

Top 25 Research Topic Details

Commercial Drivers: Drive cameras in commercial driver in commercial vehicles- **71 votes**

Research includes recording driving behavior, environment, and events that cause CMV crashes for research purposes and safety advisories to the trucking industry. Will add an additional feature that allows the CMV driver to record dangerous performance by other vehicles.

Young Drivers: Ban on texting with wireless communication device- **47 votes**

Young drivers would not be allowed to text or use the internet on a wireless communication device. Put into motion a law banning texting with all drivers, but especially with younger drivers.

Impaired Driving: Study of ignition interlock devices do to follow up of systems and number of failures- **42 votes**

Research would look at the compliance rate of the installation and use of the Ignition Interlock Device and monitor/track those with the IID.

Older Drivers: Explore cognitive assessment in a licensing setting- **42 votes**

This would provide an initial check for older drivers when they go to renew their license. It would be the first step where if a red flag arose from the assessment further testing would be done to decide if the license should be revoked.

Commercial Drivers: Evaluate a graduate license level system to new commercial drivers-**41 votes**

Ideas include an instruction permit, minimum exposure, probationary periods, violations, minimum training and restrictions for different levels of licensing for commercial drivers.

Impaired Driving: Develop and implement social campaigns for distracted driving-**39 votes**

Develop new ideas for marketing social campaigns; for example, it's cool to wear a helmet or releasing more footage of driver cameras. Focus on penalties rather than incentives to change behavior, more direct/blunt ads.

Young Drivers: All position seat belts required-primary law-**36 votes**

Auto crashes for this age group are one of the leading causes of death. One preventive measure that has been found very effective is the use of safety belts. Iowa law only requires driver and front passenger to wear seatbelts. A new law should be passed to extend this to all seating positions in the vehicle.

Impaired Driving: Study of reducing high risk behavior (self BAC machines, safe ride, rest area effective)- **33 votes**

Try to find a way to reduce behavior, already have gotten better with seatbelt usage-culture can be changed by the generation. Develop educational strategies; laws do not always solve everything.

Commercial Drivers: Health and wellness of driver down time activities, timing of break and coming back from them- 32 votes

Research will include studying the relationship between downtime activities and driving performance. Will look at the relationship between physical strength/cognitive skills and the safe operation of a CMV and compare to general driving population.

Impaired Driving: Better linkage of data-30 votes

Want to know who has the property rights to certain types of information to link the data from the EMS, hospital, police, vendor data, TRACS, and insurance companies. Most data is objective, but is there a need for cognitive data.

Older Drivers: Car cameras in older person cars-28 votes

This would be done in a similar process as to what Dan McGehee does with the younger drivers at University of Iowa. This would be a chance to reinforce good driving behaviors with the driver as well as to gain a perspective of older drivers on how they drive and how they react to situations without the presence of another person in the car.

ITS: When does an informed driver become a distracted driver-27 votes

Our cars and transportation infrastructure are capable of providing a huge amount of information to drivers. At some point, the sheer volume of information will result in attention overload for drivers. What are appropriate boundaries for the amount of information that should be provided to drivers?

Impaired Driving: What is the incidence of cell phone use in crashes- 25 votes

Need to have phone companies release records after fatal crashes to see if the crash reports are showing distractions, as well.

ITS: Formal program to evaluate high crash intersections and record video of crashes and evaluate-23 votes

Technology is available to have video monitoring of every crash and close call event at a high-crash location. The information from this monitoring, especially the near miss recordings, are valuable for engineers trying to design safer roads and intersections.

Older Drivers: Assess aging CDL for motor home and school bus-transit-22 votes

This would be done to gain a better understanding of older drivers who possess CDLs and possibly looking at requiring a CDL for motor home drivers.

Young Drivers: Standard driver education program- 22 votes

It has been found there is great variability in the driver education programs offered in Iowa. Since not all drivers are required to take an actual driving test before receiving their intermediate license, a standardized driver education program would help to educate drivers on a set curriculum.

ITS: What is the best way to minimize automated complacency and loss of perishable skills-21 votes

How many of you have a car that automatically turns on or off headlights when needed? And then you forget when you get to a different car that does not have the automatic features. That is an example of automated complacency and loss of perishable skills.

Young Drivers: Passenger limits within first 6 months- 19 votes

Studies have found that with young drivers risk taking increases with the number of passengers in the vehicle. By restricting passengers for the first 6 months, this would require younger drivers to develop better skills and decision making without the distraction of other peers.

Judgment & Decision Making: Effectiveness of different countermeasures on speed-17 votes

The research is to look at the different ways of reducing speeding. Ideas including looking into commercial, driver education, police enforcement, and speed camera enforcement. The study was also interested in looking for other way different areas have reduced speeding.

Impaired Driving: Increase testing for prescription drugs-16 votes

Need to find answers to whether the doctors or pharmacists know what drugs may impair driving skills, need to define what is heavy machinery, the effect of mixing prescriptions, and effects of sleep aids, pain killers, antidepressants, etc on driving.

Judgment & Decision Making: Relationship between red light running and time of crashes-16 votes

The relationship that will be studied is the impact on how long a traffic light is red before a car ran the light and crashed. If a significant time could be found and determined, they will be able to see if it is necessary to issue red light running camera tickets after a certain time or to give more leeway like .5 seconds before a ticket is issued.

Older Drivers : Driver guidance needs on highways-15 votes

This would involve assessing what types of signs are most easily understood and what additional signage is needed (especially at highway interchanges). A survey sent to older drivers was suggested as a method for gaining information on this topic.

Impaired Driving: Does the lack of mandatory BAC testing in Iowa result in underreporting of alcohol-related crashes-14 votes

Iowa needs to have reasonable suspicion to test drivers who are believed of driving under the influence of alcohol. Legislation needs to be passed on more testing and harder fines for alcohol-related crashes.

ITS: Researching benefits of in vehicle warning systems vs. infrastructure warnings- **14 votes**

Are warnings about traffic congestion, accidents, construction, etc. that come from outside the vehicle, such as dynamic message signs better or worse for the information and safety of the driver than warnings that would come from the vehicle itself using modern communications technology.

Judgment & Decision Making: Culture factors on seatbelt use- **14 votes**

The research here would look at different age groups as well as areas across the nation doing surveys to find out what has an effect on the wearing of seatbelts. Then the effective way can be found and groups will be more successfully targeted.