

"Compatibility of Design Speed, Operating Speed and Posted Speed" (1995 - By FHWA and TXDOT)

ITE's "Speed: Understanding Design, Operating and Posted Speed" (1997 - By Ray Krammes (FHWA) and Kay Fitzpatrick (TTI))

[Manual on Uniform Traffic Control Devices](#) (MUTCD, 2009 Edition)

- Note that the statutory speed limit is 55 mph for cars and 45 mph for trucks with the following exceptions: 25 mph in residence and business districts; 35 mph in cities and towns; 35 mph on Rural Rustic Roadways; 35 mph on non-surface treated highways. See the Code of Virginia (Speed Limits).

SHOWING DESIGN SPEED ON TITLE SHEET

See the current version of [Instructional and Informational Memorandum IIM-LD-204](#) for the method of showing design speed data on the plans.

An asterisk is to be shown adjacent to the Design Speed (Example - * 60 MPH) on the title sheet and the following note shown:

* See Plan and Profile Sheets for the horizontal and vertical curve design speeds.

OPERATING SPEED

Operating Speed is the speed at which drivers are observed operating their vehicles during free-flow conditions. The 85th percentile of the distribution of observed speeds is the most frequently used measure of the operating speed associated with a particular location or geometric feature of a highway, or highway segment.

POSTED SPEED

The Posted Speed for existing, new or reconstructed roadways should be determined by factors outlined in the [MUTCD](#), Section 2B.13. The MUTCD requires that an engineering study be conducted in accordance with established engineering practice. VDOT has a standard study template for developing speed limit recommendations which incorporates the MUTCD, Section 2B.13 as well as other considerations pertaining to VDOT's decision-making process for speed limit approvals, including enforcement consensus.

After a project is constructed, the responsible District Traffic Engineer* will re-establish the speed limit based on established traffic engineering policies. An engineering study will be performed as needed in accordance with documented traffic engineering practices.

* Rev. 1/17