



MINNESOTA DEPARTMENT OF TRANSPORTATION

METRO DIVISION - TRAFFIC ENGINEERING

SIGNAL WARRANTS ANALYSIS

LOCATION: TH-5 AT FULLER RD / VENTURE LN

COUNTY: HENNEPIN

REF. POINT: 048.249

DATE: 2/8/1996

OPERATOR: DR

Speed	Approach Description	Lanes
50	Major App1: TH-5 EB, W OF FULLER RD / VENTURE LN	4
50	Major App3: TH-5 WB, E OF FULLER RD / VENTURE LN	4
30	Minor App2: FULLER RD NB, S OF TH-5	2
30	Minor App4: VENTURE LN SB, N OF TH-5	2

0.70 FACTOR USED? YES

POPULATION < 10,000? NO

EXISTING SIGNAL ? NO

HOUR	420/630			140/70		140/70		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	140	206	346	/	3	0	/	/	/
1:00 - 2:00	195	116	311	/	13	0	/	/	/
2:00 - 3:00	119	73	192	/	15	0	/	/	/
3:00 - 4:00	108	80	188	/	2	0	/	/	/
4:00 - 5:00	197	133	330	/	5	1	/	/	/
5:00 - 6:00	670	451	1121	X/X	5	0	/	/	/
6:00 - 7:00	1883	1006	2889	X/X	11	0	/	/	/
7:00 - 8:00	2503	1192	3695	X/X	17	2	/	/	/
8:00 - 9:00	1890	1087	2977	X/X	16	2	/	/	/
9:00 - 10:00	1468	1042	2510	X/X	32	4	/	/	/
10:00 - 11:00	1225	1043	2268	X/X	34	16	/	/	/
11:00 - 12:00	1294	1251	2545	X/X	63	6	/	/	/
12:00 - 13:00	1344	1340	2684	X/X	59	3	/	/	/
13:00 - 14:00	1243	1445	2688	X/X	59	5	/	/	/
14:00 - 15:00	1504	1621	3125	X/X	61	5	/	/	/
15:00 - 16:00	1691	1816	3507	X/X	101	3	/X	/	/X
16:00 - 17:00	1524	2121	3645	X/X	134	4	/X	/	/X
17:00 - 18:00	1440	2328	3768	X/X	63	7	/	/	/
18:00 - 19:00	1421	1818	3239	X/X	33	5	/	/	/
19:00 - 20:00	901	1367	2268	X/X	12	0	/	/	/
20:00 - 21:00	574	1197	1771	X/X	14	0	/	/	/
21:00 - 22:00	494	1260	1754	X/X	14	0	/	/	/
22:00 - 23:00	569	700	1269	X/X	11	0	/	/	/
23:00 - 24:00	263	320	583	X/	9	0	/	/	/

	Met (Hr)	Required (Hr)	
Warrant 1	0	8	Not satisfied
Warrant 2	2	8	Not satisfied
Warrant 6	7	8	Not satisfied
Warrant 8	1	8	Not satisfied
Warrant 9	2	4	Not satisfied
Warrant 11	2	1	Satisfied

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

Speed	Approach Description	Lanes
50	Major App1: TH-5 EB, W OF FULLER RD / VENTURE LN	4
50	Major App3: TH-5 WB, E OF FULLER RD / VENTURE LN	4
30	Minor App2: FULLER RD NB, S OF TH-5	2
30	Minor App4: VENTURE LN SB, N OF TH-5	2

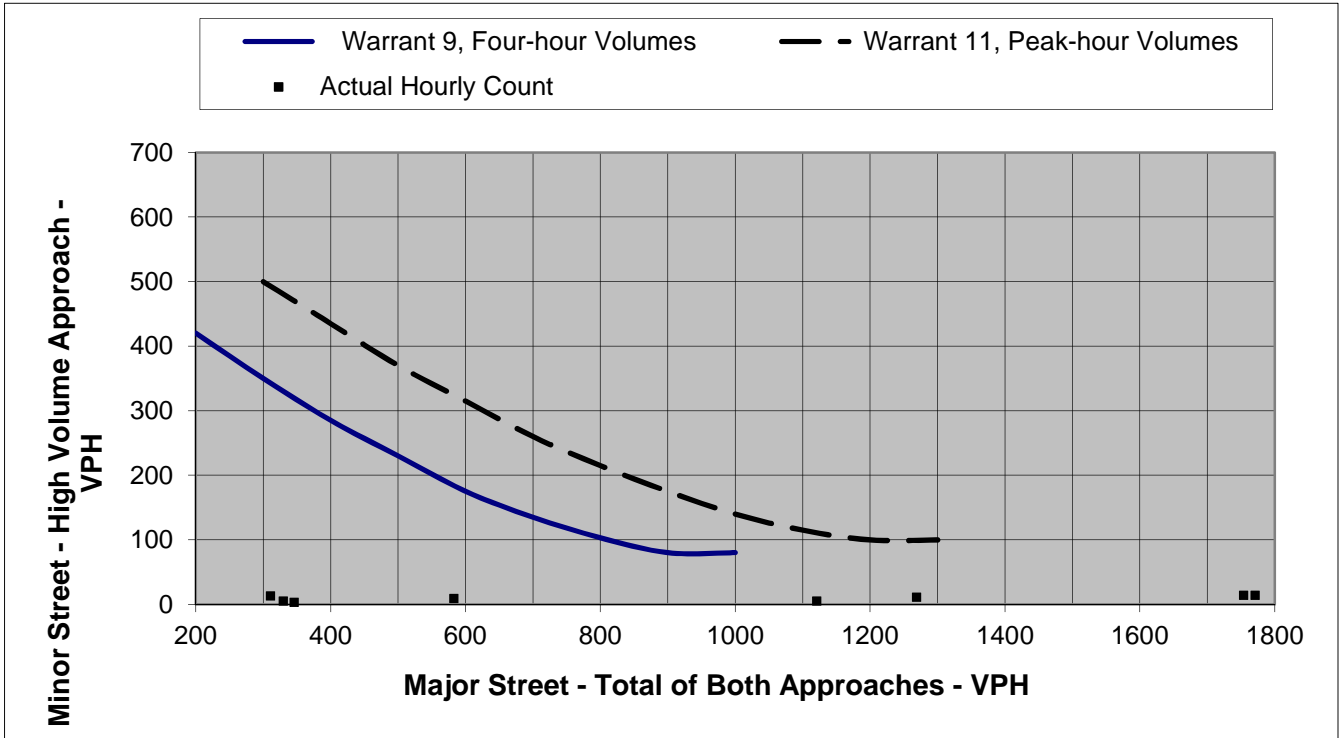


Figure 1. Four Hour and Peak Hour Warrant Analysis

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		346	3
300	350	500	311	13
400	285	435	192	15
500	230	370	188	2
600	175	315	330	5
700	135	260	1121	5
800	103	215	2889	11
900	80	175	3695	17
1000	80	140	2977	16
1100		115	2510	32
1200		100	2268	34
1300		100	2545	63
1400			2684	59
1500			2688	59
1600			3125	61
1700			3507	101
1800			3645	134
			3768	63
			3239	33
			2268	12
			1771	14
			1754	14
			1269	11
			583	9

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-5 AT FULLER RD / VENTURE LN

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DATE: 2/8/1996

OPERATOR: DR

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50	Major App3: TH-5 WB, E OF FULLER RD / VENTURE LN	4
30	Minor App2: FULLER RD NB, S OF TH-5	2
30	Minor App4: VENTURE LN SB, N OF TH-5	2

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	140	206	3	0	349	3	/
1:00 - 2:00	195	116	13	0	324	13	/
2:00 - 3:00	119	73	15	0	207	15	/
3:00 - 4:00	108	80	2	0	190	2	/
4:00 - 5:00	197	133	5	1	336	6	/
5:00 - 6:00	670	451	5	0	1126	5	X/
6:00 - 7:00	1883	1006	11	0	2900	11	X/
7:00 - 8:00	2503	1192	17	2	3714	19	X/
8:00 - 9:00	1890	1087	16	2	2995	18	X/
9:00 - 10:00	1468	1042	32	4	2546	36	X/
10:00 - 11:00	1225	1043	34	16	2318	50	X/
11:00 - 12:00	1294	1251	63	6	2614	69	X/
12:00 - 13:00	1344	1340	59	3	2746	62	X/
13:00 - 14:00	1243	1445	59	5	2752	64	X/
14:00 - 15:00	1504	1621	61	5	3191	66	X/
15:00 - 16:00	1691	1816	101	3	3611	104	X/
16:00 - 17:00	1524	2121	134	4	3783	138	X/
17:00 - 18:00	1440	2328	63	7	3838	70	X/
18:00 - 19:00	1421	1818	33	5	3277	38	X/
19:00 - 20:00	901	1367	12	0	2280	12	X/
20:00 - 21:00	574	1197	14	0	1785	14	X/
21:00 - 22:00	494	1260	14	0	1768	14	X/
22:00 - 23:00	569	700	11	0	1280	11	X/
23:00 - 24:00	263	320	9	0	592	9	X/

Allway Stop Warrant: Met (Hr) 0 Required (Hr) 8 Not satisfied

REMARKS: _____

