Introducing Human Factors in Roadway Design and Operations

This course, Implementing Human Factors into Roadway Design: A Workshop on How to Use and Apply the Human Factors Guidelines (HFG) for Road Systems, helps participants gain an understanding of the HFG and how they can apply the principles to road system design and operational decisions. This course provides an overview of human factors as they relate to the roadway environment and describes why it is necessary to incorporate human factors in the design and operation of roadways as a complement to existing standards and manuals for roadway design and operation. Finally, the course offers a review of specific guidelines, as well as scenario-based case studies that allow attendees to apply the HFG to real roadway situations.

OUTCOMES

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

• Describe basic human characteristics relevant to being a road user.
• List ways in which the vehicle, road user, and roadway elements interact to influence operations and safety outcomes.
• Identify how individual characteristics impact a road user’s experience of the road environment.
• Describe the HFG and list its intended usage.
• Describe how the HFG relates to reference sources such as the HSM, MUTCD, and AASHTO’s Policy on Geometric Design of Highways and Streets.
• Select and apply specific HFG guidelines for roadway location or design engineering elements to common scenarios.
• Select and apply specific HFG guidelines for traffic engineering elements to common scenarios.
• Analyze case studies, identify critical human factors issues associated with these case studies, and select applicable guidance from the HFG.

TARGET AUDIENCE

The primary audience for the HFG course is composed of the following: Engineers (state departments of transportation (DOT), metropolitan planning organizations (MPO), counties, local municipalities, and consultants to the public agencies) Safety Engineers Traffic Engineers Design Engineers Safety (non-engineers) Professionals (state DOTs, MPOs, counties, local municipalities, and consultants to the public agencies) Planners (state DOTs, MPOs, counties, local municipalities, and consultants to the public agencies)

TRAINING LEVEL: Basic

FEE: 2020: $160 Per Person; 2021: N/A

LENGTH: 2 DAYS (CEU: 1.2 UNITS)

CLASS SIZE: MINIMUM: 20; MAXIMUM: 30

NHI Customer Service: (877) 558-6873 • nhicustomerservice@dot.gov