



Research Project Statement 24-027 FY 2024 Annual Program

Title:	Develop Best Practices for Flexible Pavement Repairs
The Problem:	TxDOT synthesis project 0-7109, "Synthesis for Best Practices for Preventive Maintenance Preparatory Work," identified areas that additional research is needed. While there is plenty of information about different repair types for flexible pavement, that information is not specific on how to do the repair when preparing a roadway for a seal coat or thin overlay; i.e., PM treatment. To improve the long-term durability of the repair as well as the PM treatment, additional research is needed for flexible pavements.
Technical Objectives:	<p>This research will improve the process for flexible pavement repairs which will lead to cost savings and improved overall condition scores. To meet the objectives of this project, the research team shall:</p> <ul style="list-style-type: none"> • Identify the main flexible pavement repair types such as level-up, base repair, strip or spot seals, fog seal, crack seal, mill and inlay, and high-pressure water texturing, used before PM treatments and investigate best practices for performing the in-house or contracted repairs that include: <ul style="list-style-type: none"> ○ Materials ○ Equipment ○ Cost ○ Skills and training for employees • Develop a procedure and tools to determine the limits of and type of flexible pavement repair. • Develop a flexible pavement repair evaluation procedure including repair performance and effects on PM treatment. <p>Note the repair types identified in 0-7109 for flexible pavement should be investigated further.</p> <p>The expected technology readiness level (TRL) for this project is 8.</p>
Anticipated 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. This is not a stand-alone deliverable. 4. Product P1: Recommendations for improvements to the flexible pavement repair methods and materials that includes general information and best practices information booklets. 5. Product P2: Recommendations for a procedure including tools to determine limits and types of flexible pavement repairs. 6. Product P3: Recommendations for a procedure to evaluate the performance of the flexible pavement repairs. 7. Research report documenting the findings of the research, including existing best practices used to perform in-house repairs. 8. Project Summary Report.
Proposal Requirements:	<ol style="list-style-type: none"> 1. Project duration shall not exceed 30 months. 2. Proposal Deadline: 12:00 p.m. Central Time, Monday, March 6, 2023. 3. RFP#1 Q&A Deadline: 12:00 p.m. Central Time, Wednesday, February 1, 2023. 4. Use the current "ProjAgre" and "PA Forms" templates located at the RTI Forms webpage. 5. 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. 6. Proposals should be submitted in PDF format; (1) PDF file per proposal. File name should include project name and university abbreviation. 7. This project will be tracked during the life of the project using the Technology Readiness Level (TRL) scale. 8. The 2021 Texas Legislative Session requires that universities be in compliance with Senate Bill 475 by submitting a completed and signed TxDOT Security Questionnaire (TSQ) to RTIMAIN@txdot.gov in advance of a proposal submission. Universities found to not submit a completed and signed TSQ in advance of proposal submitting will be held in non-compliance and unable to participate in the Program.