Consolidating and Sharing Pavement Resources and Tools

New online website provides training tools and a broad pavement knowledgebase of resources, methods, and practices

WHAT IS THE NEED?

State departments of transportation (DOTs) and other agencies across the country have developed tools, fine-tuned processes, and acquired knowledge about pavement. Consolidating this information online enables the pavement community to share resources and knowledge and reduce duplication of efforts and research. A website can provide a ready reference on paving topics, the ability to look up methods and practices, self-directed learning tools, and links to additional resources.

The Pavement Tools Consortium (PTC) is a partnership between several DOTs, the Federal Highway Administration, and the University of Washington that formed to develop and provide computer-based tools to enhance pavement-related training and improve communication within the broader pavement community.

WHAT WAS OUR GOAL?

The goal was to develop an online warehouse of pavement knowledge and computer-based pavement tools to assist the pavement community in training and construction operations.

WHAT DID WE DO?

The PTC developed the Pavement Interactive website, which provides pavement information and tools. In addition to many pavement-related articles, the following web-based tools are available.

HMAView software—This pavement management tool is used to track hot-mix paving projects. Users can enter data and customize views. Consortium members have access to the source code for agency or company-specific modifications.
Interactive Pavement Guide—Consortium members can easily add local content to continually expand and improve the guide, which can be produced in languages other than English.

Computer simulations—Users can take advantage of virtual simulations to model pavement construction, such as the virtual roller, for training, examining what-if scenarios, or visualizing possible problems.

Distance learning content—The pavement tools aid distance learning. The content and tools supplement existing training venues.

Computation software—Software, such as EverFE (finite-element analysis tool for plain-jointed concrete pavements) and EverFlex (finite-element analysis tool for flexible pavement), are available. Documentation and training are provided, if requested. EverFE has been used for several Caltrans pavement research projects.

WHAT WAS THE OUTCOME?

The Pavement Interactive website provides a one-stop shop for general pavement information and the latest research results from the contributing states. It includes information for historical pavements, materials, testing procedures, construction, quality control and assurance, design, maintenance and rehabilitation, and pavement management. Consortium members have access to software tools.

WHAT IS THE BENEFIT?

The website allows consortium members to share information and research, rather than each state spending funds on similar projects. The information and tools are easy to access, maintain, and upgrade. Those involved in designing and constructing pavements, from DOTs, contractors, inspectors, and engineers, benefit from the information and tools provided by the website. With everyone on the same page, transportation agencies can provide the traveling public longer lasting pavements.

LEARN MORE

To view the Pavement Interactive website: www.pavementinteractive.org

IMAGES

Figure 1: Pavement Interactive Website

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