Course Number
FHWA-NHI-380118

Course Title
Signing and Markings for Complex Freeway Interchanges

Most practitioners agree, we need a well-defined process for developing an effective guide-sign design plan. This course provides a systematic approach for developing and evaluating designs that inform highway users how to safely navigate complex freeway interchanges. This course reviews applicable standards and policies, as well as relevant principles from AASHTO—A Policy on Geometric Design (Chapter 10), NCHRP 600 Series (Human Factors), Chapters 18-21, and the MUTCD (Chapters 2D & 2E and Part 3)—to illustrate and help you identify the degree of flexibility you may have in the development and design process.

This course introduces you to the three fundamental building blocks of effective guide sign designs, Sign Design Group (SDG), Sign Type (ST) and Sign Design Layouts. You will learn how lane geometry principles such as exit lane elimination, auxiliary lanes, and lane balance can impact signing and marking layouts. You will gain a better understanding of option lane signing flexibility provided by the Manual on Uniform Traffic Control Devices (MUTCD). You will interact with various complex interchanges to identify and discuss current and potential interchange guide signing and markings with the goal of consistency, maintaining motorists’ expectations, and corridor management of guide sign designs.

Before beginning this course, participants are strongly encouraged to review four 15-minute pre-recorded PowerPoint lessons covering definitions and foundations concepts. Participants will build upon these lessons during the workshop.

Outcomes
Upon completion of the course, participants will be able to:

• Identify key human factors that influence the effectiveness of roadway signing and markings
• Describe key geometric concepts of interchange exit, including lane configurations and elimination methods
• Summarize the resultant effects of geometric decisions upon signing and marking
• State the relationship and factors which influence Sign Design Group, Sign Type, and Sign Design Layout
• Apply the process for designing the appropriate signing and markings layouts for optimum driver understanding and action execution

Target Audience
Engineers, engineering practitioners, technologists, involved in freeway and expressway design, construction, and operations. The target audience for this course should also include personnel and consultants in Roadway Design, Traffic Engineering, and other state District/Division offices or anyone who is responsible for development and planning, design and review of TCDs (signing and markings).

Training Level: Intermediate

Fee: 2019: $350 Per Person; 2020: $350 Per Person

Length: 1 DAYS (CEU: .6 UNITS)

Class Size: Minimum: 20; Maximum: 30

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