

DESIGN WAIVERS

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

DESIGN EXCEPTIONS

Where it is impractical or not economical to obtain the AASHTO minimum design criteria as shown in the Geometric Design 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](#).

FUNCTIONAL CLASSIFICATION

The highway system in Virginia has been functionally classified as Principal Arterial, Minor Arterial, Collector and Local Service. The American Association of State Highway and Transportation Officials (AASHTO) utilizes, as presented in the publication: A Policy on Geometric Design of Highways and Streets, referred to as The AASHTO Book, a similar functional classification system. The designations used are: Freeway, Arterial, Collector, and Local Roads and Streets. Relationships between these two classification systems have been generally developed.

Principal and Minor Arterial Highways provide direct service between cities and larger towns and are high speed, high volume facilities. Collector highways serve small towns directly, connecting them and local roads to the arterial system.

PAVEMENT TRANSITIONS

Pavement transitions typically occur where new or reconstructed roadways tie-in to existing roadways. This transition of pavement width shall meet the minimum length provided by the following equations:

Less than 45 mph

$$L = S^2W \div 60$$

45 mph and greater

$$L = W \times S$$

L = length of transition

S = Design Speed

W = Width of offset on each side

* Rev. 1/11