UTC Project Information – Project #	
Project Title	Monitoring rail bed infrastructure using wireless passive sensing
University	The University of Vermont
Principal Investigator	Ehsan Ghazanfari
PI Contact Information	Ehsan.ghazanfari@uvm.edu
Co-PI(s)	Jeff Frolik
Co-PI Contact Information	jfrolik@uvm.edu
Funding Source(s) and Amounts Provided (by each agency or organization)	TIDC: $68,327 UVM (Faculty salary, tuition differential): $68,328
Total Project Cost	$136,655
Agency ID or Contract Number	
Start and End Dates	6/1/2022 to 5/31/2023
Brief Description of Research Project	The overarching goal of this project is to develop a passive sensing system for detection of railbed fouling and monitoring of railbed to extend its service life. A series of controlled experiments will be conducted to characterize the response of the sensing system when embedded in a ballast stack with different fouling conditions. The response data will be used to develop inverse models to extract railbed fouling.
Describe Implementation of Research Outcomes (or why not implemented) Place Any Photos Here	To be completed after actual implementation has occurred
Impacts/Benefits of Implementation (actual, not anticipated)	To be completed after actual implementation has occurred
Web Links • Reports • Project website	Coming soon