

<b>UTC Project Information – Project 1.17</b>	
Project Title	Determining Layer Thickness and Understanding Moisture Related Damage of State-Owned Roads Using GPR and Capturing Such in a GIS-Based Inventory
University	University of Rhode Island
Principal Investigator	Dr. Christopher D.P. Baxter
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Funding Source(s) and Amounts Provided (by each agency or organization)	Federal: \$130,444 URI: \$83,974 RIDOT: \$47,010
Total Project Cost	\$261,428
Agency ID or Contract Number	69A3551847101
Start and End Dates	September 1, 2021 to August 31, 2022
Brief Description of Research Project	The Rhode Island Department of Transportation (RIDOT) has a significant inventory of state owned roads of which layer thickness and moisture related damage is uncertain. Discrete methods of assessment like coring and visual inspection provide limited data and are both time-consuming and costly in terms of traffic control and personnel. The objective of this study is to evaluate the efficient use of Ground Penetrating Radar (GPR) at traffic speeds to determine layer thickness and moisture content of rural state-owned roads in the State. This will be accomplished through field studies of roads with both known and unknown compositions in close collaboration between URI and RIDOT researchers. The results will be incorporated into RIDOT’s GIS-based inventory of roads. The ultimate goal of this effort is to establish a system for collecting and viewing pavement layer thickness and moisture related damage on a network level; information that RIDOT can use to better plan, prioritize and properly allocate funding for pavement related projects.
Describe Implementation of Research Outcomes (or why not implemented)	This project is in its initial research phase. Implementation of Research outcomes will be reported upon completion of initial research.
Place Any Photos Here	
Impacts/Benefits of Implementation (actual, not anticipated)	This project is in its initial research phase. Impacts and benefits of the research will be reported after the implementation phase.
Web Links	Coming soon
<ul style="list-style-type: none"> <li>• Reports</li> <li>• Project website</li> </ul>	