

Transportation Consortium of South Central States

Key Points

Project Number: 17PPUNM01

Start Date: 05/08/2017

End Date: 11/08/2018

Principal Investigator(s):

Dr. Gregory Rowangould University of New Mexico Email: rowangould@unm.edu

Lead Institution:

University of New Mexico

Funds Requested to UTC: \$15,000

Funding Source(s):

Tran-SET
University of New Mexico

Total Project Cost:

\$30,000

Sustainable and Equitable Financing for Pedestrian Infrastructure Maintenance

Brief Project Description

This project will conduct a comprehensive study of pedestrian infrastructure financing options that will address the current backlog. By taking Albuquerque, New Mexico as a case study, this project is focused on evaluating municipal options for financing pedestrian infrastructure maintenance and reconstruction in the public right of way and identifying those that are most equitable and sustainable.

Problem Statement

In the United States, pedestrian infrastructure construction and maintenance is often funded differently than other types of transportation infrastructure such as roads, transit, and even bicycle facilities. The planning process is also typically separate from these other modes or absent. Many municipalities face a long and growing backlog of pedestrian infrastructure in need of repair or replacement. The lack of adequate and sustainable financing coupled with a lack of comprehensive planning seem to be a large part of this problem. This project uses Albuquerque, New Mexico as a case study to evaluate alternative financing methods identified through a literature review. The analysis, which uses field data collected from Albuquerque and other local data sources, focuses primarily on how households with different incomes are burdened by different financing methods and the sustainability of each method's revenue over time.

In addition to their ineffectiveness, current financing methods can also be highly inequitable. Methods that fail to provide necessary maintenance may disproportionately burden low-income and minority communities whose residents rely on walking by itself or accessing transit for their primary mode of transportation. Furthermore, where adjacent property owners must finance repairs, the costs for low-income households can be unexpected and a relatively high share of their income. In this way, it can be a highly regressive form of public infrastructure financing. Streets and roads on the other hand, are financed through relatively broad based taxes and fees.

Objective

The objective of this project is to evaluate municipal options for financing pedestrian infrastructure maintenance and reconstruction in the public right of way and identifying those that are most equitable and sustainable.



Transportation Consortium of South Central States

Intended Implementation of Research

The project aims to implement new knowledge and information that is created through activities described below:

- 1) We will distribute the white paper, and the principle investigator will make presentations to local community groups and staff from the City of Albuquerque, Bernalillo County and the Mid-Regional Council of Governments. The principal investigator has already met with several city councilors who are exploring options to improve the city's pedestrian infrastructure. The project uses the Albuquerque area as a case study; we therefore expect that communities and agencies in the region will be in the most immediate position to use the knowledge and information we generate to implement new sidewalk maintenance strategies. To the extent that municipalities in the region do adopt new strategies, these can serve as implementation examples that could be followed by other municipalities.
- 2) We will also distribute the white paper more broadly by having it distributed by the Transportation Research Board's Pedestrian Committee, distributing it through the New Mexico Local Technical Assistance Program (LTAP) which is overseen by Dr. Rowangould, and posting it on our website and other relevant websites.
- The project's findings will also be used to develop lecture materials for undergraduate and graduate transportation engineering and urban planning courses currently offered by Dr. Rowangould at UNM as well as materials for training courses focused on infrastructure management provided through the New Mexico LTAP program which is overseen by Dr. Rowangould.
- 4) We will also submit a paper for presentation at the Annual Meeting of the Transportation Research Board, targeting the Pedestrian Committee.

Anticipated Impacts/Benefits of Implementation

It is expected that this research project will highlight financing strategies that can be implemented in several municipalities or communities to address the pedestrian infrastructure backlog. The project's research findings would also be useful for implementing more effective, equitable and sustainable sidewalk maintenance strategies.

Weblinks:

- Tran-SET's website (http://transet.lsu.edu/completed-research/)
- TRB's Research in Progress (RIP) database (https://rip.trb.org/view/1467521)