

Project Title:	White Paper on national availability of MASH Approved trailer mounted equipment (Category 4 devices) (2024-01-WZ)
Project Synopsis:	<p>Having a suitable inventory of MASH approved trailer mounted equipment (Work-Zone Category IV) with accessories has been challenging for State DOTs. Many states developed sunset dates to phase outdated non-MASH devices in which many of those dates take effect in the coming months. For planning and resource purposes, a survey should be conducted nationally to see how many manufactured devices (Portable Message Boards, Arrow Boards, Portable signals, etc.) have been successfully tested to MASH standards. This approach will assist states with understanding gaps in available equipment, allow time to react and revise policy, and encourage business partners to pursue appropriate MASH testing to support business needs.</p>
Project Goal(s):	<ol style="list-style-type: none"> 1.) Review if a suitable inventory of MASH approved trailer mounted equipment (Work-Zone Category IV) with accessories are available. 2.) Perform a national survey to see how many manufactured devices (Portable Message Boards, Arrow Boards, Portable signals, etc.) have been successfully tested to MASH standards. 3.) Provide a final report for State DOT's to understand gaps in available equipment, allow time to react and revise policy, and encourage business partners to pursue appropriate MASH testing to support business needs.
Project Background:	<p>Having a suitable inventory of MASH approved trailer mounted equipment (Work-Zone Category IV) with accessories has been challenging for State DOTs. Limited amount of current available MASH approved devices. State DOTs are forced to continue to allow the use of old and new non-MASH approved devices to effectively meet the TTC needs of day-to-day operations. While state DOTs will revisit sunset dates as time moves on, the availability of crashworthy Category 4 devices is of great concern to the state DOTs. Many different configurations for the trailer mounted equipment with no knowledge of crashworthiness.</p>
Proposed Work Plan:	<ol style="list-style-type: none"> 1.) Task 1: Literature review <ul style="list-style-type: none"> • Review previously conducted research (FHWA letters) • Review NCHRP 350 compliant devices 2.) Task 2: Data Collection <ul style="list-style-type: none"> • Survey with manufacturer – Current design parameters (samples)/MASH tested product or similar devices • Survey with DOTs – Usage of devices - Compile any available crash test result / 3.) Task 3: Deliverables <ul style="list-style-type: none"> • Recommend testing condition to evaluate the devices from MASH test matrix • Address recommendations in report
Deliverables:	<p>Recommend testing condition to evaluate the devices from MASH test matrix Address recommendations in report</p>
Urgency and Expected Benefit:	<p>It may be beneficial if the pooled fund group could come up with some initial scoping or a study to provide a report on the current inventory of MASH Approved of trailer mounted equipment (aka Category 4 devices). Portable work zone traffic (trailer mounted equipment) would include arrow board trailers, changeable sign trailers, and portable traffic control signals</p>
Problem Funding and Research Period:	<p>Total Estimated Cost = \$26,992</p>

**Developer(s) of
the Problem
Statement:**

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