

UTC Project Information	
Project Title	Aerospace Industrial Waste-Incorporated Concrete for Sustainability and Extended Durability
University	Washington State University
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Funding Source(s) and Amounts Provided (by each agency or organization)	Tier 1 UTC for Environmentally Sustainable Transportation in Cold Climates (CESTiCC) WSU & Global Fiberglass Solutions.
Total Project Cost	\$74,895
Agency ID or Contract Number	Not available yet
Start and End Dates	Start date: Sep 2016 End date: Jan 2018
Brief Description of Research Project	This project uses the industry's carbon fiber composite waste stream as a feedstock for clean-tech, recycling industry to use low-cost (mostly mechanical processing methods) to produce a consistent and high-quality new product ready to enter the construction market. The new product will be used as an additive to concrete used by departments of transportation, state counties/municipalities, and private industry for applications such as pavements, sidewalks, bridge decks, loading/manufacturing floors, Jersey barriers and beyond. The focus will be to experimentally optimize the carbon fiber additives to design a concrete with the durability and mechanical properties to long last the environmental and other service loads in the cold climate region.
Describe Implementation of Research Outcomes (or why not implemented) Place Any Photos Here	Upon the completion of this project, we expect to have developed the knowledge (based on a database of test results) that demonstrates the potential of carbon fiber waste in enhancing building materials' performance. With this demonstrated information, the recycling industry can enter a new promising market for recycled composite materials. The new and green but durable concrete can have many infrastructure applications.
Impacts/Benefit of Implementation (actual, not anticipated)	The proposed plan benefits the industry in the area, sends less non-decomposing waste to landfills, and creates entrepreneurial opportunities in clean technology for investors and engineering-graduates.
Web Links <ul style="list-style-type: none"> • Reports • Project website 	Not available yet