Multi Way Stop Sign Checklist

Multiway stop control can be useful as a safety measure at intersections if certain traffic conditions exist. Safety concerns associated with multiway stops include pedestrians, bicyclists, and all road users expecting other road users to stop. The restrictions described in the Stop Sign Checklist also apply to multiway stops.

Multiway stop control is used where the volume of traffic on the intersecting roads is approximately equal. Stop signs should not be used for speed control.

Criteria Checklist (Defined as Guidance in the MUTCD, a statement of recommended, but not mandatory, practice in typical situations, with deviations allowed if engineering judgment or study indicates the deviation to be appropriate.)

The decision to install multiway stop control should be based on an engineering study showing that one or more of the following criteria (A,B,C, and/or D) have been met:

A. At intersections where traffic signals are justified, a multiway stop can be installed as an interim measure.

B. An accident rate of five or more reported crashes in a 12-month period susceptibleto correction by a multiway stop (right- and left-turn collisions, as well as right-angle collisions)

C. Minimum vehicle, pedestrian and bicycle volumes

1.) The total vehicular volume entering the intersection from both of the major street approaches averages at least 300 vehicles per hour for any 8 hours of an average day, and

2.) The total, combined vehicle, pedestrian, and bicycle volume entering the intersection from both of the minor street approaches averages at least 200 units per hour for the same 8 hours; with an average delay to minor-street vehicles of at least 30 seconds per vehicle during the hour with the highest traffic volume, but

3.) If the 85th-percentile approach speed of the major-street traffic exceeds 40 mph, the minimum vehicle volumes are 70% of the above values.

D. Where no single criteria is satisfied, but where Criteria B, C.1, and C.2 are all satisfied to 80% of the minimum values, a multiway stop is justified (Criteria C.3 is excluded)

General Notes (Defined as Options in the MUTCD, a statement of practice that is a permissive condition and carries no requirement or recommendation. Options may allow modifications to a Guidance statement.)

Other criteria that may be considered in an engineering study include:

1.) The need to control left-turn conflicts;

2,) The need to control vehicle/pedestrian conflicts near locations that generate high pedestrian volumes;

3.) At locations where a driver, after stopping, cannot see conflicting traffic and is not reasonably able to safely negotiate the intersection, unless conflicting cross traffic is also required to stop; and

4.) At an intersection of two residential neighborhood through (collector) streets of similar design and operating characteristics where multiway stop control would improve traffic operations.

Source:

Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD),Federal Highway Administration, 2003 Edition 23 CFR 655 603, MGL C.85, S.2. Composed and edited by the Acton Engineering Department, November 2004