Multi-way Stop Application Evaluation

S Plum Ave at Cross St – May 2022

Section 2B.07 of the Texas Manual on Uniform Traffic Control Devices (TMUTCD) provides support and guidance for the application of multi-way (all-way) stop applications. Table 1 provides the guidance criteria and current traffic data and Table 2 provides other criteria that may be considered in the engineering study.

Table 1. Multi-way Stop Guidance Criteria (TMUTCD Section 2B.07)

Criteria	Minimum Values	Current Values	Criteria Met?
A. Traffic signal • Interim measure for the installation of a traffic signal.	-	-	**No**
B. Crashes • Right- and left-turn and right-angle collisions • 12-month period	5	0	**No**
C.1. Major street volume • Total of both approaches • Average of any 8 hours of an average day; **and**	300	24	**No**
C.2. Minor street volume • Total of both approaches • Average of same 8 hours of major street with an average delay of at least 30 seconds per vehicle during the highest hour; but	200	4	
C.3. High-speed criteria • 85th-percentile approach speed of the major-street traffic exceeds 40 mph.	Major street 85th-percentile approach speed = **28 mph**		
• 70 percent of major street volume	210	24	**No**
• 70 percent of minor street volume	140	4	
D. Combination crash/volume criteria • Where no single criterion is satisfied	Criteria B, C.1 and C.2 Met? **No**		
80 percent of crashes	4	0	**No**
80 percent of major street volume	240	24	**No**
80 percent of minor street volume	160	4	

Table 2. Multi-way Stop Other Criteria (TMUTCD Section 2B.07)

Criteria	Criteria Met?
A. The need to control left-turn conflicts;	**No**
B. The need to control vehicle/pedestrian conflicts near locations that generate high pedestrian volumes;	**No**
C. Locations where a road user, after stopping, cannot see conflicting traffic and is not able to negotiate the intersection unless conflicting cross traffic is also required to stop; and	**No**
D. An intersection of two residential neighborhood collector (through) streets of similar design and operating characteristics where multi-way stop control would improve traffic operational characteristics of the intersection.	**No**