

<b>Project Title:</b>	<b>MASH Evaluation of Square Tubing Slip Base Sign Support Systems (2024-04-BD)</b>
<b>Project Synopsis:</b>	<p>The evaluation of slip base sign support systems with structural square tubing is needed to determine MASH compliance of these devices. Oregon DOT currently uses these systems with varying configurations of posts, sign panels, etc. This research would evaluate MASH compliance through full-scale crash testing and provide guidance for use of various configurations of square post slip base sign support systems through engineering analysis.</p>
<b>Project Goal(s):</b>	<ol style="list-style-type: none"> <li>1.) Evaluate MASH compliance of critical configuration of square post slip base sign support system.</li> <li>2.) Determine MASH compliance of other less critical configurations through engineering analysis</li> </ol>
<b>Project Background:</b>	<p>Oregon DOT uses the below linked details for slip base sign support systems.</p> <p><a href="https://www.oregon.gov/ODOT/Engineering/202201/TM602.pdf">https://www.oregon.gov/ODOT/Engineering/202201/TM602.pdf</a></p> <p>Previous crash testing has shown slip base breakaway systems to perform satisfactorily for MASH.</p>
<b>Proposed Work Plan:</b>	<ol style="list-style-type: none"> <li>1.) Task 1 – Literature review and Engineering Analysis             <ol style="list-style-type: none"> <li>a. Review previous and ongoing research related to the evaluation of slip base sign support systems.</li> <li>b. Review current state standards for slip base sign support systems with square tube posts. If additional information is needed, conduct a survey of state DOTs to collect additional information on sign support sizes, sign sizes, and other installation details.</li> <li>c. Identify and select the most critical configuration for full-scale crash testing. Other less critical configurations would be considered acceptable if the crash tests are satisfactory.</li> </ol> </li> <li>2.) Task 2 – Full scale crash testing             <ol style="list-style-type: none"> <li>a. MASH Tests 3-60, 3-61, and 3-62</li> </ol> </li> <li>3.) Task 3 – Report and recommendations</li> </ol>
<b>Deliverables:</b>	<p>Final report documenting research and testing performed and conclusions reached. Documentation of MASH compliance for applicable installation types.</p>
<b>Urgency and Expected Benefit:</b>	<p>Evaluation of these signs supports is needed to determine their MASH compliance and use on roadways.</p>

<b>Problem Funding and Research Period:</b>	<b>Total Estimated Cost = \$117,000</b>
<b>Developer(s) of the Problem Statement:</b>	Name: Scott Jollo, Oregon DOT Email: <a href="mailto:scott.u.jollo@odot.oregon.gov">scott.u.jollo@odot.oregon.gov</a> Phone: (503) 510-2204