

Title:	Develop NextGen Texas Bridge Decks
The Problem:	<p>Bridge deck construction can be accelerated, and safety during construction can be improved by streamlining the deck construction process. Currently, TxDOT does not have a design standard that permits the use of partial-depth deck panels that can cover the entire bridge deck.</p> <p>Development of a partial-depth deck panel system that spans the entire width of the bridge superstructure would simplify construction, reduce cost, and accelerate project delivery. This project aims to develop that system.</p>
Technical Objectives:	<p>The objective of this research is to develop a design standard that permits the use of partial-depth deck panels that can cover the entire bridge deck</p> <p>The researchers shall address the following:</p> <ol style="list-style-type: none"> 1. Use full-scale test specimens to evaluate and prove the feasibility of the new deck system to eliminate adverse effects of scaling. 2. Perform an experimental comparison of the performance of the current TxDOT details with that of the new system to ensure that safety margins associated with the current decks are not compromised. <p>The expectation of this project is that the end product will obtain a TRL level 8.</p>
Desired Deliverables:	<ol style="list-style-type: none"> 1. Technical memorandum for each task completed. 2. Monthly progress reports. 3. Value of Research (VoR) that includes both qualitative and economic benefits, to be included in the final research report. 4. Research report documenting the findings of the research, including the details of a partial-depth deck panel system that has been tested, proven and ready for implementation. 5. Project Summary Report.
Proposal Requirements:	<ol style="list-style-type: none"> 1. Utilize the "Proj/Agre" and "PA_Form" templates located at the TxDOT RTI website. 2. Proposals will be considered non-responsive and will not be accepted for technical evaluation if they are not received by the deadline or do not meet the requirements stated in RTI's University Handbook, which is also located at the RTI website. 3. Proposals should be submitted in PDF format, 1 PDF file per proposal. File name should include project name and university abbreviation. 4. This project will be tracked during the life of the project using a Technology Readiness Level (TRL) scale. For more information about the use of a TRL, click.