Setting Appropriate Speed Limits on Wisconsin's State Highways

Why Speed Limits?

The setting of speed limits is fundamentally influenced by basic principles of human behavior. Research and experience have shown that effective speed limits are those that the majority of motorists will naturally and instinctively drive. Traffic laws that reflect the behavior of the majority of motorists are found to be the most successful.

Common Misconceptions

- Lowering the posted speed limit will slow down the traffic
- Lowering the posted speed limit will increase safety and decrease the number of crashes
- Raising the posted speed limit will increase the speed of traffic
- Drivers will always travel at 5 mph over the speed limit which is posted

What factors are considered when setting a speed limit?

Nationally, the most recognized practice is to post the speed limit as near as practical to the speed at which 85% of the drivers are traveling. Most people choose a reasonable speed in which they feel comfortable and safe. Traffic engineers consider the 85th percentile speed to help determine the posted speed limit.

The 85th percentile speed may be adjusted based on the following factors if they significantly impact roadway characteristics or safety:

- Crash history
- Roadway geometrics
- Parking
- Pedestrians and pedestrian crossings
- Adjacent development
- Traffic engineering judgment

What a rational speed limit does:

- Encourage compliance from the majority of drivers
- Provide a clear reminder of the maximum reasonable speed under ideal conditions. When conditions change, drivers must reduce their speed accordingly
- Serve as an effective tool for law enforcement
- Minimize public antagonism toward law enforcement agencies which results from enforcement of artificially low speed limits
- Provide a smooth and orderly flow of traffic to prevent crashes

What is the relationship between vehicle speed and crashes?

Roadways are safest when the majority of vehicles are traveling at about the same speed. Studies have shown that crash rates are at their lowest when traffic is travelling at or near the 85th percentile speed. Injury and fatality crashes are highest for motorists traveling at speeds much higher or lower than the 85th percentile speed or current flow of traffic.

Variation of speed within the traffic stream creates more conflicts and passing maneuvers, which in turn lead to more crashes.

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

This theory is only effective when law enforcement is present. The availability of police officers is limited for speed enforcement on a consistent basis. If unreasonably low speed limits are posted and not vigorously enforced, there will be varying speeds of traffic which will increase the potential for crashes. In general, setting unreasonable speed limits will also lead to a disregard to speed limits.