

## TRANSPORTATION POOLED FUND PROGRAM QUARTERLY PROGRESS REPORT

Lead Agency (FHWA or State DOT):  Texas 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> TPF-5(482)	<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 type="checkbox"/> Quarter 3 (July 1 – September 30) <input type="checkbox"/> Quarter 4 (October 1 – December 31)	
<b>Project Title:</b> Development and Evaluation of Roadside Safety System for Motorcyclists		
<b>Name of Project Manager(s):</b> Chris Glancy	<b>Phone Number:</b> 512-416-4747	<b>E-Mail</b> Chris.Glancy@txdot.gov
<b>Lead Agency Project ID:</b>	<b>Other Project ID (i.e., contract #):</b>	<b>Project Start Date:</b> 2021
<b>Original Project End Date:</b> 2024	<b>Current Project End Date:</b> 2025	<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
\$900,000	\$662,511	73.6%

Quarterly Project Statistics:

Total Project Expenses and Percentage This Quarter	Total Amount of Funds Expended This Quarter	Total Percentage of Time Used to Date
\$153,896.27; 9%	\$153,896.27	70.8%

**Project Description:**

The objective of this pooled fund study is to provide a cooperative approach to conducting research to address roadside safety issues specifically related to improving motorcyclist safety. Furthermore, the study is intended to provide participating states collaborative opportunities to stay abreast of best practices, new regulatory issues, risk management strategies, and other research pertaining to roadside safety improvements for motorcyclists. Research activities will include identification, development, and evaluation of strategies and devices for mitigating the frequency and severity of roadside departure motorcyclist crashes.

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

The following tasks were completed in this quarter:

**Task 1. Project Management**

- Midyear virtual meeting was held on April 9<sup>th</sup>, 2024. Researchers provided an update on the project statuses.

**Task 2. Analyze Motorcycle Roadside Safety Issues**

- Project 5. Development and Full-Scale Crash Testing of an Improved Steel Railing for Use on Top of Barriers: Phase II
  - Construction of the test article for the barrier system was completed.
  - An upright motorcycle and ATD crash test was performed on June 4<sup>th</sup>. The crash test indicated satisfactory containment of the ATD and motorcycle. There was no significant snagging of the ATD on the chain link fence or posts. The ATD remained fully intact (i.e., no loss of limbs) and only had minor scuffing and tears on the outer clothing.
  - MASH Test 3-11 was performed on June 6<sup>th</sup>. The pickup truck vehicle was fully contained and redirected. The vehicle remained stable through the impact event. The occupant risk factors were within the MASH limits. There was observed contact of the vehicle mirror with the occupant compartment.
- Project 6. Technology Transfer
  - Website pages were developed for the various sections of the website. Material was added for each of the ongoing and completed projects
- Project 7. Development of Safety Standards for Testing of Motorcycle Helmets for Use in Roadside Safety System Crashworthiness Evaluation
  - The test impact sled was modified to improved consistency in impact speed.
  - The ATD head and neck assembly were mounted to the standing plate.
  - 13 helmet impact tests were completed.

**Anticipated Work Next Quarter:**

- Project 5. Development and Full-Scale Crash Testing of an Improved Steel Railing for Use on Top of Barriers: Phase II
  - Finalize and submit Report 9-1531-R3A that documents the testing and evaluation
- Project 6. Technology Transfer
  - Finalize the website pages and insert final project information
  - Modify styles and organization on projects page.
  - Send website prototype to member states for review and feedback.
- Project 7. Development of Safety Standards for Testing of Motorcycle Helmets for Use in Roadside Safety System Crashworthiness Evaluation
  - Analyze the ATD injury data from the helmet impact tests
  - Finalize and submit Report 9-1531-R3B that documents the test results

**Significant Results:**

**Potential Implementation:**