

**COURSE NUMBER**

FHWA-NHI-133075A

COURSE TITLE**Freeway Management and Operations (3-Day)**

This training course provides participants with an appreciation of the key policies, institutional issues, challenges and barriers, and technical and other issues to consider in the planning, design, implementation, management, operation, evaluation, and marketing of freeway facilities. The 3-day course is divided into 18 sessions, based upon the information presented in the "Freeway Management and Operations Handbook," September 2003 (FHWA-OP-04-003, EDL No.: 13875).

OUTCOMES

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

- Describe the purpose of freeway facilities and the role they serve related to the surface transportation system
- Identify types and causes of congestion on freeway facilities
- Describe the relationship between a public agency's traffic operations program and the activities involved in managing and controlling traffic on freeway facilities
- Describe the value of monitoring, evaluating, and reporting on the performance of freeway facilities
- Compare the potential to improve traffic flow between roadway improvements vs. shorter-term, lower-cost, operational improvements on freeway facilities
- Describe the range of ramp management and control strategies and the conditions under which they might be warranted
- Describe the range of lane management and control strategies and the conditions under which they might be warranted
- Describe the value of high occupancy vehicle (HOV) lanes as a strategy for improving the performance of freeway facilities
- Identify activities associated with responding to a traffic incident
- List strategies for mitigating the impacts associated with planned special events
- Define travel information, 511 service, pre-trip, and en-route travel condition information
- Identify the range of functions and elements of a transportation management system
- Describe the importance of sharing information and key issues to consider when establishing and maintaining an interface to electronically share information (voice, data, and video)
- List detection and surveillance techniques used to support freeway management and operations activities
- Identify key similarities and differences between communications alternatives to meet the varied needs of freeway management and operations activities

TARGET AUDIENCE

This course is designed for professionals engaged in any aspect of the planning, design, implementation, management, evaluation, enforcement, operation, or marketing of freeway facilities and should be considered as an introductory course for individuals with limited or no experience in traffic management or freeway management. This course is also of value to individuals whose experience is concentrated in one area of freeway operations as the course exposes participants to the wide array of freeway management activities. Participants could include traffic engineers and technicians, transportation planners, roadway design engineers and technicians, construction and maintenance engineers and technicians, managers/supervisors, transit planners, traffic management center (TMC) staff, and public information specialists from public agencies, consultants and contractors, and colleges and universities.

TRAINING LEVEL: Intermediate

FEE: 2013: \$500 Per Person; 2014: N/A

LENGTH: 3 DAYS (CEU: 1.8 UNITS)

CLASS SIZE: MINIMUM: 20; MAXIMUM: 30

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