

FOCUS

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This Way to Bridge Preservation Training

Find the training you need on bridge preservation at a time that's right for you with three new online courses sponsored by the Federal Highway Administration (FHWA).

As State and local transportation agencies face aging bridge inventories, increases in traffic and congestion, limited funding, and rising costs for labor and materials, adopting strategies for bridge preservation has become an important aspect of the overall management of bridge assets. Preservation treatments generally cost much less than major reconstruction and replacement activities.

Offered by SSPC: The Society for Protective Coatings, the free training is designed for State and local transportation agency personnel, contractors, and consultants. "The cours-

es are intended for field personnel who are responsible for performing, managing, and inspecting bridge preservation projects," said Tim Cupples of FHWA.

Each 90-minute course is available online at any time, with no registration required:

- *Safety During Bridge Preservation Activities*—Topics include regulations, hazards and risks, good safety practices, and development of a safety plan. Also covered are work zones and traffic control, personal protective equipment, and daily safety briefings.
- *Coating and Painting Bridge Superstructures*—Featured topics are containment systems, surface preparation, and coatings and application.

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www.fhwa.dot.gov/publications/focus/index.cfm



U.S. Department
of Transportation

**Federal Highway
Administration**



A bridge maintenance crew seals and waterproofs a reinforced concrete bridge deck.

Bridge Preservation, continued from page 1



Three new online courses sponsored by FHWA offer training on bridge preservation.

National Bridge Preservation Partnership Conference 2014

Plan now to attend the National Bridge Preservation Partnership Conference, scheduled for April 21–25, 2014, in Orlando, Florida. Sessions will cover such topics as best practices; new materials, equipment, technologies, and research; and sustainable long-term performance. Participants can also choose from interactive workshops spotlighting bridge preservation tools. Conference sponsors include the American Association of State Highway and Transportation Officials, Transportation Research Board, National Center for Pavement Preservation, and FHWA. For more information, visit www.nbppc2014.org, or contact Anwar Ahmad at FHWA, 202-366-8501 (email: anwar.ahmad@dot.gov).

- *Sealing and Waterproofing Bridge Decks*—The training covers concrete sealing, crack sealing, polymer and asphalt overlays, and hydraulic cement overlays.

Each course also highlights resources for additional information and training.

“This training was the result of a true partnership between volunteers from States, academia, industry, and FHWA,” said Anwar Ahmad of FHWA. “As the target audience for the training are those individuals involved in the execution and delivery of bridge preservation projects, we wanted to partner with industry leaders such as SSPC to host the courses on their Web site and help us reach out to contractors’ staff.”

For more information on launching the training modules, visit www.sspc.org/training/Training-FHWA-Bridge-Preservation or www.fhwa.dot.gov/bridge/preservation/wbt.cfm. Questions about the courses can be sent to Heather Stiner at SSPC, stiner@sspc.org. Information on the training modules is also available by contacting Tim Cupples at FHWA, 202-366-1342 (email: timothy.cupples@dot.gov), or Anwar Ahmad at FHWA, 202-366-8501 (email: anwar.ahmad@dot.gov).

To learn more about bridge preservation, visit www.fhwa.dot.gov/bridge/preservation. This online FHWA toolbox offers information on legislation and policies, bridge management, bridge preservation treatments, and research and development activities. *

Nominate a TIG Technology for 2014

Nominate an innovative, ready-to-use technology for consideration as a 2014 selection by the American Association of State Highway and Transportation Officials (AASHTO) Technology Implementation Group (TIG).

Established by the AASHTO Standing Committee on Highways in 1999, TIG champions technology implementation among State and local agencies and industry partners to improve the Nation's transportation system. Selected technologies have achieved preliminary success in implementation and promise to benefit more States through TIG's

Lead State Team and Peer to Peer deployment model.

Previous TIG technologies have included the Embedded Data Collector, which is a wireless system of gauges that monitors concrete pile installations for bridge foundations. Signals collected by the gauges can be analyzed in real time in the field.

UPlan is a powerful Web-based mapping and

TIG champions technology implementation among State and local agencies and industry partners to improve the Nation's transportation system.

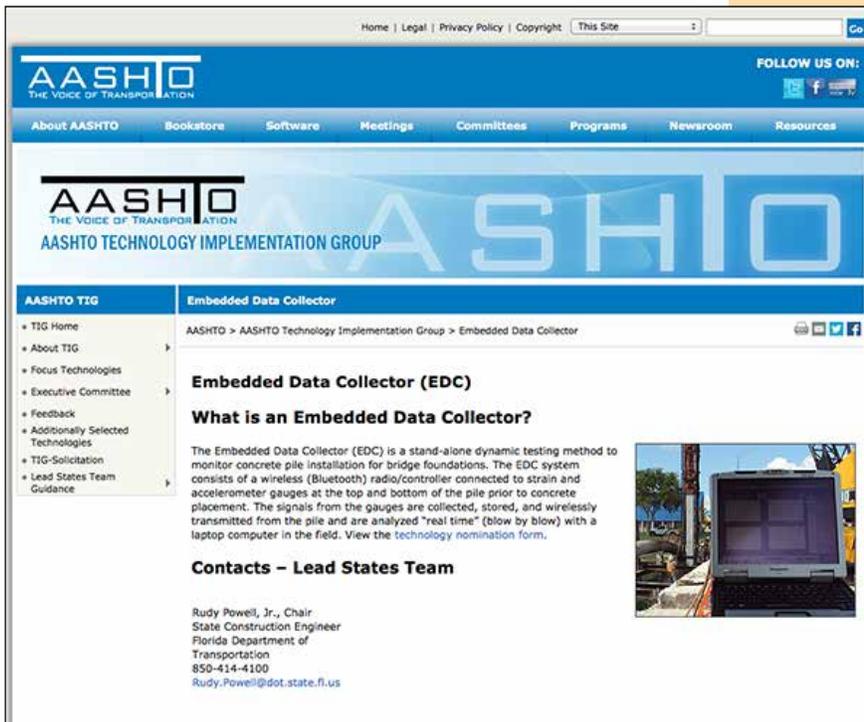
informational tool that can be used for complex planning and project development tasks. The tool allows data sharing among various units within a State transportation agency. Agencies can also select data to share with the public.

The Utility Relocation Electronic Document Management System has improved communications within agencies when managing utility relocation projects, as well as with municipal and utility agency partners.

Agencies have also benefited from **PaveSuite**, a collection of four new pavement evaluation technologies. These include the Enhanced Pavement Test Data Analysis Methodology, which is an alternative method of analyzing data from nondestructive testing. Another featured technology is the Automated Faulting Method. This software is used with high-speed inertial profilers to detect joints and estimate faulting in jointed concrete pavement.

To learn more about these and other TIG technologies, visit <http://tig.transportation.org/Pages/default.aspx>.

To submit a technology for consideration, visit http://tig.transportation.org/Pages/TIG-Solicitation_Overview.aspx. The deadline for submissions is January 15, 2014. For more information, contact Greta Smith at AASHTO, 202-624-5815 (email: gsmith@aaashto.org). *



Previous TIG technologies include the Embedded Data Collector, which uses wireless gauges to monitor concrete pile installations for bridge foundations.

FHWA to Introduce New Highway Materials Engineering Course

Get ready for a new Highway Materials Engineering course.

Presented by the Federal Highway Administration (FHWA) over the last 20 years as the Highway Materials Engineering Academy, the course offered an opportunity for transportation agency personnel to gain the knowledge needed to develop materials specifications and guidance; make effective project acceptance decisions; and design, construct, and maintain assets to achieve a long service life. FHWA is now extensively revising the course to update the technical content and add new content areas.

“The new training will meet the changing needs of highway agencies by offering the best practices in highway materials engineering, while using today’s diverse platforms for adult learning,” said Michael Rafalowski of FHWA.

Highway Materials Engineering will feature an orientation session and eight modules:

- Quality assurance.
- Soils and foundations.
- Steel, welding, and coatings.
- Aggregates for transportation construction.
- *Mechanistic-Empirical Pavement Design Guide*.
- Asphalt materials and paving.
- Portland cement concrete.
- Evaluating recycled materials for beneficial uses in transportation.



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FHWA’s new Highway Materials Engineering Course will meet the changing needs of highway agencies by offering updated technical content and best practices.

Approximately 6 weeks of training will be delivered through a combination of instructor-led, classroom sessions; Web-based training; independent study; Web conferences; and laboratory and field experiences. Instructor-led training will account for 4 weeks of the total. The course will be held at the American Association of State Highway and Transportation Officials Materials Reference Library in Frederick, Maryland.

Working with a team of national experts, Harpers Enterprise Incorporated

is redeveloping the course under an FHWA contract. The pilot session for the revised course will be held in the first quarter of 2015. No tuition will be charged for the pilot course. FHWA will announce the schedule for accepting applications for the pilot session in summer 2014.

For more information on the Highway Materials Engineering Course, contact Michael Rafalowski at FHWA, 202-366-1571 (email: michael.rafalowski@dot.gov). *

SHRP2 Implementation Assistance: A Preview of Round 3



The Federal Highway Administration (FHWA) and American Association of State Highway and Transportation Officials (AASHTO) will begin accepting applications January 17, 2014, for the third round of the second Strategic Highway Research Program (SHRP2) Implementation Assistance Program. Applications will be accepted until February 14, 2014. Round 3 recipients will be announced in March.

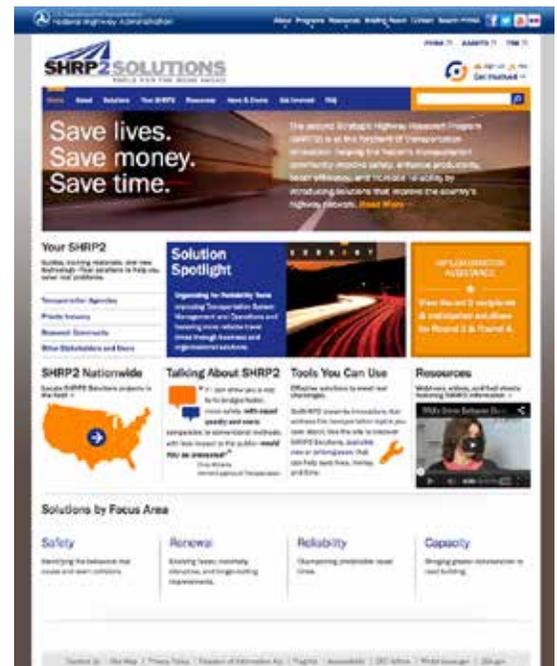
More than 100 research projects conducted under SHRP2 have resulted in an array of advanced tools and technologies for improving highway safety, renewal, reliability, and capacity. These tools and technologies are now being released as SHRP2 Solutions products. Funding awarded through the Implementation Assistance Program helps State transportation agencies, metropolitan planning organizations, tribal agencies, local agencies, and others as they implement new products.

Round 3 products are:

- *Freight Demand Modeling and Data Improvement*—This organizational approach will help agencies in achieving improved freight data sets and freight modeling practices. FHWA and AASHTO will preview the product in a free Webinar on December 16, 2013, at 2:30 p.m. eastern standard time (EST). To register, visit www.nhi.fhwa.dot.gov/resources/webconference/web_conf_learner_reg.aspx?webconfid=26933.
- *GeoTech Tools*—These tools offer more than 40 geotechnical solutions to common embankment, cut slope, structure and foundation interface, and pavement foundation issues. To learn more, plan to attend the prod-

uct Webinar on December 16, 2013, at noon EST. Registration is available at www.nhi.fhwa.dot.gov/resources/webconference/web_conf_learner_reg.aspx?webconfid=26934.

- *Precast Concrete Pavement*—New tools for using precast concrete pavement systems will help agencies reduce the duration of construction closures on critical roadways. The tools will be highlighted in a Webinar to be held December 12, 2013, at 2 p.m. EST. To register, visit www.nhi.fhwa.dot.gov/resources/webconference/web_conf_learner_reg.aspx?webconfid=26935.
- *Identifying and Managing Utility Conflicts*—Agencies will find strategies for improving cooperation among highway agencies and utility agencies and speeding up project completion. To register for a product Webinar to be held December 13, 2013, at 2 p.m. EST, visit www.nhi.fhwa.dot.gov/resources/webconference/web_conf_learner_reg.aspx?webconfid=26927.
- *Pavement Renewal Solutions*—New guidelines for using existing pavements in rapid construction will help extend pavement life and save money. The guidelines will be previewed in a Webinar scheduled for December 17, 2013, at 2 p.m. EST. To register, visit www.nhi.fhwa.dot.gov/resources/webconference/web_conf_learner_reg.aspx?webconfid=26926.



To learn more about SHRP2 Solutions products, visit www.fhwa.dot.gov/goshrp2.

Eighteen States were awarded implementation and technical assistance in October 2013 through Round 2 of the Implementation Assistance Program. For more information on the Round 2 recipients, the application process for Round 3, and anticipated products for Round 4, visit www.fhwa.dot.gov/goshrp2 or <http://SHRP2.transportation.org>. FHWA and AASHTO expect to begin accepting applications for Round 4 product implementation in June 2014.

Additional information on SHRP2 is available by contacting Carin Michel at FHWA, 410-962-2530 (email: goshrp2@dot.gov), or Pam Hutton at AASHTO, 303-263-1212 (email: phutton@aaashto.org). *

Infrastructure Innovation Webinars

These free Webinars provide a quick introduction to the latest infrastructure innovations and technologies.

Slide In Bridge Construction (SIBC) from the Owner/Policy Maker Perspective

November 21, 2013, 11 a.m.–noon
mountain standard time

Sponsored by the Federal Highway Administration (FHWA) and Colorado Department of Transportation, the training will help transportation agencies build a foundation for implementing the lateral SIBC method. This technique enables agencies to accelerate construction by building a new bridge using prefabricated bridge elements and then moving it into position with a lateral slide. The Webinar presentation will be made by Benjamin Tang, Bridge Preservation Manager for the Oregon Department of Transportation. Participants will have the opportunity to ask questions following the presentation. The target audience for the Webinar is State and local highway agency staff, including State bridge engineers.

To register for the Webinar, visit www.slideinbridgeconstruction.com. For additional information, send an email to sibc@urs.com. Future SIBC Webinars planned for January and February 2014 will focus on SIBC from the perspective of engineers, designers, and contractors.

SHRP2 Round 3 Product Webinars

FHWA and the American Association of State Highway and Transportation Officials (AASHTO) are sponsoring this Webinar series to preview products that will be included in Round 3 of the second Strategic Highway Research Program (SHRP2) Implementation Assistance Program. Applications will be accepted from January 17, 2014, to February 14, 2014, for Round 3 assistance funding.

- *Precast Concrete Pavement*—December 12, 2013, 2 p.m. eastern standard time (EST). To register, visit www.nhi.fhwa.dot.gov/resources/webconference/web_conf_learner_reg.aspx?webconfid=26935.
- *Identifying and Managing Utility Conflicts*—December 13, 2013, 2 p.m. EST. For registration, visit www.nhi.fhwa.dot.gov/resources/webconference/web_conf_learner_reg.aspx?webconfid=26927.
- *GeoTech Tools*—December 16, 2013, noon EST. Registration is available at www.nhi.fhwa.dot.gov/resources/webconference/web_conf_learner_reg.aspx?webconfid=26934.

- *Freight Demand Modeling and Data Improvement*—December 16, 2013, 2:30 p.m. EST. To register, visit www.nhi.fhwa.dot.gov/resources/webconference/web_conf_learner_reg.aspx?webconfid=26933.

- *Pavement Renewal Solutions*—December 17, 2013, 2 p.m. EST. To register, visit www.nhi.fhwa.dot.gov/resources/webconference/web_conf_learner_reg.aspx?webconfid=26926.

Additional information on SHRP2 is available by contacting Carin Michel at FHWA, 410-962-2530 (email: goshrp2@dot.gov), or Pam Hutton at AASHTO, 303-263-1212 (email: phutton@aaashto.org).

Load Rating of Steel Truss Bridges

December 17, 2013, 1 p.m.–3:30 p.m. EST

The Webinar is the 10th in FHWA's series on Load and Resistance Factor Design (LRFR). This session will highlight the fundamentals needed to evaluate the live load carrying capacity of steel truss bridges using LRFR, along with lessons learned and available resources. Representatives from the Oregon Department of Transportation will discuss their agency's experiences. Additional case studies will also be presented.

The target audience for the Webinar are bridge and structures staff from local, regional, and State transportation agencies; FHWA division office bridge engineers; and consultants.

To register, visit <https://connectdot.connectsolutions.com/steeltruss02/event/registration.html>. For more information, contact Lubin Gao at FHWA, 202-366-4604 (email: lubin.gao@dot.gov).

Data Needs, Issues, and Governance for Improved Management of Highway Assets

January 22, 2014, 2 p.m. EST

The Webinar will highlight the potential to improve transportation agencies' asset management practices and operational performance through a focus on data and data management. Representatives from State transportation agencies will discuss their agencies' efforts, providing insight into both the challenges encountered and strategies for success.

Visit <http://tam.transportation.org/Pages/Webinars.aspx> to register. For additional information, contact Steve Gaj at FHWA, 202-366-1336 (email: stephen.gaj@dot.gov). *

Highway Technology Calendar

The following events provide opportunities to learn more about products and technologies for accelerating infrastructure innovations.

Transportation Research Board (TRB) 93rd Annual Meeting

January 12–16, 2014, Washington, DC

Transportation professionals from around the world will gather to share perspectives on current developments in transportation research, policy, and practice. The conference will feature more than 4,000 presentations in nearly 750 sessions and workshops. The spotlight theme for 2014 is “Celebrating Our Legacy, Anticipating Our Future.”

Contact: For information, visit the TRB Web site at www.trb.org (click on “Annual Meeting”). Questions about the meeting can be emailed to trbmeetings@nas.edu.

LTPP InfoPave Public Release Session

January 13, 2014, Washington, DC

The Federal Highway Administration’s (FHWA) Long-Term Pavement Performance (LTPP) program will introduce LTPP InfoPave at this TRB Annual Meeting session. The new Web-based system will allow users to more easily tap into pavement data available from the LTPP program. Participants will learn how to use the system to obtain data for analysis, as well as how the program simplifies the LTPP database.

Contact: LTPP Customer Support Service Center, 202-493-3035 (email: ltppinfo@dot.gov).

2014 Design-Build in Transportation Conference

March 19–21, 2014, San Jose, CA

Join transportation leaders in discussing lessons learned in the use of the design-build project delivery method for transportation projects. Topics will include choosing the right delivery method, contracting approaches, tools and techniques that enhance collaboration, innovative financing solutions, risk allocation, and performance contracting. All modes of transportation will be featured.

Contact: Jerry Yakowenko at FHWA, 202-366-1562 (email: gerald.yakowenko@dot.gov), or visit www.dbtranspo.com.

National Bridge Preservation Partnership Conference 2014

April 21–25, 2014, Orlando, FL

Sessions will cover such topics as best practices; new materials, equipment, technologies, and research; and sustainable long-term performance. Interactive workshops will spotlight bridge preservation tools. Conference sponsors include the American Association of State Highway and Transportation Officials (AASHTO), TRB, the National Center for Pavement Preservation, and FHWA.

Contact: Anwar Ahmad at FHWA, 202-366-8501 (email: anwar.ahmad@dot.gov), or visit www.nbppc2014.org.

Tenth National Conference on Transportation Asset Management

April 28–30, 2014, Miami, FL

The conference is designed for transportation agencies and metropolitan planning organizations in all stages of asset management implementation. Themes will include establishment and monitoring of asset management plans, performance measures for asset management, tools and technology to assist decisionmaking, and adaptation to extreme weather events and climate change, including using risk assessment and vulnerability analysis. Strategies for overcoming barriers to asset management implementation will also be discussed. Organized by TRB, the conference is also supported by FHWA and AASHTO.

Contact: Steve Gaj at FHWA, 202-366-1336 (email: stephen.gaj@dot.gov), or visit www.trb.org/conferences/AssetManagement2014.aspx. *

FOCUS

Focus (ISSN 1060-6637), which is published monthly by the U.S. Department of Transportation's Federal Highway Administration (FHWA), covers the implementation of innovative technologies in all areas of infrastructure.

Its primary mission is twofold: (1) to serve the providers of highway infrastructure with innovations and support to improve the quality, safety, and service of our roads and bridges; and (2) to help promote and market programs and projects of the various offices of FHWA's Office of Infrastructure.

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FHWA Accepting Nominations for 2014 Excellence in Utility Awards

Nominations are now being accepted for the Federal Highway Administration's (FHWA) 2014 Excellence in Utility Awards.

This biennial awards program recognizes innovative utility relocation and accommodation practices and showcases outstanding utility technologies, projects, and initiatives. The awards program also recognizes individuals who have significantly enhanced how their agency or organization relocates or accommodates utilities as part of highway improvement projects.

The 2014 awards will cover projects and initiatives accomplished between October 1, 2011, and September 30, 2013. An individual, team, process, initiative, or surface transportation project that is located on the National Highway System or used Federal highway funding may be nominated. Awards will be presented in five categories:

- Project Development.
- Construction Management.

- Innovation.
- Incentives for Utility Relocation.
- Utility Program Leadership.

Nominations must be submitted by December 1, 2013. To view the nomination form and information on how to submit a nomination, visit www.fhwa.dot.gov/utilities/2014awards.cfm. Nominations must include the form, a written endorsement from a State department of transportation, and one photograph.

Award winners will be recognized at the American Association of State Highway and Transportation Officials Right-of-Way and Utility Conference, to be held April 27–30, 2014, in Salt Lake City, Utah.

For more information on the 2014 Excellence in Utility Awards, contact Ken Leuderalbert at FHWA, 317-226-5351 (email: ken.leuderalbert@dot.gov). To learn more about the FHWA Utilities Program, visit www.fhwa.dot.gov/utilities. *



Above: Previous recipients of the Excellence in Utility Awards include the Neches River Bridge Project in Texas, where \$5 million was saved by relocating utilities 1 year ahead of schedule.

Right: Other previous award winners include a sewer rehabilitation project in Clifton, NJ, that saved \$1.4 million.

