TRANSPORTATION POOLED FUND PROGRAM
QUARTERLY PROGRESS REPORT

Lead Agency (FHWA or State DOT): ____FHWA_____

INSTRUCTIONS:
Lead Agency contacts 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.

Transportation Pooled Fund Program Project # *(i.e, SPR-2(XXX), SPR-3(XXX) or TPF-5(XXX)* TPF-05(317)	**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)

TPF Study Number and Title:
TPF-05(317) The Evaluations of Low-Cost Safety Improvements Pooled Fund Study (ELCSI-PFS)

Lead Agency Contact: Woon Kim, FHWA	**Lead Agency Phone Number:** (202) 493-3383	**Lead Agency E-Mail** Woon.Kim@dot.gov
Lead Agency Project ID: TPF-05(317)	**Other Project ID (i.e., contract #):** N/A	**Project Start Date:** 08/2022
Original Project Start Date: 05/2005	**Original Project End Date:** 05/2010	**If Extension has been requested, updated project End Date:** N/A continuing effort

Project schedule status:

☐ On schedule ☐ On revised schedule ☐ Ahead of schedule ☐ Behind schedule

Overall Project Statistics:

Total Project Budget	Total Funds Expended This Quarter	Percentage of Work Completed to Date
Ongoing project (N/A)	Ongoing project (N/A)	Ongoing project (N/A)

Project Description:

The primary goal of the Evaluation of Low-Cost Safety Improvement Pool Fund Study (ELCSI-PFS) was to save lives and reduce traffic crash injuries by identifying effective safety strategies for national implementation. The ELCSI-PFS conducted research to quantify the safety effectiveness of selected strategies — so-called crash modification factors (CMFs) — that may address priority safety concerns but had not been proven. This study also provided benefit-cost (B/C) ratios to estimate the resulting relationship between the relative monetary value of benefits and costs of a selected strategy. Transportation agencies utilized estimated CMFs and B/C ratios to select, plan, fund, and install a specific safety strategy on a targeted site to improve its outstanding safety issue. The secondary goal of this study is to improve and advance the statistical tools to conduct more reliable, rigorous research. For this effort, this study collaborated with the American Statistical Association (ASA) and identified new statistical methodologies to advance the current practices

used in the development of CMFs. This study initiated in 2005 but continued adding years for additional studies. Currently this study is running Phase XIII (so-called 5 CMFs) to evaluate the safety effectiveness of the following countermeasures:

- Rectangular Rapid Flashing Beacons (RRFBs)
- Left-Turn Lanes Improvements (LTL)
- Curve Enhanced Delineation (CED)
- Alternative Rumble Strips (ARS)
- Fixed Object Delineation (FOD)

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

ELCSI-PFS PHASE XIII: 5 CMFS

RRFB
- Began formatting final drafts of technical report and techbrief in layouts.
- Discussed the potential to develop a Public Roads article emphasizing safety programs as a whole and that the RRFB is part of the toolbox.

LTL
- Incorporated crash data into the overall database and finalized database.
- Began conducting final quality control of database while statistician began analysis.

CED
- Executed the contract modification for additional analysis upon MUTCD Team's request.
- Began organization of dataset for re-analysis of separate CED treatments (yellow posts and yellow-and-black striped posts).

ARS
- Continued revising the draft technical report and techbrief in response to comments from FHWA and editors.
- Prepared and submitted 20-minute technical presentation.
- Drafted two-page outreach document.

FOD
- Responded to review comments from the MUTCD Team and other FHWA technical panel.
- Coordinated with the MUTCD Team and research team to discuss how to address concerns and issues raised by the MUTCD Team.

TECHNICAL ADVISORY COMMITTEE (TAC) MEETING
- Completed. No further activities. Please refer to the quarterly progress report for TPF-5(515) for upcoming activities under this subsection.

PUBLICATIONS

None

Anticipated work next quarter:

- Continue analyzing data for LTL study.
- Begin re-analysis of data for CED study per the MUTCD Team's request.
- Draft the scope of additional analysis and cost estimate to allocate funds for ARS study.
- Prepare additional cost estimate to revise draft technical report in response to the MUTCD Team's request for FOD study.

Significant Results:

- Began data analysis for LTL study.

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).

For FOD study, MUTCD Team requested major revisions on draft technical report, which will delay study completion. Additionally, research team will conduct full-Bayesian method for better utilization of collected data for ARS study, which will delay study completion.

Potential Implementation:
N/A