TRAFFIC CONTROL STUDY - WARRANTS FOR MULTI-WAYSTOP

North Dakota Department of Transportation, Planning & Programming Division
SFN 59012 (Rev. 12-2008)

Date	Prepared By	City	Analysis Year

Major Road	Speed Limit (mph)	Number of Lanes
Minor Road	**Speed Limit (mph)**	**Number of Lanes**

Criteria A

Traffic Signals Justified

Where traffic control signals are justified, the multi-way stop is an interim measure that can be installed quickly to control traffic while arrangements are being made for the installation of the traffic control signal.

Criteria A
☐ Satisfied ☐ Not Satisfied

Criteria B

Crash History

Five or more reported crashes, of types susceptible to correction by multi-way stop control, have occurred within a 12-month period.

Number of Crashes per 12 Months

Criteria B
☐ Satisfied ☐ Not Satisfied ☐ Does Not Apply

Criteria C

Minimum Volume

8 Highest Hour Volumes								
	1	2	3	4	5	6	7	8
Both Approaches - Major Road								
Combined vehicular, pedestrian, and bicycle volume. Total of both Minor Road approaches								

Both Condition 1 and 2 must be satisfied. (If the 85-th percentile approach speed of the major road traffic exceeds 40 mph, the following conditions only have to be satisfied to 70%.)		Satisfied
Condition 1: Major road (both approaches) averages at least 300 vph (210 for 70%, 240 for 80%) for any 8 hours.		☐ Yes ☐ No
Condition 2: Minor road (both approaches) averages at least 200 units/hr (140 for 70%, 160 for 80%) for the same 8 hours, with an average delay to minor-street vehicular traffic of at least 30 seconds per vehicle during the highest hour.	Avg delay to minor road traffic: 13.5 sec	☐ Yes ☐ No

Criteria C
☐ Satisfied ☐ Not Satisfied

Criteria D

80% Minimum Volume

No single criteria is satisfied, but Criteria B, C.1, and C.2 are all satisfied to 80% of the minimum values. (If the 70% condition is used, Criteria D can not be applied.)

Criteria D
☐ Satisfied ☐ Not Satisfied ☐ Does Not Apply

Refer to the MUTCD, section 2B.07, for other optional criteria that may be considered in an engineering study for a multi-way STOP sign installation.

CONCLUSION:	Criteria Satisfied	Multi-Way Stop ☐ Yes ☐ No

Comments