

EXAMINING EQUITY IN TRAFFIC SAFETY: A NATIONAL PERSPECTIVE AND CASE STUDIES IN SEVERAL STATES

INTRODUCTION

Although disparities in traffic safety outcomes are well-documented, less is known about the factors contributing to them or practical ways for transportation professionals to address them. The AAA Foundation for Traffic Safety is working with the University of Arizona to examine inequities in traffic safety in relation to race, ethnicity, education, income, and disability status. The work seeks to identify factors contributing to those inequities, and provide practical and evidence-based recommendations which consider the principles of the Safe System approach to mitigate disparities where they exist and improve equity in traffic safety.

PROJECT GOAL AND PLAN

This research seeks to identify disparities in traffic safety, summarize factors that contribute to them, and provide practical solutions for both transportation and non-transportation professionals to improve equity in traffic safety. First, the project will review existing literature. Next, the project will gather quantitative data on motor vehicle crashes, travel exposure, transportation infrastructure, demographics, and other related data from a variety of sources. Data will be gathered at a national level and from four individual states: Arizona, Oregon, and two additional states. The additional states will be selected to ensure that the project represents states with diverse populations. Using this national level and state level data, the research team will use two statistical approaches, Data Envelopment Analysis and Primary Machine Learning Models, to characterize the relationship between populations and crash outcomes and examine the contribution of particular infrastructure and policy features to traffic safety equity at the national and state level. Finally, the project will conduct interviews with state Department of Transportation leadership to present the findings and elucidate perspectives on contributors and solutions to inequities in traffic safety. The final report will summarize and synthesize findings from the quantitative and qualitative analyses and include recommendations on meaningful solutions that can be applied by a variety of professionals to improve equity in traffic safety.

Project Team

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Period of Performance

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