

Project Title:	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).
Project Synopsis:	<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>
Project Goal(s):	Determine MASH compliance and deflections of MGS guide rail with reduced post spacing and with curb. Possibly also investigate lower impact speed deflections.
Project Background:	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.
Proposed Work Plan:	<ol style="list-style-type: none"> 1.) Task 1 – Literature Review & State Survey 2.) Task 2 – Engineering Analysis and Simulation 3.) Task 3 – Crash Testing 4.) Task 4 – Documentation
Deliverables:	A report describing the results of the simulation and crash testing. Specifically document deflections from the various analyses.
Urgency and Expected Benefit:	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.
Problem Funding and Research Period:	Total Estimated Cost = \$216,000 Total Estimated Time = 15 months
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