

# FOCUS

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## LTTP InfoPave Goes Live *Your Portal to Pavement Data*

**S**tep into a portal to the Nation's pavement data with LTTP InfoPave™, the new Web-based system available from the Federal Highway Administration (FHWA).

The system allows users to more easily tap into the wealth of pavement data available through FHWA's Long-Term Pavement Performance (LTTP) program. Launched in 1987, the LTTP program has monitored nearly 2,500 in-service pavement test sections throughout the United States and Canada. These test sections represent a range of climatic and soil conditions. The data col-

lected now form the largest and most comprehensive pavement database in the world.

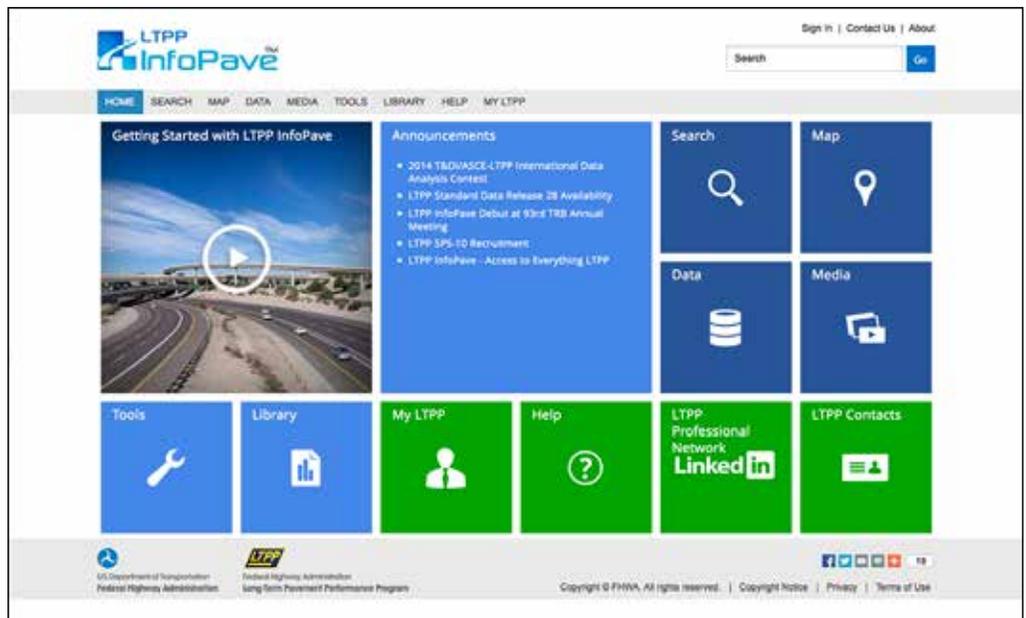
LTTP InfoPave offers a gateway to data from the LTTP test sections, as well as findings from data analyses and extensive documentation for the many aspects of LTTP experiment design, data acquisition, quality control, and data dissemination. Also available are links to LTTP products and tools, including a falling weight deflectometer calibration system and LTTPBind, a software program designed to help highway agencies select the most suitable Superpave asphalt binder per-

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[www.fhwa.dot.gov/publications/focus/index.cfm](http://www.fhwa.dot.gov/publications/focus/index.cfm)



U.S. Department  
of Transportation  
**Federal Highway  
Administration**



LTTP InfoPave offers a gateway to data collected from nearly 2,500 pavement test sections throughout the United States and Canada.



Tools and products featured on LTTP InfoPave include the falling weight deflectometer calibration system.

formance grade for a particular site. Users can also access an LTTP reference library containing more than 700 electronic documents.

“The new system provides a powerful and flexible tool that allows users at all levels—from researchers and professionals to students—to explore, extract, and employ LTTP data,” said Jane Jiang of FHWA.

Users have many different options for finding the data they need. An “LTTP Sections of Interest” feature allows visitors to narrow down the test sections that interest them. This feature also offers an overview of the various LTTP experiments and core data elements. A “Timeline” option provides the

The system allows users to more easily tap into the wealth of pavement data available through FHWA’s LTTP program.

history of each LTTP test section, including the construction, maintenance, rehabilitation, and monitoring activities that occurred during the life of the test section. The “Data Selector” tool can be used to identify and select the desired data. Data files and documents can then be searched. Using the “Data Pivot” feature, users can filter data by different criteria. Data can also be

mapped geographically. Also available are tools allowing users to create their own personalized data sets, summary reports, and queries, among other options. Data selections, views, and queries can be shared with other users. “With LTTP InfoPave, the

### Participate in the 2014 LTTP International Data Analysis Contest

Make plans now to participate in the 2014 Long-Term Pavement Performance (LTTP) International Data Analysis Contest. The contest is designed to encourage university students, professors, and highway agency engineers from around the world to get involved in using the LTTP database. This year’s theme is “Use LTTP InfoPave to Evaluate a Question or Concern for Your Region or State.”

The contest is sponsored by the Federal Highway Administration and the American Society of Civil Engineers’ Transportation and Development Institute. Submissions are due by July 31, 2014. To view the contest guidelines, visit [www.asce.org/tdi](http://www.asce.org/tdi). Winners will be recognized at the 94th Transportation Research Board Annual Meeting in Washington, D.C., in January 2015.

universe of LTTP data is at your fingertips,” said Jiang.

To start exploring LTTP InfoPave, visit [www.infopave.com](http://www.infopave.com). Visitors will also find information on LTTP InfoPave Mobile, a companion application for smart phones. For more information about the new system or the LTTP program, contact the LTTP Customer Support Service Center, 202-493-3035 (email: [ltppinfo@dot.gov](mailto:ltppinfo@dot.gov)). \*

# A Streamlined Introduction to Asset Management Implementation

**A** new Executive Summary to the *AASHTO Transportation Asset Management Guide—A Focus on Implementation* offers transportation agencies and others a streamlined introduction to using asset management to meet the demands of a rapidly changing transportation business environment. These demands include greater accountability in the effective use of Federal funds; an increased relationship between performance and funding; and more sustainable transportation solutions.

Developed by the American Association of State Highway and Transportation Officials (AASHTO) and Federal Highway Administration (FHWA), the Executive Summary is a companion to the *Transportation Asset Management Guide: A Focus on Implementation*. Released in 2011, *A Focus on Implementation* followed the first *Transportation Asset Management Guide* issued by AASHTO in 2002. “All three documents should be read and used together, as they are complementary,” said Nastaran Saadatmand of FHWA.

The 2002 *Transportation Asset Management Guide* provides background information about transportation asset management (TAM), the advantages of using TAM, and an approach that agencies can use to identify their current status and decide where they need to focus their asset management efforts. *A Focus on Implementation*, meanwhile, presents a step-by-step

roadmap of the tasks required to implement asset management in a transportation agency. Part 1 focuses on organizing and leading TAM initiatives, while Part 2 looks at TAM processes, tools, systems, and data. Part 3 features the Appendices, which include examples of asset management plans and four in-depth case studies of both U.S. and international agencies’ experiences in implementing TAM.

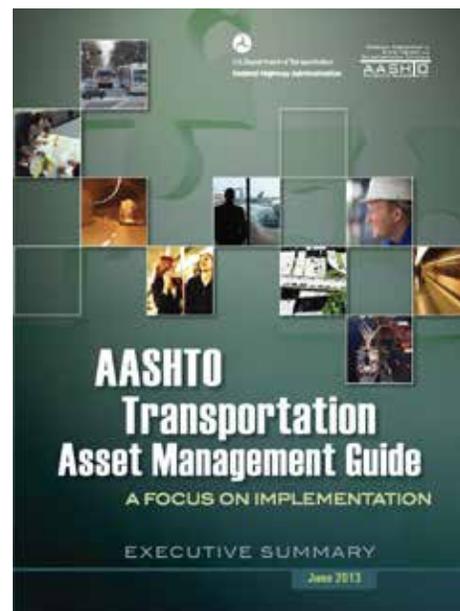
The new Executive Summary is designed to reach a broader audience within transportation agencies, increasing awareness of asset management and providing a useful resource as agencies work to align their functions with asset management objectives.

Starting with “Setting the Direction for Asset Management,” the Summary briefly highlights the steps to TAM implementation and points readers to the relevant chapters within the Guide for more detailed information. For example, as covered in Section 2 of the Guide, “Setting the Direction” includes determining agency goals and

objectives for TAM; defining the scope of TAM in the agency, including which assets are to be managed; and performing an agency self-assessment to determine the actions needed to achieve TAM improvements.

Another important step, as highlighted in Section 3 of the Guide, is “Aligning the Organization.” This includes developing a comprehensive change strategy for an agency

The new Executive Summary is designed to reach a broader audience within transportation agencies, increasing awareness of asset management.



and integrating TAM into the agency’s organizational culture and business processes.

The Executive Summary condenses recommendations for preparing an asset management plan from Section 4 of the Guide. The plan should document key information, including the agency’s strategic objectives or outcomes, the services that the agency delivers, and the assets required to deliver the services and their current condition and performance. Other vital information to document includes planned asset improvements, how the assets will be cost-effectively managed throughout their life cycles, and the agency’s long-term financial forecasts.

Also briefly highlighted are “Processes, Tools, and Data to Support Asset Management.” Topics summarized that are covered in more detail in Sections 5, 6, 7,

continued on page 4 >

## Asset Management Implementation, continued from page 3

and 8 of the Guide include strategic performance measurement, risk assessment and management, life-cycle asset management, analytical tools for asset management decisionmaking, and TAM information systems.

Agencies will also find an “Additional Information” section pointing them to resources such as a TAM gap analysis spreadsheet and case studies on asset management implementation in Colorado, Missouri, Wyoming, and New Zealand.

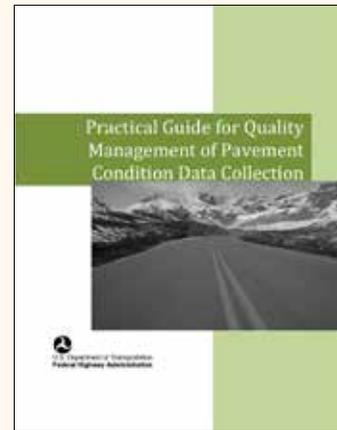
To download a copy of the Executive Summary (Pub. No. FHWA-HIF-13-047), visit [www.fhwa.dot.gov/asset/pubs/hif13047.pdf](http://www.fhwa.dot.gov/asset/pubs/hif13047.pdf). To purchase the *AASHTO Transportation Asset Management Guide—A Focus on Implementation*, visit [https://bookstore.transportation.org/item\\_details.aspx?id=1757](https://bookstore.transportation.org/item_details.aspx?id=1757). The *Transportation Asset Management Guide* can be purchased at [https://bookstore.transportation.org/Item\\_details.aspx?id=355](https://bookstore.transportation.org/Item_details.aspx?id=355). For more information on asset management, visit [www.fhwa.dot.gov/asset](http://www.fhwa.dot.gov/asset), or contact Nastaran Saadatmand at FHWA, 202-366-1337 (email: [nastaran.saadatmand@dot.gov](mailto:nastaran.saadatmand@dot.gov)). \*

Agencies are also pointed to resources such as case studies from Colorado, Missouri, Wyoming, and New Zealand.

### Explore a World of Asset Management

Visit the Federal Highway Administration’s (FHWA) Asset Management Web site ([www.fhwa.dot.gov/asset/index.cfm](http://www.fhwa.dot.gov/asset/index.cfm)) to explore a world of transportation asset management resources. Available resources include information on training opportunities and Webinars, videos, guidance on developing transportation asset management plans, details on current FHWA projects, and links to software tools. Also featured are publications covering everything from bridge management to pavement infrastructure health to risk evaluation.

New publications include FHWA’s *Practical Guide for Quality Management of Pavement Condition Data Collection*. The guide examines how transportation agencies can develop



and implement a quality management program for collecting pavement data, resulting in an effective pavement management system. Included are a Data Quality Management Plan Template and case studies from several transportation agencies. To download the guide, visit [www.fhwa.dot.gov/pavement/management/qm/data\\_qm\\_guide.pdf](http://www.fhwa.dot.gov/pavement/management/qm/data_qm_guide.pdf).

Also available are a series of reports on Risk-Based Transportation Asset Management. Topics include evaluating threats, managing risks to critical assets, and managing external threats. For electronic versions of the reports, visit [www.fhwa.dot.gov/asset/pubs.cfm?thisarea=risk](http://www.fhwa.dot.gov/asset/pubs.cfm?thisarea=risk).

To find additional publications and resources, as well as links to other useful information, visit [www.fhwa.dot.gov/asset/index.cfm](http://www.fhwa.dot.gov/asset/index.cfm) and start your asset management journey today.



# SHRP2: Apply Now for Round 3 Implementation Assistance

Innovative geotechnical solutions, tools for constructing precast concrete pavements, and strategies for managing utility conflicts are among the products available in the third round of the second Strategic Highway Research Program (SHRP2) Implementation Assistance Program.

The Federal Highway Administration (FHWA) and American Association of State Highway and Transportation Officials (AASHTO) are accepting applications until February 14, 2014, for funding assistance to implement the new products. 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. Depending on the product, implementation assistance is available at three participation levels: proof of concept pilot, lead adopter incentive, and user incentive. The proof of concept level offers transportation agencies opportunities to help evaluate the readiness of a product. User incentives allow agencies to assess a product, while lead adopters take on a more prominent role in communicating their experiences with the product and potentially assisting other organizations with implementation.

Round 3 products are:

- *Freight Demand Modeling and Data Improvement* (Product No. C20)—This organizational approach will help agencies in achieving improved freight data sets and freight modeling practices.
- *GeoTech Tools* (Product No. R02)—These tools offer more than 40 geotechnical solutions to common embankment, cut slope, structure and foundation interface, and pavement foundation issues.
- *Precast Concrete Pavement* (Product No. R05)—New tools for using precast concrete pavement systems will help agencies reduce the duration of construction closures on critical roadways.
- *Identifying and Managing Utility Conflicts* (Product No. R15B)—Agencies will find strategies for improving cooperation among highway and utility agencies and speeding up project completion.
- *Pavement Renewal Solutions* (Product No. R23)—Guidelines for using existing pavements in rapid construction will help extend pavement life and save money.

Online application forms, product details, tips on submitting an application, and other information are available at [www.fhwa.dot.gov/goSHRP2](http://www.fhwa.dot.gov/goSHRP2).

Additional information on SHRP2 is available by contacting Carin Michel at FHWA, 410-962-2530 (email: [goSHRP2@dot.gov](mailto:goSHRP2@dot.gov)), or Pam Hutton at AASHTO, 303-263-1212 (email: [phutton@aaashto.org](mailto:phutton@aaashto.org)). \*



To learn more about SHRP2 Solutions products, visit [www.fhwa.dot.gov/goSHRP2](http://www.fhwa.dot.gov/goSHRP2).

# Infrastructure Innovation Webinars

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

## Analytic Procedures for Determining the Impacts of Reliability Mitigation Strategies

February 18, 2014, 2–4 p.m. eastern standard time (EST)

Sponsored by the Transportation Research Board (TRB), the Webinar will explore projects under the second Strategic Highway Research Program (SHRP2) that have analyzed roadway geometric design features and the use of travel time reliability prediction models for urban freeways. This SHRP2 research has identified roadway design features that improve travel time reliability. Results of the research include new prediction models, a design guide, and an Excel®-based tool for evaluating the effect of design treatments on delay, safety, travel time reliability, and lifecycle costs and benefits. The final 30 minutes of the Webinar are reserved for participant questions.

To register, visit [www.trb.org/StrategicHighwayResearchProgram2SHRP2/Blurbs/170156.aspx](http://www.trb.org/StrategicHighwayResearchProgram2SHRP2/Blurbs/170156.aspx). For additional information, contact Linda Mason at TRB, 202-334-3241 (email: [lmason@nas.edu](mailto:lmason@nas.edu)).

## Application of 3D Models in the Construction Office

February 19, 2014, 1–2:30 p.m. EST

The Webinar will examine how contractors use 3D engineered models in bidding on transportation construction projects and preparing for construction work. This session is third in a Federal Highway Administration (FHWA) series on 3D Engineered Models for Construction. To view the first two Webinars in the series, Over-



More information on the FHWA Aerodynamics Program is available at [www.fhwa.dot.gov/research/tfhrc/labs/aerodynamics/index.cfm](http://www.fhwa.dot.gov/research/tfhrc/labs/aerodynamics/index.cfm).

view of 3D Engineered Models for Construction and Creating 3D Engineered Models, visit [www.fhwa.dot.gov/construction/3d](http://www.fhwa.dot.gov/construction/3d).

Upcoming Webinar topics will include Applications of 3D Models on the Construction Site, Managing and Sharing 3D Models for Construction, Overcoming Impediments to Using 3D Engineered Models for Construction, and Steps to Requiring 3D Engineered Models for Construction.

Registration is available at [www.nhi.fhwa.dot.gov/resources/webconference/viewconference.aspx?webconfid=27113](http://www.nhi.fhwa.dot.gov/resources/webconference/viewconference.aspx?webconfid=27113). For more information, contact Douglas Townes at the FHWA Resource Center, 404-562-3914 (email: [douglas.townes@dot.gov](mailto:douglas.townes@dot.gov)). \*

To view presentations and listen to a recording from the first session of FHWA's ongoing Aerodynamics Webinar series, visit <https://connectdot.connectsolutions.com/p2j4xxoqi15/>. Held on November 25, 2013, the first session presented an overview of the FHWA Aerodynamics Program.

# Highway Technology Calendar

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

## **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 the Federal Highway Administration (FHWA), 202-366-1562 (email: gerald.yakowenko@dot.gov), or visit [www.dbtransporto.com](http://www.dbtransporto.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), Transportation Research Board (TRB), 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](http://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 man-

agement 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](mailto:stephen.gaj@dot.gov)), or visit [www.trb.org/conferences/AssetManagement2014.aspx](http://www.trb.org/conferences/AssetManagement2014.aspx).

## **2014 Tools of the Trade Conference**

July 21–23, 2014, Burlington, VT

Sponsored by TRB, the conference will spotlight practical transportation planning techniques and tools for use by practitioners in small and medium-sized communities. Researchers, members of academia, and other members of the transportation community are also encouraged to attend. Among the topics are the project programming process, including evaluating and prioritizing projects with performance measures; financial strategies; pedestrian and bike planning; traffic operations and analysis; demand forecasting; and systems analysis. Technology applications, environmental and health issues, and freight logistics will also be featured.

*Contact:* For additional information, visit [www.trbtoolsofthetrade.org/conference/index.html](http://www.trbtoolsofthetrade.org/conference/index.html).

## **2014 National Hydraulic Engineering Conference: Designing Sustainable Infrastructure in a Changing Environment**

August 19–22, 2014, Iowa City, IA

Sponsored by FHWA, in coordination with the University of Iowa, the conference will feature such topics as stream stability, watershed management, scour and bridge hydraulics, coastal engineering, climate change, hydrology, and asset management.

*Contact:* Cynthia Nurmi at the FHWA Resource Center, 404-562-3908 (email: [cynthia.nurmi@dot.gov](mailto:cynthia.nurmi@dot.gov)), or visit [www.uiowa.edu/~confinst/nhec2014/index.html](http://www.uiowa.edu/~confinst/nhec2014/index.html).

## **2014 National Accelerated Bridge Construction Conference**

December 3–5, 2014, Miami, FL

The latest knowledge, technologies, and case studies related to accelerated bridge construction (ABC) will be spotlighted at the conference. Several workshops on ABC topics will be held December 3, followed by the conference kickoff on December 4. Cosponsored by 16 State transportation agencies, the event is organized by the Accelerated Bridge Construction University Transportation Center at Florida International University. Attendees will include State bridge engineers, design professionals, fabricators, contractors, members of academia, and representatives from federal agencies.

*Contact:* Atorod Azizinamini at Florida International University, 402-770-6210 (email: [aazizina@fiu.edu](mailto:aazizina@fiu.edu)), or Ben Beerman at the FHWA Resource Center, 404-562-3930 (email: [benjamin.beerman@dot.gov](mailto:benjamin.beerman@dot.gov)). \*

# 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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## Call for Abstracts: 2014 National Accelerated Bridge Construction Conference

Submit abstracts now for papers to be considered for presentation at the 2014 National Accelerated Bridge Construction Conference. To be held December 3–5, 2014, in Miami, Florida, the conference is cosponsored by 16 State transportation agencies. The event is being organized by the Accelerated Bridge Construction University Transportation Center at Florida International University.

The conference will present the latest accelerated bridge construction technologies and case studies from around the world. Conference topics will include prefabricated bridge elements and systems; construction, fabrication, and erection considerations; foundations; inno-

vative materials; short- and long-term monitoring; nondestructive testing; maintenance; and inspection.

One-page abstracts are due by March 31, 2014. Abstracts should include the title of the presentation; name and affiliation of the author or authors; presenting author; and the presenting author's contact information. Submissions should be emailed to Atorod Azizinamini at Florida International University, aazizina@fiu.edu (phone: 402-770-6210). For more information on the conference, contact Ben Beerman at the Federal Highway Administration Resource Center, 404-562-3930 (email: benjamin.beerman@dot.gov). \*