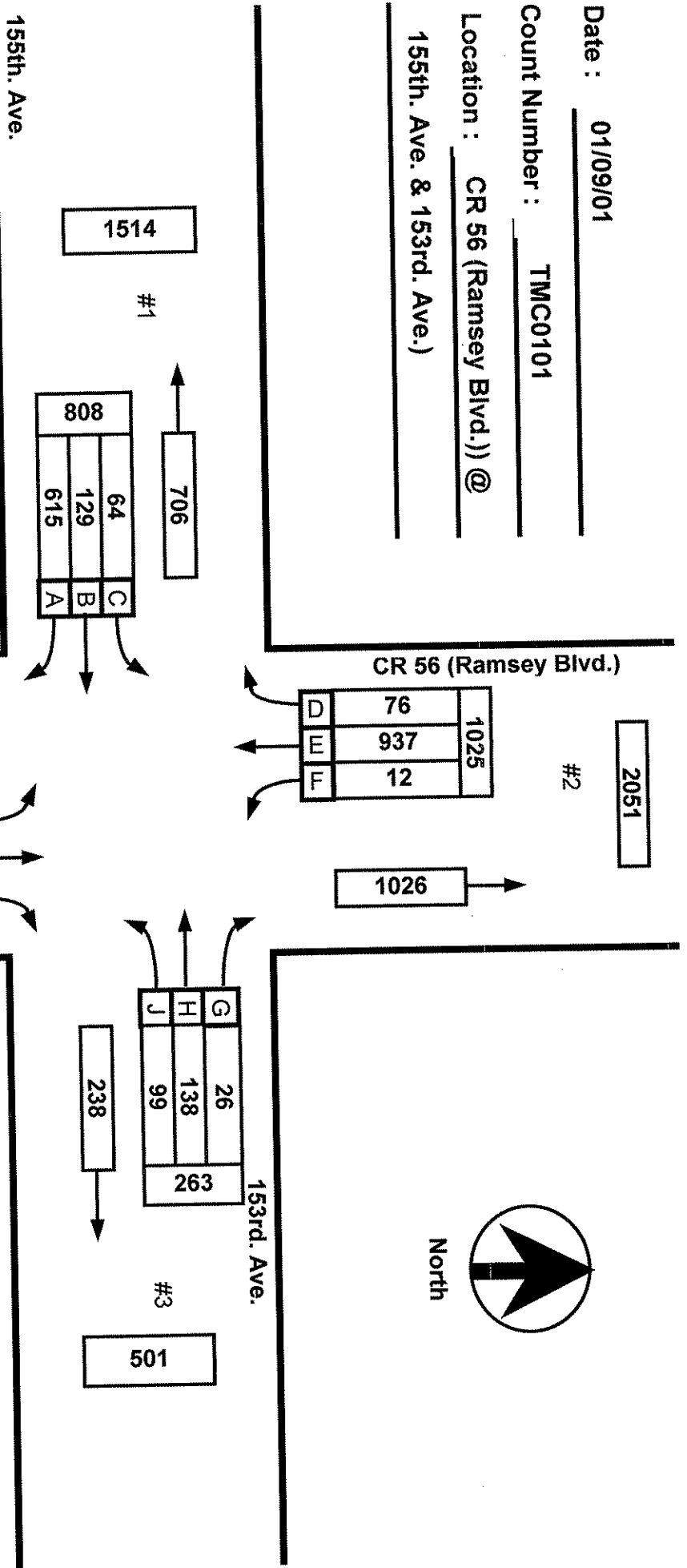
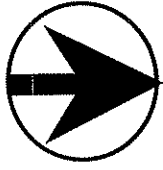


Date : 01/09/01

Count Number : TMC0101

Location : CR 56 (Ramsey Blvd.) @
155th. Ave. & 153rd. Ave.)



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

Anoka County Highway Department
Traffic Volume and Turning
Movement Study

**Anoka County Highway Department
Traffic Engineering
Traffic Volume and Turning Movement Stud**

Weather:
 Counter TDC-8
 Counted by: Dick / Sean

File Name : TMC0101
 Site Code : 01010102
 Start Date : 01/09/2001
 Page No : 1

Groups Printed- 1 - 1 - Unshifted

Start Time	Southbound					Westbound					Northbound					Eastbound					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		
Factor	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	1	39	0	1	41	3	0	0	0	3	1	1	0	0	2	0	0	26	0	26	72
06:15	0	22	1	0	23	0	0	0	0	0	3	3	0	0	6	1	3	29	0	33	62
06:30	0	31	3	0	34	1	1	0	1	3	1	3	0	1	5	0	1	27	0	28	70
06:45	0	61	3	3	67	2	0	0	0	2	2	9	0	2	13	0	4	29	0	33	115
Total	1	153	7	4	165	6	1	0	1	8	7	16	0	3	26	1	8	111	0	120	319
07:00	0	29	1	1	31	1	3	0	0	4	1	6	2	3	12	1	1	31	1	34	81
07:15	0	38	0	2	40	0	1	0	0	1	1	10	2	0	13	0	3	24	1	28	82
07:30	0	39	0	0	39	2	0	0	0	2	5	5	2	0	12	1	3	21	1	26	79
07:45	0	41	0	0	41	3	1	1	0	5	3	6	1	4	14	2	1	23	1	27	87
Total	0	147	1	3	151	6	5	1	0	12	10	27	7	7	51	4	8	99	4	115	329
08:00	0	22	1	0	23	2	5	1	1	9	6	4	1	1	12	2	1	11	2	16	60
08:15	2	18	0	2	22	0	0	0	0	0	2	8	2	4	16	0	3	14	0	17	55
08:30	0	18	2	1	21	1	2	0	1	4	0	4	3	0	7	1	6	28	1	36	68
08:45	0	18	0	0	18	1	2	0	1	4	1	6	3	3	13	1	6	11	1	19	54
Total	2	76	3	3	84	4	9	1	3	17	9	22	9	8	48	4	16	64	4	88	237
09:00	0	13	0	0	13	2	0	1	0	3	3	7	2	0	12	0	1	9	3	13	41
09:15	0	16	0	2	18	0	2	0	0	2	3	8	2	1	14	0	0	8	0	8	42
09:30	0	11	2	0	13	1	0	0	0	1	4	6	0	1	11	0	2	3	0	5	30
09:45	1	9	0	0	10	0	2	0	0	2	4	5	0	2	11	0	2	4	0	6	29
Total	1	49	2	2	54	3	4	1	0	8	14	26	4	4	48	0	5	24	3	32	142
10:00	0	9	0	0	9	0	0	0	0	0	4	6	0	0	10	2	1	8	1	12	31
10:15	0	15	1	0	16	1	1	0	0	2	4	4	1	1	10	0	3	13	2	18	46
10:30	0	11	0	0	11	1	1	0	0	2	2	7	1	1	11	1	1	5	0	7	31
10:45	0	12	2	0	14	1	1	0	0	2	4	10	2	2	18	0	1	10	0	11	45
Total	0	47	3	0	50	3	3	0	0	6	14	27	4	4	49	3	6	36	3	48	153
11:00	0	11	0	1	12	3	1	1	0	5	4	10	2	1	17	1	4	3	0	8	42
11:15	0	12	1	0	13	2	2	2	0	6	3	17	1	1	22	0	0	4	1	5	46
11:30	0	9	0	0	9	1	2	1	1	5	5	14	5	0	24	0	0	4	0	4	42
11:45	0	20	1	1	22	2	3	1	1	7	5	10	2	0	17	1	1	6	0	8	54
Total	0	52	2	2	56	8	8	5	2	23	17	51	10	2	80	2	5	17	1	25	184
12:00	0	11	1	0	12	4	4	0	1	9	6	14	2	0	22	1	1	7	1	10	53
12:15	0	12	1	2	15	0	1	0	0	1	7	13	2	2	24	0	2	10	0	12	52
12:30	0	8	0	0	8	3	0	0	0	3	5	20	1	2	28	1	2	6	1	10	49
12:45	0	0	0	0	0	2	0	2	0	4	5	14	2	0	21	0	0	0	0	0	25
Total	0	31	2	2	35	9	5	2	1	17	23	61	7	4	95	2	5	23	2	32	179
13:00	1	13	0	1	15	3	4	0	0	7	4	17	4	2	27	0	1	3	0	4	53
13:15	0	10	0	0	10	0	1	0	0	1	12	11	0	1	24	0	1	9	0	10	45
13:30	0	10	1	0	11	3	2	0	0	5	7	9	2	2	20	0	5	4	1	10	46
13:45	0	10	0	0	10	0	2	2	0	4	5	10	1	0	16	1	1	5	0	7	37
Total	1	43	1	1	46	6	9	2	0	17	28	47	7	5	87	1	8	21	1	31	181
14:00	0	12	2	2	16	6	3	0	4	13	9	10	1	0	20	2	0	6	0	8	57
14:15	0	15	0	3	18	0	5	0	1	6	5	13	1	1	20	0	0	6	1	7	51
14:30	0	18	0	1	19	1	0	1	1	3	14	20	0	3	37	1	2	8	1	12	71
14:45	0	18	0	1	19	3	3	0	0	6	8	12	3	1	24	1	2	6	1	10	59
Total	0	63	2	7	72	10	11	1	6	28	36	55	5	5	101	4	4	26	3	37	238
15:00	0	11	2	3	16	2	1	0	0	3	9	23	0	2	34	1	1	7	1	10	63
15:15	1	13	2	0	16	2	6	0	0	8	14	30	3	5	52	3	5	12	1	21	97
15:30	1	13	0	1	15	4	4	1	0	9	25	32	1	1	59	1	1	9	1	12	95
15:45	0	12	5	3	20	3	9	3	5	20	28	32	3	1	64	0	2	3	0	5	109
Total	2	49	9	7	67	11	20	4	5	40	76	117	7	9	209	5	9	31	3	48	364
16:00	0	12	2	3	17	2	6	1	2	11	19	33	5	2	59	0	2	9	0	11	98
16:15	1	25	4	2	32	5	4	0	0	9	14	40	1	2	57	2	7	6	2	17	115
16:30	1	13	5	2	21	2	5	1	0	8	15	58	1	4	78	1	2	13	0	16	123
16:45	0	15	1	1	17	3	7	0	0	10	16	32	1	2	51	3	4	8	0	15	93
Total	2	65	12	8	87	12	22	2	2	38	64	163	8	10	245	6	15	36	2	59	429

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

Weather:
 Counter TDC-8
 Counted by: Dick / Sean

File Name : TMC0101
 Site Code : 01010102
 Start Date : 01/09/2001
 Page No : 2

Groups Printed- 1 - 1 - Unshifted

Start Time	Southbound					Westbound					Northbound					Eastbound					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	
Factor	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		
17:00	1	16	1	1	19	5	9	1	1	16	16	37	4	1	58	2	1	9	0	12	105
17:15	1	14	5	1	21	3	4	2	1	10	23	38	5	0	66	2	9	13	0	24	121
17:30	0	12	0	0	12	2	4	1	0	7	30	45	3	0	78	4	4	7	1	16	113
17:45	0	11	3	0	14	2	7	1	1	11	12	29	2	1	44	6	4	14	0	24	93
Total	2	53	9	2	66	12	24	5	3	44	81	149	14	2	246	14	18	43	1	76	432
18:00	0	18	1	1	20	2	5	0	0	7	18	29	0	0	47	2	1	12	0	15	89
18:15	0	20	2	0	22	2	1	0	0	3	19	31	4	1	55	1	2	15	0	18	98
18:30	1	18	3	0	22	0	1	0	0	1	17	22	3	0	42	4	6	14	0	24	89
18:45	0	11	8	0	19	1	4	1	0	6	16	18	5	0	39	4	3	8	0	15	79
Total	1	67	14	1	83	5	11	1	0	17	70	100	12	1	183	11	12	49	0	72	355
19:00	0	8	1	0	9	1	2	0	0	3	17	22	3	0	42	1	1	16	0	18	72
19:15	0	12	3	0	15	0	2	0	0	2	6	22	0	1	29	1	4	10	0	15	61
19:30	0	8	2	0	10	2	1	1	0	4	8	13	0	0	21	2	1	5	0	8	43
19:45	0	14	3	0	17	1	1	0	0	2	12	18	0	0	30	3	4	4	0	11	60
Total	0	42	9	0	51	4	6	1	0	11	43	75	3	1	122	7	10	35	0	52	236
Grand Total	12	937	76	42	1067	99	138	26	23	286	492	936	97	65	1590	64	129	615	27	835	3778
Apprch %	1.1	87.8	7.1	3.9		34.6	48.3	9.1	8.0		30.9	58.9	6.1	4.1		7.7	15.4	73.7	3.2		
Total %	0.3	24.8	2.0	1.1	28.2	2.6	3.7	0.7	0.6	7.6	13.0	24.8	2.6	1.7	42.1	1.7	3.4	16.3	0.7	22.1	

For Street Approaches:

Northbound:

CR 56

Data File: C:\Program Files\JAMAR\PETRA\Data Files\Tmc0101.war
 Count Type: IMC. Channel: 0. Count Date: 1/ 9/ 1
 Number of Lanes: 2
 Approach Speed: 50
 Total Approach Traffic: 1525

Southbound:

CR 56

Data File: C:\Program Files\JAMAR\PETRA\Data Files\Tmc0101.war
 Count Type: IMC. Channel: 0. Count Date: 1/ 9/ 1
 Number of Lanes: 2
 Approach Speed: 50
 Total Approach Traffic: 1025

Minor Street Approaches:

Eastbound:

155TH AVE.

Data File: C:\Program Files\JAMAR\PETRA\Data Files\Tmc0101.war
 Count Type: IMC. Channel: 0. Count Date: 1/ 9/ 1
 Number of Lanes: 2
 Approach Speed: 50
 Total Approach Traffic: 808

Westbound:

153RD AVE.

Data File: C:\Program Files\JAMAR\PETRA\Data Files\Tmc0101.war
 Count Type: IMC. Channel: 0. Count Date: 1/ 9/ 1
 Number of Lanes: 2
 Approach Speed: 35
 Total Approach Traffic: 263

Analysis of 8-Hour Volume Warrants (Criteria refers to high volume side street for that hour):

Hour	Main (Total)	Side			Warrant 1		Warrant 2		Warrant 8	
		Vol.	Dir.	Rank	Meets?	Criteria	Meets?	Criteria	Meets?	Criteria
0	0	0	W	15		140		70		112
1	0	0	W	16		140		70		112
2	0	0	W	17		140		70		112
3	0	0	W	18		140		70		112
4	0	0	W	19		140		70		112
5	0	0	W	20		140		70		112
6	184	120	E	1		140	SIDE	70	SIDE	112
7	192	111	E	2		140	SIDE	70		112
8	121	84	E	3		140	SIDE	70		112
9	96	29	E	13		140		70		112
10	95	45	E	8		140		70		112
11	132	24	E	14		140		70		112
12	124	30	E	11		140		70		112
13	127	30	E	12		140		70		112
14	161	34	E	10		140		70		112
15	260	45	E	9		140		70		112
16	314	57	E	6		140		70		112
17	308	75	E	4		140	SIDE	70		112
18	264	72	E	5		140	SIDE	70		112
19	172	52	E	7		140		70		112
20	0	0	W	21		140		70		112
21	0	0	W	22		140		70		112
22	0	0	W	23		140		70		112
23	0	0	W	24		140		70		112

Warrant Summary:

Rural values apply.

Warrant 1 - Minimum Vehicular Volumes

NOT SATISFIED. Required values reached for 0 hours. Criteria--Main St.: 420; Side St.: See Volume Summary.

Warrant 2 - Interruption of Continuous Traffic

NOT SATISFIED. Required values reached for 0 hours. Criteria--Main St.: 630; Side St.: See Volume Summary.

Warrant 3 - Minimum Pedestrian Volumes

NOT SATISFIED. 8th-High Hour--Pedestrians: 3; Vehicles: 95. Criteria--Pedestrians: 105; Vehicles: 420.

Warrant 4 - School Crossing

NOT APPLICABLE. Gap data has not been defined.

Warrant 5 - Progressive Movement

NOT SATISFIED. Adjacent signals closer than 1000 feet and/or not part of coordinated system.

Warrant 6 - Accident Experience

NOT SATISFIED. 0 correctable accidents is fewer than required 5.

Correctable Accidents: 0; Right Angle Accidents: 0; Left Turn Accidents: 0; Other Accidents: 0.

Warrant 7 - Systems Warrant

NOT SATISFIED. Peak hour total entering volume 424 does not meet criteria of 800

NSEW- Approaches which are part of the principal through traffic roadway network.

- Approaches which connect areas of principal traffic generation.
- Approaches which include rural or suburban highways outside, entering or traversing a city.
- Approaches which have surface street freeway or expressway ramp terminals.
- Approaches which appear as a major route in an official transportation plan.

Warrant 8 - Combination of Warrants

NOT SATISFIED. Required values reached for 0 hours. Criteria--Main: 504; Side: See Volume Summary.

Warrant 9 - Four Hour Volumes

NOT SATISFIED. Required values reached for 0 hours.

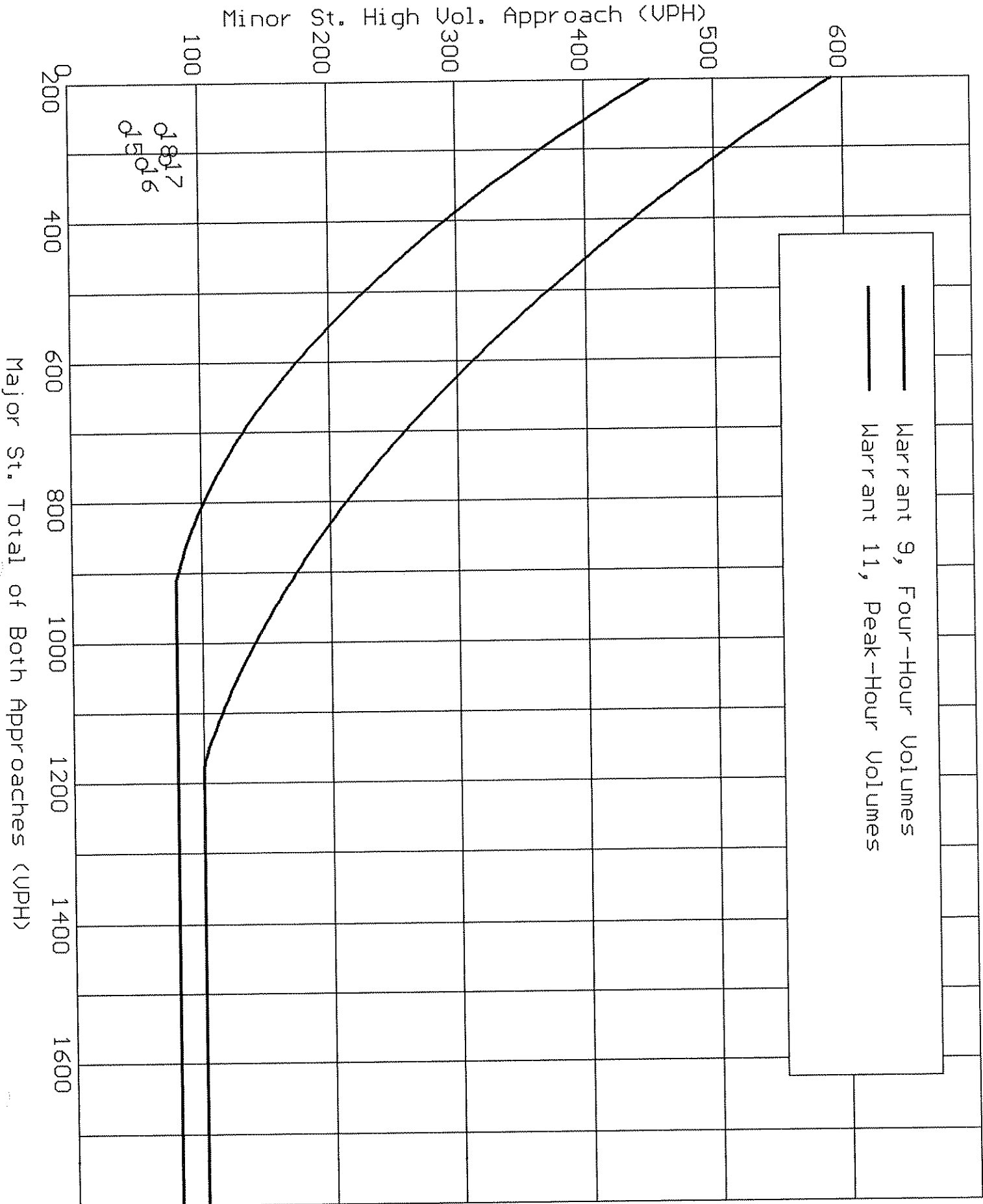
Warrant 10 - Peak Hour Delay

NOT SATISFIED. Peak hour (1700 hours) volume not adequate.

Criteria--Main St.: 800 (4 approaches), 650 (3 approaches); Side St.: 150.

Warrant 11 - Peak Hour Volume

NOT SATISFIED.



Multiway Stop Warrant Analysis
TMC 0101 CR 56 (Ramsey Blvd.) @ 155th Ave./153rd Ave.
Speed Limit of Major Roadway..... 50

Minimum Traffic Volumes Multiway Stop Warrant Criteria:

- a) The total vehicular volume entering the intersection from all approaches must average at least 500 vehicles per hour (vph) for any 8 hours of an average day, AND:
- b) The combined vehicular and pedestrian volume from the minor street or highway must average at least 200 vph for the same 8 hours, with an average delay to minor street vehicular traffic of at least 30 seconds per vehicle during the maximum hour, BUT:
- c) When the 85-percentile approach speed of the major street traffic exceeds 40 miles per hour, the minimum volume warrant is 70% of the above requirements.

Hour	Total Vehicular Traffic Entering the Intersection	Vehicular Traffic Entering on First Minor Roadway	Vehicular Traffic Entering on Second Minor Roadway	Sum of Minor Approaches	Hours Stop Warrant Met
6 AM - 7 AM	319	8	120	128	0
7 AM - 8 AM	329	12	115	127	0
8 AM - 9 AM	237	17	88	105	0
9 AM - 10 AM	142	8	32	40	0
10 AM - 11 AM	153	6	48	54	0
11 AM - 12 PM	184	23	25	48	0
12 PM - 13 PM	179	17	32	49	0
1 PM - 2 PM	181	17	31	48	0
2 PM - 3 PM	238	28	37	65	0
3 PM - 4 PM	364	40	48	88	0
4 PM - 5 PM	429	38	59	97	0
5 PM - 6 PM	432	44	76	120	0
6 PM - 7 PM	355	17	72	89	0
7 PM - 8 PM	236	11	52	63	0

TOTAL HOURS MET: 0

MULTIWAY STOP WARRANT IS NOT MET

↑
NORTH

APP. #1 = EB 155th. Ave.

APP. #2 = SB CR. 56

APP. #3 = WB 153rd. Ave.

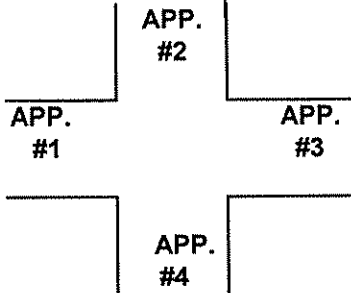
APP. #4 = NB CR. 56

COUNT LOCATION:

CR 56 @ 155rd. Ave. &
153rd. Ave.

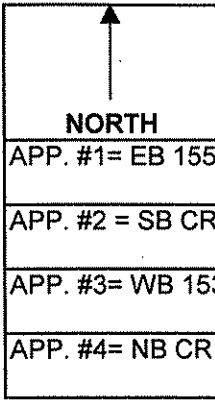
DATE:

1/9/01



- 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		
6:15-6:30								
6:30-6:45								2
6:45-7:00								5
HOURLY TOTAL						HOURLY TOTAL		8
7:00-7:15						3		2
7:15-7:30						1		2
7:30-7:45								1
7:45-8:00						2		3
HOURLY TOTAL						HOURLY TOTAL		14
8:00-8:15						2		2
8:15-8:30						1		5
8:30-8:45						2		1
8:45-9:00						1		4
HOURLY TOTAL						HOURLY TOTAL		18
9:00-9:15								5
9:15-9:30						3		
9:30-9:45						1		
9:45-10:00						2		
HOURLY TOTAL						HOURLY TOTAL		11
10:00-10:15						1		
10:15-10:30						3		
10:30-10:45						1		
10:45-11:00						2		
HOURLY TOTAL						HOURLY TOTAL		7
11:00-11:15						2		
11:15-11:30						2		
11:30-11:45						1		
11:45-12:00								2
HOURLY TOTAL						HOURLY TOTAL		7
12:00-12:15						1		1
12:15-12:30						1		3
12:30-12:45						3		
12:45-1:00								
HOURLY TOTAL						HOURLY TOTAL		9
1:00-1:15						3		
1:15-1:30						1		
1:30-1:45						3		
1:45-2:00								
HOURLY TOTAL						HOURLY TOTAL		7

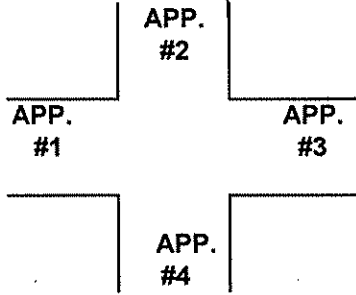


COUNT LOCATION:

CR 56 @ 155th. Ave. & 153rd. A

DATE:

1/9/01



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						6		
2:15-2:30						4		2
2:30-2:45						2		4
2:45-3:00						1		2
HOURLY TOTAL						HOURLY TOTAL		21
3:00-3:15						5		1
3:15-3:30						4		2
3:30-3:45								3
3:45-4:00						2		7
HOURLY TOTAL						HOURLY TOTAL		24
4:00-4:15						1		5
4:15-4:30								6
4:30-4:45						3		3
4:45-5:00								3
HOURLY TOTAL						HOURLY TOTAL		21
5:00-5:15						1		3
5:15-5:30						2		
5:30-5:45								1
5:45-6:00						1		1
HOURLY TOTAL						HOURLY TOTAL		9
6:00-6:15						1		
6:15-6:30						1		
6:30-6:45								
6:45-7:00								
HOURLY TOTAL						HOURLY TOTAL		2
7:00-7:15								
7:15-7:30						1		
7:30-7:45						2		
7:45-8:00								
HOURLY TOTAL						HOURLY TOTAL		3
8:00-8:15								
8:15-8:30								
8:30-8:45								
8:45-9:00								
HOURLY TOTAL						HOURLY TOTAL		
9:00-9:15								
9:15-9:30								
9:30-9:45								
9:45-10:00								
HOURLY TOTAL						HOURLY TOTAL		