

UTC Project Information	
Project Title	MPC-655 – Motorcycle Safety Assessment in Wyoming and Utah: Crash Characteristics and Contributing Factors
University	University of Wyoming
Principal Investigator	Milan Zlatkovic, Ph.D., P.E., PTOE
PI Contact Information	Assistant Professor Dept. of Civil and Architectural Engineering University of Wyoming Phone: (307) 766-2390 Email: mzlatkov@uwyo.edu ORCID: 0000-0002-6777-230X
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Brief Description of Research Project	Even though motorcycle fatalities comprise a large percentage of traffic fatalities in the U.S. (in excess of 15%), comprehensive studies on motorcycle safety on the national level are lacking. From 2015 onwards, the 5-year rolling average of fatal motorcycle crashes per million population in Wyoming has been increasing, from 26 in 2015, to 32 in 2018. In 2018, there were 15 motorcycle fatalities in Wyoming. In Utah, the average motorcycle fatalities between 2015 and 2020 were 41 per year, which constituted about 15.1% of all highway fatalities. This research will perform a comprehensive motorcycle safety assessment for Wyoming and Utah, using five to ten years of detailed crash data. It will analyze crash characteristics, severities, types and contributing factors for different facilities and area types, and assess the countermeasures which have the potential to reduce the frequency and severity of motorcycle crashes. The study will develop statistical models to be used for a detailed assessment. There aren't any recent studies on motorcycle safety in Wyoming and Utah, however fatal and serious motorcycle crashes represent a significant percentage of all crashes. A comprehensive study is needed to determine motorcycle crash characteristics, contributing factors and potential countermeasures.

<p>Describe Implementation of Research Outcomes (or why not implemented)</p> <p>Place Any Photos Here</p>	<p>This research is expected to increase the understanding of complex factors affecting motorcycle safety and crashes, as well as the countermeasures with the potential to reduce the frequency and severity of motorcycle-related crashes. The research developed a set of statistical models used to assess motorcycle safety on roadways in Utah and Wyoming. The methodology has a potential to be transferred to other locations. Both Wyoming and Utah Departments of Transportation expressed interest in this study, with a potential for the study to be expanded and the results and recommendation implemented in the field.</p>
<p>Impacts/Benefits of Implementation (actual, not anticipated)</p>	<p>This research provides methodologies and models to be used by agencies in Wyoming and Utah (as well as beyond) in the safety assessment of roadway facilities from the motorcycle-safety standpoint. Motorcycle-safety research is currently lacking behind the research for other modes, and this study provides processes for a better understanding of motorcycle safety. The study adds to the body of knowledge on motorcycle safety, crash characteristics and crash contributing factors, as well as a better understanding of statistical models to be used for motorcycle safety assessment. It is expected that this will lead to better practices to manage motorcycle traffic.</p>
<p>Web Links</p> <ul style="list-style-type: none"> • Reports • Project Website 	<ul style="list-style-type: none"> • MPC Research Report – Motorcycle Safety Assessment in Wyoming and Utah: Crash Characteristics and Contributing Factors • Journal Article – Multinomial Logistic Regression Modeling of Motorcycle Crash Severities and Contributing Factors in Wyoming