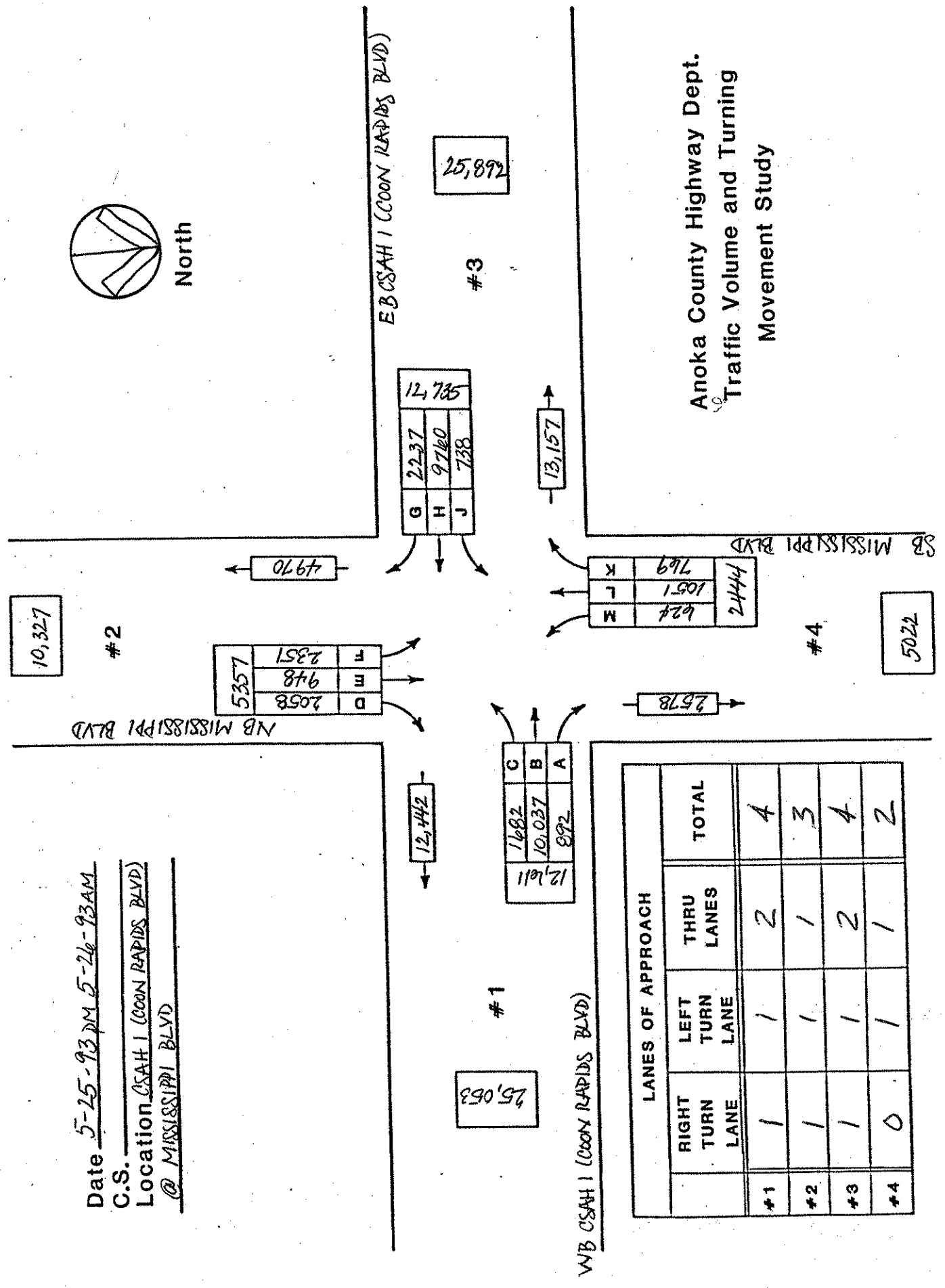
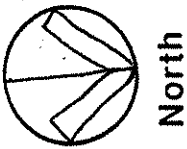


Date 5-25-93 PM 5-26-93AM
 C.S. _____
 Location CSAH 1 (COON RAPIDS BLVD)
 @ MISSISSIPPI BLVD



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	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

Site Code : 93
 Start Date: 05
 File I.D. : TM
 Page : 1

Weather : CLEAR/70 CLEAR/75
 Counter : TDC EIGHT
 Counted by: Josie/Pat

Vehicle group 1

Date 05/26/93	SB MISS BLVD Southbound				WB CSAH 1 (CRB) Westbound				NB MISS BLVD Northbound				EB CSAH 1 (CRB) Eastbound				Vehicle Total
	Left	Thru	Right	Other	Left	Thru	Right	Other	Left	Thru	Right	Other	Left	Thru	Right	Other	
06:00	22	4	7	0	3	22	3	1	5	8	4	0	6	83	6	3	173
06:15	10	0	8	0	4	38	1	0	9	3	5	0	4	114	5	3	201
06:30	10	4	12	0	2	48	3	1	10	3	6	1	5	155	10	8	268
06:45	10	9	12	1	10	92	8	5	15	3	9	0	6	133	15	2	322
Hr Total	52	17	39	1	19	200	15	7	39	17	24	1	21	485	36	16	964
07:00	15	6	7	1	14	73	3	5	6	10	13	2	10	146	25	4	328
07:15	17	12	8	0	16	101	3	2	15	12	13	0	6	154	35	8	392
07:30	12	21	10	0	44	97	9	5	19	6	12	1	11	154	56	3	451
07:45	10	67	13	1	96	149	9	6	27	3	7	3	9	158	134	10	682
Hr Total	54	106	38	2	170	420	24	18	67	31	45	6	36	612	250	25	1853
08:00	7	41	8	1	59	122	10	3	13	7	16	0	4	110	83	6	480
08:15	8	16	11	3	38	107	4	8	6	3	14	1	8	114	27	6	356
08:30	7	18	11	2	30	100	8	10	21	13	18	2	7	124	63	16	420
08:45	8	69	11	0	92	124	13	14	38	12	16	4	5	113	105	4	606
Hr Total	30	144	41	6	219	453	35	35	78	35	64	7	24	461	278	32	1862
09:00	10	28	11	2	54	103	6	5	25	11	27	3	12	121	59	3	467
09:15	6	14	8	2	14	91	11	10	16	7	12	1	11	148	30	7	368
09:30	4	15	7	0	26	113	4	9	17	6	18	4	7	134	38	4	389
09:45	6	41	8	1	66	117	12	4	26	15	39	4	8	118	69	2	525
Hr Total	26	98	34	5	160	424	33	28	84	39	96	12	38	521	196	16	1749
10:00	10	15	8	0	26	110	10	7	41	20	54	2	10	161	51	9	516
10:15	4	17	13	0	21	119	4	4	23	8	18	1	9	131	37	4	404
10:30	8	15	6	0	29	140	10	7	30	14	15	0	10	138	27	6	442
10:45	10	29	11	2	45	115	12	2	51	25	51	0	5	153	63	5	570
Hr Total	32	76	38	2	121	484	36	20	145	67	138	3	34	583	178	24	1932
11:00	6	26	8	2	24	152	12	5	64	27	68	1	14	169	34	3	604
11:15	8	13	6	0	19	166	6	4	29	9	32	3	14	147	25	4	474
11:30	7	14	10	1	31	147	8	1	32	9	37	2	8	173	30	6	506
11:45	7	29	12	0	41	137	11	2	51	35	47	2	13	148	45	4	576
Hr Total	28	82	36	3	115	602	37	12	176	80	184	8	49	637	134	17	2160
12:00	6	20	16	0	22	151	6	2	52	44	80	0	17	169	40	5	623
12:15	8	15	11	0	8	158	10	3	44	16	51	2	14	169	32	7	536
12:30	9	9	8	0	28	150	8	4	43	23	22	1	11	159	29	4	499
12:45	6	20	15	2	39	181	12	5	56	27	69	2	7	152	51	4	635
Hr Total	29	64	50	2	97	640	36	14	195	110	222	5	49	649	152	20	2293

ANOKA COUNTY HIGHWAY DEPARTMENT

TRAFFIC ENGINEERING SECTION

TRAFFIC VOLUME AND
TURNING MOVEMENT STUDY

Site Code : 93

Start Date: 05

File I.D. : TM

Page : 2

Weather : CLEAR/70 CLEAR/75
Counter : TDC EIGHT
Counted by: Josie/Pat

Vehicle group 1

Date	SB MISS BLVD Southbound				WB CSAH 1 (CRB) Westbound				NB MISS BLVD Northbound				EB CSAH 1 (CRB) Eastbound				Vehicle Total
	Left	Thru	Right	Other	Left	Thru	Right	Other	Left	Thru	Right	Other	Left	Thru	Right	Other	
05/26/93																	
13:00	8	20	12	1	22	207	13	3	92	42	84	1	5	149	19	8	673
13:15	17	7	15	1	9	171	13	7	36	20	49	1	11	130	12	4	490
13:30	4	6	11	1	10	178	15	4	24	6	32	1	10	141	21	7	458
13:45	3	15	16	1	16	182	12	6	45	13	62	1	13	191	21	5	589
Hr Total	32	48	54	4	57	738	53	20	197	81	227	4	39	611	73	24	2210
14:00	5	5	9	0	25	158	12	5	89	26	91	2	9	177	17	0	623
14:15	7	11	7	0	12	167	14	1	25	10	42	1	12	147	29	5	483
14:30	13	9	12	3	17	181	21	7	38	11	34	1	16	158	28	13	538
14:45	15	8	24	1	18	199	23	3	39	21	50	0	11	170	31	6	609
Hr Total	40	33	52	4	72	705	70	16	191	68	217	4	48	652	105	24	2253
15:00	10	11	13	0	23	184	15	1	57	24	45	4	23	178	28	5	611
15:15	8	14	21	0	10	182	19	6	42	14	31	1	16	171	36	6	564
15:30	5	13	11	0	13	219	17	5	46	13	31	7	14	213	27	3	622
15:45	15	12	14	1	22	228	22	4	39	9	28	1	15	209	31	8	644
Hr Total	38	50	59	1	68	813	73	16	184	60	135	13	68	771	122	22	2441
16:00	13	12	22	0	12	251	18	8	53	21	28	0	11	170	23	5	634
16:15	7	7	19	0	18	220	17	9	47	23	32	3	14	211	26	2	641
16:30	9	12	17	1	19	243	27	8	34	15	34	1	10	212	28	4	660
16:45	12	16	12	2	16	276	18	1	45	7	11	0	18	226	25	2	682
Hr Total	41	47	70	3	65	990	80	26	179	66	105	4	53	819	102	13	2617
17:00	14	8	16	0	25	241	29	1	24	10	3	1	20	215	40	4	645
17:15	14	12	21	0	32	258	27	3	33	14	22	0	22	197	36	1	688
17:30	12	9	27	0	22	268	28	3	38	9	19	1	12	199	34	1	677
17:45	12	24	11	0	48	264	11	1	39	7	20	0	23	187	40	2	686
Hr Total	52	53	75	0	127	1031	95	8	134	40	64	2	77	798	150	8	2696
18:00	17	30	14	0	75	224	34	3	45	20	25	0	22	208	56	2	770
18:15	15	56	18	1	95	234	21	2	37	17	23	0	16	149	94	1	775
18:30	8	23	12	0	57	190	12	3	32	5	14	0	10	184	48	1	595
18:45	17	16	13	0	38	212	14	0	41	10	12	0	18	173	34	0	598
Hr Total	57	125	57	1	265	860	81	8	155	52	74	0	66	714	232	4	2738
19:00	15	12	15	0	15	177	19	1	44	12	22	2	12	168	31	0	542
19:15	7	4	14	0	20	169	23	0	39	15	17	1	12	155	25	0	500
19:30	16	11	8	0	12	155	9	0	36	15	34	0	16	131	26	1	469
19:45	8	12	9	0	8	155	22	0	27	10	26	1	13	155	22	0	467
Hr Total	46	39	46	0	55	656	73	1	146	52	99	4	53	609	104	1	1978

Weather :CLEAR/70 CLEAR/75
 Counter :TDC EIGHT
 Counted by:Josie/Pat

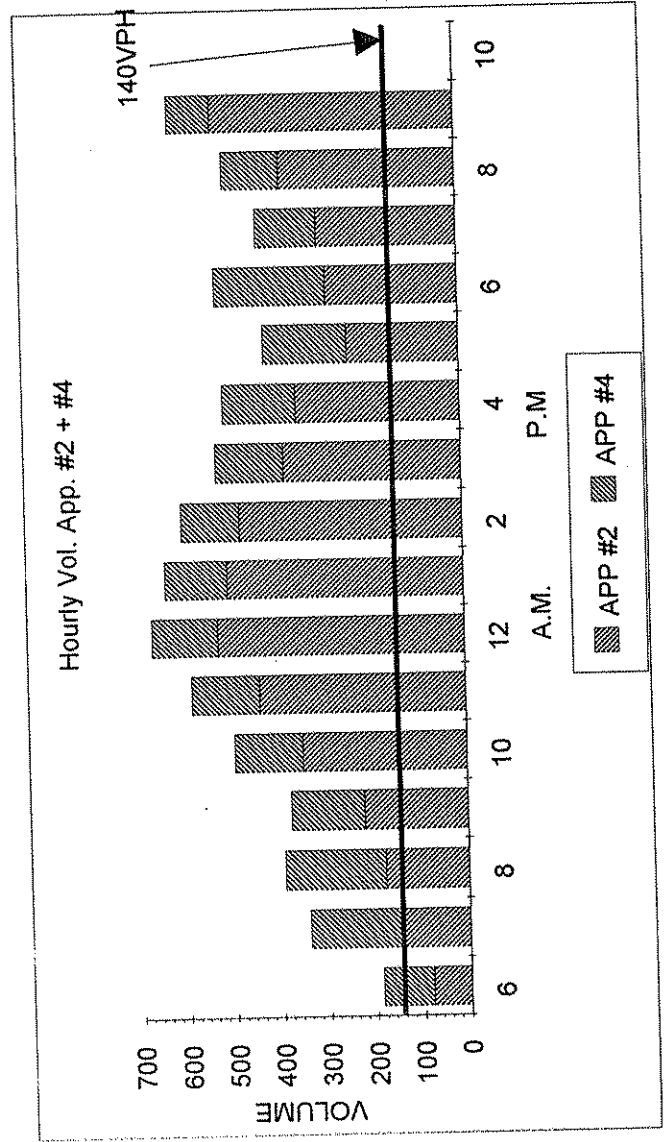
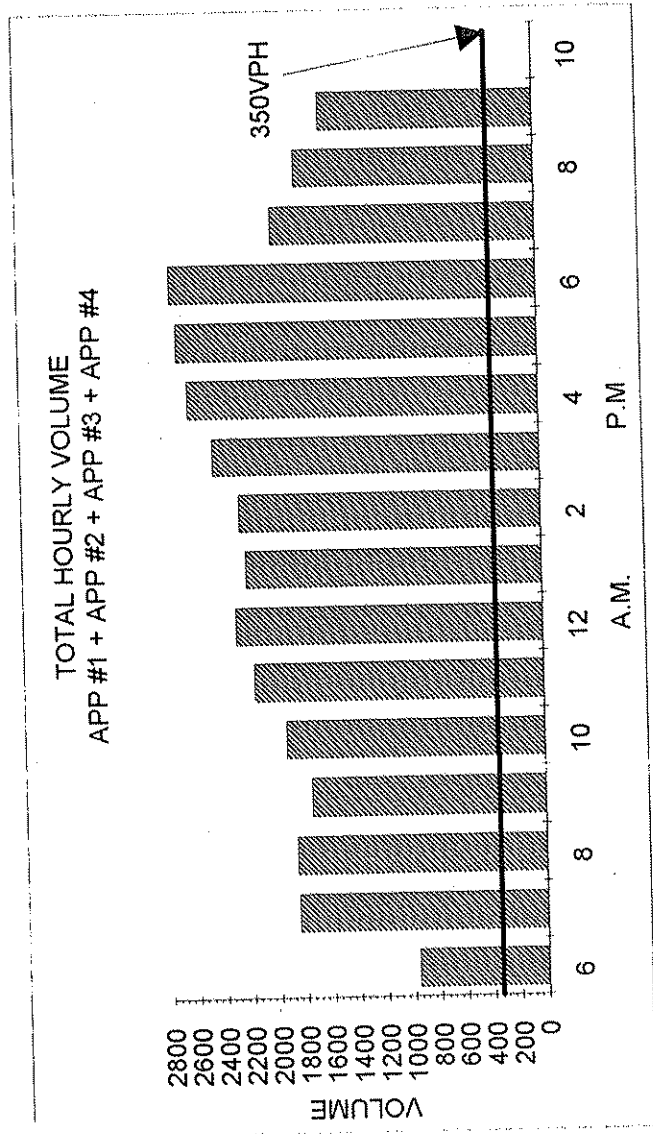
ANOKA COUNTY HIGHWAY DEPARTMENT
 TRAFFIC ENGINEERING SECTION
 TRAFFIC VOLUME AND
 TURNING MOVEMENT STUDY

Site Code : 93
 Start Date: 05
 File I.D. : TM
 Page : 3

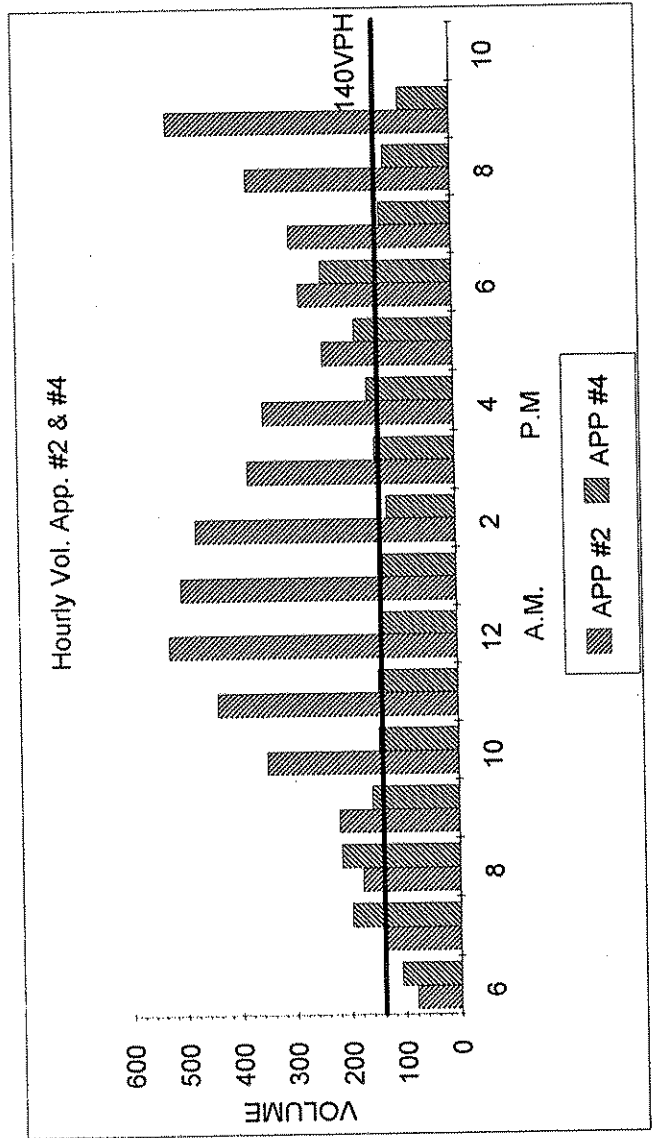
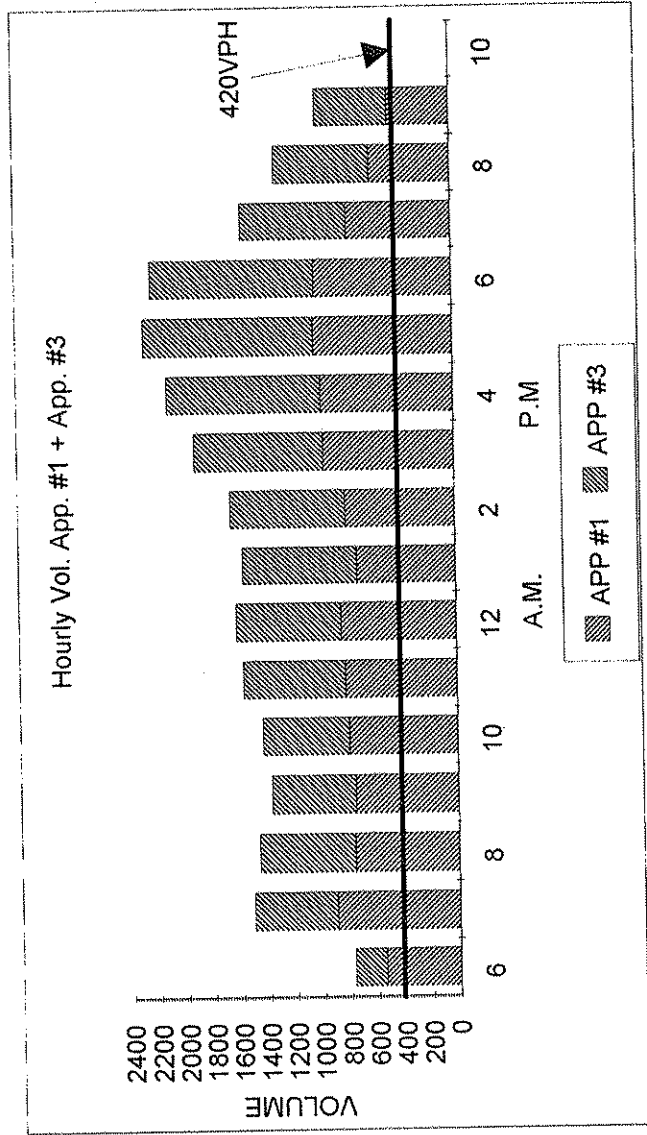
Vehicle group 1

Date	SB MISS BLVD Southbound				WB CSAH 1 (CRB) Westbound				NB MISS BLVD Northbound				EB CSAH 1 (CRB) Eastbound				Vehicle Total
	Left	Thru	Right	Other	Left	Thru	Right	Other	Left	Thru	Right	Other	Left	Thru	Right	Other	
20:00	11	8	8	0	12	154	16	0	22	10	30	0	3	113	15	0	402
20:15	12	10	12	0	11	152	23	1	38	12	29	0	8	143	19	1	469
20:30	11	15	10	0	3	154	15	0	47	20	66	1	13	116	15	2	485
20:45	5	8	13	1	12	140	16	1	44	19	38	0	15	117	15	0	442
Hr Total	39	41	43	1	38	600	70	2	151	61	163	1	39	489	64	3	1798
21:00	11	8	13	0	9	133	24	1	65	29	47	0	8	115	17	0	479
21:15	8	10	10	0	17	111	20	0	73	26	69	0	14	99	21	1	478
21:30	6	5	8	0	4	96	20	2	55	26	58	0	14	67	14	1	373
21:45	3	5	6	0	4	81	17	1	37	8	27	0	8	68	9	0	273
Hr Total	28	28	37	0	34	421	81	4	230	89	201	0	44	349	61	2	1603
TOTAL	624	1051	769	35	1682	10037	892	235	2351	948	2058	74	738	9760	2237	251	33147

TMC9320 STOP WARRANT STUDY



TMC9320 SIGNAL WARRANT 1 STUDY



TMC9320 SIGNAL WARRANT 2 STUDY

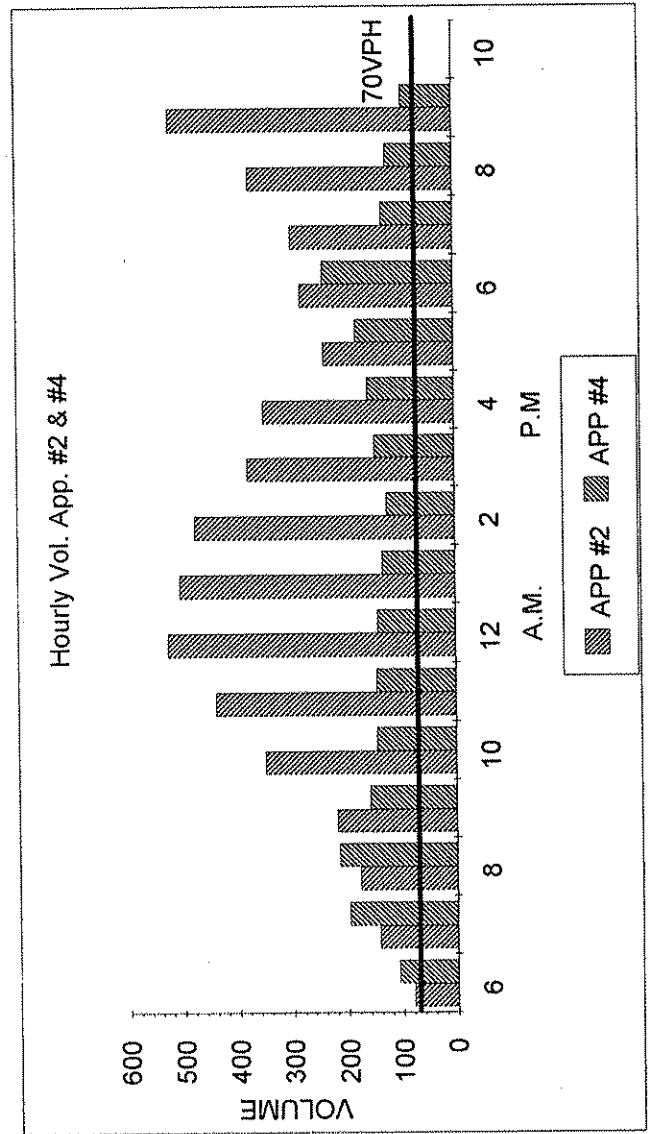
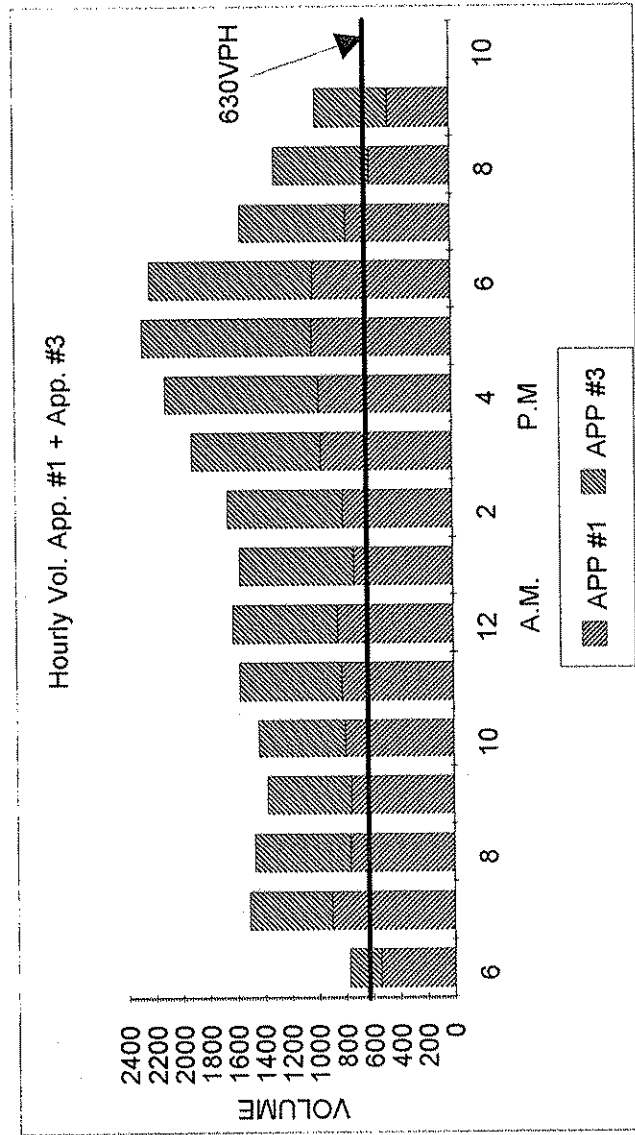
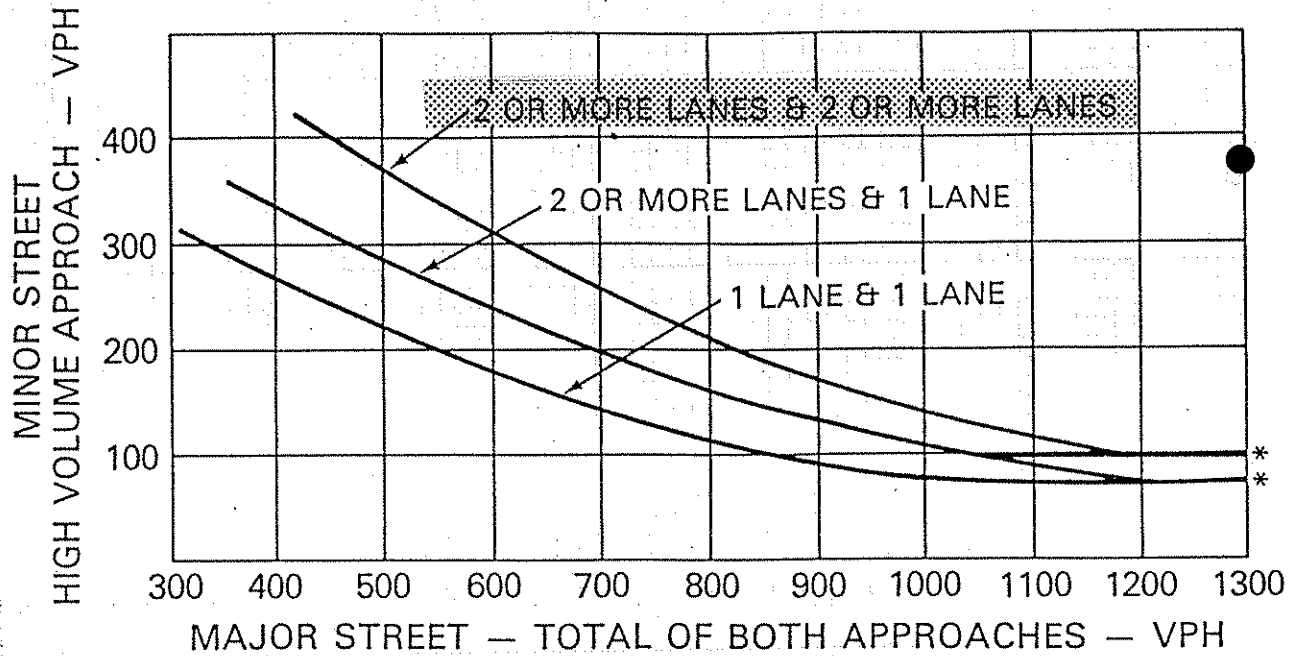


FIGURE 4-6. PEAK HOUR VOLUME WARRANT

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*NOTE: 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 75 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

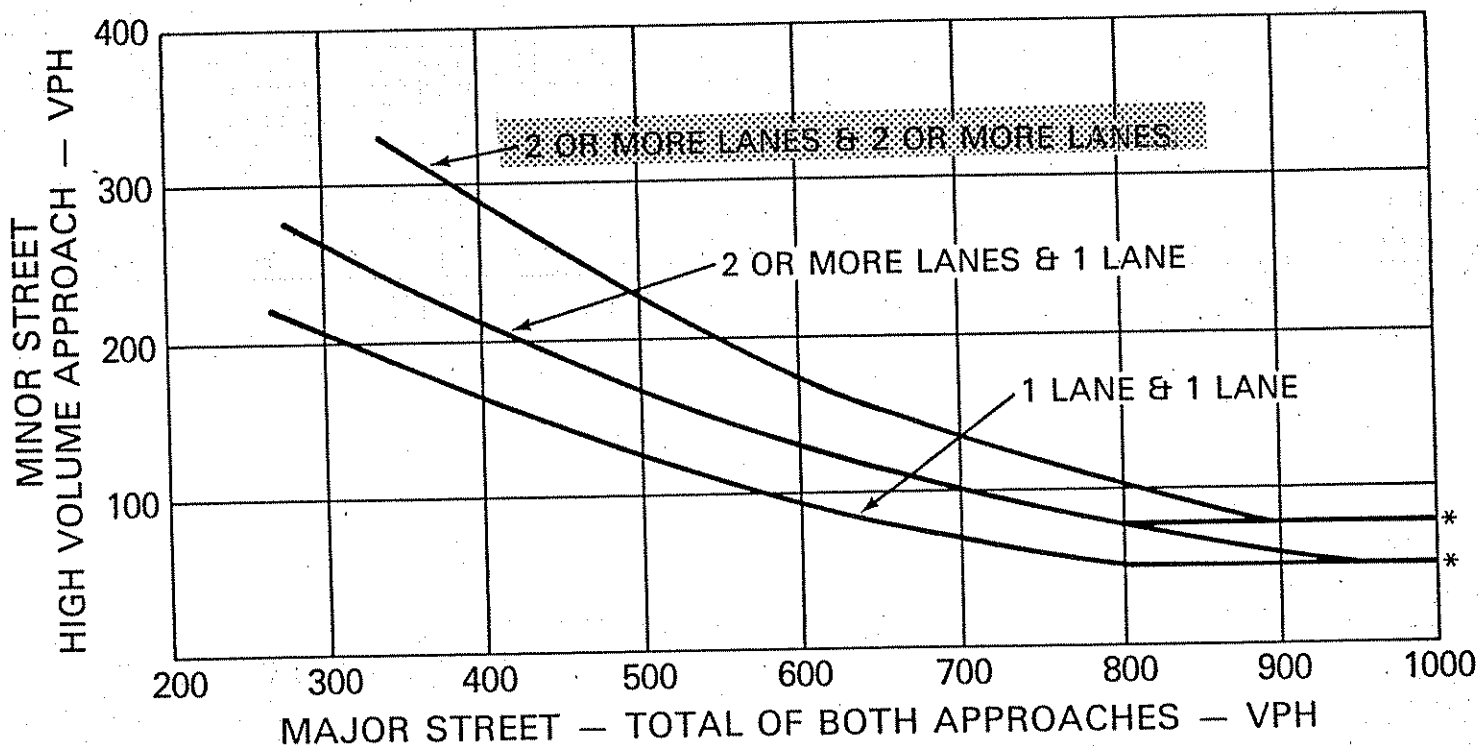
● = VOLUMES WHICH EXCEED THE THRESHOLD AND ARE REPRESENTED ON THE GRAPH.

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

TIME	MAJOR STREETS (VPH)	MINOR STREET (VPH)
6-7 am	776	108
★ 7-8 am	1512	198
★ 8-9 am	1470	215
★ 9-10 am	1372	219
★ 10-11 am	1436	350
★ 11-12 pm	1574	440
★ 12-1 pm	1623	527
★ 1-2 pm	1571	505
★ 2-3 pm	1652	476
★ 3-4 pm	1915	379
★ 4-5 pm	2109	350
★ 5-6 pm	2278	238
★ 6-7 pm	2218	281
★ 7-8 pm	1550	297
● 8-9 pm	1300	375
★ 9-10 pm	990	520

FIGURE 4-8. FOUR HOUR VOLUME WARRANT

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*NOTE: 80 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 60 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	776	108
★ 7-8 am	1512	198
★ 8-9 am	1470	215
★ 9-10 am	1372	219
★ 10-11 am	1436	350
★ 11-12 pm	1574	440
★ 12-1 pm	1623	527
★ 1-2 pm	1571	505
★ 2-3 pm	1652	476
★ 3-4 pm	1915	379
★ 4-5 pm	2109	350
★ 5-6 pm	2278	238
★ 6-7 pm	2218	281
★ 7-8 pm	1550	297
★ 8-9 pm	1300	375
★ 9-10 pm	990	520

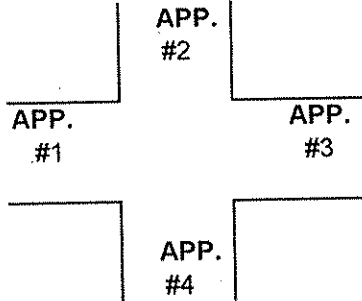


NORTH

APP. #1= W8 CSAH 1
(COON RAPIDS BLVD)
APP. #2=
N8 MISSISSIPPI BLVD
APP. #3= E8 CSAH 1
(COON RAPIDS BLVD)
APP. #4=
S8 MISSISSIPPI BLVD

COUNT LOCATION: CSAH 1 (COON RAPIDS BLVD) @
MISSISSIPPI BLVD

D 5/26/93



- 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		3
6:15-6:30	3				3			4
6:30-6:45						2		3
6:45-7:00						6		9
HOURLY TOTAL					4	HOURLY TOTAL		28
7:00-7:15	1				1	7		5
7:15-7:30	1	4	1	1	7	4		6
7:30-7:45						5		4
7:45-8:00	1				1	8		11
HOURLY TOTAL					9	HOURLY TOTAL		50
8:00-8:15	1		1		2	9		2
8:15-8:30						12		6
8:30-8:45			2		2	14		17
8:45-9:00						14		7
HOURLY TOTAL					4	HOURLY TOTAL		81
9:00-9:15	1		2		3	8	1	4
9:15-9:30						13	1	6
9:30-9:45	3			2	5	18		1
9:45-10:00						4		5
HOURLY TOTAL					8	HOURLY TOTAL		61
10:00-10:15	1			1	2	15		2
10:15-10:30						9		
10:30-10:45			1		1	12		
10:45-11:00						8	1	1
HOURLY TOTAL					3	HOURLY TOTAL		48
11:00-11:15						8	1	2
11:15-11:30			1	1	2	10		1
11:30-11:45						8		2
11:45-12:00						6	1	1
HOURLY TOTAL					2	HOURLY TOTAL		40
12:00-12:15	1				1	4	1	4
12:15-12:30				1	1	8		2
12:30-12:45						5		3
12:45-1:00						9		5
HOURLY TOTAL					2	HOURLY TOTAL		41
1:00-1:15				1	1	12		1
1:15-1:30			1		1	11		1
1:30-1:45						11		2
1:45-2:00	2				2	13		
HOURLY TOTAL					4	HOURLY TOTAL		51

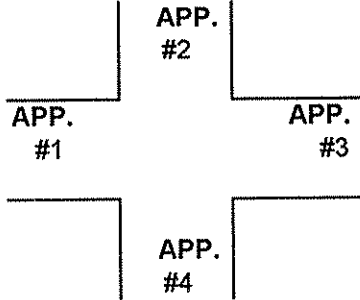


NORTH

APP. #1= W8 CSAH 1
(COON RAPIDS BLVD)
APP. #2=
N8 MISSISSIPPI BLVD
APP. #3= E8 CSAH 1
(COON RAPIDS BLVD)
APP. #4=
S8 MISSISSIPPI BLVD

COUNT LOCATION: CSAH 1 (COON RAPIDS BLVD) @
MISSISSIPPI BLVD

DA 5/25/93



- 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		3			3	5		1
2:15-2:30						8		
2:30-2:45						12		11
2:45-3:00	1	1			2	8		3
HOURLY TOTAL					5	HOURLY TOTAL		48
3:00-3:15						4		3
3:15-3:30			1		1	6		7
3:30-3:45			1		1	4		10
3:45-4:00		2	1		3	7		7
HOURLY TOTAL					5	HOURLY TOTAL		48
4:00-4:15				1	1	6		6
4:15-4:30			1	1	2	6		6
4:30-4:45				1	1	7		7
4:45-5:00						2		3
HOURLY TOTAL					4	HOURLY TOTAL		43
5:00-5:15			1		1	4		2
5:15-5:30			3	1	4	2		2
5:30-5:45			1		1	2	1	2
5:45-6:00	1		2	2	5	2		1
HOURLY TOTAL					11	HOURLY TOTAL		18
6:00-6:15			1		1		3	1
6:15-6:30			2	3	5	1	1	2
6:30-6:45						2		1
6:45-7:00	1				1	1		
HOURLY TOTAL					7	HOURLY TOTAL		12
7:00-7:15							1	1
7:15-7:30			1		1	1		
7:30-7:45								1
7:45-8:00				1	1			
HOURLY TOTAL					2	HOURLY TOTAL		4
8:00-8:15				1	1	2		
8:15-8:30						1		
8:30-8:45						2		1
8:45-9:00						1		1
HOURLY TOTAL					1	HOURLY TOTAL		8
9:00-9:15						1		
9:15-9:30						1		
9:30-9:45				2	2	2		1
9:45-10:00						1		
HOURLY TOTAL					2	HOURLY TOTAL		6