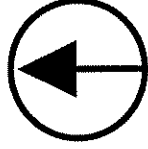


Date : 7/31/98AM 8/3/98PM

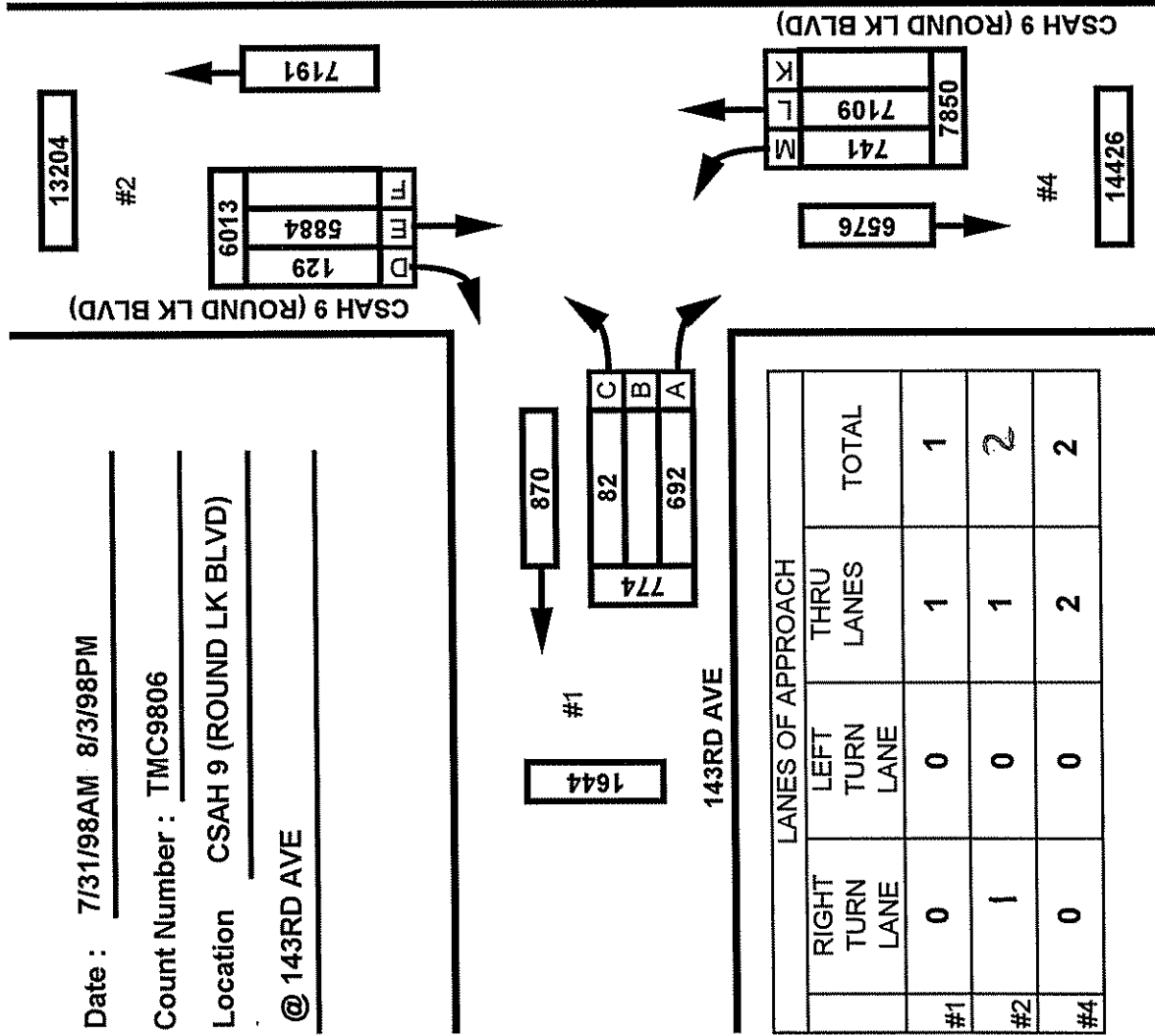
Count Number : TMC9806

Location CSAH 9 (ROUND LK BLVD)

@ 143RD AVE



North



Anoka County Highway Department

Traffic Volume and Turning

Movement Study

Weather :
 Counted by: Sarah and Vallie
 Board # :
 cher :

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 Horsham, PA.

Study Name: TMC9806
 Site Code : 98060202
 Start Date: 07/31/98
 Page : 1

Vehicle group 1

Start Time	CSAH 9 (ROUND LK BLVD) Southbound			CSAH 9 (ROUND LK BLVD) Northbound			143RD AVE. Eastbound			Intrvl. Total	Exclude Total	Include Total
	Thru	Right	Other	Left	Thru	Other	Left	Right	Other			
07/31/98												
06:00	152	0	2	2	18	0	0	17	1	192	3	189
06:15	179	0	11	5	24	2	1	17	0	239	13	226
06:30	178	0	9	4	26	0	2	26	0	245	9	236
06:45	192	0	8	3	33	0	0	14	0	250	8	242
Hour	701	0	30	14	101	2	3	74	1	926	33	893
07:00	67	6	2	2	12	3	0	12	0	104	5	99
07:15	58	3	2	0	7	0	0	6	0	76	2	74
07:30	148	0	6	0	47	3	1	21	0	226	9	217
07:45	116	1	1	6	41	4	2	12	0	183	5	178
Hour	389	10	11	8	107	10	3	51	0	589	21	568
08:00	94	5	9	2	36	4	1	8	0	159	13	146
08:15	108	1	9	6	62	3	2	15	1	207	13	194
08:30	107	1	6	0	38	1	2	12	0	167	7	160
08:45	104	0	2	5	42	2	0	14	1	170	5	165
Hour	413	7	26	13	178	10	5	49	2	703	38	665
09:00	97	1	4	2	30	0	0	5	0	139	4	135
09:15	88	10	3	8	48	3	2	10	0	172	6	166
09:30	93	3	5	3	70	3	0	5	0	182	8	174
09:45	106	2	3	4	52	1	1	12	0	181	4	177
Hour	384	16	15	17	200	7	3	32	0	674	22	652
10:00	90	1	1	8	63	2	0	13	0	178	3	175
10:15	102	3	4	7	63	2	1	7	2	191	8	183
10:30	79	0	3	8	81	5	1	10	0	187	8	179
10:45	101	0	2	3	79	3	2	15	0	205	5	200
Hour	372	4	10	26	286	12	4	45	2	761	24	737
11:00	87	2	4	7	84	2	1	6	1	194	7	187
11:15	103	1	4	13	99	2	3	8	0	233	6	227
11:30	94	0	0	14	124	6	0	7	0	245	6	239
11:45	92	2	2	9	118	6	1	10	1	241	9	232
Hour	376	5	10	43	425	16	5	31	2	913	28	885
12:00	104	1	1	13	125	4	1	10	0	259	5	254
12:15	84	1	2	10	136	3	0	6	0	242	5	237
12:30	90	1	1	8	127	1	0	10	0	238	2	236
12:45	97	3	7	8	108	2	0	11	0	236	9	227
Hour	375	6	11	39	496	10	1	37	0	975	21	954

Weather :
 Counted by: Sarah and Vallie
 Board # :
 Character :

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Study Name: TMC9806
 Site Code : 98060202
 Start Date: 07/31/98
 Page : 2

Vehicle group 1

Start Time	CSAH 9 (ROUND LK BLVD) Southbound			CSAH 9 (ROUND LK BLVD) Northbound			143RD AVE. Eastbound			Intrvl. Total	Exclude Total	Include Total
	Thru	Right	Other	Left	Thru	Other	Left	Right	Other			
13:00	104	3	5	17	134	4	1	12	0	280	9	271
13:15	96	2	4	8	119	7	2	7	0	245	11	234
13:30	93	0	3	11	122	4	1	16	2	252	9	243
13:45	96	2	0	9	126	3	4	4	0	244	3	241
Hour	389	7	12	45	501	18	8	39	2	1021	32	989
14:00	64	1	1	7	115	1	0	4	0	193	2	191
14:15	91	9	3	10	95	10	0	9	0	227	13	214
14:30	89	0	0	12	113	4	0	7	0	225	4	221
14:45	65	0	6	14	146	8	1	3	0	243	14	229
Hour	309	10	10	43	469	23	1	23	0	888	33	855
15:00	85	1	3	10	189	5	2	10	0	305	8	297
15:15	81	1	5	13	156	2	1	14	0	273	7	266
15:30	79	2	0	20	175	1	0	8	0	285	1	284
15:45	64	5	0	21	214	4	1	11	0	320	4	316
Hour	309	9	8	64	734	12	4	43	0	1183	20	1163
16:00	83	1	1	18	178	2	2	17	0	302	3	299
16:15	67	2	0	23	187	3	3	10	0	295	3	292
16:30	104	1	1	25	200	1	1	17	0	350	2	348
16:45	105	2	2	29	233	0	2	11	0	384	2	382
Hour	359	6	4	95	798	6	8	55	0	1331	10	1321
17:00	100	5	1	30	229	3	4	8	0	380	4	376
17:15	76	1	2	23	210	5	2	13	0	332	7	325
17:30	92	5	1	30	221	5	1	20	0	375	6	369
17:45	97	7	4	22	206	2	2	16	0	356	6	350
Hour	365	18	8	105	866	15	9	57	0	1443	23	1420
18:00	105	1	3	19	204	2	3	20	0	357	5	352
18:15	87	1	2	15	173	1	2	19	0	300	3	297
18:30	83	3	1	10	138	2	4	17	0	258	3	255
18:45	93	3	0	21	149	4	4	16	0	290	4	286
Hour	368	8	6	65	664	9	13	72	0	1205	15	1190
19:00	102	5	0	17	169	4	2	12	0	311	4	307
19:15	94	1	3	12	127	1	2	10	0	250	4	246
19:30	72	1	0	22	117	4	0	11	0	227	4	223
19:45	65	2	0	19	130	1	0	4	0	221	1	220
Hour	333	9	3	70	543	10	4	37	0	1009	13	996

Weather :
 Counted by: Sarah and Vallie
 Board # :
 Character :

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Study Name: TMC9806
 Site Code : 98060202
 Start Date: 07/31/98
 Page : 3

Vehicle group 1

Start Time	CSAH 9 (ROUND LK BLVD) Southbound			CSAH 9 (ROUND LK BLVD) Northbound			143RD AVE. Eastbound			Intrvl. Total	Exclude Total	Include Total
	Thru	Right	Other	Left	Thru	Other	Left	Right	Other			
20:00	77	1	0	13	113	2	1	11	0	218	2	216
20:15	77	2	1	11	105	0	1	5	0	202	1	201
20:30	54	2	0	9	88	1	1	5	0	160	1	159
20:45	46	3	1	15	95	1	2	3	0	166	2	164
Hour	254	8	2	48	401	4	5	24	0	746	6	740
21:00	46	4	1	19	117	1	2	5	1	196	3	193
21:15	56	0	1	12	83	0	3	11	0	166	1	165
21:30	43	0	0	9	61	0	1	6	0	120	0	120
21:45	43	2	2	6	79	0	0	1	0	133	2	131
Hour	188	6	4	46	340	1	6	23	1	615	6	609
Total	5884	129	170	741	7109	165	82	692	10	14982	345	14637
% Apr.	95.1	2.0	2.7	9.2	88.6	2.0	10.4	88.2	1.2	-	-	-
% Int.	39.2	0.8	1.1	4.9	47.4	1.1	0.5	4.6	-	-	-	-

or Street Approaches:

Northbound:

CSAH 9 (ROUND LK BLVD)

Data File: C:\APPS\PETRA2\DATAFILE\TMC9806.PDF
 Count Type: IMC. Channel: 0. Count Date: 7/31/98
 Number of Lanes: 2
 Approach Speed: 45
 Total Approach Traffic: 7850

Southbound:

CSAH 9 (ROUND LK BLVD)

Data File: C:\APPS\PETRA2\DATAFILE\TMC9806.PDF
 Count Type: IMC. Channel: 0. Count Date: 7/31/98
 Number of Lanes: 2
 Approach Speed: 45
 Total Approach Traffic: 6013

Minor Street Approaches:

Eastbound:

143RD AVE.

Data File: C:\APPS\PETRA2\DATAFILE\TMC9806.PDF
 Count Type: IMC. Channel: 0. Count Date: 7/31/98
 Number of Lanes: 1
 Approach Speed: 0
 Total Approach Traffic: 774

Westbound:

143RD AVE.

Data File: C:\APPS\PETRA2\DATAFILE\TMC9806.PDF
 Count Type: IMC. Channel: 0. Count Date: 7/31/98
 Number of Lanes: 1
 Approach Speed: 0
 Total Approach Traffic: 0

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

Hour	Main	Side	Warrant 1	Warrant 2	Warrant 8
Begin	(Total)	Vol. Dir. Rank	Meets? Criteria	Meets? Criteria	Meets? Criteria
0	0	0 E 17	105	52	84
1	0	0 E 18	105	52	84
2	0	0 E 19	105	52	84
3	0	0 E 20	105	52	84
4	0	0 E 21	105	52	84
5	0	0 E 22	105	52	84
6	816	77 E 2	MAIN 105	--BOTH-- 52	MAIN 84
7	514	54 E 5	MAIN 105	SIDE 52	MAIN 84
8	611	54 E 6	MAIN 105	SIDE 52	MAIN 84
9	617	35 E 13	MAIN 105	52	MAIN 84
10	688	49 E 7	MAIN 105	MAIN 52	MAIN 84
11	849	36 E 12	MAIN 105	MAIN 52	MAIN 84
12	916	38 E 11	MAIN 105	MAIN 52	MAIN 84
13	942	47 E 8	MAIN 105	MAIN 52	MAIN 84
14	831	24 E 16	MAIN 105	MAIN 52	MAIN 84
15	1116	47 E 9	MAIN 105	MAIN 52	MAIN 84
16	1258	63 E 4	MAIN 105	--BOTH-- 52	MAIN 84
17	1354	66 E 3	MAIN 105	--BOTH-- 52	MAIN 84
18	1105	85 E 1	MAIN 105	--BOTH-- 52	--BOTH-- 84
19	955	41 E 10	MAIN 105	MAIN 52	MAIN 84
20	711	29 E 14	MAIN 105	MAIN 52	MAIN 84
21	580	29 E 15	MAIN 105	52	MAIN 84
22	0	0 E 23	105	52	84
23	0	0 E 24	105	52	84

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 4 hours. Criteria--Main St.: 630; Side St.: See Volume Summary.

Warrant 3 - Minimum Pedestrian Volumes

NOT SATISFIED. Ped volumes too low. Criteria--190 Peds in peak hour, 100 peds in 4th high hour.

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. At least one street has no major approaches. Peak hour total entering volume: 1420.

- Approaches which are part of the principal through traffic roadway network.
- Approaches which include rural or suburban highways outside, entering or traversing a city.
- Approaches which appear as a major route in an official transportation plan.

Warrant 8 - Combination of Warrants

NOT SATISFIED. Required values reached for 1 hours. Criteria--Main: 504; Side: See Volume Summary.

Warrant 9 - Four Hour Volumes

NOT SATISFIED for 4 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.: 100.

Warrant 11 - Peak Hour Volume

NOT SATISFIED.

Minor St. High Vol. Approach (UPH)

Warrant 9, Four-Hour Volumes
Warrant 11, Peak-Hour Volumes

200 400 600 800 1000 1200 1400 1600

Major St. Total of Both Approaches (UPH)

7

88

28

20

11

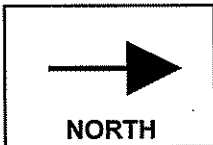
14

15

18

16

17



COUNT LOCATION:

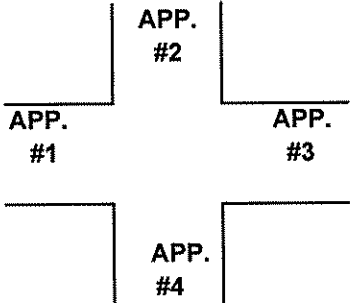
CSAH 9 (ROUND LAKE BLVD)

DATE:

7/31/98

@ 143RD AVE

APP. #1= NB CSAH 9 (ROUND LAKE BLVD)
APP. #2 = EB (143RD AVE)
APP. #3= SB CSAH 9 (ROUND LAKE BLVD)
APP. #4= WB (DRIVEWAY)



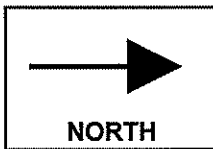
HEAVY VEHICLE- ANY VEHICLE HAVING MORE THAN FOUR TIRES TOUCHING THE PAVEMENT

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						3		
6:15-6:30						13		
6:30-6:45						7		2
6:45-7:00						8		
HOURLY TOTAL						HOURLY TOTAL		33
7:00-7:15						5		
7:15-7:30						1		1
7:30-7:45						9		1
7:45-8:00						5		
HOURLY TOTAL						HOURLY TOTAL		22
8:00-8:15						12	1	
8:15-8:30						13	1	
8:30-8:45						7		
8:45-9:00						5	1	
HOURLY TOTAL						HOURLY TOTAL		40
9:00-9:15						4		
9:15-9:30						6		
9:30-9:45				1	1	6	1	1
9:45-10:00		1				3	1	
HOURLY TOTAL					1	HOURLY TOTAL		22
10:00-10:15		1	1		2	3		
10:15-10:30		1			1	8		
10:30-10:45	2				2	7		1
10:45-11:00		1	1	2		5		
HOURLY TOTAL					5	HOURLY TOTAL		24
11:00-11:15						7		
11:15-11:30				1	1	6		
11:30-11:45	1			5	6	6		
11:45-12:00				1		8	1	
HOURLY TOTAL					7	HOURLY TOTAL		28
12:00-12:15		3		2	2	5	1	
12:15-12:30						4		
12:30-12:45		1			1	2		
12:45-1:00						9		
HOURLY TOTAL					3	HOURLY TOTAL		21
1:00-1:15				1	1	8	1	
1:15-1:30		1		2	3	12	1	
1:30-1:45						5	2	
1:45-2:00		1				3		
HOURLY TOTAL					4	HOURLY TOTAL		32



COUNT LOCATION:

CSAH 9 (ROUND LAKE BLVD)
@ 143RD AVE

DATE:

8/3/98

APP. #1= NB CSAH 9
(ROUND LAKE BLVD)
APP. #2 = EB
(143RD AVE)
APP. #3= SB CSAH 9
(ROUND LAKE BLVD)
APP. #4= WB
(DRIVEWAY)

APP. #1 APP. #3
APP. #2 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		1	1		2	2		
2:15-2:30						12		
2:30-2:45						4		
2:45-3:00						12	1	1
HOURLY TOTAL					2	HOURLY TOTAL		32
3:00-3:15						7	2	
3:15-3:30						6	1	
3:30-3:45						1		
3:45-4:00						4		
HOURLY TOTAL						HOURLY TOTAL		21
4:00-4:15						3		
4:15-4:30						3		
4:30-4:45				1	1	2		
4:45-5:00						1		
HOURLY TOTAL					1	HOURLY TOTAL		9
5:00-5:15						4		
5:15-5:30						6	1	
5:30-5:45						6		
5:45-6:00						6		
HOURLY TOTAL						HOURLY TOTAL		23
6:00-6:15						5		
6:15-6:30						2	1	
6:30-6:45						2	1	
6:45-7:00						4		
HOURLY TOTAL						HOURLY TOTAL		15
7:00-7:15		2			2	4		
7:15-7:30						3	1	
7:30-7:45				1	1	3	1	
7:45-8:00						1		
HOURLY TOTAL					3	HOURLY TOTAL		13
8:00-8:15						2		
8:15-8:30						1		
8:30-8:45							1	
8:45-9:00						1		
HOURLY TOTAL						HOURLY TOTAL		5
9:00-9:15						1	2	
9:15-9:30						1		
9:30-9:45		1			1			
9:45-10:00						2		
HOURLY TOTAL					1	HOURLY TOTAL		6