

Although the design speeds for rural highways are coupled with a terrain classification, terrain is only one of the several factors involved in determining the appropriate design speed of a highway.

Although the selected design speed establishes the minimum radius of curvature and minimum sight distance necessary for safe operation, there should be no restriction on the use of flatter horizontal curves or greater sight distances where such improvements can be provided as a part of economic design. However, if a succession of flatter curves or tangent sections would encourage drivers to operate at higher speeds, that section of highway should be designed for a higher speed and all geometric features, particularly that of sight distance on crest vertical curves and intersection sight distance should be related to it.

Table A-1-1M indicates the various speed ranges applicable to each functional classification.

## DESIGN WAIVERS

**This Design Waiver Policy is applicable to VDOT owned and maintained\* roadways only.**

Design Waivers are required when deviations from VDOT's design criteria occur. When design criteria meet or exceed AASHTO minimal design but fall short of VDOT's minimal design, a Design Waiver will be required. Design Waivers will be applicable to all projects regardless of functional classification and funding and shall be documented and approved in accordance with the Design Waiver Request Form [LD-448](#). Please refer to [IIM-LD-227](#) for specific guideline on obtaining design waiver.

## DESIGN EXCEPTIONS

Where it is impractical or not economical to obtain the AASHTO minimum design criteria as shown in the Geometric Standard tables, an exception shall be secured from the State Location and Design Engineer and FHWA (if applicable). For additional instructions on Design Exceptions, see Instructional and Informational Memorandum [IIM-LD-227](#).

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\* Rev. 1/11