

1.2 METHODOLOGY

The Traffic Engineering Design Manual presents the fundamental concepts and standard practices related to the design of TCDs for VDOT. It is structured to inform and parallel the progression of decisions, activities and functions related to the design. The following sections will identify engineering concepts and analyses, preliminary engineering activities and plan development.

This manual is not intended to be a stand-alone document. The design processes in each section are based on standards and recommendations established in the MUTCD, AASHTO, NEC, NESC and other publications. The user should be familiar with those publications and appropriate references are made to these publications within each section.

1.3 PURPOSE OF THE TRAFFIC ENGINEERING DESIGN MANUAL

The primary purpose of this Manual is to present fundamental concepts and standard practices used in traffic control device designs for VDOT projects. It is also to promote standardization and uniformity in designs throughout the Commonwealth of Virginia.

- Standardization
 - Promotes contractor understanding
 - Provides desired construction of traffic control devices
 - Minimizes change orders or impacts to schedules
- Uniformity
 - Benefits motorist expectation
 - Improves understanding between designers and reviewing agencies

1.4 TRAFFIC CONTROL DEVICE DESIGN PROJECTS EMPLOYED BY VDOT

Authorization for Preliminary Engineering is initiated in accordance with the type of roadway project that is being administered by VDOT. The various roadway project types are:

- Interstate,
- Primary,
- Urban
- And Secondary

Further information on Preliminary Engineering authorization and project initiation responsibilities are in the [VDOT Road Design Manual, Chapter 2A – Project Development](#).

In addition to VDOT projects being initiated based on the roadway type, the development of TCD designs may be in conjunction with roadway projects or as “stand-alone” projects. Chapter 4 in Sections II through V addresses TCD plan development as though the traffic control devices are being designed in conjunction with a roadway project. There are notes provided throughout the plan development process that reflect variations in the design process when the TCD design is advertised as a “Stand-alone” project.