

**COURSE NUMBER**

FHWA-NHI-142051

COURSE TITLE**Highway Traffic Noise**

This course was recently updated to reflect current FHWA noise regulations and policies: Title 23 CFR Part 772: Procedures for Abatement of Highway Traffic Noise and Construction Noise, and related State highway agency noise policies.

We recommend that participants registering for this course take the NHI 142063 Highway Traffic Noise: Basic Acoustics in advance of their session.

The Interactive Sound Information System (ISIS) demonstrations that are part of this training are deliberately very loud. So, we encourage Session Hosts to secure a training room accordingly.

This course provides an introductory- yet comprehensive- overview of highway traffic noise that will help educate engineers, environmental specialists, designers, planners, and consultants about traffic noise and ways to reduce the impacts. This course is designed not just for those performing noise analyses, but also for those responsible for the review and approval of noise studies and incorporating the results of these studies into design and environmental documents. Among topics covered are the basic principles of acoustics, how to determine when a noise analysis is required, typical strategies to mitigate noise in highway projects, noise study requirements and documentation, noise measurement, construction noise, and public involvement.

Participants will also learn about noise-compatible planning, which encourages local governments and developers to avoid noise-sensitive land uses adjacent to highways. And the course includes an overview of the FHWA Traffic Noise Model (FHWA TNM)--developed to predict noise levels and evaluate noise abatement measures.

Additionally, the NHI commissioned a customized version of the Interactive Sound Information System (ISIS) as part of the curriculum design for this course. ISIS is a noise simulation software program that employs high-quality digital recordings, precise sound control, and graphic imagery to present basic acoustical concepts and sounds from various traffic loads. ISIS also demonstrates the sound level reductions provided by various noise barrier configurations.

OUTCOMES

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

- Explain the basic principles of acoustics
- Describe all necessary documentation to fulfill FHWA noise requirements, as codified in 23 CFR 772
- Determine when a noise study is required
- Explain applicable Federal noise abatement regulations and policies

TARGET AUDIENCE

FHWA staff; State department of transportation environmental specialists, designers, planners or engineers; city or county environmental engineers, coordinators or specialists; consultants.

TRAINING LEVEL: Basic

FEE: 2017: \$1100 Per Person; 2018: N/A

LENGTH: 3 DAYS (CEU: 1.8 UNITS)

CLASS SIZE: MINIMUM: 20; MAXIMUM: 30

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