



Centered on Service

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Virginia Demonstration Showcases EPS Geofoam Installation on Display

When working on roadway projects, do you occasionally run across situations where the underlying soft soil is too soft and compressible to carry designed loads, or the estimated time-rate of settlement of an embankment exceeds acceptable standards? Have costly corrective fill measures still resulted in significant settlement or decreased stability over time? Do you deal with failing slopes, excessive culvert loads, or problems with high lateral loads behind retaining structures? Expanded Polystyrene Geofoam (EPS Geofoam) could be your answer!

On Tuesday, July 25, the Virginia Department of Transportation (VDOT) and URS Corporation joined the Federal Highway Administration's (FHWA) Resource Center, and the Virginia, Florida, and Utah Local Technical Assistance Programs to



Woodrow Wilson Bridge Replacement Project, looking North from Virginia side (foreground) to Maryland side. Demo took place in lower left corner area.

present a 1-day Demonstration Showcase at the intersection of U.S. Route 1 and the Capitol Beltway (I-495) in Arlington,

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EPS GEOFOAM *From Page 1*

Virginia, on Expanded Polystyrene (EPS) Geofoam and recommended field applications--what to do and what not to do. (See bottom left corner of photo for demo site).

Setting the Tone

Participants for the 1-day event were initially provided a Geofoam Technology Overview, including the history and recommended applications for this technology, by Silas Nichols, Senior Geotechnical Engineer, FHWA Resource Center. Then John Volk, Principal Engineer, URS Corporation, provided information on Field Applications and Experiences.

Putting Things in Perspective

David Shiell, District Materials Engineer, VDOT-No. Virginia District gave an overview of the showcase project; Archie Filshill, General Manager, CETCO Contracting Services, provided insight on the contractor perspective; and Mike Terpak, President, R-Control, Team/Insulated Building Systems, Inc., provided the manufacturing perspective.

Road Trip

It was then time to see a live EPS Geofoam deployment. A caravan took participants to an Active Installation Site on the Woodrow Wilson Bridge Project.

A guided field visit to a previous EPS Geofoam installation provided an opportunity for in-use evaluation. A guided visit to the actual construction

site also took place to provide participants a real-time experience with EPS Geofoam block preparation and placement. A post-showcase support team also was available to assist with first-time applications back home.

Introductory speakers included Jim Smith, National Local Technical Assistance Program Association, Product Demonstration Showcase Program Coordinator; Renaldo "Nick" Nicholson Woodrow Wilson Bridge Project Manager, VDOT-Northern Virginia District; Joyce Curtis, Director, FHWA Resource Center; Betsy Steiner, Executive Director, EPS Molders Association.



For more information on Expanded Polystyrene Geofoam use in highway and bridge construction projects, contact:

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Why consider EPS Geofoam?

EPS Geofoam is a rigid foam plastic engineered with a unit density as low as 1 pound per square foot, thus delivering a material that is 100 times lighter than most soils. In particular situations this extreme difference in density makes EPS Geofoam an attractive fill option. A lightweight manufactured molded block, EPS Geofoam can be easily cut to any size or shape at the job site. Additionally, as an embankment soil alternative, EPS Geofoam can be covered to look like a normal slope embankment or finished to look like a wall. This technology, when properly applied in the appropriate situation is a field tested, budget-friendly winner. Here is a look at some of the less-obvious, but very important, field proven benefits:

- **Accelerated construction**
- **Payroll, transportation and equipment cost savings**
- **Reduced labor time for construction**
- **Exerts little or no lateral load on retaining structures**
- **Easily constructed in limited right-of-way situations**
- **Allows application in adverse weather conditions**

TECHNICAL ASSISTANCE

Pacific Northwest Freight Workshop Attracts Diverse and Highly Influential Attendance

Seattle, Washington, was the site of a highly successful freight workshop, *Federal Financial Tools, Financing Freight in the Pacific Northwest*, on June 29, 2006. The FHWA co-sponsored the 1-day financial workshop, along with the Maritime Administration, the Federal Railroad Administration, and the Washington State Department of Transportation (WDOT).

The Resource Center's Innovative Finance Technical Service Team (TST) had the lead for the FHWA efforts in coordinating the workshop. In addition, each TST specialist, Prabhat Diksit, Jennifer Mayer, Jim Hatter, and Keith Bishop provided a technical presentation. The workshop was an outgrowth of the agency's congestion initiative, the *National Strategy to Reduce Congestion on America's Transportation Network*. One of the solutions to congestion in the Nation is to address and seek out answers to eliminate freight congestion.

The workshop specifically emphasized port access projects and the two issues of roadway and railway congestion. Diksit considered the workshop, "A wonderful exchange where the very serious problems of port access via highways and rail were addressed both by U.S.DOT experts and State and local governments. The U.S.DOT experts brought their approach of using complex financing tools and public private partnerships; Washington State and local

governments area brought their approaches of voluntary coalition building to identify bottlenecks and the raising of grants from many sources. A lively exchange was had."

The workshop attracted more than 60 attendees, including representatives of the US House and Senate, Washington State

"You and your team Rock! I am so glad to have had the opportunity to participate in a small group setting...this was a fabulous find. Thanks!"

Libby Ogard
Wilbur Smith
Associates

FINANCING FREIGHT IN THE PACIFIC NORTHWEST WORKSHOP ON FEDERAL (USDOT) FINANCIAL TOOLS

June 20, 2006 - Seattle, Washington

Freight Issues in the Pacific Northwest

*Barb Ivanov, Director
Office of Freight Strategy
and Policy, Washington State DOT*

Funding Categories and Freight Eligibility Under the Federal-Aid Program

*Prabhat Diksit,
FHWA RC Innovative Finance Team*

Innovative Finance: A project selection case study

*Pete Beaulieu
Freight Mobility/Corridor Strategies
Puget Sound Regional Council*

Federal Credit Assistance Applicable to Freight Projects

*TIFIA: Keith Bishop
Joint Programs Office, USDOT
RRIF: Roth Alexander
Federal Railroad Administration*

State Infrastructure Banks Section 129 Loans: State-Based Credit Assistance Options

*Jennifer Mayer
FHWA RC Innovative Finance Team*

Private Sector Financing of Freight Infrastructure

*Jim Hatter
FHWA RC Innovative Finance Team*

Freight in the Future

*Karen Schmidt, Executive Director
Freight Mobility Strategic Investment Board*

Legislature, WDOT, metropolitan planning organizations from the States of California, Oregon, and Washington, several West Coast ports, the University of Washington, cities and counties from throughout the Northwest, the Boeing Company, the Home Depot, Wilbur Smith, BNSF Railway, Parsons Brinckerhoff and many other organizations.

See **FINANCE** on Page 4

FINANCE from Page 3

"The workshop discussion was excellent primarily due to diversification of attendees and high level of interest," commented Hatter. The workshop included the application of complex tools for freight projects in the Pacific Northwest, offering case study and lessons learned.

The presentations from the workshop are available on the website for Innovative Finance for Surface Transportation at:

http://www.innovativefinance.org/events/resources-freight_june06.asp

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*"All agreed that the presentations were excellent.
Your expertise and articulate presentations were truly outstanding"*

Lyn McClelland
Maritime Administration

North Central Superpave Center Shifts Focus from Superpave to HMA Technology

The North Central Superpave Center (NCSC) in West Lafayette, Indiana, is a premier testing facility and research laboratory, recognized for excellence in the implementation of the Superpave performance-based system for designing asphalt pavements. In addition, the NCSC's expanding role in the highway industry includes addressing all issues related to Hot Mix Asphalt (HMA) technology. The NCSC is a regional organization, primarily serving the departments of transportation in 10 States in the north central region of the United States and the highway ministries in two provinces in Canada.

The NCSC is poised to revitalize the center, introduce new products, strengthen customer relations, and to become a leader in HMA technology. The NCSC is morphing into a central information resource and clearinghouse for the north central region. Initiated in 1995 through the FHWA to support the technology transfer of Superpave, the NCSC has accomplished this goal, and today the center is moving forward, exploring new directions and broadening its scope of services.

In the past year, the center has been working diligently to develop a marketing strategy to complement its change in focus and business objectives. A marketing subcommittee was convened, including representatives from the center's staff, State

Departments of Transportation, private industry, and the FHWA. In addition, the FHWA representative, Lee Gallivan, with the Office of Pavement Technology, requested assistance from the Resource Center (RC) Pavement and Materials Technical Service Team (TST). RC Pavement and Materials Engineer Dennis Dvorak responded bringing in the services of the RC Marketing and Communications Internal Services Team.

Marketing Specialist Judith Johnson is providing technical assistance to the NCSC, developing a comprehensive marketing plan to use as a roadmap for the center's changing emphasis and direction. In March, Johnson, along with Strategic Planner Denise Bednar met in Chicago with the NCSC director, staff, key stakeholders, and FHWA Pavement and Materials Engineer Gallivan, to conduct a marketing assessment. The aim of the one-day session was twofold: 1) to facilitate a discussion concerning the future of the center, and 2) to obtain information critical to initiate a marketing analysis and develop strategies to drive the center's business goals.

The NCSC started as one of five Superpave Regional Centers, established in various regions across the country. The five centers had the single purpose to assist agencies and the industry in the implementation of the Superpave performance-based system for designing asphalt pavements. The NCSC is a joint effort of Purdue University, the Indiana Department

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of Transportation, and the FHWA and is administered by the Joint Transportation Research Program at Purdue University.

Past success for the NCSC involved delivering an innovative product, Superpave, to customers across the north central region. To remain competitive in this industry, the NCSC should establish a business model to deliver value to customers. When speaking about the future expectations for the center, Mike Heitzman, Iowa Department of Transportation and lead for the marketing subcommittee, commented that the NCSC is making a "major transition to HMA performance testing."

The marketing challenges facing the NCSC today are as follows:

- The NCSC is in transition, and in a state of re-energizing its organization.
- At the same time, the NCSC faces low awareness of the center, its changing direction, and its current shift from Superpave to new and innovative products and services in HMA technology.

During the session, the group exchanged opinions about the NCSC's purpose; debated the course of the center; examined the center's primary products and services; and began to clarify the center's niche in the marketplace and define target customers. For example, the questions presented in the assessment explored the following issues:

- Who are the "customers" of the center?
- Who does the center appeal to?
- What is their perception of the center?
- Why/how is the center different or unique?
- Why would customers choose to work with the center?
- Why would these customers choose not to work with the center?
- What is the current situation?
- What are your expectations for the future?
- What is your offering (how do you describe it)?
- What are your criteria for success?
- What trends or factors are impacting success?
- What opportunities and challenges are before the center?
- What are your key assets? What are your key liabilities?

- What will tell the center if it is moving in the right direction, meeting customer expectations, and is achieving a given state of efficiency on its processes?

An evaluation of the NCSC's internal strengths and weaknesses and external opportunities and threats serves as the foundation for the strategic analysis and marketing plan. The plan focuses on the NCSC's transition from a Superpave center to a resource in HMA Technology, and other emerging technologies related to asphalt pavement. The plan suggests ways in which the NCSC can build on existing customer relationships, and on the development of new products and/or services targeted to specific customer niches.

Jan Olek, Director of the NCSC and Professor of Civil Engineering at Purdue University, said, "The NCSC should build on the existing strength to develop the best organizational model that will allow the center to align strategic goals, capabilities, and technical needs of the stakeholders. . . Main elements of that development [include the following]:

- Assessment (and endorsement) of the key functions of the center
- Quantification of benefits
- Development of improved ways of communicating the center's role
- Ongoing evaluation program

In this process, advantage should be taken of the existing attributes, including association with a strong engineering program, diversified research experience and portfolio, national presence and recognition, recognized expertise in binder testing, RAP and noise research."

The NCSC is ideally suited to assist agencies and industry with current and future challenges, providing the following core benefits and services:

- **Research**
- **Conducting New Research Projects**
- **Providing Expertise as Research Advisor**
- **Technical Support**
- **Providing Testing Services**
 - Providing Interactive Training
 - Answering Information Requests
 - Conducting Literature Searches

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- **Technology Transfer**
 - Disseminating Information
 - Providing Technical Assistance
 - Participating in conferences in speaking engagements
 - Providing Expertise as members of committees
- **Training**
 - Creating On-line Training
- **HMA**
- **Noise**
- **RAP**
 - Producing Technical Videos
 - Developing New Training Courses in Emerging Technology

Through these core benefits, the NCSC delivers products, bringing solutions and technical expertise in the following:

- **Pavement Performance**
 - Dynamic Modulus
 - Flow Number
 - Master Curves
- **Environment**
 - Recycled Asphalt Pavements (RAP), and other recycled materials
- **Safety**
 - Friction
 - Noise

In addition, the center offers the following expertise and augmented product services:

- Provides technical solutions and input on national issues through the following means:
 - National Newsletter
 - Website
 - Web HMA Searchable Database
 - Training Courses
- Disseminates technical information through visits to State departments of transportation (DOT's) and highway ministries in Canada.
- Provides preliminary literature searches for agency and ministry research projects.

Steadily advancing forward, the NCSC is progressing beyond the immediate challenges of Superpave implementation, and the center's products and services are evolving to engage a changing transportation industry. This vision of tomorrow's potential keeps the center on the cutting edge of research, technology,

and training allowing the NCSC to focus on new issues of specific concern to the north central highway agencies and industry. Such issues include tire pavement noise control, frictional characteristics of surfaces, ignition oven reliability, and regional test standardization. Visit the NCSC website at:

<http://bridge.ecn.purdue.edu/~spave/>

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IT TIP

You just completed a large project such as a Process Review using Microsoft Word and you need to share the document with your colleagues, but it's over FIFTY MEGABYTES in size!

**What do you do? You can't email it . . .
it's TOO LARGE and even if you could,
it would take HALF AN HOUR
to open or download . . .**

In many cases, converting the MS Word Document to an Adobe PDF using Adobe Acrobat 7.0 Professional is the way to go. Using the latest version of Adobe, we recently converted a 50-megabyte MS Word Document to just under two-megabytes in size.

For a copy of the software or for more detailed instructions, contact **Kemper Hulvey** at **(202) 366-9087**.

TRAINING

High Performance Materials Accelerate Bridge Construction



Members of the FHWA Resource Center's Structures Technical Service Team recently traveled to Oregon, at the request of the Oregon Department of Transportation (ODOT), to deliver the latest information on five high performance materials (HPM):

1. Fiber Reinforced Polymers
2. High-Performance Concrete (HPC)
3. High-Performance Steel (HPS)
4. Rebar
5. Accelerated Bridge Construction/
Prefabricated Bridge Elements (ABC/PBES)

Based on a total attendance of more than 250, the cross-section of attendee backgrounds, the amount of exchange during Q and A periods, and the follow-up actions taken by the ODOT, these HPM training seminars appear to have been very successful.

Emphasis throughout the seminars on the use of HPMs in accelerated bridge construction technology was a natural progression in marrying these two elements of the FHWA Strategic Bridge Program. On a broader scale, the important combination of these two elements directly supported the agency's National Strategic Goal of Mobility and Productivity.

One added benefit of the HPS seminar was the enhanced opportunity for a concurrent meeting between the FHWA Oregon Division and representatives from the States of Idaho and Washington, as well as the private industry, which initiated discussions on regional uniformity of steel bridge design and fabrication details. This type of periodic forum should have long-term effects through the evolution of continuous long-term improvements to quality and life-cycle cost-effectiveness and competitiveness of steel bridges. The enthusiasm shown by several attendees after the HPC seminar was impressive. The group remained with speakers long after the formal workshop adjournment to discuss potential improvements to specifications and HPC bridge deck performance. To further enhance the material in future HPC seminars for staffs and the State's consideration,

the plan is for the training to include the emerging technologies of self-consolidating concrete, light-weight HPC and ultra-HPC.

5-Module Training Now Captured on 2-CD Set

Following the seminar, a 2-CD set of the HPM training offered in Oregon was developed, and it illustrates how these educational offerings can be tailored to meet Division-, State-, or Region-specific needs. The CDs contain Powerpoint presentations from five HPM seminars hosted by the ODOT this past February and March.

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Accelerated Bridge Construction/ Prefabricated Bridge Element Seminar Offered

This workshop is designed for the representatives of the owner agencies who are making the decisions regarding the bridge type; the contractors; and the implementers, including designers and project managers. The workshop is tailored to States' specific needs and practice. The agenda includes presentations on decisionmaking framework, a tool for the objective consideration of prefabrication to achieve accelerated bridge construction; completed projects in various States using either concrete, steel, or an innovative material or system; contractors' and consultants' viewpoints on accelerated bridge construction; and the latest on industry research.

It is expected that the PBES Manual will be coming this winter. (See the January issue for more details about where to get a copy as they come available.)

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Design Guide Implementation Team Conducts Training for Mexico Transportation Institute

The FHWA Design Guide Implementation Team (DGIT) has put forth a strategic plan of action to aid the transportation community in deploying the new technology, Mechanistic-Empirical Design Guide (MEPDG). The DGIT is an integral part of an extensive outreach campaign including *Enhancement, Education, and Implementation* strategies to promote the MEPDG. These activities include onsite and web based workshops that have already educated more than 1,200 engineers across the United States in 25 States and around the globe in Canada, Europe, China, India, Mexico, and Central and South America.

On July 10 - 14, 2006, two Resource Center staff members of the Pavement and Materials Technical Service Team (TST), Chris Wagner and Angel Correa, provided four days of training on the MEPDG to the Mexico Transportation Institute. Wagner and Correa also are members of the FHWA Design Guide Implementation Team. The workshop included presentations on theory and application of the MEPDG Software. The training was held at the Mexico Transportation Institute Research Facility in Queretaro, Mexico.

Approximately 60 participants representing several Mexican States, research engineers, industry representatives, and the country of Guatemala were participants of the workshop. This workshop marks the fourth time that the Resource Center Pavement and Materials TST has traveled to Mexico to provide training. "The continued coordination between the Mexico Transportation Institute and the Federal Highway Administration allows for an exchange of current national practices and design philosophies in pavement materials and structural design," Wagner said.

For more information on MEPDG, or to schedule training, contact:

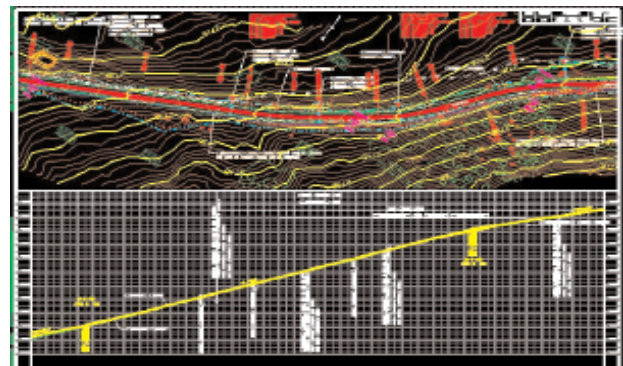
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States Benefit from Workshop The Visualization Toolbox: A Practical Primer for Transportation

The expectations of the public continue to grow, more public involvement, more responsibility for collaborative decision-making and more realistic presentations of proposals. Experience of the public from the internet, instant messaging and video games have increased expectations of how the transportation industry, and government agencies, communicate and share information. Vague transparencies of project plans will no longer do.

For a long time, there was no alternative to DOTs using engineering drawings to describe proposed transportation plans, programs and policies. It is now possible to use visual imagery to explain the context of how a proposal fits into the world, its impact on surrounding communities and environment and how it will be developed. It is increasingly a part of effective public involvement, as well as communication between transportation technical staff.



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Not only can visuals make communicating what complex proposals will look like, easy and quick, but it also can make it possible to demonstrate how the facility will function.

VISUALIZATION *From Page 8*

At the same time new tools are becoming available to tackle these expectations. Commonly available software for GIS, CAD, traffic simulation and planning are adding graphic and animation extensions, which allow agencies to create realistic portrayals of alternatives. Low-cost tools, such as Google Earth and Microsoft Virtual Earth, are making it easier to reach larger audiences.

The current surface transportation legislation--The Safe Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU)--will spur more efforts. The law calls for State Departments of Transportation (DOTs) and Metropolitan Planning Organizations (MPOs) to use visualization techniques to the extent possible to convey transportation plans and programs.

This new requirement has added to the anxiety of those same DOTs and MPOs. Most do not have an idea of what will be required. What will it mean for costs, staffing needs, and training and information technology? Much of the existing transportation work in this area has been conducted by consultants.

Visualization.
Examples of visualization techniques include sketches, drawings, artist renderings, physical models and maps, simulated photos, videos, computer modeled images, interactive GIS systems, GIS-based scenario planning tools, photo manipulation and computer simulation.

To help guide State and local efforts to address visualization, the FHWA Resource Center has developed technical assistance for the DOTs and MPOs. The Resource Center partnered with the FHWA Federal Lands Highway Division and New York State DOT, developing a half-day workshop, entitled "The Visualization Toolbox: A Practical Primer for Transportation." For the past 2 years, the workshop was presented at the American Association for State and Highway Transportation Officials (AASHTO) GIS-T Symposiums. The Resource Center also presented shorter versions to four State Planning Conferences in 2006. In addition, the Resource Center, in collaboration with the Office of Planning and Federal Lands Highway Division, presented a discussion on visualization, as part of the "Let's Talk Planning" web conference series.

Other FHWA resources for Visualization include the following:

- FHWA Office of Planning web site:
www.fhwa.dot.gov/planning/vip/index.htm
- Federal Lands Highway Division:
Design Visualization Guide
http://www.efl.fhwa.dot.gov/techdev/design_index.htm

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TECHNOLOGY DEPLOYMENT

FHWA Offers a Chance to "Kick the Tires"



The FHWA Resource Center's Operations Technical Service Team (TST) recently offered agency staff an opportunity to participate in a series of web conferences aimed at allowing practitioners to share key information with each other about select market-ready technologies for a better understanding about:

- their capabilities as well as the limits of their applicability,
- the deployment goal and anticipated deployment issues,
- the roles of Division-Headquarters-FHWA Resource Center specialists,
- available resources to assist promotion efforts,
- and some best practices and lessons learned.

The series provided a **Kick-the-Tires** opportunity for specialists to ask questions and obtain product information from the presenters and peers to help all be ready to face similarly busy practitioners at State and local agencies.

What's Offered

Many practitioners have a lot of experience and great perspectives with a few of these technologies-but, through this effort participants collaborated on good ways to advance the state-of-the-practice with these technologies. Skeptical of a product's readiness? That's quite alright--such a perspective is invaluable and can strengthen the agency's promotion efforts if articulated in a constructively.

The series, hosted by the Operations TST, is focused on providing the Division Offices with detailed technical information and opportunities to ask questions and share best practices with their peers on the market-ready technologies in the operations discipline. Other sessions on **ACS-Lite**, **511**, **Maintenance Decision Support Systems (MDSS)**, and **Quickzone** have also been held throughout the summer.

Forecasting Maintenance Work

The first session in the "Kick-the-Tires" series was held June 28, and was conducted by Ray Murphy, one of the FHWA Resource Center's Rural ITS Specialists, via a Breeze web conference on the Maintenance Decision Support System (MDSS). MDSS integrates information about the road surface, weather conditions, and an organization's policy and procedures to provide enhanced decision support, presently focusing on winter road operations. The series sponsored by the Operations TST, is focused on giving Division Specialists more detailed, technical briefings on technologies that provide them with greater background when they are talking to State and local partners about a tool's status, applicability, and limitations. Specifically, participants were given information on Investment, Development, Functionality, a Reality Check, DOT Perspectives, Outreach, and Future Direction. Speakers included Ray Murphy, Pat Kennedy from the Office of Transportation Operations, and Andy Stern from Mitretek. The session had 26 individuals or offices participating.

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Spotlight on ACS-Lite

Eddie Curtis, Traffic Management Specialist for the Operations TST recently conducted two web-based presentations focusing on ACS-Lite. The first presentation, on August 17, was an NTOC Web Cast with over 100 attendees. Speakers for the NTOC Webcast included Raj Ghaman, FHWA Operations R&D; Douglas Gettman, Siemens; Gary Duncan, Econolite; Mark Hudgins, Siemens and Peter Ragsdale, PEEK. A recording of the web-cast is available along with all presentation materials at www.ntoctalks.com/web_casts_archive.php.

On August 24, ACS-Lite was the focus of a "Kick-the-Tires" webinar for the FHWA division offices. This session was attended by 42 attendees and focused on the deployment aspects of ACS-Lite. ACS-Lite is an adaptive traffic signal timing tool aimed at improving traffic signal timing on closed loop traffic signal systems. ACS-Lite accomplishes this with low implementation cost and minimal ongoing operations and

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TIRES form Page 10

maintenance expense. Curtis featured ACS-Lite during a technical session at ITE Annual Meeting in Milwaukee and technical sessions on ACS-Lite are planned during the spring and Annual ITE meetings in 2007.

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Promoting 511 Deployment Experience

Mac Lister, ITS Specialist in the FHWA Resource Center, hosted a "Kick-the-Tires" session for the market-ready technology 511 with a T3 webconference on 511 was approved by the FCC to provide three-digit telephone public access to real-time transportation condition information. The 511 session targeted FTA and State DOT audiences based on the specifics of this technology. Speakers included Mac Lister, Pete Costello from PBS&J, Carol Zimmerman from Battelle, and Barbara Blue from Kansas DOT covering the guidelines, business models, deployment experience, and performance measures. The session had 39 individuals or offices participating. In addition to the web conference, Lister also participated in the National 511 Conference held recently in San Diego.

For more information about 511, contact:

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QuickZone

On September 27, Daniel Grate conducted the QuickZone "Kick-the-Tires" session, which featured presentations about the development of QuickZone, its benefits, basic functions, and limitations. QuickZone is a traffic impact analysis spreadsheet tool that was developed by FHWA for use in estimating work zone delay. It also estimates the average and maximum queue length that can be expected with a particular work zone configuration. QuickZone can be used to compare the traffic impacts for work zone mitigation strategies and

estimate the costs to motorists in terms of delays and potential backups associated with different strategies or scenarios. QuickZone is intended for use in all phases of the project development process including planning, design, construction, maintenance, and operations.

For more information about QuickZone, contact:

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PARTNERSHIPS

FHWA Launches Planning Community of Practice Web Site

In August 2006, the FHWA established a new resource to share information within the FHWA planning discipline, the Planning Community of Practice (CoP). The purpose of the Planning CoP web site is to provide a forum for internal discussion and sharing of resources and ideas for FHWA Planners across all units and offices. The intent of the CoP is to be a common and beneficial source of information and dialogue for FHWA planners.

The CoP is being launched with an initial focus on a few critical planning topics. Based on the usage and feedback received from the site, new topics or theme areas will be added. The Planning CoP currently has seven initial theme areas:

- Fiscal constraint
- SAFETEA-LU Update Cycles
- SAFETEA-LU Planning and Environmental Provisions
- SAFETEA-LU Overall Planning Issues
- Planning Grants and Administration
- Planning Meetings and Conferences
- Planning Interchange/Field Email Group

Each theme area has been populated with reference materials and initial discussion items by the Planning CoP development team. With the

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launching of the site, any FHWA staff member will now be able to add new documents, post discussion questions, respond to questions, and generally share information.

A cross-unit team of facilitators also will moderate each of the Planning CoP theme areas. The role of the facilitator is to review reference materials and postings for accuracy and appropriateness to the topic and to post leading questions and issues in the discussion forum area of each topic.

Resource Center Planning Team Leader Lisa Randall, served as the lead for the Planning CoP development team to organize the initial topics of the CoP. The development team includes members from across the FHWA:

- **Lisa Randall**, FHWA Resource Center Planning Technical Service Team
- **Rob Ritter**, Transportation Planning Capacity Building Program, FHWA HQ
- **Robin Smith**, Planning Oversight and Stewardship Team, FHWA HQ
- **Leigh Levine**, FHWA California Division
- **Susan Law**, FLH Planning (Central Federal Lands Highway Division)
- **Ben Williams**, FHWA Resource Center Planning Technical Service Team
- **Dave Franklin**, FHWA Indiana Division

In addition, the Resource Center is instrumental in serving as moderators/facilitators for particular theme areas of the Planning CoP. They include the following:

- **Fiscal constraint:** Robin Smith, John Humeston, Eloise Freeman-Powell, RC Staff member TBD
- **SAFETEA-LU Planning/Environment:** Ben Williams, Chester Fung, Jose Campos, Danyell Diggs
- **SAFETEA-LU Planning Update Cycle:** Leigh Levine, Sabrina David, Bill Hass, Brian Betlyon, Harlan Miller
- **Overall Planning and SAFETEA-LU:** Rob Ritter, Jim Thorne, Spencer Stevens, Marcus Wilner, Dave Harris
- **Administration of FHWA Planning and Research Grants:** Ken Petty
- **Planning Meetings and Conferences:** Jocelyn Jones
- **Planning Interchange/Field Email Group:** Dave Franklin, Eric Pihl, and Lorrie Lau

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SPECIAL FEATURE: RC Staff Hosts Simultaneous Celebration

On June 26, 2006, the FHWA Resource Center joined colleagues around the nation in celebrating the 50th anniversary of the Eisenhower Interstate and Defense Highway System. In a coordinated effort, RC staff--in Atlanta, Baltimore, Olympia Fields, Lakewood, and San Francisco--timed their events to occur in unison.

In Atlanta, the FHWA Resource Center and the Division Office staffs joined for a special tribute to celebrate the achievement of this milestone. Construction & Project Management Team Leader, Rob Elliott opened the 50th anniversary event commemorating the initiation of the Interstate and its impact on our Nation. Pavements Management Engineer Luis Rodriquez provided a blessing for the day and thanksgiving for the luncheon. The RC staff was joined by FHWA GA Division Administrator Bob Callan (*seated on the left in second photo above*), Atlanta AAST Director Stan Fleming, and FHWA staff in Atlanta from the GA Division, Administration, and Headquarters.



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The Baltimore staff (*some shown here*) joined by the staff from the Maryland Division Office, celebrated the milestone by performing outreach-in the form of a Birthday party in the lobby of the City Crescent Building (where the RC is located). Over 160 guests, building-mates, and visitors were treated to slices of Interstate cake, lapel pins, brochures, and magnets and informational brochures.



Earlier in the week, the American Association of State Highway and Transportation Officials' (AASHTO) "50th Anniversary Reenactment Route Convoy" passed through Chicago off I-80 near the Resource Center site in Olympia Fields, IL. On Saturday, June 24, the convoy proceeded to Tinley Park, Illinois (a suburb of Chicago), where the local Lincoln Highway historical association offered a welcome reception sponsored by Motor Coach Industries. For more information on observances of the 50th Anniversary of the Interstate System, visit FHWA's site at:

www.fhwa.dot.gov/interstate/homepage.cfm

For information on the AASHTO Convoy visit:

<http://interstate50th.org/>

On June 26, 2006, the Illinois DOT hosted a news conference and send off breakfast near the Convention Center featuring the unveiling of

artwork commissioned by the University of Illinois to commemorate the 50th Anniversary of the Interstate. The artwork is included in a traveling display, a specially designed Airstream Trailer containing telescreens with historical information and a recording booth where people are able to record their own Interstate Highway stories and memories. This display will travel cross-country with the National Convoy and then afterwards it will be featured at events around the State. The theme of the artwork is a celebration of 50 years of the Interstate System and the benefits it has provided the people of Illinois by fostering economic progress, freedom, and safety of travel.

The San Francisco staff of the Resource Center opted to host a Celebratory Open House, (having also just recently moved from Suite 2100 to Suite 1700 within the building). They were joined by 21 guests--"a good mix of other DOT modes, other Federal agencies, Caltrans, building tenants and management, FHWA retirees, etc.", according to Robert O'Loughlin, AQ TST Team Leader.

*Due to widespread travel demands on the staff in Colorado on June 29, their official celebration was held August 11, at their Employee picnic at Daniel's Park in Lakewood-which included the staff's from the Colorado Division Office, Central Federal Lands, Lakewood Administrative Service Team (LAST) staff.

CO Transportation Fair Aims at Congestion

On June 24th, the Resource Center Office in the Lakewood, CO, location participated in a building-wide Transportation Fair. Several public agencies and businesses to offer information to DOT employees on how to reduce the cost and stress of commuting to and from work and other travel around the Denver metro area. Information about Bike-To-Work Days, Eco-passes for mass transit and car-pool matching was provided. In addition, the modal agencies with offices in the Dakota Building set up tables providing information about what they do, allowing all the employees to get to know their "neighbors" in the Dakota Building. Agencies participating included the FHWA Colorado Division, Central Federal Lands, and the Resource Center, Federal Transit Administration, Federal Motor Carrier Safety Administration, National Highway Traffic Safety Administration, the Federal Rail Administration, and Pipeline and Hazardous Materials Safety Administration.



Photo courtesy of AASHTO

Media Training Program Still Going Strong after 5 Years

It started years ago on a rainy May morning in the New Jersey Division Office in West Trenton. Public Affairs Specialist Carin Michel, now the Resource Center's Marketing and Communications (Internal Services) Team leader, instructed the first FHWA Media Training Course to about 15 division employees. That inaugural class marked the beginning of a major agency effort to assist FHWA field offices and their State and local partners to more effectively handle local news media inquiries and interviews.

Because FHWA's Media Policy permits field offices to respond directly to local media inquiries at the direction of the Office of Public Affairs, the agency wanted to provide management and staff with the basic skills to more effectively carry out the policy, said Michel, when asked about the impetus for launching the media training program. "FHWA wanted to give its employees the tools to better tell the agency's story in the local press. That's what this course is all about. The amount of good or damage that can be done in a 2-minute interview is amazing." [**Note: FHWA Media Policy: Refer any calls from reporters to the Office of Public Affairs immediately.*]

Michel spent most of early 2001 designing and developing the course curriculum based on her own past experiences as a spokesperson for the Internal Revenue Service, her academic studies, and a lot of research. Working with Headquarters, she also surveyed all FHWA Division Administrators and Assistant Division Administrators about their media training needs. The initial curriculum consisted of six lessons taught over a one-day class:

- The importance of media relations
- How to develop main messages
- Developing relationships with reporters
- How to control the media interview
- How different media have different needs
- General tips, aesthetics and appearance

The course takes participants through the process of handling a media inquiry from the moment a reporter calls until the conclusion of the interview and beyond.

The class learns how to take extra time after the reporter's initial call to gather their thoughts and develop a series of main messages, which interviewees can use repeatedly throughout the interview to make their point.

"I try to emphasize that interviewing is not just answering a series of reporter questions," said Michel. "It's also about inserting key messages into the interview that help explain and educate the public about agency projects or issues. I try to teach people how to answer questions clearly and concisely, but at the same time, take control of the interview by talking about what's important to their agency, not necessarily just what's important to the reporter."

These basic theories and techniques are reinforced through class exercises. After the class completes a group exercise on how to develop main messages, the group participates in a series of individual or group mock interviews, with Michel playing the role of "challenging" reporter.

"The class never knows which Carin they're going to get," said Michel. "Sometimes I play the role of the nasty, negative reporter who constantly interrupts and challenges them, and then I switch to being the caring, empathetic reporter who's deceptively nice but sneaky. My goal is to be their worst nightmare of a reporter. The role playing is fun and challenging for the entire class."



The interviews, which are usually based on local projects and issues, are videotaped and then critiqued by the entire class. "The idea behind the mock interview is to give participants a chance to experiment and practice in front of their peers before they have to do it in the real world," Michel said. "It's better to work out the bugs in class than have thousands of people hear or read your mistakes in the local news media."

The mock interviews, though at times intense and challenging, also produce light-hearted moments when participants blunder or give humorous responses to difficult questions. For example, one recent class erupted into laughter after a participant, when asked if FHWA had an ethics policy, responded, "Yes, and we follow it and we just keep it going all day long."

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"We really enjoyed the media training, especially the mock interviews," said Arkansas Division Administrator Sandra Otto, whose office took the course in late 2001. "I remember us getting pretty hilarious watching the video replay of ourselves. The engineers and others who took the class really appreciated learning about what to say and what not to say. It's something they're not usually exposed to every day."

But the task of covering the entire country became too daunting for one person to manage. To meet course demands and increase geographic coverage, Steve Moler, a Public Affairs Specialist in the FHWA Resource Center office in San Francisco, was also enlisted to teach the class in the summer of 2001. They co-instructed the course in the California, Montana and Alaska divisions. After further perfecting the program together, both instructors then fanned out across the entire country to teach the course. Over the past five years, some 1,200 FHWA, State department of transportation, and metropolitan planning organization employees in 34 States have received the training from either Michel or Moler, and in some cases, from both.

"The media training program has been a huge success for us," said Resource Center Director Joyce Curtis. "It has allowed the Divisions and their partners to more confidently respond to some of the smaller organizations on the local level. We're all better off when the public is well informed."

Media Training Level 2

Even though Michel and Moler have taught the majority of the Divisions, they each get many requests for repeat courses and refreshers. They have also expanded the program over the years to meet additional training needs. For example, media training has been refined to provide more customized media training for the Divisions and their State counterparts. This more intermediate-level technical assistance, called Media Training Level 2, examines ways to use the media in a more proactive manner to educate the public about projects and issues. Participants develop additional skills in reporter relations, proactive media strategies, crisis communications, and how to plan and execute a successful media campaign. This



course also includes videotaped mock interviews, with an emphasis on how to handle press conferences, television and radio interview programs, and all types of public meetings.

The main difference between the regular media training course and the Level 2 class is to teach State transportation agencies how to shift from reactive to proactive media strategies, said Moler, who developed and now teaches the Level 2 course. "To be successful in media relations, you have to not only react to day-to-day media inquires, but you also have to have the capabilities to go on the offensive when necessary, especially on the larger, longer-term Federal-aid projects. That's what the Level 2 class is all about."

Short courses

Moler and Michel have expanded the technical assistance they provide to include expertise in a variety of communications topics. Divisions can pick and choose which type of expertise they need for their specific office. Help is available in the following areas:

- Customized media training
- Public speaking
- Writing and editing assistance
- Giving dynamic, persuasive presentations
- Dealing with hostile groups and individuals
- Crisis communications
- Interpersonal communications
- Public involvement communications training

After the media training program hit full stride in late-2001, another communications need unexpectedly arose. Media training participants started clamoring for help with public meetings. As a result, Moler has developed a workshop and customized technical assistance that focuses specifically on improving communications at all types of public meetings. Called "Effective Communications in a Public Involvement Campaign," this full-day workshop first examines the human emotions that play out in so many of today's public involvement campaigns. Next, Moler teaches strategies to help deal with and overcome these emotionally charged issues to get projects approved and implemented more efficiently.

Through class exercises and mock public meetings, participants gain practical, hands-on experience on how to incorporate an effective communications plan into the overall public involvement campaign, how to

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prepare for and carry out a successful public meeting, and how to conduct proper meeting follow up. The mock public meetings are usually based on real projects a division office or state transportation agency is currently working on. The session also includes assistance with how to give effective presentations and deal with hostile groups and individuals.

You can obtain more information about all the services of the Marketing and Communications Internal Services Team at the following web site:

<http://www.fhwa.dot.gov/resourcecenter/programs/marketing/index.cfm>.

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Marketing Group Offers Technical Assistance and Training

Marketing is the process of initiating and building mutually beneficial relationships. Strategic marketing gives customers good reasons to maintain a loyal relationship with an organization. Today, across the Federal Highway Administration (FHWA), the principles of marketing--and the practice of developing marketing plans and strategies--play an essential role in administering transportation programs, deploying technology, building coalitions, and encouraging customer service.

What can marketing do? How can incorporating marketing into project planning or overall program goals lead to success? What is the process of marketing? The Marketing Group in the FHWA Resource Center offers assistance in understanding the fundamentals of marketing, and provides technical advice and expertise in creating solid marketing plans and communications.

Marketing can help an organization:

- Clarify business goals.
- Select the most promising customers.
- Understand opportunities.
- Understand advantages or disadvantages when compared to competitors.
- Know what is possible in the future of an organization.

The following training is available:

Maximizing Your Outreach Efforts. A 1-day course on marketing fundamentals, which provides the basics for effective, targeted technology deployment, and outreach efforts. If you have a project, product, or message that you need to tell the country or world about, this course teaches participants how and where to get started. The course includes tips on how to develop a marketing plan, determine customer needs, get to know your audience demographics to determine the appropriate methods to reach them, and finally, how to maximize the success of your program. You'll learn how to start the project development phase with marketing in mind to enhance your ability to reach your partners and customers and attain positive results.

In addition, customized services can be developed to meet the individual needs of a project. Customized training is available in half-day to 2-day sessions, covering the following topics:

Marketing and Communications Overview:

This session provides a general overview, presenting the following subjects: Know Your Audience; Communicating with Customers; SELF Profile (customer profiles); Stimulate Creativity

Strategies for Promoting New Technology: This session demonstrates how to use marketing techniques to persuade and use communications appropriate for each stage of the decision making process. Learn to use *Five Key Marketing Messages* and *Bowling for Adoption Strategy*.

Creating a Marketing Plan: This session discusses the reasons to write a marketing plan, how to create a planning structure, what to include in the plan, an overview of market research and analysis, and steps to implement the plan, including developing the marketing budget.

The Power of Future Conversation: This session discusses the importance of conversation at work and in your daily lives. The Power of Future Conversation is an effective communication tool for furthering partnerships and building relationships.

- o Learn how to make distinctions between different kinds of conversations.
- o Be aware of speech acts that take place in the past, present and future.
- o Be able to shift conversations out of the past and into the realms of the future and present.
- o Know how to avoid the unspoken conversations that prevent positive change.
- o Learn how to listen effectively and affirmatively.
- o Be able to consciously use conversation as a tool to create breakthroughs in your lives and workplace.

Brand Management: This session defines what is a brand, and the importance of brands to an organization. Topics include: Branding Philosophy; Brand Positioning; and Brand Promise.

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CENTERED ON RESULTS

FHWA Resource Center Adds New Staff and Expertise



FINANCE SERVICES TST

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Robert J. Clark joins the Resource Center as Team Leader for the Finance Services Technical Service Team. Prior to joining the RC, Robert was the Financial Manager in the South Carolina Division Office. He brings considerable experience in the finance area from an FHWA perspective, as well as more than 10 years with the North Carolina Department of Transportation. He holds dual Bachelor Degree's in Finance and Accounting from Georgia Southern University and a Master's Degree in Public Administration from NCState University. Robert will be working out of the Baltimore office.



GEOTECHNICAL & HYDRAULICS

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Daniel is recently joined the FHWA Resource Center's Geotechnical & Hydraulics TST, where he serves as a Geotechnical Engineer. Daniel has over 16 years of experience in the geotechnical engineering field and comes to FHWA Resource Center after most recently serving in the FHWA's Central Federal Lands Division from 2002 to 2006. Previously, he was employed as a Consultant; and was a participant in the development of the National Park Service retaining wall asset management program. His bridge experience includes Column Supported Embankments; Earth Retaining Structures; Geosynthetics; Geophysics; and Reinforced Soil Slopes. Daniel is a graduate of the University of Connecticut where he obtained his Bachelor of Science's in Civil Engineering and the is working through the University of Colorado to earn his Masters degree in Geotechnical Engineering later this Technical Operations Manager by Tensar Earth Technologies, Inc. for the company's Latin America Division; as a Geotechnical Engineer with year in December. He is also a Registered P.E. in GA.

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Veronica joins the FHWA Resource Center's Geotechnical & Hydraulics TST, where she serves as a Hydraulics Engineer by way of the Professional Development Program (PDP). Her Hydraulics experience is in the areas of: Open Channel Hydraulics, Bridge and Culvert Hydraulics, and Scour. Veronica earned her B.A., Economics, Boston College, in 1976; her B.S.C.E., Civil Engineering (Structures), University of the District of Columbia, in 1998; and her M.S.C.E., Civil Engineering (Water Resources), University of Maryland, in 2004. She completed her Master's thesis entitled, "Estimation of Long Term Bridge Pier Scour in Cohesive Soils at Maryland Bridges Using EFA/SRICOS." She began working in hydraulics field in 1999 and joined FHWA in 2004.



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Tom Harman joins the Resource Center as the Team Leader for the Pavement and Materials Technical Service Team. Prior, Tom was the Pavement Materials and Construction Team Leader for the FHWA Office of Infrastructure, Research and Development. Tom also worked in the Office of Technology Applications and was heavily involved in the SHRP implementation activities, as well as assignments with a consultant and the American Concrete Pavement Association. Tom received the "Engineer of the Year" team award for his work in SUPERPAVE. He earned a B.S. in Civil Engineering, from the University of Maryland, College Park; M.S. in Civil Engineering, University of Illinois, Urbana-Champaign; and post-graduate studies in Civil Engineering, University of Maryland, College Park.

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