UTC Project Information

Project Title	MPC-631 – Enhancing Crash Data Reporting to Highway Safety Partners in Wyoming by Utilizing Big Data Analysis and Survey Techniques
University	University of Wyoming
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Brief Description of Research Project	Crash reporting forms are an integral part of any system aimed at improving traffic safety. Reliable and accurate data generated from crash reports are needed to diagnose safety problems, identify factors impacting crashes, implement countermeasures, and monitor performance. In Wyoming, crash reporting is done by the Wyoming Department of Transportation (WYDOT). The reports are then distributed to safety partners who also contribute to safety in the state. However, there is a gap between the data expectations of the safety agencies and what is being provided by WYDOT in terms of type and

	quality. This research aims to identify the safety needs of traffic safety partners in Wyoming and to make recommendations on improving crash reporting. Also, the study will identify human factors that significantly impact crash severity and frequency using big data analysis. An analysis of the reporting intervals of important human factors will then be determined.
Describe Implementation of Research Outcomes (or why not implemented) Place Any Photos Here	Suggestions made for WYDOT include the provision of the following data for WHP, WASCOP and Wyoming's counties: • Crash statistics by crash type • Crash injury severity levels statistics by age/gender • Seat belt use statistics • DUI statistics • Fatigued driving related crash statistics • Distracted driving related crash statistics • Traffic violation statistics • Truck policy violation statistics • Crash statistics by weather condition • Crash statistics by lighting condition • Crash statistics by day of the week • Crash statistics by time of day • Motorcycle crash statistics • Hot spots by crash severity level and description (seat belt improper use or non-use, CMV related, etc.) • Other noteworthy suggestions entail the planning for research studies relating to the following topics: • Effectiveness of speed, seat belt use and other violation enforcement policies • Effectiveness of traffic safety educational campaigns • Response times of emergency services, particularly for fatal, suspected serious injury and suspected minor injury crashes
Impacts/Benefits of Implementation (actual, not anticipated)	It is anticipated that WYDOT not only implements the recommendations suggested in this study but also develops a strategy to conduct follow-up studies on the suggested research topics (e.g., effectiveness of traffic safety educational campaigns, etc.).
Web Links • Reports • Project Website	• MPC Research Report – Enhancing Crash Data Reporting to Highway Safety Partners in Wyoming by Utilizing Big Data Analysis and Survey Techniques