

## Safety Programs

MAY 2026

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

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**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 National Cooperative Highway Research Program (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?

To achieve a national goal shared by the United States Department of Transportation (USDOT), American Association of State Highway and Transportation Officials (AASHTO), and Governors Highway Safety Association (GHSA) to reduce the fatality rate and save lives annually, these strategies will need to be appropriately implemented.

### WHAT ARE WE DOING?

The scope of the Evaluation of Low-Cost Systematic Improvements–Pooled Fund Study (ELCSI–PFS) is to conduct a research project on the priority strategies in the NCHRP Report 500 Guides. 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. To provide much-needed reliable measures for the effectiveness of various low-cost safety improvements, this study's performance period has been extended beyond 2017.

### 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 NCHRP Report 500 Guides. These estimates are determined by conducting scientifically rigorous before-after evaluations at sites in the U.S. where these strategies are



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being implemented.

## WHAT IS THE BENEFIT?

The Department can potentially benefit from the outcome of this research by implementing the resulting recommendations and potential solution from this pooled fund study. 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?

Currently this study is running Phase XIII so-called 5 crash modification factors to evaluate the safety effectiveness of the following counter measures:

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

They have recently published the RRFB Factsheet:

<https://highways.dot.gov/sites/fhwa.dot.gov/files/FHWA-HRT-25-086.pdf>