



CP Road Map E-News July 2010

The **CP Road Map E-News** is the newsletter of the [Long-Term Plan for Concrete Pavement Research and Technology \(CP Road Map\)](#), a national research plan developed and jointly implemented by the concrete pavement stakeholder community. To find out more about the CP Road Map, or to get involved, contact Dale Harrington, dharrington@snyder-associates.com, 515-964-2020.

News from the Road

News from the Road highlights research around the country that is helping the concrete pavement community meet the research objectives outlined in the CP Road Map.

ACPA launches website database for concrete overlays

ACPA has launched a new website database for concrete overlays that includes nearly 300 overlay projects that have been completed in the United States. Using the website, users can access job-specific information, such as overlay type, application information, location, design details, and photos, for each of the projects in the database.

To view the website, [click here](#).

The website contributes to technology transfer needs identified in [CP Road Map Track 7: High-Speed Concrete Pavement Rehabilitation and Construction](#).



Virginia Transportation Council investigates high friction surfaces

The Virginia Transportation Council, a partnership of the Virginia Department of Transportation and the University of Virginia, recently released the report *Field Performance of High Friction Surfaces*. The report provides guidance to help agencies determine when high friction surfaces may be appropriate solutions to address specific instances of low skid resistance or especially high friction demand.

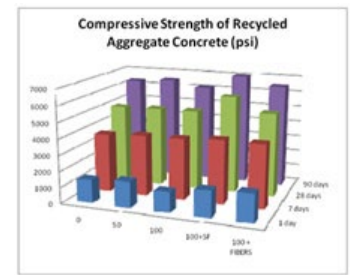
To download the full report, [click here](#).

This research addresses needs identified in [CP Road Map Track 4: Concrete Pavement Surface Characteristics](#) and [Track 10: Concrete Pavement Performance](#).



University of Illinois investigates two-stage mixing for recycled concrete aggregates

Replacement of virgin coarse aggregates with recycled concrete aggregates typically reduces the workability and strength properties of the concrete when all other factors are held constant. However, a recent study by the University of Illinois at Urbana-Champaign showed that the use of two-stage mixing can improve workability and strength properties of concrete mixes incorporating recycled concrete aggregates.



To read the full report, *Batching Effect on Properties of Recycled Concrete Aggregates for Airfield Rigid Pavements*, [click here](#).

This research is helping to fill knowledge gaps outlined in [CP Road Map Track 13: Concrete Pavement Sustainability](#) and [Track 1: Performance-Based Concrete Pavement Mix Design](#).

Texas research project evaluates alternatives to asphalt for subbase layers

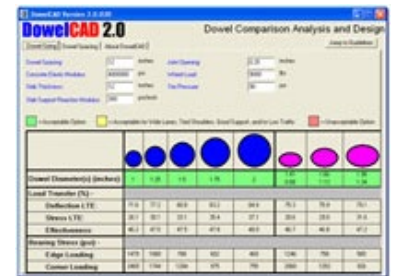
The Texas Transportation Institute, the Center for Multidisciplinary Research, and the Center for Transportation Research recently conducted a Texas DOT study that evaluated alternatives to the use of asphalt for subbase layers. The report, *Alternatives to Asphalt Concrete Pavement Subbase for Concrete Pavement* published in May 2009, presents a test method to measure subbase erodibility. The method involves a triaxial type device that evaluates the interface between layers. Critical shear strength, coefficient of friction, and weight loss are measured in order to characterize the performance of typical concrete pavement subbase materials with respect to erosion.

To read a summary of this research, [click here](#).

This research is meeting a need identified in [CP Road Map Track 8: Long-Life Pavements](#).

Free ACPA software helps users develop job-specific dowel bar designs

ACPA offers free software for dowel bar design. DowelCAD 2.0 can be downloaded from the ACPA website link listed below. Guidelines are included with the download. The software helps users evaluate pavement responses based on various dowel bar sizes and spacing. It assists users in engineering alternative dowel bar designs for load transfer based on job-specific needs.



To download this free program, [click here](#).

The development of DowelCAD is categorized under [CP Road Map Track 6: Innovative Concrete Pavement Joint Design, Materials, and Construction](#).

Updates from the States: Wisconsin

Highway research and technology transfer in Wisconsin is accomplished through various Wisconsin Department of Transportation (WisDOT) programs and partnerships with state universities and industry organizations.

Ongoing research efforts in Wisconsin include investigating the use of partial-depth repair techniques for concrete pavements, conducting demonstrations of cold-weather concrete paving, and evaluating the performance of open-graded base course with dowled and undowled transverse joints.



Recently completed research has focused on concrete pavement rubblization, high-performance concrete pavement, and whitetopping and ultrathin whitetopping.

[Read on for more details on Wisconsin's research efforts.](#)

Newsletter archives

- [June 2010](#)
- [May 2010](#)
- [April 2010](#)

Newsletter staff

- [Dale Harrington](#), Snyder and Associates, Program Manager
- [Rob Rasmussen](#), The Transtec Group, Program Specialist
- [Sabrina Garber](#), The Transtec Group, Program Specialist
- [Sabrina Shields-Cook](#), National Concrete Pavement Technology Center, Editor

The [National Concrete Pavement Technology Center](#) at [Iowa State University](#) provides operations support services to the CP Road Map program.
CP Tech Center

2711 S. Loop Drive, Suite 4700

Ames, IA 50010

Phone: 515-294-5798

Fax: 515-294-0467

Email: [Program Management](#) ~ [Communications](#) ~ [Webmaster](#)

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