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| **UTC Project Information** | |
| Project Title | MPC-634 – Durable and Constructible Materials in Glass Reinforced Concrete to Efficiently Shape Magnetic Fields |
| University | Utah State University |
| Principal Investigator | Marvin W. Halling, PhD, PE, SE, F.ASCE |
| PI Contact Information | Professor  Department of Civil and Environmental Engineering  Utah State University  Phone: (435) 797-3179  Email: marv.halling@usu.edu  ORCID: 0000-0003-1599-8304 |
| Funding Source(s) and Amounts Provided (by each agency or organization) | USDOT, Office of the Assistant Secretary for Research and Technology  $63,500  Utah State University  $63,500 |
| Total Project Cost | $127,000 |
| Agency ID or Contract Number | 69A3551747108 |
| Start and End Dates | October 12, 2020 to July 31, 2024 |
| Brief Description of Research Project | The objective of this research is to develop a suitably efficient embedded coil configuration into pavement that is functionally efficient and durable. This objective will be achieved by producing at least two operating models that can be evaluated electrically at the test track located at USU. These models will provide a construction approach of how these panels can be mass constructed as well as demonstrate the durability of long-term use in the test track environment. |
| Describe Implementation of Research Outcomes (or why not implemented)  Place Any Photos Here | These fiber-reinforced schemes have been disseminated in the wireless power transfer community and future test beds will incorporate these findings. |
| Impacts/Benefits of Implementation  (actual, not anticipated) | This research adds to the experimental database of tests perfomed in the lab using various reinforcing schemes. Future test-bed designs will draw upon these results. |
| Web Links   * Reports * Project Website | * MPC Final Report – [Durable and Constructible Materials in Glass Reinforced Concrete to Efficiently Accommodate Magnetic Fields](https://www.ugpti.org/resources/reports/details.php?id=1162) |