

UTC Project Information	
Project Title	MPC-587 – Use of Geogrid in Pavement Systems to Provide Longer Service Life and Reduced Maintenance
University	University of Utah
Principal Investigator	Evert Lawton Pedro Romero
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Funding Source(s) and Amounts Provided (by each agency or organization)	<p>USDOT, Research and Innovative Technology Administration \$40,000</p> <p>Utah Department of Transportation \$50,000</p>
Total Project Cost	\$90,000
Agency ID or Contract Number	69A3551747108
Start and End Dates	January 12, 2019 to July 31, 2022
Brief Description of Research Project	<p>In 2010, a section of roadway on Utah SR 10 near Emery, Utah was reconstructed using a geogrid-reinforced pavement system. This project was intended to demonstrate the effectiveness of geogrid in reducing cost, providing longer service life, and reducing long-term maintenance of the pavement system. This roadway carries between 200 to 300 coal trucks per day in each direction. A test section was constructed first to evaluate the effectiveness of four different biaxial geogrids. While this test section has performed well, much of the remaining roadway section has required significant multiple maintenance procedures to keep it functional. The primary objectives of this research project are to evaluate forensically the test section and the rest of the roadway to determine why the test section has performed well but the rest has not; evaluate the performance of each of the four geogrids; determine the benefit, if any, provided by the geogrid to the pavement system; and develop methods to evaluate the use of geogrid on other pavement systems. These objectives will be accomplished by obtaining and evaluating distress data and field construction records; analyzing historical FWD data; performing other field tests to evaluate</p>

	<p>the engineering properties of the pavement system and subgrade soils; obtaining samples of the asphaltic wearing surface, the supporting soils and the geogrid; conducting various laboratory tests on collected samples to determine their engineering properties; and performing large-scale tests in the University of Utah's 42-inch diameter pipe test setup to compare the performance of each geogrid under controlled testing conditions.</p>
<p>Describe Implementation of Research Outcomes (or why not implemented)</p> <p>Place Any Photos Here</p>	
<p>Impacts/Benefits of Implementation (actual, not anticipated)</p>	
<p>Web Links</p> <ul style="list-style-type: none"> • Reports • Project Website 	