

Research

Notes

Transportation Safety and Mobility

AUGUST 2022

Project Title:

Fostering Innovation in Pedestrian and Bicycle Transportation Pooled Fund Study TPF-5(370)

Task Number: 3230

Start Date: May 24, 2017

Completion Date: September 2022 2 Year Commitment for a 5 Year Pooled Fund Study

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Fostering Innovation in Pedestrian and Bicycle

A Transportation Pooled Fund study that focuses on bicycle and pedestrian network planning, safety design issues, traffic control devices, and other relevant issues.

WHAT IS THE NEED?

Transportation agencies across the country are seeking ways to improve safety and mobility for pedestrians and bicyclists. The research team has seen a rapid rise in the demand for research on a wide variety of pedestrian and bicycle issues in many different settings and situations.

This Transportation Pooled Fund (TPF) study will supplement the existing research by emphasizing short turnaround, practical research on safety, and road design that focuses on bicycle and pedestrian traffic.

WHAT ARE WE DOING?

The Federal Highway Administration (FHWA) office is collaborating with numerous research members in order to ensure that the TPF study addresses all issues, recognizes research underway, and does not duplicate any efforts.

This study includes conducting research that will evaluate the pedestrian lane facility type and multimodal safety issues relating to clear zones on rural, suburban, and urban streets; and other economic and safety benefits.



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WHAT IS OUR GOAL?

The goal of this research is to focus on bicycle and pedestrian network planning, safety, design issues, traffic control devices, and other relevant issues as designed by TPF participants.

WHAT IS THE BENEFIT?

This project will provide valuable information to answer, conduct, facilitate, and support any research demands on a wide variety of pedestrian and bicycle issues, the benefits are a new or improved business practice, procedure, or process. The results can improve the standards and business process to deal with evolving active transportation plan for validating yield and pedestrian sign in Manual on uniform traffic Control Devices (MUTCD).

WHAT IS THE PROGRESS TO DATE?

Separated bike lanes on higher-speed (40mph+)

roads: This compendium is with the procurement office and is expected to have a contractor on board shortly. This will provide an overview of existing design guidance on separated bike lanes (SBLs) on higher speed roads, including any existing guidance on when an off-street side path is a more appropriate treatment than an on-street facility. It will also profile some case studies of successfully implemented SBLs on higher speed roadways, describe roadway context, highlight notable design features (such as delineator types, crosssection dimensions, and intersection treatments. Supplemented with some additional funding which was secured internally, the study is also going to collect and describe maintenance costs associated with separated facilities.

Effective Crosswalk Design: The production of a decision support guide for agencies on what design of crosswalk to install was substantially delayed by the pandemic. Since the research team had to conduct a field experiment to test yielding rates associated with hi-viz designs on lower volume roads. The field experiment has now been completed, and the researchers have delivered a first draft of their final report and they anticipated to have the guide completed and published by end of calendar year.

Asset management of pedestrian facilities:

This report will provide an overview of asset management practices for pedestrian facilities. It will review the planning process, inventories of pedestrian facilities, best practices for integrating ADA transition plans, metrics for measuring outcomes, methods of analyzing conditions, and integrating into program and project development (including equity considerations). While the primary focus is intended to be on State highway systems, the practices and applications are intended to be universal.

The steps are generating statements-of-work (SOW) for these two projects and proceed with the award process.

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