



RESEARCH PROJECT CAPSULE [19-2PF]

April 2019

TECHNOLOGY TRANSFER PROGRAM

Synthesis on the Contributing Factors and Effective Countermeasures for Low Volume Roadway Fatality Rates in the Southeast

JUST THE FACTS:

Start Date:
March 1, 2019

Duration:
9 months

End Date:
November 30, 2019

Funding:
SPR: Pooled Fund: TT-Reg

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University

POINTS OF INTEREST:

Problem Addressed / Objective of
Research / Methodology Used /
Implementation Potential

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The RAC Region II has initiated a collaborative research program consortium through the Transportation Pooled Fund (TPF) Program called the Southeast Transportation Consortium (STC), which is intended to encourage coordination among member states and provide resources and management of collaborative studies. The consortium intends to address high priority transportation research topics of common interest to the southeastern and adjoining states. Louisiana serves as the lead agency in the STC.

PROBLEM

Low-volume roads (LVRs), those carrying fewer than 2,000 vehicles per day, are typically classified as local roads and most are located in rural areas. LVRs are associated with higher crash rates and more than half of roadway fatalities. In typical crash analysis and prioritization of exposure-based improvements, roadways with higher volumes often receive greater emphasis and resources.

State highway agencies (SHAs) attempt to address these issues by identifying ways to improve safety and reduce fatalities on LVRs. This research will develop a comprehensive list of countermeasures for addressing safety improvements on LVR, based on their use by SHAs.

OBJECTIVE

The principal goals of this synthesis study are to summarize factors affecting crashes on LVRs based on prior domestic and international research; identify countermeasures that have been implemented to address safety on LVRs; and document countermeasure effectiveness.

Additional goals include the evaluation and prioritization of the factors affecting LVR crashes in order to establish an approach that would maximize effectiveness of safety improvements and identification of new countermeasures.

METHODOLOGY

After thoroughly reviewing related literature and research findings from the survey of state transportation agencies and select local agencies, the research team will identify factors that affect LVR crashes and document countermeasure implementation efforts

to address LVR safety. The team will evaluate the effectiveness of each countermeasure in relation to the contributing factors and determine its appropriateness for the range of uses and contexts where applied. Appropriate prioritization of countermeasures will be provided based on their effectiveness.

IMPLEMENTATION POTENTIAL

This synthesis will achieve greatest implementation potential when used for training and as a reference for the practitioner.