**TRANSPORTATION POOLED FUND PROGRAM**

**QUARTERLY PROGRESS REPORT**

Lead Agency (FHWA or State DOT): \_\_\_\_\_\_FHWA\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**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.*

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| **Transportation Pooled Fund Program Project #**  *TPF-5(447)* | | **Transportation Pooled Fund Program - Report Period:**  □Quarter 1 (January 1 – March 31)  🗷Quarter 2 (April 1 – June 30)  □Quarter 3 (July 1 – September 30)  □Quarter 4 (October 1 – December 31) | |
| **Project Title:**  **Traffic Control Devices Pooled Fund Study** | | | |
| **Name of Project Manager(s):**  Laura Mero, FHWA Jose Calvo | **Phone Number:**  (202) 493-3377 (202) 493-3380 | | **E-Mail**  [Laura.Mero@dot.gov](mailto:Laura.Mero@dot.gov) [Jose.Calvo.CTR@dot.gov](mailto:Jose.Calvo.CTR@dot.gov) |
| **Lead Agency Project ID:**  TPF-5(447) | **Other Project ID (i.e., contract #):** | | **Project Start Date:** October 1, 2002 |
| **Original Project End Date:**  N/A Continuing Effort | **Current Project End Date:** | | **Number of Extensions:** |

Project schedule status:

□ On schedule 🗷 On revised schedule □ Ahead of schedule □ Behind schedule

Overall Project Statistics:

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| **Total Project Budget** | **Total Cost to Date for Project** | **Percentage of Work**  **Completed to Date** |
| Values indicate total commitments  2016 – $325,000  2017 – $375,000  2018 – $290,000  2019 – $335,000  2020 – $335,000  2021 – $405,000  2022 – $440,000 | Ongoing Project (N/A) | Ongoing Project (N/A) |

***Quarterly*** Project Statistics:

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| **Total Project Expenses**  **and Percentage This Quarter** | **Total Amount of Funds**  **Expended This Quarter** | **Total Percentage of**  **Time Used to Date** |
| Ongoing Project (N/A) | Ongoing Project (N/A) | Ongoing Project (N/A) |

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| **Project Description**:  The purpose of the TCD PFS is to assemble a consortium composed of regional, State, local entities, appropriate organizations and the FHWA to 1) establish a systematic procedure to select, test, and evaluate approaches to novel TCD concepts as well as incorporation of results into the MUTCD; 2) select novel TCD approaches to test and evaluate; 3) determine methods of evaluation for novel TCD approaches; 4) initiate and monitor projects intended to address evaluation of the novel TCDs; 5) disseminate results; and 6) assist MUTCD incorporation and implementation of results. |

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| **Progress this Quarter (includes meetings, work plan status, contract status, significant progress, etc.):** Traffic Control Devices Pooled Fund Study Technical Support  * Held Q2 meeting * Created and distributed Q2 meeting minutes * Maintained, updated, and consolidated TCD PFS contact lists * Provided access to MS Teams Site for new members * Made improvements to the MS Teams Site including State of the Practice, questions for admins, questions for members, and new project idea channels. * Added locations for files to be placed on the TCD PFS MS Teams Site * Began preparation for Q3 meeting (Annual in-person meeting) * Finalized the location of the Q3(Annual) meeting * Created draft agenda for Q3 meeting * Created document to track new project ideas * Held bi-weekly meetings * Continued tracking contributions   **Sign Guidance for Zipper Merge**   * The research team completed data collection in New Hampshire and most of the data collection in North Carolina and Maryland. In addition, the team has analyzed data collected from the three locations.   **Enhancing Conspicuity for Standard Signs and Retroreflectivity Strips on Posts**   * The research team has provided edits to the FHWA publications team and the final version has been developed for publication.   **Evaluation of Additional Alternatives of and Arrow Sizes for Overhead Arrow-per-Lane Guide Signs**   * Finished data collection * Began data analysis |
| **Anticipated work next quarter**: Traffic Control Devices Pooled Fund Study Technical Support  * Plan and Hold Q3 meeting * Distribute Q3 meeting minutes * Begin planning for Q4 meeting * Expand the MS Teams Site for continued member usage * Continue management of document used to track new project ideas * Continue maintaining, updating, and consolidating TCD PFS master contact lists * Continue holding bi-weekly meetings * Continue tracking contributions * Continue updating past TCD PFS reports for 508 compliance and public affairs approval   **Sign Guidance for Zipper Merge**   * The research team will complete after data collection in Maryland and North Carolina. * The research team will analyze the remaining data. * The research team will prepare the draft extended tech brief.   **Enhancing Conspicuity for Standard Signs and Retroreflectivity Strips on Posts**   * No further tasks. Project complete.   **Evaluation of Additional Alternatives of and Arrow Sizes for Overhead Arrow-per-Lane Guide Signs**   * Finish data analysis * Present findings * Prepare extended technical brief and submit for review |

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| **Significant Results:**  Past projects have led to significant results and changes that were incorporated into the 2009 MUTCD, particularly from the Symbol Sign, Arrow Per Lane Guide Signs, and Roundabout Signing studies. Recent studies are being considered by the MUTCD for incorporation into the next MUTCD.  The “Enhancing Conspicuity for Standard Signs and Retroreflective Strips on Posts” project was completed with several findings that are helpful for practitioners as well as to confirm the appropriateness of treatments provided in the manual. Data for the project were collected in New Hampshire, Iowa, and Virginia with treatments including adding red flags, beacons, retroreflective strips on posts, enlarging signs, duplicating signs on both sides of the roadway, and adding header panels. While the results related to changes in behavior were mixed across all treatment sites, eye-tracking data showed that drivers had an increase in glances where enhancements were made. For speed limit signs, drivers were more likely to glance at their speedometer. Therefore, the enhanced treatments do appear to be effective in increasing conspicuity. |
| **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).**  There were delays in data collection for Sign Guidance for Zipper Merge due to the COVID-19 pandemic. |

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| **Potential Implementation:**  All results from the Traffic Control Devices Pooled Fund Study are considered by FHWA for inclusion in subsequent MUTCD versions and interim approvals. |