



MINNESOTA DEPARTMENT OF TRANSPORTATION

METRO DIVISION - TRAFFIC ENGINEERING

SIGNAL WARRANTS ANALYSIS

LOCATION: TH-55 & EAGANDALE BLVD

COUNTY: DAKOTA

REF. POINT: 201.090

DATE: 8/13/1998

OPERATOR: DR

Speed	Approach Description	Lanes
50	Major App1: TH-55 EB, W OF EAGANDALE BLVD	3
5	Major App3: TH-55 WB, E OF EAGANDALE BLVD	3
30	Minor App2: EAGANDALE BLVD NB, S OF TH-55	2
0	Minor App4: N/A	0

0.70 FACTOR USED? YES

POPULATION < 10,000? NO

EXISTING SIGNAL ? NO

HOUR	420/630			140/70			0/0		MET SAME HOURS
	MAJOR APP. 1	MAJOR APP. 3	TOTAL 1+3	WARRANT MET	MINOR APP. 2	MINOR APP. 4	WARRANT MET APP. 2	WARRANT MET APP. 4	
0:00 - 1:00	166	107	273	/	51	0	/	/	/
1:00 - 2:00	127	98	225	/	31	0	/	/	/
2:00 - 3:00	82	76	158	/	24	0	/	/	/
3:00 - 4:00	74	55	129	/	40	0	/	/	/
4:00 - 5:00	119	123	242	/	23	0	/	/	/
5:00 - 6:00	228	359	587	X/	67	0	/	/	/
6:00 - 7:00	556	968	1524	X/X	178	0	X/X	/	X/X
7:00 - 8:00	765	1409	2174	X/X	146	0	X/X	/	X/X
8:00 - 9:00	718	884	1602	X/X	142	0	X/X	/	X/X
9:00 - 10:00	537	502	1039	X/X	155	0	X/X	/	X/X
10:00 - 11:00	519	470	989	X/X	167	0	X/X	/	X/X
11:00 - 12:00	563	554	1117	X/X	176	0	X/X	/	X/X
12:00 - 13:00	605	580	1185	X/X	168	0	X/X	/	X/X
13:00 - 14:00	604	545	1149	X/X	144	0	X/X	/	X/X
14:00 - 15:00	663	591	1254	X/X	200	0	X/X	/	X/X
15:00 - 16:00	884	672	1556	X/X	263	0	X/X	/	X/X
16:00 - 17:00	1109	770	1879	X/X	348	0	X/X	/	X/X
17:00 - 18:00	115	778	893	X/X	272	0	X/X	/	X/X
18:00 - 19:00	684	525	1209	X/X	110	0	/X	/	/X
19:00 - 20:00	431	347	778	X/X	79	0	/X	/	/X
20:00 - 21:00	447	291	738	X/X	70	0	/X	/	/X
21:00 - 22:00	397	317	714	X/X	67	0	/	/	/
22:00 - 23:00	389	245	634	X/X	54	0	/	/	/
23:00 - 24:00	279	171	450	X/	72	0	/X	/	/

	Met (Hr)	Required (Hr)	
Warrant 1	12	8	Satisfied
Warrant 2	15	8	Satisfied
Warrant 6	17	8	Satisfied, check accident record
Warrant 8	12	8	Satisfied
Warrant 9	13	4	Satisfied
Warrant 11	13	1	Satisfied

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0.70 FACTOR USED? YES
 POPULATION < 10,000? NO
 EXISTING SIGNAL ? NO

Speed	Approach Description	Lanes
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0	Minor App4: N/A	0

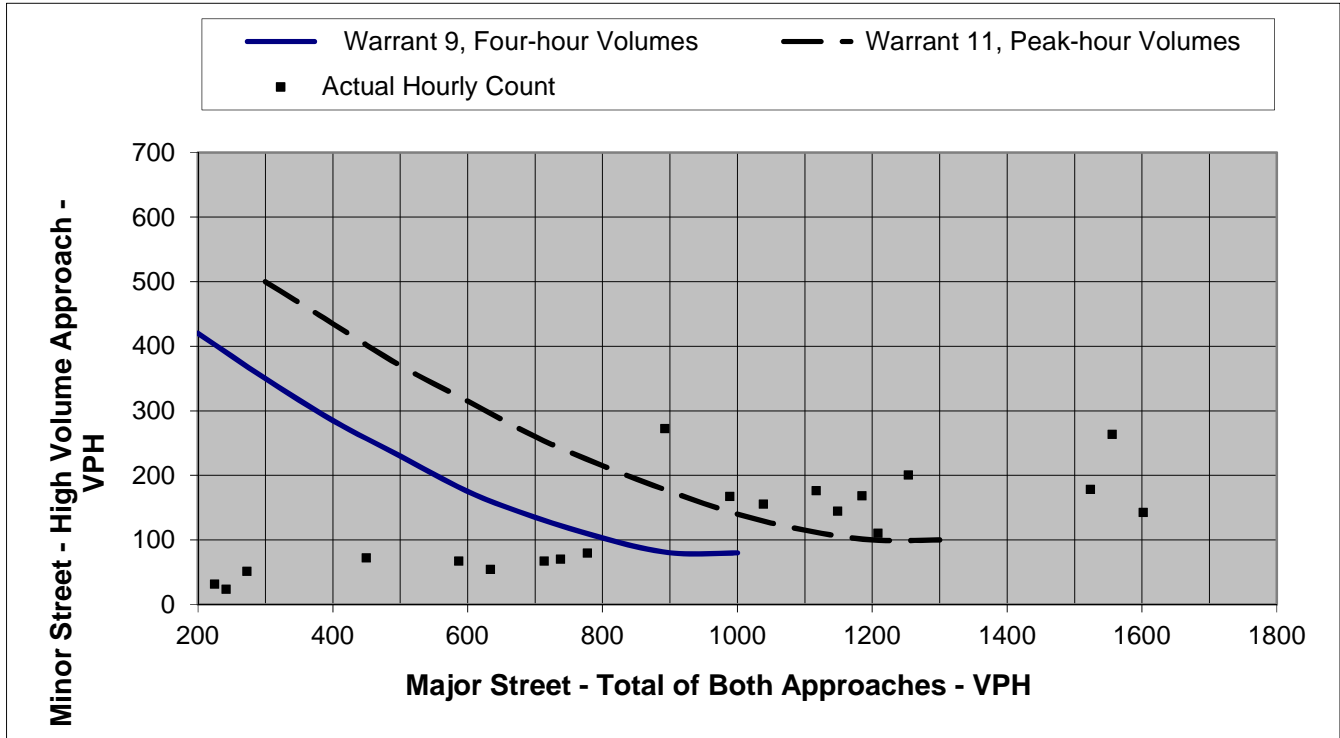


Figure 1. Four Hour and Peak Hour Warrant Analysis

Note: For data points outside the graph range, check the minor street volume against the lower thresholds

Major	Warrant Criteria		Actual Hourly Count	
	Warrant 9, F	Warrant 11, P	Major	Actual Hourly Count
200	420		273	51
300	350	500	225	31
400	285	435	158	24
500	230	370	129	40
600	175	315	242	23
700	135	260	587	67
800	103	215	1524	178
900	80	175	2174	146
1000	80	140	1602	142
1100		115	1039	155
1200		100	989	167
1300		100	1117	176
1400			1185	168
1500			1149	144
1600			1254	200
1700			1556	263
1800			1879	348
			893	272
			1209	110
			778	79
			738	70
			714	67
			634	54
			450	72

Four Hour Warrant

Major App	Minor App		
	1 & 1	2 & 1	2 & 2
300	360	440	590
400	310	390	530
500	260	340	460
600	215	290	390
700	180	245	330
800	150	205	280
900	125	170	235
1000	100	145	195
1100	85	120	165
1200	80	100	135
1300	80	83	110
1400	80	80	110

Peak Hour

Major App	1 & 1
400	475
500	425
600	370
700	330
800	280
900	240
1000	204
1100	175
1200	150
1300	130
1400	115
1500	100
1600	100
1700	100
1800	100

Four Hour Warrant Factored

Major App	Minor App		
	1 & 1	2 & 1	2 & 2
200	250	320	420
300	210	265	350
400	170	215	285
500	130	170	230
600	93	130	175
700	70	100	135
800	60	80	103
900	60	65	80
1000	60	60	80

Peak Hour

Major App	1 & 1
300	320
400	270
500	225
600	180
700	145
800	115
900	90
1000	75
1100	75
1200	75
1300	75

Warrant

Minor App

2 & 1	2 & 2
570	725
520	665
465	600
420	540
370	480
330	425
285	375
250	330
220	285
190	250
160	220
140	187
115	165
100	150
100	150

Warrant Factored

Minor App

2 & 1	2 & 2
380	500
335	435
285	370
240	315
200	260
160	215
135	175
110	140
95	115
75	100
75	100



MINNESOTA DEPARTMENT OF TRANSPORTATION

METRO DIVISION - TRAFFIC ENGINEERING

ALL WAY STOP WARRANT

LOCATION: TH-55 & EAGANDALE BLVD

COUNTY: DAKOTA

REF. POINT: 201.090

DATE: 8/13/1998

OPERATOR: DR

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5	Major App3: TH-55 WB, E OF EAGANDALE BLVD	3
30	Minor App2: EAGANDALE BLVD NB, S OF TH-55	2
0	Minor App4: N/A	0

0.70 FACTOR USED? Yes

HOUR	MAJOR APP. 1	MAJOR APP. 3	MINOR APP. 2	MINOR APP. 4	350	140	WARRANT MET
					TOTAL Σ (APP.1 to APP. 4)	MINOR TOTAL APP. 2 + APP. 4	
0:00 - 1:00	166	107	51	0	324	51	/
1:00 - 2:00	127	98	31	0	256	31	/
2:00 - 3:00	82	76	24	0	182	24	/
3:00 - 4:00	74	55	40	0	169	40	/
4:00 - 5:00	119	123	23	0	265	23	/
5:00 - 6:00	228	359	67	0	654	67	X/
6:00 - 7:00	556	968	178	0	1702	178	X/X
7:00 - 8:00	765	1409	146	0	2320	146	X/X
8:00 - 9:00	718	884	142	0	1744	142	X/X
9:00 - 10:00	537	502	155	0	1194	155	X/X
10:00 - 11:00	519	470	167	0	1156	167	X/X
11:00 - 12:00	563	554	176	0	1293	176	X/X
12:00 - 13:00	605	580	168	0	1353	168	X/X
13:00 - 14:00	604	545	144	0	1293	144	X/X
14:00 - 15:00	663	591	200	0	1454	200	X/X
15:00 - 16:00	884	672	263	0	1819	263	X/X
16:00 - 17:00	1109	770	348	0	2227	348	X/X
17:00 - 18:00	115	778	272	0	1165	272	X/X
18:00 - 19:00	684	525	110	0	1319	110	X/
19:00 - 20:00	431	347	79	0	857	79	X/
20:00 - 21:00	447	291	70	0	808	70	X/
21:00 - 22:00	397	317	67	0	781	67	X/
22:00 - 23:00	389	245	54	0	688	54	X/
23:00 - 24:00	279	171	72	0	522	72	X/

Met (Hr) Required (Hr)

Allway Stop Warrant: **12** 8 **Satisfied**

REMARKS: _____
