



U.S. Department of Transportation  
Federal Highway Administration

# PRODUCT BRIEF

## DataPave Online: Improving Pavement Design through Performance Data Analysis

### Introduction

For more than a decade, the Long-Term Pavement Performance (LTPP) program and participating State and Provincial highway agencies collected data from thousands of LTPP test sections across the United States and Canada. In 1998, the Federal Highway Administration released a CD-ROM software package called DataPave to put LTPP data into the hands of potential users throughout the highway engineering community.

DataPave brought LTPP data to desktop computers, plus the tools for searching, viewing, and manipulating that information. DataPave helps engineers use LTPP data to develop products that improve pavement technology.

Because the software was on a CD-ROM, producing, packaging, and distributing the database was time-consuming and expensive. Updates rendered previous CD-ROMs obsolete.

Now the software is available on the Web, leveraging the power of the Internet to distribute pavement performance data. The new Web site, DataPave Online, circulates every new LTPP data release more efficiently and cost effectively.

### What Is DataPave Online?

DataPave Online is a Web site that simplifies the task of providing worldwide access to the LTPP data. Programmers can update the online database quickly with each new LTPP data release, providing access to the latest data when available. In addition, LTPP reference documents are available on the site for users to download. The site also is designed so that users can provide comments and feedback.

### DataPave Online Features

**Access—Viewing DataPave Data Graphically.** The DataPave site enables users to select and view pavement section-specific information. This information includes section location, experiment type,

pavement layers, falling weight deflectometer, and profile information. Quick and easy-to-use presentations help managers and other users illustrate the value and potential of the LTPP data. In addition, users can view performance histories of several key distress indicators for the selected sections.

**Database Tools—Using the Data Instruments.** The DataPave Online tools help users explore, extract, and organize the extensive LTPP data for in-depth analysis.

**Data Dictionary—Understanding LTPP Data Elements.** The Data Dictionary provides detailed information on data elements stored in the LTPP database, including tables and attributes. Users can explore the LTPP numerical codes for the different data elements.

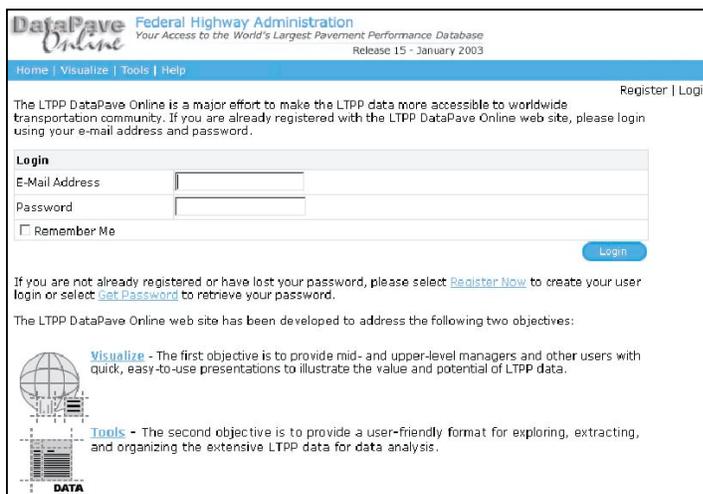


Figure 1. DataPave Online enables users to access LTPP data through their Web browsers.

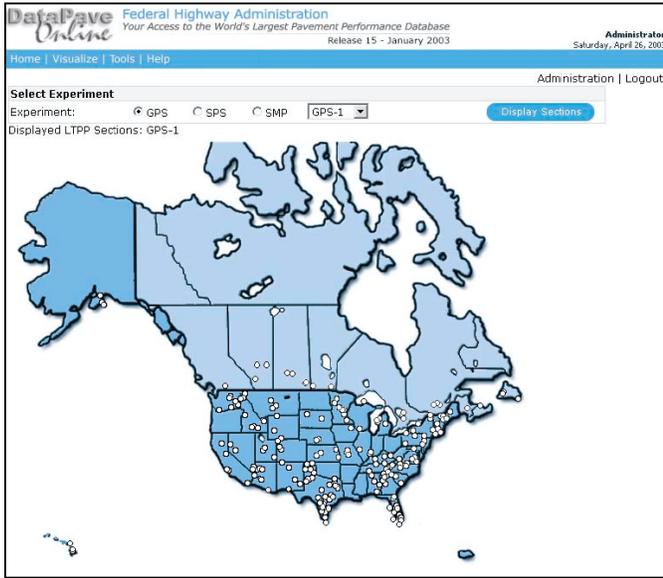


Figure 2. Users can select LTPP sections of interest using an online map of the United States and Canada or through criteria filters, enabling them to view section-specific pavement characterization and performance information graphically.

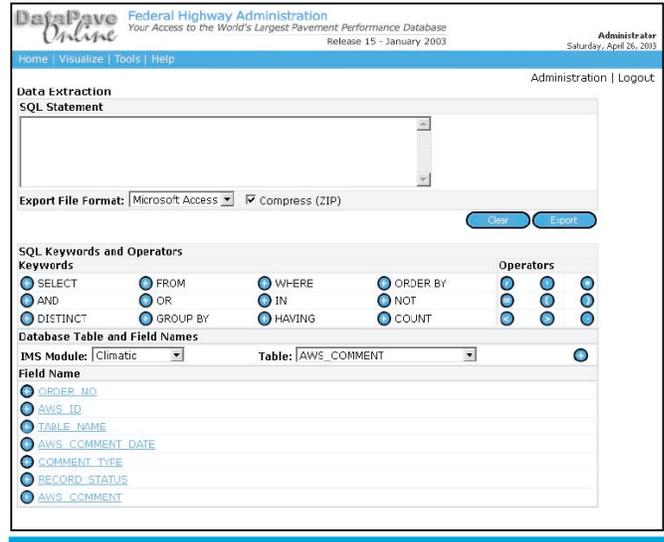


Figure 3. DataPave Online allows users to export data for LTPP sections of interest in Microsoft Access and Excel formats.

**Data Export—Taking LTPP Data Anywhere.** Users can export data using complex Microsoft® Structured Query Language (SQL) statements to create customized analysis data sets and can combine relational data from multiple database tables to create custom reports for data analysis.

**Support—Providing Help Whenever Needed.** The DataPave Online “Help” feature provides comprehensive information on request about using the Web site. This feature also allows users to provide comments and feedback based on their experiences with the site.

## DataPave Online Technology

DataPave Online Web site was developed using Active Server Pages (ASP) technology that employs server-side information processing and Microsoft ActiveX® data objects technology for database connectivity. The LTPP data is stored in a Microsoft SQL Server 2000 database. Users can export data in Microsoft Access 2000 database or Microsoft Excel spreadsheet formats.

## Contact Information

DataPave Online is available on the Web at <http://www.datapave.com>.

Contact Antonio Nieves Torres at 202–493–3074 or via e-mail at [antonio.nieves@fhwa.dot.gov](mailto:antonio.nieves@fhwa.dot.gov) for additional information about DataPave Online or the LTPP program.

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