

Date : 10/24/13

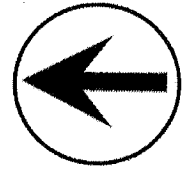
Count Number : TMC1345

Location : CSAH 78 (Hanson Blvd.)

@ 154th Ave.

Collection Period : PEAK HOURS

6-9:30AM, 2:30-6PM



North

5092

#2

CSAH 78

2827	D	251
2450	E	
126	F	

2265

154th Ave.

#3

102	G
22	H
300	J
424	

912

488

748

#1

1453

705	C
27	B
510	A

154th Ave.

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

2805	M	475
1995	L	
335	K	

3260

CSAH 78

#4

6065

Anoka County Highway Department  
Traffic Volume and Turning  
Movement Study

Date : 10/24/13

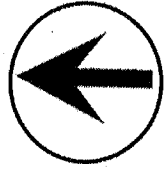
Count Number : TMC1345

Location : CSAH 78 (Hanson Blvd.)

@ 154th Ave.

Collection Period : AM PEAK

Hour : 7:15-8:15AM



North

CSAH 78  
#2  
869

647		
164	D	
464	E	
19	F	

222

10	G	
9	H	
35	J	
54		

#3

60

114

154th Ave.

760		
429		
331	A	
11	B	
86	C	

#1

154th Ave.

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

733		
256	M	
126	L	
30	K	
412		

#4

CSAH 78

1145

Anoka County Highway Department

Traffic Volume and Turning

Movement Study

Date : 10/29/13

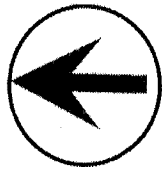
Count Number : TMC1345

Location : CSAH 78 (Hanson Blvd.)

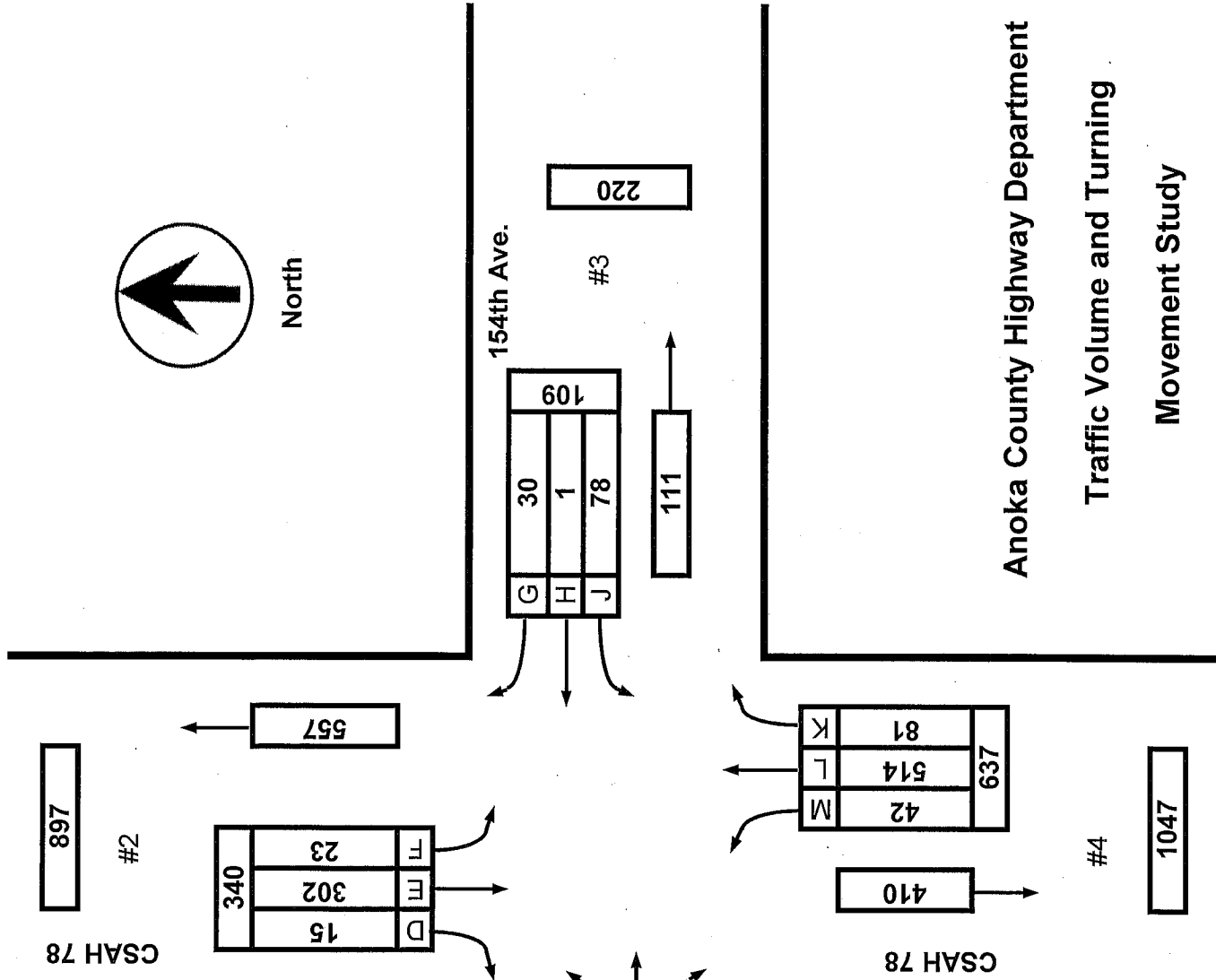
@ 154th Ave.

Collection Period : PM PEAK

Hour : 5-6PM



North



EXISTING LANES OF APPROACH				TOTAL
	RIGHT TURN LANE	LEFT TURN LANE	THRU LANES	
#1	0	1	1	2
#2	1	1	1	3
#3	0	1	1	2
#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 : tmc 1345  
 Site Code : 13450203  
 Start Date : 10/29/2013  
 Page No : 1

Weather: Cloudy and Cool  
 Counter: DB-400  
 study conducted by: Josie/Terri

Groups Printed- Unshifted

Start Time	CSAH 78 Southbound					154th Ave. Westbound					CSAH 78 Northbound					154th Ave. Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	Heavys	App. Total	Left	Thru	Right	Heavys	App. Total	Left	Thru	Right	Heavys	App. Total	Left	Thru	Right	Heavys	App. Total			
06:00	0	94	0	0	94	3	1	0	0	4	1	9	3	1	13	0	0	0	0	0	1	111	112
06:15	0	109	1	5	110	9	0	2	1	11	1	25	2	3	28	0	0	0	0	0	9	149	158
06:30	1	121	1	4	123	7	0	1	0	8	5	18	2	0	25	0	0	3	0	3	4	159	163
06:45	1	136	2	1	139	11	0	1	0	12	6	32	4	3	42	0	0	9	0	9	4	202	206
<b>Total</b>	<b>2</b>	<b>460</b>	<b>4</b>	<b>10</b>	<b>466</b>	<b>30</b>	<b>1</b>	<b>4</b>	<b>1</b>	<b>35</b>	<b>13</b>	<b>84</b>	<b>11</b>	<b>7</b>	<b>108</b>	<b>0</b>	<b>0</b>	<b>12</b>	<b>0</b>	<b>12</b>	<b>18</b>	<b>621</b>	<b>639</b>
07:00	2	152	9	4	163	9	0	0	0	9	10	34	4	1	48	1	0	15	0	16	5	236	241
07:15	3	162	50	4	215	14	2	0	2	16	77	33	5	0	115	11	2	63	0	76	6	422	428
07:30	7	118	23	2	148	10	1	1	0	12	54	34	8	5	96	23	0	56	1	79	8	335	343
07:45	4	92	48	0	144	3	4	1	0	8	69	31	9	1	109	21	4	40	0	65	1	326	327
<b>Total</b>	<b>16</b>	<b>524</b>	<b>130</b>	<b>10</b>	<b>670</b>	<b>36</b>	<b>7</b>	<b>2</b>	<b>2</b>	<b>45</b>	<b>210</b>	<b>132</b>	<b>26</b>	<b>7</b>	<b>368</b>	<b>56</b>	<b>6</b>	<b>174</b>	<b>1</b>	<b>236</b>	<b>20</b>	<b>1319</b>	<b>1339</b>
08:00	5	92	43	24	140	8	2	8	1	18	56	28	8	6	92	31	5	75	0	111	31	361	392
08:15	6	83	12	8	101	13	4	1	0	18	25	27	2	4	54	9	3	33	0	45	12	218	230
08:30	4	80	1	4	85	0	0	1	0	1	7	36	2	7	45	3	0	6	0	9	11	140	151
08:45	3	92	0	5	95	11	0	3	0	14	6	39	6	5	51	0	0	3	0	3	10	163	173
<b>Total</b>	<b>18</b>	<b>347</b>	<b>56</b>	<b>41</b>	<b>421</b>	<b>32</b>	<b>6</b>	<b>13</b>	<b>1</b>	<b>51</b>	<b>94</b>	<b>130</b>	<b>18</b>	<b>22</b>	<b>242</b>	<b>43</b>	<b>8</b>	<b>117</b>	<b>0</b>	<b>168</b>	<b>64</b>	<b>882</b>	<b>946</b>
09:00	4	82	1	2	87	10	0	2	1	12	5	36	9	3	50	2	0	2	0	4	6	153	159
09:15	7	102	1	14	110	7	0	3	0	10	2	42	6	5	50	2	0	2	1	4	20	174	194
*** BREAK ***																							
<b>Total</b>	<b>11</b>	<b>184</b>	<b>2</b>	<b>16</b>	<b>197</b>	<b>17</b>	<b>0</b>	<b>5</b>	<b>1</b>	<b>22</b>	<b>7</b>	<b>78</b>	<b>15</b>	<b>8</b>	<b>100</b>	<b>4</b>	<b>0</b>	<b>4</b>	<b>1</b>	<b>8</b>	<b>26</b>	<b>327</b>	<b>353</b>
*** BREAK ***																							
14:30	1	71	7	4	79	9	1	1	1	11	9	94	18	7	121	0	0	7	0	7	12	218	230
14:45	6	51	10	3	67	13	1	2	0	16	31	75	18	7	124	0	0	2	0	2	10	209	219
<b>Total</b>	<b>7</b>	<b>122</b>	<b>17</b>	<b>7</b>	<b>146</b>	<b>22</b>	<b>2</b>	<b>3</b>	<b>1</b>	<b>27</b>	<b>40</b>	<b>169</b>	<b>36</b>	<b>14</b>	<b>245</b>	<b>0</b>	<b>0</b>	<b>9</b>	<b>0</b>	<b>9</b>	<b>22</b>	<b>427</b>	<b>449</b>
15:00	8	59	11	17	78	9	1	2	0	12	8	78	14	5	100	15	1	36	0	52	22	242	264
15:15	2	67	6	24	75	11	1	3	0	15	11	92	19	8	122	14	0	41	1	55	33	267	300
15:30	2	53	0	2	55	9	1	3	0	13	6	101	8	4	115	6	0	21	0	27	6	210	216
15:45	7	58	3	2	68	10	0	8	0	18	10	132	29	6	171	1	2	19	0	22	8	279	287
<b>Total</b>	<b>19</b>	<b>237</b>	<b>20</b>	<b>45</b>	<b>276</b>	<b>39</b>	<b>3</b>	<b>16</b>	<b>0</b>	<b>58</b>	<b>35</b>	<b>403</b>	<b>70</b>	<b>23</b>	<b>508</b>	<b>36</b>	<b>3</b>	<b>117</b>	<b>1</b>	<b>156</b>	<b>69</b>	<b>998</b>	<b>1067</b>
16:00	7	78	3	3	88	19	0	11	0	30	10	111	28	3	149	9	1	22	0	32	6	299	305
16:15	6	64	0	9	70	10	0	6	0	16	10	119	20	1	149	3	1	12	0	16	10	251	261
16:30	9	60	1	2	70	9	1	8	0	18	4	123	16	0	143	2	1	6	0	9	2	240	242
16:45	8	72	3	2	83	8	1	4	0	13	10	132	14	0	156	2	0	7	0	9	2	261	263
<b>Total</b>	<b>30</b>	<b>274</b>	<b>7</b>	<b>16</b>	<b>311</b>	<b>46</b>	<b>2</b>	<b>29</b>	<b>0</b>	<b>77</b>	<b>34</b>	<b>485</b>	<b>78</b>	<b>4</b>	<b>597</b>	<b>16</b>	<b>3</b>	<b>47</b>	<b>0</b>	<b>66</b>	<b>20</b>	<b>1051</b>	<b>1071</b>
17:00	5	61	7	5	73	17	1	5	0	23	11	133	15	2	159	7	5	17	0	29	7	284	291
17:15	6	86	1	7	93	21	0	14	0	35	9	129	19	2	157	4	1	5	1	10	10	295	305
17:30	7	75	2	1	84	19	0	6	0	25	12	131	24	0	167	1	1	5	0	7	1	283	284
17:45	5	80	5	1	90	21	0	5	0	26	10	121	23	0	154	1	0	3	0	4	1	274	275
<b>Total</b>	<b>23</b>	<b>302</b>	<b>15</b>	<b>14</b>	<b>340</b>	<b>78</b>	<b>1</b>	<b>30</b>	<b>0</b>	<b>109</b>	<b>42</b>	<b>514</b>	<b>81</b>	<b>4</b>	<b>637</b>	<b>13</b>	<b>7</b>	<b>30</b>	<b>1</b>	<b>50</b>	<b>19</b>	<b>1136</b>	<b>1155</b>
<b>Grand Total</b>	<b>126</b>	<b>2450</b>	<b>251</b>	<b>159</b>	<b>2827</b>	<b>300</b>	<b>22</b>	<b>102</b>	<b>6</b>	<b>424</b>	<b>475</b>	<b>1995</b>	<b>335</b>	<b>89</b>	<b>2805</b>	<b>168</b>	<b>27</b>	<b>510</b>	<b>4</b>	<b>705</b>	<b>258</b>	<b>6761</b>	<b>7019</b>
Apprch %	4.5	86.7	8.9			70.8	5.2	24.1			16.9	71.1	11.9			23.8	3.8	72.3					
Total %	1.9	36.2	3.7		41.8	4.4	0.3	1.5		6.3	7	29.5	5		41.5	2.5	0.4	7.5		10.4	3.7	96.3	

Start Time	CSAH 78 Southbound					154th Ave. Westbound					CSAH 78 Northbound					154th Ave. 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 07:15																					
07:15	3	162	50	215	14	2	0	16	77	33	5	115	11	2	63	76	422				
07:30	7	118	23	148	10	1	1	12	54	34	8	96	23	0	56	79	335				
07:45	4	92	48	144	3	4	1	8	69	31	9	109	21	4	40	65	326				
08:00	5	92	43	140	8	2	8	18	56	28	8	92	31	5	75	111	361				
<b>Total Volume</b>	<b>19</b>	<b>464</b>	<b>164</b>	<b>647</b>	<b>35</b>	<b>9</b>	<b>10</b>	<b>54</b>	<b>256</b>	<b>126</b>	<b>30</b>	<b>412</b>	<b>86</b>	<b>11</b>	<b>234</b>	<b>331</b>	<b>1444</b>				
% App. Total	2.9	71.7	25.3		64.8	16.7	18.5		62.1	30.6	7.3		26	3.3	70.7						
PHF	.679	.716	.820	.752	.625	.563	.313	.750	.831	.926	.833	.896	.694	.550	.780	.745	.855				



# Anoka County Highway Department

## Traffic Engineering Section

### Traffic Volume and Turning Movement Study

Weather: Cloudy and Cool  
 Counter: DB-400  
 study conducted by: Josie/Terri

File Name : tmc 1345  
 Site Code : 13450203  
 Start Date : 10/29/2013  
 Page No : 2

Start Time	CSAH 78 Southbound				154th Ave. Westbound				CSAH 78 Northbound				154th Ave. 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 12:00 to 17:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 17:00																	
17:00	5	61	7	73	17	1	5	23	11	133	15	159	7	5	17	29	284
17:15	6	86	1	93	21	0	14	35	9	129	19	157	4	1	5	10	295
17:30	7	75	2	84	19	0	6	25	12	131	24	167	1	1	5	7	283
17:45	5	80	5	90	21	0	5	26	10	121	23	154	1	0	3	4	274
Total Volume	23	302	15	340	78	1	30	109	42	514	81	637	13	7	30	50	1136
% App. Total	6.8	88.8	4.4		71.6	0.9	27.5		6.6	80.7	12.7		26	14	60		
PHF	.821	.878	.536	.914	.929	.250	.536	.779	.875	.966	.844	.954	.464	.350	.441	.431	.963



# Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

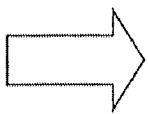
Weather: Cloudy and Cool  
 Counter: DB-400  
 study conducted by: Josie/Terri

File Name : tmc 1345\_activity\_pm\_peak  
 Site Code : 13450102  
 Start Date : 10/24/2013  
 Page No : 1

Groups Printed- Unshifted

Start Time	CSAH 78 Southbound					154th Ave. Westbound					CSAH 78 Northbound					154th Ave. Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	Heavys	App. Total	Left	Thru	Right	Heavys	App. Total	Left	Thru	Right	Heavys	App. Total	Left	Thru	Right	Heavys	App. Total			
14:30	9	59	4	6	72	9	2	3	2	14	15	102	20	8	137	1	0	6	0	7	16	230	246
14:45	6	61	13	8	80	12	2	4	0	18	35	85	10	11	130	2	2	7	0	11	19	239	258
<b>Total</b>	15	120	17	14	152	21	4	7	2	32	50	187	30	19	267	3	2	13	0	18	35	469	504
15:00	9	74	9	28	92	5	0	6	1	11	14	96	18	8	128	24	3	42	0	69	37	300	337
15:15	6	52	6	17	64	12	1	4	0	17	8	80	10	3	98	8	0	27	0	35	20	214	234
15:30	0	75	0	7	75	6	0	3	0	9	5	118	11	6	134	4	0	14	0	18	13	236	249
15:45	3	68	2	3	73	6	0	8	0	14	10	123	18	4	151	2	1	11	0	14	7	252	259
<b>Total</b>	18	269	17	55	304	29	1	21	1	51	37	417	57	21	511	38	4	94	0	136	77	1002	1079
16:00	6	67	1	3	74	15	0	5	0	20	8	124	31	4	163	5	2	12	0	19	7	276	283
16:15	12	89	1	3	102	17	0	5	0	22	8	107	19	0	134	0	1	5	0	6	3	264	267
16:30	12	63	3	4	78	12	2	4	0	18	11	132	29	3	172	2	0	0	0	2	7	270	277
16:45	7	64	19	4	90	14	1	8	0	23	63	122	19	1	204	1	1	4	0	6	5	323	328
<b>Total</b>	37	283	24	14	344	58	3	22	0	83	90	485	98	8	673	8	4	21	0	33	22	1133	1155
17:00	11	63	20	6	94	14	6	15	0	35	62	134	30	0	226	13	0	92	0	105	6	460	466
17:15	10	107	12	7	129	36	6	10	0	52	17	127	45	1	189	32	11	75	1	118	9	488	497
17:30	7	104	1	1	112	21	2	10	0	33	7	128	31	3	166	5	4	12	0	21	4	332	336
17:45	9	96	1	2	106	43	2	13	0	58	6	121	29	2	156	1	1	4	0	6	4	326	330
<b>Total</b>	37	370	34	16	441	114	16	48	0	178	92	510	135	6	737	51	16	183	1	250	23	1606	1629
Grand Total	107	1042	92	99	1241	222	24	98	3	344	269	1599	320	54	2188	100	26	311	1	437	157	4210	4367
Apprch %	8.6	84	7.4			64.5	7	28.5			12.3	73.1	14.6			22.9	5.9	71.2					
Total %	2.5	24.8	2.2		29.5	5.3	0.6	2.3		8.2	6.4	38	7.6		52	2.4	0.6	7.4		10.4	3.6	96.4	

Start Time	CSAH 78 Southbound				154th Ave. Westbound				CSAH 78 Northbound				154th Ave. 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 14:30 to 17:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 17:00																	
17:00	11	63	20	94	14	6	15	35	62	134	30	226	13	0	92	105	460
17:15	10	107	12	129	36	6	10	52	17	127	45	189	32	11	75	118	488
17:30	7	104	1	112	21	2	10	33	7	128	31	166	5	4	12	21	332
17:45	9	96	1	106	43	2	13	58	6	121	29	156	1	1	4	6	326
<b>Total Volume</b>	37	370	34	441	114	16	48	178	92	510	135	737	51	16	183	250	1606
% App. Total	8.4	83.9	7.7		64	9	27		12.5	69.2	18.3		20.4	6.4	73.2		
PHF	.841	.864	.425	.855	.663	.667	.800	.767	.371	.951	.750	.815	.398	.364	.497	.530	.823

**COUNT LOCATION:**

CSAH 78 (Hanson Blvd.)

**DATE:**

10/24/2013

@ 154th Ave.

**NORTH**

APP. #1 = CSAH 78

APP. #2 = 154th Ave.

APP. #3 = CSAH 78

APP. #4 = 154th Ave.

**APP.  
#2**HEAVY VEHICLE- ANY VEHICLE HAVING MORE THAN  
FOUR TIRES TOUCHING THE PAVEMENT**APP.  
#1****APP.  
#3**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.**APP.  
#4**

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						7		1
6:30-6:45						3		1
6:45-7:00						2		2
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>18</b>
7:00-7:15AM	2			1	3			5
7:15-7:30	4				4	1		5
7:30-7:45	8			1	9	4		3
7:45-8:00	15			7	22			1
<b>HOURLY TOTAL</b>					<b>38</b>	<b>HOURLY TOTAL</b>		<b>19</b>
8:00-8:15AM	11			1	12	4		26
8:15-8:30	1				1	3		9
8:30-8:45						9		1
8:45-9:00						5		5
<b>HOURLY TOTAL</b>					<b>13</b>	<b>HOURLY TOTAL</b>		<b>62</b>
9:00-9:15AM						1		5
9:15-9:30	1				1	6		14
<b>HOURLY TOTAL</b>					<b>1</b>	<b>HOURLY TOTAL</b>		<b>26</b>
					<b>TOTAL</b>		<b>TOTAL</b>	<b>125</b>
					<b>52</b>			

TIME	PEDESTRIANS					HEAVY VEHICLES		
	APP. #1	APP. #2	APP. #3	APP. #4	15 MIN TOT	TRUCKS	RV	BUS
2:30-2:45PM	1				1	8		5
2:45-3:00						4		5
<b>HOURLY TOTAL</b>					<b>1</b>	<b>HOURLY TOTAL</b>		<b>22</b>
3:00-3:15PM	60				60	4		18
3:15-3:30	9			3	12	8		27
3:30-3:45	2				2			6
3:45-4:00	2				2	5		3
<b>HOURLY TOTAL</b>					<b>76</b>	<b>HOURLY TOTAL</b>		<b>71</b>
4:00-4:15PM	2	1			3	3		3
4:15-4:30						3		8
4:30-4:45	1				1		1	1
4:45-5:00						1		1
<b>HOURLY TOTAL</b>					<b>4</b>	<b>HOURLY TOTAL</b>		<b>21</b>
5:00-5:15PM	1				1	3		4
5:15-5:30		2			2	2		6
5:30-5:45				2	2			1
5:45-6:00				2	2	1		
<b>HOURLY TOTAL</b>					<b>7</b>	<b>HOURLY TOTAL</b>		<b>17</b>
					<b>TOTAL</b>		<b>TOTAL</b>	<b>131</b>
					<b>88</b>			