

City of Minot Signal Warrant Analysis

5-Year Forecasted Traffic Volumes

City/County: Minot, ND

Intersection: 31st Avenue SE and 10th Street SE



Study Data	Date:	8/27/2019	Approach	Speed	Lanes
	Population < 10,000:	No	Major 1: EB 31st Avenue SE	35	1
	Existing Signal:	Yes	Major 3: WB 31st Avenue SE	35	1
	0.70 Factor Used:	No	Minor 2: NB 10th Street SE	25	1
			Minor 4: SB 10th Street SE	25	1

Warrants Analysis	Time of Day	Major #1	Major #3	Total 1+3	Major 1A/1B	Minor #2	Minor #2 1A/1B	Minor #4	Minor #4 1A/1B	Both Met 1A/1B	Crash Warrant	MWSA Warrant
					500/750		150/075		150/075			
6:00 - 7:00	44.16323	68.45301	112.6162	/	35.33059	/	5.520404	/	/			
7:00 - 8:00	114.8244	154.5713	269.3957	/	87.22238	/X	38.64283	/	/			
8:00 - 9:00	183.2774	221.9202	405.1977	/	77.28566	/X	37.53875	/	/			
9:00 - 10:00	199.8386	257.2508	457.0895	/	78.38974	/X	36.43467	/	/			
10:00 - 11:00	211.9835	246.21	458.1935	/	62.93261	/	71.76525	/	/			
11:00 - 12:00	249.5223	363.2426	612.7648	X/	93.84687	/X	108.1999	/X	/	X	X	
12:00 - 1:00	261.6672	389.7405	651.4077	X/	97.15911	/X	131.3856	/X	/	X	X	
1:00 - 2:00	262.7712	365.4507	628.222	X/	111.5122	/X	115.9285	/X	/	X	X	
2:00 - 3:00	235.1692	341.161	576.3302	X/	90.53463	/X	118.1366	/X	/		X	
3:00 - 4:00	314.663	390.8446	705.5076	X/	96.05503	/X	110.4081	/X	/	X	X	
4:00 - 5:00	315.7671	428.3834	744.1505	X/	96.05503	/X	126.9693	/X	/	X	X	
5:00 - 6:00	331.2242	465.9221	797.1463	X/X	110.4081	/X	120.3448	/X	/X	X	X	
6:00 - 7:00	248.4182	330.1202	578.5383	X/	69.55709	/	94.95095	/X	/		X	
7:00 - 8:00	197.6305	271.6039	469.2343	/	57.4122	/	93.84687	/X	/		X	
8:00 - 9:00	139.1142	160.0917	299.2059	/	28.7061	/	59.62036	/	/			
9:00 - 10:00	0	0	0	/	0	/	0	/	/			

Results	Criteria	Hours Met	Hours Required	Warrants Met
	Warrant 1a: Minimum Vehicular Volume	0	8	Not Met
	Warrant 1b: Interruption of Continuous Traffic	1	8	Not Met
	Warrant 2: Four-Hour Vehicular Volume	0	4	Not Met
	Warrant 3: Peak Hour	0	1	Not Met
	Warrant 7: Crash Experience	6	8	Not Met
	Multi-way Stop Applications (MWSA)	9	8	Met

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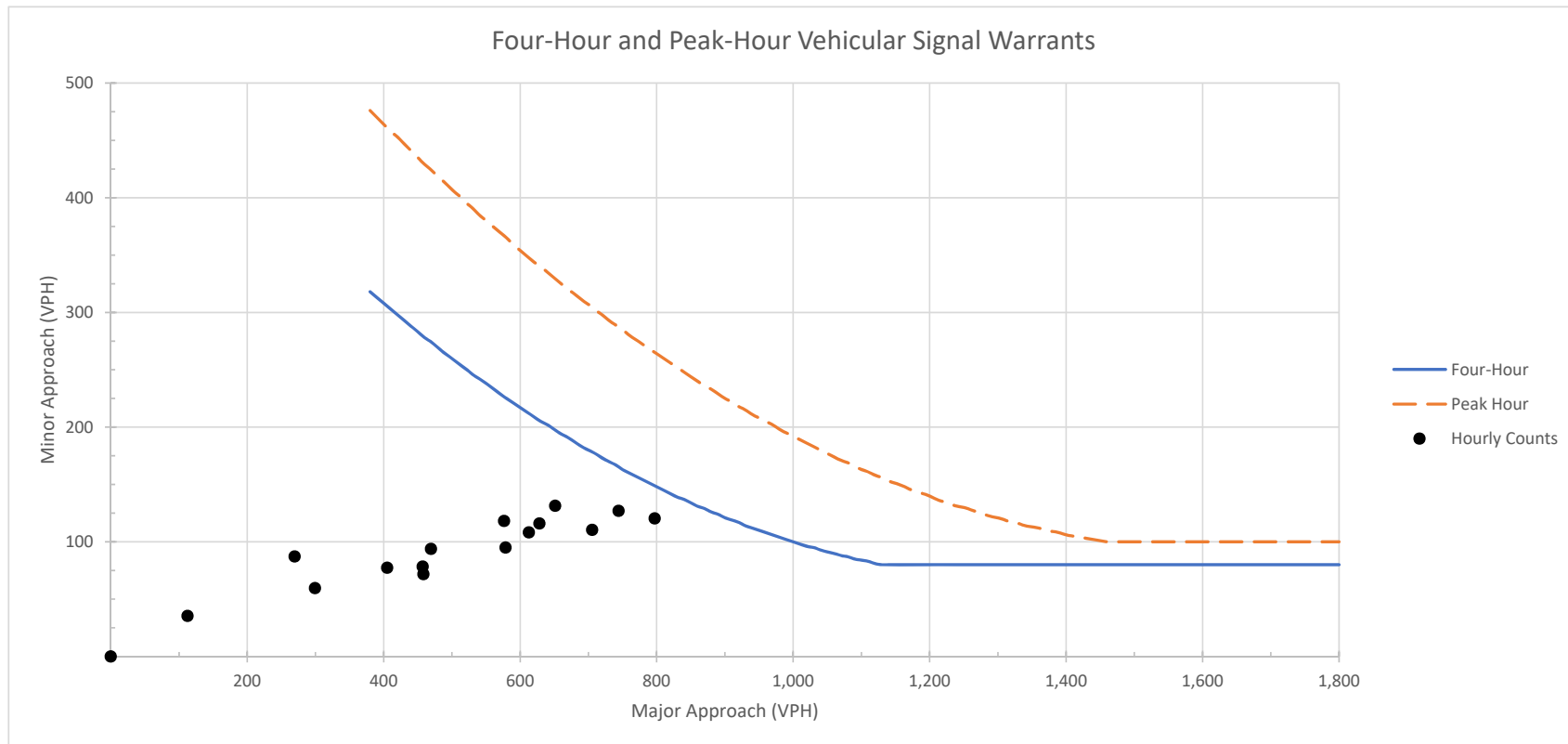
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*Note: For data outside of the graph range, check the minor street volume against the lower thresholds

Results	Criteria	Hours Met	Hours Required	Warrants Met
	Warrant 2: Four-Hour Vehicular Volume	0	4	Not Met
	Warrant 3: Peak Hour	0	1	Not Met