August 2008

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www.tfhrc.gov/focus/focus.htm



U.S. Department of Transportation

Federal Highway Administration

### The Place to Go for System Preservation Technical Assistance

"We provide

timely answers to

urgent transportation

system preservation

questions."

rom personalized technical assistance to 24/7 online access to the latest information resources, the Transportation System Preservation Technical Services Program (TSP•2) is helping transportation agencies across the country implement and improve their pavement preservation programs.

Launched 2 years ago, TSP•2 is sponsored by the American Association of State Highway and Transportation Officials (AASHTO) and hosted by the National Center for Pavement Preservation (NCPP) in Okemos, Michigan. The Federal Highway Administration (FHWA) actively supports the TSP•2 effort. The program offers an AASHTO

Help Desk that transportation agencies can call or visit online (www.tsp2.org) for information and personalized professional assistance in the area of pavement preservation.

Since the program started, the Help Desk has fielded questions on such topics as preservation treatments, project selection, construc-

tion best practices, specification development and implementation, quality control and assurance, network strategy, and pavement management systems. The Help Desk also receives many requests for informational guides, documents, and other publications and videos. A limited number of speaking engagements or onsite visits can be arranged as well.

"We provide timely answers to urgent questions," says Larry Galehouse, Director of the NCPP. "The vast majority of requests are handled within one business day or less." Help desk staff can also link practitioners calling about a particular issue or problem with practitioners in other States who can provide assistance. From April 2007 to March 2008, Help Desk requests increased nearly 90 percent over the previous year, while page "hits" on the TSP-2 Web site amounted to approximately 710,000 page views. "More and more, States are seeing the Help Desk and Web site as places where they can go to get up-to-date information and practical assistance in the preservation area,"

says Galehouse.

Mike Doran of the Tennessee Department of Transportation has contacted the Help Desk on several occasions, including a request for training for his agency on using preventive maintenance techniques such as chip sealing. "I've been very happy with the assistance provided. The

staff has been great to work with and very helpful," says Doran.

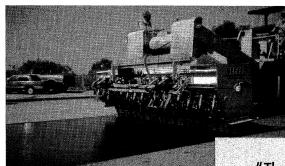
Other States recently receiving assistance include New York. Dave Smith of the New York State Department of Transportation contacted the Help Desk with a question about construction practices for microsurfacing. "It was the first time I had contacted

continued on page 2 ➤

#### System Preservation,

continued from page 1





The TSP•2 program provides personalized technical assistance with pavement preservation techniques and strategies, including the chip seals shown here (left and right).

the Help Desk and the help I received was excellent. They got back to me right away," says Smith.

The TSP•2 Web site offers a range of resources for practitioners, including an online library of nearly 800 technical papers and reports, videos, and downloadable software. Other popular features include a photo gallery of pavement preservation treatments, Surface Treatment Selection Tool, bulletin boards and email listservs, news archive, downloadable presentations by State and industry practitioners, and a calendar of upcoming events. While some sections of the Web site were previously password protected, those restrictions were lifted in January 2008 and the entire site is now open to State transportation departments, local governments, and other visitors.

Another important aspect of the TSP•2 program is its work with State agencies, FHWA, industry, and academia to establish regional Pavement Preservation Partnerships. These partnerships are now active across the country. "The partnerships facilitate the exchange of information on pavement preservation techniques and provide support to State and industry efforts," says Galehouse.

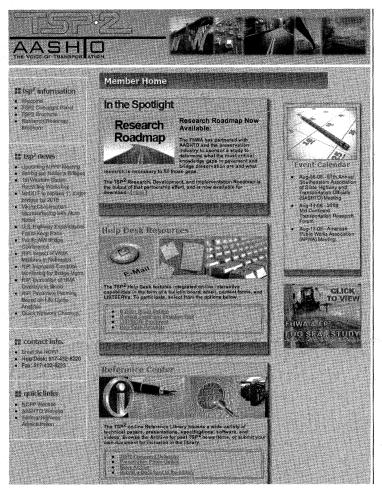
"The regional partnerships are key to advancing pavement preservation nationwide. We have seen a lot of enthusiasm as the groups have been established in the past year. They allow members to go into more detail and share technologies and resources with each other," says Steve Varnedoe of the North Carolina Department of Transportation (NCDOT) and chair of the AASHTO TSP•2 Oversight Panel. "If one State tries a new technique, representatives from adjoining States can come visit the project, for example. And, as the number of States implementing pavement preservation programs increases, that will attract greater industry and contractor support." Regional Pavement Preservation Partnerships have been formally established for the Northeast, Southeast, Midwest, Rocky Mountain, and Pacific/Western regions. More information on the partnerships and their activities is available at www.tsp2.org.

As the TSP•2 enters its third year of providing assistance and support, planning is underway to expand the scope of the program by launching a bridge preservation component. In support of this effort, regional Bridge Preservation Partnerships are now being formed. The University of Kentucky and the University Transportation Center at Northwestern University are providing financial assistance for establishing the regional bridge partnerships. "These partnerships can benefit States and universities alike. Researchers can learn of maintenance and performance needs and can provide both

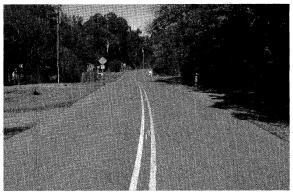
"The regional partnerships are key to advancing pavement preservation nationwide.
The partnerships allow members to go into more detail and share technologies and resources with each other."

the applied and fundamental research needed by the maintenance and preservation community," says Jim Sorenson of FHWA's Office of Asset Management.

The TSP•2 is supported by an AASH-TO voluntary fund. Any AASHTO member can join the TSP•2. Membership in the program costs \$6,000 per agency per year. Membership in a regional Pavement Preservation Partnership is an additional contribution of \$3,500 per year. These funds cover the cost of State travel to partnership meetings, as well as meeting organization and facilitation. With the AASHTO TSP•2 Oversight Panel recommending that similar services be provided for bridge preservation, the total







The TSP•2 Help Desk can answer questions on such topics as preservation treatments, construction best practices, and quality control and assurance.

cost of the combined program is estimated to be \$20,000 annually. These funds would provide for both pavement and bridge expertise and technical support, as well as organizing and facilitating regional meetings for State maintenance practitioners in both the pavements and bridge areas. This action is expected to be considered by AASHTO at its fall 2008 meeting, to be held October 16–20, 2008, in Hartford, Connecticut.

For more information on becoming a member of TSP•2 or participating in a

regional Pavement Preservation or Bridge Preservation Partnership, contact Steve Varnedoe at NCDOT, 919-733-7621 (email: svarnedoe@ncdot.gov). To contact the TSP•2 Help Desk, call 517-432-8220 (email: ncpp@egr.msu.edu), or visit www. tsp2.org. For more information on pavement preservation or to learn more about the startup efforts for the bridge preservation program, contact Jim Sorenson at FHWA, 202-366-1333 (email: james. sorenson@fhwa.dot.gov), or visit www. fhwa.dot.gov/preservation.

### Pavement Preservation Resources

AASHTO TSP•2 Help Desk 517-432-8220 • ncpp@egr.msu.edu www.tsp2.org

National Center for Pavement Preservation www.pavementpreservation.org

FHWA Preservation Web Site www.fhwa.dot.gov/preservation

Foundation for Pavement Preservation www.fp2.org

### All Construction, All the Time

he Federal Highway Administration's (FHWA) new Construction Web site (www.fhwa.dot.gov/construction) brings a world of resources on highway construction together in one convenient location. For everything from technical guidance to publications to information on available training, one stop at the Construction Web site is now all you need.

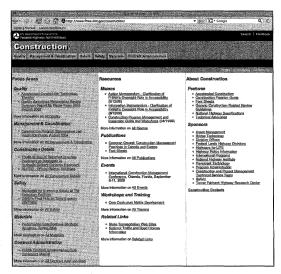
The site features five focus areas: quality, management and coordination, construction details, safety, and materials. Each focus area includes information on such topics as publications, technical advisories, FHWA

memos, fact sheets, and FHWA's Construction Program Guide. A "Resources" section gathers details on memos, publications, events, and workshops and training for all of the focus areas, while a "Related Links" feature includes links to State transportation agency Web sites and FHWA's National Traffic and Road Closure site. A "Features" section includes guidance on accelerated construction and information on the National Highway Specifications Web site.

The site's comprehensive list of contacts includes FHWA staff who can assist in the following areas:



A range of resources on highway construction are available online at www.fhwa.dot.gov/construction.



- Claims.
- · Contract administration.
- · Inspection techniques.
- Partnering.
- Process review.
- · Project review.
- Quality assurance.
- Work zone and worker safety.

To find the highway construction resources you need today, visit www.fhwa. dot.gov/construction. For additional assistance, send an email to construction @fhwa.dot.gov. To visit FHWA's other topic-based Web sites, see sidebar.

### **FHWA Topic-Based Web Sites**

**Hydraulics Engineering** www.fhwa.dot.gov/engineering/ hydraulics

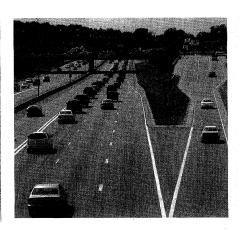
Pavements www.fhwa.dot.gov/pavement

**Geotechnical Engineering** www.fhwa.dot.gov/engineering/ geotech

### FHWA Sponsors Asset Management Webinars

Join the Federal Highway Administration's (FHWA) Office of Asset Management online for its series of free quarterly Webinars on transportation asset management topics. Scheduled for September 9, 2008, the next Webinar will focus on "Program Tradeoff Analysis for Asset Management: Moving from Information to Understanding." The Webinar will be held from 1 p.m. to 2:30 p.m. (eastern time). Presentations from the Wyoming Department of Transportation and the Maryland State Highway Administration will be featured during the event.

To register for the Web-inar, visit www.nhi.fhwa.dot.gov/resources/Webconference/web\_conf\_learner\_reg.aspx?webConfID=14965. Preregistration is required. For more information, contact Linda Riggins in FHWA's Office of Asset Management, 202-366-4847 (email: linda.riggins@fhwa.dot.gov). Updates on the quarterly Webinars are also posted online at www.fhwa.dot.gov/infrastructure/asstmgmt/webinar.cfm.



### Seminar Offers One-Stop Information Source for Building More Corrosion-Resistant Bridges

he Federal Highway Administration's (FHWA) Corrosion-Resistant Reinforcing Bar Seminar offers a one-stop opportunity to find out more about the many types of products now available to prevent reinforcing bar corrosion in bridges, resulting in a longer bridge service life. Presented by the FHWA Resource Center's Structures Technical Service Team (TST), the free 1-day seminar highlights the range of corrosion-resistant technologies available, including solid stainless steel, stainless steel-clad, micro-composite metallic, epoxy-coated, hot-dipped galvanized, combination zinc and epoxycoated, and fiber-reinforced polymer (FRP) composite reinforcing bars. Also discussed is a laboratory investigation into various alternative reinforcing bars.

The seminar covers both deployment and cost considerations for each technology. The material costs for corrosion-resistant reinforcing bars range from a 5 to 10 percent increase for epoxy-coated reinforcing bars, over traditional black steel, up to the increased material costs for solid stainless steel reinforcing bars,

which on average are at least four times the amount for black steel. "The higher initial costs of the corrosion-resistant bars need to be evaluated on a life-cycle cost basis, taking into account the extended bridge deck service life that results from using the bars. Savings in roadway user costs that would result from delaying bridge rehabilitation or replacement also have to be considered," says Lou Triandafilou of FHWA's Structures TST.

FHWA presented two sessions of the seminar in New York State in February 2008, drawing more than 90 attendees in Albany and 25 in Syracuse. "The seminar covered the range of what's available right now and was very useful to our staff. The feedback has been very positive," says Art Yannotti, Director of the New York State Department of Transportation's Structures Design Bureau. "We have used galvanized and stainless steel reinforcing bars in a few locations and are now looking into using FRP composite bars."

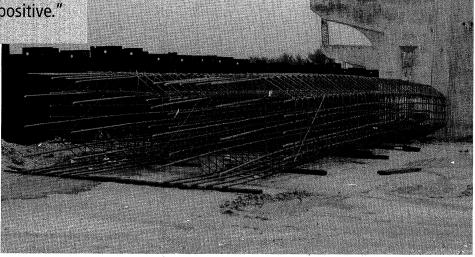
A seminar held in Louisville, Kentucky, in February also proved to be popular, drawing about 25 participants. The Kentucky event was geared toward personnel working on the planning and design of

the \$4.2 billion Ohio River Bridges Project, which will include the construction of two new bridges connecting Indiana and Kentucky. Staff from the Indiana Department of Transportation and Kentucky Transportation Cabinet attended the seminar, as well as FHWA staff and consultants working on this mega project. "The seminar was very successful and was timely in terms of the project design, as the bridge designers are considering what type of reinforcing bar will be used and analyzing the cost considerations for stainless steel and other technologies," says George Jones of FHWA's Kentucky division office.

Rhode Island also hosted the seminar in March in Providence. The 25 attendees included Rhode Island Department of Transportation and FHWA and consultant engineering staff involved in planning the replacement of the Sakonnet River Bridge. The bridge carries Rhode Island State Route 24 over the Sakonnet River between Portsmouth and Tiverton in Newport County, Rhode Island.

For more information on the seminar or to host one in your State, contact Lou Triandafilou at the FHWA Resource Center, 410-962-3648 (email: lou. triandafilou@fhwa.dot.gov).





Corrosion-resistant technologies available now for use in bridge construction include solid stainless steel reinforcing bars.

### Highway Technology Calendar

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

### International Construction Management Conference September 8–11, 2008, Orlando, FL

The conference will look at such topics as alternative procurement and contracting systems, construction cost escalation, public-private partnerships, and risk management. The conference is sponsored by the Construction Management Expert Technical Group, which includes representatives from the American Association of State Highway and Transportation Officials (AASHTO), the Federal Highway Administration (FHWA), industry, and academia.

Contact: Jerry Yakowenko at FHWA, 202-366-1562 (email: gerald. yakowenko@fhwa.dot.gov).

Nondestructive Evaluation (NDE)/ Nondestructive Testing (NDT) for Highways and Bridges: Structural Materials Technology Symposium September 8–12, 2008, Oakland, CA

Sponsored by the American Society for Nondestructive Testing, the symposium will highlight the use of NDE and NDT technologies to assess the condition of highways and bridges. More than 20 sessions will cover such topics as bridge inspection, crack detection, bridge management, ground penetrating radar, acoustic methods for evaluating pavements, bridge scour, inspection and

assessment of bridge substructures, and structural monitoring. The sessions will include discussions on field applications, applied research, technology implementation, and case studies. A postsymposium workshop, "Advanced NDE of Concrete Structures Workshop: Ultrasonic Imaging of Concrete," will be held on September 12. The workshop will cover the fundamentals of ultrasonic imaging of concrete.

Contact: For additional information, visit www.asnt.org/events/events.htm, or contact Frank Jalinoos at FHWA, 202-493-3044 (email: frank.jalinoos@fhwa.dot.gov).

#### FHWA 2008 Regional Asset Management Conferences September 10–11, 2008, Albuquerque, NIM

November 13–14, 2008, Memphis, TN The final two conferences in this series of free regional events are designed to bring the latest transportation asset management technologies, research, and best practices to State, Federal, and local prac-

Contact: Francine Shaw-Whitson at FHWA, 202-366-8028 (email: francine.shaw-whitson@fhwa.dot.gov), or visit www.fhwa.dot.gov/infrastructure/asstmgmt/ramc.cfm.

titioners and others across the country.

#### Second National Maintenance Quality Assurance (MQA) Peer Exchange

September 23–24, 2008, Durham, NC Participants will discuss MQA analysis

Participants will discuss MQA analysis procedures and reporting to support highway decisionmaking and will identify progress made since the first Peer Exchange held in 2004. Sponsored by FHWA's Office of Asset Management, the Peer Exchange is being held in conjunction with the National Workshop on Highway Asset Inventory and Data Collection.

Contact: Jennifer Brandenburg at the North Carolina Department of Transportation (NCDOT), 919-733-3725 (email: jbrandenburg@ncdot.gov), or Celso Gatchalian at FHWA, 202-366-1342 (email: celso.gatchalian@fhwa.dot.gov).

### National Conference on Highway Asset Inventory and Data Collection

September 24-26, 2008, Durham, NC

The conference will highlight the latest in technology for managing highway assets. Four focus areas will be featured: Pavements, Bridges, Roadside Appurtenances, and Geotechnical and Drainage. The conference is cosponsored by the Transportation Research Board, FHWA, NCDOT, North Carolina State University, and AASHTO.

Contact: Terry Canales at NCDOT, 919-733-2210 (email: tcanales@ncdot.gov), or Celso Gatchalian at FHWA, 202-366-1342 (email: celso.gatchalian@fhwa.dot.gov). Information is also available online at www.itre.ncsu.edu/ncassetmgmtconf/index.html.

#### 2008 Road Dust Management Practices and Future Needs Conference November 13–14, 2008, San Antonio,

November 13–14, 2008, San Antonio, TX Sponsored by FHWA and the Western

Sponsored by FHWA and the Western Transportation Institute at Montana State University, the conference will discuss current road dust management practices and define future needs and research priorities. Environmental impacts and cost benefits will also be covered. The conference is aimed at representatives from Federal, State, and local governments; transportation agencies; industry; tribal agencies; and the military, as well as researchers.

Contact: Roger Surdahl at FHWA, 720-963-3768 (email: roger. surdahl@fhwa.dot.gov), or visit www.meetingsnorthwest.com/DustConference.htm.

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# Highways for LIFE Now Accepting Applications for 2009 Projects

he Federal Highway Administration's (FHWA) Highways for LIFE (HfL) program is now soliciting grant applications for its final round of demonstration construction projects. The HfL program is designed to encourage State transportation agencies to build projects

using proven innovations that have been infrequently or never used by the agency. A State transportation department can apply if the project constructs, reconstructs, or rehabilitates a route or connection on an eligible Federal-aid highway and uses innovative technologies, manufacturing processes, financing, or contracting methods. The proposed innovations must be avail-

able now and ready to use. Projects should meet the HfL performance goals of improving safety, reducing congestion caused by construction, and improving quality and customer satisfaction.

This year, HfL also invites applications of larger-scale projects that provide strategic safety and congestion benefits. Applicants should describe the safety benefits associated with the project, including whether the project:

- Will result in a measurable reduction in fatalities, injuries, or loss of property.
- Incorporates innovative safety design or operational techniques, including variable pricing for congestion reduction, electronic tolling, barrier systems, and intersectionrelated enhancements.

- Incorporates innovative construction work zone strategies to improve safety.
- Is located on a rural road or in an urban area that is in need of priority attention because of high injury or fatality rates.

The Highways for
LIFE program
is designed to
encourage State
transportation
agencies to build
projects using proven
innovations that have
been infrequently
or never used by
the agency.

Applicants should also describe how their HfL project relieves congestion in an urban area or along a major transportation corridor or addresses major freight bottlenecks. The project must meet the HfL criteria.

Depending on the availability of fiscal year 2009 funding for the program, selected projects may receive either a program grant or a

waiver to allow 100 percent Federalaid funding for the project. States that have not been previously selected as a HfL recipient will receive first consideration for funding.

Applications must be submitted to FHWA's division offices. As the division offices must review and send recommended applications to the HfL program by September 30, 2008, agencies should check with their local division office to determine the deadline for submitting applications. The application form is available on the HfL Web site at www.fhwa.dot.gov/hfl. For more information, contact your local FHWA division office. For additional information on HfL, contact Mary Huie at FHWA, 202-366-3039 (email: mary.huie@fhwa.dot.gov).

## H()(II)

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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