

MOVING FORWARD



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

Ohio Department of Transportation, Office of Research and Development

Spring 2003

R&D Announces 2004 Request for Proposals

Proposals are now being accepted for projects anticipated to be funded during fiscal year 2004. Requests for proposals (RFPs) can be obtained from our website at <http://www.dot.state.oh.us/divplan/research/RFP2004.htm>. Formatting and submission requirements are also available on-line.



The proposed research projects for FY2004 include the following:

- PS-04-03 Landslide Hazard Rating Matrix and Database
- PS-04-04 Freight Mobility, Access, and Safety
- PS-04-07 Off Road Axle Detection Sensor (ORADS) - Phase 2: Traffic Counter Development
- PS-04-08 Development of a NCHRP Report 350 TL-3 New Jersey Shape 50-inch Portable Concrete Barrier
- PS-04-09 Liability Risk Assessment of Highway Maintenance Operations
- PS-04-10 Evaluation and Design of ODOT's Type 5 Guardrail with Tubular Backup
- PS-04-11 Portable Bench Tester for Piezo Weigh in Motion (WIM) Equipment
- PS-04-12 Bio-Engineering for Land Stabilization
- PS-04-13 Evaluation of Stay In Place Metal Forms
- PS-04-14 Instrumentation of the Maumee River Crossing
- PS-04-15 Creation of New Origin and Destination Survey Techniques
- PS-04-16 Development of a NCHRP Report 350 TL-3 Approved W-Beam Guardrail to Portable Concrete Barrier Transition
- PS-04-17 Pavement Forecasting Models
- PS-04-18 Forensic Investigation of Pavements (Asphalt and Concrete) with Extended Service Life
- PS-04-19 Long Term Monitoring of Moisture Under Pavements
- PS-04-21 Human Factor Opportunities to Improve Ohio's Transportation System
- PS-04-22 Crash Base Rates for Intersections in Ohio

Proposals on research studies not listed above will not be reviewed.

The deadline for submitting proposals is **4:30 PM on May 23, 2003**. All submissions must be **received** by this time. *Absolutely, no late proposals will be accepted. No extensions or exceptions will be made to this deadline.* Non-compliance with the formatting and submission guidelines is cause for the rejection of a proposal.

If you have any questions concerning the technical nature of the projects please contact the submitter/liaison listed for that project. If you have any questions concerning the submission or format of the proposals, please contact our office at research@dot.state.oh.us.

2002 Cooperative Research Seminar Proceedings



The proceedings for the 2002 Cooperative Research Seminar are available on our website. To view these documents, go to <http://www.dot.state.oh.us/divplan/research/CRS2002Proceedings.htm> or click on the “announcements” link located on the home page.

This site contains information on the discussions from all four breakout sessions as well as pdf files of the presentations given during the opening session.

International Conference on Highway Pavement, Data, Analysis and Mechanistic Design Applications

During the past several years, state and federal transportation agencies have invested substantial resources in constructing a number of experimental pavement facilities to acquire response and performance data under closely monitoring loading and environmental conditions. While these facilities were designed to address various specific questions regarding the performance of rigid and flexible pavements, data and findings obtained at one site often can be used to enhance data obtained at other sites and to resolve issues in other jurisdictions. The most significant effort of this type was the SHRP Long-Term Pavement Performance Program, a national research study in which participating states across the country constructed new pavement sections and/or monitored existing pavement sections containing specific combinations of structural and material parameters believed to have a major impact on performance. Other major pavement facilities constructed in recent years include: MSRoad, NCAT Test Track, WesTrack, and the Ohio SHRP Test Road.

Pavement design guidelines are currently being finalized in NCHRP Project 01-37A, “Development

of the 2002 Guide for the Design of New and Rehabilitated Pavement Structures.” Concurrently, state DOT’s, FHWA, universities, and industry are developing mechanistic empirical design models for general application and for specific geologic and climatic regions. Data obtained from experimental pavement facilities can be used to validate and calibrate these new procedures.

With the diversity of activities currently underway, and with many mathematical and empirical models being developed over the past decade, it is vital that a forum be provided to exchange recent developments and findings on the structural performance of flexible and rigid pavements. This forum, the International Conference on Highway Pavement (IHP) Data, Analysis, and Mechanistic Design Applications, will bring together engineers, researchers, and practitioners from state DOT’s, FHWA, academia, the private sector, and industry, to provide a platform for:

- The exchange of technologies related to the testing and monitoring of in-service highway test sections and other related topics;

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ICHP (Continued)

- The validation, calibration and implementation of mechanistic design procedures; and
- The sharing of current activities, findings, experiences, and pavement research.

Knowledge gained from this conference will permit attendees and the agencies they represent to:

- Become aware of improved pavement design procedures;
- Become aware of sources of data for analysis;
- More reliably calibrate and validate existing design procedures; and
- Gain new insight regarding national and international trends in pavement research.

Papers on the following topics will be presented at the conference:

- Collection and analysis of response data
- Calibration and verification of mechanistic empirical models
- Non-destructive testing
- Two and three-dimensional finite-element pavement models
- Load and Environmental pavement response
- Development of mechanistic/empirical models
- Accelerated pavement testing
- Forensic studies
- Distress models

The conference will be held on September 7-10, 2003 in Columbus, Ohio. For more information on the conference including registration materials, visit the conference website at <http://webce.ent.ohiou.edu/ICHP.html>.

R&D's New Web Page

Our web site has had a make over! Several changes have been made recently in an effort to make the site more user friendly. Included among these changes are:

- ◆ updated and additional links
- ◆ downloadable versions of frequently used forms in MS Word and WordPerfect formats
- ◆ an "Announcement" page has been added to make it easier to locate new information
- ◆ a subscriber feature to add yourself to or remove yourself from our mailing lists has been created
- ◆ information on our office staff
- ◆ a list of completed projects has been added to the final reports page. Currently this list goes back as far as 2000. Continuing efforts is being made to make this list as comprehensive as possible

Visit our web site (www.dot.state.oh.us/divplan/research) to check out all the new features. Let us know what you think of the new look and if there is anything you would like to see on our site. Send your comments and suggestions to research@dot.state.oh.us. Thanks for helping us help you!



Calendar of Events

May - 2003

May 23 - Proposals for FY2004 due by 4:30PM

June - 2003

Announce recipients of 2004 OPREP Award

July - 2003

July 1 - New biennium for Ohio

Quarterly Progress Reports Due on all R&D projects

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