

Multi-way Stop Application Evaluation

Jefferson Avenue and Volunteer Street/Apartment Driveway – April 2023

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 <ul style="list-style-type: none">Interim measure for the installation of a traffic signal. | - | - | No |
| B. Crashes <ul style="list-style-type: none">Right- and left-turn and right-angle collisions12-month period | 5 | 0 | No |
| C.1. Major street volume <ul style="list-style-type: none">Total of both approachesAverage of any 8 hours of an average day; and | 300 | 173 | No |
| C.2. Minor street volume <ul style="list-style-type: none">Total of both approachesAverage of same 8 hours of major street with an average delay of at least 30 seconds per vehicle during the highest hour; but | 200 | 55 | |
| C.3. High-speed criteria <ul style="list-style-type: none">85th-percentile approach speed of the major-street traffic exceeds 40 mph. | Major street 85 th -percentile approach speed = 33 mph | | |
| <ul style="list-style-type: none">70 percent of major street volume | 210 | 173 | No |
| <ul style="list-style-type: none">70 percent of minor street volume | 140 | 55 | |
| D. Combination crash/volume criteria <ul style="list-style-type: none">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 | 173 | No |
| 80 percent of minor street volume | 160 | 55 | |

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 |