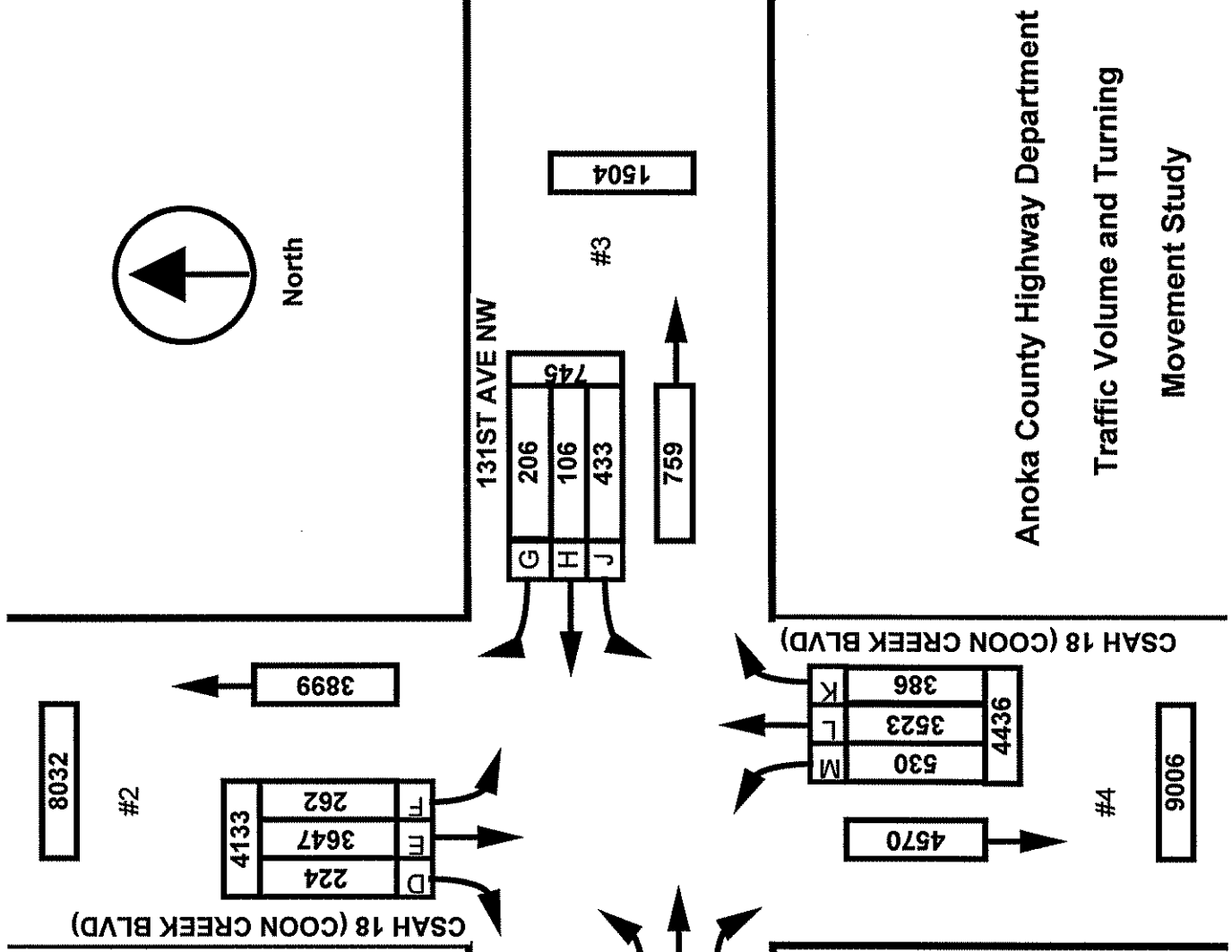


Date : 8/20/97AM 8/21/97PM

Count Number : TMC9724

Location CSAH 18 (COON CREEK BLVD)

@ 131ST AVE NW



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

Anoka County Highway Department
 Traffic Volume and Turning
 Movement Study

Weather : COOL, SUNNY
 Counted by: SARAH AND JANELLE
 Board # :
 Cher :

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 Horsham, PA.

Study Name: TMC9724
 Site Code : 97240202
 Start Date: 08/21/97
 Page : 1

Vehicle group 1

Start Time	CSAH 18 (COON CREEK BL)				131ST AVE NW				CSAH 18 (COON CREEK BL)				131ST AVE NW				Intvl	Exclu	Inclu
	Southbound		Westbound		Northbound		Eastbound		Left		Thru		Right		Other				
08/21/97																			
06:00	0	130	0	2	13	0	1	0	0	11	0	0	4	0	6	0	167	2	165
06:15	2	163	3	3	11	2	2	0	2	18	0	0	5	0	24	0	235	3	232
06:30	4	136	1	3	11	2	6	0	2	11	4	0	0	0	19	0	199	3	196
06:45	1	142	1	1	19	2	1	0	1	19	1	0	4	0	19	0	211	1	210
Hour	7	571	5	9	54	6	10	0	5	59	5	0	13	0	68	0	812	9	803
07:00	1	124	2	1	18	0	3	1	4	24	3	0	2	0	19	0	202	2	200
07:15	4	141	2	2	19	0	2	0	0	22	1	0	6	2	15	0	216	2	214
07:30	2	103	5	2	7	1	1	0	1	24	4	0	1	0	8	0	159	2	157
07:45	3	91	3	3	9	0	2	0	4	21	2	1	1	1	13	1	155	5	150
Hour	10	459	12	8	53	1	8	1	9	91	10	1	10	3	55	1	732	11	721
08:00	1	67	0	1	5	0	3	0	6	16	4	1	1	0	17	1	123	3	120
08:15	0	67	2	2	8	0	2	0	6	21	0	1	0	2	10	0	121	3	118
08:30	2	42	3	2	3	1	1	0	1	28	3	0	0	3	0	1	90	3	87
08:45	2	44	3	3	6	0	3	1	4	21	1	1	2	0	5	0	96	5	91
Hour	5	220	8	8	22	1	9	1	17	86	8	3	3	5	32	2	430	14	416
09:00	2	46	2	2	7	0	0	0	3	18	1	1	4	0	6	0	92	3	89
09:15	2	47	2	2	4	0	0	0	5	24	2	0	5	1	8	1	103	3	100
09:30	3	45	4	4	3	0	3	1	4	31	4	1	1	0	6	0	110	6	104
09:45	1	52	1	4	6	1	2	0	1	25	0	0	0	0	6	0	99	4	95
Hour	8	190	9	12	20	1	5	1	13	98	7	2	10	1	26	1	404	16	388
10:00	2	47	6	2	6	1	1	0	2	25	3	2	1	2	8	0	108	4	104
10:15	2	50	2	1	5	0	5	0	8	25	2	0	1	2	6	0	109	1	108
10:30	4	42	4	3	4	4	4	1	1	28	0	1	4	0	4	1	105	6	99
10:45	3	46	7	4	5	0	6	0	3	27	4	1	2	0	3	0	111	5	106
Hour	11	185	19	10	20	5	16	1	14	105	9	4	8	4	21	1	433	16	417
11:00	3	54	3	5	6	2	2	1	3	32	6	1	7	0	4	0	129	7	122
11:15	1	38	4	4	3	0	4	0	6	37	5	1	2	3	5	3	116	8	108
11:30	3	38	8	3	2	1	4	1	6	48	3	4	4	0	6	1	132	9	123
11:45	2	30	2	1	2	1	3	0	4	35	9	1	3	1	8	0	102	2	100
Hour	9	160	17	13	13	4	13	2	19	152	23	7	16	4	23	4	479	26	453
12:00	3	46	4	6	5	1	3	0	8	40	7	4	3	1	4	0	135	10	125
12:15	1	52	0	4	6	1	0	0	9	27	6	0	0	3	13	1	123	5	118
12:30	5	49	3	2	9	1	3	1	5	49	8	2	2	4	5	0	148	5	143
12:45	5	46	3	3	4	0	2	0	9	47	5	1	1	1	5	1	133	5	128
Hour	14	193	10	15	24	3	8	1	31	163	26	7	6	9	27	2	539	25	514

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Horsham, PA.

Weather : COOL, SUNNY
 Counted by: SARAH AND JANELLE
 Board # :
 Character :

Study Name: TMC9724
 Site Code : 97240202
 Start Date: 08/21/97
 Page : 2

Vehicle group 1

Start Time	CSAH 18 (COON CREEK BL Southbound)				131ST AVE NW Westbound				CSAH 18 (COON CREEK BL Northbound)				131ST AVE NW Eastbound				Intvl	Exclu	Inclu
	Left	Thru	Right	Other	Left	Thru	Right	Other	Left	Thru	Right	Other	Left	Thru	Right	Other			
13:00	1	37	3	4	9	1	0	0	10	41	3	2	0	0	7	0	118	6	112
13:15	6	44	7	5	4	3	2	0	6	42	2	3	2	3	6	1	136	9	127
13:30	6	49	1	4	4	2	2	0	4	52	7	2	3	0	3	1	140	7	133
13:45	3	40	7	1	4	3	7	0	4	37	3	1	2	1	5	0	118	2	116
Hour	16	170	18	14	21	9	11	0	24	172	15	8	7	4	21	2	512	24	488
14:00	6	75	3	0	8	1	4	0	4	43	6	1	4	6	6	2	169	3	166
14:15	3	50	0	0	5	2	0	0	13	37	10	3	2	0	7	3	135	6	129
14:30	2	30	2	1	2	2	1	0	12	48	5	1	3	5	6	0	120	2	118
14:45	1	30	1	2	1	1	0	0	8	42	8	2	2	2	3	0	103	4	99
Hour	12	185	6	3	16	6	5	0	37	170	29	7	11	13	22	5	527	15	512
15:00	5	47	4	2	4	1	4	0	6	72	9	1	0	1	8	1	165	4	161
15:15	4	45	8	2	5	2	5	1	15	66	10	1	2	1	8	0	175	4	171
15:30	6	55	3	3	4	4	2	0	10	109	13	1	0	4	3	1	218	5	213
15:45	8	41	8	2	8	1	3	0	16	94	11	1	3	5	6	0	207	3	204
Hour	23	188	23	9	21	8	14	1	47	341	43	4	5	11	25	2	765	16	749
16:00	8	41	2	2	10	3	3	0	17	107	13	1	3	0	6	0	216	3	213
16:15	13	54	6	0	11	4	5	1	17	106	16	2	2	5	6	0	248	3	245
16:30	5	60	3	1	10	3	4	0	20	124	11	1	2	2	8	0	254	2	252
16:45	6	78	1	1	3	1	3	0	19	139	12	5	7	1	12	0	288	6	282
Hour	32	233	12	4	34	11	15	1	73	476	52	9	14	8	32	0	1006	14	992
17:00	7	64	9	0	10	5	5	0	17	124	13	0	4	3	8	0	269	0	269
17:15	10	61	2	0	5	6	2	0	28	148	10	2	5	5	9	0	293	2	291
17:30	5	65	4	1	16	4	8	2	13	136	10	0	4	1	7	0	276	3	273
17:45	7	65	4	0	4	2	5	0	14	129	6	1	5	2	5	0	249	1	248
Hour	29	255	19	1	35	17	20	2	72	537	39	3	18	11	29	0	1087	6	1081
18:00	6	46	6	0	10	6	7	0	20	102	17	0	6	4	14	0	244	0	244
18:15	5	64	4	3	8	4	8	0	10	93	7	2	2	5	4	0	219	5	214
18:30	5	49	4	1	9	0	4	0	5	60	5	1	6	3	9	0	161	2	159
18:45	9	56	6	0	3	4	6	0	7	59	7	3	4	2	11	0	177	3	174
Hour	25	215	20	4	30	14	25	0	42	314	36	6	18	14	38	0	801	10	791
19:00	11	48	8	1	13	0	10	0	17	103	11	1	6	5	9	0	243	2	241
19:15	6	87	3	1	8	7	8	0	7	46	6	1	0	2	5	0	187	2	185
19:30	6	40	6	0	3	1	0	0	9	70	12	2	1	3	8	0	161	2	159
19:45	7	37	3	1	7	4	1	0	10	74	7	1	3	5	7	0	167	2	165
Hour	30	212	20	3	31	12	19	0	43	293	36	5	10	15	29	0	758	8	750

Weather : COOL, SUNNY
 Counted by: SARAH AND JANELLE
 Board # :
 cher :

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Study Name: TMC9724
 Site Code : 97240202
 Start Date: 08/21/97
 Page : 3

Vehicle group 1

Start Time	CSAH 18 (COON CREEK BL 131ST AVE NW Southbound				Westbound				CSAH 18 (COON CREEK BL 131ST AVE NW Northbound				Eastbound				Intvl	Exclu	Inclu
	Left	Thru	Right	Other	Left	Thru	Right	Other	Left	Thru	Right	Other	Left	Thru	Right	Other			
20:00	5	32	6	0	12	0	5	0	10	54	7	1	3	2	6	0	143	1	142
20:15	5	38	4	0	2	2	3	0	13	77	7	2	2	0	12	0	167	2	165
20:30	3	38	3	0	2	3	6	0	12	59	6	0	0	0	3	0	135	0	135
20:45	4	32	4	1	4	1	7	0	15	46	6	1	3	3	5	0	132	2	130
Hour	17	140	17	1	20	6	21	0	50	236	26	4	8	5	26	0	577	5	572
21:00	5	26	4	0	9	2	3	0	8	77	9	0	5	2	6	0	156	0	156
21:15	4	21	4	0	8	0	2	0	13	61	2	1	6	3	9	0	134	1	133
21:30	5	22	1	0	2	0	2	0	6	58	6	1	1	0	1	0	105	1	104
21:45	0	2	0	0	0	0	0	0	7	34	2	1	1	2	0	0	49	1	48
Hour	14	71	9	0	19	2	7	0	34	230	19	3	13	7	16	0	444	3	441
Total	262	3647	224	114	433	106	206	11	530	3523	383	73	170	114	490	20	10306	218	10088
% Apr.	6.1	85.8	5.2	2.6	57.2	14.0	27.2	1.4	11.7	78.1	8.4	1.6	21.4	14.3	61.7	2.5	-	-	-
% Int.	2.5	35.3	2.1	1.1	4.2	1.0	1.9	0.1	5.1	34.1	3.7	0.7	1.6	1.1	4.7	0.1	-	-	-

or Street Approaches:

Northbound:

CSAH 18 (COON CREEK BLVD)

Data File: C:\APPS\PETRA2\DATAFILE\TMC9724.PDF
 Count Type: IMC. Channel: 0. Count Date: 8/21/97
 Number of Lanes: 2
 Approach Speed: 45
 Total Approach Traffic: 4436

Southbound:

CSAH 18 (COON CREEK BLVD)

Data File: C:\APPS\PETRA2\DATAFILE\TMC9724.PDF
 Count Type: IMC. Channel: 0. Count Date: 8/21/97
 Number of Lanes: 2
 Approach Speed: 45
 Total Approach Traffic: 4133

Minor Street Approaches:

Eastbound:

131ST AVE NW

Data File: C:\APPS\PETRA2\DATAFILE\TMC9724.PDF
 Count Type: IMC. Channel: 0. Count Date: 8/21/97
 Number of Lanes: 1
 Approach Speed: 30
 Total Approach Traffic: 774

Westbound:

131ST AVE NW

Data File: C:\APPS\PETRA2\DATAFILE\TMC9724.PDF
 Count Type: IMC. Channel: 0. Count Date: 8/21/97
 Number of Lanes: 1
 Approach Speed: 30
 Total Approach Traffic: 745

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

Hour	Main (Total)	Side Vol.	Dir.	Rank	Warrant 1 Meets?	Warrant 1 Criteria	Warrant 2 Meets?	Warrant 2 Criteria	Warrant 3 Meets?	Warrant 3 Criteria
0	0	0	W	17		105		52		84
1	0	0	W	18		105		52		84
2	0	0	W	19		105		52		84
3	0	0	W	20		105		52		84
4	0	0	W	21		105		52		84
5	0	0	W	22		105		52		84
6	652	81	E	1	MAIN	105	--BOTH--	52	MAIN	84
7	591	68	E	4	MAIN	105	SIDE	52	MAIN	84
8	344	40	E	14		105		52		84
9	325	37	E	15		105		52		84
10	343	41	W	12		105		52		84
11	380	43	E	9		105		52		84
12	437	42	E	11	MAIN	105		52		84
13	415	41	W	13		105		52		84
14	439	46	E	8	MAIN	105		52		84
15	665	43	W	10	MAIN	105	MAIN	52	MAIN	84
16	878	60	W	6	MAIN	105	--BOTH--	52	MAIN	84
17	951	72	W	2	MAIN	105	--BOTH--	52	MAIN	84
18	652	70	E	3	MAIN	105	--BOTH--	52	MAIN	84
19	634	62	W	5	MAIN	105	--BOTH--	52	MAIN	84
20	486	47	W	7	MAIN	105		52		84
21	377	36	E	16		105		52		84
22	0	0	W	23		105		52		84
23	0	0	W	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 5 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: 1081.

- 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 0 hours. Criteria--Main: 504; Side: See Volume Summary.

Warrant 9 - Four Hour Volumes

NOT SATISFIED. Required values reached for 1 hours.

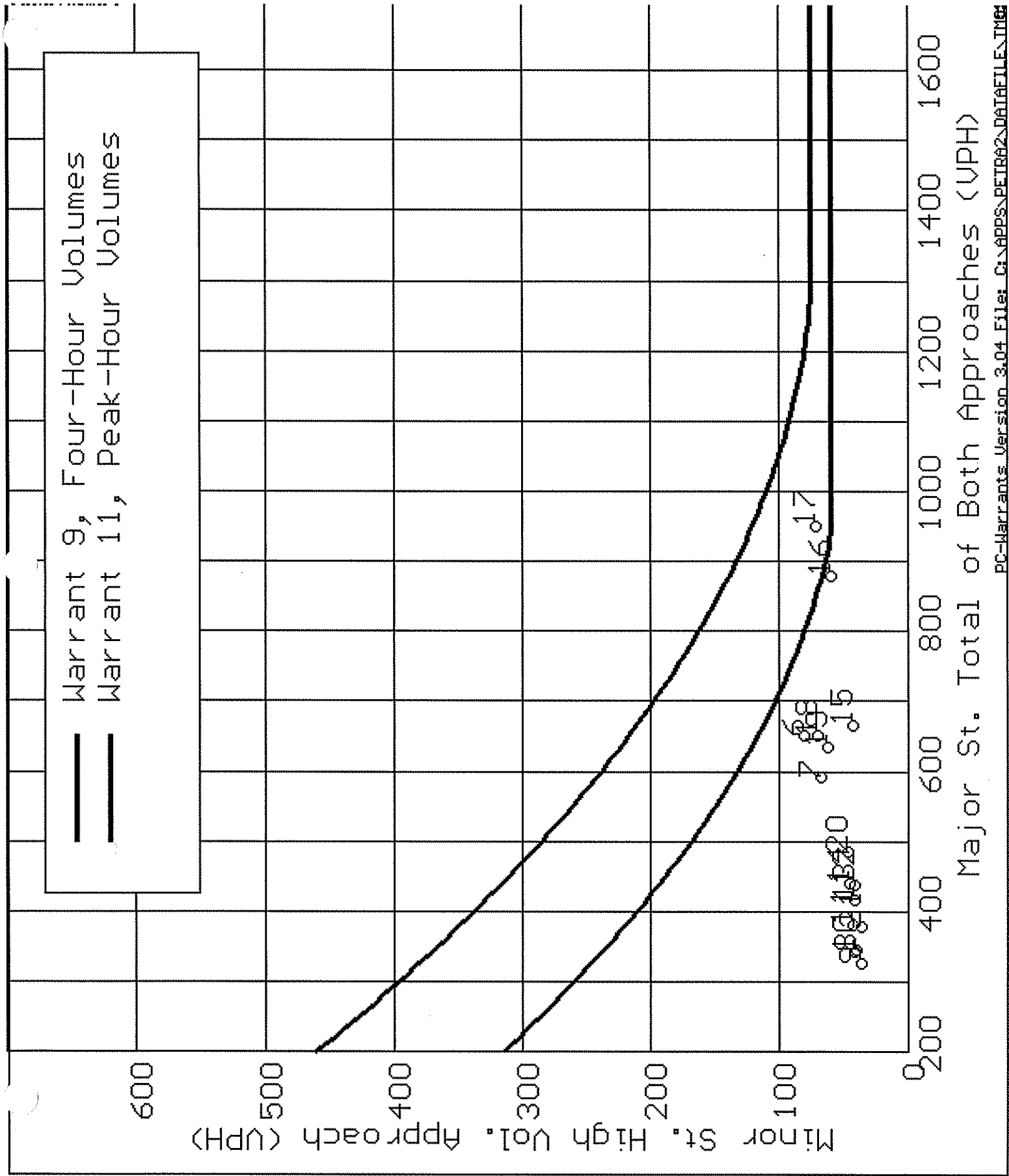
Warrant 10 - Peak Hour Delay

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.



Major St. Total of Both Approaches (VPH)

↓
NORTH

APP. #1=WB
131ST AVE NW

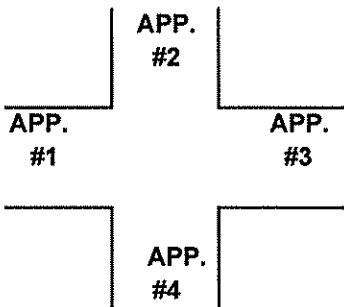
APP. #2 =NB CSAH 18
(COON CREEK BLD)

APP. #3=EB
131ST AVE NW

APP. #4=SB CSAH 18
(COON CREEK BLD)

COUNT LOCATION: TMC 9724 CSAH 18 (COON CREEK)
@ 131ST AVE NW

DATE: 8/20/97



- 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	2		
6:15-6:30						2		
6:30-6:45						2		
6:45-7:00						2		
HOURLY TOTAL					3	HOURLY TOTAL		8
7:00-7:15						1		1
7:15-7:30						1		
7:30-7:45						2		
7:45-8:00		1			1	2		
HOURLY TOTAL					1	HOURLY TOTAL		7
8:00-8:15	1				1	6		
8:15-8:30	1	2			3	3		
8:30-8:45						3		
8:45-9:00						6		
HOURLY TOTAL					4	HOURLY TOTAL		18
9:00-9:15				2	2	3		
9:15-9:30						3		
9:30-9:45						6		
9:45-10:00						3		
HOURLY TOTAL					2	HOURLY TOTAL		15
10:00-10:15		1		2	3	4		
10:15-10:30	2			3	5	1		
10:30-10:45	1	2			3	6		
10:45-11:00		1	1	1	3	5		
HOURLY TOTAL					14	HOURLY TOTAL		16
11:00-11:15	2	1	2		5	7		
11:15-11:30				4	4	8		
11:30-11:45						10		
11:45-12:00		4		4	8	2		
HOURLY TOTAL					17	HOURLY TOTAL		27
12:00-12:15				1	1	7		3
12:15-12:30						6		1
12:30-12:45						5		
12:45-1:00	1			2	3	6		
HOURLY TOTAL					4	HOURLY TOTAL		28
1:00-1:15				1	1	5		
1:15-1:30	2			2	4	8		1
1:30-1:45						7		
1:45-2:00	2				2	2		
HOURLY TOTAL					7	HOURLY TOTAL		23



NORTH

COUNT LOCATION: TMC 9724 CSAH 18 (COON CREEK)
@ 131ST AVE NW

DATE: 8/21/97

APP. #1=WB
131ST AVE NW

APP. #2 =NB CSAH 18
(COON CREEK BLD)

APP. #3= EB
131ST AVE NW

APP. #4=SB CSAH 18
(COON CREEK BLD)

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.

TIME	PEDESTRIANS					HEAVY VEHICLES		
	APP. #1	APP. #2	APP. #3	APP. #4	15 MIN TOT	TRUCKS	RV	BUS
2:00-2:15PM						3		
2:15-2:30						5		
2:30-2:45						2		1
2:45-3:00						4		1
HOURLY TOTAL						HOURLY TOTAL		16
3:00-3:15	1				1	4		
3:15-3:30	1				1	4		
3:30-3:45						3		2
3:45-4:00	6				6	2		
HOURLY TOTAL					8	HOURLY TOTAL		15
4:00-4:15	1	1			2	3		
4:15-4:30	3				3	3		
4:30-4:45						2		
4:45-5:00	2	4			6	6		
HOURLY TOTAL					11	HOURLY TOTAL		14
5:00-5:15	1				1	1		
5:15-5:30	1				1	3		
5:30-5:45						1		
5:45-6:00	2	2		5	9	1		
HOURLY TOTAL					11	HOURLY TOTAL		6
6:00-6:15		1	3	4	8			
6:15-6:30	1	2			3	5		
6:30-6:45		1		3	4	3		
6:45-7:00		4	3		7	2		
HOURLY TOTAL					22	HOURLY TOTAL		10
7:00-7:15		1		6	7	2		
7:15-7:30			5	12	17	2		
7:30-7:45		1		1	2	2		
7:45-8:00		8	2	2	12	2		
HOURLY TOTAL					38	HOURLY TOTAL		8
8:00-8:15		4		2	6	1		
8:15-8:30		4			4	2		
8:30-8:45								
8:45-9:00						1		
HOURLY TOTAL					10	HOURLY TOTAL		4
9:00-9:15						2		
9:15-9:30		2			2			
9:30-9:45						2		
9:45-10:00		1			1	1		
HOURLY TOTAL					3	HOURLY TOTAL		5