Stop Signs



Why can't we have a STOP sign or a 4-way STOP to reduce Collisions & Speeds?

Many people believe that installing STOP signs on all approaches to an intersection will result in fewer collisions. This is not always the case however. Although the crash severity may be lessened, drivers are penalized by the additional delay and higher vehicle operating costs (fuel, brakes, etc.) There is no real evidence to indicate that STOP signs decrease the 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 slow down without stopping. This can sometimes lead to tragic consequences.

What are the official guidelines?

The Revised Code of Washington (RCW or Washington State Law) requires us to follow the national guidelines outlined in the "Manual on Uniform Traffic Control Devices" (MUTCD) in determining the use of traffic control devices. This includes the use of a STOP sign or the use of an all-way (4-way) stop control at an intersection.

When are STOP signs used?

The literal message of a STOP sign is clear and uncomplicated. The intent behind a STOP sign is to assign and control right-of-way. STOP signs are considered at locations where the prevailing traffic volumes and reported collision history make assignment of right-of-way desirable. As simple as that may appear on the surface, the decision to install these signs requires careful consideration of engineering criteria.

What are the specific criteria for installing STOP signs?

To determine whether or not a STOP sign would be the best and most appropriate measure of traffic control, traffic engineers analyze the various characteristics of an intersection. Some of the questions they ask themselves include:

- Is this an intersection of minor road with a main road where application of the normal right-of-way rule (e.g. yield to the right) is unduly hazardous?
- Is this an intersection where a street enters an arterial (major) street?



• Is this an intersection where a combination of speed, restricted view and reported collision history indicates a need for control by the stop sign?

What are the specific criteria for installing all-way stops?

In order to consider the installation of a all-way stop, the MUTCD requires that the following should be satisfied:

- There must be five or more reported collisions of a type correctable by an all-way stop within the latest 12 month period, or
- The combined vehicular, pedestrian, and bicycle volumes for the major street must average 300 units per hour and the minor street must average 200 units per hour for the same 8 hours.
- All-way stop control should not to be used for speed control.

What are the drawbacks to these signs?

National and State guidelines dictate that STOP signs should not be used to reduce speeding problems. When misused, the stop sign can create an inconvenient, and even dangerous, situation for motorists and pedestrians. Drivers are more likely to intentionally violate unwarranted signs.

Research has shown that unwarranted STOP signs and STOP signs that have been used for speed control, do not have the effect desired. Speeds between the STOP signs increase as drivers try to make up for lost time. Drivers tend to roll through the unwarranted STOP signs with higher frequency (over 50%). Traffic collisions at unwarranted STOP controlled intersection are often higher than when the intersection was uncontrolled or two-way STOP controlled. There is also an increase in noise and air pollution levels to nearby residents as the result of vehicles braking and accelerating.

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

What other measures could be available?

When a request for a STOP sign is received, many times the resulting review shows that there are other traffic control measures which may be available to address the concerns. Improving intersection visibility and sight distance or using less restrictive signing can make installation of STOP signs unnecessary.



Informational Handouts

The MUTCD outlines a set of warrants or standards against which all intersections can be evaluated. By applying consistent criteria to all intersections, we are able to insure uniformity of sign placement. Maintaining uniformity helps to preserve the expectation of drivers that all STOP signs are important and should command their attention and respect.

If you have any questions about Stop Signs, please contact the City of Spokane, Traffic Operations Division at (509) 232-8800.