



Transportation Consortium of South Central States

Key Points

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\$47,000

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Tran-SET

University of Louisiana at Lafayette

Total Project Cost:

\$94,000

Investigating Problem of Distracted Drivers on Louisiana Roadways

Brief Project Description

While the ongoing developments of autonomous vehicles show a great promise to reduce fatalities and injuries, the full implementation will take years to become a reality. Effective crash countermeasures can provide quick payoff in crash reductions. Distracted driving is ranked as one of the most serious problems faced by DOTs and law enforcement agencies today. The need to address this issue and implement effective countermeasures is urgent for roadway safety improvement.

Problem Statement

Distracted driving is the act of engaging in other activities while driving - activities such as texting, talking on the phone or to a passenger, watching videos, eating, rubbernecking or reading. These activities take the driver's attention away from the road. Louisiana's definition for distracted driving is, "A distracted or inattentive driver is one who is actively engaged in any activity that diverts his/her attention away from the task of driving. The distraction could be manual, visual or cognitive and be inside or outside the vehicle." Even with the law banning cellphone usages while driving in many states including Louisiana and significant effort made on curbing distracted driving over the last decade, it is still a leading cause of car crashes in the United States. Texting, talking on a cell phone, eating and drinking are the most common driver distraction. The National Highway Traffic Safety Administration (NHTSA) reports that 660,000 Americans are using cell phones at any given moment. In 2015, distracted driving fatalities represented 22.8 percent of all fatalities and 48.4 percent of serious injuries. Based on the crash database, distracted driving causes 19.5 percent of fatalities and 31.8 percent of serious injuries in Louisiana. A share of 55.6 percent of all injury crashes and 55.8 percent of total property damage only crashes occur on Louisiana roads due to distraction in driving.

Distracted driving not only causes crashes, but also affects traffic flow efficiency. Distracted drivers do not pay close attention to signal display changes or available gaps, which induces delay, thus reduces roadway capacity. It is clear that the problem of distracted driving is not likely to go away with the ever-expanding opportunities for staying in touch while driving.



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While the ongoing developments on autonomous vehicles show a great promise to reduce fatalities and injuries, the full implementation will take years to become a reality. Effective crash countermeasures can provide quick payoff in crash reductions. Distracted driving is ranked as one of the most serious problems faced by DOTs and law enforcement agencies today. The need to address this issue and implement effective countermeasures is urgent for the state to reach Zero Death Destination goal. This proposal aims to improve public safety by conducting in-depth investigation on the scope of the problem and providing recommendations to address distracted driving.

Objective

This proposal aims to investigate the scale of the problem in Louisiana, analyze characteristics of distracted drivers and how their behaviors affect roadway safety. To do that, the research team will collect the data including possibly distractive driving frequencies, type of distractive driving behavior, traffic citation data and crash data.

Intended Implementation of Research

Workforce development: Disseminate the results of this study through conferences, meetings, workshops, and webinars to educate and train professionals in the transportation industry about methods to mitigate the impact of distracted driving and reduce fatalities.

Outreach activities: The PI will actively recruit undergraduate and graduate students from underrepresented groups to participate this research work, which she has being actively doing for many years. The undergraduate students, possible from her highway safety class, will do majority of data collection work. The PI will make a commitment to work with the college high school recruiting team to local high schools talking about the distracted driving problem. It is hoped that some of the social media surveys will be conducted with the help of high school students.

Education: The results of research efforts will be used to update the PI existing course on roadway safety including the scale of distracted driving problem in Louisiana and the methods to mitigate the problem, which may be implemented in courses in safety at LSU, and other universities associated with Tran-SET consortium. The PI is willing to talk about distracted driver problem at any public setting (group meeting and conferences) to create awareness of distracted driving in the region and produce knowledge on the subject of distracted driving.

Anticipated Impacts/Benefits of Implementation

The research outcomes should provide recommendations to combat distracted driving thereby potentially reducing fatalities and serious injuries caused by such unforgiving and yet common type of behavior admitted by many drivers.

Weblinks:

<http://transet.lsu.edu/research/research-in-progress/>

<https://rip.trb.org/view/1466912>