

Transportation
Safety & Mobility

AUGUST 2022

Project Title:
Evaluation of Low Cost Safety
Improvements TPF-5(317)

Task Number: 2913

Start Date: March 1, 2005

Completion Date: Open Ended

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Research study to encompass safety-effectiveness evaluations of priority strategies from the NCHRP Report 500 Guidebooks

Develop reliable estimates of the safety effectiveness of safety improvements identified as strategies in the NCHRP Report 500 Guidebooks through scientifically rigorous "Before"- "After" (B/A) evaluations of sites within the U.S. where these strategies are being implemented.

WHAT IS THE NEED?

In order to achieve a national goal shared by the US Department of Transportation (USDOT), American Association of State Highway Transportation Officials (AASHTO), and Governor's Highway Safety Association (GHSA) to reduce the fatality rate and save lives annually, the safety improvement strategies will need to be appropriately implemented.

WHAT ARE WE DOING?

The scope of the Evaluations of Low Cost Safety Improvements Pooled Fund Study (ELCSI-PFS) is to conduct a research project of the priority strategies in the NCHRP Report 500 Guidebooks. Originally, a target of 20 strategies totaling \$4.38 million over 5 years was planned for ELCSI-PFS studies in four phases. Currently, this study has outperformed its original goals, and has added many extra goals. To provide much needed reliable measures for effectiveness of various low-cost safety improvements, this study's performance period has been extended beyond 2017.



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WHAT IS OUR GOAL?

The goal of this research is to develop reliable estimates of the effectiveness of the safety improvements that are identified as strategies in the National Cooperative Highway Research Program (NCHRP) Report 500 Guides. These estimates are determined by conducting scientifically rigorous before-and-after evaluations at sites in the United States where these strategies are being implemented.

WHAT IS THE BENEFIT?

The Department can potentially benefit from the outcome of this research by implementing the resulting recommendations and potential solutions from the transportation pooled fund (TPF) study, TPF-5(317).

The public may benefit from the implementation of the results of this research which have the potential to improve the effectiveness in reducing the number and severity of crashes.

WHAT IS THE PROGRESS TO DATE?

April 1, 2022 – June 30, 2022

This pooled fund study has contributed over 800 CMFs to the CMF Clearinghouse, and this effort is on-going.

Significant Results for this quarter:

The 2022 Annual Technical Advisory Committee (TAC) meeting was conducted virtually on May 25-26, 2022. All presentations and documents were shared with the TAC members by emails and on the Contractor (TTI) website after the meeting.

ELCSI-PFS, PHASE XIII

The FHWA awarded the PHASE XIII task order to the Texas A&M, Transportation Institute (TTI) in July of 2022. This task order will study: 1) Curve Enhanced Delineation (CED), 2) Alternative Rumble Strip (ARS), and 3) Fixed Objects Delineation of (FOD). This task order's kickoff meeting is on August 17, 2022.

The Phase XIII is funded by the FHWA and the ELCSI-PFS.

ELCSI-PFS, PHASE XII

Innovative Intersection Design for Pedestrian and Bicycle Safety completion Date is October 30, 2022. This phase is active. The highlights for this quarter progress are:

- Continued reducing the video data at the three sites in Washington DC.
- Continued to reduce the aerial video data. • Explored the possibility of obtaining right-turn speed from the sites with before and after data.
- Received bids for drone video for the Silver Spring, MD site. Selected vendor.
- Met with Montgomery County and the drone vendor to discuss data collection in Silver Spring, MD.

ELCSI-PFS, PHASE XI

This task is in progress (completion on 08/30/22). All deliverables were received and publication process has started for following studies:

- a) Safety Evaluation of Mini-Roundabouts.
- b) Safety Evaluation of Bike Lane Configurations at Intersections.
- c) Safety Evaluation of Wrong Way Driving (WWD) Low Cost Safety Improvements.
- d) Wrong-Way Driving Research and Technical Resources' Workshop (virtual) was conducted on March 9-10, 2022.

The ELCSI-PFS, Phase XI is mostly funded by: the FHWA, DCMF program, and Intersection Road map.