

Why wait until someone is seriously injured or killed before anything is done about speeding?

After a serious crash, speeding is often assumed to be the cause. This may not always be true. While crash experience is one of the factors considered in establishing speed limits, it is not the only one- or even the major one. The prevailing 85th percentile speed is the primary factor used to establish a proper speed limit, even if there have been no crashes.



I am only one person among thousands of other drivers. What can I do to reduce the speeding problem in my community?

Speed limits are based upon studies of driving speeds - yours, your neighbors, and a percentage of everyone traveling on a roadway. Please obey the speed limit, not only on your street but on all streets and highways.

HRC Traffic Tips

Setting Realistic Speed Limits has been brought to you courtesy of the Michigan State Police and Hubbell, Roth & Clark, Inc. - Consulting Engineers since 1915.

For more information on HRC's traffic engineering services, please contact:

Mr. Richard Beaubien, P.E., P.T.O.E.
Hubbell, Roth & Clark, Inc.
555 Hulet Drive
Bloomfield Hills, MI 48302
(248) 454-6300
rbeaubien@hrc-engr.com
www.hrc-engr.com



Setting Realistic Speed Limits



**SPEED
LIMIT
45**

Speed limits can and should provide motorists, police and traffic courts with information on reasonable and safe speeds that will facilitate the safe, orderly flow of traffic under normal conditions. The public should be encouraged to bring to the

attention of public officials what they perceive to be speeding problems. But speed limits should not be set based on casual observations or uninformed opinion. Public agencies have responsibility to establish speed limits based upon thorough traffic engineering surveys.

What factors are considered when establishing a speed limit?

Traffic engineers and police officers examine many traffic and road conditions to determine a reasonable speed limit. These include number and type of crashes, speed of vehicles and number of cars, pedestrians, and bicycles. Also considered are physical conditions of the road such as sidewalks, hills, curves, lanes, driveways, intersections, roadway surfaces and traffic controls.



Isn't a lower speed limit always safer?

No, lower speed limits do not necessarily improve safety. The more uniform the speeds of vehicles in a traffic stream, the less chance there is for conflict and crashes. Posting speed limits lower or higher than what the majority of drivers are traveling produces two distinct groups of drivers - those attempting to observe the limit and those driving at what they feel is reasonable and prudent. These differences in speeds may result in increased crashes due to tailgating, improper passing, reckless driving and weaving from lane to lane. Inappropriately established speed limits also foster disregard for other speed limits, traffic signs and signals, and contribute to driver frustration.

Most drivers drive 5 to 10 mph over the speed limit. Why not establish the speed limit with this in mind?

While some drivers drive faster than the speed limit, this is not true of everyone. Experience shows that 85% of the drivers adhere to properly established speed limits which they feel are reasonable, comfortable and safe for conditions at the time. This is what we call the 85th percentile speed. This



is the speed at, or below which, 85% of the traffic moves. Police officers can then target their speed enforcement efforts at the remaining 15% of drivers who are not in compliance with the speed limit.

Why not simply post a lower speed limit and have the police enforce it?

Posting speed limits lower than the 85th percentile speed does not result in voluntary motorist compliance with the posted speed limit unless there is strict, continuous and visible enforcement. Increased enforcement is effective only at the immediate time and in the area where the police officer is present. The availability of police officers is limited and their services must be shared with other



police responsibilities. Since those lower speed limits cannot be properly enforced, they will be consistently violated and will breed disregard for speed limits in general.

How can speed enforcement be effective when it is limited to such a small portion of the drivers?

When the majority of drivers respect the posted speed limit, enforcement can be directed at drivers who exceed the speed limit. When enforcement is directed at these drivers, voluntary compliance increases, resulting in a lower percentage of violators.

Why not install 25 mph signs or "Children Playing" signs to make residential areas safer?

Installing signs is only effective if a hazard is not already obvious to the reasonably safe driver. Drivers are generally aware that they are in a residential area and do not require signs to notify them of



this fact. Improper use of these signs conveys a false sense of security to residents and does nothing to improve safety.

Why not install stop signs, traffic signals, speed bumps, or some other device to reduce speeds?

Traffic control devices are designed and installed to solve a particular problem. When they are misused for speed control purposes, they are ineffective and may create a hazard. For example:

Stop signs are designed to control traffic at busy intersections. When used to reduce speed, motorists "roll" through them, then increase their speed between such signs.



Traffic signals are designed to control traffic at busy intersections or to reduce broadside crashes. When misused, they may cause drivers to speed up to "beat the light" and may increase crashes.

Speed bumps are hazardous to all vehicles especially emergency vehicles, bicyclists, motorcyclists, school buses and snow plows.