



CP Road Map E-News May 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.

New Moving Advancements into Practice (MAP) Brief

Moving Advancements into Practice (MAP) Briefs describe promising technologies that can be used now to enhance concrete paving practices.

[MAP Brief 1-1: Job-Specific Optimization of Paving Concrete with COMPASS \(Concrete Mixture Performance Analysis System\)](#) has recently been published under [Track 1: Performance-Based Concrete Pavement Mix Design Systems](#). This MAP Brief explains how COMPASS works and discusses how it can be used by pavement engineers and contractors to optimize concrete mixtures.

[Download MAP Brief 1-1](#) (587 kb pdf).

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.

Texas Transportation Institute studies design of concrete pavement transitions

Concrete pavement transition areas remain one of the more difficult aspects of concrete pavement design. Localized roughness and other performance issues often arise at these critical locations if pavements are not designed and constructed properly. Researchers at the Texas Transportation Institute recently assembled common practices for various types of transitions and developed recommended practices.

[Click here to view publications resulting from this project.](#)

Work on this project is meeting a need identified under [CP Road Map Track 2: Performance-Based Design Guide](#).



Washington DOT examines dowel bar retrofit to extend pavement life

Research work by the Washington Department of Transportation proves that dowel bar retrofit can extend the life of existing concrete pavements, even when those pavements have far outlived their expected design lives. Results of this research include guidelines for specifications and construction processes based on a better knowledge of performance.

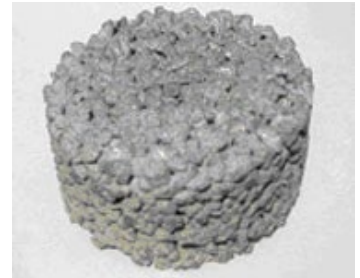
[Click here to find out more about this research.](#)

This research links together work identified under [CP Road Map Track 8: Long-Life Concrete Pavements](#) and [Track 10: Concrete Pavement Performance](#).



ACI releases report on pervious concrete

ACI International recently released ACI 522.R-10: Report on Pervious Concrete. While pervious concrete is being used increasingly around the country on lower volume roads, parking areas, and shoulders, there have been some experimental mainline paving applications as well. The ACI report provides technical information on applications, design, materials properties, mix design, construction methods, testing, and inspection for pervious concrete.



[View abstract and additional information for ACI 522.R-10.](#)

Research and developments related to pervious concrete are addressing issues identified in [CP Road Map Track 12: Advanced Concrete Pavement Materials](#). In addition, pervious concrete can be a sustainable pavement alternative, meeting needs outlined in [Track 13: Concrete Pavement Sustainability](#).

Minnesota DOT launches web page on concrete overlays

To facilitate the use of concrete overlays as a viable rehabilitation alternative, the Minnesota Department of Transportation recently launched a web page containing design tools and links to better practices for design and construction of concrete overlays.

[View the Minnesota DOT's concrete overlays web page.](#)

Concrete overlays are at the center of work under [CP Road Map Track 7: High-Speed Concrete Pavement Rehabilitation](#).



Nonwoven geotextile interlayers gaining popularity in the U.S.

At the ACPA Chapter/State Executives meeting in Madison, Wisconsin in May 2010, the use of nonwoven geotextile interlayers for concrete overlays was identified as one of the most important recent developments for concrete overlays in the United States.

The first CP Road Map MAP Brief (7-1), published in May 2009, provides information on nonwoven geotextile interlayers for concrete pavements.

[View MAP Brief 7-1: Use of Nonwoven Geotextiles as Interlayers in Concrete Pavement Systems](#) (275 kb pdf).

Updates from the States: Indiana

The Indiana Department of Transportation (INDOT) Research and Development (R&D) Division is focused on a strategic plan with goals for safety, mobility, economic development, resource management, training, and customer service. Currently, many of the INDOT R&D research efforts focus on developing methods for reducing construction costs by optimizing design and construction procedures. Several ongoing research efforts include the following:

- Optimization of Mixture Proportions for Concrete Pavements
- Portland Cement Concrete Pavement Performance Relative to Permeability
- Using Recycled Concrete as Aggregate in Concrete Pavements to Reduce Materials Costs
- Investigation of Use of Slag Aggregates and Slag Cements in Concrete Pavements to Reduce the Maintenance Costs
- Development of Self Curing Concrete for Increasing Service Life

Ongoing, recently completed, and needed research as identified by INDOT R&D can be linked to the CP Road Map.

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

Newsletter archives

[View the April 2010 CP Road Map E-News.](#)

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