



MINNESOTA DEPARTMENT OF TRANSPORTATION

METRO DIVISION - TRAFFIC ENGINEERING

SIGNAL WARRANTS ANALYSIS

LOCATION: TH-244 & WEDGEWOOD DRIVE

COUNTY: WASHINGTON

REF. POINT: 002.882

DATE: 10/1/1997

OPERATOR: DR

Speed	Approach Description	Lanes
40	Major App1: TH-244/WILDWOOD RD EB, W OF WEDGEWOOD	3
40	Major App3: TH-244/WILDWOOD RD WB, E OF WEDGEWOOD	2
30	Minor App2: WEDGEWOOD DR NB, S OF TH-244/WILDWOOD	1
25	Minor App4: WEDGEWOOD DR SB, N OF TH-244/WILDWOOD	1

0.70 FACTOR USED? YES

POPULATION < 10,000? NO

EXISTING SIGNAL ? NO

HOUR	420/630				105/52		105/52		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	39	23	62	/	0	0	/	/	/
1:00 - 2:00	24	14	38	/	0	1	/	/	/
2:00 - 3:00	15	6	21	/	0	0	/	/	/
3:00 - 4:00	11	7	18	/	1	3	/	/	/
4:00 - 5:00	16	28	44	/	3	1	/	/	/
5:00 - 6:00	28	114	142	/	1	5	/	/	/
6:00 - 7:00	118	371	489	X/	6	30	/	/	/
7:00 - 8:00	244	713	957	X/X	3	4	/	/	/
8:00 - 9:00	259	549	808	X/X	18	26	/	/	/
9:00 - 10:00	308	431	739	X/X	18	19	/	/	/
10:00 - 11:00	322	328	650	X/X	12	12	/	/	/
11:00 - 12:00	395	361	756	X/X	23	14	/	/	/
12:00 - 13:00	443	399	842	X/X	15	13	/	/	/
13:00 - 14:00	446	338	784	X/X	15	24	/	/	/
14:00 - 15:00	508	402	910	X/X	16	23	/	/	/
15:00 - 16:00	625	444	1069	X/X	19	30	/	/	/
16:00 - 17:00	804	450	1254	X/X	24	29	/	/	/
17:00 - 18:00	931	566	1497	X/X	13	32	/	/	/
18:00 - 19:00	743	530	1273	X/X	20	40	/	/	/
19:00 - 20:00	545	424	969	X/X	8	29	/	/	/
20:00 - 21:00	450	274	724	X/X	3	13	/	/	/
21:00 - 22:00	304	185	489	X/	1	8	/	/	/
22:00 - 23:00	173	93	266	/	1	3	/	/	/
23:00 - 24:00	85	41	126	/	0	1	/	/	/

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

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OPERATOR: DR

0.70 FACTOR USED? YES

POPULATION < 10,000? NO

EXISTING SIGNAL ? NO

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40	Major App3: TH-244/WILDWOOD RD WB, E OF WEDGEWOOD	2
30	Minor App2: WEDGEWOOD DR NB, S OF TH-244/WILDWOOD	1
25	Minor App4: WEDGEWOOD DR SB, N OF TH-244/WILDWOOD	1

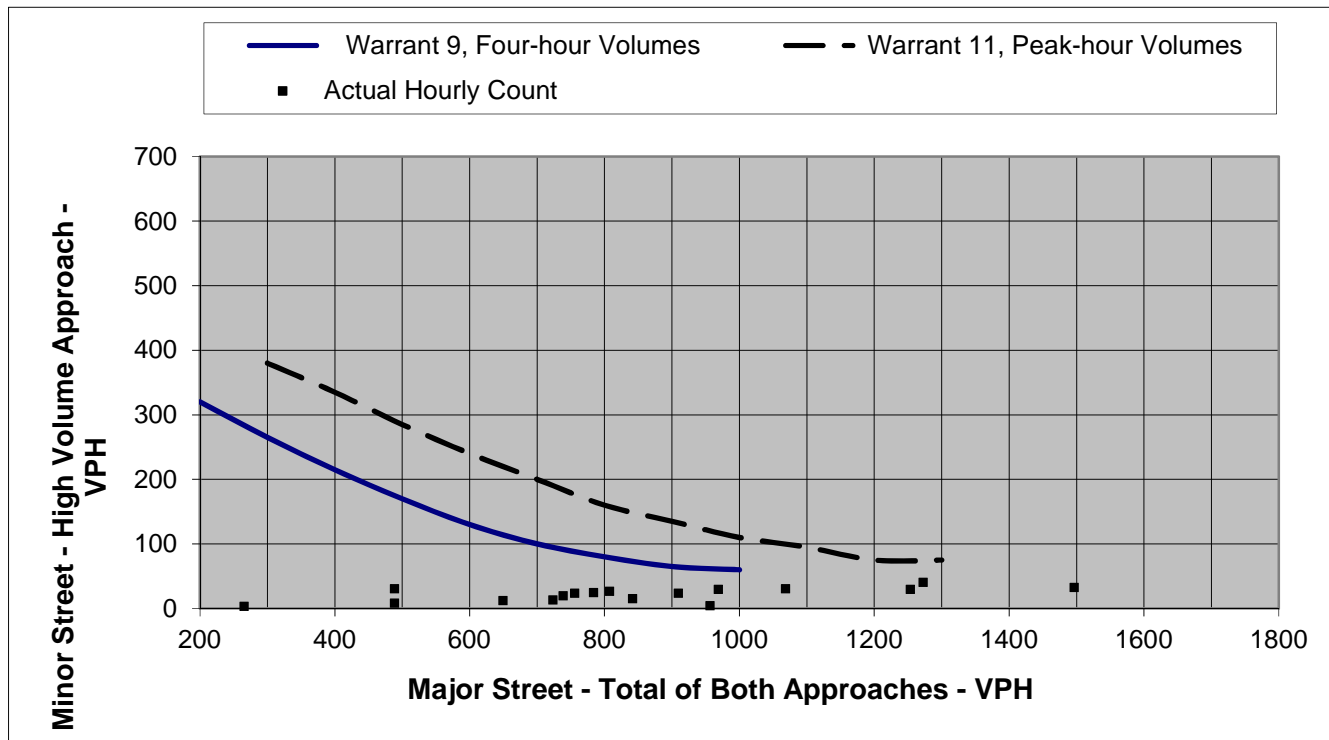


Figure 1. Four Hour and Peak Hour Warrant Analysis

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	320		62	0
300	265	380	38	1
400	215	335	21	0
500	170	285	18	3
600	130	240	44	3
700	100	200	142	5
800	80	160	489	30
900	65	135	957	4
1000	60	110	808	26
1100		95	739	19
1200		75	650	12
1300		75	756	23
1400			842	15
1500			784	24
1600			910	23
1700			1069	30
1800			1254	29
			1497	32
			1273	40
			969	29
			724	13
			489	8
			266	3
			126	1

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-244 & WEDGEWOOD DRIVE

COUNTY: WASHINGTON

REF. POINT: 002.882

DATE: 10/1/1997

OPERATOR: DR

Speed	Approach Description	Lanes
40	Major App1: TH-244/WILDWOOD RD EB, W OF WEDGEWOOD	3
40	Major App3: TH-244/WILDWOOD RD WB, E OF WEDGEWOOD	2
30	Minor App2: WEDGEWOOD DR NB, S OF TH-244/WILDWOC	1
25	Minor App4: WEDGEWOOD DR SB, N OF TH-244/WILDWOC	1

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	39	23	0	0	62	0	/
1:00 - 2:00	24	14	0	1	39	1	/
2:00 - 3:00	15	6	0	0	21	0	/
3:00 - 4:00	11	7	1	3	22	4	/
4:00 - 5:00	16	28	3	1	48	4	/
5:00 - 6:00	28	114	1	5	148	6	/
6:00 - 7:00	118	371	6	30	525	36	X/
7:00 - 8:00	244	713	3	4	964	7	X/
8:00 - 9:00	259	549	18	26	852	44	X/
9:00 - 10:00	308	431	18	19	776	37	X/
10:00 - 11:00	322	328	12	12	674	24	X/
11:00 - 12:00	395	361	23	14	793	37	X/
12:00 - 13:00	443	399	15	13	870	28	X/
13:00 - 14:00	446	338	15	24	823	39	X/
14:00 - 15:00	508	402	16	23	949	39	X/
15:00 - 16:00	625	444	19	30	1118	49	X/
16:00 - 17:00	804	450	24	29	1307	53	X/
17:00 - 18:00	931	566	13	32	1542	45	X/
18:00 - 19:00	743	530	20	40	1333	60	X/
19:00 - 20:00	545	424	8	29	1006	37	X/
20:00 - 21:00	450	274	3	13	740	16	X/
21:00 - 22:00	304	185	1	8	498	9	X/
22:00 - 23:00	173	93	1	3	270	4	/
23:00 - 24:00	85	41	0	1	127	1	/

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

REMARKS: _____

