

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: <input type="checkbox"/> Quarter 1 (January 1 – March 31) <input type="checkbox"/> Quarter 2 (April 1 – June 30) <input checked="" type="checkbox"/> Quarter 3 (July 1 – September 30) <input type="checkbox"/> 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

- Continued and completed statistical analyses.
- Developed a quarterly progress report and presented the progress summary at the quarterly progress review meeting on August 29, 2024.
- Developed a technical memo for completion of data analysis summarizing process, accomplishments, issues, opportunities, and recommendation.
- Began developing the draft Technical Report with the goal of submitting in early October.

LTL

- Developed a quarterly progress report and presented the progress summary at the quarterly progress review meeting on August 29, 2024.
- Continued exploring feasibility of using Streetlight data to obtain estimated turning percentages.

CED

- Developed a quarterly progress report and presented the progress summary at the quarterly progress review meeting on August 29, 2024.
- Completed statistical analyses to develop CMFs.
- Continued working on B/C analysis.
- Developed and submitted a technical memo for completion of data analysis summarizing process, accomplishments, issues, opportunities, and recommendation.
- Began developing the draft Technical Report to document all efforts.

ARS

- Developed a quarterly progress report and presented the progress summary at the quarterly progress review meeting on August 29, 2024.
- Began and continued developing a technical memo for completion of data analysis summarizing process, accomplishments, issues, opportunities, and recommendation.

FOD

- Continued development of the Texas and Pennsylvania database to use for comparison purposes.
- Developed a quarterly progress report and presented the progress summary at the quarterly progress review meeting on August 29, 2024.
- Completed and submitted the technical memorandum for selected statistical methodologies and requirements.
- Began drafting the technical memorandum for final work plan.

TECHNICAL ADVISORY COMMITTEE (TAC) MEETING

- Completed and submitted meeting notes and summary of responses from the post-meeting input form.

PUBLICATIONS

None

Anticipated work next quarter:

- Submit the draft technical report for RRFB and revise it as needed based on panel feedback.
- Continue exploring feasibility of obtaining turning counts and estimated average daily traffics using passive measurement system for LTL.
- Submit the draft technical report for CED and revise it as needed based on panel feedback.
- Complete B/C analysis and submit the draft technical report for ARS.
- Submit the technical memorandum for final work plan and continue work on the Texas and Pennsylvania database development for FOD study.

Significant Results:

- Completed data analyses to develop CMFs and began drafting technical reports for RRFB, CED, and ARS.

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).

LTL: Acquiring left-turning vehicle volumes is a continued challenging activity.

FOD: Responsibility for completing this task has been transferred to another lead researcher due to the retirement of the current lead researcher.

Potential Implementation:

N/A