# LTPP Newsletter

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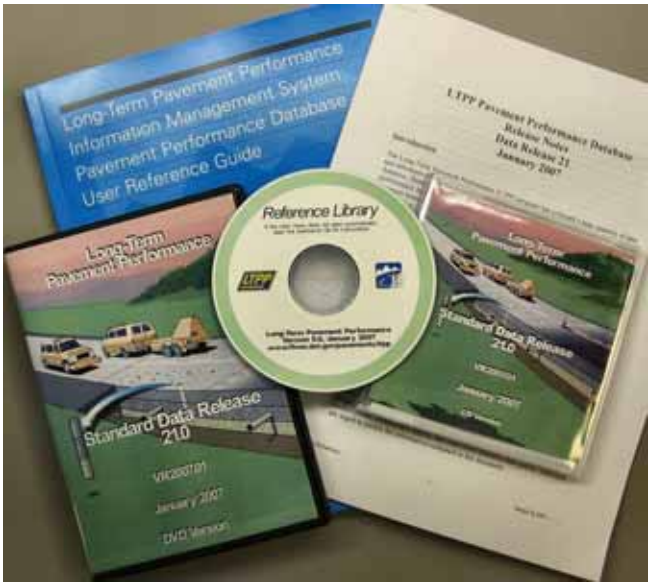
## *LTPP Standard Data Release #21 Access the World's Largest Pavement Performance Database*




The latest edition of the world's largest pavement performance database is now available from the Federal Highway Administration's (FHWA) Long-Term Pavement Performance (LTPP) program. LTPP Standard Data Release (SDR) 21 can be obtained as a five CD-ROM set or on a single DVD-ROM. The SDR is in Microsoft® Access format.

The release contains the complete LTPP pavement performance database, including new material sampling and testing data from the Specific Pavement Study (SPS) Material Action Plan and new weigh-in-motion traffic data from the SPS Traffic Data Collection Pooled-Fund Study, TPF-5(004). The release also contains the Database User Reference Guide, tutorial, and other information including details on changes made since previous data releases. We strongly suggest that you request a copy of this new version of the SDR if you currently are working with an older version, because we are working continually to improve the quality of existing data and corrections may have occurred that could affect analysis results.

Also available with the SDR is a Reference Library CD of LTPP documents which contains research reports, technical briefs, resource documents, and database utilities such as Table Navigator. The Table Navigator application contains definitions for database fields and codes and allows users to expand, collapse, and search the LTPP database structure. To obtain copies or for more information, contact LTPP Customer Support Services (phone: 202–493–3035 or email: ltppinfo@fhwa.dot.gov).

## *EsalCalc, Now on DataPave Online*

Previously a utility software included as part of the LTPP SDR package, ESALCalc also is now available via DataPave Online (www.ltpp-products.com). Equivalent Single-Axle Load (ESAL) estimates commonly are used to determine pavement loading. State highway agencies provide these estimates to LTPP using various estimation methods for the years where no traffic loading data are available. ESAL estimates in the LTPP database are considered computed parameters since they are not measured values. To assist LTPP database users with calculating ESAL estimates, the ESALCalc utility was developed.

**What does it do?**
ESALCalc computes the annual estimate of traffic applied to the LTPP lane when monitored weight data are available. The utility uses the 1993 AASHTO Pavement Design Guide method and data from LTPP's current SDR release to create the estimates. The inputs needed to calculate the estimates include layer thickness, material type, climatic region, and monitored traffic weight data. If there are no monitored weight data for a year, the estimate is not computed for that year. After the estimate is computed, tables for annual estimates and intermediate values are produced.

The annual estimates table lists the site, year, and KESAL estimate for that year. One of the intermediate tables indicates the source of the data and the input values for items other than traffic and section properties. Intermediate tables for the asphalt concrete and portland cement concrete structural information also are produced. In cases where all layer data are not available, particularly for overlays, typical values for the experiment are substituted.

Additional questions on how to use ESALCalc or about the inputs used should be addressed to Antonio Nieves (e-mail: antonio.nieves@fhwa.dot.gov).

## *In Brief*

### *Congratulations to Eric Weaver!*

A key member of the LTPP Team, Eric Weaver, has been promoted to research highway engineer on the Pavement Design and Performance Modeling Team in the FHWA Office of Infrastructure Research & Development. Since joining the LTPP Team in 2002, Eric has made significant contributions to the program, especially in the areas of information management and falling weight deflectometer technology. We wish him well in his new position and hope to find his replacement soon. Until then, please contact Aramis López (e-mail: Aramis.Lopez@fhwa.dot.gov) regarding issues that were previously handled by Eric.

### *TRB Annual Meeting Update*

The LTPP staff enjoyed seeing many of you at the TRB Annual Meeting and Exhibit a few weeks ago. In addition to the LTPP State Coordinators Meeting and the LTPP Box Session, there were many other sessions and workshops that related to the LTPP data.

We distributed copies of many of our most recent publications at the LTPP booth, most notably: the *LTPP Falling Weight Deflectometer Maintenance Manual* (FHWA-HRT-05-153), the *LTPP Manual for Falling Weight Deflectometer Measurements, Version 4.1* (FHWA-HRT-06-132), *Effects of Multiple Freeze Cycles and Deep Frost Penetration on Pavement Performance and Cost: Final Report* (FHWA-HRT-06-121) and *LTPP 2006 Year In Review*, FHWA-HRT-07-028. (To obtain printed copies of these new reports, please contact LTPP Customer Support Services e-mail: ltppinfo@fhwa.dot.gov. Electronic versions will become available later this year on the LTPP Web page at www.fhwa.dot.gov/pavement/ltpp).

More than 200 requests for copies of the LTPP Pavement Performance Database on SDR 21 were received from meeting attendees from around the United States and the world, including Argentina, Australia, Canada, Chile, China, Ecuador, El Salvador, France, Greece, India, Italy, Korea, South Africa, Thailand, and the United Kingdom.

### *Profiler Rodeo Postponed Until Spring 2007*

The LTPP profiler comparison rodeo, originally scheduled last October, was postponed because of severe weather. We plan to reschedule the rodeo this spring, which will be held at the Minnesota Road Research facility.

### *Recently Published LTPP Reports*

Improving Pavements With Long-Term Pavement Performance: Products for Today and Tomorrow, FHWA-HRT-06-109.

Study of Long-Term Pavement Performance (LTPP): Pavement Deflections, FHWA-RD-03-093.

TechBrief: Optimization of Traffic Data Collection for Specific Pavement Design Applications, FHWA-HRT-06-111.

Seasonal Variations in the Moduli of Unbound Pavement Layers, FHWA-HRT-04-079.

Rehabilitation of Asphalt Concrete Pavements: Initial Evaluation of the SPS-5 Experiment—-Final Report, FHWA-HRT-01-168.

Optimization of Traffic Data Collection for Specific Pavement Design Applications, FHWA-HRT-05-079.

TechBrief: Quantification of Smoothness Index Differences Related to LTPP Equipment Type, FHWA-HRT-06-064.

Highway Concrete Pavement Technology Development and Testing: Volume I: Field Evaluation of SHRP C-202 Test Sites (Alkali-Silica Reaction (ASR)), FHWA-RD-02-082.

Highway Concrete Pavement Technology Development and Testing Volume II: Field Evaluation of Strategic Highway Research Program (SHRP) C-203 Test Sites (Freeze-Thaw Resistance), FHWA-RD-02-083.

Highway Concrete Technology Development and Testing Volume III: Field Evaluation of SHRP C-205 Test Sites (High Performance Concrete), FHWA-RD-02-084.

Highway Concrete Technology Development and Testing Volume IV:Field Evaluation of SHRP C-206 Test Sites (Early Opening of Full-Depth Pavement Repairs), FHWA-RD-02-085.

Highway Concrete Pavement Technology Development and Testing Volume V: Field Evaluation of SHRP C-206 Test Sites (Bridge Deck Overlays), FHWA-RD-02-086.

For more information on LTPP publications and products, visit the LTPP Library and Products Web sites at www.fhwa.dot.gov/pavement/ltpp/library.cfm and www.fhwa.dot.gov/pavement/ltpp/product.cfm. For more information about the LTPP program, visit www.fhwa.dot.gov/pavement/ltpp.

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