



RESEARCH PROJECT CAPSULE [21-1SA]

June 2021

TECHNOLOGY TRANSFER PROGRAM

Highway Safety Culture Assessment through Louisiana's Regions

JUST THE FACTS:

Start Date:
May 1, 2021

Duration:
24 months

End Date:
April 30, 2023

Funding:
SPR: TT-Fed/TT-Reg-5

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POINTS OF INTEREST:

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

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PROBLEM

Human behavior and errors in human judgement account for a large proportion of roadway crashes in the United States. Most priorities in Louisiana's Strategic Highway Safety Plan involve human behavior.

Strategies designed to address driving behavior problems tend to be legislative and/or enforcement-based, often coordinated with message-driven media efforts. While they may raise awareness about safety issues, these strategies are not necessarily effective in producing long-term behavior change.

For Louisiana to reach its goal of 50% reduction in highway fatalities by the year 2030, individual driving behavior must change. Without an understanding of traffic safety culture, the state's public outreach and education efforts will be limited.

OBJECTIVE

The objective of this research is to support an overall reduction in crashes and their severity as identified in the Louisiana Strategic Highway Safety Plan. The specific goal of this research is to provide new insights into driving behavior at the individual, social, and cultural levels. This will be achieved through developing a survey that can be used to establish a baseline and assess yearly progress toward the goals of the Louisiana Strategic Highway Safety Plan, gaining an understanding of traffic safety culture in Louisiana, obtaining quantifiable data about daily driver behavior through naturalistic observational studies, and developing best practices guidelines for strategically changing attitudes and risky driving behaviors.

METHODOLOGY

A comprehensive literature review has begun regarding human behavior as it relates to traffic safety. Preliminary assessment of the topic suggests that

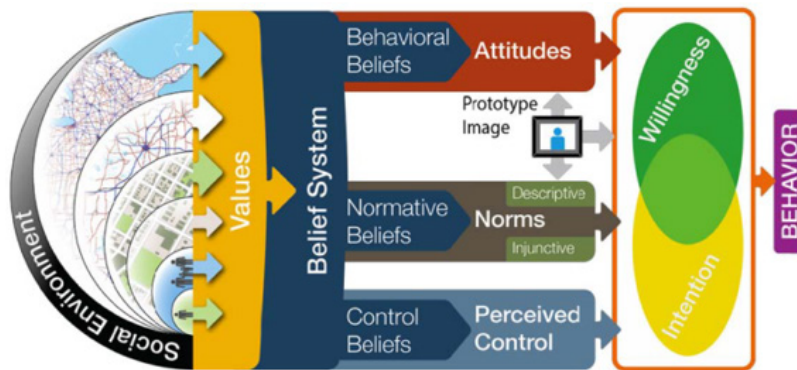


Figure 1. Safety culture model [Source: NCHRP web-only document 252: "A Strategic Approach to Transformic Traffic Safety Culture to Reduce Death and Injuries" (2018)]

advancements in behavioral psychology have not yet been incorporated into research pertaining to traffic safety culture.

Many past efforts to reduce the number and severity of crashes are based on national strategies with little regard for the considerable variation of safety cultures between states. This research will provide insight into how an individual's behavior on roads is shaped through attitudes, beliefs, and values—and how these may vary throughout regions due to different social environments.

A synthesis of data pertaining to Louisiana driver behaviors will be collected and analyzed. Cultural patterns across regions of the state will be compared and contrasted. Through naturalistic observational studies at a regional level, a broader and more complete understanding of the interactions between behavioral features and actual driving performance can be attained. Focus groups will be used to collect qualitative interview data. Careful planning will enable development of a pilot survey and implementation/analysis of subsequent annual surveys. Guidelines for measuring traffic safety culture will be developed.

IMPLEMENTATION POTENTIAL

This research will develop best practices guidelines for implementation of the findings. Results from this research project will inform Louisiana stakeholders of the range of factors that need to be considered when addressing traffic safety culture. Baseline findings will offer a snapshot of the public's perception and the state's priorities regarding roadway safety. The survey instruments will provide a means to measure safety culture changes over time.