UTC Project Information	
Project Title	REPAIR AND UPGRADE OF STEEL CULVERTS USING SPRAYABLE ULTRA-HIGH PERFORMANCE CONCRETE (UHPC)
University	Florida International University
Principal Investigator	Atorod Azizinamini, Ph.D., P.E.
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Funding Source(s) and Amounts Provided (by each agency or organization)	IBT-ABC-UTC funds: $35,000 Match funds : $35,000
Total Project Cost	$ 70,000
Agency ID or Contract Number	69A3552348322
Start and End Dates	January 1, 2025 - Active
Brief Description of Research Project	This research proposes using Ultra-High-Performance Concrete (UHPC) shotcrete to repair and upgrade steel culverts, addressing significant infrastructure challenges posed by aging, deterioration, and increased traffic demands. Many U.S. steel culverts are nearing the end of their service life, suffering from corrosion, wear, and soil erosion, which can lead to structural failure and severe environmental and economic consequences. This study aims to optimize UHPC shotcrete mixtures, evaluate their mechanical and durability properties, and assess their effectiveness in repairing and upgrading steel culverts.
Describe Implementation of Research Outcomes (or why not implemented) Place Any Photos Here	The outcomes will be tracked and reported once they are identified.
Impacts/Benefits of Implementation (actual, not anticipated)	The impacts will be tracked and reported once they are identified.

Web Links • Reports • Project website	https://abc-utc.fiu.edu/repair-and-upgrade-of-steel-culverts-using-sprayable-ultra-high-performance-concrete-uhpc/