TIDC Transportation Infrastructure Durability Center AT THE UNIVERSITY OF MAINE

UTC Project Information	
Project Title	Performance Structural Concrete Optimized for Cost, Durability and Manufacturability
University	University of Vermont
Principal Investigator	Dryver Huston
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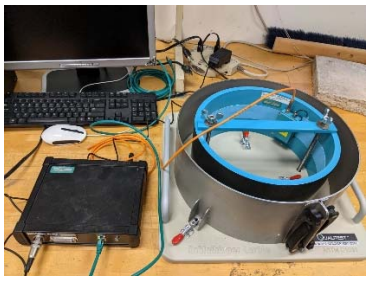
Funding Source(s) and Amounts Provided	TIDC $251,873 UVM $251,871
Total Project Cost	$503,744
Agency ID or Contract Number	Project 2.13
Start and End Dates	Start 1/1/21 End 8/31/23
Brief Description of Research Project	The primary goal is to develop prescriptive concrete mix designs that meet modern high- performance durability requirements while being practical to manufacture with New England-sourced materials and suppliers. These new Performance Concrete or High Performance Concrete (HPC) mix designs use graded aggregates, silica fumes, slags, fly ash, fibers, and other admixtures. The overall deliverable is a prescriptive concrete mix that suppliers can use with New England sourced materials for performance concrete. This project will use machine learning methods throughout to sort through mix complexity to predict the performance of new mix compositions.
Implementation of Research Outcomes and Photos	  Shrinkage test ring (left) and Wenner probe surface resistivity test setups for assessing performance of concrete mixes
Impacts/Benefits of Implementation (actual, not anticipated)	None yet

Web Links • Reports • Project website	None yet