# FHWA R&T Now -November 2008-

A news update of research, technology, and development from the U.S. Department of Transportation, Federal Highway Administration

#### **GENERAL/ADMINISTRATIVE**

### -Federal Highway Administration Supports Innovative State Transportation Projects-

The Federal Highway Administration (FHWA) announced the new Office of Innovative Program Delivery, which will provide states with stronger and more effective federal support to deliver transportation projects. Ms. Regina McElroy will assume the position of Director of Innovative Program Delivery. Since 2006, Ms. McElroy has been the Director of the Office of Transportation Management. The new Office of Innovative Program Delivery will work with state departments of transportation to help them explore opportunities with innovative financing and congestion pricing and tap into the \$400 billion in private funds available world wide for investment in transportation infrastructure. Existing FHWA activities such as public private partnerships, innovative financing, experimental projects, and tolling authorities will be merged into the new office, which will improve access and communication for the states. The Office of Innovative Program Delivery will provide national leadership and advice for states pursuing innovative and non-traditional transportation projects.

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#### ADVANCED RESEARCH

## -Making Driving Simulators More Useful for Behavioral Research-

FHWA entered into a contract with the University of Iowa that will evaluate issues related to the use of interactive driving simulators in highway safety and operations research. Driving behavior in simulators will be correlated to driving behavior in the real world. The influences of visual, auditory, and haptic fidelity will be investigated. The proposed research will develop a theoretical model of the relationship between driver performance in interactive driving simulators and driving performance in real vehicles on real roads. The proposed research responds to research needs identified at the Boston, MA Advanced Research Think Tank regarding development of enabling technologies, such as simulators. This award is a result of the national Broad Agency Announcement for Exploratory Advanced Research (EAR) Proposals issued in May 2008. Awarded through a cooperative effort of FHWA's Office of Corporate Research, Technology, and Innovation Management; Office of Safety R&D; and Office of Acquisition Management, the project will be managed by the Office of Safety R&D.

For more information about the project, contact:

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For more information about the Broad Agency Announcement for EAR projects, contact:

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## **INFRASTRUCTURE**

## -FHWA Launches Web Site for Flagship Initiative: Long-Term Bridge Performance Program-

The Long-Term Bridge Performance Program will collect data on highway bridges across the Nation. The data will be used for a variety of purposes, including the study of deterioration and durability of bridges and

the impacts of maintenance and repair. Researchers expect the program to provide a better understanding of bridge deterioration, including the effects of corrosion, fatigue, environmental conditions and loadings.

For more information, contact: <a href="mailto:ltbp@dot.gov">ltbp@dot.gov</a>

## -FHWA Enters Into Cooperative Agreement with ACI-

The Federal Highway Administration (FHWA) has entered into a cooperative agreement with the American Concrete Institute (ACI) to support training activities for FHWA's customers and partners. The technology areas covered under this agreement include concrete materials and concrete pavements. Training materials for two seminars (Cementitious Materials for Concrete and Chemical Admixtures for Concrete) are being developed and should be completed by the end of 2008. Availability of these seminars should be early 2009. Both are one day seminars.

This cooperative agreement will help FHWA broaden and improve the success of the technology transfer activities being performed the Office of Pavement Technology whose principal partners include State DOTs, industry groups, and academia. If you are interested in learning more about these seminars or interested in hosting any of these seminars, please contact Antonio Nieves Torres at:

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#### **OPERATIONS**

## -Fact Sheet: Office of Operations Research and Development (R&D)-

The Office of Operations Research and Development (R&D) is making major contributions to help the Federal Highway Administration (FHWA) meet its mobility, safety, and security goals through completed or planned products and activities.

http://www.tfhrc.gov/about/08030.htm

#### **EVENTS/MEETINGS/ WORKSHOPS**

## -Transportation, Energy and Climate Change Spotlighted at TRB's Annual Meeting-

"Transportation, Energy and Climate Change" will be spotlighted for Transportation Research Board's (TRB) 88th Annual Meeting in Washington, D.C., January 11-15, 2009. Nearly 70 sessions and workshops have been planned around this theme, with many led by national and international experts in the fields of climate change and energy. Two of the Sunday workshops will be coordinated by TRB's Special Task Force (STF) on Climate Change and Energy, which was established in January of last year to develop a strategic plan and roadmap for TRB's energy and climate change programs and activities, and to facilitate communication and coordination among TRB Standing Committees on this topic. The workshops, "Climate 101: The Basics of Climate Change" and "Climate Change and Transportation 101" will provide an overview of introductory concepts related to climate change and energy. The STF will also be holding a joint session with The World Road Congress (PIARC), on research programs to address climate change, energy and alternatives for transportation financing.

For further information, see the TRB Web site: http://www.trb.org/meeting/2009/default.asp

- FHWA Research Library Reference Workshop Web Conference, December 9, 2008-

Join the Federal Highway Administration's (FHWA's) Exploratory Advanced Research (EAR) Program for a workshop on December 9, 2008, 11:00 a.m. – 12:30 p.m. Eastern. The workshop will provide a basic understanding of select features and functionality of two free transportation-focused bibliographic (i.e., item descriptions) databases and two (2) general Web technology resources. Topics include the Transportation Research Information System (TRIS), Research in Progress (RiP), RSS (Really Simple Syndication) feeds, and Alerting Services.

Link to join the Web Conference:

http://fhwa.na3.acrobat.com/fhwaresearchlibrary/

Teleconference number to access audio portion: 888-603-9707 RESEARCH

For more information, contact:

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#### RECENT PERIODICALS

### -FOCUS Newsletter - September 2008-

This issue includes: Performance Contracting: A New Way of Doing Business; SHRP 2 Updates Available Online; New Resources for Training the Transportation Workforce; Highway Technology Calendar; An Interactive Road Map to the Future of Concrete Pavement; and, FHWA to Offer Highway Materials Course.

http://www.tfhrc.gov/focus/sep08/index.htm

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## -FOCUS Newsletter - October 2008-

This issue includes: Construction Analysis Software Makes It Easier to Get In, Get Out, and Stay Out; Earth Retaining Structures: An Essential Part of an Asset Management Program; FHWA Product Demonstration Showcases: A Hands-on Introduction to New Technologies; Maintenance Management Course Goes Online; Highway Technology Calendar; and, National Conference to Spotlight Safer, Smoother, and Longer Lasting Concrete Pavements.

http://www.tfhrc.gov/focus/oct08/index.htm

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## -Public Roads - September/October 2008-

This issue includes: 1. Steel Versus GFRP Rebars?: Field studies show that glass fiber-reinforced polymer offers a low life-cycle cost option for reinforcement in concrete pavements. 2. Gearing Up for SafeTrip-21: RITA is promoting technology solutions for improving transportation safety and reducing congestion. 3. The Ongoing Evolution of FRP Bridges: In a research project on new hybrid structural construction, Texas explored the viability of custom fiber-reinforced polymer beams. 4. Applying AQS in the Highway Industry: The advanced quality system offers promise for improving pavement quality while helping agencies finish paving projects on time and within budget. 5. Using Supercomputers to Determine Bridge Loads: FHWA and the Argonne National Laboratory are using multidimensional programs to study hydrodynamic forces on flooded bridge decks.

http://www.tfhrc.gov/pubrds/08sep/index.htm

## -Transportation and Climate Change Newsletter - October 2008-

This issue includes: Governor Schwarzenegger Signs Landmark Legislation Linking Transportation Planning, Housing, California Quality Act (CEQA) Requirements and Greenhouse Gas Emissions; California Attorney General Forges Greenhouse Gas Agreement with City of Stockton; Wisconsin's Strategy for Reducing Global Warming; University of Maryland Study on Economic Impacts of Global Climate Change; Washington State DOT Adopts Requirements for Analysis of GHG Emissions; Climate Change Policy and CO2 Emissions from Passenger Vehicles; TRB's Special Task Force on Climate Change and Energy; and, NHTSA Issues Final EIS for New CAFÉ Standards.

http://www.fhwa.dot.gov/hep/climatechange/newsletter/index.htm

## -Innovator-Accelerating Innovation for the American Driving Experience-October/November 2008-

This issue includes: Michigan Project Features Performance Contracting; Q&A: Why Innovation Matters in the Highway Industry; What Others Say About Innovation; Performance Contracting Improves Project Outcomes; Innovations Speed Iowa Bridge construction; Visit Us at AASHTO; Highways for LIFE Seeks 2009 Project Applications; and, Calendar.

http://www.fhwa.dot.gov/hfl/innovator/issue09.cfm

#### -Centered on Service- November 2008-

This issue includes: First Northern Air Quality Summit a Huge Success; 2nd Regional Hydraulics Web Conference; Bridge Inspector Pocket Guide Available; Low-Cost Signal Timing Workshop Gets Green Light Review; Southeast States Host Roundtable on VE; PDS UPDATE: Getting Ready for Winter with MDSS in NE, PA, and ID; Life-Cycle Cost Analysis Implementation Workshop Held in ME; Seismic Retrofit Workshop in SC; 6th National Seismic Conference; National Hydraulics Conference held in ME; CA Debuts Web-based Training: Designing for Older Drivers and Pedestrians; CA Holds GEESD IV Conference; MN DOT & FHWA Partner to Promote National R&T Center; Bike-Pedestrian-Only Roundabouts; New Staff Profiles; and, Calendar of Events.

http://www.fhwa.dot.gov/resourcecenter/success/cosvol4iss4.pdf

Links:

Turner-Fairbank Highway Research Center: <a href="www.tfhrc.gov">www.tfhrc.gov</a> Resource Center: <a href="http://www.fhwa.dot.gov/resourcecenter/">http://www.fhwa.dot.gov/resourcecenter/</a>

National Highway Institute: http://www.nhi.fhwa.dot.gov/home.aspx

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Suggestions may be submitted to: FHWA\_Now@fhwa.dot.gov