

UTC Project Information	
Project Title	MPC-580 – Implementation of Precast Concrete Segments for Electrified Roadway
University	Utah State University
Principal Investigator	Marvin W. Halling, PhD, PE, SE, F.ASCE
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Funding Source(s) and Amounts Provided (by each agency or organization)	USDOT, Research and Innovative Technology Administration \$66,500 Select Center and CEE department funds \$66,500
Total Project Cost	\$133,000
Agency ID or Contract Number	69A3551747108
Start and End Dates	October 19, 2018 to July 31, 2022
Brief Description of Research Project	<p>A major impediment to broad public acceptance of electric vehicles is their limited travel range. An exciting potential solution to this problem is In-Motion Electric Wireless Power Transfer. This is essential for the development of connected and autonomous vehicles. Durability of the Civil-Electrical Infrastructure has been studied in recent research. The next logical step toward adoption is integration in a successful demonstration project.</p> <p>In order for the future adoption of this technology, roadways will need to be modified to allow the transmission of power to vehicles as they travel. Successful adoption of In-Motion Wireless Power Transfer will require advances in the efficiency of the overall electrical system, improvements in tracking of the actual vehicles, and significant developments in the civil infrastructure.</p> <p>This proposal will address the constructability of coils in a proposed precast system. The stringent electrical specifications will be monitored while utilized in an actual closed loop working system.</p>
Describe Implementation of Research Outcomes (or why not implemented)	
Place Any Photos Here	
Impacts/Benefits of Implementation (actual, not anticipated)	

Web Links

- Reports
- Project Website