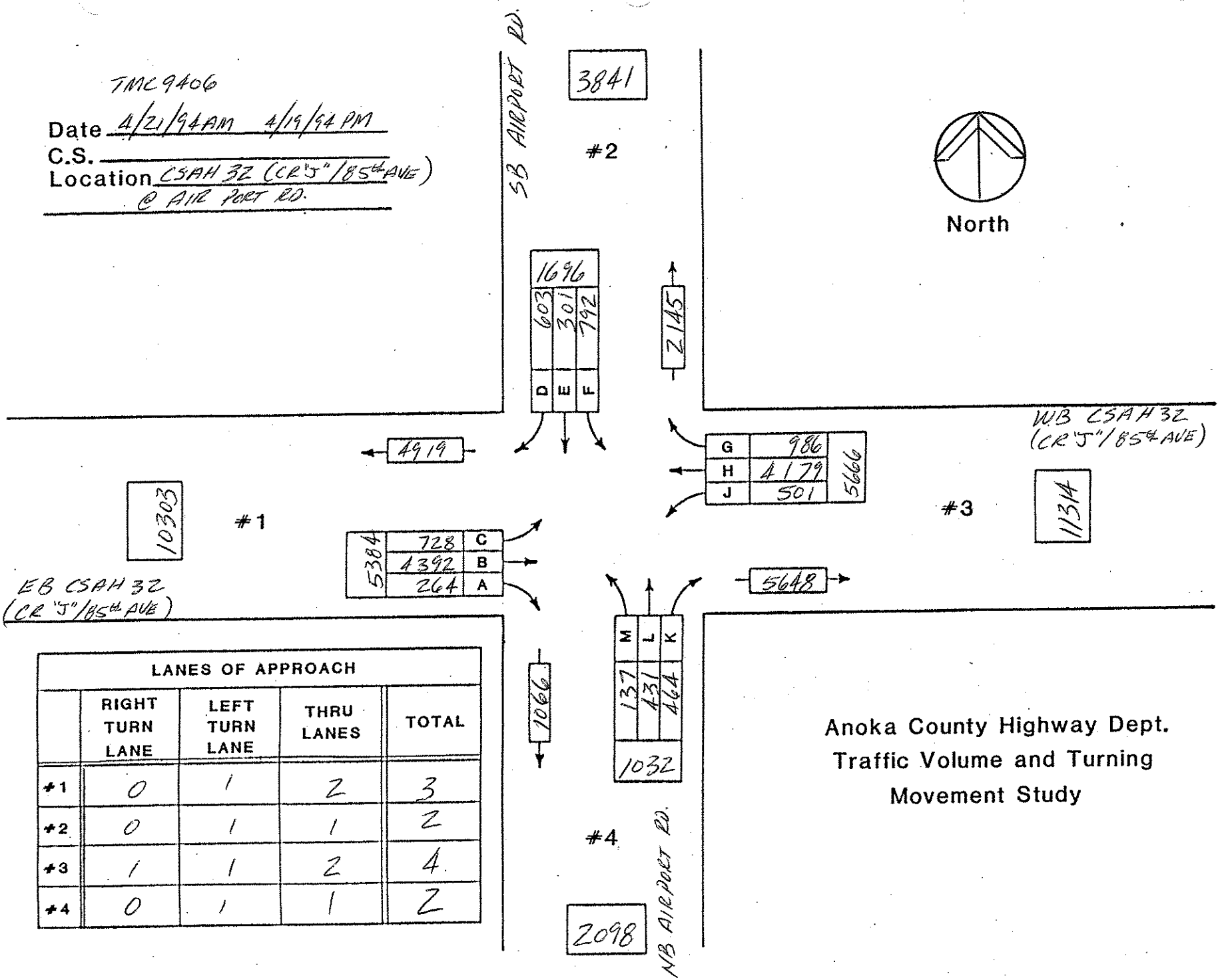
TMC 9406

Date 4/21/94 AM 4/19/94 PM

C.S.

Location CSAH 32 (CR "J"/85th AVE) @ AIR PORT RD.



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

Anoka County Highway Dept.
Traffic Volume and Turning Movement Study

ANOKA COUNTY HIGHWAY DEPARTMENT
TRAFFIC ENGINEERING SECTION
TRAFFIC VOLUME AND
TURNING MOVEMENT STUDY

Counter :TDC EIGHT
ed by

Site Code : 94060101
Start Date: 04/21/94
File I.D. : TMC940610(
Page : 1

Vehicle group 1

	AIRPORT ROAD Southbound				CSAH 32 (CR "J"/85TH AVE) Westbound				AIRPORT ROAD Northbound				CSAH 32 (CR "J"/85TH AVE) Eastbound					
	Other	Right	Thru	Left	Other	Right	Thru	Left	Other	Right	Thru	Left	Other	Right	Thru	Left	Vehicle Total	Other Total
Date 04/21/94																		
06:00	0	0	0	7	1	6	38	1	0	5	5	0	3	2	14	7	85	4
06:15	2	3	1	6	14	21	48	5	0	1	14	0	0	1	21	17	138	16
06:30	1	2	0	4	4	29	82	10	2	5	19	3	4	0	27	19	200	11
06:45	1	8	1	6	7	54	126	16	2	6	10	1	2	3	31	20	282	12
Hr Total	4	13	2	23	26	110	294	32	4	17	48	4	9	6	93	63	705	43
07:00	0	3	1	9	1	40	87	13	0	7	13	3	4	9	38	24	247	5
07:15	2	8	7	16	10	43	113	18	1	10	12	1	2	4	49	18	299	15
07:30	1	9	5	10	5	57	156	39	0	6	14	1	6	6	62	19	384	12
07:45	2	7	3	25	11	59	235	73	0	9	18	2	10	5	73	14	523	23
Hr Total	5	27	16	60	27	199	591	143	1	32	57	7	22	24	222	75	1453	55
08:00	3	7	1	14	13	53	172	43	0	6	7	2	6	3	56	14	378	22
08:15	1	13	2	18	8	23	114	17	0	5	9	3	5	2	48	14	268	14
08:30	1	9	2	13	11	10	72	4	2	2	9	2	5	2	29	13	167	19
08:45	4	4	4	8	5	6	60	7	0	6	10	3	5	0	36	6	150	14
tal	9	33	9	53	37	92	418	71	2	19	35	10	21	7	169	47	963	69
09:00	3	9	3	1	9	8	64	8	2	6	5	1	8	2	40	12	159	22
09:15	0	6	4	10	5	9	64	10	0	4	8	2	5	3	34	6	160	1(
09:30	4	6	2	13	9	15	50	1	0	1	3	3	8	1	36	13	144	21
09:45	5	4	7	16	3	7	65	2	0	10	7	2	4	3	23	9	155	12
Hr Total	12	25	16	40	26	39	243	21	2	21	23	8	25	9	133	40	618	65
10:00	3	7	1	8	4	5	55	4	0	4	4	4	6	5	45	8	150	1:
10:15	3	3	2	8	5	5	58	1	0	2	2	2	2	3	51	8	145	1(
10:30	3	5	3	14	9	13	61	1	1	2	9	3	4	4	48	14	177	1:
10:45	3	9	0	7	5	9	60	1	0	1	2	1	9	0	47	9	146	1:
Hr Total	12	24	6	37	23	32	234	7	1	9	17	10	21	12	191	39	618	57
11:00	3	10	1	7	8	8	49	5	0	4	1	3	7	1	59	10	158	1(
11:15	4	13	2	17	5	13	48	3	2	10	6	2	10	3	56	8	181	2:
11:30	1	7	8	14	6	14	51	5	1	3	4	3	2	1	52	10	172	1(
11:45	2	16	5	7	3	10	58	1	0	1	5	2	3	4	52	15	176	(
Hr Total	10	46	16	45	22	45	206	14	3	18	16	10	22	9	219	43	687	57
12:00	0	15	4	18	6	12	63	2	0	3	3	2	9	2	61	14	199	1!
12:15	1	10	2	12	9	10	65	9	0	6	7	1	4	2	74	7	205	1(
12:30	1	8	5	16	5	11	72	4	4	17	4	2	8	3	76	11	229	1(
12:45	7	20	1	10	3	11	59	3	1	10	7	0	4	2	66	15	204	1.
Hr Total	9	53	12	56	23	44	259	18	5	36	21	5	25	9	277	47	837	62

ANOKA COUNTY HIGHWAY DEPARTMENT
TRAFFIC ENGINEERING SECTION
TRAFFIC VOLUME AND
TURNING MOVEMENT STUDY

Counter :TDC EIGHT
Counted by

Site Code : 94060101
Start Date: 04/21/94
File I.D. : TMC9406}0(
Page : 2

Vehicle group 1

	AIRPORT ROAD Southbound				CSAH 32 (CR "J"/85TH AVE) Westbound				AIRPORT ROAD Northbound				CSAH 32 (CR "J"/85TH AVE) Eastbound					
	Other	Right	Thru	Left	Other	Right	Thru	Left	Other	Right	Thru	Left	Other	Right	Thru	Left	Vehicle Total	Other Total
Date 04/21/94																		
13:00	3	9	3	10	11	12	42	6	2	6	3	2	6	5	63	16	177	22
13:15	0	4	5	12	7	8	57	9	3	6	6	2	5	2	75	11	197	15
13:30	2	13	4	15	6	17	61	6	1	7	2	0	10	3	64	17	209	19
13:45	3	11	3	14	10	12	50	8	2	4	4	3	4	4	68	9	190	19
Hr Total	8	37	15	51	34	49	210	29	8	23	15	7	25	14	270	53	773	75
14:00	2	6	1	17	8	8	35	3	1	8	7	2	6	2	52	6	147	17
14:15	5	11	2	14	8	19	55	3	0	6	5	4	7	5	70	11	205	20
14:30	2	11	4	16	6	23	64	4	1	8	8	6	9	2	69	12	227	18
14:45	2	11	9	10	2	8	51	7	1	10	9	5	7	4	85	9	218	12
Hr Total	11	39	16	57	24	58	205	17	3	32	29	17	29	13	276	38	797	67
15:00	5	17	5	22	6	16	55	5	0	3	4	1	4	5	69	13	215	15
15:15	2	15	9	14	5	13	72	4	0	13	7	5	5	9	80	7	248	12
15:30	3	14	8	14	9	20	62	8	0	9	7	0	10	8	124	7	281	22
15:45	4	14	9	30	2	22	52	4	0	17	4	0	16	4	129	15	300	22
tal	14	60	31	80	22	71	241	21	0	42	22	6	35	26	402	42	1044	71
16:00	0	13	12	20	3	15	61	2	2	14	7	0	10	5	104	14	267	15
16:15	3	11	8	15	8	13	68	6	0	15	5	1	9	6	119	19	286	20
16:30	3	25	11	18	4	29	65	5	0	16	9	2	6	8	122	7	317	13
16:45	1	13	17	23	5	12	73	8	0	19	3	4	4	8	144	24	348	10
Hr Total	7	62	48	76	20	69	267	21	2	64	24	7	29	27	489	64	1218	58
17:00	1	12	7	12	3	12	75	8	0	19	7	1	10	6	154	19	332	14
17:15	2	21	13	16	1	18	75	10	0	17	12	2	6	7	145	13	349	9
17:30	0	16	8	18	4	17	72	11	1	11	9	2	1	11	103	12	290	6
17:45	0	11	9	14	4	21	72	13	0	14	6	3	3	6	126	14	309	7
Hr Total	3	60	37	60	12	68	294	42	1	61	34	8	20	30	528	58	1280	36
18:00	2	14	10	14	3	14	75	8	0	16	9	4	2	7	83	22	276	7
18:15	1	15	6	11	1	13	87	4	0	11	7	2	4	8	73	9	246	6
18:30	1	10	6	10	1	11	64	4	1	5	11	3	2	8	80	12	224	5
18:45	1	13	3	12	0	12	71	4	1	10	8	4	0	6	59	8	210	2
Hr Total	5	52	25	47	5	50	297	20	2	42	35	13	8	29	295	51	956	20
19:00	1	9	4	13	0	4	73	10	0	7	6	4	6	3	78	7	218	1
19:15	1	11	4	10	1	3	51	4	0	6	7	4	3	5	80	12	197	5
19:30	0	6	4	13	0	2	43	7	0	2	2	3	0	7	76	4	169	0
19:45	0	4	4	9	0	8	44	2	0	7	5	4	1	5	67	5	164	1
Hr Total	2	30	16	45	1	17	211	23	0	22	20	15	10	20	301	28	748	13

ANOKA COUNTY HIGHWAY DEPARTMENT
TRAFFIC ENGINEERING SECTION
TRAFFIC VOLUME AND
TURNING MOVEMENT STUDY

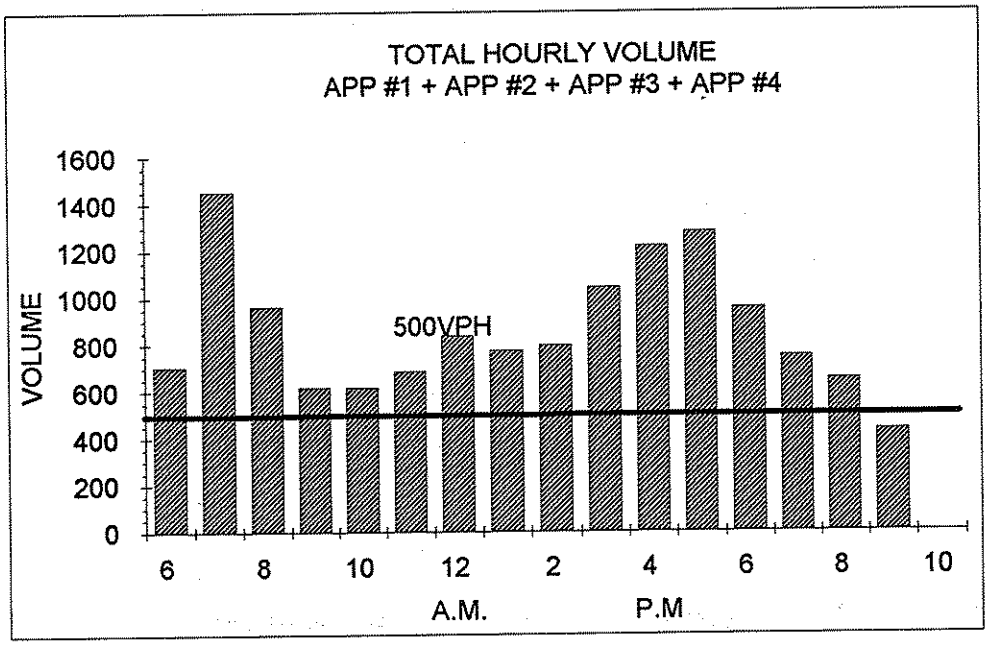
Counter :TDC EIGHT
Entered by

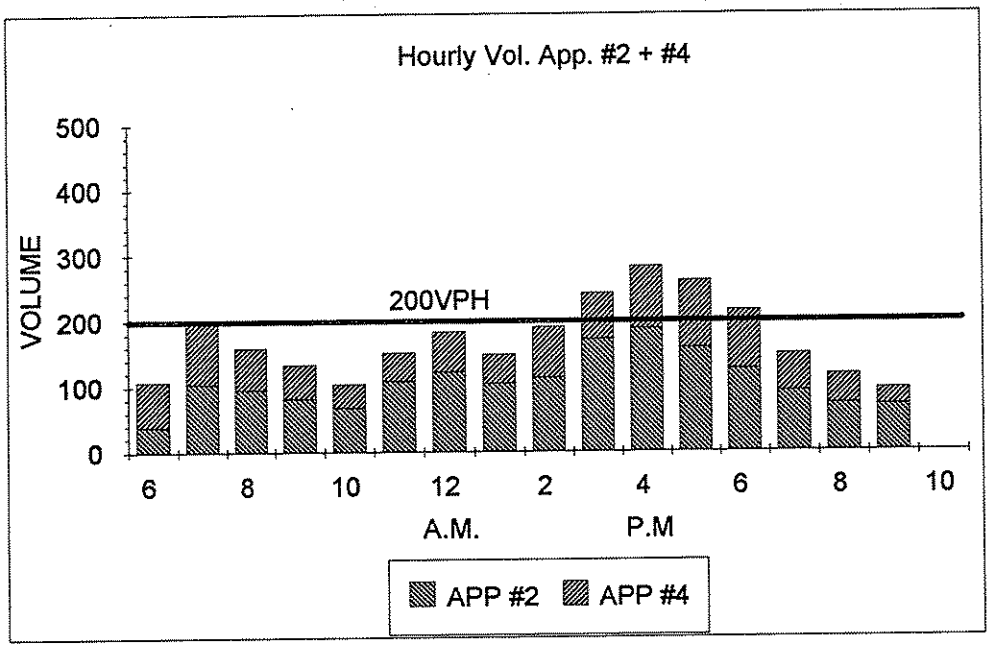
Site Code : 94060101
Start Date: 04/21/94
File I.D. : TMC94061(
Page : 3

Vehicle group 1

	AIRPORT ROAD Southbound				CSAH 32 (CR "J"/85TH AVE) Westbound				AIRPORT ROAD Northbound				CSAH 32 (CR "J"/85TH AVE) Eastbound					
	Other	Right	Thru	Left	Other	Right	Thru	Left	Other	Right	Thru	Left	Other	Right	Thru	Left	Vehicle Total	Other Total
Date 04/21/94																		
20:00	0	3	5	11	2	8	36	3	0	5	8	2	0	2	80	6	169	2
20:15	0	7	6	7	0	7	43	6	0	3	3	0	0	8	78	4	172	0
20:30	1	6	2	10	1	6	39	4	0	4	5	3	2	3	76	4	162	4
20:45	1	3	3	8	0	6	27	3	0	3	8	1	1	6	73	5	146	2
Hr Total	2	19	16	36	3	27	145	16	0	15	24	6	3	19	307	19	649	8
21:00	0	1	6	5	0	3	13	2	0	6	5	1	0	5	67	9	123	0
21:15	0	5	6	9	0	5	14	0	0	1	3	2	0	1	70	3	119	0
21:30	1	5	6	8	0	4	16	1	0	1	2	1	0	2	52	8	106	1
21:45	0	12	2	4	0	4	21	3	0	3	1	0	0	2	31	1	84	0
Hr Total	1	23	20	26	0	16	64	6	0	11	11	4	0	10	220	21	432	1
TOTAL	114	603	301	792	305	986	4179	501	34	464	431	137	304	264	4392	728	13778	757

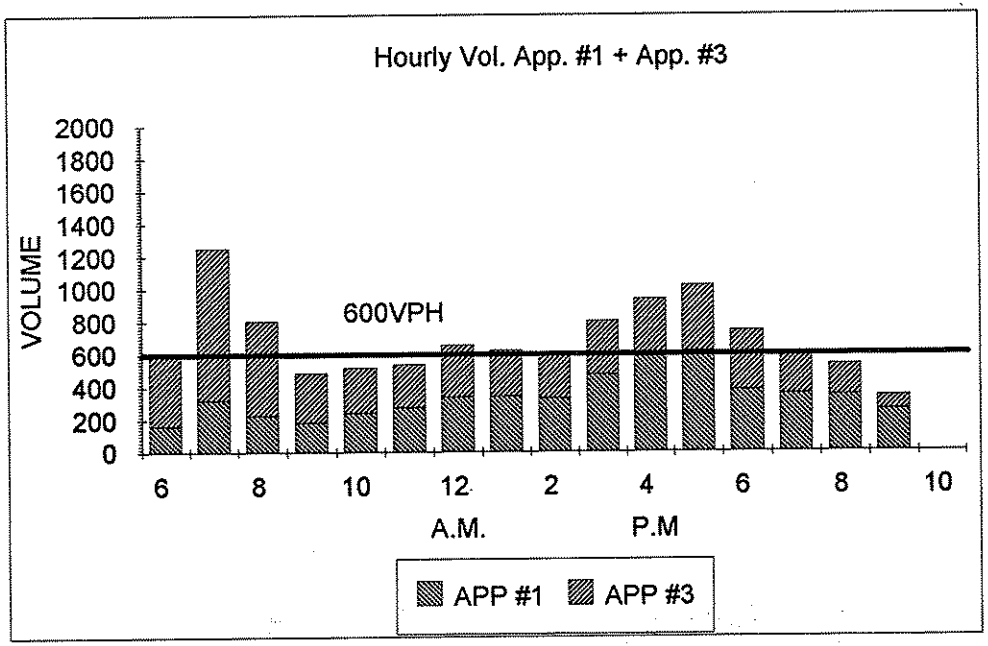
TMC9406 STOP WARRANT STUDY

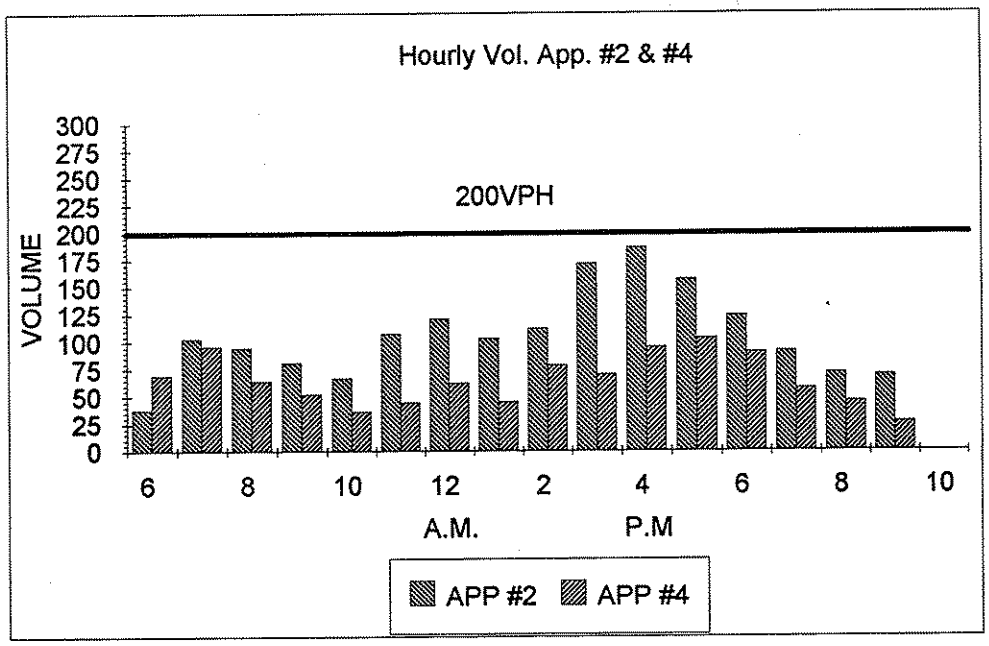




CSAH 32 (CR "J"/85TH AVE) @ AIRPORT ROAD

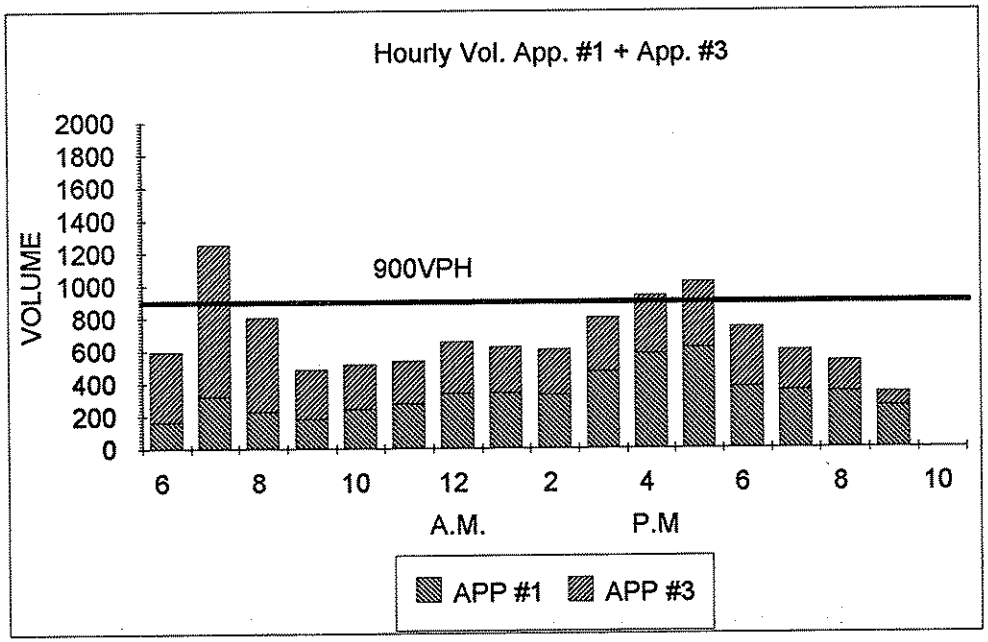
TMC9406 SIGNAL WARRANT 1 STUDY

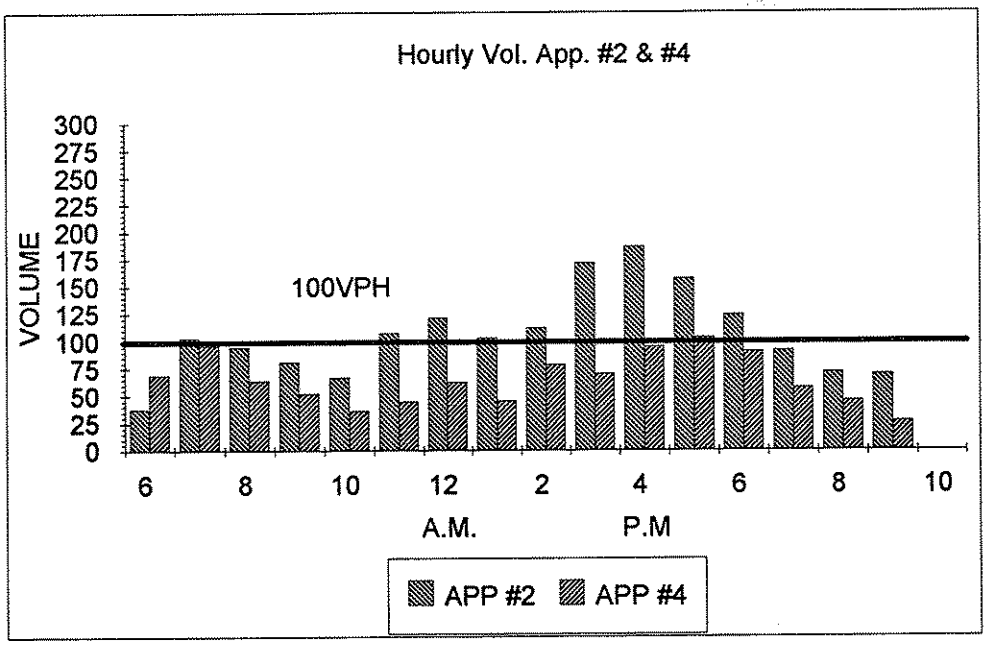




CSAH 32 (CR "J"/85TH AVE) @ AIRPORT ROAD

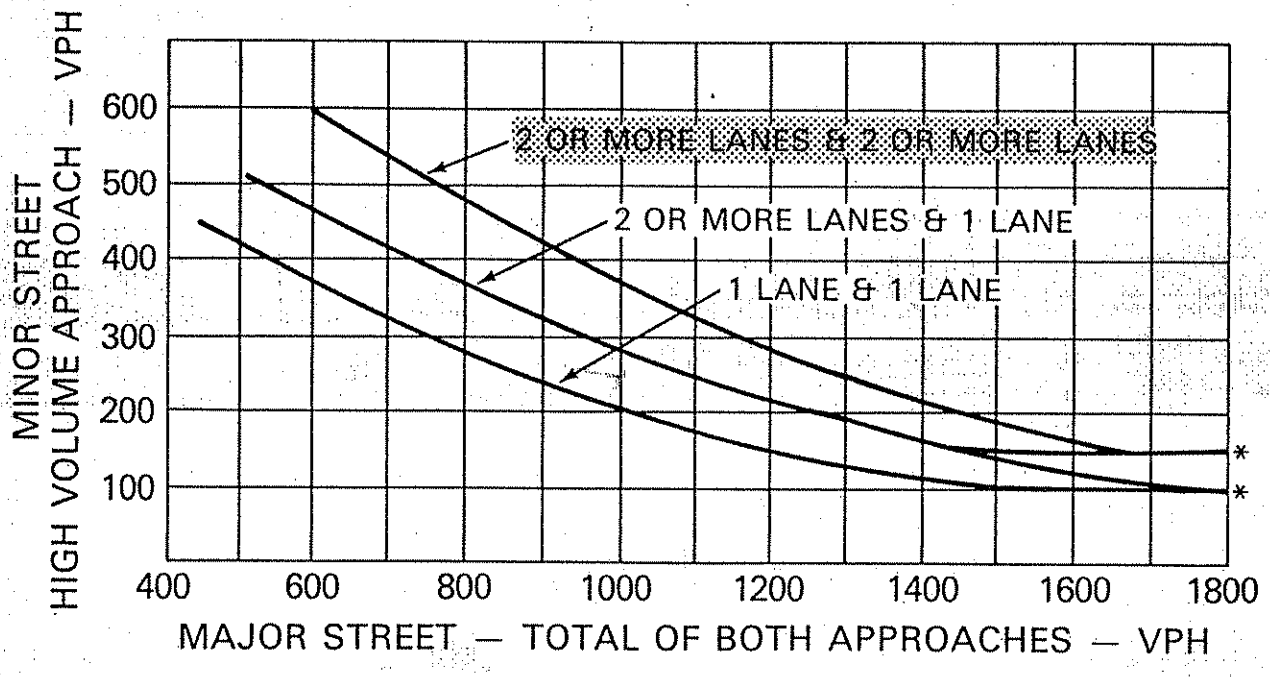
TMC9406 SIGNAL WARRANT 2 STUDY





CSAH 32 (CR "J"/85TH AVE) @ AIRPORT ROAD

FIGURE 4-5. PEAK HOUR VOLUME WARRANT



*NOTE: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

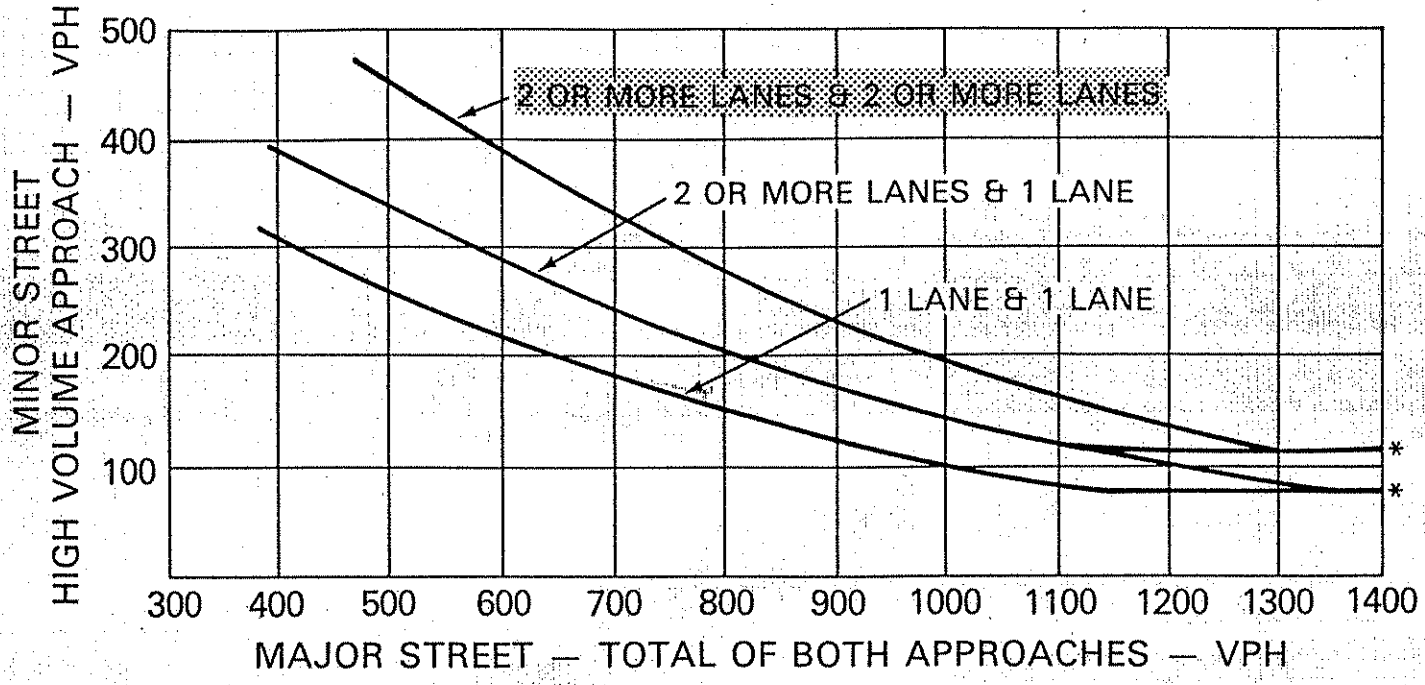
● = VOLUMES WHICH EXCEED THE THRESHOLD AND ARE REPRESENTED ON THE GRAPH.

★ = VOLUMES WHICH EXCEED THE THRESHOLD BUT CANNOT BE REPRESENTED ON THE GRAPH.

TIME	MAJOR STREETS (VPH)	MINOR STREET (VPH)
6-7 am	598	69
7-8 am	1254	103
8-9 am	804	95
9-10 am	485	81
10-11 am	515	67
11-12 pm	536	107
12-1 pm	654	121
1-2 pm	625	103
2-3 pm	607	112
3-4 pm	803	171
4-5 pm	937	186
5-6 pm	1020	157
6-7 pm	742	124
7-8 pm	600	91
8-9 pm	533	71
9-10 pm	337	69

TMC9406 CSAH 32 (CR "J"/85TH AVE) @ AIRPORT ROAD

FIGURE 4-7. FOUR HOUR VOLUME WARRANT



*NOTE: 115 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 80 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

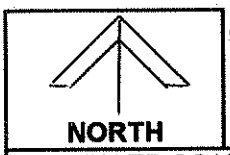
● = VOLUMES WHICH EXCEED THE THRESHOLD AND ARE REPRESENTED ON THE GRAPH.

★ = VOLUMES WHICH EXCEED THE THRESHOLD BUT CANNOT BE REPRESENTED ON THE GRAPH.

‡

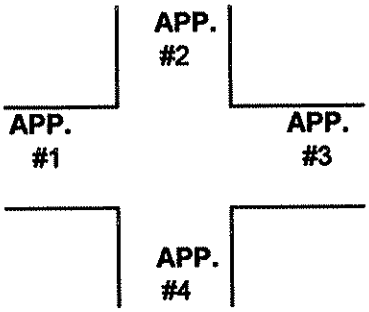
TIME	MAJOR STREETS (VPH)	MINOR STREET (VPH)
6-7 am	598	69
7-8 am	1254	103
8-9 am	804	95
9-10 am	485	81
10-11 am	515	67
11-12 pm	536	107
12-1 pm	654	121
1-2 pm	625	103
2-3 pm	607	112
3-4 pm	803	171
4-5 pm	937	186
5-6 pm	1020	157
6-7 pm	742	124
7-8 pm	600	91
8-9 pm	533	71
9-10 pm	337	69

TMC9406 CSAH 32 (CR "J"/85TH AVE) @ AIRPORT ROAD



COUNT LOCATION: CSAH 32 (CR "J") @ AIRPORT ROAD **DATE:** 4/21/94

APP. #1=EB CSAH 32 (CR "J")
APP. #2=SB AIRPORT ROAD
APP. #3=WB CSAH 32 (CR "J")
APP. #4=NB AIRPORT ROAD



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.

	PEDESTRIANS					HEAVY VEHICLES		
TIME	APP. #1	APP. #2	APP. #3	APP. #4	15 MIN TOT	TRUCKS	RV	BUS
6:00-6:15AM						3	1	
6:15-6:30						14	1	
6:30-6:45						8		2
6:45-7:00						11		2
HOURLY TOTAL						HOURLY TOTAL		42
7:00-7:15						5		
7:15-7:30						11		3
7:30-7:45		1			1	11		2
7:45-8:00						19		3
HOURLY TOTAL					1	HOURLY TOTAL		54
8:00-8:15						20		
8:15-8:30						12		2
8:30-8:45						17	1	2
8:45-9:00						6	1	7
HOURLY TOTAL						HOURLY TOTAL		68
9:00-9:15						15		7
9:15-9:30						7		
9:30-9:45						21		
9:45-10:00						12		
HOURLY TOTAL						HOURLY TOTAL		62
10:00-10:15						12	1	
10:15-10:30	1				1	10		
10:30-10:45	1				1	15	1	
10:45-11:00						15	2	
HOURLY TOTAL					2	HOURLY TOTAL		56
11:00-11:15						18		
11:15-11:30						20	1	
11:30-11:45						9		
11:45-12:00				1	1	8		
HOURLY TOTAL					1	HOURLY TOTAL		56
12:00-12:15						12		2
12:15-12:30						12		1
12:30-12:45						16		3
12:45-1:00						14		1
HOURLY TOTAL						HOURLY TOTAL		61
1:00-1:15						21		
1:15-1:30						14		
1:30-1:45						19		1
1:45-2:00						16		1
HOURLY TOTAL						HOURLY TOTAL		72

NORTH

COUNT LOCATION: CSAH 32 (CR "J") @ AIRPORT ROAD **DATE:** 4/21/94

APP. #1=EB CSAH 32 (CR "J")
APP. #2=SB AIRPORT . ROAD
APP. #3=WB CSAH 32 (CR "J")
APP. #4=NB AIRPORT . ROAD

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

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

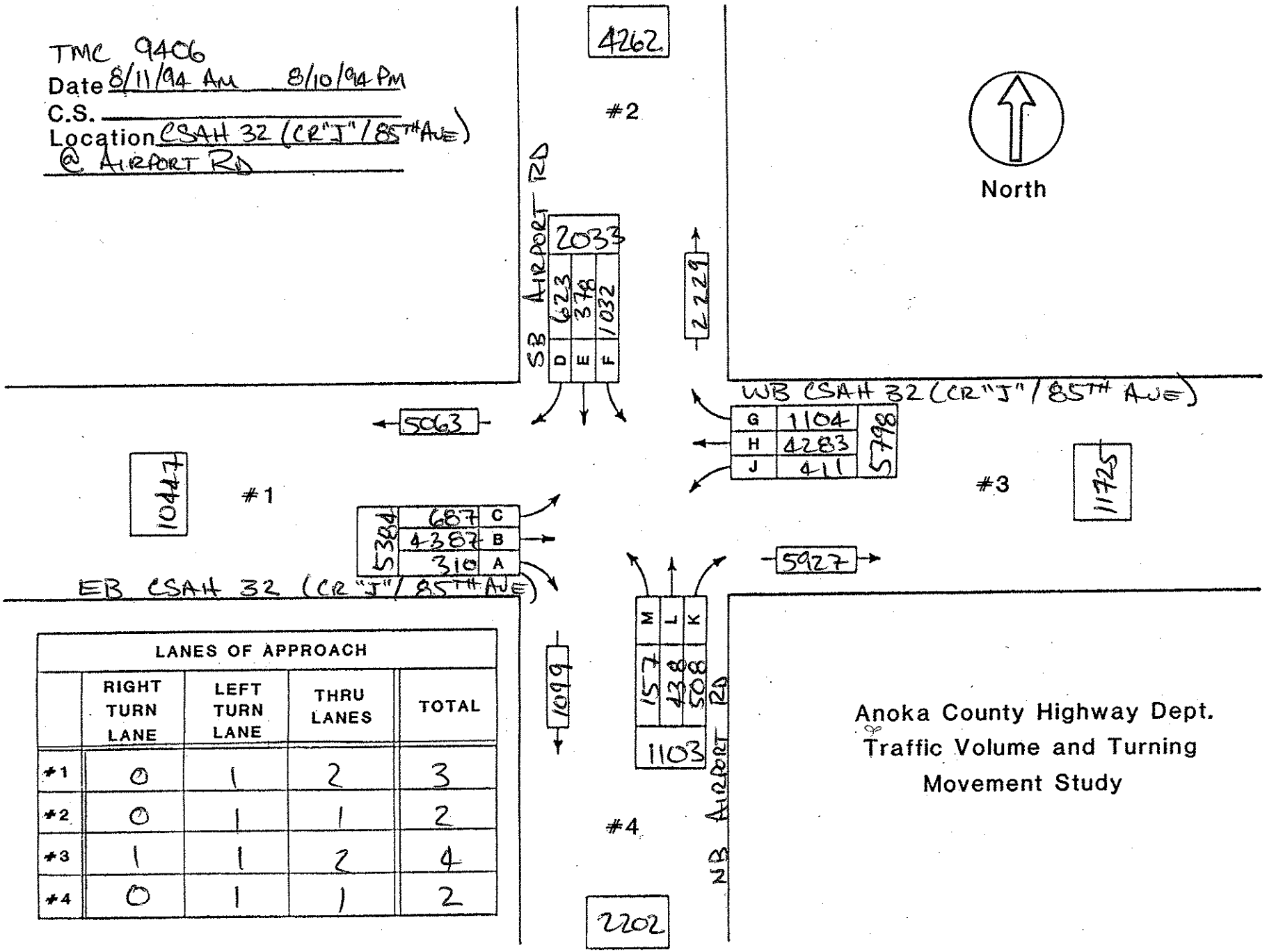
A. TRUCKS- A HEAVY VEHICLE INVOLVED PRIMARILY IN THE TRANSPORT OF GOODS OR IN THE DELIVERY OF A SERVICE.

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.

	PEDESTRIANS					HEAVY VEHICLES		
TIME	APP. #1	APP. #2	APP. #3	APP. #4	15 MIN TOT	TRUCKS	RV	BUS
2:00-2:15PM						13		3
2:15-2:30						18		2
2:30-2:45						17		2
2:45-3:00						10		
HOURLY TOTAL						HOURLY TOTAL		65
3:00-3:15						13		1
3:15-3:30						10		2
3:30-3:45						18		3
3:45-4:00						13		9
HOURLY TOTAL						HOURLY TOTAL		69
4:00-4:15	1				1	11		3
4:15-4:30						15		5
4:30-4:45						11		3
4:45-5:00						8		
HOURLY TOTAL					1	HOURLY TOTAL		56
5:00-5:15						14		2
5:15-5:30						7		
5:30-5:45						6		1
5:45-6:00						7		
HOURLY TOTAL						HOURLY TOTAL		37
6:00-6:15						5		1
6:15-6:30						6		
6:30-6:45						3		
6:45-7:00						2		
HOURLY TOTAL						HOURLY TOTAL		17
7:00-7:15				1	1	4		2
7:15-7:30						3		2
7:30-7:45				1	1	1		
7:45-8:00								
HOURLY TOTAL					2	HOURLY TOTAL		12
8:00-8:15						2		
8:15-8:30						2		
8:30-8:45	1				1	1		1
8:45-9:00	1				1			1
HOURLY TOTAL					2	HOURLY TOTAL		7
9:00-9:15								
9:15-9:30								
9:30-9:45								
9:45-10:00								
HOURLY TOTAL						HOURLY TOTAL		

TMC 9406
Date 8/11/94 AM 8/10/94 PM
C.S. _____
Location CSAH 32 (CR "J" / 85TH AVE)
@ AIRPORT RD



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

Anoka County Highway Dept.
Traffic Volume and Turning
Movement Study

ANOKA COUNTY HIGHWAY DEPARTMENT
TRAFFIC ENGINEERING SECTION
TRAFFIC VOLUME AND
TURNING MOVEMENT STUDY

Counter :TDC EIGHT
Counted by ROGER BUTLER

Site Code : 94060101
Start Date: 08/10/94
File I.D. : TMC9406}
Page : 1

Vehicle group 1

	AIRPORT ROAD Southbound				CSAH 32 (CR "J" / 85TH AVE) Westbound				AIRPORT ROAD Northbound				CSAH 32 (CR "J" / 85TH AVE) Eastbound					
Date 08/10/94	Other	Right	Thru	Left	Other	Right	Thru	Left	Other	Right	Thru	Left	Other	Right	Thru	Left	Vehicle Total	Other Total
06:00	1	2	2	9	5	12	40	5	0	1	4	0	1	1	16	9	101	7
06:15	1	1	3	8	11	32	65	9	0	6	13	1	1	1	25	15	179	13
06:30	3	10	4	19	6	40	107	20	0	7	12	4	4	2	28	17	270	13
06:45	2	7	4	13	4	49	97	23	1	4	13	1	1	2	32	18	263	8
Hr Total	7	20	13	49	26	133	309	57	1	18	42	6	7	6	101	59	813	41
07:00	2	3	4	12	5	28	112	21	0	4	10	1	4	5	43	13	256	11
07:15	1	7	3	8	7	33	106	15	0	8	10	4	1	5	40	21	260	9
07:30	2	5	7	22	7	27	120	11	0	5	13	1	6	3	40	21	275	15
07:45	2	11	6	24	4	26	107	15	0	5	12	0	6	4	71	12	293	12
Hr Total	7	26	20	66	23	114	445	62	0	22	45	6	17	17	194	67	1084	47
08:00	1	3	4	18	8	29	79	7	0	5	12	1	6	1	56	21	236	15
08:15	5	10	3	21	2	11	67	5	0	6	14	1	6	3	34	11	186	13
08:30	0	10	1	15	2	8	55	4	0	5	6	6	2	0	29	14	153	4
08:45	0	10	3	14	5	7	72	4	0	4	10	4	4	4	43	12	187	9
H tal	6	33	11	68	17	55	273	20	0	20	42	12	18	8	162	58	762	41
09:00	2	9	2	7	7	9	67	5	1	7	10	0	2	4	36	11	167	12
09:15	1	7	2	13	8	16	45	5	0	7	6	4	3	3	32	5	145	12
09:30	1	4	1	12	6	13	64	6	1	0	4	3	2	0	37	7	151	10
09:45	2	5	5	14	2	10	47	3	1	6	4	1	10	1	37	6	139	15
Hr Total	6	25	10	46	23	48	223	19	3	20	24	8	17	8	142	29	602	49
10:00	1	7	2	12	7	11	51	6	0	4	0	2	7	3	38	10	146	15
10:15	3	8	7	13	8	23	51	4	1	4	4	2	4	2	34	9	161	16
10:30	2	9	5	16	2	13	60	5	1	5	4	5	5	8	42	12	184	10
10:45	2	8	4	15	3	9	62	2	0	3	4	4	4	3	49	8	171	9
Hr Total	8	32	18	56	20	56	224	17	2	16	12	13	20	16	163	39	662	50
11:00	5	10	6	19	6	8	69	4	0	5	4	5	7	7	50	11	198	18
11:15	8	9	3	18	6	17	57	2	1	10	8	3	7	2	50	3	182	22
11:30	1	11	6	12	5	14	68	5	0	5	1	0	7	6	60	7	195	13
11:45	4	9	7	18	10	15	62	5	0	4	5	5	9	2	55	7	194	23
Hr Total	18	39	22	67	27	54	256	16	1	24	18	13	30	17	215	28	769	76
12:00	3	20	6	20	6	16	70	8	0	6	9	1	2	4	69	12	241	11
12:15	4	15	6	24	5	12	73	3	2	13	3	1	2	7	56	12	225	13
12:30	6	10	5	20	10	12	84	8	0	6	6	3	9	0	63	21	238	25
12:45	2	12	5	12	7	19	58	9	1	6	10	3	8	1	81	9	225	16
Hr Total	15	57	22	76	28	59	285	28	3	31	28	8	21	12	269	54	929	67

ANOKA COUNTY HIGHWAY DEPARTMENT
TRAFFIC ENGINEERING SECTION
TRAFFIC VOLUME AND
TURNING MOVEMENT STUDY

Counter :TDC EIGHT
Counted by ROGER BUTLER

Site Code : 94060101
Start Date: 08/10/94
File I.D. : TMC9406J
Page : 2

Vehicle group 1

	AIRPORT ROAD Southbound				CSAH 32 (CR "J" / 85TH AVE) Westbound				AIRPORT ROAD Northbound				CSAH 32 (CR "J" / 85TH AVE) Eastbound					
Date 08/10/94	Other	Right	Thru	Left	Other	Right	Thru	Left	Other	Right	Thru	Left	Other	Right	Thru	Left	Vehicle Total	Other Total
13:00	2	11	5	15	2	16	63	7	0	9	6	2	4	3	60	8	205	8
13:15	4	12	5	17	2	12	56	2	0	8	5	1	11	2	81	8	209	17
13:30	4	12	4	20	5	23	75	10	0	10	4	0	9	2	73	17	250	18
13:45	3	7	5	15	4	18	53	2	0	8	4	1	8	3	66	8	190	15
Hr Total	13	42	19	67	13	69	247	21	0	35	19	4	32	10	280	41	854	58
14:00	1	15	3	11	5	13	64	3	0	4	7	1	6	7	67	6	201	12
14:15	1	12	5	13	3	22	73	3	0	5	5	3	4	12	76	8	237	8
14:30	2	7	12	11	4	15	67	2	0	10	6	3	6	3	72	18	226	12
14:45	2	13	7	14	11	17	72	6	1	6	5	2	3	6	64	9	221	17
Hr Total	6	47	27	49	23	67	276	14	1	25	23	9	19	28	279	41	885	49
15:00	1	15	3	16	6	18	63	5	0	15	8	4	8	6	84	14	251	15
15:15	2	9	8	20	8	16	73	1	2	10	5	3	5	6	85	14	250	17
15:30	4	8	14	23	6	27	69	5	0	19	7	3	6	9	122	14	320	16
15:45	1	18	10	16	4	23	66	3	1	13	6	3	9	6	108	12	284	15
H tal	8	50	35	75	24	84	271	14	3	57	26	13	28	27	399	54	1105	63
16:00	10	16	10	29	9	21	57	7	2	14	2	5	6	12	115	17	305	27
16:15	3	21	10	26	8	18	70	4	1	10	11	2	8	17	118	15	322	20
16:30	2	15	10	27	8	27	82	8	0	11	12	2	4	10	140	15	359	14
16:45	2	21	8	23	4	21	73	8	0	19	8	1	7	13	184	18	397	13
Hr Total	17	73	38	105	29	87	282	27	3	54	33	10	25	52	557	65	1383	74
17:00	1	18	9	30	4	30	84	17	1	32	14	2	8	9	191	16	452	14
17:15	0	18	11	20	1	28	98	10	1	17	3	2	6	9	125	9	350	8
17:30	4	15	5	18	3	17	70	7	0	18	15	4	3	9	139	14	331	10
17:45	2	11	15	19	4	19	91	5	0	12	11	6	3	5	100	11	305	9
Hr Total	7	62	40	87	12	94	343	39	2	79	43	14	20	32	555	50	1438	41
18:00	2	10	9	23	2	12	71	7	0	10	6	4	3	7	95	13	267	7
18:15	0	16	9	15	1	19	77	4	0	14	6	5	0	7	74	9	255	1
18:30	1	11	7	23	2	16	83	7	0	16	10	6	3	8	68	14	269	6
18:45	1	14	8	17	2	16	83	5	0	7	4	4	1	11	71	11	251	4
Hr Total	4	51	33	78	7	63	314	23	0	47	26	19	7	33	308	47	1042	18
19:00	2	10	7	15	2	8	86	6	0	11	5	4	3	1	77	6	236	7
19:15	2	3	7	15	2	25	71	3	1	6	3	3	1	8	66	3	213	6
19:30	0	4	5	12	0	11	42	6	0	5	10	2	2	5	66	3	171	2
19:45	0	7	3	12	1	12	50	4	0	11	6	2	2	0	74	4	185	3
Hr Total	4	24	22	54	5	56	249	19	1	33	24	11	8	14	283	16	805	18

ANOKA COUNTY HIGHWAY DEPARTMENT
TRAFFIC ENGINEERING SECTION
TRAFFIC VOLUME AND
TURNING MOVEMENT STUDY

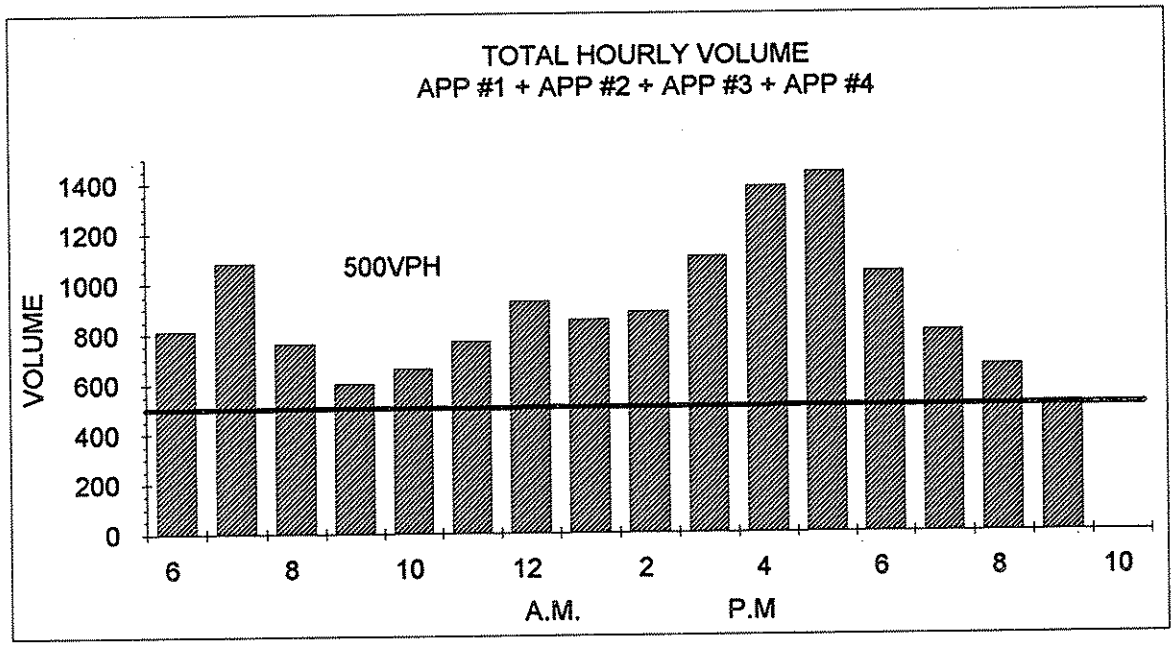
Counter :TDC EIGHT
Counted by ROGER BUTLER

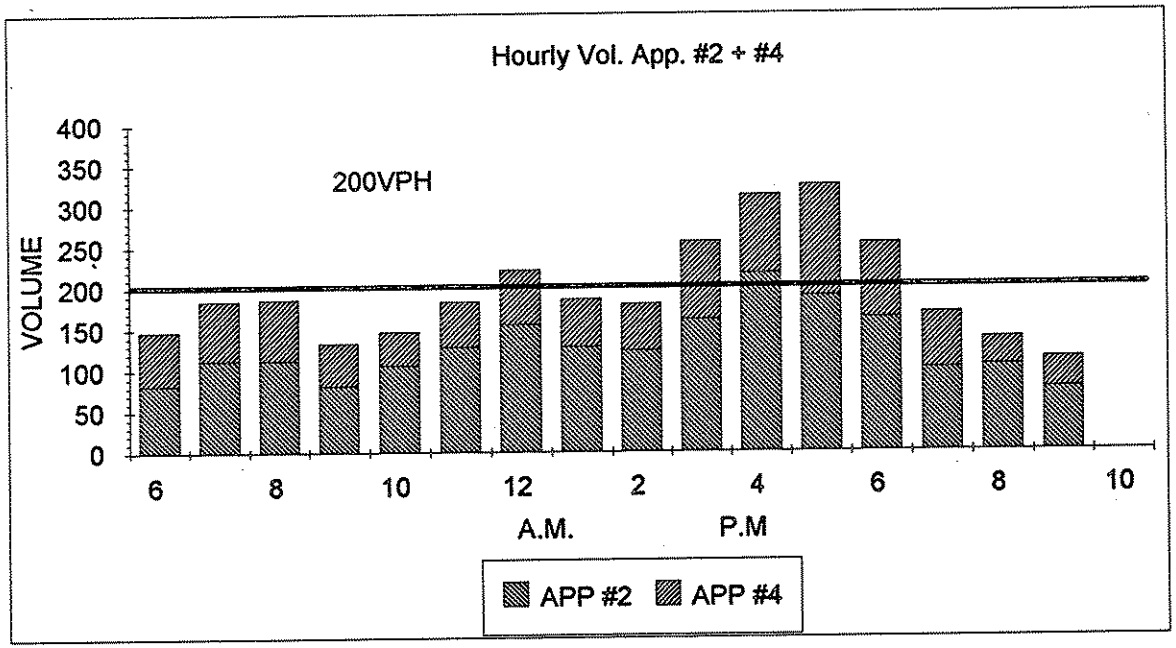
Site Code : 94060101
Start Date: 08/10/94
File I.D. : TMC9406

Vehicle group 1

	AIRPORT ROAD Southbound				CSAH 32 (CR "J" / 85TH AVE) Westbound				AIRPORT ROAD Northbound				CSAH 32 (CR "J" / 85TH AVE) Eastbound					
	Other	Right	Thru	Left	Other	Right	Thru	Left	Other	Right	Thru	Left	Other	Right	Thru	Left	Vehicle Total	Other Total
Date 08/10/94																		
20:00	0	4	9	18	2	13	46	6	0	1	4	1	0	3	64	8	177	2
20:15	0	5	5	11	1	6	46	3	0	6	3	1	2	5	70	7	168	3
20:30	0	10	7	12	1	13	44	5	0	5	3	1	2	3	62	2	167	3
20:45	1	3	7	12	1	8	38	6	0	2	4	3	0	6	60	6	155	2
Hr Total	1	22	28	53	5	40	174	20	0	14	14	6	4	17	256	23	667	10
21:00	1	4	5	10	0	6	32	6	0	7	5	1	0	4	79	5	164	1
21:15	0	5	7	6	1	4	26	3	0	0	4	2	0	6	55	1	119	1
21:30	0	6	6	13	1	14	37	5	1	4	6	1	0	1	41	7	141	2
21:45	0	5	2	7	0	1	17	1	0	2	4	1	0	2	49	3	94	0
Hr Total	1	20	20	36	2	25	112	15	1	13	19	5	0	13	224	16	518	4
TOTAL	128	623	378	1032	284	1104	4283	411	21	508	438	157	273	310	4387	687	14318	706

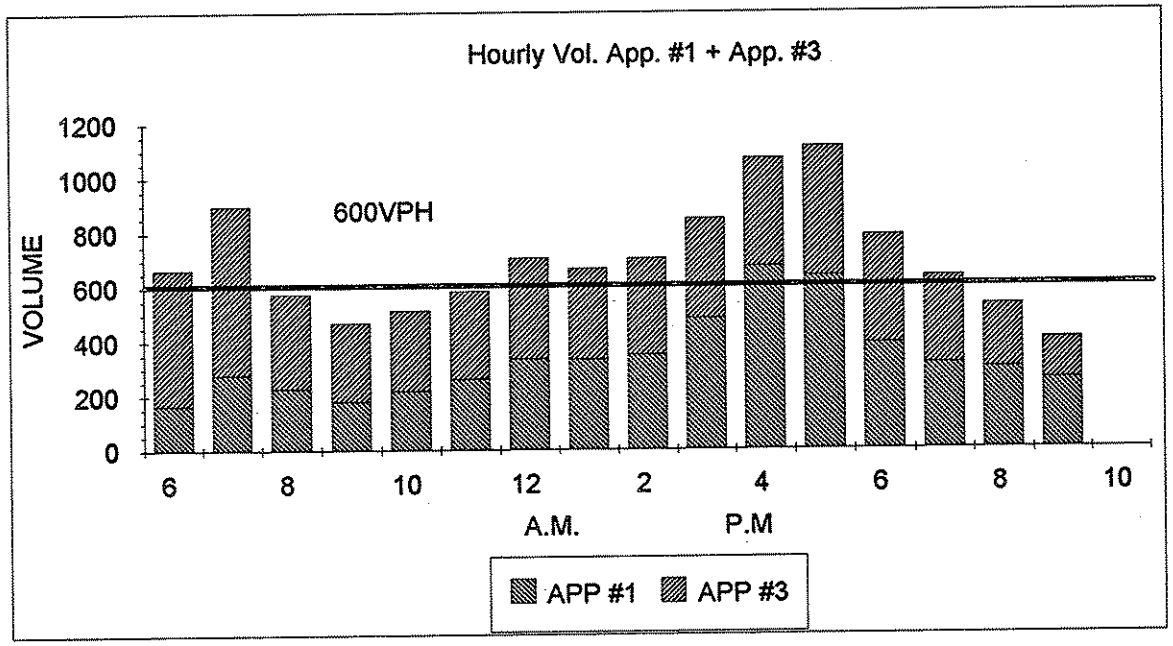
TMC9406 STOP WARRANT STUDY

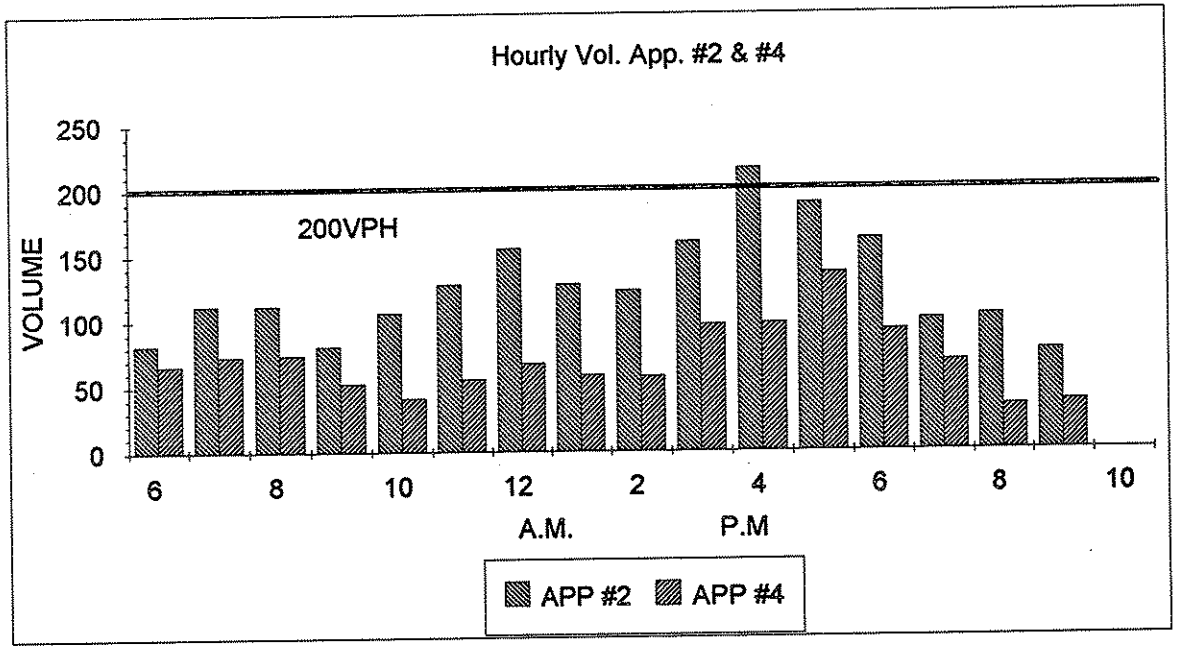




CSAH 32 (CR "J" / 85TH AVE) @ AIRPORT RD

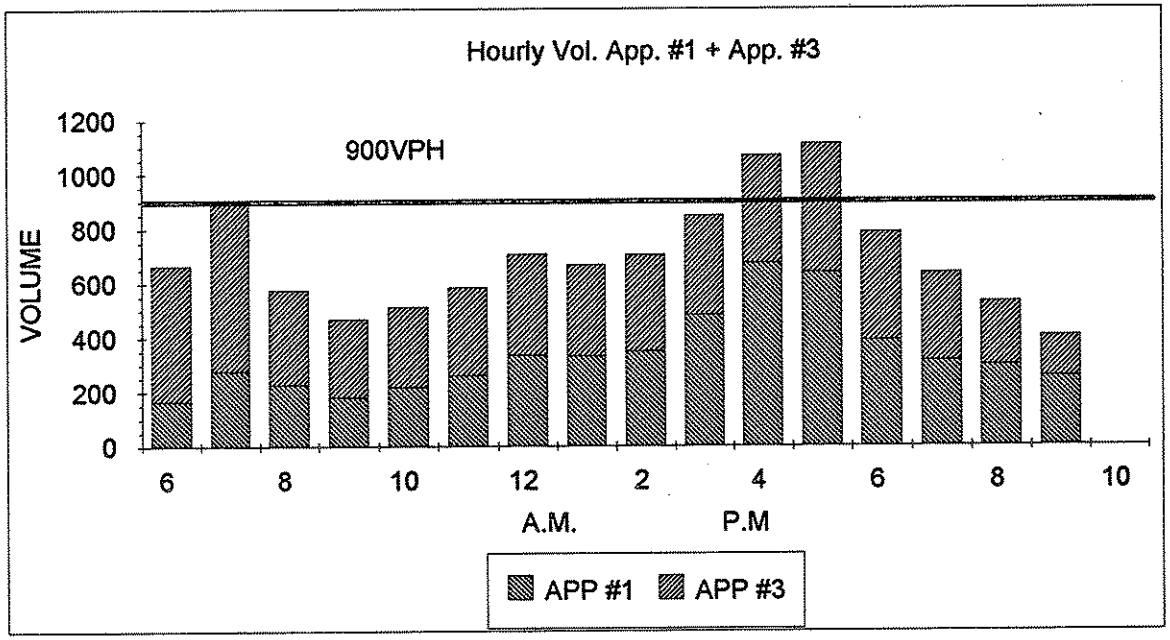
TMC9406 SIGNAL WARRANT 1 STUDY

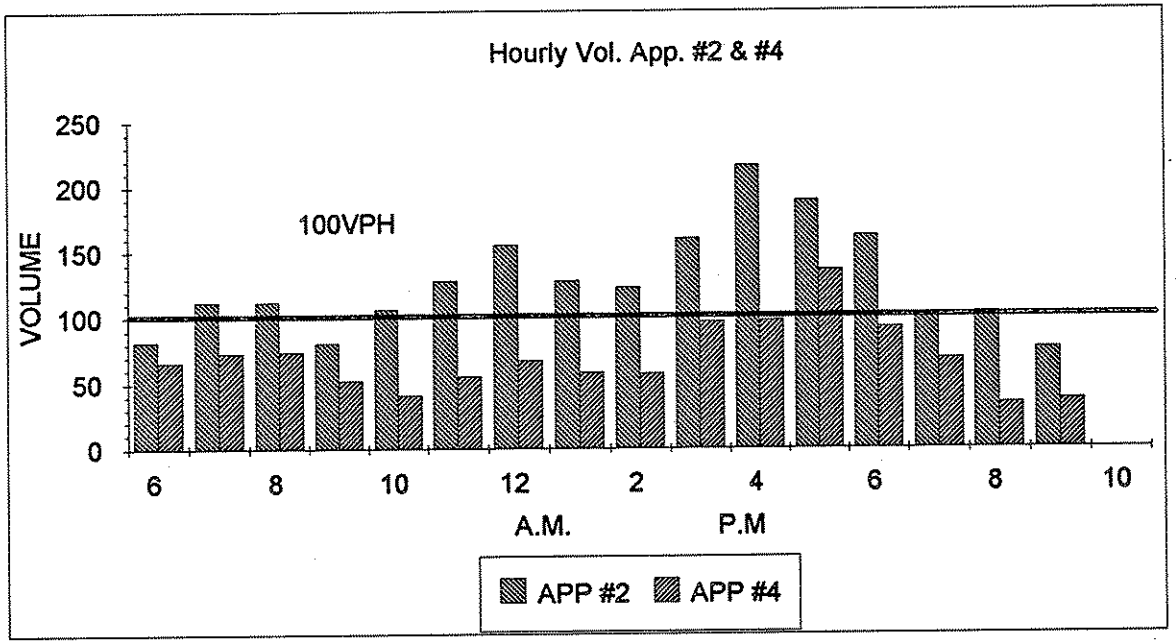




CSAH 32 (CR "J" / 85TH AVE) @ AIRPORT RD

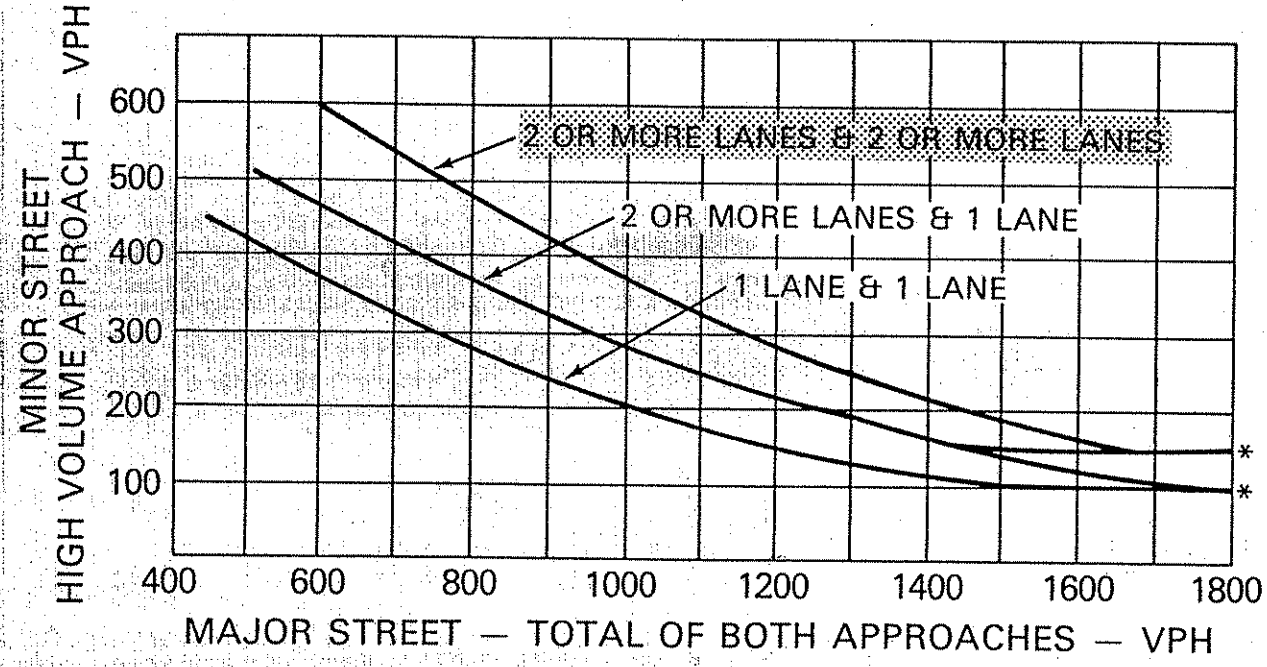
TMC9406 SIGNAL WARRANT 2 STUDY





CSAH 32 (CR "J" / 85TH AVE) @ AIRPORT RD

FIGURE 4-5. PEAK HOUR VOLUME WARRANT



*NOTE: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

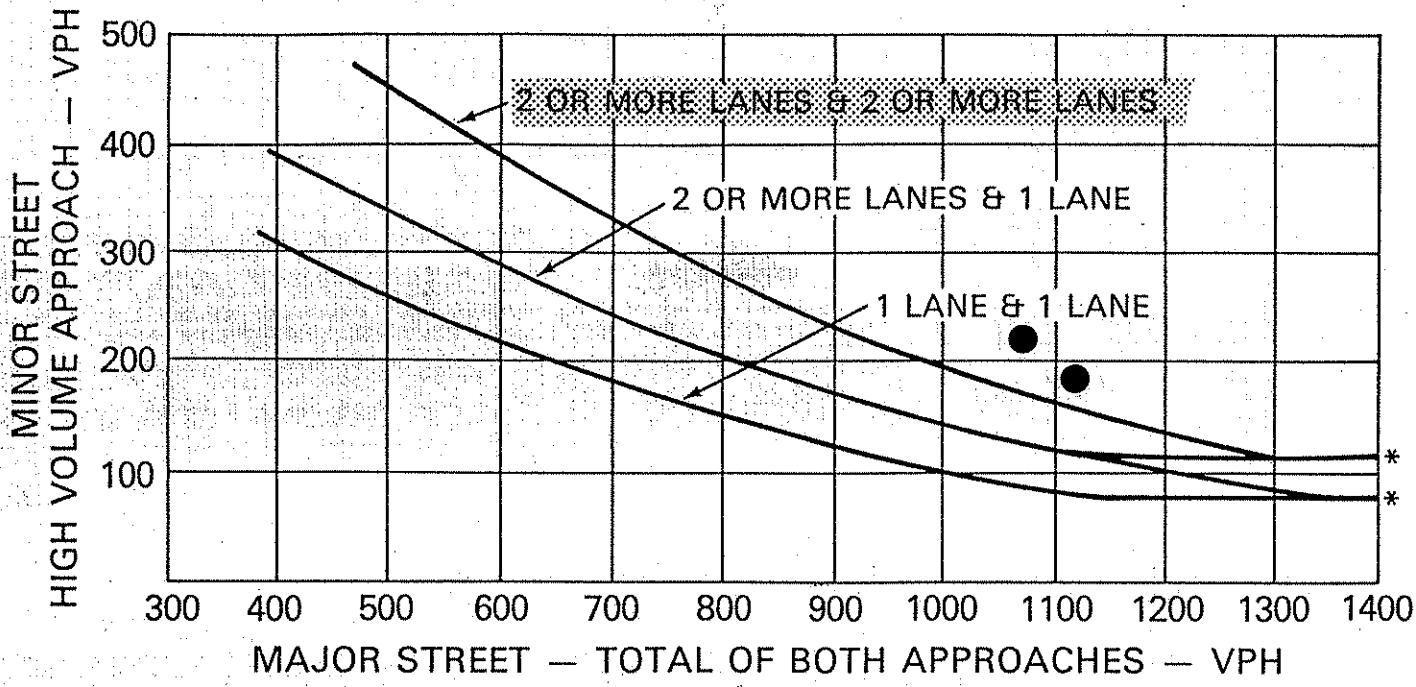
● = VOLUMES WHICH EXCEED THE THRESHOLD AND ARE REPRESENTED ON THE GRAPH.

★ = VOLUMES WHICH EXCEED THE THRESHOLD BUT CANNOT BE REPRESENTED ON THE GRAPH.

TIME	MAJOR STREETS (VPH)	MINOR STREET (VPH)
6-7 am	665	82
7-8 am	899	112
8-9 am	576	112
9-10 am	469	81
10-11 am	515	106
11-12 pm	586	128
12-1 pm	707	155
1-2 pm	668	128
2-3 pm	705	123
3-4 pm	849	160
4-5 pm	1070	216
5-6 pm	1113	189
6-7 pm	788	162
7-8 pm	637	100
8-9 pm	530	103
9-10 pm	405	76

TMC 9406 CSAH 32 (CR "J" / 85TH AVE) @ AIRPORT RD

FIGURE 4-7. FOUR HOUR VOLUME WARRANT



*NOTE: 115 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 80 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

● = VOLUMES WHICH EXCEED THE THRESHOLD AND ARE REPRESENTED ON THE GRAPH.

★ = VOLUMES WHICH EXCEED THE THRESHOLD BUT CANNOT BE REPRESENTED ON THE GRAPH.

TIME	MAJOR STREETS (VPH)	MINOR STREET (VPH)
6-7 am	665	82
7-8 am	899	112
8-9 am	576	112
9-10 am	469	81
10-11 am	515	106
11-12 pm	586	128
12-1 pm	707	155
1-2 pm	668	128
2-3 pm	705	123
3-4 pm	849	160
●4-5 pm	1070	216
●5-6 pm	1113	189
6-7 pm	788	162
7-8 pm	637	100
8-9 pm	530	103
9-10 pm	405	76

TMC 9406 CSAH 32 (CR "J" / 85TH AVE) @ AIRPORT RD

COUNT LOCATION: CSAH 32 (CR "J" / 85TH AVE) @ AIRPORT RD **DATE:** 8/11/94

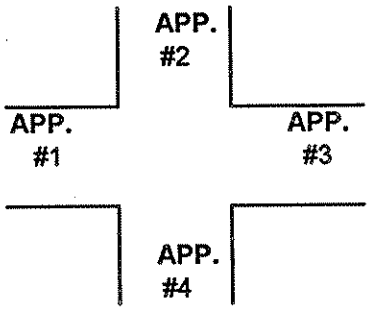
NORTH

APP. #1= WB CSAH 32 (CR "J" / 85TH AVE)

APP. #2= NB AIRPORT RD

APP. #3= EB CSAH 32 (CR "J" / 85TH AVE)

APP. #4= SB AIRPORT RD



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.

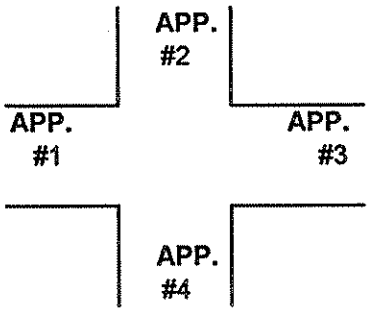
C. BUSES- A HEAVY VEHICLE INVOLVED IN THE TRANSPORTATION OF GROUPS OF PEOPLE.

TIME	PEDESTRIANS					HEAVY VEHICLES		
	APP. #1	APP. #2	APP. #3	APP. #4	15 MIN TOT	TRUCKS	RV	BUS
6:00-6:15AM						4		3
6:15-6:30						11		2
6:30-6:45						13		
6:45-7:00	1				1	5	1	2
HOURLY TOTAL					1	HOURLY TOTAL		41
7:00-7:15						12		
7:15-7:30	1				1	9		
7:30-7:45	2				2	14		
7:45-8:00	1				1	9		2
HOURLY TOTAL					4	HOURLY TOTAL		46
8:00-8:15						14		
8:15-8:30						12		1
8:30-8:45		1			1	5		
8:45-9:00	1				1	7		1
HOURLY TOTAL					2	HOURLY TOTAL		40
9:00-9:15						12		
9:15-9:30						10		2
9:30-9:45						10		
9:45-10:00						14		
HOURLY TOTAL						HOURLY TOTAL		48
10:00-10:15						10		1
10:15-10:30						16		
10:30-10:45						8		
10:45-11:00						9	1	
HOURLY TOTAL						HOURLY TOTAL		45
11:00-11:15	1				1	16		
11:15-11:30						21		
11:30-11:45						9	1	2
11:45-12:00						16		1
HOURLY TOTAL					1	HOURLY TOTAL		66
12:00-12:15						11		
12:15-12:30	1				1	12	1	
12:30-12:45		1		1	2	20		1
12:45-1:00	1				1	15		2
HOURLY TOTAL					4	HOURLY TOTAL		62
1:00-1:15						8		
1:15-1:30	1				1	15		1
1:30-1:45						17	1	1
1:45-2:00						14		
HOURLY TOTAL					1	HOURLY TOTAL		57

COUNT LOCATION: CSAH 32 (CR "J" / 85TH AVE) @ AIRPORT RD **DATE:** 8/10/94

NORTH

APP. #1= WB CSAH 32 (CR "J" / 85TH AVE)
APP. #2= NB AIRPORT RD
APP. #3= EB CSAH 32 (CR "J" / 85TH AVE)
APP. #4= SB AIRPORT RD



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						11		1
2:15-2:30		1		1	2	8		
2:30-2:45	2				2	11		1
2:45-3:00	1				1	13		4
HOURLY TOTAL					**5**	**HOURLY TOTAL**		**49**
3:00-3:15			2		2	13		1
3:15-3:30						13		2
3:30-3:45						15		
3:45-4:00						14		
HOURLY TOTAL					**2**	**HOURLY TOTAL**		**58**
4:00-4:15						25		1
4:15-4:30						17		2
4:30-4:45		1		1	2	14		
4:45-5:00		1			1	12		
HOURLY TOTAL					**3**	**HOURLY TOTAL**		**71**
5:00-5:15						10	1	
5:15-5:30						7		
5:30-5:45	2	2			4	9		1
5:45-6:00						6	2	1
HOURLY TOTAL					**4**	**HOURLY TOTAL**		**37**
6:00-6:15				2	2	7		
6:15-6:30	1				1	1		
6:30-6:45						4		
6:45-7:00						3		
HOURLY TOTAL					**3**	**HOURLY TOTAL**		**15**
7:00-7:15			1		1	6		
7:15-7:30						6		
7:30-7:45						2		
7:45-8:00		1			1	3		
HOURLY TOTAL					**2**	**HOURLY TOTAL**		**17**
8:00-8:15		1		1	2	2		
8:15-8:30						2		1
8:30-8:45						3		
8:45-9:00						2		
HOURLY TOTAL					**2**	**HOURLY TOTAL**		**10**
9:00-9:15						1		
9:15-9:30	2				2	1		
9:30-9:45						2		
9:45-10:00	1				1			
HOURLY TOTAL					**3**	**HOURLY TOTAL**		**4**