



UTC Project Information – Project 2.12	
Project Title	Evaluation of processed glass aggregate for utilization in transportation projects as a sand borrow
University	The University of Vermont
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Funding Source(s) and Amounts Provided (by each agency or organization)	USDOT/TIDC: \$168,752 CSWD: \$15,000 (cash) + \$20,200 (in-kind) VTrans: \$10,000 (in-kind) UVM: \$56,843
Total Project Cost	\$270,795
Agency ID or Contract Number	69A3551847101
Start and End Dates	9/1/2020 to 9/30/2023
Brief Description of Research Project	<p>“Sand borrow” is a sand-like material most commonly used as a subbase under pavements. To provide good drainage and protect the pavement from frost heaves, the sand borrow material is required to have a low content of small particles. Sources of sand borrow material however are diminishing. Processed glass aggregate (PGA), produced from recycled glass, has a high potential to be used as a substitute for sand borrow. The current specifications in our region however prevent widespread use of PGA because of lack of reliable methods to determine deleterious materials (e.g. plastic, paper) in PGA and how it impacts PGA’s engineering performance. The overarching goal of this project is therefore to catalyze the use of PGA as a substitute for increasingly scarce sand borrow material in transportation projects in Vermont, in New England, and beyond. The project not only alleviates the scarcity of these high quality construction materials faced by transportation projects, but also promotes sustainability by reducing the consumption of natural resources, minimizing greenhouse gas emissions and reducing waste going to landfills, a win-win for transportation sector and solid waste facilities.</p>
Describe Implementation of Research Outcomes (or why not implemented)	
Place Any Photos Here	



Impacts/Benefits of Implementation (actual, not anticipated)	
Web Links <ul style="list-style-type: none">• Reports• Project website	