

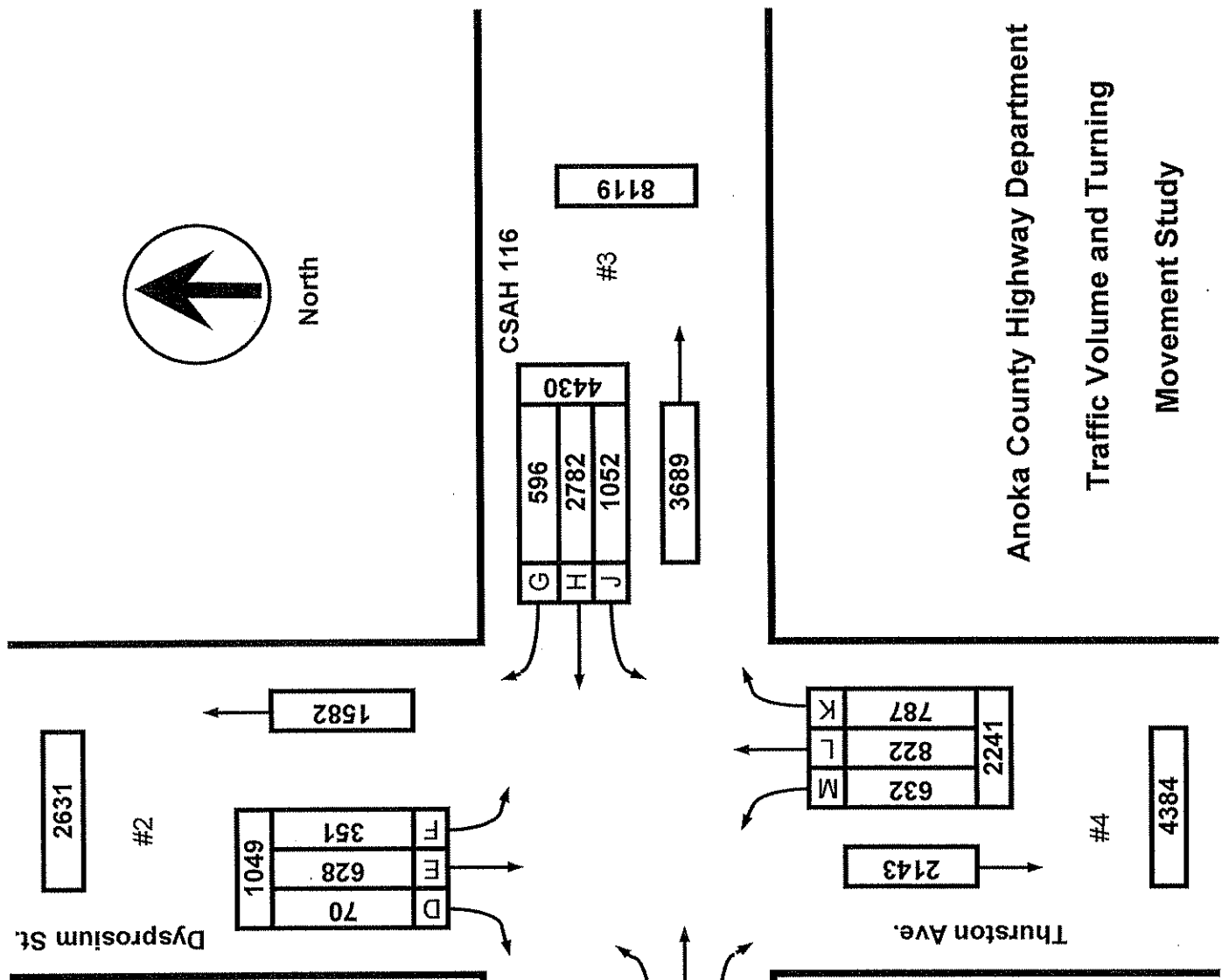
Date : 06/29/09

Count Number : TMC0920

Location : CSAH 116 (Bunker Lk. Blvd.)

@ Thurston Ave.

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



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

Anoka County Highway Department  
 Traffic Volume and Turning  
 Movement Study

Date : 06/29/09

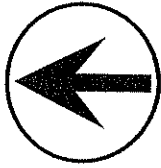
Count Number : TMC0920

Location : CSAH 116 (Bunker Lk. Blvd.)

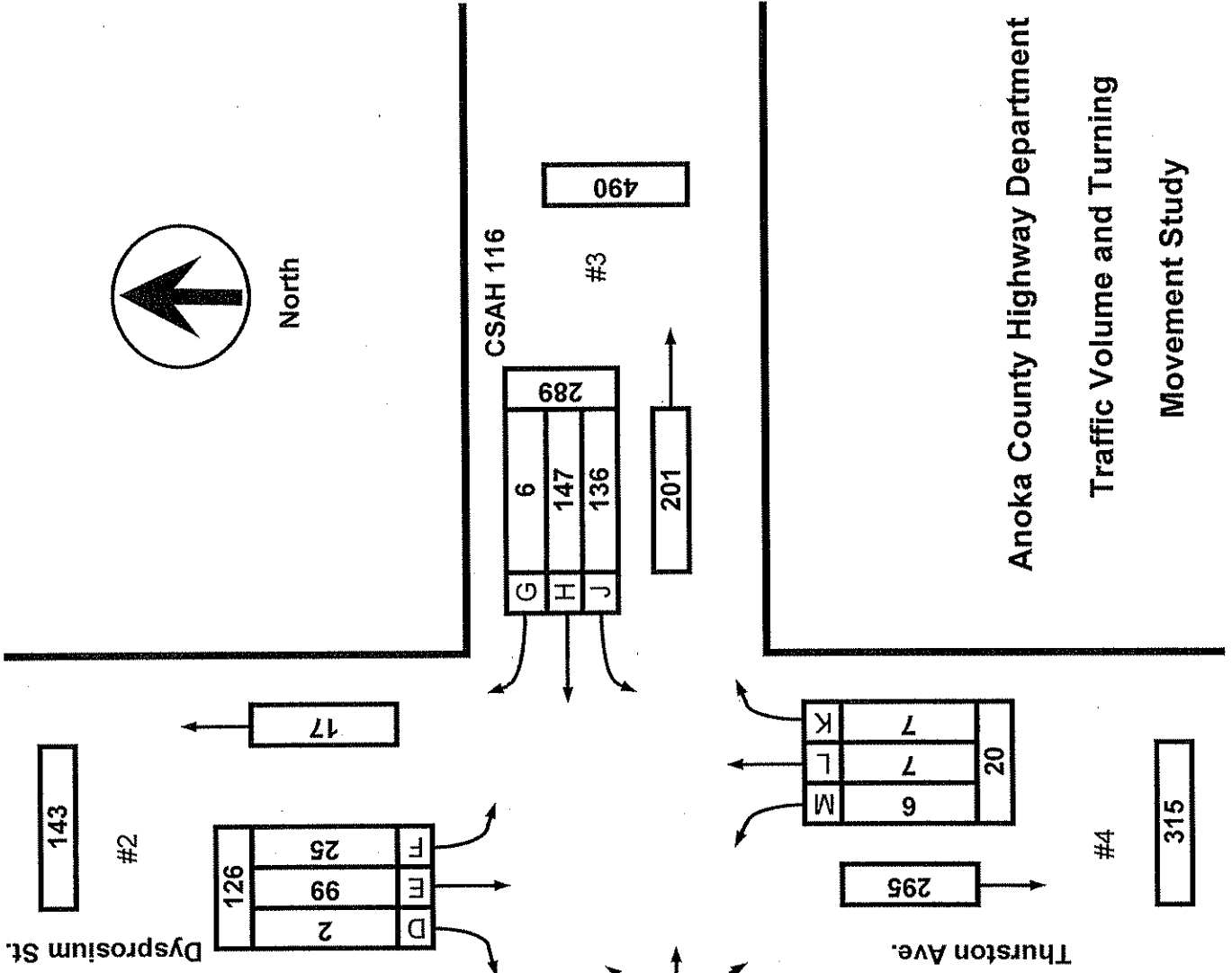
@ Thurston Ave.

Collection Period : AM PEAK

Hour : 7:00 - 8:00AM



North



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

Anoka County Highway Department  
 Traffic Volume and Turning  
 Movement Study

Date : 06/29/09

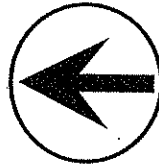
Count Number : TMC0920

Location : CSAH 116 (Bunker Lk. Blvd.)

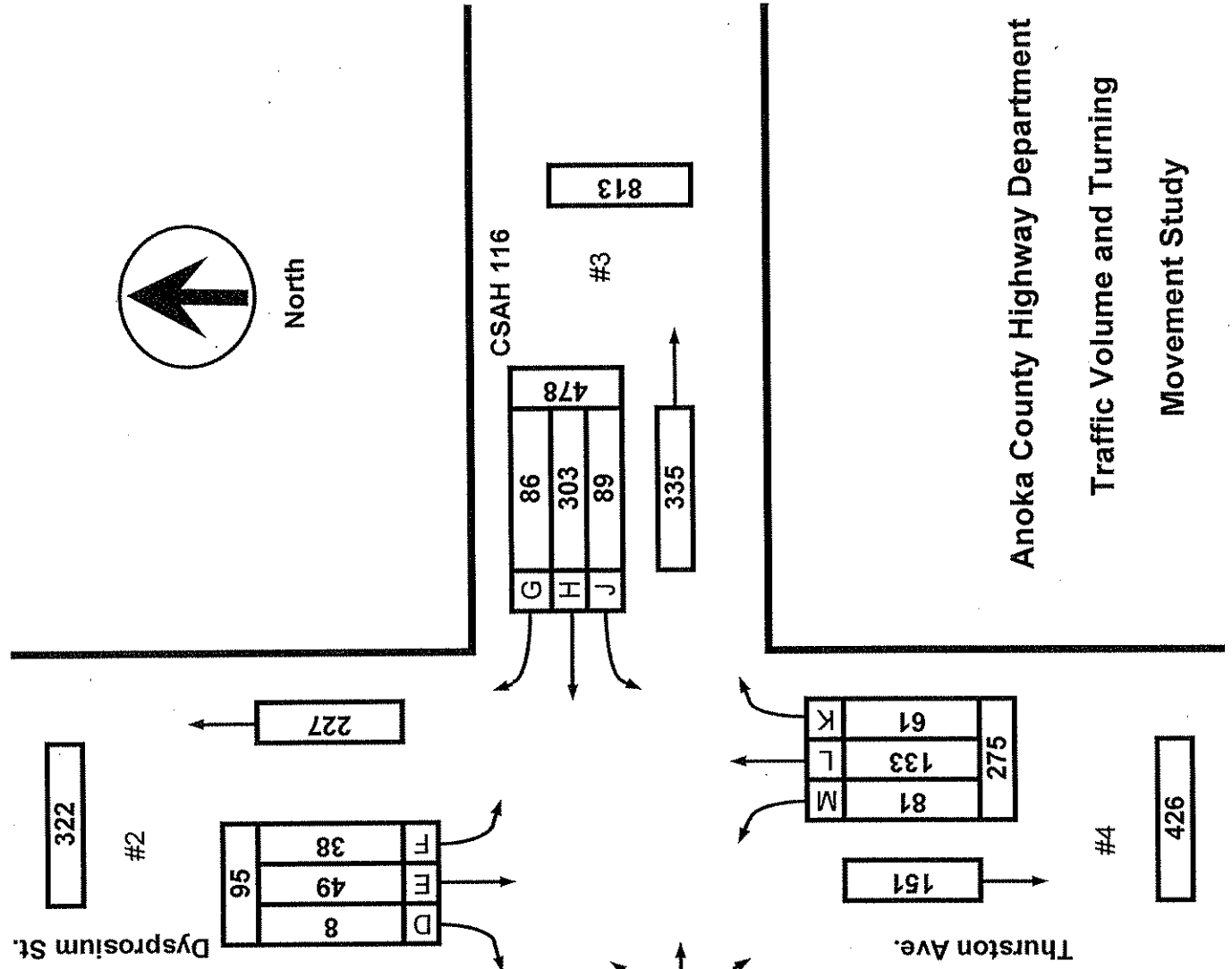
@ Thurston Ave.

Collection Period : PM PEAK

Hour : 4:30 - 5:30PM



North



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

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 : TMC0920  
Site Code : 09200202  
Start Date : 6/29/2009  
Page No : 1

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

### Groups Printed - Unshifted - Bank 1

Start Time	Dysprosium St. Southbound					CSAH 116 Westbound					Thurston Ave. Northbound					CSAH 116 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	4	16	1	0	21	10	25	10	0	45	0	0	2	0	2	1	16	21	0	38	0	106	106
06:15	3	26	2	0	31	19	26	1	1	46	2	1	4	1	7	0	43	19	0	62	2	146	148
06:30	8	24	2	1	34	22	26	1	0	49	2	1	3	1	6	0	34	18	1	52	3	141	144
06:45	6	12	2	0	20	33	45	2	1	80	3	0	3	2	6	0	34	14	2	48	5	154	159
Total	21	78	7	1	106	84	122	14	2	220	7	2	12	4	21	1	127	72	3	200	10	547	557
07:00	4	32	1	1	37	21	32	0	0	53	0	2	0	0	2	2	29	17	1	48	2	140	142
07:15	6	21	0	0	27	27	35	1	2	63	3	1	0	0	4	1	47	14	3	62	5	156	161
07:30	2	17	0	0	19	39	35	1	1	75	1	3	2	1	6	0	42	16	4	58	6	158	164
07:45	13	29	2	0	44	49	45	4	6	98	2	1	5	3	8	1	51	13	0	65	9	215	224
Total	25	99	3	1	127	136	147	6	9	289	6	7	7	4	20	4	169	60	8	233	22	669	691
08:00	1	8	0	0	9	18	39	0	8	57	3	5	5	4	13	0	17	12	3	29	15	108	123
08:15	0	12	0	0	12	12	18	1	3	31	7	7	7	3	21	1	55	5	1	61	7	125	132
08:30	5	8	1	0	14	20	28	3	2	51	3	4	5	3	12	1	15	7	1	23	6	100	106
08:45	6	8	0	3	14	16	22	4	0	42	3	7	7	3	17	2	24	10	2	36	8	109	117
Total	12	36	1	3	49	66	107	8	13	181	16	23	24	13	63	4	111	34	7	149	36	442	478
09:00	1	6	1	0	8	12	28	4	1	44	7	5	6	1	18	1	19	2	2	22	4	92	96
09:15	7	7	0	0	14	20	28	6	3	54	7	6	2	1	15	0	17	1	0	18	4	101	105
09:30	2	6	0	0	8	12	27	2	1	41	4	3	3	1	10	1	25	0	1	26	3	85	88
09:45	2	6	1	1	9	16	49	3	4	68	3	2	14	5	19	0	12	0	0	12	10	108	118
Total	12	25	2	1	39	60	132	15	9	207	21	16	25	8	62	2	73	3	3	78	21	386	407
10:00	9	9	2	0	20	17	34	9	2	60	2	5	6	1	13	4	41	7	3	52	6	145	151
10:15	4	4	1	1	9	22	33	6	2	61	4	8	13	2	25	2	54	9	8	65	13	160	173
10:30	6	10	0	0	16	14	34	9	1	57	10	6	12	3	28	1	42	8	4	51	8	152	160
10:45	2	1	0	0	3	10	22	6	0	38	4	8	16	3	28	2	38	6	3	46	6	115	121
Total	21	24	3	1	48	63	123	30	5	216	20	27	47	9	94	9	175	30	18	214	33	572	605
11:00	7	2	0	0	9	20	43	13	6	76	5	8	18	2	31	4	35	7	1	46	9	162	171
11:15	7	10	3	0	20	17	45	11	2	73	5	10	12	2	27	2	39	10	1	51	5	171	176
11:30	5	6	0	0	11	17	45	4	5	66	10	14	29	3	53	1	26	4	1	31	9	161	170
11:45	6	9	0	0	15	19	44	2	3	65	3	17	9	2	29	4	51	3	1	58	6	167	173
Total	25	27	3	0	55	73	177	30	16	280	23	49	68	9	140	11	151	24	4	186	29	661	690
12:00	3	11	0	2	14	28	56	14	6	98	16	23	40	3	79	9	73	10	5	92	16	283	299
12:15	8	10	4	0	22	19	62	9	3	90	21	20	28	6	69	5	63	9	5	77	14	258	272
12:30	2	2	0	0	4	21	45	7	1	73	26	18	32	4	76	5	51	9	1	65	6	218	224
12:45	6	14	1	3	21	31	52	14	1	97	14	16	16	1	46	2	30	11	3	43	8	207	215
Total	19	37	5	5	61	99	215	44	11	358	77	77	116	14	270	21	217	39	14	277	44	966	1010
13:00	1	5	2	2	8	18	60	11	1	89	38	20	26	1	84	6	54	10	2	70	6	251	257
13:15	1	5	0	0	6	14	55	5	5	74	6	11	17	4	34	1	61	13	3	75	12	189	201
13:30	5	7	2	1	14	18	46	9	2	73	15	11	18	2	44	0	75	18	2	93	7	224	231
13:45	6	8	2	0	16	13	51	8	1	72	18	16	22	3	56	8	44	12	1	64	5	208	213
Total	13	25	6	3	44	63	212	33	9	308	77	58	83	10	218	15	234	53	8	302	30	872	902
14:00	4	5	4	1	13	12	46	9	3	67	7	8	17	0	32	2	44	8	3	54	7	166	173
14:15	6	13	4	1	23	11	45	7	2	63	7	17	29	5	53	4	41	6	5	51	13	190	203
14:30	10	12	2	0	24	25	49	11	1	85	21	12	13	0	46	7	34	11	2	52	3	207	210
14:45	9	8	0	0	17	10	55	13	2	78	9	14	19	1	42	0	39	1	2	40	5	177	182
Total	29	38	10	2	77	58	195	40	8	293	44	51	78	6	173	13	158	26	12	197	28	740	768
15:00	4	5	2	1	11	13	49	9	5	71	25	32	40	3	97	5	69	6	3	80	12	259	271
15:15	1	6	0	0	7	28	36	15	5	79	20	18	16	1	54	4	28	8	5	40	11	180	191
15:30	4	22	3	0	29	22	59	13	6	94	24	25	23	3	72	8	127	17	3	152	12	347	359
15:45	9	5	1	0	15	23	57	17	2	97	13	18	19	5	50	13	86	9	1	108	8	270	278
Total	18	38	6	1	62	86	201	54	18	341	82	93	98	12	273	30	310	40	12	380	43	1056	1099
16:00	9	4	0	0	13	28	67	19	4	114	22	38	19	4	79	2	72	3	2	77	10	283	293
16:15	4	5	1	0	10	7	51	11	2	69	12	25	14	0	51	1	24	1	2	26	4	156	160
16:30	10	5	3	0	18	27	65	19	3	111	14	44	14	1	72	3	76	3	2	82	6	283	289
16:45	11	15	1	0	27	20	80	27	0	127	25	36	18	1	79	0	64	2	1	66	2	299	301
Total	34	29	5	0	68	82	263	76	9	421	73	143	65	6	281	6	236	9	7	251	22	1021	1043
17:00	8	14	4	0	26	20	67	22	0	109	22	29	18	1	69	2	63	5	0	70	1	274	275
17:15	9	16	0	0	24	22	91	18	2	131	20	24	11	1	55	3	33	3	0	39	3	249	252
17:30	8	11	4	0	23	22	69	23	2	114	17	32	14	1	63	1	49	2	1	52	4	252	256
17:45	15	18	0	2	33	14	82	18	0	114	6	21	3	0	30	5	27	5	1	37	3	214	217
Total	40	58	8	2	106	78	309	81	4	468	65	106	46	3	217	11	172	15	2	198	11	989	1000
18:00	9	14	4	0	27	10	59	19	1	88	14	12	12	0	38	2	29	3	1	34	2	187	189
18:15	9	7	3	1	19	11	44	12	0	67	12	8	11	0	31	4	65	5	2	74	3	191	194
18:30	5	4	1	0	10	7	51	8	0	66	13	16	16	0	45	1	40	3	1	44	1	165	166
18:45	2	9	1	0	12	8	47	5	0	60	12	22	10	1	44	5	57	8	1	70	2	186	188
Total	25	34	9	1	68	36	201	44	1	281	51	58	49	1	158	12	191	19	5	222	8	729	737

# Anoka County Highway Department

## Traffic Engineering Section Traffic Volume and Turning Movement Study

File Name : TMC0920  
Site Code : 09200202  
Start Date : 6/29/2009  
Page No : 2

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

### Groups Printed- Unshifted - Bank 1

Start Time	Dysprosium St. Southbound					CSAH 116 Westbound					Thurston Ave. Northbound					CSAH 116 Eastbound					Excl. Total	Incl. 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			
19:00	6	6	0	0	12	9	45	4	1	58	8	15	11	0	34	1	26	5	0	32	1	136	137
19:15	9	12	0	0	21	8	43	16	3	67	7	11	13	1	31	0	19	4	1	23	5	142	147
19:30	5	9	0	0	14	9	39	8	0	56	10	12	5	0	27	5	35	7	0	47	0	144	144
19:45	5	8	0	0	13	4	38	4	1	46	9	8	7	1	24	0	28	3	2	31	4	114	118
<b>Total</b>	<b>25</b>	<b>35</b>	<b>0</b>	<b>0</b>	<b>60</b>	<b>30</b>	<b>165</b>	<b>32</b>	<b>5</b>	<b>227</b>	<b>34</b>	<b>46</b>	<b>36</b>	<b>2</b>	<b>116</b>	<b>6</b>	<b>108</b>	<b>19</b>	<b>3</b>	<b>133</b>	<b>10</b>	<b>536</b>	<b>546</b>
20:00	3	6	0	1	9	6	28	11	0	45	6	11	5	0	22	0	16	2	1	18	2	94	96
20:15	5	3	0	0	8	3	17	13	0	33	1	11	5	0	17	3	12	5	0	20	0	78	78
20:30	4	4	1	0	9	5	32	5	0	42	7	7	9	0	23	1	20	1	0	22	0	96	96
20:45	3	7	0	0	10	3	25	14	0	42	2	7	4	0	13	1	15	1	0	17	0	82	82
<b>Total</b>	<b>15</b>	<b>20</b>	<b>1</b>	<b>1</b>	<b>36</b>	<b>17</b>	<b>102</b>	<b>43</b>	<b>0</b>	<b>162</b>	<b>16</b>	<b>36</b>	<b>23</b>	<b>0</b>	<b>75</b>	<b>5</b>	<b>63</b>	<b>9</b>	<b>1</b>	<b>77</b>	<b>2</b>	<b>350</b>	<b>352</b>
21:00	7	12	0	0	19	10	36	18	0	64	4	9	3	0	16	4	22	1	1	27	1	126	127
21:15	4	8	1	0	13	3	29	14	0	46	12	13	4	0	29	0	12	6	1	18	1	106	107
21:30	4	4	0	0	8	4	25	9	0	38	3	5	2	0	10	6	14	2	0	22	0	78	78
21:45	2	1	0	0	3	4	21	5	0	30	1	3	1	0	5	4	8	2	0	14	0	52	52
<b>Total</b>	<b>17</b>	<b>25</b>	<b>1</b>	<b>0</b>	<b>43</b>	<b>21</b>	<b>111</b>	<b>46</b>	<b>0</b>	<b>178</b>	<b>20</b>	<b>30</b>	<b>10</b>	<b>0</b>	<b>60</b>	<b>14</b>	<b>56</b>	<b>11</b>	<b>2</b>	<b>81</b>	<b>2</b>	<b>362</b>	<b>364</b>
<b>Grand Total</b>	<b>351</b>	<b>628</b>	<b>70</b>	<b>22</b>	<b>1049</b>	<b>1052</b>	<b>2782</b>	<b>596</b>	<b>119</b>	<b>4430</b>	<b>632</b>	<b>822</b>	<b>787</b>	<b>101</b>	<b>2241</b>	<b>164</b>	<b>2551</b>	<b>463</b>	<b>109</b>	<b>3178</b>	<b>351</b>	<b>10898</b>	<b>11249</b>
Apprch %	33.5	59.9	6.7			23.7	62.8	13.5			28.2	36.7	35.1			5.2	80.3	14.6					
Total %	3.2	5.8	0.6		9.6	9.7	25.5	5.5		40.6	5.8	7.5	7.2		20.6	1.5	23.4	4.2		29.2	3.1	96.9	
Unshifted	351	628	70		1071	1052	2782	596		4549	632	822	787		2342	164	2551	463		3287	0	0	11249
% Unshifted	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	0	0	100
Bank 1	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0
% Bank 1	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0

Start Time	Dysprosium St. Southbound				CSAH 116 Westbound				Thurston Ave. Northbound				CSAH 116 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 06:00 to 11:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00																	
07:00	4	32	1	37	21	32	0	53	0	2	0	2	2	29	17	48	140
07:15	6	21	0	27	27	35	1	63	3	1	0	4	4	47	14	62	156
07:30	2	17	0	19	39	35	1	75	1	3	2	6	0	42	16	58	158
07:45	13	29	2	44	49	45	4	98	2	1	5	8	1	51	13	65	215
<b>Total Volume</b>	<b>25</b>	<b>99</b>	<b>3</b>	<b>127</b>	<b>136</b>	<b>147</b>	<b>6</b>	<b>289</b>	<b>6</b>	<b>7</b>	<b>7</b>	<b>20</b>	<b>4</b>	<b>169</b>	<b>60</b>	<b>233</b>	<b>669</b>
<b>% App. Total</b>	<b>19.7</b>	<b>78</b>	<b>2.4</b>		<b>47.1</b>	<b>50.9</b>	<b>2.1</b>		<b>30</b>	<b>35</b>	<b>35</b>		<b>1.7</b>	<b>72.5</b>	<b>25.8</b>		
PHF	.481	.773	.375	.722	.694	.817	.375	.737	.500	.583	.350	.625	.500	.828	.882	.896	.778
Peak Hour Analysis From 12:00 to 21:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 16:30																	
16:30	10	5	3	18	27	65	19	111	14	44	14	72	3	76	3	82	283
16:45	11	15	1	27	20	80	27	127	25	36	18	79	0	64	2	66	299
17:00	8	14	4	26	20	67	22	109	22	29	18	69	2	63	5	70	274
17:15	9	15	0	24	22	91	18	131	20	24	11	55	3	33	3	39	249
<b>Total Volume</b>	<b>38</b>	<b>49</b>	<b>8</b>	<b>95</b>	<b>89</b>	<b>303</b>	<b>86</b>	<b>478</b>	<b>81</b>	<b>133</b>	<b>61</b>	<b>275</b>	<b>8</b>	<b>236</b>	<b>13</b>	<b>257</b>	<b>1105</b>
<b>% App. Total</b>	<b>40</b>	<b>51.6</b>	<b>8.4</b>		<b>18.6</b>	<b>63.4</b>	<b>18</b>		<b>29.5</b>	<b>48.4</b>	<b>22.2</b>		<b>3.1</b>	<b>91.8</b>	<b>5.1</b>		
PHF	.864	.817	.500	.880	.824	.832	.796	.912	.810	.756	.847	.870	.667	.776	.650	.784	.924

**ANOKA COUNTY HIGHWAY  
PC-WARRANTS  
TRAFFIC SIGNAL WARRANT ANALYSIS**

Study Name : **TMC0920**  
Study Date : **07/06/09**  
Page No. : **1**

**Signal Warrants - Summary**

**Major Street Approaches**

**Eastbound: CSAH 116**

Number of Lanes: 2  
Approach Speed: 50  
Total Approach Volume: 3,178

**Westbound: CSAH 116**

Number of Lanes: 2  
Approach Speed: 50  
Total Approach Volume: 4,430

**Minor Street Approaches**

**Northbound: Thurston Ave.**

Number of Lanes: 2  
  
Total Approach Volume: 2,241

**Southbound: Dysprosium St.**

Number of Lanes: 2  
  
Total Approach Volume: 1,049

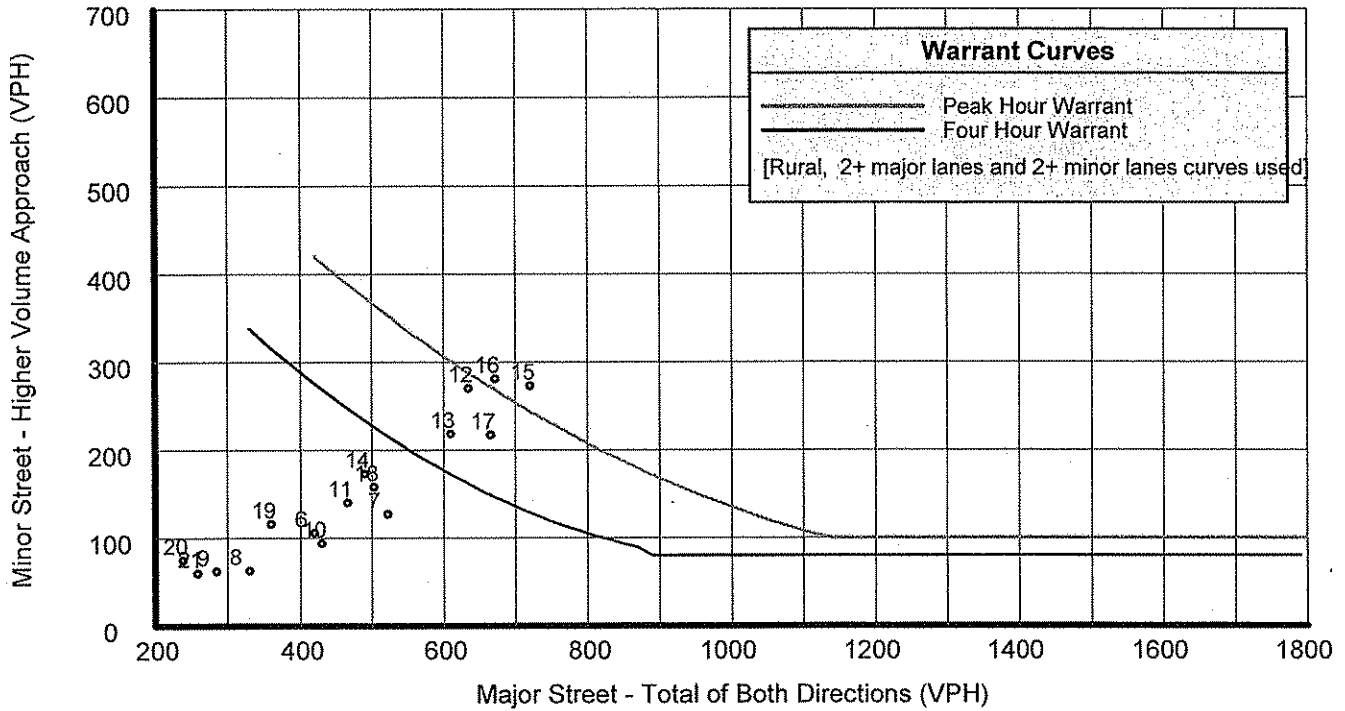
**Warrant Summary (Rural values apply.)**

<b>Warrant 1 - Eight Hour Vehicular Volumes</b> .....	<b>Satisfied</b>
<b>Warrant 1A - Minimum Vehicular Volume</b> .....	<b>Satisfied</b>
Required volumes reached for 8 hours, 8 are needed	
<b>Warrant 1B - Interruption of Continuous Traffic</b> .....	<b>Not Satisfied</b>
Required volumes reached for 4 hours, 8 are needed	
<b>Warrant 1 A&amp;B - Combination of Warrants</b> .....	<b>Not Satisfied</b>
Required volumes reached for 6 hours, 8 are needed	
<b>Warrant 2 - Four Hour Volumes</b> .....	<b>Satisfied</b>
Number of hours (5) volumes exceed minimum >= 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 (21) volumes exceed minimum >= required (1). Delay data not evaluated.	
<b>Warrant 3B - Peak Hour Volumes</b> .....	<b>Satisfied</b>
Volumes exceed minimums for at least one 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

Study Name : TMC0920  
Study Date : 07/06/09  
Page No. : 2

## Signal Warrants - Summary



### Analysis of 8-Hour Volume Warrants:

Hour Begin	Major Total	Higher Minor		War-1A			War-1B			War-1A&B		
		Vol	Dir	Major Crit	Minor Crit	Meets?	Major Crit	Minor Crit	Meets?	Major Crit	Minor Crit	Meets?
00:00	0	0	NB	420-No	140-No	---	630-No	70-No	---	504-No	112-No	---
01:00	0	0	NB	420-No	140-No	---	630-No	70-No	---	504-No	112-No	---
02:00	0	0	NB	420-No	140-No	---	630-No	70-No	---	504-No	112-No	---
03:00	0	0	NB	420-No	140-No	---	630-No	70-No	---	504-No	112-No	---
04:00	0	0	NB	420-No	140-No	---	630-No	70-No	---	504-No	112-No	---
05:00	0	0	NB	420-No	140-No	---	630-No	70-No	---	504-No	112-No	---
06:00	420	106	SB	420-Yes	140-No	Major	630-No	70-Yes	Minor	504-No	112-No	---
07:00	522	127	SB	420-Yes	140-No	Major	630-No	70-Yes	Minor	504-Yes	112-Yes	Both
08:00	330	63	NB	420-No	140-No	---	630-No	70-No	---	504-No	112-No	---
09:00	285	62	NB	420-No	140-No	---	630-No	70-No	---	504-No	112-No	---
10:00	430	94	NB	420-Yes	140-No	Major	630-No	70-Yes	Minor	504-No	112-No	---
11:00	466	140	NB	420-Yes	140-Yes	Both	630-No	70-Yes	Minor	504-No	112-Yes	Minor
12:00	635	270	NB	420-Yes	140-Yes	Both	630-Yes	70-Yes	Both	504-Yes	112-Yes	Both
13:00	610	218	NB	420-Yes	140-Yes	Both	630-No	70-Yes	Minor	504-Yes	112-Yes	Both
14:00	490	173	NB	420-Yes	140-Yes	Both	630-No	70-Yes	Minor	504-No	112-Yes	Minor
15:00	721	273	NB	420-Yes	140-Yes	Both	630-Yes	70-Yes	Both	504-Yes	112-Yes	Both
16:00	672	281	NB	420-Yes	140-Yes	Both	630-Yes	70-Yes	Both	504-Yes	112-Yes	Both
17:00	666	217	NB	420-Yes	140-Yes	Both	630-Yes	70-Yes	Both	504-Yes	112-Yes	Both
18:00	503	158	NB	420-Yes	140-Yes	Both	630-No	70-Yes	Minor	504-No	112-Yes	Minor
19:00	360	116	NB	420-No	140-No	---	630-No	70-Yes	Minor	504-No	112-Yes	Minor
20:00	239	75	NB	420-No	140-No	---	630-No	70-Yes	Minor	504-No	112-No	---
21:00	259	60	NB	420-No	140-No	---	630-No	70-No	---	504-No	112-No	---
22:00	0	0	NB	420-No	140-No	---	630-No	70-No	---	504-No	112-No	---
23:00	0	0	NB	420-No	140-No	---	630-No	70-No	---	504-No	112-No	---

**ANOKA COUNTY HIGHWAY  
PC-WARRANTS  
TRAFFIC SIGNAL WARRANT ANALYSIS**

Study Name : TMC0920  
Study Date : 07/06/09  
Page No. : 1

**Multi-Way Stop Warrant Report**

**Major Street Approaches**

**Eastbound: CSAH 116**  
Total Approach Volume: 3,178  
Approach Speed: 50

**Westbound: CSAH 116**  
Total Approach Volume: 4,430  
Approach Speed: 50

**Minor Street Approaches**

**Northbound: Thurston Ave.**  
Total Approach Volume: 2,241

**Southbound: Dysprosium St.**  
Total Approach Volume: 1,049

**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

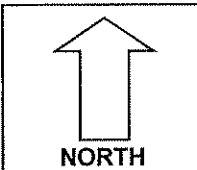
**Criteria C - Minimum Volumes and Delays** ..... Satisfied  
Delay data not evaluated  
Required volumes reached for 11 hours, 8 are needed

**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?
06:15 - 07:15	438	143	210-Yes	140-Yes	Both	240-Yes	160-No	Major
10:00 - 11:00	430	142	210-Yes	140-Yes	Both	240-Yes	160-No	Major
11:00 - 12:00	466	195	210-Yes	140-Yes	Both	240-Yes	160-Yes	Both
12:00 - 13:00	635	331	210-Yes	140-Yes	Both	240-Yes	160-Yes	Both
13:00 - 14:00	610	262	210-Yes	140-Yes	Both	240-Yes	160-Yes	Both
14:00 - 15:00	490	250	210-Yes	140-Yes	Both	240-Yes	160-Yes	Both
15:00 - 16:00	721	335	210-Yes	140-Yes	Both	240-Yes	160-Yes	Both
16:00 - 17:00	672	349	210-Yes	140-Yes	Both	240-Yes	160-Yes	Both
17:00 - 18:00	666	323	210-Yes	140-Yes	Both	240-Yes	160-Yes	Both
18:00 - 19:00	503	226	210-Yes	140-Yes	Both	240-Yes	160-Yes	Both
19:00 - 20:00	360	176	210-Yes	140-Yes	Both	240-Yes	160-Yes	Both
05:45 - 06:45	292	101	210-Yes	140-No	Major	240-Yes	160-No	Major
06:00 - 07:00	420	127	210-Yes	140-No	Major	240-Yes	160-No	Major
07:15 - 08:15	507	130	210-Yes	140-No	Major	240-Yes	160-No	Major
07:30 - 08:30	474	132	210-Yes	140-No	Major	240-Yes	160-No	Major
07:45 - 08:45	415	133	210-Yes	140-No	Major	240-Yes	160-No	Major
08:00 - 09:00	330	112	210-Yes	140-No	Major	240-Yes	160-No	Major
08:15 - 09:15	310	116	210-Yes	140-No	Major	240-Yes	160-No	Major
08:30 - 09:30	290	112	210-Yes	140-No	Major	240-Yes	160-No	Major
08:45 - 09:45	283	104	210-Yes	140-No	Major	240-Yes	160-No	Major
09:00 - 10:00	285	101	210-Yes	140-No	Major	240-Yes	160-No	Major
09:15 - 10:15	331	108	210-Yes	140-No	Major	240-Yes	160-No	Major
09:30 - 10:30	385	113	210-Yes	140-No	Major	240-Yes	160-No	Major
09:45 - 10:45	426	139	210-Yes	140-No	Major	240-Yes	160-No	Major



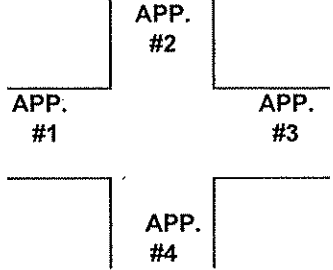


**COUNT LOCATION:**

CSAH 116 (Bunker Lk. Blvd.)  
@ Thurston Ave.

**DATE:** 7/2/2009

APP. #1 = CSAH 116
APP. #2 = Dysprosium St.
APP. #3 = CSAH 116
APP. #4 = Thurston Ave.



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

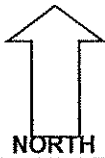
A. TRUCKS- A HEAVY VEHICLE INVOLVED PRIMARILY IN THE TRANSPORT OF GOODS OR IN THE DELIVERY OF A SERVICE.

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						2		
6:15-6:30								
6:30-6:45						1		1
6:45-7:00						6		
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>10</b>
7:00-7:15						1		
7:15-7:30						4		1
7:30-7:45						5		1
7:45-8:00						6		3
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>21</b>
8:00-8:15						6		9
8:15-8:30						7		
8:30-8:45						5		1
8:45-9:00						5		3
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>36</b>
9:00-9:15						4		
9:15-9:30						3	1	
9:30-9:45						3		
9:45-10:00						9	1	
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>21</b>
10:00-10:15						5		
10:15-10:30						13		
10:30-10:45						8		
10:45-11:00						5		1
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>32</b>
11:00-11:15						7	1	1
11:15-11:30						2	1	2
11:30-11:45						7		2
11:45-12:00						2	1	2
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>28</b>
12:00-12:15						12		4
12:15-12:30						10	2	3
12:30-12:45						3		2
12:45-1:00						4		4
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>44</b>
1:00-1:15						6		4
1:15-1:30						10		
1:30-1:45						4	1	
1:45-2:00						4		
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>29</b>
					<b>TOTAL</b>		<b>TOTAL</b>	<b>221</b>

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COUNT LOCATION:

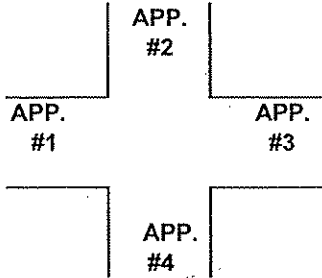
CSAH 116 (Bunker Lk. Blvd.)

DATE:

6/29/2009

@ Thurston Ave.

APP. #1 = CSAH 116
APP. #2 = Dysprosium St.
APP. #3 = CSAH 116
APP. #4 = Thurston Ave.



- 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				1		7		
2:15-2:30	1		1			11		1
2:30-2:45						3		
2:45-3:00	1					4	1	
<b>HOURLY TOTAL</b>					<b>4</b>	<b>HOURLY TOTAL</b>		<b>27</b>
3:00-3:15						12		
3:15-3:30						10		
3:30-3:45	1	2				12		1
3:45-4:00						6	1	1
<b>HOURLY TOTAL</b>					<b>3</b>	<b>HOURLY TOTAL</b>		<b>43</b>
4:00-4:15						9		
4:15-4:30						4		
4:30-4:45						7		
4:45-5:00		1				2		
<b>HOURLY TOTAL</b>					<b>1</b>	<b>HOURLY TOTAL</b>		<b>22</b>
5:00-5:15						1		
5:15-5:30						3		
5:30-5:45		3				4		
5:45-6:00						3		
<b>HOURLY TOTAL</b>					<b>3</b>	<b>HOURLY TOTAL</b>		<b>11</b>
6:00-6:15						2		
6:15-6:30						3		
6:30-6:45						2		
6:45-7:00						1		
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>8</b>
7:00-7:15							1	
7:15-7:30						4		
7:30-7:45						1		
7:45-8:00						1		1
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>8</b>
8:00-8:15						1	1	
8:15-8:30	3							
8:30-8:45			2					
8:45-9:00						1		
<b>HOURLY TOTAL</b>					<b>5</b>	<b>HOURLY TOTAL</b>		<b>3</b>
9:00-9:15								
9:15-9:30						1		
9:30-9:45								
9:45-10:00							1	
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>2</b>
					<b>TOTAL</b>		<b>TOTAL</b>	<b>345</b>
					<b>16</b>			

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