

# Learning in Progress

## April 2010



*Improving the Performance of the Transportation Industry through Training*

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### Quick Links

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

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

[NHIMarketing@dot.gov](mailto:NHIMarketing@dot.gov)

### New Online Training Registration Process

**Our new online training registration process is here! Now registering for Web-based and Web-conference Trainings is easier and more user-friendly.**

The new "My Training" single login feature simplifies launching Web-based and Web-conference Trainings. "My Training" replaces "My Downloads" and allows you to:

- Directly launch Web-based and Web-conference Trainings on the NHI site
- View your course history for current and past Web-based and Web-conference Trainings
- Easily obtain personalized certificates for successfully completed Web-based and Web-conference Trainings
- View printable, unofficial transcripts for Web-based and Web-conference Trainings
- Request an official transcript from the NHI Registrar
- View and download electronic materials ordered from the NHI Store

**For additional information on the new "My Training" feature, visit the [NHI Web site](#). You can also view a [tutorial](#) that will guide you through this new registration process.**

We thank you for your business and look forward to making your online training process more enjoyable.

### New and Updated Courses

We've got two great new Instructor-led Trainings. 380095 is a new classroom-based course, while 131106 is an updated course.

[Geometric Design: Applying Flexibility and Risk Management \(380095\)](#)

## [Transportation Asset Management \(131106\)](#)

Our updated Web-based Pavement Preservation Treatment Series (131110A-K) presents information on different preservation treatments available, materials, and how they should be selected and applied, so agencies can make informed decisions when determining which treatments best fit their pavement preservation needs. The trainings utilize information from Pavement Preservation Treatment Construction Guide (PPTCG), a resource for agency and industry pavement preservation practitioners.

To become more informed about any one of the pavement preservation treatments discussed in the PPTCG, or to find out how to select the appropriate treatment for your agency, you can take one of the stand-alone trainings offered below:

[Introduction to Pavement Preservation \(131110A\)](#)

[Materials \(131110B\)](#)

[Crack Sealing, Crack Filling and Joint Sealing of Flexible & Rigid Pavements \(131110C\)](#)

[Localized Pavement Repairs \(131110D\)](#)

[Chip Seals \(131110E\)](#)

[Fog Seals \(131110F\)](#)

[Slurry Seals \(131110G\)](#)

[Micro-surfacing Projects \(131110H\)](#)

[Thin Functional Hot-Mix Asphalt Overlay Projects \(131110I\)](#)

[Ultra Thin, Hot-Mixed, Bonded Wearing Course Projects \(131110J\)](#)

[Selecting a Pavement Presentation Treatment \(131110K\)](#)

These trainings can also be accessed as an entire Web-based curriculum and completed for Continuing Education Credits. To do so, register for [131110 on the NHI Web site](#).

For the latest listing of all NHI courses, visit the [NHI Web site](#).

## NHI Partners with ASCE

The FHWA geotechnical program, the Office of Technical Services (OTS), and NHI recently participated in a ceremony to finalize a partnering agreement with the American Society of Civil Engineers (ASCE). The partnering agreement allows NHI and ASCE to combine resources for offering geotechnical engineering training courses focused on transportation facilities through the Geo-Institute of the ASCE (G-I).



Amy Lucero, Director of the Office of Technical Services and John Casazza, ASCE Managing

Director for Continuing Education

The goals of the cooperative partnership are to:

- Establish a framework for coordinated delivery of NHI geotechnical engineering training on multiple platforms through the G-I
- Promote a coordinated effort to build the professional capacity of practitioners designing, constructing, and inspecting foundations and geotechnical features for roadways, bridges, and other transportation structures
- Advance the common mission of the FHWA and G-I: providing training and education for practicing engineers, technicians, contractors, and other geo-professionals

We will soon offer selected courses from our Geotechnical Curriculum through the ASCE Continuing Education Department. We are excited about this partnership and look forward to educating a larger portion of the engineering community.

### Upcoming Web Conferences

This year, the **NHI Real Solutions Seminar Series** has hosted presentations on the following topics: Assessing the Impact of Local Agency Traffic Safety Training Using Ethnographic Techniques (hosted live from the annual TRB conference in January), Best Practices on Bridge Preservation (January), Bridge Life Cycle Benefit and Cost Analysis: Fundamentals and Application (February), and SCAN 09-05 Best Practices for Roadway Tunnel Design, Construction and Maintenance (March).

The **NHI Innovations** series continued with the seminars Accelerating Project Delivery, Innovative Contracting (February) and The Use of Recycled Materials in Roadway Construction (March).

Did you know you can watch past seminars anytime? Check out the NHI Web site for recordings of previous seminars or to register for future [NHI Real Solutions Seminars](#) or [NHI Innovations](#) seminars.

#### *Upcoming Real Solutions Seminars:*

- April 22, 2010, 1 - 3 pm EST, VDOT Design Build Project: Gilberts Corner
- May 27, 2010, 1 - 3 pm EST, Connection/Overlap Between Bridge Inspection and Construction Inspection: The Massachusetts Highway Story

#### *Upcoming NHI Innovations:*

- April 15, 2010, 2:30 - 4 pm EST, High Friction Surface Treatments to Reduce Crashes at Curves
- May 20, 2010, 2:30 - 4 pm EST, Continuous Flight Auger Piles
- June 17, 2010, 2:30 - 4 pm EST, Culvert Repair Techniques

Want to be notified when registration opens for any of these free Web conferences? E-mail [nhimarketing@dot.gov](mailto:nhimarketing@dot.gov).

**New Course Spotlight: Geometric Design: Applying Flexibility and Risk Management**

## (Instructor-led Training, 380095)

Highway designers often face complex trade-offs when developing projects. A "quality" design may be thought of as satisfying the needs of a wide variety of users while balancing the often competing interests of cost, safety, mobility, social, and environmental impacts. Applying flexibility and risk management in highway design requires more than simply assembling geometric elements from the available tables, charts, and equations of design criteria. This course provides participants with knowledge of the functional basis of critical design criteria to enable informed decisions when applying engineering judgment and flexibility. The course exercises and case studies provide practical applications of current knowledge from research and operational experience of human factors and safety effects for various design elements.

This is a moderate to advanced level course intended for highway design practitioners that have at least a basic understanding of geometric design criteria. The course includes facilitated discussions and questioning with practical work problems and exercises based on actual case studies.

**Length:** 2-day

**CEU:** 1.2 Units

**Fee:** \$350 per participant

To learn more about this training and to request to host, visit the [NHI Web site](#).

## Transportation in the News

### **President Signs Bill Providing 9-Month Extension, \$19.5 Billion for Highway Trust Fund**

*AASHTO Journal*

3/19/2010

President Barack Obama signed into law Thursday morning a bill known as the "HIRE Act" containing several transportation provisions including an extension of authorization for federal highway and transit programs through Dec. 31 as well as providing \$19.5 billion to the Highway Trust Fund.

[See full article](#)

### **Amazing: Highway traffic death rate falls to lowest level since 1954**

By Chris Woodyard

*USA Today*

3/11/2010

The government announced today that the rate of overall traffic fatalities reported last year reached the lowest level since 1954.

[See full article](#)

### **FHWA Recovery Act Map tells a great story with few words**

*Fastlane: The Official Blog of the U.S. Secretary of Transportation*

3/11/2010

Here's something that is kind of fun and very useful. The web team at our Federal Highway Administration has created an interactive map of the U.S. that shows every single one of our

12,000+ Recovery Act road projects.

[See full article](#)

## Engineering Excellence Awards



Louisa Ward, Training Program Manager for Geotechnical, Structures, and Hydraulics and Dr. Firas I. Sheikh Ibrahim, Team Leader for Infrastructure Inspection & Management

The Federal Highway Administration and the National Highway Institute have been awarded the Engineering Excellence Silver Award by the American Council of Engineering Companies of New York for creating the first national, comprehensive *Technical Manual for the Design and Construction of Road Tunnels*. The manual was developed under the direction of Dr. Firas I. Sheikh Ibrahim, currently with the Office of Infrastructure R&D and formerly a member of the Office of Bridge Technology. To commemorate his work, Dr. Ibrahim attended the Engineering Excellence Awards Black Tie Ceremony on March 27<sup>th</sup>, 2010 and accepted the award on behalf of NHI.

Dr. Ibrahim stated, "We appreciate ACEC's recognition of this landmark effort. The manual exemplifies FHWA and NHI's proactive commitment to ensure that our infrastructure is safe, reliable, and healthy. It is the first U.S. comprehensive manual to standardize state-of-the-art practices for the design and construction of tunnels. Success of this effort was the result of an experienced tunnel development team, the seamless cooperation of several FHWA offices, NHI, and the active engagement of our State partners."

## Courses of Excellence: January - March 2010

Course	Course Title	Training Type	Average
135082	Highways in the Coastal Environment	ILT	4.81
132070	Drilled Shaft Foundation Inspection	ILT	4.80
135067	Practical Highway Hydrology	ILT	4.75
135046	Stream Stability and Scour at Highway Bridges	ILT	4.73
130082B	LRFD for Highway Bridge Substructures and Earth Retaining Structures (4-Day)	ILT	4.68
135048	Countermeasure Design for Bridge Scour and Stream Instability (2.5-Day)	ILT	4.67
310110	Federal-Aid Highways - 101 (State Version)	ILT	4.66
131032	Hot-Mix Asphalt Construction	ILT	4.65

135027	Urban Drainage Design (3-Day)	ILT	4.63
151043	Transportation and Land Use	ILT	4.58
135056	Culvert Design	ILT	4.56
130055	Safety Inspection of In-Service Bridges	ILT	4.52
130092	Fundamentals of LRFR and Applications of LRFR for Bridge Superstructures	ILT	4.51
130092A	Load and Resistance Factor Rating for Highway Bridges	ILT	4.51

## NHI at GeoFlorida 2010

GeoFlorida 2010 was hosted by the Geo-Institute of ASCE in West Palm Beach, Florida from February 20-24. The conference highlighted the latest developments in computational analysis and modeling.

The geotechnical conference allowed us to showcase our programs and course offerings in the exhibit hall, as well as provide expertise during panel discussions. FHWA's Silas Nichols was a panelist for the discussions *AASHTO Design Specifications: What is New Concerning Driven Piles?* and *Application of Ground Improvement Technologies Toward Sustainable Engineering Practices*. As a panelist for the *AASHTO Design Specifications: What is New Concerning Driven Piles?* discussion, Silas talked about the design policy changes regarding driven piles made to the AASHTO manual. In the second panel, *Application of Ground Improvement Technologies Toward Sustainable Engineering Practices*, he discussed the significance of ground improvement technologies through the development of "sustainable" or "green" technology for engineering and construction practices. The discussion emphasized the importance of creating sustainable civil projects.

We are looking forward to participating in the Geo-Institute's next geotechnical conference, Earth Retention, Aug 1-4, in Bellevue, WA.

## TCCC Corner



TCCC (Transportation Curriculum Coordination Council) along with NHI have seen record high enrollments for Web-based trainings: 1,071 TCCC training participants in January and 1,057 participants in February. We are excited to see the March totals!

We now have 50 WBTs available on the [NHI Web site](#) and many new training resources have been added to the [NTTR database](#). Over the next month we will be updating 134081 TCCC Plan Reading and 134072 TCCC Math Module based on your feedback.

Also, we would like to welcome North Dakota and Kansas to our TCCC Training Sharing Program. This program has allowed us to train another 1,500 participants (from October thru December) at the State level who cannot access the NHI Web site.

The TCCC Training Sharing Program along with the NHI Web site has allowed us to reach more than 4,500 participants since October 2009. Keep watching for new and exciting things from TCCC!

### **New Trainings Available**

[131128 TCCC Testing Self Consolidating Concrete](#)

[131130 TCCC Advanced Self Consolidating Concrete](#)

[381001 TCCC Safety Orientation](#)

### **WBTs Coming Soon!**

131129 TCCC HMA Paving Inspection

134105 TCCC Pipe Inspection

134107 TCCC Maintenance Series - Recognizing Roadside Weeds

381002 TCCC Maintenance Series - Safe Use of Hand and Power Tools

381003 TCCC Maintenance Series - Safe Use of Basic Carpentry Tools

381004 TCCC CDL Series - General Knowledge

381005 TCCC CDL Series - Air Brakes

381006 TCCC CDL Series - Pre-Trip Inspection

With new topics being added monthly!

### **Staffing Update**

We are excited to welcome three great new team members: Mallory Minter, Business Analyst; Lilly Pinto, Marketing Coordinator; and Meredith Riddile, Instructional Systems Designer for Geotechnical and Hydraulics courses.

