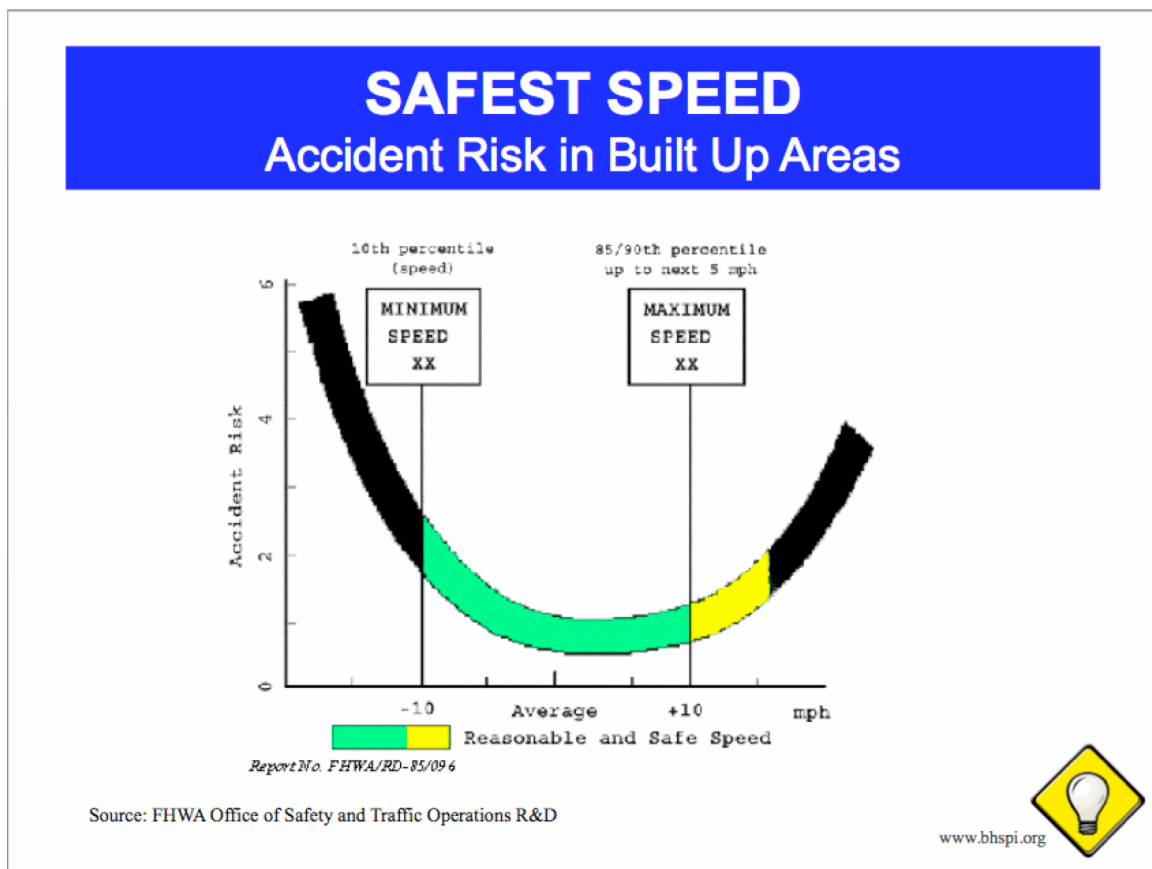


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To be compliant:

1. Must be 24 hour free-flowing speeds by either 1 or 2 hour increments.
2. Spot speed surveys do not meet due process or safety requirements of an ETS
Typical speed varies 4-8 miles per hour over 24hr day
Speed variance can be even greater by day, and time of year
Safe speed (85th) documented in some instances to vary more than 30 mph
3. Discrete by direction, vehicle classification and lane on interstates, combined data does not meet due process requirements
4. Must state or use chart below to quantify range of safe speeds per ETS



5. Officer must be able to discern the safe for condition speed as noted by the study during for the conditions then present. Range in chart according to FHWA mean plus 16 mph. The engineering study must be consistent with the following;

A FUNDAMENTAL REVIEW OF SPEED ZONING AND ENFORCEMENT:

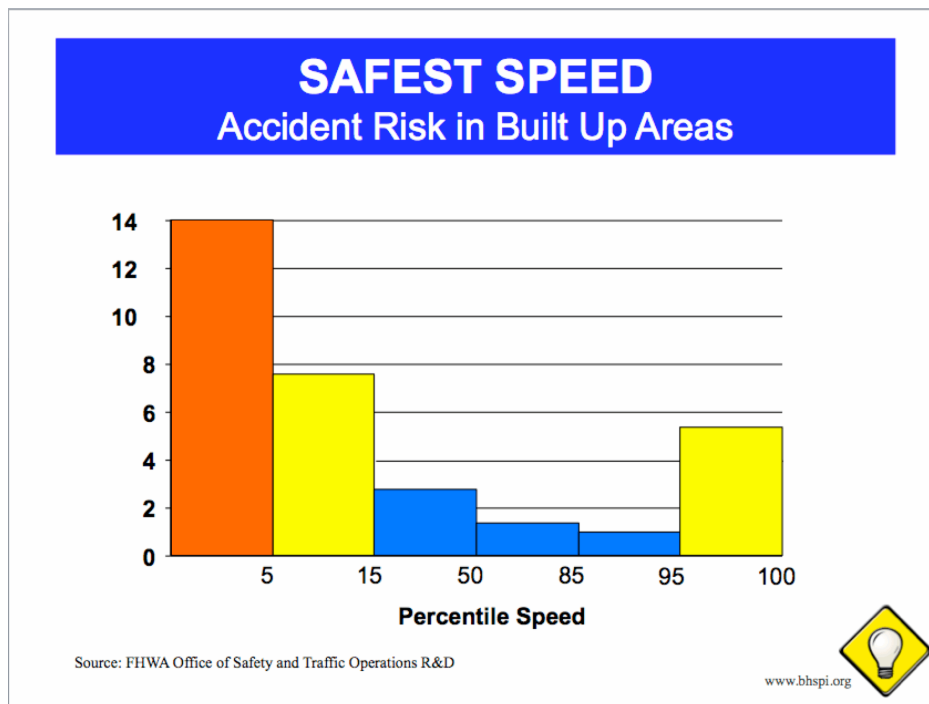
Speed not in excess of those posted is presumed to be lawful unless clearly proven to be in violation of the basic speed law (22351a CVC). The fact that a speed was less than the posted limit is, in itself, adequate to establish a fact or presumption that it was reasonable and prudent, unless, there is evidence

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presented to refute it.

Conversely, speed in excess of that which is posted or set forth in the Code as prima facie speed is, on its face, unlawful unless the defendant established by competent evidence that it did not constitute a violation of the basic speed law (22351b CVC). It is extremely important, however, that the enforcement officer possess the training and background to be able to establish a violation of the basic speed law in the first place.

If the enforcement officer is to do a competent job of speed enforcement, he must be well trained in how to apply the variable conditions to a "norm" (the engineering and traffic survey) to arrive at a speed that is reasonable and prudent for the location, time, and conditions. The engineering and traffic survey must be competent and must document conditions that support a discrepancy of more than 4 mph difference between the 85th percentile and the posted limit.



In every case, certain elements need to be proven by the prosecution:

- 1. Defendant was driving;*
- 2. Engineering and Traffic Survey completed within five years (for radar use);*
- 3. maximum safe speed for time and conditions;*
- 4. and, defendant's speed was in excess thereof.*

Under the above interpretation, it has been suggested that the fine assessed a speed violator be based upon the difference between the officer's opinion as to the maximum safe speed and the alleged speed, rather than the difference between the posted speed and the alleged speed.

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Factors that must also be considered:

1. Speed of traffic best indicator of reasonable and safe speed
2. Spot speed survey does not meet due process or safety requirements of a study
Typical speed varies 4-8 miles per hour over 24hr day
Speed variance can be even greater by day, and time of year
Safe speed (85th) documented in some instances to vary more than 30 mph
3. Must be 24 hour free-flowing speeds
4. Measuring all vehicles in queues results in a lower than actual speed distribution
5. Vehicles entering or leaving the stream shall be excluded
4. At least 500 feet from junctions, convergence zones and curves
5. No active enforcement prior to or during study
6. Measurement methods must not impede traffic or influence results
7. Radar devices have shown to result in 3 mph plus reduction in speed - "Detectible" measurements methods influence results
8. Measurement cosine angles greater than 15 degrees results not reliable
9. New roadway surface increases speed 4-5 mph
10. Trucks on average are 3 mph slower
11. Prevailing speed - 85th percentile speed rounded up to next 5 mph
12. Higher speeds are found where higher speeds are safe
13. Highest speed roadways safest
14. Every 5 years or when there is a substantive change in use
15. Surveyor must be trained in all aspects of both engineering and due process requirements.
16. Absent a physical site review of all factors and findings, the traffic engineer has no factual foundation to certify findings.

