



ACCELERATED BRIDGE CONSTRUCTION  
UNIVERSITY TRANSPORTATION CENTER

<b>UTC Project Information</b>	
Project Title	Developing ABC Success Index to Support Contractors During Pre-Project Planning
University	Florida International University
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Funding Source(s) and Amounts Provided (by each agency or organization)	\$56,007 from ABC-UTC \$12,466 from FIU
Total Project Cost	\$68,473
Agency ID or Contract Number	69A3551747121
Start and End Dates	04/01/2021 to Active
Brief Description of Research Project	<p>The goal of this research is primarily geared towards supporting ABC projects through twofold: attracting contractors to adopt ABC projects and informing project stakeholders about ABC success indicators during the pre-project planning phase. Given the novelty of ABC method, providing knowledge of ABC success indicators during pre-project planning phase will have a significant impact on ABC project success. This is particularly true since planning efforts conducted during the early stages of a construction project, known as pre-project planning, which encompasses tasks from project scope, definition, alignment, funding source/s, initiation to the beginning of detailed design, has a significant effect on project success than efforts undertaken after project kickoff. Therefore, this study reinforces the success of ABC projects during the early planning phase by pre-informing contractors about the success indicators, which can be developed into a tool elicited from analyzing successes of previous ABC projects. The research team set forth the objective of producing a user-friendly tool that supports identifying ABC success indicators with the following characteristics and functions:</p> <ol style="list-style-type: none"> <li>1. Identify the success indicators based upon the literature and industry expertise,</li> <li>2. Conduct ABC industry interviews-workshops for professionals from construction, transportation, and the structural disciplines to define the required weighted success criteria i.e., ABC Success matrix; and</li> <li>3. Develop regression model with a machine learning algorithm that would help to determine the correlation between different project</li> </ol>

	performance factors and expected success in ABC projects as well make accurate predictions.
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 <ul style="list-style-type: none"> <li>• Reports</li> <li>• Project website</li> </ul>	<a href="https://abc-utc.fiu.edu/research-projects/developing-abc-success-index-to-support-contractors-during-pre-project-planning/">https://abc-utc.fiu.edu/research-projects/developing-abc-success-index-to-support-contractors-during-pre-project-planning/</a>