

Research Project Statement 22-046 FY 2022 Annual Program

Title:	Synthesis for Best Practices for Preventive Maintenance Preparatory Work
The Problem:	TxDOT has numerous sections of roadway that have preventive maintenance (PM) type work contracted annually and require some in-house preparatory work to get the pavement ready for the PM treatment. With over \$300 million investment annually in PM seal coats, overlays and other surfaces, it is imperative that the appropriate preparatory work be performed. The question is, what work needs to be performed to a roadway before a new surface is placed? There is a substantial amount of general information about maintenance preparatory work; however, it is not well documented in one document with basic guidelines and procedures. It is also necessary for the document to explain the goals of the preparatory work and how these goals will be accomplished to help select the correct repairs.
Technical Objectives:	This synthesis shall produce documentation for use by anyone in TxDOT involved with PM, but specifically for district maintenance personnel. To achieve this objective, the work to be performed shall include: 1. Conduct a literature review and survey of TxDOT Maintenance Supervisors and Engineers for the following: a. Best practices for pavement repairs before seal coat, overlay or other surface is placed. b. Other factors that may affect the repair decision, such as material availability. c. Problems associated with repairs and their effect on the performance and life of the new surface; i.e., seal coat, overlay or other surface. 2. Document results of this synthesis study. The expectation of the project end product(s) shall attain a Technology Readiness Level of 2.
Anticipated Deliverables:	 Technical memorandum for each task completed. Monthly progress reports. Value of Research (VoR) that includes both qualitative and economic benefits, to be included in the final research report; not a stand-alone deliverable. Research report documenting the findings of the research, including literature review and survey findings. Project Summary Report
Proposal Requirements:	 The project duration shall not exceed 12 months. The project budget shall not exceed \$65,000. Utilize the "Proj/Agre" and "PA_Form" templates located at the TxDOT RTI website. 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. Proposals should be submitted in PDF format, 1 PDF file per proposal. File name should include project name and university abbreviation. 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.