

MOVING FORWARD



“He who does not look ahead, remains behind.” (Spanish Proverb)

Ohio Department of Transportation, Office of Research and Development

Winter 2004

First International Conference on Pavement Draws Large Attendance

The first international forum on highway pavement issues was attended by more than 225 individuals from eight countries, 21 departments of transportation and 27 universities. The three-day conference was conducted recently in Columbus, Ohio before an audience that included engineers, researchers, and industry practitioners from all over the world.

The International Conference on Highway Pavement Data, Analysis and Mechanistic Design Applications served as a forum for the exchange of recent developments and findings on the structural response and performance of flexible and rigid pavements. The conference was organized and co-sponsored by the Ohio Research Institute for Transportation and the Environment (ORITE) at Ohio University. Other sponsors included the Federal Highway Administration (FHWA), Flexible Pavement Incorporated, the Ohio Concrete Construction Association, Ohio Ready Mixed Concrete Association, the Transportation Research Board, and Departments of Transportation in Georgia, Missouri, New Jersey, New York, North Carolina, Ohio and Texas.



Highlighting ODOT Pavement Research

Organizers said they felt the conference was especially timely since state and federal transportation agencies have increasingly been investing in research facilities to improve structural performance of pavements, and researchers have been developing new pavement design models for general application as well as for specific regions and climates. The sharing of data from the research facilities can potentially aid researchers in validating and calibrating their new procedures.

The fact that NCHRP's guide for the Design of New and Rehabilitated Pavement Structures is soon to be released was another consideration in the timing of this conference, organizers noted.

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What Goes on in R&D?

Organizationally, the Office of Research & Development (R&D) is within the Division of Planning. The Division of Planning reports to the Assistant Director of Planning and Production.

The roles and responsibilities of R&D are as follows:

- ◆ Developing, administering, and marketing the research program.
- ◆ Coordinating all research activities for the Department, including research funded without SP&R monies.
- ◆ Coordinating all of the Department's activities with TRB and the AASHTO Research Advisory Council (RAC).
- ◆ Facilitating the exchange of research information with other agencies, researchers, State DOTs, and interested parties.
- ◆ Developing strategies for technology transfer in conjunction of sponsoring offices.
- ◆ Formulating strategies for implementing innovative technologies and procedures.
- ◆ Developing public and private research partnerships.
- ◆ Initiating strategies to ensure proper evaluation of new products and emerging technologies resulting from research projects.
- ◆ Monitoring national and international research for potential application.
- ◆ Preparing periodic status reports on unusual or unique and high impact (flagship) projects in conjunction with the program offices.
- ◆ Initiating requests for research proposals.
- ◆ Developing and issuing all research contracts.
- ◆ Preparing contract packages for Controlling Board review.
- ◆ Reviewing proposals and selecting researchers for projects as a member of the Research Selection Committee.
- ◆ Reviewing and paying research invoices.
- ◆ Approving all contractual changes (related to project scope, budget, time extensions, etc.).
- ◆ Monitoring the general progress of research, including implementation.
- ◆ Scheduling annual research review sessions. (Technical Liaisons/Project Panels may schedule additional review sessions when needed, but should include R&D on the invitation list.)
- ◆ Distributing all research documents/reports.

R&D also maintains project files for all research studies. Each project file contains the proposal, the contract, general correspondence relating to the project, quarterly progress reports, and copies of all invoices with backup material.

OTEC 2004 - Call for Abstracts "Managing Mega Projects"



The Ohio Transportation Engineering Conference (OTEC), the largest statewide conference for transportation professionals, will be held October 26-27, 2004 at the Greater Columbus Convention Center. New program ideas to be presented at the conference are currently being solicited. The theme for this year's conference is Managing Mega Projects. In addition to this topic, submissions in the areas of transportation policy, planning, design, construction, maintenance, traffic & operations, management, pavements & materials, environmental issues, and local government concerns are welcomed. Of special interest are those submissions that relate to the development of mega projects.

Abstracts should be 150 words or less, and should include the title, author, author's affiliation, address, phone number and e-mail address. The deadline for receipt is March 21, 2004. Abstracts may be e-mailed to: terri.barnhart@dot.state.oh.us. Check out the OTEC website for updated information on the conference: <http://www.otecohio.org>

International Conference on Pavement (Continued from pg. 1)

In conjunction with the conference, some attendees visited two research sites. Participants toured either the *Ohio –SHRP Test Road* in Delaware, Ohio, or ORITE's *Accelerated Pavement Load Facility (APLF)* on the Ohio University-Lancaster campus in Lancaster, Ohio. The Ohio SHRP Test Road is a 3-mile long test pavement which was opened to traffic in 1996. The APLF is a 4,200 square foot, environmentally controlled facility for the accelerated testing of rigid and flexible pavement structures.

Two pre-conference workshops were offered as well. The first, entitled *2002 Guide for Mechanistic Pavement Design*, led by Dr. Mike Darter, ERES Consultants, and Linda Pierce, Washington State DOT, provided participants with a comprehensive review of the 2002 Design Guide procedures for new and rehabilitated pavements. The second workshop, *Ground Penetrating Radar (GPR) Implementation*, was led by Tom Scullion of the Texas Transportation Institute. This workshop focused on non-contact GPR systems where data can be collected at highway speeds up to 70 mph. Participants were introduced to GPR technology and shown several case studies which have proven to be successful.

Overall, the International Conference on Highway Pavement Data, Analysis and Mechanistic Design Application received high marks from attendees. In fact, 86 percent indicated that they would like to attend a follow-up conference in two to three years.



Randy Morris, ODOT, and Dr. Shad Sargand, OU



Site Visit to DEL-23 Test Section - Issam Khoury, OU

Keynote speaker T. Paul Teng, Director of the Federal Highway Administration's Office of Infrastructure Research and Development, also commended the quality of the conference, calling it "a very successful and enlightening exchange on the analysis of pavement data and its application to mechanistic design."

Teng said the presenters' focus on innovative designs and use of the most applicable materials and techniques supported the FHWA's major goal for pavement design – to produce long life pavements as a standard for the future.

Dr. Carl Monismith of the University of California Berkeley, and Dr. Mike Nunn, of the Transportation Research Laboratory in the United Kingdom, also served as keynote speakers.

Exhibitors included Advanced Drainage Systems, Inc., Asphalt Pavement Alliance, CEM-BASE, Inc., Construction Technology Laboratories, Inc., Dynatest Consulting, Inc., the Federal Highway Administration, Flexible Pavements of Ohio, Humbolt Manufacturing Company, Meredith Brothers Inc., Mettler Toledo, Ohio Concrete Construction Association, Ohio Department of Transportation, Ohio Ready Mixed Concrete Association, Ohio Research Institute for Transportation and the Environment – Ohio University, RJD Industries, Inc., Resource International Inc., Sensors & Software Inc., TransTech Systems Inc., Valley Forge Laboratories Inc. and WAKE Inc.

Calendar of Events

See Insert for important upcoming dates!

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