

DOCUMENT REVIEW

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SEPTEMBER-OCTOBER 1999

Setting Speed Limits—An Epidemic of Malpractice by Greg Mauz (Florida Chapter, National Motorists Association, 3102 Cardinal Dr., Delray Beach, FL 33444; ph. 561-243-0920)(Sept. 1999)

Highlights

- the 85th percentile rule should be used to set posted speed limits
- speed limits set lower than the 85th percentile reduce safety
- a “model speed zoning bill” is recommended for Congressional action

This report contends that in many instances posted speed limits are too low. This practice unnecessarily consumes precious time. It also decreases safety.

The author asserts that speed limits ought to be set based on the 85th percentile speed. That is, the posted limit should be the speed at which 85% of the traffic travels at or under in free flow conditions. The author calls this the “universally accepted, proper, scientific, democratic and safest speed to post the limit at.”

Most engineers would generally agree with the 85th percentile approach under most circumstances. They would, however, make exceptions based on traffic volumes, roadside development, and pedestrians. The president of the National Motorists Association points out that drivers already adjust their speeds under these so-called exceptional circumstances. Consequently, setting a limit below the 85th percentile may lead to unreasonably slow posted limits.

Well, what’s so bad about unreasonably slow posted speed limits? Doesn’t speed kill? Won’t slowing the traffic save lives? Surely the extra delay from lower speeds is more than offset by the safety gains? Or is it?

The author presents graphical information showing that the crash rate for vehicles is lowest at a speed that exceeds the mean by about 10 mph on Interstate highways and 5 mph on other rural highways. Odd as this may seem, apparently those who drive a little faster than average are in accidents less often than those who drive at slower speeds. These faster speeds coincide with the 85th percentile speeds. Hence, the author is convinced that safety would be improved if these speeds were made the posted legal limits.

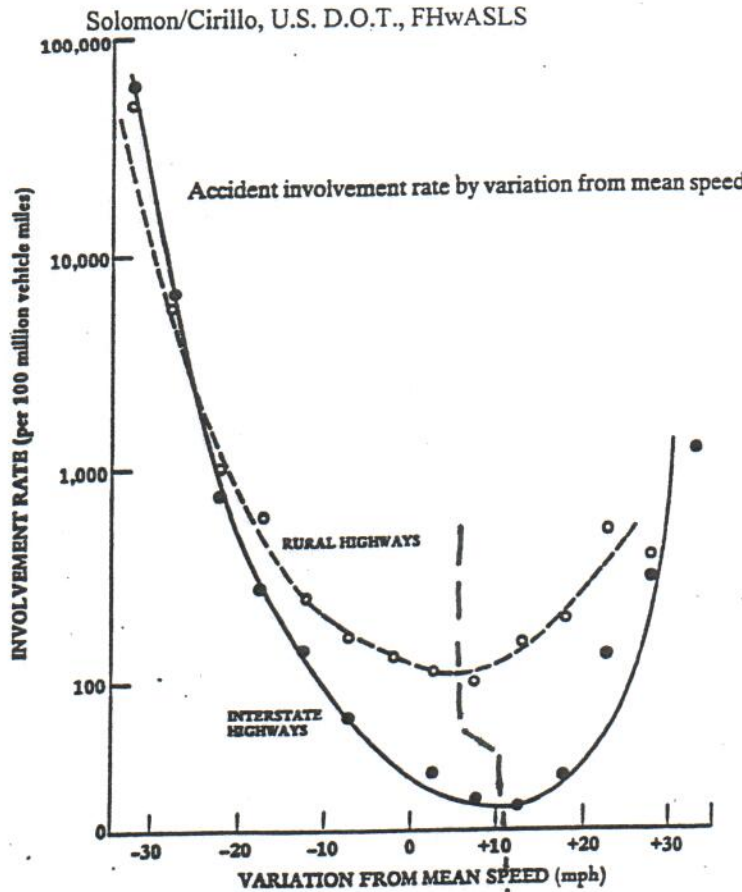
Anticipating the objection that raising the posted speed limits would simply raise the actual speeds of vehicles, the author cites some evidence from an ADOT pamphlet. This pamphlet concludes that “before and after studies consistently demonstrate that there are no significant changes in traffic speeds following the posting of new or revised speed limits.” The author is confident that the overwhelming majority of drivers are going to choose a safe speed. Posted limits lower than the 85th percentile will reduce safety by increasing the differences in speeds among vehicles and by diverting drivers’ attention to speedometers and watching out for law enforcement.

It’s not as if exceeding posted speed limits is a major factor in traffic crashes. The author indicates that in Florida, exceeding the posted speed limit accounted for only 2% of all accidents. Data from Arizona are similar.

It is the author’s contention that speed limits are posted low in order to get revenue from fines. When limits are posted too low, the majority of drivers are converted into

“speeders.” Law enforcement officers can then pretty much take their pick of who they want to stop and cite. So, while those exceeding posted speed limits account for only 2% of the accidents in Florida, speeding tickets account for over 60% of the moving violation citations.

In conclusion, the author recommends that Congress pass the “Model Speed Zoning Bill.” This bill would mandate that speed limits be set according to the 85th percentile rule. States that failed to comply would risk the loss of some of their federal aid.



85th %ile speed should be speed limit.
 Safest, most democratic,
 very few violations.
 Federal/State Law (MUTCD 2B.11).

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