

## TRANSPORTATION POOLED FUND PROGRAM QUARTERLY PROGRESS REPORT

Date: 1/25/2019

Lead Agency (FHWA or State DOT): [Washington State Department of Transportation](#)

**INSTRUCTIONS:**

*Project Managers and/or research project investigators should complete a quarterly progress report for each calendar quarter during which the projects are active. Please provide a project schedule status of the research activities tied to each task that is defined in the proposal; a percentage completion of each task; a concise discussion (2 or 3 sentences) of the current status, including accomplishments and problems encountered, if any. List all tasks, even if no work was done during this period.*

<b>Transportation Pooled Fund Program Project #</b>  <a href="#">TPF-5(343) Roadside Safety Research for MASH Implementation</a>		<b>Transportation Pooled Fund Program - Report Period:</b> <input type="checkbox"/> Quarter 1 (January 1 – March 31) <input checked="" type="checkbox"/> Quarter 2 (April 1 – June 30) <input checked="" type="checkbox"/> Quarter 3 (July 1 – September 30) <input checked="" type="checkbox"/> Quarter 4 (October 1 – December 31)	
<b>Project Title:</b> MASH Implementation			
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<b>Lead Agency Project ID:</b> <a href="#">N/A</a>		<b>Other Project ID (i.e., contract #):</b> <a href="#">GCB</a>	<b>Project Start Date:</b> <a href="#">2016</a>
<b>Original Project End Date:</b>		<b>Current Project End Date:</b> <a href="#">2020</a>	<b>Number of Extensions:</b>

Project schedule status:

On schedule     
  On revised schedule     
  Ahead of schedule     
  Behind schedule

Overall Project Statistics:

Total Project Budget	Total Cost to Date for Project	Percentage of Work Completed to Date

Quarterly Project Statistics:

Total Project Expenses and Percentage This Quarter	Total Amount of Funds Expended This Quarter	Total Percentage of Time Used to Date

**Project Description:**

The Roadside Safety Research for MASH Implementation program is designed to conduct research on roadside safety priorities for research projects aligned with the MASH implementation completion schedule. The compliance dates for MASH roadside safety hardware are:

- December 31, 2017: W-beam barriers and cast-in-place concrete barriers
- June 30, 2018: W-beam tangent terminals
- December 31, 2018: Crash cushions
- December 31, 2019: Bridge rails, transitions, all other longitudinal barriers (including portable barriers installed permanently), all other terminals, sign supports, other breakaway hardware, cable barriers, cable barrier terminals
- Also, temporary work zone devices, including portable barriers, manufactured after December 31, 2019, must have been successfully tested to the 2016 edition of MASH.

Washington State Department of Transportation is the lead agency for this pooled fund study. Texas A&M Transportation Institute (TTI) is the lead Principal Investigator and crash test site. A website is available to those interested in completed and ongoing research as well as the work plan for new inquiries.

<https://www.roadsidepooledfund.org/>

**Progress these Quarters (includes meetings, work plan status, contract status, significant progress, etc.):**

The following tasks were completed in these quarters:

- Held several phone meetings between WSDOT, CDOT, and TTI to coordinate the Fall 2018 Roadside Safety Pooled Fund Annual Meeting logistics to be held in Denver, CO. The purpose of this meeting is to develop and prioritize the 2019 projects for testing and evaluation at TTI.
- Twenty-three projects were selected for prioritization by the Members. Of those 23, 11 were chosen to move forward to proposals. They are:
  1. 2019 Administrative Support
  2. 2019 MASH Coordination Effort
  3. Engineering Support Services and Recommendations for Roadside Safety Issues/Problems for Member States
  4. A Study of Acceptable Sidewalk Heights and Widths
  5. Review and Investigation of W-Beam Terminals with Curbs
  6. MASH TL-4 Investigation and Testing of the Critical Flare Rate for Cast-in-Place Single Slope 42" Concrete Barrier Flaring Around a Fixed Object
  7. MASH TL-4 Testing and Evaluation of a Concrete Median Barrier with Fence Mounted on Top
  8. Testing and Evaluation of Large Signs Slipbase Support on Slope at MASH TL-3 Impact Conditions
  9. Determination of Pedestrian Rail Offset Requirements to Eliminate Vehicle Interaction
  10. Shorter TL-3 MASH W-Beam Transition
  11. Guardrail Evaluation on 6:1 Slope
- Proposals have been finalized and submitted on 8 of the above.
- The following new Task Orders were issued:
  1. T4541-CZ: Thrie/W-Beam/Tubular Barrier Gap Rail for MASH TL-3
  2. T4541-DA: 2018 Administrative Support
  3. T4541-DB: Engineering Support Services and Recommendations for Roadside Safety Issues/Problems for Member States
- Work continued on the following projects:
  1. T4541-CR: Placement of Guardrail on Slopes Phase IV: MASH TL-3 Testing of Guardrail
  2. T4541-CS: 31" W-Beam Guardrail with Steel and Wood Posts in Concrete Mow Strip
  3. T4541-CU: 2018 MASH Coordination Effort
  4. T4541-CV: Testing and Evaluation of the MGS System with Maximum Flare at MASH Test
  5. T4541-CW: Testing of Midwest Guardrail Systems with Reduced Post Spacing for MASH Compliance
- Work was completed on the following projects:
  1. T4541-CD: MASH TL3 T-Intersection (Short Radius) System Design Variations
  2. T4541-CL: Implementation Agreement
  3. T4541-CO: MASH Implementation Support

4. T4541-CQ: MASH Full-Scale Crash Testing of a 31" Buried-in-Backslope Terminal Compatible with an MGS Guardrail System
5. T4541-CX: MASH Testing of Keyed-In Single Slope Barrier
6. T4541-CY: MASH Testing of Pinned Temporary concrete Barrier on Concrete Pavement

Additional project information and project activities is available by visiting the pooled fund web site:  
<https://www.roadsidepooledfund.org/>.

**Anticipated work next quarter:**

- Continue carrying out the research plan for testing approved projects at the September 2018 Roadside Safety Pooled Fund Annual Meeting.
- Set Fall 2019 Roadside Safety Pooled Fund Annual Meeting and communicate to Members to save the date. It will be held in College Station, TX this year.

**Significant Results:**

TBD

**Circumstance affecting project or budget. (Please describe any challenges encountered or anticipated that might affect the completion of the project within the time, scope and fiscal constraints set forth in the agreement, along with recommended solutions to those problems).**

No issues at this time.

**Potential Implementation:**