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LTPP Products Online 2.0 "Next Generation"



The Long-Term Pavement Performance (LTPP) program has recently unveiled LTPP Products Online 2.0 – the next generation of online access to data, research findings, and products resulting from the program. LTPP Products Online has been enhanced to take advantage of the latest internet technologies so that users can view and extract data in a more user friendly environment. The new site consists of four primary areas:

- DataPave Online
- Reference Library
- Other Products
- Discussion Forum

The **DataPave Online** portion of the website provides users with an intuitive user interface with which to extract LTPP data. Some of the new features of this version of DataPave Online include an update of the navigation map which uses Google TM mapping capabilities. Through this intuitive mapping interface DataPave Online users can view summary data as well as multimedia associated with a section—including images and videos. This version marks the most complete integration of the LTPP Pavement Performance Database with the Ancillary Information Management System (AIMS) to-date. Previously, AIMS information was available offline by special

request. Now a great deal of this supporting information is available through DataPave Online. This includes pavement distress videos and images for some of the LTPP test sites, with more to come later.

The data summary sheet was enhanced to provide users with more detailed and useful information about the LTPP test sites of interest. The latest version of DataPave Online also integrates the Distress Viewer and Analyzer (DiVA) application graphs. All graphs from DiVA are now part of the integrated data sheet view.

In addition to these changes, two other exciting new features of DataPave Online include "Export by Topic" and "LTPP Information Management System (IMS) A-Z." "Export by Topic" does what its name impliesallows users to explore LTPP data by topic. This feature was developed with the user experience in mind, so that the user can now select multiple data elements and directly view the number of available records even before a download is made! On the other hand, "LTPP IMS A-Z" is designed for new DataPave Online users or users new to the LTPP program. This is a great tool for beginners to obtain the information and data available from the LTPP program based on pre-defined topic areas. "LTPP IMS A-Z" encapsulates topic and sub-topic areas within the LTPP data. The user simply clicks the preferred topic, and then a list of documents and data elements related to that topic appears. Once the user reaches the data of interest, clicking the "Get Data" button takes the user to the "Export by Topic" page, which will allow further site selection refinement of the data, if necessary.

The LTPP Reference Library - a repository of publications and applications available from the LTPP program in a variety of formats—has been dramatically upgraded. The website has incorporated a new streamlined and efficient LTPP reference library system that is completely searchable using keywords.

Along with DataPave Online and the Reference Library, the website contains **Other Products**. These other LTPP products include:

 LTPPBind - a Windows-based software program developed by LTPP to help highway agencies select the most suitable and cost-effective Superpave asphalt binder Performance Grade for a particular site.

- LTPP Rigid Pavement Online Rigid Pavement Design Software assists users by automating the design and analysis procedure. The application uses the improved guidelines for PCC pavements as published in the 1998 Supplement to the AASHTO Guide for the Design of Pavement Structures, Part II Rigid Pavement Design & Rigid Pavement Joint Design.
- LTPP Performance Forecast Online provides pavement performance predictions (i.e., roughness and distress) for flexible and rigid pavements. The models were developed from measured field performance of LTPP test sections.
- LTPP WIM Cost Online allows users to calculate
 the costs associated with the placement of Weighin-Motion sites. The application factors in costs for
 equipment, staff, and maintenance required to
 operate the site at the level expected by LTPP.

The website also incorporates a new **Discussion Forum** which allows users to leave detailed comments concerning the site and the data for use by the program to improve and refine the user experience. This forum also provides an excellent communication channel for users to discuss their experiences and to teach and learn from other users.

LTPP Products Online 2.0 has new and improved performance. The bandwidth for the website has increased from 3 Mbps to 6 Mbps. This translates to faster download and access times for videos, images, and maps. Of course most of the user expected features such as Table Navigator, data dictionary, data codes, table export, SQL export, and export history are still available. The site now hosts the most up-to-date Standard Data Release - SDR 25.0—with SDR 26.0 coming in early 2012.

LTPP Products Online 2.0 can be accessed at www.ltpp-products.com. Please take a close look at the website and help us by providing comments in the discussion group area, so that we can continue to improve the delivery of LTPP data, research findings, and products to you, our stakeholders and users.

For more information about the enhanced website, contact Antonio Nieves at antonio.nieves@dot.gov or (202) 366-4597.

LTPP Webinar Update

This fall, LTPP initiated a series of informational webinars to provide more direct contact and interaction between the LTPP Team and stakeholders—highway agencies, university professors, students, and others who have an interest in the LTPP program. So far the three webinars listed below have been held, and nearly 150 people participated in these sessions.

- September 8, 2011: History and Future Plans for I TPP
- October 6, 2011: Introduction and Demonstration of LTPP* (Dynamic Modulus software).
- December 1, 2011: LTPP International Data Analysis Contest and DataPave Online Changes.

Starting in 2012, LTPP will host bi-monthly webinars. The webinars will take place the first Thursday of the scheduled month from 2:00 - 3:00 p.m. EST. The first webinar for 2012 will be held on February 2, 2012 and will highlight some of the presentations from the LTPP State Coordinators' Meeting (see *In Brief*).

To get a copy of previous presentations (the October webinar also has audio with it), submit suggested webinar topics; or to be added to the webinar mailing list, contact the LTPP Customer Support Service Center at ltppinfo@dot.gov or (202) 493-3035.

In Brief

LTPP Meetings at the TRB 91st Annual Meeting

If you are in Washington, D.C. for the 2012 Transportation Research Board (TRB) Annual Meeting, please make plans to attend the LTPP State Coordinators' Meeting on Sunday, January 22 and the LTPP Box Session on Monday, January 23. More information about each meeting can be found at the TRB Web links below where you can also easily add the meetings to your TRB schedule.

<u>Long-Term Pavement Performance State</u> <u>Coordinators' Meeting</u>

Sunday, January 22, 2012, Marriott, Balcony A Session 147, 9:30 a.m. to 12:00 noon

This meeting will focus on Highway Agencies' LTPP Experience. The topics and highway agency presenters are as follows:

Inheriting LTPP

Rodney Wynn

Team Leader for New Products and Research Activities, Maryland Department of Transportation, Office of Materials Technology

LTPP Test Section Evaluations

Christ Dimitroplos

Research Project Manager

Arizona Department of Transportation, Arizona Transportation Research Center

Transportation Research Center

LTPP's Contribution to Manitoba's Materials and Pavement Evaluation Resources

Said Kass, Director

Manitoba Infrastructure and Transportation, Materials and Engineering Branch

Texas' Suggestion for Long-Term Monitoring of Performance of Mixes with RAP and Recycled Shingles

Magdy Mikhail

Pavements Branch Manager

Texas Department of Transportation, Construction Division - Materials and Pavements Section

In addition to the opening and closing remarks being shared by the Federal Highway Administration and the Canadian Strategic Highway Research Program management, an update on the International Data Analysis Contest will be given by Shelley Stoffels, Associate Professor of Civil Engineering, Pennsylvania State University, Department of Civil and Environmental Engineering.

Applications of Long-Term Pavement Performance (LTPP) Data and Products

Monday, January 23, 2012, Marriott, Virginia A Session 265, 10:15 a.m. to 12:00 noon This meeting will focus on applications of LTPP data and products.

DataPave Online 2.0 – Key Features and Uses Antonio Nieves Concrete Pavement Engineer Federal Highway Administration

Riaz Ahmad President and CEO iENGINEERING Corporation

Model Validation Based on LTPP Data to Predict Asphalt Temperature Profile in Multi-Layer Pavements Dong Wang

NRC Postdoctoral Research Associate Federal Highway Administration, Office of Infrastructure Research and Development

Warp and Curl of Arizona LTPP Jointed Concrete Pavement Test Sections

Steve Karamihas Senior Research Associate University of Michigan Transportation Research Institute, Vehicle Systems and Control Group

Prediction Models for Portland Cement Concrete **Properties**

Chetana Rao Principal Research Engineer Applied Research Associates, Inc.

All attendees of the TRB Annual Meeting are welcome to attend, without registration or fee, the session: TRB Data Analysis Working Group (DAWG) Forum on Pavement Performance Data Analysis,

Saturday, January 21, 2012, Shoreham,

9:00 a.m. to 6:00 p.m.

The DAWG sponsors this forum to discuss methods of pavement performance data analysis.

Standard Data Release 26.0 Is Coming Soon

The next release of the LTPP database will be distributed at the TRB 91st Annual Meeting in January 2012. To get your copy, visit the LTPP booth during TRB week or contact the LTPP Customer Support Service Center at ltppinfo@dot.gov or (202) 493-3035.

New Publications

Report: Falling Weight Deflectometer Calibration Center and Operational Improvements: Redevelopment of The Calibration Protocol and Equipment, FHWA-HRT-07-040

Report: LTPP Computed Parameter: Dynamic Modulus, FHWA-HRT-10-035

Report: Impact of Design Features on Pavement Response and Performance in Rehabilitated Flexible and Rigid Pavements. FHWA-HRT-10-066

Tech Brief: Statistical Analysis of Performance of Recycled Hot Mix Asphalt Overlays in Flexible Pavement Rehabilitation, FHWA-HRT-11-051

Tech Brief: Performance Comparison of Pavement Rehabilitation Strategies, FHWA-HRT-11-050

Tech Brief: Results of Long-Term Pavement Performance SPS-3 Analysis: Preventive Maintenance of Flexible Pavements, FHWA-HRT-11-049

Report: Long-Term Effects of Electrochemical Chloride Extraction on Laboratory Specimens and Concrete Bridge Components, FHWA-HRT-10-069

Infobrief: High Reclaimed Asphalt Pavement Use. FHWA-HRT-10-057

> HRDI-30/12-11(Web)E FHWA-HRT-12-026

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