ROADWAY SAFETY INSTITUTE
Advancing roadway safety with user-centered solutions

UTC Project Information	
Project Title	Older Driver Support System (ODSS)
University	University of Minnesota
Principal Investigator	Nichole Morris
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Funding Source(s) and Amounts Provided (by each agency or organization)	Roadway Safety Institute (USDOT): $60,000 Roadway Safety Institute-Office of the Dean, College of Science & Engineering: $9,237 Roadway Safety Institute-Office of the Vice President for Research: $11,289
Total Project Cost	$80,526
Agency ID or Contract Number	UTC Grant Number: DTRT13-G-UTC35 CTS Project Number: 2018050
Start and End Dates	03/01/2018 - 02/28/2019
Brief Description of Research Project	*Final report abstract:* Older drivers represent the highest injury and fatality rate per 100 million miles driven. The disproportionate fatality risk is linked to several known factors, ranging from failure to yield to cognitive and visual limitations to seatbelt use abstention to fragility. Through a series of focus groups, usability tests, and a controlled field test, a universally designed smartphone app (called RoadCoach) designed to reduce risky driving behaviors, such as speeding and hard braking, was previously found to have high usability among older drivers. The current research consisted of a field operational test of the app, which examined the baseline driving behavior (3 weeks) of 28 older drivers in Minnesota and Kansas, their driving behavior with RoadCoach feedback (6 weeks), and their driving behavior during a follow-up, no-feedback period (3 weeks). The results demonstrated marginal reductions in speeding behaviors while the app was functioning, but speed behaviors significantly increased after the feedback was discontinued compared to when it was active. Hard braking and stop sign violations were significantly reduced during feedback and post feedback. Finally, satisfaction and trust were high among users, with drivers reporting that the app helped improve their attention and focus on the task of driving.

Last updated (9/27/2019)

Describe Implementation of Research Outcomes (or why not implemented) Place Any Photos Here	Morris was contacted by U.S. Sen. Bob Casey (D-Pa) about this study and results because he wanted to integrate that information into the Senate's Special Committee on Aging.
Impacts/Benefits of Implementation (actual, not anticipated)	This research has impacted the discipline of human factors by demonstrating the power of universal design for serving older drivers and all other driver age groups.
Web Links • Reports • Project website	http://www.roadwaysafety.umn.edu/research/search/projectdetail.html?id=201805 0 http://www.roadwaysafety.umn.edu/publications/researchreports/reportdetail.html?id=2798

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