

<b>Project Title:</b>	Determine MASH TL-3 and/or TL-2 compliance of the Midwest Guardrail System (MGS) with half post spacing / quarter post spacing and in combination with curb (6-inch maximum height).
<b>Project Synopsis:</b>	<p>Previous research has indicated MASH compliance of MGS guide rail with 6" curb. Previous research has also provided MASH compliant MGS guide rail with reduced post spacing.</p> <p>This research is to look at the combination of MGS guide rail with reduced post spacing and with 6" curb.</p> <p>The goal would be to first evaluate this combination for MASH TL-3. If project resources allow, simulations would evaluate deflections of this combination at lower speeds (45mph and/or 25 mph).</p>
<b>Project Goal(s):</b>	Determine MASH compliance and deflections of MGS guide rail with reduced post spacing and with curb. Possibly also investigate lower impact speed deflections.
<b>Project Background:</b>	A report was recently completed on MGS guide rail with half post spacing / quarter post spacing. This problem statement is a follow-up to that regarding what deflections would be when combined with curb.
<b>Proposed Work Plan:</b>	<ol style="list-style-type: none"> <li>1.) Task 1 – Literature Review</li> <li>2.) Task 2 – Engineering Analysis and Simulation</li> <li>3.) Task 3 – Crash Testing</li> <li>4.) Reporting</li> </ol>
<b>Deliverables:</b>	A report describing the results of the simulation and crash testing. Specifically document deflections from the various analyses.
<b>Urgency and Expected Benefit:</b>	Sometimes there are trees, utility poles and other hazards right behind a curb. Then a reduced post spacing guide rail system is needed to reduce deflection.
<b>Problem Funding and Research Period:</b>	<b>Total Estimated Cost = TBD</b> <b>Total Estimated Time = TBD</b>
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