

STRIDE Southeastern Transportation Research, Innovation, Development and Education Center

Project Title	UF & UAB's Phase 1 Demonstration Study: Older Driver
	Experiences with Autonomous Vehicle Technology (Project D2)
University	University of Florida
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Funding Source(s) and	STRIDE: \$220,000
Amounts Provided (by each agency or organization)	FDOT: \$220,000
Total Project Cost	\$220,000
Agency ID or Contract Number	69A3551747104
Start and End Dates	August 15, 2018 – May 28, 2020
Brief Description of Research Project	The number of older adults (65 years of age and older) is nearing 20% of the US population, and Florida is leading the nation with 25% of its population being older adults. Driving, a critical mode of transportation for older adults, yields many health, community and societal benefits, while driving cessation is associated with poor health outcomes. But, older drivers are at-risk for crashes and deleterious crash-related effects. Although the deployment of autonomous vehicles (AV) may hold health and safety benefits for older drivers, the environment and society, the perceptions of older adults about such emerging technologies have only be solicited via surveys. Lived experiences in AV modes—i.e., "driving" a simulator in autonomous mode and an on-road AV, in combination with surveys, may more accurately reveal the perceptions of older drivers before and after "driving" the autonomous simulator or the AV. Therefore, this study is using an experimental repeated measures cross over design with pre-visit and post visit surveys, to quantify the perceptions of 70 older drivers, matched for age and gender, who have been exposed to "driving" the simulator in autonomous mode and riding in a level 5 AV. We expect that (1) user perceptions, values, beliefs, and



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	attitudes will change after being exposed to "driving" the simulator and/or the AV; (2) the greatest level of change will occur between pre-survey results and post-survey results; and (3) the on-road experience in the AV may be a more positive experienced compared to the driving simulator. Information gained from such experiences will inform engineers, the city manager, and transportation officials of opportunities and barriers to improve older drivers' interaction with AV, facilitate their ease-of-use practices, and potentially empower them to adopt these technologies—and in so doing contribute to congestion mitigation, a core component of the UF TRI test-bed initiative.
Describe Implementation of Research Outcomes (or why not implemented)	Not available. Research is in progress.
Place Any Photos Here	
Impacts/Benefits of	Not available. Research is in progress.
Implementation (actual, not anticipated)	
Web Links	
Reports	https://stride.ce.ufl.edu/project-d2/
Project website	