

Title:	Develop Transition for MASH Test Level 4 (TL-4) Compliant Guardrail System
The Problem:	<p>TxDOT research project 0-7019, Development of a MASH Test-Level 4 Compliant Guardrail, is currently in the process of developing a MASH Test Level 4 (TL-4) compliant guardrail system that is more cost effective than TL-4 concrete barriers. The design has been completed and testing is underway. This project is scheduled for completion in February 2021.</p> <p>There is a need to develop an end transition for the new TL-4 compliant guardrail so it can be used with TL-3 W-beam guardrail and standard guardrail terminals. Developing the TL-4 guardrail transition will provide ends of the system that are MASH compliant and safe for motorists. The transition will also allow use of the TL-4 compliant guardrail in line with the standard W-beam guardrail as needed.</p>
Technical Objectives:	<p>This project will provide a transition design for a new TL-4 compliant guardrail and will be fully implementable on project completion. To achieve this objective, the work to be performed shall include:</p> <ol style="list-style-type: none"> 1. Develop preliminary conceptual design. 2. Selected one conceptual design for further development and conduct simulation analysis. 3. Evaluate design changes as needed and develop final design. 4. Conduct full scale crash tests of the transition system in accordance with the MASH criteria. <p>he expectation of the project end product(s) shall attain a Technology Readiness Level of 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; <u>not a stand-alone deliverable</u>. 4. Research report documenting the findings of the research, including detailed drawings of a MASH TL-4 compliant transition system, suitable for incorporating into TxDOT standard details. 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.