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

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.
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?

July 1, 2021 - September 30, 2021

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

Significant Results for this quarter:

ELCSI-PFS, PHASE XIII

Due to the TFHRC, Office of Safety R&D’s IDIQ contract mechanism deadline (extended for 3 months) in Winter of 2021, the award of Phase XIII task order is delayed till early 2022. This phase’s fund (FHWA and ELCSI-PFS) has been secured. Two more strategies were added to this phase for total of five evaluations. The Statement of Work (SOW), and Independent Government Cost Estimates (IGCE) are in progress for:

1. Turning Lane Treatments (Two strategies for signalized and unsignalized intersections).
2. Rectangular Rapid Flashing Bacons.
5. Fixed Objects delineation.

ELCSI-PFS, PHASE XII

Innovative Intersection Retrofit Design for Pedestrian and Bicycle Safety completion Date is March 31, 2022. The phase is active, and in progress for:

• The treatments are installed in DC. Schedule / plan after data collection for October 2021 (similar time period as used for before data collection).
• Continue discussions with Fremont and Silver Springs as needed regarding timing of construction.
• Vendor will continue gathering video at the California sites.
• Begin data reduction for the Austin video once received from the vendor.
• Package findings from field sites completed to date (7 sites). Contractor submitted data as part of deliverables.
• Completed a two-page brochure for pedestrian and bicycle countermeasures at Intersections.