

Why and Where Are Stop Signs Needed?

Each year, Cities receive requests for stop signs as a way to reduce speeding, minimize driver delay and curtail traffic accidents. Stop signs are needed to assign right-of-way at an intersection, not to control speeding. Right-angle accidents can also be reduced by the installation of stop signs when warranted, but additional stops may also increase the frequency of rear-end accidents. The need for stop signs involves a trade-off between safety and delay. **Because drivers have preconceived opinions on traffic control, public opinion can often justify the use of these devices when they are not needed.**



Traffic Law

Not every intersection must have an official traffic control device controlling traffic movement through the intersection. *If a vehicle approaches or enters an intersection that does not have an official traffic-control device and another vehicle approaches or enters from a different highway at approximately the same time, the driver of the vehicle on the left shall yield the right of way to the vehicle on the right. If the intersection is T-shaped and does not have an official traffic-control device, the driver of the vehicle on the terminating street or highway shall yield to the vehicle on the continuing street or highway.* There are many intersections that do not have stop signs, yield signs or traffic signals, particularly in residential areas.

What Harm Can Arise From Unnecessary Stops?

Stop signs should be installed at an intersection **only** when a careful evaluation of existing conditions indicates that their installation is warranted and appropriate. But what harm can arise from unnecessary stops when unwarranted stop signs are installed?

1. **Overuse of stop signs reduces their effectiveness** because drivers tend to speed up between stop sign controlled intersections rather than slow down. In fact, studies have shown that at residential speeds, drivers accelerate to their original speed prior to the stop sign in less than 200 feet (that's less than 3 house lots from the intersection). Driver acceleration and deceleration only adds to noise levels that can turn a quiet neighborhood into a race track.
2. **Stop compliance is poor at unwarranted stop signs.** Studies have determined that drivers see little reason to stop and yield the right-of-way when there is no traffic on the minor street. Unwarranted stop signs foster disrespect and disregard of the law.
3. **Studies have found that pedestrian safety, particularly small children, is decreased at unwarranted stop sign locations.** Pedestrians expect vehicles to stop at the stop signs but many vehicles "run" the unnecessary stop sign.
4. **The cost of installing stop signs is relatively low, but enforcement costs are not.** In addition, enforcement cannot be provided "24/7" and at best, can only have limited effectiveness.
5. **Finally, according to some State Codes, placement of stop signs not warranted by engineering studies may violate State law.**

When are Stop Signs Warranted?

Installation Policies and Warrants

The Federal MUTCD (Manual on Uniform Traffic Control Devices) dictates the size, shape and color of all traffic control devices. **The City is required by State law to comply with the guidelines of the MUTCD when warranting stop signs.** If stop signs are installed when they are not warranted, traffic safety is not improved and may actually be impaired. Unnecessary stops may cause rear-end accidents while increasing fuel consumption and adding to environmental concerns.

***** Stop signs must only be installed when an engineering study provides justification for their installation at the subject location. *****

The MUTCD provides the following warrants for the use of stop signs: *STOP signs should be used if engineering judgment indicates that one or more of the following conditions exist:*

- *Intersection of a less important road with a main road where application of the normal right-of-way rule would not be expected to provide reasonable compliance with the law;*
- *Street entering a through highway or street;*
- *Unsignalized intersection in a signalized area; and/or*
- *High speeds, restricted view, or crash records indicate a need for control by the STOP*

Most T-intersections in residential neighborhoods are not signed because when sight distance is adequate, these signs contribute little to traffic safety. The MUTCD warrants for ALL-WAY stops (4-way and 3-way at T-intersections) are typically not met in residential areas because traffic volumes must be roughly equal on both streets and exceed 500 vehicles per hour for at least eight hours of the day. These conditions are typically only found where two major streets intersect and a traffic signal is not warranted.