

# New Procedures for Setting Speed Limits in California

By John E. Fisher, P.E., PTOE



or



or



# CVC 627 – Engineering and Traffic Survey:

“...shall include

- 1) Prevailing speeds...
- 2) Accident records
- 3) Conditions not readily apparent
- 4) Residential density
- 5) Pedestrian and bicyclist safety”

## CVC 22358.5 – Downward Speed Zoning:

“... It is the intent of the Legislature that physical conditions such as width, curvature, grade and surface conditions or any other condition readily apparent to the driver, in the absence of other factors, would not require downward speed zoning...”

# 2003 and 2009 MUTCD:

“When a speed limit is to be posted, it should be **within** 10 Km/h or 5 mph of the 85th – percentile speed of free-flowing traffic”



or



# 1996 (California) Traffic Manual:

“Speed limits should be established **at or near** the 85th percentile speed...”

-- versus --

“The speed limit normally should be established at the first five mile per hour increment **below** the 85th percentile speed.”



not



# 1996 (California) Traffic Manual:

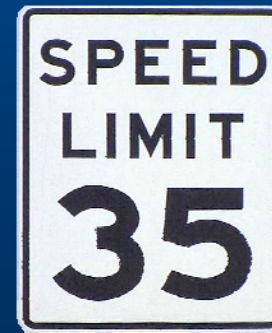
“When roadside development results in traffic conflicts and unusual conditions which are **not readily apparent** to drivers, as indicated in the collision records, speed limits **somewhat below** the 85<sup>th</sup> percentile may be justified.”

-- versus --

“However, in matching existing conditions with the traffic safety **needs of the community, engineering judgment** may indicate the need for a **further reduction** of five miles per hour.”



or



# 2006 CA MUTCD:

“... At the nearest 5 mph increment...”



“... may be reduced 5 mph... where an engineering study indicates...”



or



# 2006 & 2007

“We’ll have to raise speed limits”  
“Lack of flexibility”

From



To



or



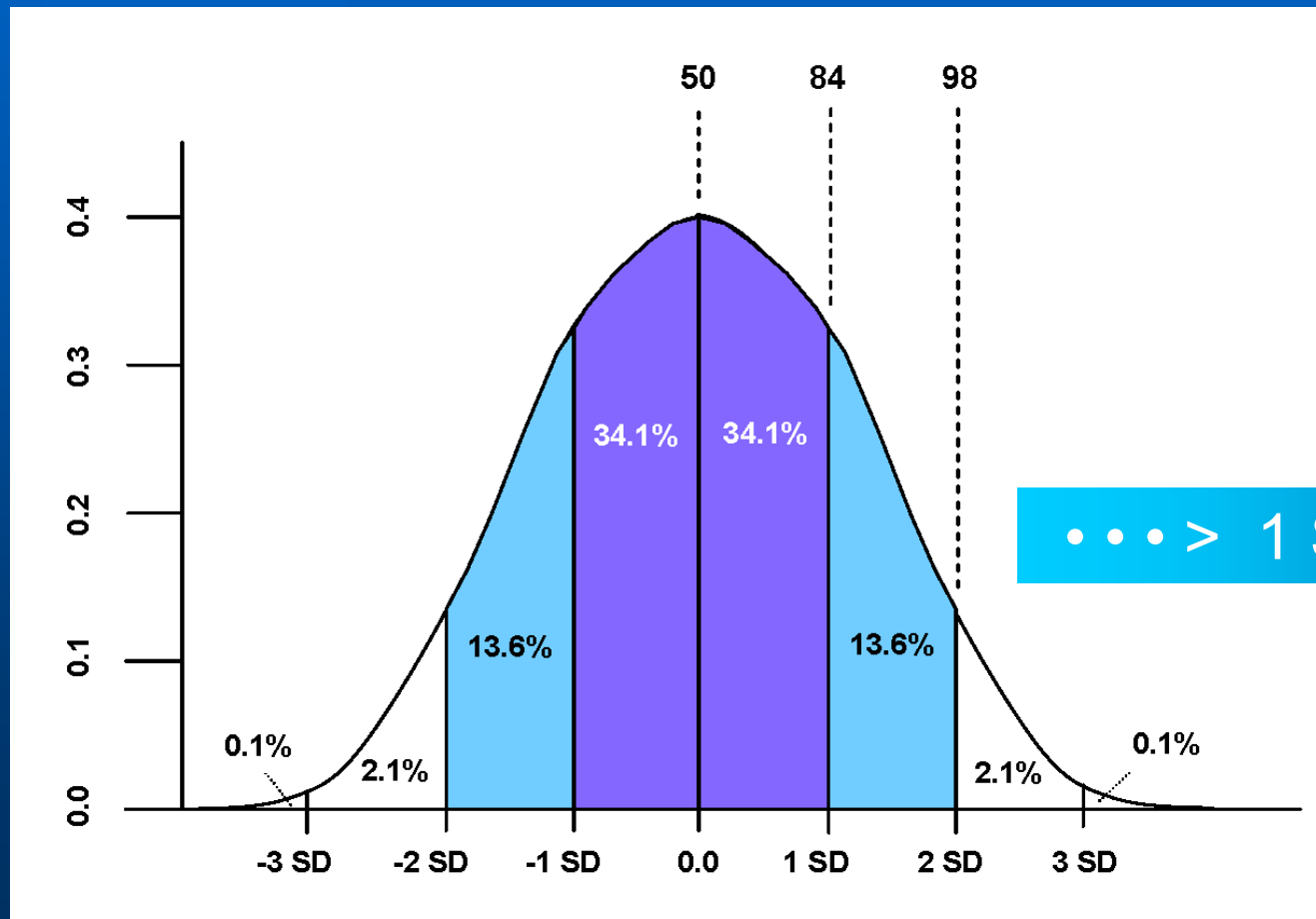


# *Back to Basics*



# Science:

85<sup>th</sup> Percentile



... > 1 SD from Mean

# Fundamental Principles:




In a free society laws must be largely self enforcing...

Most people behave prudently most of the time...

Speed limit thresholds should serve to identify those few motorists whose behavior is blatantly inconsistent with the majority...

Motorists generally can recognize or be warned of the driving environment and can be expected to adjust their driving accordingly...



# CTCDC Hearings:

## Conclusion

- Speed limits are artificially too low due to political pressure and the mis-application of downward speed zoning. In many jurisdictions they have been set so that the greater majority of motorists are “illegal”.



# 2008 CA MUTCD

- Speed Limit within 5 mph of 85<sup>th</sup> percentile speed
- However, 5 mph reduction OK if consistent with CVC 22358.5
- 5 mph reduction shall be documented in writing by P.E.
- Final Speed Limit shall be  $\geq$  50<sup>th</sup> percentile speed



or

