



ACCELERATED BRIDGE CONSTRUCTION
UNIVERSITY TRANSPORTATION CENTER

UTC Project Information	
Project Title	Adoption and Implementation of Project Management Plans (PMPs) for ABC Projects: Benefits and Challenges
University	Florida International University
Principal Investigator	Matthew Reyes & Somik Ghosh
PI Contact Information	Matthew Reyes: mdreyes@ou.edu Somik Ghosh: sghosh@ou.edu
Funding Source(s) and Amounts Provided (by each agency or organization)	ABC-UTC Funding: \$39,845 Match Funding: \$31,145
Total Project Cost	\$70,990
Agency ID or Contract Number	69A3551747121
Start and End Dates	06/01/2022 - Active
Brief Description of Research Project	<p>The Accelerated Bridge Construction (ABC) process employs a variety of design, material, and management techniques to reduce the impacts of construction to the public, decreasing the time of construction and minimizing traffic disruptions. These projects require a great deal of planning and collaboration among project team members due to their complex nature. To guide the team's planning and collaboration, Project Management Plans (PMP) are developed that define the roles of the team members and the processes that will be followed. These PMPs are critical tools and are required on major projects (over \$500 million) on projects funded by the Federal Highway Administration (FHWA). It is critical that these PMPs are developed properly at the outset of the project so that they are a useful reference and guide throughout the project. The FHWA's SHRP 2 R10 report provides guidance for completion of the PMPs for the projects on which they are required, there is no template or guide on the specifics of completing a PMP for an ABC project.</p> <p>Bridges have long played a crucial role in our culture, and they are an integral element of our daily commutes. Researchers and engineers have been inventing new technologies and innovating new construction methods for many years to achieve more cost-effective, safe, and convenient methods of construction and rehabilitation of bridges. There are about 607,000 bridges on public roads spread out across the U.S. The average age of these bridges is 43 years, and nearly a quarter of them require repair or replacement. The ABC approach is currently utilized in some states for the rapid construction of bridges, reduce traffic congestion, and for convenience to travelers. However, not all DOTs use the ABC</p>

	<p>approach. This may be due to hesitation of contractors to implement the ABC approach due to lack of awareness, training, incentives, or due to the culture of some OTs to rely on traditional methods. Having a formal guidance for PMPs crafted specifically for the ABC projects to mitigate/eliminate the complexities and uncertainties will facilitate the project team during the life of the projects and encourage higher adoption of the approach.</p> <p>The research team will build on the team's previously completed framework of PMP for ABC project for use by project teams to develop PMPs specifically for ABC projects. In this proposed project, the completed template will be piloted by the DOTs and contractors that the researchers will partner with. The resulting analysis will describe effective ways to use the previously developed PMP for ABC framework and, more importantly, effective ways to use the PMP as a reference for the successful completion of a project.</p>
<p>Describe Implementation of Research Outcomes (or why not implemented) Place Any Photos Here</p>	<p>The outcomes will be tracked and reported once they are identified.</p>
<p>Impacts/Benefits of Implementation (actual, not anticipated)</p>	<p>The impacts will be tracked and reported once they are identified.</p>
<p>Web Links</p> <ul style="list-style-type: none"> • Reports • Project website 	<p>https://abc-utc.fiu.edu/research-projects/ou-research-projects/adoption-and-implementation-of-project-management-plans-pmps-for-abc-projects-benefits-and-challenges/</p>