

ADAS AND AUTOMATION SAFETY CONSIDERATIONS BEYOND THE ORIGINAL PURCHASER

INTRODUCTION

Advanced driver assistance systems and partial vehicle automation technology are becoming more and more prevalent in vehicles, offering drivers new and enhanced safety and accessibility features. Past research has raised concerns over driver understanding and appropriate use of these technologies; however, such research has been conducted mainly on registered owners of new vehicles and drivers exposed to technologies in laboratory settings. As vehicles with these technologies enter the used and rental vehicle markets, they may pose safety concerns that are specific to or heightened among drivers who do not acquire their vehicle new from an OEM dealer. In addition, approximately 40% of vehicles involved in fatal crashes were being driven by a person who was not the registered owner at the time of the crash. The AAA Foundation for Traffic Safety is working with researchers at the University of Iowa Driving Safety Research Institute to examine safety considerations associated with advanced vehicle technologies for drivers other than the original purchaser.

PROJECT GOAL AND PLAN

The main objective of the proposed research is to identify, prioritize, and address safety concerns and knowledge gaps related to drivers other than the original vehicle purchaser when driving vehicles with advanced technologies. The research team will conduct a literature review and synthesis and environmental scan to inform the development of a prioritized framework of issues, safety considerations, and barriers for people who purchase used vehicles, rent vehicles, or drive vehicles they do not own. Drivers of new, used, and rental vehicles will then be surveyed to examine their knowledge of and experiences with relevant technologies, including changes over time and in relation to feedback. Findings will inform the development of a prioritized set of recommendations for researchers and traffic safety stakeholders.

Project Team

[University of Iowa](#)

John Gaspar, Ph.D.

(Principal Investigator)

[AAA Foundation for Traffic Safety](#)

Brian Tefft

(Project Manager)

Period of Performance

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