

<b>Project Title:</b>	31" Rectangular Wood Post W-Beam Guardrail in Concrete Mow Strips
<b>Project Synopsis:</b>	To develop a leave-out and grout backfill detail around a wood post within a concrete mow strip that will allow the post to function as part of a MASH TL-3 guard rail barrier.
<b>Project Goal(s):</b>	To develop and analyze various options that will allow a wood post used in a concrete mow strip to perform properly when used as part of MASH TL-3 guard rail barrier. A preferred detail would be selected for full scale or pendulum testing.
<b>Project Background:</b>	<p>Previous MASH tests were run on this concept by TTI but two of the tests failed. (TTI Report 608551-01-1-5 ; April 2019)</p> <p>Previous research into posts in mow strips was conducted by TTI using NCHRP 350 (TTI Report 405160-14-1 ; May 2009) and may have details or information that could be useful for this project.</p>
<b>Proposed Work Plan:</b>	<p>This project would examine the failures from the original testing and use the lessons learned to develop new, potential options. These proposed options would be evaluated and a preferred detail would be selected for testing.</p> <p>Assuming a successful test, the applicability of the new detail would be analyzed for use with steel posts as well as for posts (both wood and steel) in asphalt mow strips.</p>

<b>Deliverables:</b>	An engineering drawing of the leave out and post along with specifications for the grout / backfill material. A crash test report or summary of the analysis performed should also be delivered.
<b>Urgency and Expected Benefit:</b>	Louisiana primarily uses timber posts and includes mow strips on almost all of their guard rail installations. Having an approved MASH detail for most strips is essential and would see immediate implementation.
<b>Problem Funding and Research Period:</b>	<i>Task 1 – Redesign: \$5,000</i> <i>Task 2 – Construction, Testing, &amp; Reporting: \$55,000</i>  <i>Total Estimated Cost: \$60,000</i>  <i>Research Period: 6 months</i>
<b>Developer(s) of the Problem Statement:</b>	Name: Kurt Brauner Email: kurt.brauner@la.gov Phone: 225-379-1933