

## UTC Project Information

Project Title	Geosynthetic-reinforced Overlays as Preventive Maintenance Strategy
University	The University of Texas at Austin
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Total Project Cost	\$101,587
Agency ID or Contract Number	DTRT13-G-UTC44
Start and End Dates	January 31, 2017 to January 31, 2018
Brief Description of Research Project	<p>The advent of geosynthetic reinforcements with a wide range of stiffness values now offers the opportunity to tailor its properties so it can accommodate the reinforcement of thin overlays. The use of geosynthetic-reinforced overlays as a preventive maintenance strategy is particularly promising, as it can extend the service life of a road through improving its performance under traffic loads while, at the same time, it can retard the initiation and propagation of fatigue and reflective cracks. The study proposed herein aims at evaluating the effectiveness of geosynthetic-reinforced thin overlays as a preventive maintenance treatment. Specifically, the proposed study includes field evaluation and experimental characterization components. As part of the field evaluation component, the performance of test sections incorporating geosynthetic-reinforced overlays will be compared to those without geosynthetics. The experimental component of this project involves characterization of geosynthetic-hot mix asphalt interfaces by using results obtained from overlay tests and interface shear box tests. Ultimately, this study will generate a wealth of field and experimental data that will allow cost-effective, innovative strategies for preventive maintenance.</p>

Describe Implementation of Research Outcomes (or why not implemented)

N/A

Place Any Photos Here

Impacts/Benefits of Implementation (actual, not anticipated)

The implementation of the findings of this research will provide state Departments of Transportation (DOTs) with advanced preventive maintenance techniques that can significantly enhance the performance of overlays.

Web Links

<[www.chpp.egr.msu.edu](http://www.chpp.egr.msu.edu)>

- Reports
- Project website