

## **Research Problem Statement**

Project Title:	Galvanized Steel "Goal Post" Type Pipe Post Sign Supports MASH Compliance
Project Synopsis:	The project will review existing literature, analyze current design and propose modifications, evaluate final design through computer simulations, and perform MASH crash testing.
Project Goal(s):	Evaluate crashworthiness of breakaway steel "goal post" type sign supports according to MASH. In addition, evaluate design modification for omni-directional impacts.
Project Background:	These support systems are typically used in relatively low speed, urban environments where available right of way is highly restricted and/or available sidewalk width for pedestrians would be too restricted by using a multiple support system.  Breakaway steel supports were previously approved under NCHRP Report 350. To date, no MASH crash testing has been performed on these types of sign support systems.
Proposed Work Plan:	The proposed work plan includes the following tasks:  Literature Review Engineering Analysis and Design Modifications Computer Simulations MASH TL-3 Crash Testing Final Report

Deliverables:	Crash test report, photos, videos, summary of results and performance evaluation summary.
Urgency and Expected Benefit:	Successful completion of this project will result in the availability of a non-proprietary support system for use typically in relatively low speed, urban environments where available right of way is highly restricted and/or available sidewalk width for pedestrians would be too restricted by using a multiple support system.
Problem Funding and Research Period:	The estimated costs to complete the proposed project is \$200,000. Estimated time to complete the project is 18 months.
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