



SETTING SPEED LIMITS ON STATE HIGHWAYS

The setting of speed limits on streets and highways is a technical science backed by many years of research and experience on what works and doesn't work for the safety and benefit of the motorist. We at the Washington State Department of Transportation are often approached by citizens who feel that a change in the posted speed limit is the answer to a safety problem on a specific highway. Safety is the highest concern in any project we undertake, however changing the posted speed limit is not always the answer.

If safety isn't behind it, what is the purpose of having speed limits?

Safety is always a factor, but the setting of speed limits is, for completely practical reasons, more fundamentally influenced by some basic principles of human behavior. When setting speed zones, traffic engineers base decisions on several fundamental concepts proven over the years to be true:

- The majority of motorists drive in a safe and reasonable manner
- The normally careful and competent actions of a reasonable person should be considered to be legal
- Laws are established for the protection of the public and the regulation of unreasonable behavior of a few individuals
- Laws cannot be effectively enforced without the consent and voluntary compliance of the majority

Research and experience have shown that effective speed limits are those that the majority of motorists naturally drive, and that raising and lowering speed limits doesn't substantially influence that speed.

But if you lower the speed limits, people drive slower, Right?

The answer is no, just as people don't automatically drive faster when the speed limit is raised. These are common misconceptions, along with the mistaken belief that speed limit signs will decrease the accident rate and increase safety, and highways with posted speed limits are safer than unposted highways.

Most people are surprised to learn that the posted speed limits have less influence on the speed motorists travel than on the reverse.

You mean motorists influence the speed limits?

Yes, because speed limits that reflect the behavior of the majority - - keeping in mind that the majority drive in a safe and reasonable manner - - are more likely to be obeyed.

Speed limits that reflect the behavior of the majority are determined by what engineers call the "85th percentile speed", or the speed that 85 out of 100 vehicles travel at or below. This method is based on the principle that reasonable drivers will consider road conditions when selecting their speed of travel.

Studies have consistently demonstrated that there are no significant changes in the 85th percentile speed following the posting of a revised speed limit.

What if the majority are driving too fast?

What's actually more dangerous is when motorists are traveling at varying speeds. With speed limits set at the 85th percentile speed, the speed differential - - or range of travel speeds - - is reduced so that more vehicles are traveling at or near the same speed, with fewer vehicles traveling at extremely high or low speeds.

Statistics show that roadways with speed limits set at the 85th percentile speed have fewer accidents than roads where the posted speed limit is above or below the what the majority naturally travel.

What do you mean by "realistic" speed laws?

Realistic speed laws are desirable for a number of reasons:

1. They invite public compliance by conforming to the behavior of the majority and by giving a clear reminder to the non-conforming violators.
2. They offer an effective enforcement tool to the police by clearly separating the occasional violator from the reasonable majority.
3. They tend to minimize antagonism toward police enforcement of unreasonable regulations.
4. They inject an element of logic and reason into an otherwise arbitrary and often emotional issue.

What is the law?

All 50 states have adopted a basic speed law which recognizes that driving conditions vary widely from time to time, and place to place. No set of fixed driving rules will ever adequately serve all conditions. Motorists must constantly adjust their driving behavior to fit the conditions they meet.

Individuals need to learn this with a minimum of assistance from law enforcement. The basic speed law is founded on the belief that most motorists are able to modify their driving behavior properly as long as they are aware of the conditions around them.

If I think the posted speed limit on a particular highway is wrong, what can I do about it?

Contact the appropriate public agency, the Washington State Department of Transportation for the case of state highways, or your city or county public works department regarding city or county roads.

They will conduct engineering and traffic studies necessary for establishment of speed zone, including prevailing speed studies, accident history investigations, and investigation of highway, traffic, and roadside conditions not readily apparent to the driver.

The solution is not to post a speed zone to an unjustifiably low speed and then expect law enforcement to control the violators by constant monitoring. Police agencies do not, and indeed can not afford to lie in wait constantly for speeders in a multitude of locations.

Who can I contact for more information about speed limits on SR 164?

You can contact:

Don Sims

Traffic Engineer, WSDOT King County area

206-440-4353

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