

<b>Project Title:</b>	Design and Testing of a MASH TL-3 Thrie-Beam System for Roadside and Median Applications
<b>Project Synopsis:</b>	<i>Develop and crash test a thrie-beam roadside and a median system that will meet MASH TL-3. Additionally, develop a transition between w-beam MGS and the newly developed thrie-beam system through computer simulation.</i>
<b>Project Goal(s):</b>	<ul style="list-style-type: none"> <li>-Develop designs for a MASH TL-3 thrie-beam roadside system and a median system</li> <li>-MASH crash test the newly developed thrie-beam designs</li> <li>-Develop transition from w-beam to thrie-beam system through computer simulation</li> </ul>
<b>Project Background:</b>	<p><i>NCHRP Project 22-14(03) tested and evaluated existing NCHRP 350 crash tested roadside hardware to MASH standards. Included in that study was a MASH TL-3 test on G9 Thrie Beam, which did not perform acceptably during 3-11.</i></p>
<b>Proposed Work Plan:</b>	<p><i>Task 1: Literature and Engineering Review</i>          This task will review the current literature and previous research related to thrie-beam guardrail systems and transitions between w-beam and thrie-beam sections. This task will also complete a preliminary analysis of the roadside, median, and transition systems in preparation for the computer simulation</p> <p><i>Task 2: Computer Modeling and Simulation</i>          This task will develop the roadside, median, and transitions systems through computer simulation.</p> <p><i>Task 3: MASH Crash Testing</i>          This task will crash test the roadside and median systems to MASH TL-3.</p> <p><i>Task 4: Reporting</i>          This task will complete the final technical report documenting all of the work completed in this project.</p>

<b>Deliverables:</b>	<ul style="list-style-type: none"> <li>-Designs for a roadside and a median thrie-beam barrier that will conform to MASH TL-3 that have been crash tested</li> <li>-Design for a transition between w-beam and thrie-beam guardrail that was computer simulated</li> <li>-Technical report documenting all of the work completed in this project</li> </ul>
<b>Urgency and Expected Benefit:</b>	<p><i>There are currently limited options for reducing deflection while conforming to MASH TL-3. The development of a thrie beam option would have an immediate benefit to safety by reducing impact severity and financially by having an alternative to concrete barrier.</i></p>
<b>Problem Funding and Research Period:</b>	<p><i>\$300,000 18 month project</i></p>
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