

# NHI CATALOG



## Improving the Performance of the Transportation Industry Through Training

This customized version was generated on December 27, 2016

# CATEGORY ICONS

These NHI category icons can assist users in identifying the course category or multiple course categories. The category icons are listed below for your reference.

## STRUCTURES



## GEOTECHNICAL



## CONSTRUCTION AND MAINTENANCE



## INTELLIGENT TRANSPORTATION SYSTEMS (ITS)



## REAL ESTATE



## TRANSPORTATION PLANNING



## HIGHWAY SAFETY



## SITE AND PERSONAL SAFETY



## FINANCIAL MANAGEMENT



## PAVEMENT AND MATERIALS



## DESIGN AND TRAFFIC OPERATIONS



## HYDRAULICS



## FREIGHT AND TRANSPORTATION LOGISTICS



## ENVIRONMENT



## BUSINESS, PUBLIC ADMINISTRATION & QUALITY



## COMMUNICATIONS



## ASSET MANAGEMENT



## TRANSPORTATION PERFORMANCE MANAGEMENT



Customized Version of the NHI Catalog  
Generated on December 27, 2016  
Program Area: Freight and Transportation Logistics  
Delivery Types: All  
Sorted by Course Number

## TABLE OF CONTENTS

### INFORMATION

About NHI .....	iii
NHI Makes Hosting Easy .....	1
Receiving Course Credit .....	3
Free Web-Conference Training .....	5

### FREIGHT AND TRANSPORTATION LOGISTICS

FHWA-NHI-139006 Integrating Freight in the Transportation Planning Process - WBT-Standard Version .....	6
FHWA-NHI-139006W Integrating Freight in the Transportation Planning Process - WBT-Accessible 508 Version .....	7
FHWA-NHI-139008 Freight and Land Use Workshop .....	8
FHWA-NHI-139009 Engaging the Private Sector in Freight Planning .....	9
FHWA-NHI-139011 Fundamentals of Freight Data Workshop .....	10
NHI Store .....	11
Contacts .....	19

## ABOUT NHI

### WHO WE ARE

The National Highway Institute (NHI) provides technical training to the highway transportation workforce to build skills and enhance job performance to improve the conditions and safety of our nations' roads, highways, and bridges.

As part of Federal Highway Administration's (FHWA) Office of Technical Services (OTS), NHI courses complement the targeted training and technical assistance of FHWA program offices, Resource Center, and Local and Tribal Technical Assistance Programs (LTAP/TTAP).

### OUR TRAINING

NHI courses are instrumental in developing core competencies and new skills, as well as learning about leading technologies and current policies. Our instructors strive to ensure that participants leave training not only with additional knowledge, but also the ability to apply that knowledge directly to their work. NHI is an accredited training provider by the International Association of Continuing Education and Training (IACET), allowing participants to earn Continuing Education Units (CEUs) for completed coursework. NHI also is an approved provider of the American Institute of Certified Planners (AICP) certification maintenance (CM) credits.

NHI offers three types of training.

*Instructor-led Training (ILT):* These courses are held in-person and led by an instructor when an organization is available to host the session. Any organization may host a session by submitting a Host Request form on the [NHI Web site](#).

*Web-conference Training (WCT):* These are live, online training sessions that take place at a set time. Web-conference Training sessions also require a host.

*Web-based Training (WBT):* These online courses are available 24/7 for six months after purchase by the registrant. Participants can control the pace at which they complete the course and may return to it as many times as they wish within the six-month access period.

### LEARN MORE

For more information or to subscribe to our mailing list, please visit the NHI Web site at [www.nhi.fhwa.dot.gov](http://www.nhi.fhwa.dot.gov).

Customers with additional questions may also contact NHI Customer Service at [NHICustomerService@dot.gov](mailto:NHICustomerService@dot.gov), or by phone during regular business hours, 7:30AM – 4:30PM Eastern Time, at (877) 558-6873.

## NHI MAKES HOSTING EASY

### HOSTING A COURSE

NHI partners with host organizations across the country to deliver training where it is needed most. NHI provides top-notch instructors and course materials, while hosting organizations provide the facilities and equipment.

### WHO CAN HOST

Any United States-based organization can host Instructor-led Trainings (ILT), which are taught in classrooms, and/or Web-conference Trainings (WCT), which are taught online.

Our instructors may tailor individual sessions to meet the unique needs and array of experiences of the hosting organization, including covering local issues and topics of special interest. Instructors also may modify case studies and exercises based on their subject matter expertise to make them pertinent to the participant's experiences.

### REQUESTING TO HOST

To host a course, domestic customers can go to the NHI Web site and complete the appropriate Host Request form (ILT or WCT). The process takes just a few minutes. First-time users will need to [create a user profile](#) and check the **INSTRUCTOR/HOST BOX**.

If you run into any difficulty when you are logging in, filling out a Host Request form, or navigating the NHI Web site, please contact NHI Customer Service for help at (877) 558-6873 during normal business hours, 7:30am – 4:30pm Eastern time. Customers may also email NHI Customer Service at [nhicustomerservice@dot.gov](mailto:nhicustomerservice@dot.gov).

To assist the host in preparation for and coordination of the session, a [hosting checklist](#) is provided on the NHI Web site. This checklist includes important information about hosting your NHI training session, as well as valuable “best-practice” information based on NHI's 40 years of experience with our hosting partners.

### CONFIRMING SESSION DATES/LOCATIONS/TIMES

After the Host Request form is received, an Instructor or a member of the NHI team will contact the host to discuss scheduling options. While preferred dates may be specified on the Host Request form, sessions are not official until the hosting organization receives formal confirmation from NHI. Once official, NHI will list the session publicly on its Web site.

### Enrollment Options

The host's contact information is listed with the scheduled session. Interested participants from outside the host's organization may contact the host to enroll. Alternatively, the host may ask NHI to open public seats, which allow outside participants to enroll through NHI.

The NHI Scheduler will email all participant information to the host and instructor prior to the session start date.

### HOSTING EXPENSES

To host a session, hosts are charged the per-participant price multiplied by the class-size minimum, or the host is charged per participant if the session class size exceeds the minimum. Pricing cannot be reduced if the minimum class size is not met. Therefore, if registration for a course is lower than anticipated, it is important for the host to contact NHI prior to the cancellation period (15 business days) to discuss a remedy. Please note that with sufficient notice, NHI may be able to offer marketing support for the session.

Three seats in every session are reserved for Federal Highway Administration (FHWA) employees until 15 days before the course begins. FHWA participants do not count toward the participant minimum, but should be considered in the course maximum. Hosts are not charged for FHWA personnel or participants who have paid via the NHI Web site. Hosts are not charged for any instructor expenses.

Course hosts may charge participants an additional fee to recover all or part of costs associated with hosting the course. However, we ask hosts to contact the NHI Scheduler at (703) 235-0534 with this information prior to the confirmation of the session.

Course fees, which include the cost of materials for each participant, are listed with every course description.

## RECEIVING COURSE MATERIALS

NHI will ship course material to the host approximately three weeks prior to the session start date.

## PROVIDING PAYMENT

Payment may be made to NHI by check, money order, or credit card. Checks and money orders must be made payable to the National Highway Institute. To make credit card payments, contact NHI Customer Service at [NHICustomerService@dot.gov](mailto:NHICustomerService@dot.gov) or 1-877-558-6873. You are not charged for any FHWA participants or for participants who paid via the NHI Web site.

## CANCELLATION POLICY/REFUNDS

To avoid incurring the \$1,500 cancellation fee, cancellation must be requested no later than 15 business days prior to the course start date. If a course must be cancelled, the host is required to contact NHI Customer Service at 1-877-558-6873 during normal business hours, 7:30AM – 4:30PM Eastern Time, or email [NHICustomerService@dot.gov](mailto:NHICustomerService@dot.gov). If the course materials have been sent, the host must contact NHI Customer Service.

In the event of cancellation, it is the host's responsibility to contact all participants (including those registered for public seats). There must be verification that the registrants received the cancellation notice. Notice to out-of-state participants is especially important so that they may alter or cancel any travel arrangements.

In the case of an emergency or weather-related closing, the cancellation fee will not apply. NHI follows the host office's policy regarding weather and emergency closings.

## RECEIVING COURSE CREDIT

Many of the courses offered at NHI can be used toward obtaining Continuing Education Units (CEUs), Certification Maintenance (CM) credits, and Professional Development Hours (PDHs). Please select the headers below for more information about receiving credits.

### CONTINUING EDUCATION UNITS

NHI has been recognized as an Accredited Provider by the International Association for Continuing Education and Training (IACET). In obtaining this accreditation, NHI has demonstrated that it complies with the ANSI/IACET Standard which is recognized internationally as a standard of good practice. As a result of this Accredited Provider status, NHI is authorized to offer IACET CEUs for its programs that qualify under the ANSI/IACET Standard. IACET is an independent, non-profit association whose goal is to ensure quality continuing education for professionals. For an organization to become an IACET approved CEU Accredited Provider, it must demonstrate that it designs, develops, and delivers training in accordance with proven adult learning theory and recognizes instructional systems design practices. Each course description in the NHI catalog includes the number of CEUs offered upon successful completion of the course.

One CEU is offered for every ten contact hours of training led by a qualified instructor and qualified instruction. In order to be offered CEUs, a course participant must attend 100% of the course and must pass the course examination with a score of 70% or greater.

CEUs are offered to each course participant who fulfills the above stated requirement. NHI will maintain individual training records for seven years for the CEUs offered. Individuals and their employers are also encouraged to maintain their own training records including course name, class date(s), instructor name, class roster, and CEUs offered.

For proof of your CEU record, please contact NHI at [NHICustomerService@dot.gov](mailto:NHICustomerService@dot.gov) or 1-877-558-6873 and request your official transcript. Your official transcript displays a record of your NHI course history as well as the CEUs offered for each CEU-accredited course. Please allow at least one month after the completion of your course before requesting your official transcript.

### CERTIFICATION MAINTENANCE CREDITS

NHI provides Certification Maintenance (CM) credits to assist professional planners become and maintain their membership as certified planners through the American Planning Association (APA).

American Institute of Certified Planners (AICP) is APA's professional institute. Certified Planners have demonstrated a commitment to high standards of professional practice and a mastery of theories and tools of planning.

NHI recognizes that the certification carries a high mark of distinction and requires planners to meet rigorous standards and maintain their expertise through continuing education. Planners must earn 32 CM continuing education credits every two years in order to stay up to date on the latest trends, technologies, and best practices. NHI courses will now help them achieve that requirement.

CM credits are measured in contact hours, so that 30 minutes of instructional time equals 30 minutes of CM credit (30 minutes contact = 0.5 CM credits; 1.0 contact hours = 1.0 CM credits). An event must be at least 30 minutes in duration to be eligible for CM credit.

Contact NHI Customer Service at [NHICustomerService@dot.gov](mailto:NHICustomerService@dot.gov) or 877-558-6873 to ask for an official transcript to be used by AICP to calculate CM credits. Please allow at least one month after the completion of your course before requesting your official transcript.

### PROFESSIONAL DEVELOPMENT HOURS (PDHs)

NHI does not officially offer PDHs; however, it is possible to receive PDHs for your completed NHI training courses. To receive PDHs, please submit your course certificate (which indicates the contact hours assigned to the course) and/or your official transcript (which indicates the CEUs granted for a course) to the respective licensing agency. Upon consent, the licensing agency may convert your hours and/or CEUs into PDHs and proceed with the PDH awarding process.

PDHs are offered on a ratio of one contact hour to one PDH. When converting from CEU to PDH, please note that one CEU is equal to ten PDHs (or one PDH is equal to one-tenth of a CEU).

To request your official transcript with proof of CEU record and/or contact hours, please contact NHI at [NHICustomerService@dot.gov](mailto:NHICustomerService@dot.gov) or 1-877-558-6873. Your official transcript displays a record of your NHI course history as well as

the CEUs offered for each CEU-accredited course. Please allow at least one month after the completion of your course before requesting your official transcript.

### **NHI CERTIFICATES OF ACCOMPLISHMENT**

NHI's Certificate of Accomplishment program was designed to recognize individuals who have successfully enhanced their depth and breadth of knowledge and expertise in specific disciplines or topic areas. Students are eligible for the Certificate of Accomplishment when they have completed and passed a suite of related NHI course offerings.

Certificates of Accomplishment are available in the following disciplines, with more to come over the next year:

- Work Zone Safety
- Relocation Under The Uniform Act
- Incident Management
- Freight Management and Operations

For more information about the Certificates of Accomplishment, please visit the NHI Web site at [www.nhi.fhwa.dot.gov/training/cert\\_programs.aspx](http://www.nhi.fhwa.dot.gov/training/cert_programs.aspx).

## FREE WEB-CONFERENCE TRAINING

NHI is excited to offer FREE Web-conference training. These trainings save both time and money, while covering the latest topics and techniques within the transportation industry. All transportation professionals in the public and private sectors are invited to participate in these trainings.

## REAL SOLUTIONS SEMINAR SERIES

This series of free monthly Webinars features a guest speaker who presents problems or issues faced in the field and what steps were taken to solve them. In some sessions, additional panelists join the guest speaker to further discuss that seminar's topic.

Some past topics include:

- Best Practices for Integrating Climate Change Considerations in the Transportation Planning Process
- eLearning and Distance Learning within the Transportation Industry
- Smart Corridors and Complete Streets: A Look at Some Situations and Strategies
- Solving Old Traffic Noise Ills: Tennessee Type II Noise Abatement Program

Visit the *Real Solutions Seminar Series* section of the Web site to register for the next *Real Solutions* Web conference or to listen to past Web conferences.

## LEARN MORE

For more information, please visit the NHI Web site at [www.nhi.fhwa.dot.gov](http://www.nhi.fhwa.dot.gov).

Want to be notified when a free Web conference is scheduled? Email [nhimarketing@dot.gov](mailto:nhimarketing@dot.gov).

**COURSE NUMBER**

FHWA-NHI-139006

**COURSE TITLE****Integrating Freight in the Transportation Planning Process - WBT-Standard Version**

This training is a prerequisite of another NHI training and is offered at no cost.

Freight transportation issues can be complex and involve many different stakeholders, all of whom have different perspectives on the freight transportation system. The challenge faced by many public-sector transportation planners is how to best incorporate these freight perspectives into the transportation planning process in a way that results in a safe and efficient transportation system for both people and goods. This Web-based training course will provide a greater understanding of freight trends, its stakeholders, and its issues, so that public-sector transportation planners are better able to incorporate freight into their respective transportation planning processes and programs.

This is a prerequisite course for other Freight courses.

In accordance with the Rehabilitation Act of 1973, as amended, this WBT is also available in an accessible 508 compliant version. See course number FHWA-NHI-139006W for more information.

**OUTCOMES**

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

- Upon completion of the course, participants will be able to:
- Identify the stakeholders involved in freight transportation
- Explain the role of different modes in freight transportation
- Describe some trends affecting freight transportation, and their impact on a State's transportation system and communities
- Discuss some of the common issues that prevent freight from being fully incorporated into the planning process
- Identify key resources to help guide statewide and metropolitan freight planning effort

**TARGET AUDIENCE**

Transportation planners and freight transportation planners from State DOTs, MPOs, local governments, and Federal agencies.

**TRAINING LEVEL:** Basic

**FEE:** 2016: \$0 Per Person; 2017: N/A

**LENGTH:** 6 HOURS (CEU: .6 UNITS)

**CLASS SIZE:** MINIMUM: 1; MAXIMUM: 1

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



## COURSE NUMBER

FHWA-NHI-139006W

## COURSE TITLE

### Integrating Freight in the Transportation Planning Process - WBT-Accessible 508 Version

**WBT**

This training is a prerequisite of another NHI training and is offered at no cost.

Freight transportation issues can be complex and involve many different stakeholders, all of whom have different perspectives on the freight transportation system. The challenge faced by many public-sector transportation planners is how to best incorporate these freight perspectives into the transportation planning process in a way that results in a safe and efficient transportation system for both people and goods. This Web-based training course will provide a greater understanding of freight trends, its stakeholders, and its issues, so that public-sector transportation planners are better able to incorporate freight into their respective transportation planning processes and programs.

This is a prerequisite course for other Freight courses.

In accordance with the Rehabilitation Act of 1973, as amended, this WBT was developed as an accessible 508 compliant version. See course number FHWA-NHI-139006 for the standard WBT version.

## OUTCOMES

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

- Upon completion of the course, participants will be able to:
- Identify the stakeholders involved in freight transportation
- Explain the role of different modes in freight transportation
- Describe some trends affecting freight transportation, and their impact on a State's transportation system and communities
- Discuss some of the common issues that prevent freight from being fully incorporated into the planning process
- Identify key resources to help guide statewide and metropolitan freight planning effort

## TARGET AUDIENCE

Transportation planners and freight transportation planners from State DOTs, MPOs, local governments, and Federal agencies.

**TRAINING LEVEL:** Basic

**FEE:** 2016: \$0 Per Person; 2017: N/A

**LENGTH:** 6 HOURS (CEU: .6 UNITS)

**CLASS SIZE:** MINIMUM: 1; MAXIMUM: 1

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

**COURSE NUMBER**

FHWA-NHI-139008

**COURSE TITLE****Freight and Land Use Workshop**

The Freight and Land Use Workshop is a one-day training session intended to provide an in-depth, hands-on understanding of the land use needs of freight-generating facilities; the potential impacts freight land uses can have on the transportation system, communities, and the natural environment; strategies that can reduce or mitigate the impacts of freight land uses; and the roles stakeholder groups can play in implementing those strategies.

This workshop provides specific guidance to planning practitioners on how to integrate freight and land use considerations within the transportation planning and programming process, and offers the tools and resources to assess the impacts of land use decisions on freight movements, as well as the impacts of freight development and growth on land use planning goals.

**OUTCOMES**

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

- Discuss the importance of coordinating land use policies and freight transportation planning
- Describe methods for coordinating freight land use with local, regional, and state comprehensive and transportation planning processes
- Describe methods to avoid or mitigate impacts of freight land uses on surrounding land uses and the environment
- Identify examples of sustainable freight land use strategies and initiatives
- Locate the resources and tools available to address freight and land use considerations within the transportation and comprehensive planning processes

**TARGET AUDIENCE**

The target audience for this course includes a variety of transportation and planning professionals involved in transportation or land use planning, with a particular focus on municipal and county land use and transportation planners; and local, regional, or state economic development officials. This course is also relevant for State DOT planners; environmental specialists; engineers and specialists; MPO staff; Federal transportation employees, particularly FHWA and FRA staff; private sector stakeholders, particularly representatives from industrial real estate development, trucking, rail, and other industry associations, and port and port authority staff. Secondary audiences include Federal and state resource agency staff, EPA staff, elected officials or MPO board members, shippers or industry leaders, consultants, and citizen activists.

**TRAINING LEVEL:** Basic**FEE:** 2016: \$350 Per Person; 2017: \$350 Per Person**LENGTH:** 1 DAYS (CEU: 0 UNITS)**CLASS SIZE:** MINIMUM: 20; MAXIMUM: 30**NHI Customer Service:** (877) 558-6873 • [nhicustomerservice@dot.gov](mailto:nhicustomerservice@dot.gov)



## COURSE NUMBER

FHWA-NHI-139009

## COURSE TITLE

### Engaging the Private Sector in Freight Planning

Engaging the Private Sector in Freight Planning is a one-day workshop intended to provide techniques and strategies to help practitioners establish and strengthen relationships with the private sector. It is designed for practitioners addressing freight issues at metropolitan planning organizations (MPOs), State departments of transportation, local governments, and economic development agencies.

Building knowledge of both private sector business needs and the public sector transportation planning process supports the effective integration of freight into many statewide and metropolitan transportation plans and investment decisions. Developing and sustaining relationships, either formally or informally, with key private sector stakeholders is critical to effective freight transportation planning. Upon completion of this workshop participants will be able to develop an action plan that will engage freight stakeholders in their agencies' planning processes.

## OUTCOMES

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

- Describe the value that private sector freight stakeholders can add to the planning process
- Apply tools and resources for identifying freight stakeholders
- Construct an action plan for engaging freight stakeholders in their agencies' planning processes

## TARGET AUDIENCE

The target audience for this course includes practitioners and others involved in transportation planning, project development, and project implementation specifically, State DOT Planners, Freight Transportation Specialists, MPO Staff, City/County Engineers and Planners, Economic Development Agency staff, Quasi-public Agencies (such as ports), FHWA Employees, and other Federal Employees. Private sector entities are considered a secondary audience; however, their participation in the workshop can be extremely beneficial to them and the public sector participants.

**TRAINING LEVEL:** Basic

**FEE:** 2016: \$350 Per Person; 2017: \$350 Per Person

**LENGTH:** 1 DAYS (CEU: 0 UNITS)

**CLASS SIZE:** MINIMUM: 20; MAXIMUM: 30

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

**COURSE NUMBER**

FHWA-NHI-139011

**COURSE TITLE****Fundamentals of Freight Data Workshop**

The Federal Highway Administration's (FHWA) one-day workshop, Fundamentals of Freight Data is intended for freight transportation professionals at state Departments of Transportation (DOT) and Metropolitan Planning Organizations (MPO), including planners and policy- and decision-makers who need information on freight data for a variety of uses. These freight data uses include regional profiles, Long-Range Transportation Plans (LRTP), State Freight Plans, State and MPO Transportation Improvement Plans (STIP/TIP), freight performance measures, forecasting, studies facility/corridor planning and strategic policy planning, among others.

The workshop will provide participants with a broad knowledge of freight data sources. As well as the ability to utilize freight data for transportation planning program/project development and policy analysis.

It is important to understand the topic of freight for many reasons, including: policy and strategic planning, local planning, project development, operations and performance management. Understanding and being able to use freight data is not an easy endeavor, yet it is one that is critical to master for many transportation planning projects. This workshop provides broad knowledge of the freight data sources used in the primary freight activities needed for transportation planning and effective policy decision making.

This workshop is not meant to be a comprehensive and in-depth examination of freight data and its applications. It will present the characteristics and key limitations of existing data, methods for collecting local/state data, and overall use of freight data.

**OUTCOMES**

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

- Understand needs and uses for freight data
- Identify the major sources and types of freight data
- Review noteworthy applications of freight data
- Determine freight data needs for your organization

**TARGET AUDIENCE**

The target audience for this training includes those individuals directly involved in freight activities, including: State DOT transportation and freight planners, city and county planners who deal with freight issues, MPO staff, public sector transportation and freight planners, economic development analysts, and FHWA employees. It is expected that attendees will already have a basic freight transportation foundation before attending this workshop. Participants should be familiar with general freight terminology, modes and trends before participating in this workshop. The NHI course, Integrating Freight in the Transportation Planning Process (139006) which is offered online or equivalent experience can provide the fundamentals necessary to prepare for this workshop.

**TRAINING LEVEL:** Basic

**FEE:** 2016: \$680 Per Person; 2017: \$680 Per Person

**LENGTH:** 1 DAYS (CEU: 0 UNITS)

**CLASS SIZE:** MINIMUM: 20; MAXIMUM: 30

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

# NHI STORE PROVIDES RESOURCES AND REFERENCE MATERIALS

Created based on customer feedback, the NHI Store is an online resource that enables users to order course materials through the NHI Web site. These materials can be used to plan a workshop, support train-the-trainer programs, or gather highway-related reference materials. The NHI Store offers both electronic downloads and hard copy versions.

To search for and purchase NHI course training materials, please visit [www.nhi.fhwa.dot.gov](http://www.nhi.fhwa.dot.gov). Easy directions are provided for ordering and payment; special instructions are provided for FHWA employees.

If you are unable to find the training materials you need, please contact us at [nhitraining@dot.gov](mailto:nhitraining@dot.gov).

**The following pages list all materials available for purchase at the time this catalog was published. For the most up-to-date listing, visit the NHI Store at [www.nhi.fhwa.dot.gov](http://www.nhi.fhwa.dot.gov). Credit card payment is accepted.**

## LEGEND

**PW - Participant Workbook**

**RM - Reference Manual**

**PP - PowerPoint Presentation**

**OM - Other Materials**

**EF - Electronic File**

Course Number	Material Name	Format	Type	Price
130053	Bridge Inspector's Reference Manual-Compact Disc (November 2015)	Hard Copy	RM	\$20.00
130053A	Bridge Inspection Refresher Training (August 2014)	Hard Copy	PW	\$70.00
130053A	Bridge Inspector's Reference Manual-Compact Disc (November 2015)	Hard Copy	RM	\$20.00
130054	Bridge Inspector's Reference Manual-Compact Disc (November 2015)	Hard Copy	RM	\$20.00
130054	Engineering Concepts For Bridge Inspectors (September 2011)	Hard Copy	PW	\$40.00
130055	Bridge Inspector's Reference Manual-Compact Disc (November 2015)	Hard Copy	RM	\$20.00
130055	Safety Inspection of In-Service Bridges-Vol 1 (04/2016)	Hard Copy	PW	\$30.00
130055	Safety Inspection of In-Service Bridges-Vol 2 (04/2016)	Hard Copy	PW	\$30.00
130078	Fracture Critical Inspection Techniques for Steel Bridges (08/2016)	Hard Copy	PW	\$50.00
130081B	(130081) Load and Resistance Factor Design (LRFD) for Highway Bridge Superstructures (April 2007)	Hard Copy	PW	\$50.00
130081B	Handbook of Retrofit Options for Bridges Vulnerable to Coastal Storms (May 2008)	Hard Copy	OM	\$40.00
130081B	Load and Resistance Factor Design (LRFD) For Highway Bridge Superstructures-Examples (April 2007)	Hard Copy	OM	\$40.00
130081B	Load and Resistance Factor Design (LRFD) For Highway Bridge Superstructures-SEC No. 1 (April 2007)	Hard Copy	RM	\$100.00
130087	Guidelines For The Installation, Inspection, Maintenance And Repair Of Structural Supports For Highw	Hard Copy	OM	\$50.00
130087	Inspection And Maintenance Of Ancillary Highway Structures-(March 2005)	Hard Copy	PW	\$50.00
130088	Bridge Construction Inspection - Participant Workbook Volume 1 (March 2015)	Hard Copy	PW	\$50.00

Course Number	Material Name	Format	Type	Price
130088	Bridge Construction Inspection - Participant Workbook Volume 2 (March 2015)	Hard Copy	PW	\$40.00
130091	Bridge Inspector's Reference Manual-Compact Disc (November 2015)	Hard Copy	RM	\$20.00
130091	Underwater Bridge Inspection (January 2010)	Hard Copy	PW	\$40.00
130091	Underwater Inspection of Bridges (June 2010)	Hard Copy	RM	\$40.00
130091B	Underwater Bridge Repair (December 2009)	Hard Copy	RM	\$40.00
130091B	Underwater Bridge Repair, Rehabilitation, and Countermeasures (December 2009)	Hard Copy	PW	\$30.00
130092	Fundamentals of LRFR and Applications of LRFR for Bridge Superstructures (September 2013)	Hard Copy	PW	\$40.00
130092A	Load and Resistance Factor Rating for Highway Bridges (September 2013)	Hard Copy	PW	\$40.00
130092B	Fundamentals of LRFR and Applications of LRFR for Bridge Superstructures (September 2013)	Hard Copy	PW	\$40.00
130093	LRFD Seismic Analysis and Design of Bridges (July 2013)	Hard Copy	PW	\$50.00
130093	LRFD Seismic Analysis and Design of Bridges (October 2014)	Hard Copy	RM	\$50.00
130093	LRFD Seismic Analysis and Design of Bridges-Design Examples (July 2014)	Hard Copy	OM	\$50.00
130093A	LRFD Seismic Analysis and Design of Bridges-Design Examples (July 2014)	Hard Copy	OM	\$50.00
130095	LRFD and Analysis of Curved Steel Highway Bridges (February 2011)	Hard Copy	PW	\$70.00
130095	LRFD and Analysis of Curved Steel Highway Bridges (February 2011)-Compact Disc	Hard Copy	RM	\$20.00
130095A	LRFD and Analysis of Curved Steel Highway Bridges (February 2011)-Compact Disc	Hard Copy	RM	\$20.00
130095B	LRFD and Analysis of Curved Steel Highway Bridges (February 2011)-Compact Disc	Hard Copy	RM	\$20.00
130096	Design Criteria for Arch and Cable Stayed Signature Bridges (February 2012)	Hard Copy	RM	\$70.00
130096	Design Criteria for Arch and Cable Stayed Signature Bridges (February 2012)	Electronic Copy	RM	\$20.00
130096	Design Criteria for Arch and Cable Stayed Signature Bridges (March 2013)	Hard Copy	PW	\$40.00
130102	Engineering for Structural Stability in Bridge Construction (04/2015)	Hard Copy	RM	\$50.00
130102A	Engineering for Structural Stability in Bridge Construction (04/2015)	Hard Copy	RM	\$50.00
131050	Asphalt Pavement In-Place Recycling Techniques (March 2013)	Hard Copy	PW	\$50.00
132010B	Design and Construction of Driven Pile Foundations-RM/DE Set (09/2016) NHI Store Only	Hard Copy	OM	\$80.00
132012	Soils And Foundations Workshop - Reference Manual Volume 1 (December 2006)	Hard Copy	RM	\$40.00
132012	Soils And Foundations Workshop - Reference Manual Volume 2 (December 2006)	Hard Copy	RM	\$40.00
132013	Geosynthetics Engineering Workshop (RM)	Hard Copy	RM	\$40.00

Course Number	Material Name	Format	Type	Price
132013A	Geosynthetics Engineering Workshop	Hard Copy	RM	\$40.00
132013B	Geosynthetics Engineering Workshop	Hard Copy	RM	\$40.00
132013C	Geosynthetics Engineering Workshop	Hard Copy	RM	\$40.00
132013D	Geosynthetics Engineering Workshop	Hard Copy	RM	\$40.00
132014	Drilled Shafts: Construction Procedures and LRFD Design Methods (May 2010)	Hard Copy	RM	\$50.00
132033	Soil Slope and Embankment Design (September 2005)	Hard Copy	RM	\$40.00
132035	Rock Slopes - Module 5 - Reference Manual	Hard Copy	RM	\$50.00
132035	Rock Slopes - Module 5 - Student Exercises (August 1999)	Hard Copy	OM	\$50.00
132036	Earth Retaining Structures (RM)	Hard Copy	RM	\$50.00
132036	Soil Nail Walls Reference Manual-GEC 7 (February 2015)	Hard Copy	RM	\$40.00
132037	Shallow Foundations - Module 7 - Reference Manual	Hard Copy	RM	\$50.00
132037	Shallow Foundations (April 2012)	Hard Copy	PW	\$40.00
132040	Geotechnical Aspects of Pavements (June 2010)	Hard Copy	RM	\$40.00
132041	Geotechnical Instrumentation - Module 11 - Reference Manual	Hard Copy	RM	\$50.00
132042	Corrosion/Degradation of Soil Reinforcements for MSE/RSS (November 2009)	Hard Copy	RM	\$40.00
132042	Design of Mechanically Stabilized Earth Walls and Reinforced Soil Slopes-Vol 1 (March 2012)	Hard Copy	RM	\$40.00
132042	Design of Mechanically Stabilized Earth Walls and Reinforced Soil Slopes-Vol 2 (March 2012)	Hard Copy	RM	\$40.00
132043	Design of Mechanically Stabilized Earth Walls and Reinforced Soil Slopes-Vol 1 (March 2012)	Hard Copy	RM	\$40.00
132043	Design of Mechanically Stabilized Earth Walls and Reinforced Soil Slopes-Vol 2 (March 2012)	Hard Copy	RM	\$40.00
132069	Driven Pile Foundation Inspection - Participant Workbook (July 2006)	Hard Copy	PW	\$50.00
132069	Plan Set Handout Driven Pile Foundation Inspection Course (October 2002)	Hard Copy	OM	\$60.00
132070	Drilled Shaft Foundation Inspection - Participant Workbook (December 2002)	Hard Copy	PW	\$50.00
132070	Drilled Shaft Inspector's Course - Plan Set Handout	Hard Copy	OM	\$50.00
132070B	Drilled Shaft Foundation Inspection - Participant Workbook (December 2002)	Hard Copy	PW	\$50.00
132070B	Drilled Shaft Inspector's Course - Plan Set Handout	Hard Copy	OM	\$50.00
132078	Micropile Design and Construction Reference Manual (December 2005)	Hard Copy	RM	\$30.00
132081	Highway Slope Maintenance and Slide Restoration -- Participant Workbook	Hard Copy	PW	\$50.00
132081	Highway Slope Maintenance and Slide Restoration -- Reference Manual	Hard Copy	RM	\$50.00
132082	LRFD for Highway Bridge Substructures and Earth Retaining Structures (Feb 2012)	Hard Copy	RM	\$50.00

Course Number	Material Name	Format	Type	Price
132082	LFRD for Highway Bridge Substructures and Earth Retaining Structures (Feb 2014)	Hard Copy	PW	\$50.00
132083	Implementation of LFRD Geotechnical Design for Bridge Foundations (February 2011)	Hard Copy	RM	\$20.00
132094	LFRD Seismic Analysis and Design of Transportation Structures, Features and Foundations (Feb 2012)	Hard Copy	PW	\$50.00
132094	LFRD Seismic Analysis and Design of Transportation Structures, Features and Foundations (Feb 2012)	Hard Copy	RM	\$75.00
132094	LFRD Seismic Analysis and Design of Transportation Structures,...Design Examples (April 2012)	Hard Copy	OM	\$75.00
132094A	LFRD Seismic Analysis and Design of Transportation Structures, Features and Foundations (Feb 2012)	Hard Copy	RM	\$75.00
132094A	LFRD Seismic Analysis and Design of Transportation Structures,...Design Examples (April 2012)	Hard Copy	OM	\$75.00
132094B	LFRD Seismic Analysis and Design of Transportation Structures, Features and Foundations(August 2011)	Hard Copy	PW	\$50.00
132094B	LFRD Seismic Analysis and Design of Transportation Structures, Features and Foundations(August 2011)	Hard Copy	RM	\$75.00
132094B	LFRD Seismic Analysis and Design of Transportation Structures,...Design Examples (April 2012)	Hard Copy	OM	\$75.00
133075	Freeway Management And Operations - Participant Workbook (August 2005)	Hard Copy	PW	\$50.00
133075A	Freeway Management And Operations - Participant Workbook (August 2005)	Hard Copy	PW	\$50.00
133078	Access Management Location and Design (February 2007)	Hard Copy	PW	\$50.00
133099	Managing Travel For Planned Events - CD (September 2005)	Hard Copy	OM	\$20.00
133099	Managing Travel For Planned Events - Participant Workbook (September 2005)	Hard Copy	PW	\$50.00
133099A	Managing Travel for Planned Special Events	Hard Copy	PW	\$50.00
133115	Advanced Work Zone Management and Design (August 2007)	Hard Copy	PW	\$20.00
133115	Advanced Work Zone Management and Design (August 2007)	Hard Copy	RM	\$40.00
133120	WZ Traffic Analysis Applications and Decision Framework-PW	Hard Copy	PW	\$50.00
133121	Traffic Signal Design and Operations (Dec 2011)	Hard Copy	PW	\$50.00
133122	Traffic Signal Timing Concepts (May 2014)	Hard Copy	PW	\$50.00
133123	Systems Engineering for Signal Systems Including Adaptive Control	Hard Copy	PW	\$50.00
133125	Successful Traffic Signal Management: The Basic Service Approach (May 2014)	Hard Copy	PW	\$50.00
134005	VALUE ENGINEERING (February 2013)	Hard Copy	PW	\$30.00
134005A	VALUE ENGINEERING (AUGUST 2010)	Hard Copy	PW	\$30.00
134005B	VALUE ENGINEERING (February 2013)	Hard Copy	PW	\$30.00
134005C	VALUE ENGINEERING (February 2013)	Hard Copy	PW	\$30.00

Course Number	Material Name	Format	Type	Price
134037A	Managing Highway Contract Claims: Analysis And Avoidance - Participant Notes (September 2004)	Hard Copy	PW	\$50.00
134062A	Participant Workbook Volume I (November 2007)	Hard Copy	PW	\$40.00
134062A	Participant Workbook Volume II (November 2007)	Hard Copy	PW	\$40.00
134064	Transportation Construction Quality Assurance (June 2011)-1.5 Day Version	Hard Copy	PW	\$50.00
134064	Transportation Construction Quality Assurance Reference Manual	Hard Copy	RM	\$50.00
134064	Transportation Construction Quality Assurance Reference Manual	Electronic Copy	RM	Free
134064A	Transportation Construction Quality Assurance	Electronic Copy	RM	Free
134080	Environmental Factors in Construction and Maintenance (Independant Study Guide)	Hard Copy	PW	\$20.00
135010	River Engineering For Highway Encroachments: Highways In The River Environment (December 2001)	Hard Copy	OM	\$50.00
135027	Errata for HEC-22 dtd September 2009 (Included in September 2013 Revision)	Electronic Copy	OM	Free
135027	Urban Drainage Design Manual, HEC-22 (Revised September 2013)	Hard Copy	RM	\$50.00
135027A	Highway Stormwater Pump Station Design (HEC-24)	Hard Copy	OM	\$40.00
135028	Highway Stormwater Pump Station Design HEC-24	Hard Copy	OM	\$50.00
135041	One-Dimensional Modeling of River Encroachments with HEC-RAS (Mar 2016)	Hard Copy	PW	\$30.00
135046	Evaluating Scour At Bridges, 5th Edition (HEC-18) (April 2013)	Hard Copy	OM	\$50.00
135046	Stream Instability, Bridge Scour, and Countermeasures: A Field Guide for Bridge Inspectors (Feb2009)	Hard Copy	RM	\$20.00
135046	Stream Stability at Highway Structures, 4th Edition (HEC-20)	Hard Copy	OM	\$50.00
135047	Stream Instability, Bridge Scour, and Countermeasures: A Field Guide for Bridge Inspectors (Feb2009)	Hard Copy	RM	\$20.00
135048	Countermeasure Design for Bridge Scour and Stream Instability	Hard Copy	OM	\$30.00
135048	HEC-23 Bridge Scour And Stream Instability Countermeasures-Vol I	Hard Copy	RM	\$20.00
135048	HEC-23 Bridge Scour And Stream Instability Countermeasures-Vol II	Hard Copy	RM	\$30.00
135048	Stream Instability, Bridge Scour, and Countermeasures: A Field Guide for Bridge Inspectors (Feb2009)	Hard Copy	RM	\$20.00
135056	Culvert Design for Aquatic Organism Passage: HEC-26, First Ed. (October 2010)	Hard Copy	OM	\$50.00
135056	Hydraulic Design of Highway Culverts-HDS 5 (April 2012)	Hard Copy	RM	\$50.00
135065	Introduction to Highway Hydraulics-(June 2008)	Hard Copy	OM	\$50.00
135065	Introduction to Highway Hydraulics-HDS No. 4 (June 2008)	Hard Copy	OM	\$50.00
135067	Highway Hydrology, Hydraulic Design Series No. 2, Second Edition - (October 2002)	Hard Copy	OM	\$50.00
135082	HEC-25 ( Volume 2)-Highways in the Coastal Environment: Assessing Exposure to Extreme Events	Hard Copy	RM	\$30.00

Course Number	Material Name	Format	Type	Price
135082	Highways in the Coastal Environment (HEC-25)	Hard Copy	RM	\$40.00
135085	PLAN OF ACTION (POA) FOR SCOUR CRITICAL BRIDGES - CD (MAY 2007)	Hard Copy	PP	Free
135090	Hydraulic Design of Safe Bridges-HDS-7 (April 2012)	Hard Copy	RM	\$50.00
136065	RISK MANAGEMENT (JULY 2013)	Hard Copy	PW	\$30.00
136106	TRANSPORTATION ASSET MANAGEMENT (June 2013)	Hard Copy	PW	\$50.00
136106A	Introduction to Transportation Asset Management (June 2013)	Hard Copy	PW	\$50.00
137046	NHI Using IDAS Data	Electronic Copy	EF	Free
141043	Appraisal for Federal-Aid Highway Programs (May 2013)	Hard Copy	PW	\$30.00
141050	Introduction to Federal-Aid Right-of-Way Requirements for Local Public Agencies (August 2010)	Hard Copy	PW	\$50.00
142005	NEPA And The Transportation Decision Making Process (11/2015)	Hard Copy	PW	\$50.00
142042	Fundamentals Of Title VI / Environmental Justice PW (06/2016)	Hard Copy	PW	\$50.00
142046	Bicycle Facility Design (July 2013)	Hard Copy	PW	\$50.00
142046	Bicycle Facility Design (July 2013)	Electronic Copy	PP	\$50.00
142047	Water Quality Management of Highway Runoff PW/RM	Hard Copy	PW	\$50.00
142049	Beyond Compliance: Historic Preservation In Transportation Project Development - Exercise 4 (July 07)	Hard Copy	OM	\$20.00
142049	Beyond Compliance: Historic Preservation In Transportation Project Development (July 2012)	Hard Copy	PW	\$50.00
142049	Beyond Compliance: Historic Preservation In Transportation Project Development - Exercise 3(July 07)	Hard Copy	OM	\$20.00
142049	Beyond Compliance: Historic Preservation In Transportation Project Development -Exercise 2 (July 07)	Hard Copy	OM	\$20.00
142054	Design And Implementation Of Erosion And Sediment Control - Participant Workbook (December 2006)	Hard Copy	PW	\$30.00
142054	Design And Implementation Of Erosion And Sediment Control - Reference Manual (December 2006)	Hard Copy	RM	\$30.00
142055	Advanced Seminar on Transportation Project Development: Navigating the NEPA Maze (December 2008)	Hard Copy	PW	\$40.00
152054	INTRODUCTION TO URBAN TRAVEL DEMAND FORECASTING (February 2012)	Hard Copy	PW	\$50.00
231028	Using the AASHTO Audit Guide for the Procurement and Administration of A/E Contracts (Feb 2012)	Hard Copy	PW	\$35.00
231029	Using AASHTO Audit Guide for Development of A/E Consultant Indirect Cost Rates (Feb 2012)	Hard Copy	PW	\$50.00
231030	Using AASHTO Audit Guide for Auditing and Oversight of A/E Consultant Indirect Cost Rate (Feb2012)	Hard Copy	PW	\$50.00
310110	Federal-Aid Highways-101 (April 2014)	Hard Copy	PW	\$50.00
380005	Railroad-Highway Grade Crossing Improvement Program (09/2016)	Hard Copy	PW	\$50.00

Course Number	Material Name	Format	Type	Price
380069	Desktop Reference for Crash Reduction Factors (September 2007)	Electronic Copy	OM	Free
380069	FHWA Road Safety Audit Guidelines (June 2006)	Electronic Copy	OM	Free
380069	Road Safety Audits/Assesments Participant Workbook (August 2008)	Hard Copy	PW	\$50.00
380069	Road Safety Audits: Case Studies (December 2006)	Electronic Copy	OM	Free
380069	Toolbox of Countermeasures & Their Potential Effectiveness for Intersection Crashes (September 2007)	Electronic Copy	OM	Free
380069	Toolbox of Countermeasures & Their Potential Effectiveness for Pedestrian Crashes (September 2007)	Electronic Copy	OM	Free
380069	Toolbox of Countermeasures & Their Potential Effectiveness for Roadway Departure Crashes (Sept 2007)	Electronic Copy	OM	Free
380069	Traffic Signals (September 2007)	Electronic Copy	OM	Free
380071	Interactive Highway Safety Design Model (December 2013)	Hard Copy	PW	\$50.00
380075	Desktop Reference for Crash Reduction Factors (September 2007)	Electronic Copy	OM	Free
380075	New Approaches To Highway Safety Analysis - Reference Manual (February 2006)	Hard Copy	RM	\$50.00
380075	New Approaches to Highway Safety Analysis Participant Workbook (April 2011)	Hard Copy	PW	\$50.00
380075	Toolbox of Countermeasures & Their Potential Effectives for Intersection Crashes (September 2007)	Electronic Copy	OM	Free
380075	Toolbox of Countermeasures & Their Potential Effectives for Pedestrian Crashes (September 2007)	Electronic Copy	OM	Free
380075	Toolbox of Countermeasures & Their Potential Effectives for Roadway Departure Crashes (Sept 2007)	Electronic Copy	OM	Free
380075	Traffic Signals (September 2007)	Electronic Copy	OM	Free
380076	Desktop Reference for Crash Reduction Factors (September 2007)	Electronic Copy	OM	Free
380076	Low Cost Safety Improvements Workshop - Participant Workbook (February 2010)	Hard Copy	PW	\$50.00
380076	Toolbox of Countermeasures & Their Potential Effectiveness for Intersection Crashes (September 2007)	Electronic Copy	OM	Free
380076	Toolbox of Countermeasures & Their Potential Effectiveness for Pedestrian Crashes (September 2007)	Electronic Copy	OM	Free
380076	Toolbox of Countermeasures & Their Potential Effectiveness for Roadway Departure Crashes (Sept 2007)	Electronic Copy	OM	Free
380076	Traffic Signals (September 2007)	Electronic Copy	OM	Free
380077	Desktop Reference for Crash Reduction Factors (September 2007)	Electronic Copy	OM	Free

<b>Course Number</b>	<b>Material Name</b>	<b>Format</b>	<b>Type</b>	<b>Price</b>
<b>380077</b>	Toolbox of Countermeasures & Their Potential Effectiveness for Intersection Crashes (September 2007)	Electronic Copy	OM	<b>Free</b>
<b>380077</b>	Toolbox of Countermeasures & Their Potential Effectiveness for Pedestrian Crashes (September 2007)	Electronic Copy	OM	<b>Free</b>
<b>380077</b>	Toolbox of Countermeasures & Their Potential Effectiveness for Roadway Departure Crashes (Sept 2007)	Electronic Copy	OM	<b>Free</b>
<b>380077</b>	Traffic Signals (September 2007)	Electronic Copy	OM	<b>Free</b>
<b>380090</b>	Developing a Pedestrian Safety Action Plan Participant Workbook (January 2009)	Hard Copy	PW	<b>\$50.00</b>
<b>380095</b>	Highway Design: Applying Flexibility & Risk Management (February 2016)	Hard Copy	PW	<b>\$50.00</b>
<b>380100</b>	Interactive Highway Safety Design Model - Web-based course-Participant Workbook	Electronic Copy	PW	<b>\$50.00</b>
<b>N/A</b>	FHWA-NHI-132037 Shallow Foundations	Hard Copy	RM	<b>\$50.00</b>

# NATIONAL HIGHWAY INSTITUTE (NHI)

Division of FHWA Office of Technical Services

1310 N Courthouse Road, Suite 300  
Arlington, VA 22201

Phone: 703-235-0500 or Toll Free 877-558-6873

Fax: 703-235-0593

## MAIN CONTACTS

### Questions About?

NHI Training  
NHI Web site  
Instructors  
Materials

### E-mail

nhitraining@dot.gov  
nhiwebmaster@dot.gov  
nhiinstructorliaison@dot.gov  
nhimaterials@dot.gov

### Telephone

703-235-0534  
703-235-0556  
703-235-0952  
703-235-0552

## SUBJECT AREA CONTACTS

### Questions About?

Asset Management  
Business, Public Administration & Quality  
Communications  
Construction and Maintenance  
Design and Traffic Operations  
Environment  
Freight and Transportation Logistics  
Geotechnical  
Highway Safety  
Hydraulics  
Intelligent Transport Systems (ITS)  
Pavement and Materials  
Real Estate  
Structures  
Transportation Planning

### Contact

Tom Elliott  
Tom Elliott  
Carol Keenan  
Tom Elliott  
Carol Keenan  
Heather Shelsta  
Carol Keenan  
Heather Shelsta  
Tom Elliott  
Carol Keenan  
Carol Keenan  
Tom Elliott  
Heather Shelsta  
Louisa Ward  
Heather Shelsta

### Name

Briggs, Valerie  
Elliott, Tom  
Keenan, Carol  
Shelsta, Heather  
Ward, Louisa

### Title

Director  
Training Program Manager  
Training Program Manager  
Training Program Manager  
Training Program Manager

### Email

valerie.briggs@dot.gov  
thomas.elliott@dot.gov  
carol.keenan@dot.gov  
heather.shelsta@dot.gov  
louisa.ward@dot.gov

**NATIONAL HIGHWAY INSTITUTE**  
1310 N. Courthouse Road, Suite 300  
Arlington, VA 22201

(703) 235-0500  
(877) 558-6873  
Fax (703) 235-0593

[www.nhi.fhwa.dot.gov](http://www.nhi.fhwa.dot.gov)