

<b>Project Title:</b>	Determine deflection distances for MASH TL-2 (and maybe TL-1) of the MGS with half post spacing and quarter post spacing using existing TL-3 MASH designs. (2024-04-LSRB)
<b>Project Synopsis:</b>	<p>Previous research has indicated MASH compliance of MGS guide rail with lower speeds (TL-2 and TL-1). Previous research has also provided MASH compliant MGS guide rail with reduced post spacing (half and quarter spacing).</p> <p>This research is to look at the combination of MGS guide rail with reduced post spacing and with lower speeds.</p> <p>Researchers would perform computer simulations to predict deflections at lower speeds (45 mph and/or 25 mph).</p>
<b>Project Goal(s):</b>	Determine MASH compliance and deflections of MGS guide rail with quarter-post spacing at TL-2 and TL-1 speeds
<b>Project Background:</b>	<p>Deflection of guide rail is based on TL-3 deflections around the state, and there are many circumstances where knowing what TL-2 or TL-1 deflections could greatly benefit the design of a location on a low speed road.</p> <p>There is currently a Lower Impact Severity Project funded through the Pooled Fund. In that project, states prioritized half-post spacing MGS, but not quarter-post spacing. This project would fund the additional quarter-post spacing effort.</p>
<b>Proposed Work Plan:</b>	1.) Task 1 – Computer Simulation and Documentation
<b>Deliverables:</b>	A report describing the results of the engineering analysis and simulation. Specifically document deflections from the various analyses.
<b>Urgency and Expected Benefit:</b>	MGS guide rail with reduced post spacings at half and quarter post spacing are used where lower deflections are needed. If deflections for lower speeds (45mph and/or 25 mph) are known, then fewer applications with extra close post spacing might be needed.
<b>Problem Funding and Research Period:</b>	<b>Total Estimated Cost = \$15,000</b> <b>Total Estimated Time = 6 Months</b>
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