

Research and Education in Promoting Safety (REPS)

Tier-1 UTC

REPS Center Data Management Plan

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Lead Institution: Howard University

Partner Institutions: University of Maryland, College Park, San Jose State University, University of Nevada, Las Vegas

Overview:

The Research and Education for Promoting Safety (REPS) Tier 1 University Transportation Center will combine cutting-edge research from different fields, especially civil engineering and computer science, to improve transportation safety and address infrastructure, traffic operations, and cybersecurity challenges. While traditional engineering approaches to safety have significantly reduced fatalities, injuries, property damage, and other negative impacts on transportation infrastructure, safety remains a significant threat to people in the United States and across the globe. Enhanced multidisciplinary collaboration between key fields could improve the current approach to safety and lead to even greater gains in transportation safety. By integrating the strengths of engineering, computer science, and other disciplines, REPS will develop innovative solutions to transportation safety challenges.

A number of interventions have been proposed to prevent drug and alcohol impaired driving, including lowering the legal limit for drunk driving, sobriety checkpoints, ignition interlocks for all offenders, zero tolerance for teen drivers, and per se laws for drugs. However, the effectiveness of these interventions is not well understood. This research project will design a survey to understand individuals' perceptions of strict enforcement and widespread education on drug and alcohol impaired driving. The survey data will be used to perform descriptive statistics and empirical modeling to identify the most effective policies for promoting safety by reducing drug and alcohol impaired driving. The output of this project will be a set of evidence-based policies that can be used to reduce drug and alcohol impaired driving and improve public safety.

Data Description

The first year of the project will involve collecting survey responses from the public, both online and in person, to assess their perceptions of strict enforcement and education related to drug and alcohol impaired driving. The survey will be posted online for the public and university students to complete. Google forms will be used as an online survey program, which will also store the data in pie chart and bar graph formats for further analysis.

Descriptive statistics and empirical modeling will be performed on the survey data. The data will be used to deduce evidence-based policies that will assist in directing the promotion of safety with the reduction of drug and alcohol impaired driving.

The data can be used by those conducting research on the impacts of enforcement and education on drug and alcohol and impaired driving.

Data Standard and Formats

The data will be collected and stored in .xls and .csv formats.

Data Access and Protecting Sensitive Data

The research team will have the most access to the data. Any authorized personnel, upon request, will also receive access to the data. The research team will take steps to maintain confidentiality and adhere to ethical guidelines while collecting data. The team will use only collect and use the data that is required for the research.

Data Sharing, Re-use and Re-distribution

The USDOT also reserves a royalty-free, nonexclusive, and irrevocable license to reproduce, publish, or otherwise use and to authorize others to use the work for government purposes. The data will be stored in Howard University's online repository Digital Howard. Digital Howard is an online repository curated by the Moorland-Spingarn Research Center (MSRC) and the Howard University Libraries. The repository is publicly accessible. However, any sensitive information within the data will be hidden/removed to protect the privacy, confidentiality and the security of the respondents.

Data Preservation and Archiving

Survey data will be stored on a secure server at Howard University's online repository Digital Howard, which is publicly accessible. However sensitive data or those including personal information will be redacted to protect the privacy and confidentiality of the respondents. Data

will be retained and destroyed according to the repository's record retention and destruction policy. Any archival work will be done on the repository to preserve it for the future.

Change Log

10-13-23: Data Preservation and Archiving on Howard Repository included in the data management plan.