RESEARCH NEEDS FOR SAFETY TAG

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ISSUE

Distracted driving involves activities that divert driver attention from the primary driving task. Distractions can be: Visual (taking eyes off the road), Manual (taking hands off the wheel), and/or Cognitive (taking mind off the driving task). Sources of distraction include, but are not limited to: electronic gadgets, radio, eating/drinking, reading, grooming, and interacting with passengers. Cellphone use in particular affects how drivers scan and process roadway information. The cognitive distractions associated with cellphone use can lead to “inattentive blindness” in which a driver fails to process information from the road. To decrease the number of cellphone related crashes, certain states and U.S. territories have passed laws pertaining to the use of handheld devices by the driver in moving vehicles. A ban on driving while talking on a hand-held phone is in place in 16 states, and a ban on texting for all drivers is in place in 47 states; plus the District of Columbia, Puerto Rico, Guam, and the Virgin Islands. Enforcement of these laws is either primary or secondary. Primary means officers can pull a vehicle over based solely on cellphone usage, needing no other reason. Secondary means the officer needs another reason to stop the vehicle other than just cellphone usage. 41 states use primary enforcement and the rest use secondary enforcement. The distracted driver data collected from the Fatality Analysis Reporting System (FARS) have been analyzed to see how prevalent cellphone use has been in distracted driving crashes. According to the National Highway Traffic Safety Administration (NHTSA), nine percent of fatal crashes in 2016 were reported as distracted-affected crashes; 3,450 people were killed in motor vehicle crashes involving distracted drivers; and six percent of all drivers involved in fatal crashes were reported as distracted at the time of the crash.

SUMMARY OF PROBLEM

Although distracted driving is considered one of the major contributors to motor vehicle crashes, it is not completely supported in the literature that banning hand-held cell phones have a substantial beneficial effect on crashes even with strong enforcement. The proposed research will review previous studies and analyze both crash and survey data to evaluate the impact of hand-held cell phone use and texting on risks of crashes, controlling for demographic and vehicle characteristics. This effort will require coordination among IDOT, Illinois Secretary of State (SOS), and the Illinois State Board of Education (ISBE).

DESIRED RESULTS/OUTCOME

The research goal is to utilize crash, roadway, and survey data to better understand causal risks from distracted driving and to identify strategies to mitigate these risks, especially among
younger and older drivers. It will identify strategies to reduce distracted driving. Research steps identified include:

1. Conduct a literature search on distracted driving, focusing on hand-held cell phones for calls and texting.
2. Conduct data quality analyses on distracted driving data items and attributes using current Illinois crash data.
3. Conduct surveys of younger and older adults to better understand driver opinions on cell phone use, state law, enforcement, and media in Illinois.
4. Using the survey data, conduct a multivariate analysis to determine how distracted driving causal factors affect the risk of serious crashes.
5. Recommend strategies that will encompass engineering, enforcement, education, and outreach programs to reduce distracted driving behavior in Illinois.

The results of this research will provide IDOT with a better understanding of distracted driving behavior and its contribution to crashes. It will also provide recommended steps toward systematic enhancements to state safety culture and development of strategies for reducing distracted driving crashes and making progress toward the statewide goal of “Zero Deaths.”