

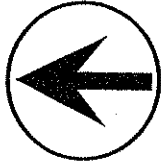
Date: 05/18/09

Count Number: TMC0908

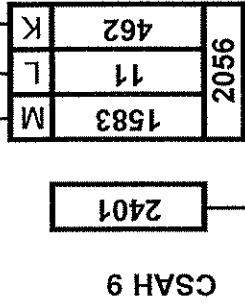
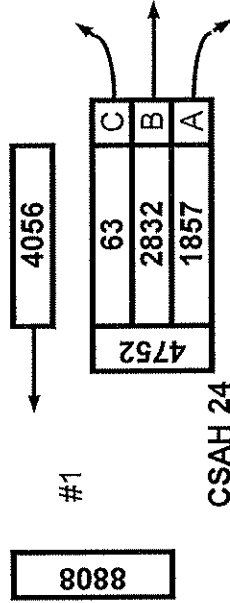
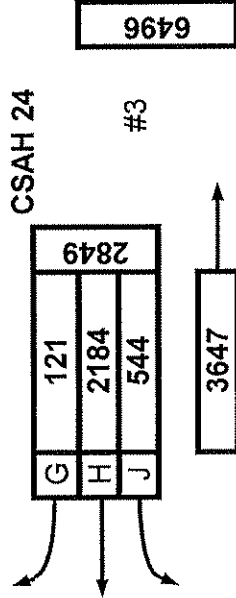
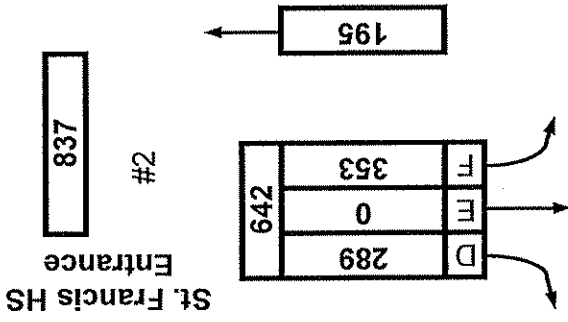
Location: CSAH 24 (Bridge St.)

@ CSAH 9 (Lake George Blvd.)

Collection Period: 6:00AM - 10:00PM



North



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

Anoka County Highway Department  
 Traffic Volume and Turning  
 Movement Study

Date : 05/18/09

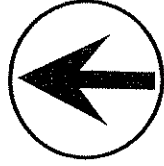
Count Number : TMC0908

Location : CSAH 24 (Bridge St.)

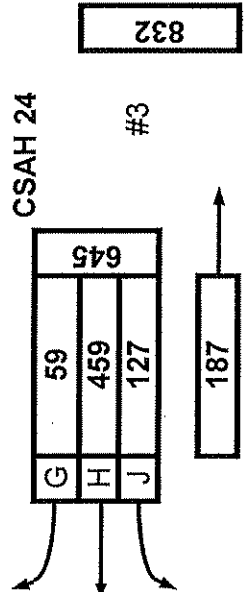
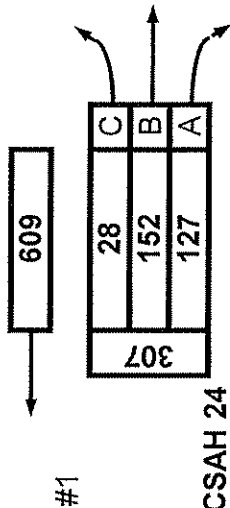
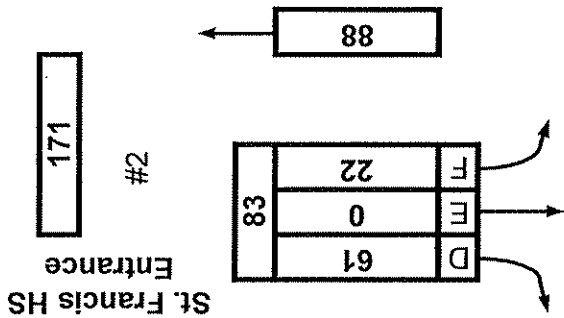
@ CSAH 9 (Lake George Blvd.)

Collection Period : AM PEAK

Hour : 6:30 - 7:30AM



North



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

Anoka County Highway Department  
 Traffic Volume and Turning  
 Movement Study

Date : 05/18/09

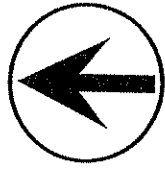
Count Number : TMC0908

Location : CSAH 24 (Bridge St.)

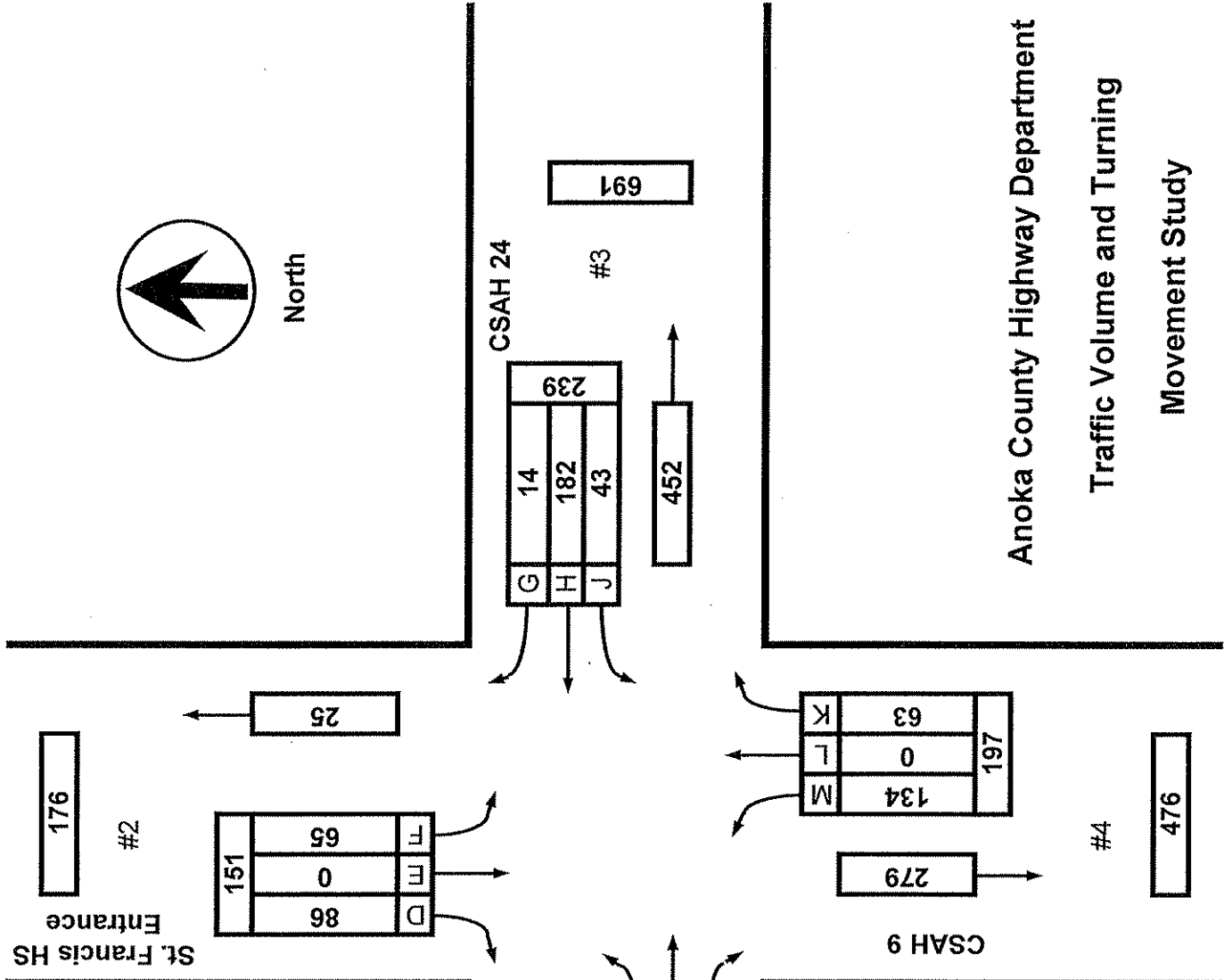
@ CSAH 9 (Lake George Blvd.)

Collection Period : PM PEAK

Hour : 2:15 - 3:15PM



North



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

Anoka County Highway Department  
 Traffic Volume and Turning  
 Movement Study



# Anoka County Highway Department

## Traffic Engineering Section

### Traffic Volume and Turning Movement Study

Weather: Sunny and Hot  
 Counter: DB-400  
 Counted by: Laura/Jake

File Name : TMC0908  
 Site Code : 09080202  
 Start Date : 05/18/2009  
 Page No : 1

Groups Printed- Unshifted

Start Time	St. Francis HS Entrance Southbound					CSAH 24 Westbound					CSAH 9 Northbound					CSAH 24 Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	Heavy	App. Total	Left	Thru	Right	Heavy	App. Total	Left	Thru	Right	Heavy	App. Total	Left	Thru	Right	Heavy	App. Total			
06:00	0	0	0	0	0	26	36	3	3	65	11	0	5	0	16	6	28	25	7	59	10	140	150
06:15	0	0	0	0	0	27	41	3	0	71	16	0	1	0	17	0	20	30	1	50	1	138	139
06:30	0	0	0	0	0	38	51	4	1	93	13	0	4	0	17	0	26	32	1	58	2	168	170
06:45	0	0	0	0	0	24	150	19	21	193	31	0	5	2	36	0	39	32	5	71	28	300	328
Total	0	0	0	0	0	115	278	29	25	422	71	0	15	2	86	6	113	119	14	238	41	746	787
07:00	11	0	56	43	67	41	139	18	4	198	25	1	1	1	27	21	38	34	9	93	57	385	442
07:15	11	0	5	0	16	24	119	18	1	161	20	0	3	1	23	7	49	29	2	85	4	285	289
07:30	1	0	0	0	1	29	39	0	1	68	8	0	0	0	8	0	29	27	4	56	5	133	138
07:45	0	0	2	0	2	20	39	0	0	59	17	0	2	1	19	0	36	17	5	53	6	133	139
Total	23	0	63	43	86	114	336	36	6	486	70	1	6	3	77	28	152	107	20	287	72	936	1008
08:00	0	0	1	1	1	11	30	0	0	41	6	0	4	1	10	0	39	31	9	70	11	122	133
08:15	0	0	0	0	0	11	21	0	3	32	11	0	1	0	12	0	21	16	5	37	8	81	89
08:30	0	0	0	0	0	4	15	0	0	19	8	0	0	0	8	0	27	24	4	51	4	78	82
08:45	2	0	0	1	2	7	12	0	3	19	13	0	2	1	15	0	29	18	1	47	6	83	89
Total	2	0	1	2	3	33	78	0	6	111	38	0	7	2	45	0	116	89	19	205	29	364	393
09:00	1	0	1	1	2	3	10	0	1	13	11	1	1	3	13	1	38	26	2	65	7	93	100
09:15	0	0	0	0	0	0	18	0	1	18	0	0	1	0	1	0	34	21	4	55	5	74	79
09:30	0	0	1	1	1	6	7	0	0	13	10	0	0	0	10	0	37	23	7	60	8	84	92
09:45	2	0	0	1	2	10	16	0	0	26	13	0	10	1	23	0	28	20	1	48	3	99	102
Total	3	0	2	3	5	19	51	0	2	70	34	1	12	4	47	1	137	90	14	228	23	350	373
10:00	3	0	1	1	4	8	5	0	1	13	7	0	1	1	8	0	30	29	1	59	4	84	88
10:15	2	0	0	2	2	7	21	0	2	28	4	0	4	1	8	0	27	22	4	49	9	87	96
10:30	0	0	0	0	0	1	16	0	0	17	10	0	5	0	15	0	38	15	6	53	6	85	91
10:45	0	0	0	0	0	5	11	0	1	16	9	0	1	1	10	0	12	23	3	35	5	61	66
Total	5	0	1	3	6	21	53	0	4	74	30	0	11	3	41	0	107	89	14	196	24	317	341
11:00	2	0	0	1	2	3	11	0	1	14	5	0	0	0	5	0	44	19	1	63	3	84	87
11:15	0	0	0	0	0	2	13	2	1	17	8	0	0	0	8	0	42	29	9	71	10	96	106
11:30	0	0	0	0	0	6	26	1	2	33	18	0	8	2	26	2	32	18	3	52	7	111	118
11:45	1	0	1	1	2	2	18	2	0	22	17	1	4	2	22	1	32	14	3	47	6	93	99
Total	3	0	1	2	4	13	68	5	4	86	48	1	12	4	61	3	150	80	16	233	26	384	410
12:00	0	0	1	0	1	7	33	10	0	50	25	0	7	3	32	0	18	10	1	28	4	111	115
12:15	0	0	0	0	0	6	21	0	0	27	22	1	8	0	31	0	39	15	4	54	4	112	116
12:30	0	0	0	0	0	7	17	1	0	25	9	0	1	2	10	0	28	16	2	44	4	79	83
12:45	1	0	0	0	1	0	13	0	1	13	19	0	1	0	20	0	25	32	1	57	2	91	93
Total	1	0	1	0	2	20	84	11	1	115	75	1	17	5	93	0	110	73	8	183	14	393	407
13:00	0	0	0	0	0	0	8	0	2	8	2	0	0	0	2	0	34	18	0	52	2	62	64
13:15	0	0	0	0	0	7	29	0	5	36	23	0	3	5	26	0	35	27	7	62	17	124	141
13:30	1	0	0	0	1	8	34	0	1	42	11	0	4	1	15	0	21	20	1	41	3	99	102
13:45	4	0	1	0	5	4	20	0	3	24	35	0	5	2	40	0	25	13	6	38	11	107	118
Total	5	0	1	0	6	19	91	0	11	110	71	0	12	8	83	0	115	78	14	193	33	392	425
14:00	6	0	2	0	8	12	53	2	4	67	33	0	13	4	46	0	40	25	6	65	14	186	200
14:15	12	0	6	5	18	6	44	5	2	55	47	0	11	0	58	8	57	33	7	98	14	229	243
14:30	26	0	59	38	85	12	50	4	2	66	25	0	22	1	47	1	104	90	2	195	43	393	436
14:45	15	0	14	0	29	12	60	4	0	76	25	0	14	0	39	1	99	64	33	164	33	308	341
Total	59	0	81	43	140	42	207	15	8	284	130	0	60	5	190	10	300	212	48	522	104	1116	1220
15:00	12	0	7	0	19	13	28	1	2	42	37	0	16	1	53	1	64	49	4	114	7	228	235
15:15	7	0	8	0	15	10	32	3	2	45	24	0	12	0	36	2	63	34	2	99	4	195	199
15:30	11	0	6	0	17	9	36	1	3	46	27	1	18	3	46	1	64	30	2	95	8	204	212
15:45	6	0	1	0	7	5	36	0	2	41	37	0	7	1	44	0	60	36	0	96	3	188	191
Total	36	0	22	0	58	37	132	5	9	174	125	1	53	5	179	4	251	149	8	404	22	815	837
16:00	10	0	2	0	12	8	43	0	1	51	45	0	15	0	60	0	87	32	1	119	2	242	244
16:15	2	0	3	0	5	2	27	3	1	32	36	0	11	2	47	2	64	30	0	96	3	180	183
16:30	11	0	4	0	15	6	40	3	1	49	46	3	10	1	59	0	69	47	0	116	2	239	241
16:45	4	0	3	0	7	6	58	2	7	66	41	0	17	1	58	1	79	40	0	120	8	251	259
Total	27	0	12	0	39	22	168	8	10	198	168	3	53	4	224	3	299	149	1	451	15	912	927
17:00	3	0	9	0	12	3	43	1	2	47	61	0	30	1	91	0	75	27	3	102	6	252	258
17:15	6	0	4	0	10	5	25	0	0	30	40	0	14	1	54	1	73	39	0	113	1	207	208
17:30	7	0	6	0	13	5	30	2	1	37	33	0	15	0	48	0	56	34	0	90	1	188	189
17:45	6	0	1	0	7	5	28	2	1	35	43	0	10	1	53	0	54	34	2	88	4	183	187
Total	22	0	20	0	42	18	126	5	4	149	177	0	69	3	246	1	258	134	5	393	12	830	842



# Anoka County Highway Department

## Traffic Engineering Section

### Traffic Volume and Turning Movement Study

Weather: Sunny and Hot  
 Counter: DB-400  
 Counted by: Laura/Jake

File Name : TMC0908  
 Site Code : 09080202  
 Start Date : 05/18/2009  
 Page No : 2

Groups Printed- Unshifted

Start Time	St. Francis HS Entrance Southbound					CSAH 24 Westbound					CSAH 9 Northbound					CSAH 24 Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	Heavy	App. Total	Left	Thru	Right	Heavy	App. Total	Left	Thru	Right	Heavy	App. Total	Left	Thru	Right	Heavy	App. Total			
18:00	6	0	10	0	16	9	52	0	0	61	49	0	14	0	63	1	47	30	1	78	1	218	219
18:15	8	0	9	0	17	14	91	0	1	105	89	1	14	0	104	0	52	26	0	78	1	304	305
18:30	17	0	5	0	22	4	69	5	0	78	83	0	15	0	98	1	54	32	1	87	1	285	286
18:45	5	0	6	0	11	5	59	0	2	64	67	0	12	0	79	0	41	32	0	73	2	227	229
<b>Total</b>	<b>36</b>	<b>0</b>	<b>30</b>	<b>0</b>	<b>66</b>	<b>32</b>	<b>271</b>	<b>5</b>	<b>3</b>	<b>308</b>	<b>288</b>	<b>1</b>	<b>55</b>	<b>0</b>	<b>344</b>	<b>2</b>	<b>194</b>	<b>120</b>	<b>2</b>	<b>316</b>	<b>5</b>	<b>1034</b>	<b>1039</b>
19:00	1	0	2	0	3	5	53	0	1	58	62	0	10	0	72	0	44	24	0	68	1	201	202
19:15	7	0	3	0	10	3	24	0	0	27	24	0	4	0	28	0	43	21	2	64	2	129	131
19:30	0	0	0	0	0	1	44	0	1	45	40	0	15	0	55	3	59	21	0	83	1	183	184
19:45	13	0	4	0	17	4	8	0	0	12	31	0	7	1	38	0	54	38	0	92	1	159	160
<b>Total</b>	<b>21</b>	<b>0</b>	<b>9</b>	<b>0</b>	<b>30</b>	<b>13</b>	<b>129</b>	<b>0</b>	<b>2</b>	<b>142</b>	<b>157</b>	<b>0</b>	<b>36</b>	<b>1</b>	<b>193</b>	<b>3</b>	<b>200</b>	<b>104</b>	<b>2</b>	<b>307</b>	<b>5</b>	<b>672</b>	<b>677</b>
20:00	21	0	4	0	25	0	11	0	0	11	11	0	8	0	19	0	49	44	0	93	0	148	148
20:15	5	0	3	0	8	5	6	0	0	11	15	0	6	0	21	0	33	22	1	55	1	95	96
20:30	14	0	2	0	16	4	14	0	1	18	9	0	11	0	20	0	48	48	0	96	1	150	151
20:45	35	0	15	0	50	7	28	0	1	35	18	0	6	1	24	1	74	45	0	120	2	229	231
<b>Total</b>	<b>75</b>	<b>0</b>	<b>24</b>	<b>0</b>	<b>99</b>	<b>16</b>	<b>59</b>	<b>0</b>	<b>2</b>	<b>75</b>	<b>53</b>	<b>0</b>	<b>31</b>	<b>1</b>	<b>84</b>	<b>1</b>	<b>204</b>	<b>159</b>	<b>1</b>	<b>364</b>	<b>4</b>	<b>622</b>	<b>626</b>
21:00	22	0	16	0	38	4	30	2	1	36	19	0	5	0	24	1	49	35	0	85	1	183	184
21:15	7	0	3	0	10	2	8	0	0	10	9	0	0	0	9	0	30	28	0	58	0	87	87
21:30	5	0	2	0	7	2	6	0	0	8	9	0	3	0	12	0	28	21	0	49	0	76	76
21:45	1	0	0	0	1	2	9	0	0	11	11	2	5	0	18	0	19	21	0	40	0	70	70
<b>Total</b>	<b>35</b>	<b>0</b>	<b>21</b>	<b>0</b>	<b>56</b>	<b>10</b>	<b>53</b>	<b>2</b>	<b>1</b>	<b>65</b>	<b>48</b>	<b>2</b>	<b>13</b>	<b>0</b>	<b>63</b>	<b>1</b>	<b>126</b>	<b>105</b>	<b>0</b>	<b>232</b>	<b>1</b>	<b>416</b>	<b>417</b>
<b>Grand Total</b>	<b>353</b>	<b>0</b>	<b>289</b>	<b>96</b>	<b>642</b>	<b>544</b>	<b>2184</b>	<b>121</b>	<b>98</b>	<b>2849</b>	<b>1583</b>	<b>11</b>	<b>462</b>	<b>50</b>	<b>2056</b>	<b>63</b>	<b>2832</b>	<b>1857</b>	<b>186</b>	<b>4752</b>	<b>430</b>	<b>10299</b>	<b>10729</b>
<b>Arch %</b>	<b>55</b>	<b>0</b>	<b>45</b>			<b>19.1</b>	<b>76.7</b>	<b>4.2</b>			<b>77</b>	<b>0.5</b>	<b>22.5</b>			<b>1.3</b>	<b>59.6</b>	<b>39.1</b>					
<b>Total %</b>	<b>3.4</b>	<b>0</b>	<b>2.8</b>		<b>6.2</b>	<b>5.3</b>	<b>21.2</b>	<b>1.2</b>		<b>27.7</b>	<b>15.4</b>	<b>0.1</b>	<b>4.5</b>		<b>20</b>	<b>0.6</b>	<b>27.5</b>	<b>18</b>		<b>46.1</b>	<b>4</b>	<b>96</b>	

Start Time	St. Francis HS Entrance Southbound					CSAH 24 Westbound					CSAH 9 Northbound					CSAH 24 Eastbound					Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total					
06:30	0	0	0	0	38	51	4	93	13	0	4	17	0	26	32	58	168				
08:45	0	0	0	0	24	150	19	193	31	0	5	36	0	39	32	71	300				
07:00	11	0	56	67	41	139	18	198	25	1	1	27	21	38	34	93	385				
07:15	11	0	5	16	24	119	18	161	20	0	3	23	7	49	29	85	285				
<b>Total Volume</b>	<b>22</b>	<b>0</b>	<b>61</b>	<b>83</b>	<b>127</b>	<b>459</b>	<b>59</b>	<b>645</b>	<b>89</b>	<b>1</b>	<b>13</b>	<b>103</b>	<b>28</b>	<b>152</b>	<b>127</b>	<b>307</b>	<b>1138</b>				
<b>% App. Total</b>	<b>26.5</b>	<b>0</b>	<b>73.5</b>		<b>19.7</b>	<b>71.2</b>	<b>9.1</b>		<b>86.4</b>	<b>1</b>	<b>12.6</b>		<b>9.1</b>	<b>49.5</b>	<b>41.4</b>						
<b>PHF</b>	<b>.500</b>	<b>.000</b>	<b>.272</b>	<b>.310</b>	<b>.774</b>	<b>.765</b>	<b>.776</b>	<b>.814</b>	<b>.718</b>	<b>.250</b>	<b>.650</b>	<b>.715</b>	<b>.333</b>	<b>.776</b>	<b>.934</b>	<b>.825</b>	<b>.739</b>				

Peak Hour Analysis From 12:00 to 21:45 - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 14:15

14:15	12	0	6	18	6	44	5	55	47	0	11	58	8	57	33	98	229
14:30	26	0	59	85	12	50	4	66	25	0	22	47	1	104	90	195	393
14:45	15	0	14	29	12	60	4	76	25	0	14	39	1	99	64	164	308
15:00	12	0	7	19	13	28	1	42	37	0	16	53	1	64	49	114	228
<b>Total Volume</b>	<b>65</b>	<b>0</b>	<b>86</b>	<b>151</b>	<b>43</b>	<b>182</b>	<b>14</b>	<b>239</b>	<b>134</b>	<b>0</b>	<b>63</b>	<b>197</b>	<b>11</b>	<b>324</b>	<b>236</b>	<b>571</b>	<b>1158</b>
<b>% App. Total</b>	<b>43</b>	<b>0</b>	<b>57</b>		<b>18</b>	<b>76.2</b>	<b>5.9</b>		<b>68</b>	<b>0</b>	<b>32</b>		<b>1.9</b>	<b>56.7</b>	<b>41.3</b>		
<b>PHF</b>	<b>.625</b>	<b>.000</b>	<b>.364</b>	<b>.444</b>	<b>.827</b>	<b>.758</b>	<b>.700</b>	<b>.786</b>	<b>.713</b>	<b>.000</b>	<b>.716</b>	<b>.849</b>	<b>.344</b>	<b>.779</b>	<b>.656</b>	<b>.732</b>	<b>.737</b>

**ANOKA COUNTY HIGHWAY**

**PC-WARRANTS**

**TRAFFIC SIGNAL WARRANT ANALYSIS**

**Signal Warrants - Summary**

**Major Street Approaches**

**Eastbound: CSAH 24**

Number of Lanes: 1  
Approach Speed: 40  
Total Approach Volume: 4,752

**Westbound: CSAH 24**

Number of Lanes: 1  
Approach Speed: 40  
Total Approach Volume: 2,849

**Minor Street Approaches**

**Northbound: CSAH 9**

Number of Lanes: 2  
  
Total Approach Volume: 2,056

**Southbound: St. Francis HS Entrance**

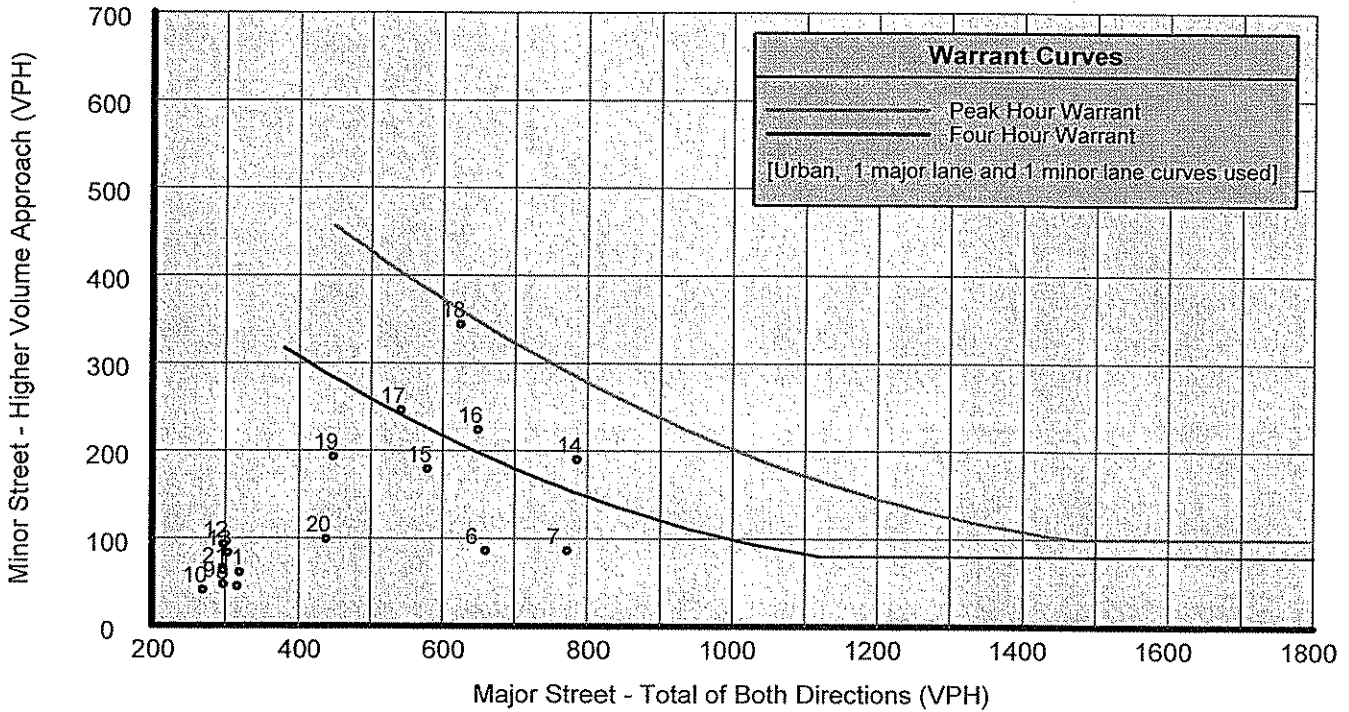
Number of Lanes: 1  
  
Total Approach Volume: 642

**Warrant Summary (Urban values apply.)**

<b>Warrant 1 - Eight Hour Vehicular Volumes</b> .....	<b>Not Satisfied</b>
<b>Warrant 1A - Minimum Vehicular Volume</b> .....	<b>Not Satisfied</b>
Required volumes reached for 5 hours, 8 are needed	
<b>Warrant 1B - Interruption of Continuous Traffic</b> .....	<b>Not Satisfied</b>
Required volumes reached for 1 hours, 8 are needed	
<b>Warrant 1 A&amp;B - Combination of Warrants</b> .....	<b>Not Satisfied</b>
Required volumes reached for 3 hours, 8 are needed	
<b>Warrant 2 - Four Hour Volumes</b> .....	<b>Satisfied</b>
Number of hours (4) volumes exceed minimum $\geq$ minimum required (4).	
<b>Warrant 3 - Peak Hour</b> .....	<b>Satisfied</b>
<b>Warrant 3A - Peak Hour Delay</b> .....	<b>Satisfied</b>
Number of hours (4) volumes exceed minimum $\geq$ required (1). Delay data not evaluated.	
<b>Warrant 3B - Peak Hour Volumes</b> .....	<b>Not Satisfied</b>
Volumes do not exceed minimums for any hour.	
<b>Warrant 4 - Pedestrian Volumes</b> .....	<b>Not Evaluated</b>
<b>Warrant 5 - School Crossing</b> .....	<b>Not Evaluated</b>
<b>Warrant 6 - Coordinated Signal System</b> .....	<b>Not Evaluated</b>
<b>Warrant 7 - Crash Experience</b> .....	<b>Not Evaluated</b>
<b>Warrant 8 - Roadway Network</b> .....	<b>Not Evaluated</b>

# ANOKA COUNTY HIGHWAY PC-WARRANTS TRAFFIC SIGNAL WARRANT ANALYSIS

## Signal Warrants - Summary



### Analysis of 8-Hour Volume Warrants:

Hour Begin	Major Total	Higher Minor Vol	Dir	War-1A			War-1B			War-1A&B		
				Major Crit	Minor Crit	Meets?	Major Crit	Minor Crit	Meets?	Major Crit	Minor Crit	Meets?
00:00	0	0	NB	500-No	200-No	---	750-No	100-No	---	600-No	160-No	---
01:00	0	0	NB	500-No	200-No	---	750-No	100-No	---	600-No	160-No	---
02:00	0	0	NB	500-No	200-No	---	750-No	100-No	---	600-No	160-No	---
03:00	0	0	NB	500-No	200-No	---	750-No	100-No	---	600-No	160-No	---
04:00	0	0	NB	500-No	200-No	---	750-No	100-No	---	600-No	160-No	---
05:00	0	0	NB	500-No	200-No	---	750-No	100-No	---	600-No	160-No	---
06:00	660	86	NB	500-Yes	150-No	Major	750-No	75-Yes	Minor	600-Yes	120-No	Major
07:00	773	86	SB	500-Yes	200-No	Major	750-Yes	100-No	Major	600-Yes	160-No	Major
08:00	316	45	NB	500-No	150-No	---	750-No	75-No	---	600-No	120-No	---
09:00	298	47	NB	500-No	150-No	---	750-No	75-No	---	600-No	120-No	---
10:00	270	41	NB	500-No	150-No	---	750-No	75-No	---	600-No	120-No	---
11:00	319	61	NB	500-No	150-No	---	750-No	75-No	---	600-No	120-No	---
12:00	298	93	NB	500-No	150-No	---	750-No	75-Yes	Minor	600-No	120-No	---
13:00	303	83	NB	500-No	150-No	---	750-No	75-Yes	Minor	600-No	120-No	---
14:00	786	190	NB	500-Yes	150-Yes	Both	750-Yes	75-Yes	Both	600-Yes	120-Yes	Both
15:00	578	179	NB	500-Yes	150-Yes	Both	750-No	75-Yes	Minor	600-No	120-Yes	Minor
16:00	649	224	NB	500-Yes	150-Yes	Both	750-No	75-Yes	Minor	600-Yes	120-Yes	Both
17:00	542	246	NB	500-Yes	150-Yes	Both	750-No	75-Yes	Minor	600-No	120-Yes	Minor
18:00	624	344	NB	500-Yes	150-Yes	Both	750-No	75-Yes	Minor	600-Yes	120-Yes	Both
19:00	449	193	NB	500-No	150-Yes	Minor	750-No	75-Yes	Minor	600-No	120-Yes	Minor
20:00	439	99	SB	500-No	200-No	---	750-No	100-No	---	600-No	160-No	---
21:00	297	63	NB	500-No	150-No	---	750-No	75-No	---	600-No	120-No	---
22:00	0	0	NB	500-No	200-No	---	750-No	100-No	---	600-No	160-No	---
23:00	0	0	NB	500-No	200-No	---	750-No	100-No	---	600-No	160-No	---

**ANOKA COUNTY HIGHWAY  
PC-WARRANTS**

TRAFFIC SIGNAL WARRANT ANALYSIS

**Multi-Way Stop Warrant Report**

**Major Street Approaches**

**Eastbound: CSAH 24**

Total Approach Volume: 4,752

Approach Speed: 40

**Westbound: CSAH 24**

Total Approach Volume: 2,849

Approach Speed: 40

**Minor Street Approaches**

**Northbound: CSAH 9**

Total Approach Volume: 2,056

**Southbound: St. Francis HS Entrance**

Total Approach Volume: 642

**Warrant Summary**

**Criteria A - Interim Measure** ..... Not Evaluated

If traffic signals are justified, stop signs can be installed as an interim measure.

**Criteria B - Crash Experience** ..... Not Evaluated

**Criteria C - Minimum Volumes and Delays** ..... Not Satisfied

Delay data not evaluated

Required volumes reached for 7 hours, 8 are needed

**Criteria D - 80% of Volumes, Delays, and Crashes** ..... Not Evaluated

Delay data not evaluated

Number of crashes (-1) is less than the minimum required (4).

Required volumes reached for 0 hours, 8 are needed

**Analysis of 8-Hour Volume Warrants:**

Time	Major Total	Minor Total	Crit C			Crit D		
			Major	Minor Crit	Meets?	Major Crit	Minor Crit	Meets?
13:45 - 14:45	608	307	300-Yes	200-Yes	Both	240-Yes	160-Yes	Both
14:45 - 15:45	681	254	300-Yes	200-Yes	Both	240-Yes	160-Yes	Both
15:45 - 16:45	600	249	300-Yes	200-Yes	Both	240-Yes	160-Yes	Both
16:45 - 17:45	605	293	300-Yes	200-Yes	Both	240-Yes	160-Yes	Both
17:45 - 18:45	610	380	300-Yes	200-Yes	Both	240-Yes	160-Yes	Both
18:45 - 19:45	482	258	300-Yes	200-Yes	Both	240-Yes	160-Yes	Both
20:15 - 21:15	456	201	300-Yes	200-Yes	Both	240-Yes	160-Yes	Both
05:45 - 06:45	396	50	300-Yes	200-No	Major	240-Yes	160-No	Major
06:00 - 07:00	660	86	300-Yes	200-No	Major	240-Yes	160-No	Major
06:15 - 07:15	827	164	300-Yes	200-No	Major	240-Yes	160-Yes	Both
06:30 - 07:30	952	186	300-Yes	200-No	Major	240-Yes	160-Yes	Both
06:45 - 07:45	925	178	300-Yes	200-No	Major	240-Yes	160-Yes	Both
07:00 - 08:00	773	163	300-Yes	200-No	Major	240-Yes	160-Yes	Both
07:15 - 08:15	593	80	300-Yes	200-No	Major	240-Yes	160-No	Major
07:30 - 08:30	416	53	300-Yes	200-No	Major	240-Yes	160-No	Major
07:45 - 08:45	362	52	300-Yes	200-No	Major	240-Yes	160-No	Major
08:00 - 09:00	316	48	300-Yes	200-No	Major	240-Yes	160-No	Major
10:45 - 11:45	301	51	300-Yes	200-No	Major	240-Yes	160-No	Major
11:00 - 12:00	319	65	300-Yes	200-No	Major	240-Yes	160-No	Major
11:15 - 12:15	320	91	300-Yes	200-No	Major	240-Yes	160-No	Major
11:30 - 12:30	313	114	300-Yes	200-No	Major	240-Yes	160-No	Major
12:45 - 13:45	311	65	300-Yes	200-No	Major	240-Yes	160-No	Major
13:00 - 14:00	303	89	300-Yes	200-No	Major	240-Yes	160-No	Major
13:15 - 14:15	375	141	300-Yes	200-No	Major	240-Yes	160-No	Major





**NORTH**

**COUNT LOCATION:**

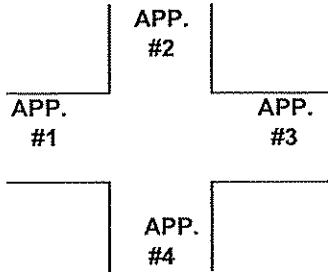
CSAH 9 (Lake George Blvd.)

**DATE:**

05/20/2009

@ CSAH 24 (Bridge St.)

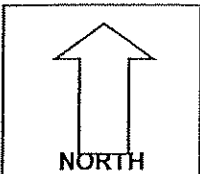
APP. #1 = CSAH 24
APP. #2 = HS Entrance
APP. #3 = CSAH 24
APP. #4 = CSAH 9



- HEAVY VEHICLE- ANY VEHICLE HAVING MORE THAN FOUR TIRES TOUCHING THE PAVEMENT
- A. TRUCKS- A HEAVY VEHICLE INVOLVED PRIMARILY IN THE TRANSPORT OF GOODS OR IN THE DELIVERY OF A SERVICE.
  - B. RV- A HEAVY VEHICLE OPERATED BY A PRIVATE MOTORIST AND INVOLVED IN THE TRANSPORT OF RECREATIONAL EQUIPMENT OR FACILITIES.
  - C. BUSES- A HEAVY VEHICLE INVOLVED IN THE TRANSPORTATION OF GROUPS OF PEOPLE.

TIME	PEDESTRIANS					HEAVY VEHICLES		
	APP. #1	APP. #2	APP. #3	APP. #4	15 MIN TOT	TRUCKS	RV	BUS
6:00-6:15AM						4		8
6:15-6:30								
6:30-6:45						1		
6:45-7:00						1		27
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>41</b>
7:00-7:15						5		50
7:15-7:30						2		2
7:30-7:45								5
7:45-8:00						2		4
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>70</b>
8:00-8:15						3		8
8:15-8:30						4		3
8:30-8:45						2		2
8:45-9:00						2		3
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>27</b>
9:00-9:15						4		4
9:15-9:30						2		3
9:30-9:45						2		8
9:45-10:00						1		
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>24</b>
10:00-10:15						3		1
10:15-10:30						5		4
10:30-10:45						6		
10:45-11:00						4		2
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>25</b>
11:00-11:15						1		1
11:15-11:30						4		6
11:30-11:45						3	1	3
11:45-12:00						4		2
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>25</b>
12:00-12:15						1		3
12:15-12:30						2		2
12:30-12:45						2		2
12:45-1:00						1		1
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>14</b>
1:00-1:15						2		
1:15-1:30						11		6
1:30-1:45						2		1
1:45-2:00						7		4
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>33</b>
<b>TOTAL</b>						<b>TOTAL</b>		<b>259</b>

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COUNT LOCATION:

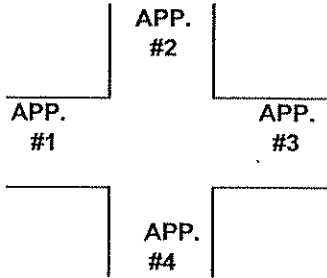
CSAH 9 (Lake George Blvd.)

DATE:

05/18/2008

@ CSAH 24 (Bridge St.)

APP. #1 = CSAH 24
APP. #2 = HS Entrance
APP. #3 = CSAH 24
APP. #4 = CSAH 9



HEAVY VEHICLE- ANY VEHICLE HAVING MORE THAN FOUR TIRES TOUCHING THE PAVEMENT

- A. TRUCKS- A HEAVY VEHICLE INVOLVED PRIMARILY IN THE TRANSPORT OF GOODS OR IN THE DELIVERY OF A SERVICE.
- B. RV- A HEAVY VEHICLE OPERATED BY A PRIVATE MOTORIST AND INVOLVED IN THE TRANSPORT OF RECREATIONAL EQUIPMENT OR FACILITIES.
- C. BUSES- A HEAVY VEHICLE INVOLVED IN THE TRANSPORTATION OF GROUPS OF PEOPLE.

TIME	PEDESTRIANS					HEAVY VEHICLES		
	APP. #1	APP. #2	APP. #3	APP. #4	15 MIN TOT	TRUCKS	RV	BUS
2:00-2:15PM						10		4
2:15-2:30						6		8
2:30-2:45						2		42
2:45-3:00						2		29
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>103</b>
3:00-3:15						2		7
3:15-3:30						2		
3:30-3:45						3		4
3:45-4:00								3
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>21</b>
4:00-4:15						3		
4:15-4:30						2		
4:30-4:45						2		2
4:45-5:00						1		6
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>16</b>
5:00-5:15						4		1
5:15-5:30						1		
5:30-5:45						1		
5:45-6:00						2	1	
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>10</b>
6:00-6:15						1		
6:15-6:30						1		
6:30-6:45						1		
6:45-7:00						2		
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>5</b>
7:00-7:15						1		
7:15-7:30						2		
7:30-7:45								1
7:45-8:00								1
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>5</b>
8:00-8:15								
8:15-8:30						1		
8:30-8:45						1		
8:45-9:00						2		
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>4</b>
9:00-9:15						1		
9:15-9:30								
9:30-9:45								
9:45-10:00								
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>1</b>
					<b>TOTAL</b>		<b>TOTAL</b>	<b>424</b>

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