

UTC Project Information – Project #1.8	
Project Title	Enhancing Intelligent Compaction with Passive Wireless Sensors
University	University of Vermont
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Funding Source(s) and Amounts Provided (by each agency or organization)	University Transportation Centers Program (\$115,879) University of Vermont (\$44,887) Vermont Agency of Transportation (\$93,966)
Total Project Cost	\$254,931
Agency ID or Contract Number	69A3551847101
Start and End Dates	7/1/2018 to 12/31/2021
Brief Description of Research Project	To ensure long lasting performance of pavement materials and avoid significant maintenance and rehabilitation costs, it is necessary to achieve high quality and uniformly compacted materials. In this project, we aim to improve the IC performance and facilitate the process of geomaterial compaction and pavement performance monitoring by (i) integration of passive sensing system with IC, and (ii) potential utilization of IC measurements as a function of vibration amplitude and frequency in the control system, with the goal of optimizing the compaction process. This can potentially improve performance of pavement and reduce maintenance and rehabilitation costs.
Describe Implementation of Research Outcomes (or why not implemented)	Research is in the initial phase and is ongoing.
Place Any Photos Here	
Impacts/Benefits of Implementation (actual, not anticipated)	Research is in the initial phase and is ongoing.
Web Links <ul style="list-style-type: none"> • Reports • Project website 	Coming soon