Multi-way Stop Application Evaluation

Stonecrest Path at Frances Street - October 2017

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	_	_	No
 Interim measure for the installation of a traffic signal. 	-	_	NO
B. Crashes			
 Right- and left-turn and right-angle collisions 	5	0	No
12-month period			
C.1. Major street volume			
Total of both approaches	300 78		
 Average of any 8 hours of an average day; and 			
C.2. Minor street volume			No
Total of both approaches	200	51	
 Average of same 8 hours of major street with an average delay 			
of at least 30 seconds per vehicle during the highest hour; but			
C.3. High-speed criteria	Major street 85 th -percentile approach speed = 27/26 mph		
85th-percentile approach speed of the			
major-street traffic exceeds 40 mph.	approach speed – 27/20 mpm		
70 percent of major street volume	210	78	No
70 percent of minor street volume	140	51	
D. Combination crash/volume criteria	Criteria B, C.1 and C.2 Met?		
Where no single criterion is satisfied	No		
80 percent of crashes	4	0	No
80 percent of major street volume	240	78	No
80 percent of minor street volume	160	51	

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