



The Institute of Transportation Engineers
Traffic Engineering Council
presents TIPS on



Four-Way Stop Signs

Why can't we have an all-way stop to reduce accidents?

Many people believe that installing STOP signs on all approaches to an intersection will result in fewer accidents. Effects of unwarranted stop signs on driver behavior and safety are difficult to substantiate. Also, there is no real evidence to indicate that STOP signs decrease the overall speed of traffic. Impatient drivers view the additional delay caused by unwarranted STOP signs as “lost time” to be made up by driving at higher speeds between STOP signs. Unwarranted STOP signs breed disrespect by motorists who tend to ignore them or only slow down without stopping. This can sometimes lead to tragic consequences.

Generally, every State requires the installation of all traffic control devices, including STOP signs, to meet state standards of the Department of Transportation. The state standards are based on the Manual on Uniform Traffic Control Devices (MUTCD). The MUTCD

is published by the U.S. Department of Transportation, is the national standard for traffic control devices. The MUTCD prescribes standards for the design, location, use and operation of traffic control devices.



The installation of multi-way stop control must first meet the warrants as set forth in the MUTCD. Any of the following conditions may warrant an all-way STOP sign installation:

1. Where a traffic signal is warranted, multi-way stop control is an interim measure that can be implemented

quickly to control traffic until the signal is designed and installed.

2. The occurrence within a twelve-month period of five or more reported accidents of a type susceptible to correction by multi-way stop control. Such accident types include turn collisions, as well as right-angle collisions.

3. Total vehicular volume entering the intersection from all approaches must average 500 vehicles per hour for any eight hours of an average day and the combined vehicular and pedestrian volume from the minor street or

highway must average at least 200 units per hour for the same eight hours, with an average delay to minor street vehicular traffic of at least 30 seconds per vehicle during the maximum hour. However, when the 85th percentile speed of traffic approaching on the major street exceeds 40 miles per hour, the above minimum volumes are reduced to 70 percent.

STOP signs should not be viewed as a cure-all for solving safety problems but, when properly located, can be useful traffic control devices to enhance safety for all roadway users.