UTC Project Information – Project 3.16	
Project Title	CT bridge girder sections with precast decks and FRP girder-deck shear connectors
University	UMaine
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Co-PI(s)	
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Funding Source(s) and Amounts Provided (by each agency or organization)	TIDC ($245,057), AIT Bridges ($40,000), MaineDOT ($20,000)
Total Project Cost	$305,057
Agency ID or Contract Number	
Start and End Dates	11/1/2021 – 12/31/2022
Brief Description of Research Project	UMaine recently developed and commercialized, in partnership with AIT Bridges, a novel, fiber-reinforced polymer (FRP) composite bridge girder. This project focuses on the assessment of the fiber-reinforced polymer tub girder (CT girder) with precast concrete decks and new, FRP girder-deck shear connectors. This will extend the application of this new bridge technology by modularizing construction and the additional use of composite materials. The new FRP shear connectors, when used with FRP rebar for the deck reinforcing, will completely eliminate steel and therefore all corrosion in the bridge superstructure. The project will also include the fatigue testing of a full-scale girder, which has not been performed to-date. This research project will employ both large-scale and smaller-scale experiments, and includes direct collaboration with the industrial partner who has licensed and is marketing the CT girder.
Describe Implementation of Research Outcomes (or why not implemented) Place Any Photos Here	To be completed after actual implementation has occurred
Impacts/Benefits of Implementation (actual, not anticipated)	To be completed after actual implementation has occurred
Web Links • Reports • Project website	