.6</b>	<b>100</b>	<b>96.2</b>	<b>98.8</b>	<b>97.8</b>	<b>98</b>	<b>100</b>	<b>97</b>	<b>97.7</b>	<b>96.5</b>	<b>97.5</b>	<b>97.5</b>
<b>Trucks</b>	<b>0</b>	<b>82</b>	<b>13</b>	<b>63</b>	<b>158</b>	<b>0</b>	<b>26</b>	<b>171</b>	<b>88</b>	<b>285</b>	<b>0</b>	<b>15</b>	<b>13</b>	<b>17</b>	<b>45</b>	<b>0</b>	<b>42</b>	<b>174</b>	<b>11</b>	<b>227</b>	<b>715</b>
<b>% Trucks</b>	<b>0</b>	<b>3.3</b>	<b>1.2</b>	<b>3.8</b>	<b>3</b>	<b>0</b>	<b>4.1</b>	<b>2.1</b>	<b>3.1</b>	<b>2.4</b>	<b>0</b>	<b>3.8</b>	<b>1.2</b>	<b>2.2</b>	<b>2</b>	<b>0</b>	<b>3</b>	<b>2.3</b>	<b>3.5</b>	<b>2.5</b>	<b>2.5</b>



# Anoka County Highway Department

## Traffic Engineering Section

### Traffic Volume and Turning Movement Study

File Name : TMC 2254  
 Site Code :  
 Start Date : 07/28/2022  
 Page No : 4

Start Time	CSAH 78 (Hanson Blvd.) Southbound					CSAH 1 (Coon Rapids Blvd.) Westbound					Northbound					CSAH 1 (Coon Rapids Blvd.) 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 07:15																					
07:15	0	44	26	14	84	0	10	105	19	134	0	3	18	30	51	0	13	157	6	176	445
07:30	0	47	9	20	76	0	2	81	31	114	0	2	17	31	50	0	22	134	4	160	400
07:45	0	56	16	18	90	0	13	125	35	173	0	7	17	17	41	0	19	131	2	152	456
08:00	0	37	10	15	62	0	9	87	27	123	0	3	16	23	42	0	14	111	7	132	359
Total Volume	0	184	61	67	312	0	34	398	112	544	0	15	68	101	184	0	68	533	19	620	1660
% App. Total	0	59	19.6	21.5		0	6.2	73.2	20.6		0	8.2	37	54.9		0	11	86	3.1		
PHF	.000	.821	.587	.838	.867	.000	.654	.796	.800	.786	.000	.536	.944	.815	.902	.000	.773	.849	.679	.881	.910

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	43	16	35	94	0	7	136	43	186	0	7	16	6	29	0	32	105	4	141	450
13:00	3	38	13	23	77	1	4	124	25	154	0	7	13	17	37	0	31	125	6	162	430
13:15	1	42	17	28	88	1	5	130	40	176	0	6	15	19	40	0	19	107	5	131	435
13:30	1	53	18	21	93	1	3	126	35	165	0	7	16	8	31	0	27	108	5	140	429
Total Volume	5	176	64	107	352	3	19	516	143	681	0	27	60	50	137	0	109	445	20	574	1744
% App. Total	1.4	50	18.2	30.4		0.4	2.8	75.8	21		0	19.7	43.8	36.5		0	19	77.5	3.5		
PHF	.417	.830	.889	.764	.936	.750	.679	.949	.831	.915	.000	.964	.938	.658	.856	.000	.852	.890	.833	.886	.969

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	38	32	37	107	0	18	227	59	304	0	7	28	2	37	0	33	142	6	181	629
16:45	0	54	23	33	110	1	13	247	86	347	0	10	28	5	43	0	21	125	4	150	650
17:00	0	47	35	30	112	0	14	190	73	277	0	13	22	7	42	0	43	126	7	176	607
17:15	0	51	23	29	103	1	9	211	90	311	0	9	18	6	33	1	20	149	0	170	617
Total Volume	0	190	113	129	432	2	54	875	308	1239	0	39	96	20	155	1	117	542	17	677	2503
% App. Total	0	44	26.2	29.9		0.2	4.4	70.6	24.9		0	25.2	61.9	12.9		0.1	17.3	80.1	2.5		
PHF	.000	.880	.807	.872	.964	.500	.750	.886	.856	.893	.000	.750	.857	.714	.901	.250	.680	.909	.607	.935	.963



File Name : TMC 2254  
 Site Code :  
 Start Date : 07/28/2022  
 Page No : 1

Groups Printed- Trucks

	CSAH 78 (Hanson Blvd.) Southbound					CSAH 1 (Coon Rapids Blvd.) Westbound					Northbound					CSAH 1 (Coon Rapids Blvd.) Eastbound										
	UTrn	Left	Thru	Right	Peds	UTrn	Left	Thru	Right	Peds	UTrn	Left	Thru	Right	Peds	UTrn	Left	Thru	Right	Peds						
00:00	0	0	0	0	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	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
00:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	1
00:45	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
Total	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	4	4
01:00	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	2
01:30	0	0	0	0	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	1	0	0	0	0	0	0	1	1
Total	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	4	4
02:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
02:15	0	0	0	0	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	0	0	0	0
02:45	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Total	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	1
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	2	2
03:30	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	2	2
03:45	0	0	0	0	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	1	0	0	0	0	0	1	0	0	0	3	0	0	0	0	0	0	5	5
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	1
04:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	1
04:30	0	0	0	0	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	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	3	3
Total	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	5	5
05:00	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	2	2
05:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	2
05:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	1
05:45	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Total	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	6	6





# Anoka County Highway Department

## Traffic Engineering Section

### Traffic Volume and Turning Movement Study

File Name : TMC 2254  
 Site Code :  
 Start Date : 07/28/2022  
 Page No : 2

Groups Printed- Trucks

Start Time	CSAH 78 (Hanson Blvd.) Southbound					CSAH 1 (Coon Rapids Blvd.) Westbound					Northbound					CSAH 1 (Coon Rapids Blvd.) Eastbound					Exclu. Total	Inclu. Total	Int. Total
	UTrn	Left	Thru	Right	Peds	UTrn	Left	Thru	Right	Peds	UTrn	Left	Thru	Right	Peds	UTrn	Left	Thru	Right	Peds			
06:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	4	4
06:15	0	1	1	0	0	0	0	1	0	0	0	0	0	1	0	0	0	1	0	0	0	5	5
06:30	0	4	0	3	0	0	0	1	2	0	0	0	0	0	0	0	0	2	0	0	0	12	12
06:45	0	3	0	0	0	0	1	4	1	0	0	1	0	0	0	0	0	5	0	0	0	15	15
<b>Total</b>	<b>0</b>	<b>8</b>	<b>1</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>6</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>9</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>36</b>	<b>36</b>
07:00	0	4	0	0	0	0	2	5	0	0	0	0	0	0	0	0	0	1	0	0	0	12	12
07:15	0	0	1	1	0	0	0	7	1	0	0	0	1	1	0	0	0	0	0	0	0	12	12
07:30	0	3	0	1	0	0	1	1	6	0	0	0	1	1	0	0	1	1	1	0	0	17	17
07:45	0	9	0	1	0	0	0	2	5	0	0	0	0	0	0	0	0	4	0	0	0	21	21
<b>Total</b>	<b>0</b>	<b>16</b>	<b>1</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>15</b>	<b>12</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>6</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>62</b>	<b>62</b>
08:00	0	3	1	0	0	0	0	4	2	0	0	0	1	1	0	0	0	1	2	0	0	15	15
08:15	0	3	0	0	0	0	0	3	2	0	0	0	1	6	0	0	1	3	0	0	0	19	19
08:30	0	1	0	5	0	0	1	9	2	0	0	4	1	1	0	0	0	0	0	0	0	24	24
08:45	0	2	0	5	0	0	0	4	0	0	0	0	0	0	0	0	1	3	0	0	0	15	15
<b>Total</b>	<b>0</b>	<b>9</b>	<b>1</b>	<b>10</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>20</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>3</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>7</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>73</b>	<b>73</b>
09:00	0	3	1	1	0	0	0	1	3	0	0	0	1	0	0	0	5	2	0	0	0	17	17
09:15	0	3	1	1	0	0	1	7	3	0	0	0	0	1	0	0	1	3	0	0	0	21	21
09:30	0	0	0	1	0	0	0	5	2	0	0	0	0	0	0	0	0	4	0	0	0	12	12
09:45	0	0	0	3	0	0	0	3	0	0	0	0	1	0	0	0	0	5	0	0	0	12	12
<b>Total</b>	<b>0</b>	<b>6</b>	<b>2</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>16</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>6</b>	<b>14</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>62</b>	<b>62</b>
10:00	0	4	0	0	0	0	2	4	1	0	0	0	0	0	0	0	0	6	0	0	0	17	17
10:15	0	0	0	0	0	0	0	3	2	0	0	1	0	1	0	0	1	2	1	0	0	11	11
10:30	0	1	0	0	0	0	0	1	1	0	0	0	1	0	0	0	0	11	0	0	0	15	15
10:45	0	2	0	0	0	0	0	5	7	0	0	1	0	0	0	0	0	7	0	0	0	22	22
<b>Total</b>	<b>0</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>13</b>	<b>11</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>26</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>65</b>	<b>65</b>
11:00	0	2	0	2	0	0	0	5	4	0	0	0	1	0	0	0	1	5	0	0	0	20	20
11:15	0	0	0	1	0	0	0	3	1	0	0	0	0	0	0	0	0	2	0	0	0	7	7
11:30	0	4	0	3	0	0	0	7	2	0	0	0	0	0	0	0	0	2	0	0	0	18	18
11:45	0	2	0	4	0	0	1	7	1	0	0	0	0	0	0	0	1	6	0	0	0	22	22
<b>Total</b>	<b>0</b>	<b>8</b>	<b>0</b>	<b>10</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>22</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>15</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>67</b>	<b>67</b>
12:00	0	2	0	1	0	0	0	4	2	0	0	1	1	0	0	0	4	3	1	0	0	19	19
12:15	0	0	0	3	0	0	0	5	3	0	0	0	1	0	0	0	7	4	0	0	0	23	23



# Anoka County Highway Department

## Traffic Engineering Section

### Traffic Volume and Turning Movement Study

File Name : TMC 2254  
 Site Code :  
 Start Date : 07/28/2022  
 Page No : 3

Groups Printed- Trucks

Start Time	CSAH 78 (Hanson Blvd.) Southbound					CSAH 1 (Coon Rapids Blvd.) Westbound					Northbound					CSAH 1 (Coon Rapids Blvd.) Eastbound					Exclu. Total	Inclu. Total	Int. Total
	UTrn	Left	Thru	Right	Peds	UTrn	Left	Thru	Right	Peds	UTrn	Left	Thru	Right	Peds	UTrn	Left	Thru	Right	Peds			
12:30	0	1	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	5	0	0	0	9	9
12:45	0	0	0	5	0	0	0	2	1	0	0	0	0	0	0	0	3	2	2	0	0	15	15
<b>Total</b>	0	3	0	9	0	0	0	13	7	0	0	1	2	0	0	0	14	14	3	0	0	66	66
13:00	0	2	0	2	0	0	0	0	0	0	0	1	0	0	0	0	2	2	0	0	0	9	9
13:15	0	2	1	2	0	0	0	3	4	0	0	0	0	0	0	0	0	3	0	0	0	15	15
13:30	0	2	0	1	0	0	0	3	1	0	0	2	0	1	0	0	3	4	0	0	0	17	17
13:45	0	3	0	1	0	0	2	2	1	0	0	1	0	0	0	0	1	3	0	0	0	14	14
<b>Total</b>	0	9	1	6	0	0	2	8	6	0	0	4	0	1	0	0	6	12	0	0	0	55	55
14:00	0	2	1	1	0	0	2	1	3	0	0	0	0	0	0	0	0	3	0	0	0	13	13
14:15	0	2	0	0	0	0	2	2	3	0	0	1	0	0	0	0	1	2	2	0	0	15	15
14:30	0	0	0	0	0	0	3	2	3	0	0	2	1	0	0	0	0	2	0	0	0	13	13
14:45	0	0	0	1	0	0	2	5	4	0	0	0	0	2	0	0	1	3	0	0	0	18	18
<b>Total</b>	0	4	1	2	0	0	9	10	13	0	0	3	1	2	0	0	2	10	2	0	0	59	59
15:00	0	1	1	2	0	0	0	4	2	0	0	0	0	0	0	0	0	1	1	0	0	12	12
15:15	0	1	0	0	0	0	0	4	3	0	0	0	0	0	0	0	1	3	0	0	0	12	12
15:30	0	1	0	3	0	0	0	2	0	0	0	0	0	0	0	0	0	3	0	0	0	9	9
15:45	0	0	2	2	0	0	0	1	1	0	0	0	0	0	0	0	0	2	0	0	0	8	8
<b>Total</b>	0	3	3	7	0	0	0	11	6	0	0	0	0	0	0	0	1	9	1	0	0	41	41
16:00	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	1	3	0	0	0	6	6
16:15	0	1	0	2	0	0	1	0	0	0	0	0	0	0	0	0	1	4	0	0	0	9	9
16:30	0	1	1	0	0	0	1	1	1	0	0	0	0	0	0	0	0	3	0	0	0	8	8
16:45	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	4	0	0	0	7	7
<b>Total</b>	0	2	2	2	0	0	2	3	2	0	0	0	1	0	0	0	2	14	0	0	0	30	30
17:00	0	1	0	1	0	0	0	2	0	0	0	0	0	0	0	0	2	1	0	0	0	7	7
17:15	0	2	0	0	0	0	0	2	0	0	0	0	0	0	0	0	1	1	0	0	0	6	6
17:30	0	0	0	0	0	0	0	3	1	0	0	0	0	0	0	0	0	3	0	0	0	7	7
17:45	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	1	0	0	0	3	3
<b>Total</b>	0	3	0	1	0	0	0	9	1	0	0	0	0	0	0	0	3	6	0	0	0	23	23
18:00	0	1	0	2	0	0	0	4	0	0	0	0	0	0	0	0	0	2	0	0	0	9	9
18:15	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3
18:30	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	3	0	0	0	5	5
18:45	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1
<b>Total</b>	0	1	0	2	0	0	1	7	2	0	0	0	0	0	0	0	0	5	0	0	0	18	18



# Anoka County Highway Department

## Traffic Engineering Section

### Traffic Volume and Turning Movement Study

File Name : TMC 2254  
 Site Code :  
 Start Date : 07/28/2022  
 Page No : 4

Groups Printed- Trucks

Start Time	CSAH 78 (Hanson Blvd.) Southbound					CSAH 1 (Coon Rapids Blvd.) Westbound					Northbound					CSAH 1 (Coon Rapids Blvd.) Eastbound					Exclu. Total	Inclu. Total	Int. Total
	UTrn	Left	Thru	Right	Peds	UTrn	Left	Thru	Right	Peds	UTrn	Left	Thru	Right	Peds	UTrn	Left	Thru	Right	Peds			
19:00	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2	2
19:15	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	1	0	0	0	3	3
19:30	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	1	1	0	0	0	4	4
19:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	2
<b>Total</b>	0	0	0	1	0	0	0	4	1	0	0	0	0	0	0	0	1	4	0	0	0	11	11
20:00	0	0	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	0	0	0	0	0	0	1	0	0	0	1	1
20:30	0	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	3	0	0	0	6	6
20:45	0	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3
<b>Total</b>	0	2	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	4	0	0	0	10	10
21:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
21:15	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	2	2
21:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
21:45	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
<b>Total</b>	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	2	0	0	0	5	5
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
22:15	0	0	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	1	0	0	0	0	0	0	0	0	0	1	0	0	0	2	2
22:45	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
<b>Total</b>	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2	0	0	0	4	4
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:30	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
23:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
<b>Total</b>	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	2
<b>Grand Total</b>	0	82	13	63	0	0	26	171	88	0	0	15	13	17	0	0	42	174	11	0	0	715	715
Apprch %	0	51.9	8.2	39.9		0	9.1	60	30.9		0	33.3	28.9	37.8		0	18.5	76.7	4.8				
Total %	0	11.5	1.8	8.8		0	3.6	23.9	12.3		0	2.1	1.8	2.4		0	5.9	24.3	1.5		0	100	

# ANOKA COUNTY HIGHWAY

## PC-WARRANTS

### TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2254

Study Date : 01/02/2024

## Signal Warrants - Summary

### Major Street Approaches

Eastbound: CSAH 1 (Coon Rapids Blvd.)

Number of Lanes : 2+

Total Approach Volume: 9,122

Westbound: CSAH 1 (Coon Rapids Blvd.)

Number of Lanes : 2+

Total Approach Volume: 11,675

### Minor Street Approaches

Northbound: CSAH 78 (Hanson Blvd.)

Number of Lanes : 1

Total Approach Volume: 2,242

Southbound: CSAH 78 (Hanson Blvd.)

Number of Lanes : 1

Total Approach Volume: 5,297

### Warrant Summary (Rural Values Apply)

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

Warrant 1A - Minimum Vehicular Volume.....Satisfied

Required volumes reached for 17 hours, 8 are needed

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

Required volumes reached for 16 hours, 8 are needed

Warrant 1C - Combination of Warrants.....Satisfied

Required 1A volumes reached for 18 hours, 8 are needed

Required 1B volumes reached for 17 hours, 8 are needed

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

Number of hours (16) volumes exceed minimum >= minimum required (4).

Warrant 3 - Peak Hour.....Satisfied

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

Number of one hour periods (63) 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 2254

Study Date : 01/02/2024

## 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

17 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 = **420**  
  
Veh/Hr Minor = **105**

Time	Major Road				Total	Minor Road		Met?
	Major EB	+	Major WB	=		Minor NB	Minor SB	
	<b>CSAH 1 (Coon Rapids Blvd.)</b>					<b>CSAH 78 (Hanson Blvd.)</b>		
16:15 - 17:15	673	+	1224	=	1897	161	416	Yes
15:15 - 16:15	699	+	1008	=	1707	150	384	Yes
17:15 - 18:15	584	+	1057	=	1641	124	387	Yes
14:15 - 15:15	605	+	896	=	1501	120	362	Yes
13:15 - 14:15	550	+	735	=	1285	103	365	Yes
12:15 - 13:15	586	+	643	=	1229	140	321	Yes
18:15 - 19:15	439	+	729	=	1168	128	316	Yes
07:15 - 08:15	620	+	544	=	1164	184	312	Yes
11:15 - 12:15	535	+	586	=	1121	130	343	Yes
08:15 - 09:15	534	+	524	=	1058	165	282	Yes
09:15 - 10:15	446	+	556	=	1002	119	266	Yes
10:15 - 11:15	458	+	529	=	987	126	279	Yes
19:15 - 20:15	411	+	528	=	939	83	234	Yes
06:15 - 07:15	489	+	355	=	844	135	266	Yes
20:15 - 21:15	333	+	498	=	831	101	208	Yes
21:15 - 22:15	270	+	366	=	636	53	153	Yes
05:15 - 06:15	329	+	153	=	482	75	120	Yes
22:15 - 23:15	173	+	295	=	468	47	97	No
05:00 - 06:00	285	+	116	=	401	67	101	No
22:30 - 23:30	150	+	249	=	399	36	92	No
22:45 - 23:45	159	+	210	=	369	34	83	No
04:45 - 05:45	248	+	97	=	345	54	79	No
23:00 - 00:00	143	+	183	=	326	25	63	No
04:30 - 05:30	181	+	85	=	266	52	52	No
23:15 - 00:15	88		134		222	16	45	No

# ANOKA COUNTY HIGHWAY

## PC-WARRANTS

### TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2254

Study Date : 01/02/2024

## 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

16 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 EB	+	Major WB	=		Minor NB	Minor SB	
	CSAH 1 (Coon Rapids Blvd.)					CSAH 78 (Hanson Blvd.)		
16:45 - 17:45	625	+	1208	=	1833	144	429	Yes
15:45 - 16:45	700	+	1100	=	1800	146	399	Yes
14:45 - 15:45	639	+	963	=	1602	133	345	Yes
13:45 - 14:45	591	+	835	=	1426	99	380	Yes
17:45 - 18:45	520	+	870	=	1390	126	344	Yes
12:45 - 13:45	574	+	681	=	1255	137	352	Yes
11:45 - 12:45	561	+	612	=	1173	132	335	Yes
07:45 - 08:45	554	+	578	=	1132	174	298	Yes
06:45 - 07:45	599	+	452	=	1051	172	298	Yes
18:45 - 19:45	421	+	623	=	1044	103	270	Yes
09:45 - 10:45	476	+	554	=	1030	126	262	Yes
10:45 - 11:45	465	+	540	=	1005	134	312	Yes
08:45 - 09:45	484	+	510	=	994	131	265	Yes
19:45 - 20:45	368	+	498	=	866	88	227	Yes
20:45 - 21:45	330	+	449	=	779	89	178	Yes
05:45 - 06:45	390	+	243	=	633	105	201	Yes
05:30 - 06:30	358	+	183	=	541	89	163	No
21:45 - 22:45	177	+	326	=	503	49	119	No
05:15 - 06:15	329	+	153	=	482	75	120	No
22:00 - 23:00	165	+	314	=	479	56	110	No
22:15 - 23:15	173	+	295	=	468	47	97	No
05:00 - 06:00	285	+	116	=	401	67	101	No
22:30 - 23:30	150	+	249	=	399	36	92	No
22:45 - 23:45	159	+	210	=	369	34	83	No
04:45 - 05:45	248		97		345	54	79	No

# ANOKA COUNTY HIGHWAY

## PC-WARRANTS

### TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2254

Study Date : 01/02/2024

## 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

18 hours meet 1A minimums.  
17 hours meet 1B 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  
Warrant 1A 1B  
Veh/Hr Major = **336 504**

Veh/Hr Minor = **84 42**

#### Major Road CSAH 1 (Coon Rapids Blvd.)

#### Minor Road CSAH 78 (Hanson Blvd.)

Time	Major EB	+	Major WB	=	Total	Minor NB	Minor SB	Met1A?
16:00 - 17:00	678	+	1190	=	1868	152	398	Yes
17:00 - 18:00	619	+	1128	=	1747	130	401	Yes
15:00 - 16:00	658	+	988	=	1646	147	373	Yes
14:00 - 15:00	602	+	892	=	1494	104	376	Yes
18:00 - 19:00	477	+	791	=	1268	126	345	Yes
13:00 - 14:00	575	+	670	=	1245	126	345	Yes
12:00 - 13:00	562	+	668	=	1230	133	345	Yes
07:00 - 08:00	620	+	521	=	1141	179	328	Yes
08:00 - 09:00	537	+	525	=	1062	168	280	Yes
11:00 - 12:00	502	+	542	=	1044	132	325	Yes
09:00 - 10:00	470	+	549	=	1019	124	266	Yes
10:00 - 11:00	458	+	523	=	981	128	260	Yes

Time	Major EB	+	Major WB	=	Total	Minor NB	Minor SB	Met1B?
16:30 - 17:30	677	+	1239	=	1916	155	432	Yes
15:30 - 16:30	693	+	1065	=	1758	146	379	Yes
14:30 - 15:30	627	+	936	=	1563	141	344	Yes
17:30 - 18:30	532	+	981	=	1513	127	363	Yes
13:30 - 14:30	569	+	758	=	1327	85	387	Yes
12:30 - 13:30	575	+	678	=	1253	140	331	Yes
11:30 - 12:30	550	+	581	=	1131	130	346	Yes
07:30 - 08:30	574	+	553	=	1127	184	282	Yes
18:30 - 19:30	446	+	633	=	1079	110	299	Yes
08:30 - 09:30	517	+	515	=	1032	139	295	Yes
10:30 - 11:30	473	+	546	=	1019	136	284	Yes
06:30 - 07:30	566	+	430	=	996	154	295	Yes

# ANOKA COUNTY HIGHWAY

## PC-WARRANTS

### TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2254

Study Date : 01/02/2024

## 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.

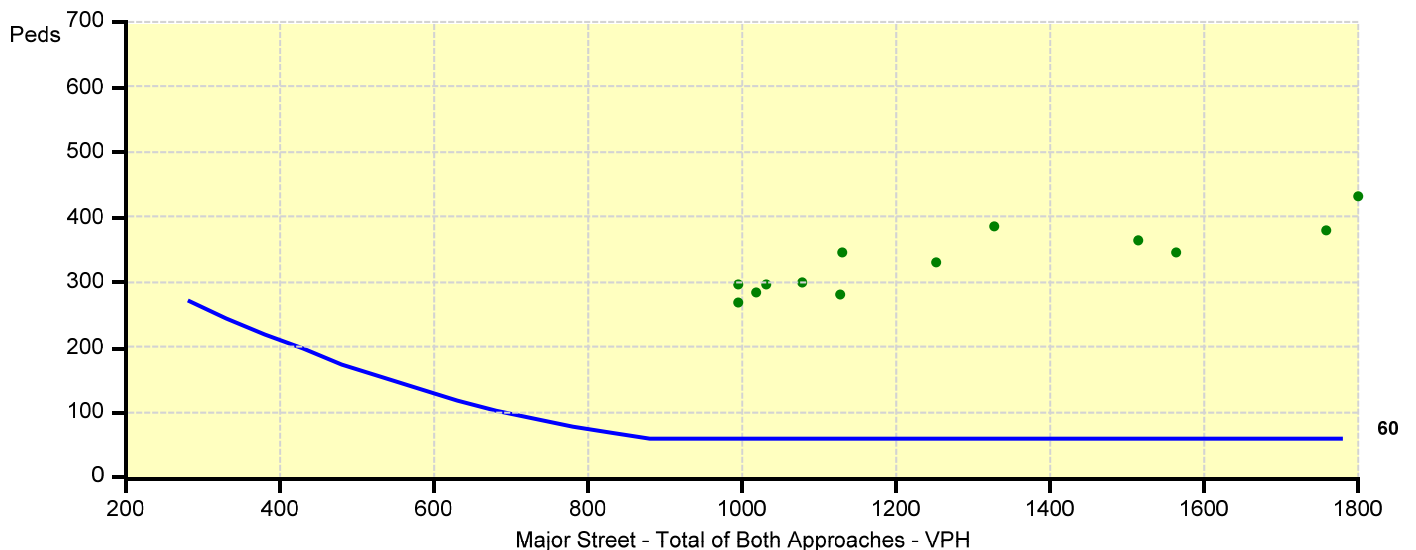
#### Summary

16 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 (Coon Rapids Blvd.)				Total	Minor Road CSAH 78 (Hanson Blvd.)		Met?
	Major EB	+	Major WB	=		Minor NB	Minor SB	
16:30 - 17:30	677	+	1239	=	1916	155	432	Yes
15:30 - 16:30	693	+	1065	=	1758	146	379	Yes
14:30 - 15:30	627	+	936	=	1563	141	344	Yes
17:30 - 18:30	532	+	981	=	1513	127	363	Yes
13:30 - 14:30	569	+	758	=	1327	85	387	Yes
12:30 - 13:30	575	+	678	=	1253	140	331	Yes
11:30 - 12:30	550	+	581	=	1131	130	346	Yes
07:30 - 08:30	574	+	553	=	1127	184	282	Yes
18:30 - 19:30	446	+	633	=	1079	110	299	Yes
08:30 - 09:30	517	+	515	=	1032	139	295	Yes
10:30 - 11:30	473	+	546	=	1019	136	284	Yes
06:30 - 07:30	566	+	430	=	996	154	295	Yes





# ANOKA COUNTY HIGHWAY

## PC-WARRANTS

### TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2254

Study Date : 01/02/2024

## 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

60 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 (Coon Rapids Blvd.)					Minor Road CSAH 78 (Hanson Blvd.)		Met?
	Major EB	+	Major WB	=	Total	Minor NB	Minor SB	
16:30 - 17:30	677	+	1239	=	1916	155	432	Yes
16:15 - 17:15	673	+	1224	=	1897	161	416	Yes
16:00 - 17:00	678	+	1190	=	1868	152	398	Yes
16:45 - 17:45	625	+	1208	=	1833	144	429	Yes
15:45 - 16:45	700	+	1100	=	1800	146	399	Yes
15:30 - 16:30	693	+	1065	=	1758	146	379	Yes
17:00 - 18:00	619	+	1128	=	1747	130	401	Yes
15:15 - 16:15	699	+	1008	=	1707	150	384	Yes
15:00 - 16:00	658	+	988	=	1646	147	373	Yes
17:15 - 18:15	584	+	1057	=	1641	124	387	Yes
14:45 - 15:45	639	+	963	=	1602	133	345	Yes
14:30 - 15:30	627	+	936	=	1563	141	344	Yes

