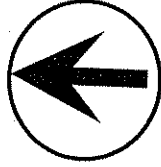


Date : 7/17/06

Count Number : TMC0615

Location : CSAH 52 (Radisson Rd.)

@ 129th Ave./ Quail Creek Pkwy



North

CSAH 52

8847

#2

4508

4339	D	27
4236	E	
76	F	

Quail Creek Pkwy

272

#1

107	C	12
	B	9
	A	86

129th Ave.

73	G	594
15	H	
506	J	

#3

1277

683

CSAH 52

4828

#4

5144	M	123
4423	L	
598	K	

9972

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

Anoka County Highway Department

Traffic Volume and Turning

Movement Study

Anoka County Highway Department
 Traffic Engineering
 Traffic Volume and Turning Movement Study

File Name : TMC0615
 Site Code : 06150102
 Start Date : 07/17/2006
 Page No : 1

Weather: sunny and warm
 Counter: DB-400
 Counted by: Jordan/Tom

Groups Printed- 1 - 1 - Unshifted

Start Time	CSAH 52 Southbound					Quail Creek Pkwy Westbound					CSAH 52 Northbound					129th Ave. 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				
	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0					
06:00	0	108	0	0	108	17	0	0	0	17	0	6	0	1	6	0	0	1	0	1	1	1	132	133
06:15	1	140	1	2	142	9	0	2	0	11	0	14	0	3	14	0	0	7	0	7	5	174	179	
06:30	0	196	0	2	196	13	0	0	0	13	1	14	1	16	0	0	4	0	4	4	3	229	232	
06:45	0	243	0	4	243	10	0	0	1	10	0	19	4	23	0	0	1	0	0	1	6	277	283	
Total	1	687	1	8	689	49	0	2	1	51	1	53	5	6	59	0	0	13	0	13	15	812	827	
07:00	1	215	0	3	216	18	0	3	1	21	0	19	4	3	23	0	0	3	0	3	7	263	270	
07:15	1	197	1	1	199	17	0	0	1	17	1	26	4	4	31	0	0	0	0	0	6	247	253	
07:30	3	194	0	6	197	21	0	0	0	21	0	21	1	2	22	0	0	1	0	1	8	241	249	
07:45	1	189	0	2	190	10	1	2	1	13	0	26	1	2	27	0	0	4	0	4	5	234	239	
Total	6	795	1	12	802	66	1	5	3	72	1	92	10	11	103	0	0	8	0	8	26	985	1011	
08:00	2	107	0	7	109	8	0	0	0	8	1	35	5	4	41	0	0	0	0	0	11	158	169	
08:15	0	94	0	4	94	5	0	2	0	7	1	26	6	3	33	0	0	1	1	1	8	135	143	
08:30	0	91	8	5	99	12	0	0	1	12	1	15	6	3	22	0	0	1	0	1	9	134	143	
08:45	0	75	0	5	75	11	0	1	0	12	0	27	5	6	32	0	0	0	0	0	11	119	130	
Total	2	367	8	21	377	36	0	3	1	39	3	103	22	16	128	0	0	2	1	2	39	546	585	
09:00	0	61	0	2	61	8	0	2	1	10	0	25	8	1	33	1	0	2	0	3	4	107	111	
09:15	0	84	1	1	85	10	0	1	1	11	1	28	9	7	38	0	0	1	0	1	9	135	144	
09:30	1	50	1	4	52	3	0	1	0	4	0	33	5	5	38	0	1	2	0	3	9	97	106	
09:45	1	50	0	2	51	8	0	4	3	12	1	30	5	4	36	0	0	0	0	0	9	99	108	
Total	2	245	2	9	249	29	0	8	5	37	2	116	27	17	145	1	1	5	0	7	31	438	469	
10:00	0	53	0	4	53	9	0	1	0	10	0	27	4	2	31	0	0	2	0	2	6	96	102	
10:15	1	54	0	8	55	10	0	0	1	10	2	34	7	6	43	0	0	2	0	2	15	110	125	
10:30	1	51	0	3	52	7	0	1	2	8	0	29	4	5	33	0	0	1	1	1	11	94	105	
10:45	1	30	0	6	31	11	0	1	0	12	1	27	4	6	32	2	0	1	0	3	12	78	90	
Total	3	188	0	21	191	37	0	3	3	40	3	117	19	19	139	2	0	6	1	8	44	378	422	
11:00	1	53	0	2	54	4	0	2	0	6	1	41	8	5	50	0	0	1	0	1	7	111	118	
11:15	1	43	0	2	44	8	0	4	1	12	0	31	6	4	37	1	0	1	1	2	8	95	103	
11:30	0	40	0	4	40	9	0	2	1	11	2	29	9	2	40	0	0	1	0	1	7	92	99	
11:45	1	46	1	1	48	9	0	1	0	10	3	41	9	8	53	0	0	2	0	2	9	113	122	
Total	3	182	1	9	186	30	0	9	2	39	6	142	32	19	180	1	0	5	1	6	31	411	442	
12:00	3	48	2	5	53	9	0	0	0	9	1	56	16	1	72	1	0	3	0	4	6	138	144	
12:15	0	50	0	2	50	19	0	3	0	22	1	50	7	1	58	0	0	0	0	0	3	130	133	
12:30	1	42	0	3	43	18	0	3	0	21	3	61	10	4	74	0	0	2	1	2	8	140	148	
12:45	2	35	1	2	38	10	0	3	0	13	0	40	11	1	51	1	4	1	0	6	3	108	111	
Total	6	175	3	12	184	56	0	9	0	65	5	206	44	7	255	2	4	6	1	12	20	516	536	
13:00	2	48	1	3	51	10	0	0	0	10	3	50	13	4	66	0	0	1	0	1	7	128	135	
13:15	3	41	2	2	46	3	2	0	2	5	5	53	10	2	68	0	0	1	0	1	6	120	126	
13:30	3	73	1	3	77	7	3	3	0	13	10	117	22	6	149	1	0	3	0	4	9	243	252	
13:45	1	82	2	6	85	15	2	4	1	21	7	121	22	9	150	1	0	0	0	1	16	257	273	
Total	9	244	6	14	259	35	7	7	3	49	25	341	67	21	433	2	0	5	0	7	38	748	786	
14:00	3	44	1	0	48	4	0	1	0	5	5	66	11	4	82	0	0	1	0	1	4	136	140	
14:15	1	51	0	1	52	3	0	2	0	5	1	72	12	6	85	0	0	2	1	2	8	144	152	
14:30	1	31	0	0	32	8	0	4	1	12	0	66	4	3	70	0	0	0	0	0	4	114	118	
14:45	1	21	0	2	22	5	0	3	0	8	3	87	9	1	99	0	0	0	0	0	3	129	132	
Total	6	147	1	3	154	20	0	10	1	30	9	291	36	14	336	0	0	3	1	3	19	523	542	
15:00	0	61	0	2	61	5	0	0	0	5	1	115	11	4	127	0	0	1	0	1	6	194	200	
15:15	1	37	0	3	38	2	0	0	0	2	1	113	8	7	122	0	0	1	0	1	10	163	173	
15:30	0	45	0	0	45	3	1	1	0	5	4	126	7	4	137	0	0	1	0	1	4	188	192	
15:45	1	52	0	1	53	5	0	1	0	6	5	185	11	8	201	0	0	1	0	1	9	261	270	
Total	2	195	0	6	197	15	1	2	0	18	11	539	37	23	587	0	0	4	0	4	29	606	635	
16:00	1	49	0	1	50	6	0	0	0	6	2	131	13	7	146	0	0	2	0	2	8	204	212	
16:15	2	43	0	4	45	9	1	3	0	13	3	177	16	4	196	0	0	1	0	1	8	255	263	
16:30	0	40	0	1	40	2	0	2	0	4	8	185	7	2	200	0	0	3	0	3	3	247	250	
16:45	3	60	0	1	63	5	0	0	1	5	2	180	18	2	200	0	0	0	0	0	4	268	272	
Total	6	192	0	7	198	22	1	5	1	28	15	673	54	15	742	0	0	6	0	6	23	974	997	
17:00	5	59	0	0	64	4	0	0	0	4	2	201	33	3	236	0	0	1	0	1	3	305	308	
17:15	2	64	1	1	67	8	1	3	0	12	5	201	14	0	220	1	0	1	0	2	1	301	302	
17:30	2	84	1	3	87	5	0	0	0	5	4	180	25	1	209	0	1	2	1	3	5	304	309	
17:45	0	53	0	0	53	14	0	0	0	14	3	134	12	3	149	0	0	0	0	0	3	216	219	
Total	9	260	2	4	271	31	1	3	0	35	14	716	84	7	814	1	1	4	1	6	12	1126	1138	
18:00	1	51	0	0	52	8	0	1	0	9	5	129	18	2	152	0	0	3	0	3	2	216	218	
18:15	0	56	0	0	5																			

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

Study Name : **TMC0615**
Study Date : **07/21/06**
Page No. : **1**

Signal Warrants - Summary

Major Street Approaches

Northbound: CSAH 52

Number of Lanes: 1
Approach Speed: 45
Total Approach Volume: 5,144

Southbound: CSAH 52

Number of Lanes: 1
Approach Speed: 45
Total Approach Volume: 4,339

Minor Street Approaches

Eastbound: 129th Ave.

Number of Lanes: 1

Total Approach Volume: 107

Westbound: Quail Creek Pkwy

Number of Lanes: 1

Total Approach Volume: 594

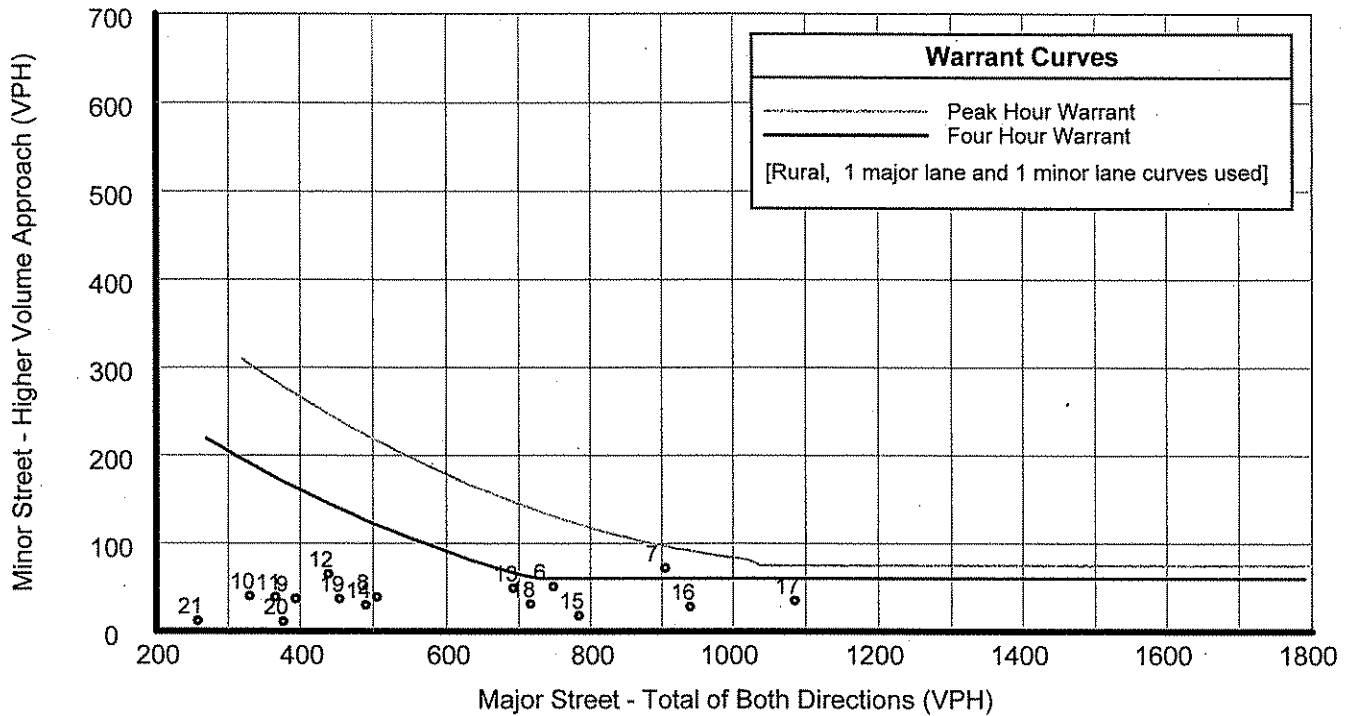
Warrant Summary (Rural values apply.)

Warrant 1 - Eight Hour Vehicular Volumes	Not Satisfied
Warrant 1A - Minimum Vehicular Volume	Not Satisfied
Required volumes reached for 0 hours, 8 are needed	
Warrant 1B - Interruption of Continuous Traffic	Not Satisfied
Required volumes reached for 1 hours, 8 are needed	
Warrant 1 A&B - Combination of Warrants	Not Satisfied
Required volumes reached for 0 hours, 8 are needed	
Warrant 2 - Four Hour Volumes	Not Satisfied
Number of hours (1) volumes exceed minimum < minimum required (4).	
Warrant 3 - Peak Hour	Not Satisfied
Warrant 3A - Peak Hour Delay	Not Satisfied
Approach volumes on minor street don't exceed minimums for any hour. Delay data not evaluated.	
Warrant 3B - Peak Hour Volumes	Not Satisfied
Volumes do not exceed minimums for any hour.	
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

ANOKA COUNTY HIGHWAY PC-WARRANTS TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name : TMC0615
Study Date : 07/21/06
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	EB	350-No	105-No	---	525-No	53-No	---	420-No	84-No	---
01:00	0	0	EB	350-No	105-No	---	525-No	53-No	---	420-No	84-No	---
02:00	0	0	EB	350-No	105-No	---	525-No	53-No	---	420-No	84-No	---
03:00	0	0	EB	350-No	105-No	---	525-No	53-No	---	420-No	84-No	---
04:00	0	0	EB	350-No	105-No	---	525-No	53-No	---	420-No	84-No	---
05:00	0	0	EB	350-No	105-No	---	525-No	53-No	---	420-No	84-No	---
06:00	748	51	WB	350-Yes	105-No	Major	525-Yes	53-No	Major	420-Yes	84-No	Major
07:00	905	72	WB	350-Yes	105-No	Major	525-Yes	53-Yes	Both	420-Yes	84-No	Major
08:00	505	39	WB	350-Yes	105-No	Major	525-No	53-No	---	420-Yes	84-No	Major
09:00	394	37	WB	350-Yes	105-No	Major	525-No	53-No	---	420-No	84-No	---
10:00	330	40	WB	350-No	105-No	---	525-No	53-No	---	420-No	84-No	---
11:00	366	39	WB	350-Yes	105-No	Major	525-No	53-No	---	420-No	84-No	---
12:00	439	65	WB	350-Yes	105-No	Major	525-No	53-Yes	Minor	420-Yes	84-No	Major
13:00	692	49	WB	350-Yes	105-No	Major	525-Yes	53-No	Major	420-Yes	84-No	Major
14:00	490	30	WB	350-Yes	105-No	Major	525-No	53-No	---	420-Yes	84-No	Major
15:00	784	18	WB	350-Yes	105-No	Major	525-Yes	53-No	Major	420-Yes	84-No	Major
16:00	940	28	WB	350-Yes	105-No	Major	525-Yes	53-No	Major	420-Yes	84-No	Major
17:00	1,085	35	WB	350-Yes	105-No	Major	525-Yes	53-No	Major	420-Yes	84-No	Major
18:00	716	31	WB	350-Yes	105-No	Major	525-Yes	53-No	Major	420-Yes	84-No	Major
19:00	454	37	WB	350-Yes	105-No	Major	525-No	53-No	---	420-Yes	84-No	Major
20:00	377	11	WB	350-Yes	105-No	Major	525-No	53-No	---	420-No	84-No	---
21:00	258	12	WB	350-No	105-No	---	525-No	53-No	---	420-No	84-No	---
22:00	0	0	EB	350-No	105-No	---	525-No	53-No	---	420-No	84-No	---
23:00	0	0	EB	350-No	105-No	---	525-No	53-No	---	420-No	84-No	---

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

Study Name : TMC0615
Study Date : 08/08/06
Page No. : 1

Multi-Way Stop Warrant Report

Major Street Approaches

Northbound: CSAH 52
Total Approach Volume: 5,144
Approach Speed: 45

Southbound: CSAH 52
Total Approach Volume: 4,339
Approach Speed: 45

Minor Street Approaches

Eastbound: 129th Ave.
Total Approach Volume: 107

Westbound: Quail Creek Pkwy
Total Approach Volume: 594

Warrant Summary

Criteria A - Interim Measure Not Evaluated
If traffic signals are justified, stop signs can be installed as an interim measure.

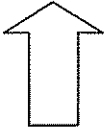
Criteria B - Crash Experience Not Evaluated

Criteria C - Minimum Volumes and Delays Not Satisfied
Delay data not evaluated
Required volumes reached for 0 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?
00:00 - 01:00	0	0	210-No	140-No	No	240-No	160-No	No
01:00 - 02:00	0	0	210-No	140-No	No	240-No	160-No	No
02:00 - 03:00	0	0	210-No	140-No	No	240-No	160-No	No
03:00 - 04:00	0	0	210-No	140-No	No	240-No	160-No	No
04:00 - 05:00	0	0	210-No	140-No	No	240-No	160-No	No
05:00 - 06:00	0	0	210-No	140-No	No	240-No	160-No	No
06:00 - 07:00	748	64	210-Yes	140-No	Major	240-Yes	160-No	Major
07:00 - 08:00	905	80	210-Yes	140-No	Major	240-Yes	160-No	Major
08:00 - 09:00	505	41	210-Yes	140-No	Major	240-Yes	160-No	Major
09:00 - 10:00	394	44	210-Yes	140-No	Major	240-Yes	160-No	Major
10:00 - 11:00	330	48	210-Yes	140-No	Major	240-Yes	160-No	Major
11:00 - 12:00	366	45	210-Yes	140-No	Major	240-Yes	160-No	Major
12:00 - 13:00	439	77	210-Yes	140-No	Major	240-Yes	160-No	Major
13:00 - 14:00	692	56	210-Yes	140-No	Major	240-Yes	160-No	Major
14:00 - 15:00	490	33	210-Yes	140-No	Major	240-Yes	160-No	Major
15:00 - 16:00	784	22	210-Yes	140-No	Major	240-Yes	160-No	Major
16:00 - 17:00	940	34	210-Yes	140-No	Major	240-Yes	160-No	Major
17:00 - 18:00	1,085	41	210-Yes	140-No	Major	240-Yes	160-No	Major
18:00 - 19:00	716	40	210-Yes	140-No	Major	240-Yes	160-No	Major
19:00 - 20:00	454	40	210-Yes	140-No	Major	240-Yes	160-No	Major
20:00 - 21:00	377	17	210-Yes	140-No	Major	240-Yes	160-No	Major
21:00 - 22:00	258	19	210-Yes	140-No	Major	240-Yes	160-No	Major
22:00 - 23:00	0	0	210-No	140-No	No	240-No	160-No	No
23:00 - 00:00	0	0	210-No	140-No	No	240-No	160-No	No



NORTH

COUNT LOCATION:

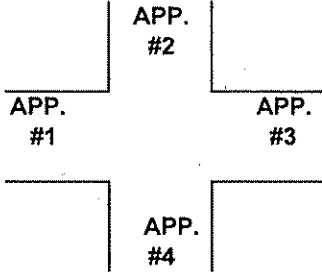
CSAH 52 (Rasison Rd.)

DATE:

07/18/2006

@ 129th Ave./ Quail Creek Pkwy

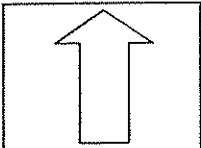
APP.#1= 129th Ave.
APP.#2= CSAH 52
APP.#3= Quail Creek Pkwy
APP.#4= CSAH 52



- 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		1			1	1		
6:15-6:30						5		
6:30-6:45						3		
6:45-7:00						6		
HOURLY TOTAL					1	HOURLY TOTAL		15
7:00-7:15	1				1	5		2
7:15-7:30						5		1
7:30-7:45						7		1
7:45-8:00						3		2
HOURLY TOTAL					1	HOURLY TOTAL		26
8:00-8:15						11		
8:15-8:30						6		2
8:30-8:45						9		
8:45-9:00						11		
HOURLY TOTAL						HOURLY TOTAL		39
9:00-9:15						10		
9:15-9:30	2	1			3	9		
9:30-9:45				3	3	9		
9:45-10:00						9		
HOURLY TOTAL					6	HOURLY TOTAL		37
10:00-10:15						6		
10:15-10:30						14	1	
10:30-10:45						11		
10:45-11:00						12		
HOURLY TOTAL						HOURLY TOTAL		44
11:00-11:15						6		1
11:15-11:30		1		1	2	6		2
11:30-11:45						8		
11:45-12:00						9		
HOURLY TOTAL					2	HOURLY TOTAL		32
12:00-12:15				1	1	6		
12:15-12:30						3		
12:30-12:45						7		2
12:45-1:00			1		1	3		
HOURLY TOTAL					2	HOURLY TOTAL		21
1:00-1:15						7		
1:15-1:30						6		
1:30-1:45				1	1	9		
1:45-2:00						8		
HOURLY TOTAL					1	HOURLY TOTAL		30
TOTAL						TOTAL		244

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COUNT LOCATION:

CSAH 52 (Rasison Rd.)

DATE:

07/17/2006

129th Ave./ Quail Creek Pkwy

NORTH
APP.#1= 129th Ave.
APP.#2= CSAH 52
APP.#3= Quail Creek Pkwy
APP.#4= CSAH 52

APP. #2	APP. #3
APP. #1	APP. #4

- 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								
2:15-2:30		2			2	6		
2:30-2:45						4		
2:45-3:00						7		1
HOURLY TOTAL					2	HOURLY TOTAL		18
3:00-3:15						2		
3:15-3:30						2		
3:30-3:45						6		
3:45-4:00						10		
HOURLY TOTAL						HOURLY TOTAL		20
4:00-4:15						5		
4:15-4:30						7		
4:30-4:45						8		
4:45-5:00						8		
HOURLY TOTAL						HOURLY TOTAL		28
5:00-5:15						3		
5:15-5:30			1		1	4		
5:30-5:45						3		
5:45-6:00						1		
HOURLY TOTAL					1	HOURLY TOTAL		11
6:00-6:15						4	1	
6:15-6:30						3		
6:30-6:45						2		
6:45-7:00						5		
HOURLY TOTAL						HOURLY TOTAL		15
7:00-7:15								
7:15-7:30						1		
7:30-7:45								
7:45-8:00						3		
HOURLY TOTAL						HOURLY TOTAL		4
8:00-8:15		2			2			
8:15-8:30								
8:30-8:45			1		1	1		
8:45-9:00			2		2			
HOURLY TOTAL					5	HOURLY TOTAL		1
9:00-9:15								
9:15-9:30								
9:30-9:45						1		
9:45-10:00								
HOURLY TOTAL						HOURLY TOTAL		1
					TOTAL	8		
							TOTAL	342

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