

UTC Project Information

Project Title	Environmental and Functional Benefits and Trade-offs of Hot In-Place Recycling Treatment Techniques
University	University of Illinois at Urbana-Champaign
Principal Investigator	Dr. Imad Al-Qadi, Professor Director of Illinois Center for Transportation, University of Illinois at Urbana-Champaign, 1207 Newmark Civil Engineering Laboratory, 205 N. Mathews Ave. Urbana, IL 61801
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Funding Source(s) and Amounts Provided (by each agency or organization)	\$136,331 USDOT \$63,345 UIUC
Total Project Cost	\$199,676
Agency ID or Contract Number	DTR13-G-UTC44
Start and End Dates	May 15, 2014 – May 14, 2017
Brief Description of Research Project	<p>Despite the widespread use of in-place recycling, limited information is available on the in situ and laboratory properties of materials undergoing in-place recycling. In-place recycling techniques, including hot and cold in-place recycling, are often considered the most costly and environmentally friendly techniques because they do not require the acquisition and transport of materials to job sites. However, critical concerns extensively limit the use of in-place recycling techniques as part of pavement preservation programs. The performance of the pavements rehabilitated with in-place recycling and the lack of material selection and mix design guidelines are some of the limiting factors. The objective of this study is to characterize the lab and field performance of hot in-place recycling techniques and optimize mix design and construction procedures. The study will provide guidance on improving the performance of pavements rehabilitation using various techniques of hot in-place recycling.</p>

Describe Implementation of Research Outcomes (or why not implemented) N/A

Place Any Photos Here

Impacts/Benefits of Implementation (actual, not anticipated)

Potential benefits of this study are the improvement in the HIR procedures for optimized performance. This will include process selection (surface recycling, repaving, and remixing), material selection, mix design, construction procedures, and site selection.

Web Links

- Reports
- Project website

<www.chpp.egr.msu.edu>