



Project Number

BDV30-977-11

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Enhanced Mobility for Aging Population Using Automated Vehicles

January 2016

Current Situation

Studies show that aging adults have travel needs that can be inadequately addressed by today's transportation system. Automated vehicles (AVs), ranging from assistive technologies to full automation, may offer a safe and efficient transportation option for aging adults and other transportation disadvantaged populations.

Research Objectives

Florida State University researchers developed information and guidance on how automated vehicle technologies could enhance the mobility of aging populations.

Project Activities

The researchers divided the project into four tasks: a literature review of travel behavior and mobility needs of older adults, a literature review of travel safety and technology adoption by older adults, a survey of elderly residents' attitudes toward AVs and related technologies, and a social media data mining analysis of public perception of AVs.

The literature review of travel behavior revealed how aging adults travel and how their travel needs differ from those of younger people. Retiring from work is often the primary cause of changing travel needs. Older adults often remain dependent on cars, yet may cease driving at some point, typically due to deteriorating eyesight and safety concerns. However, walking, biking, or public transit may not provide viable options due to health restrictions, distances, or lack of connection to destinations.

In the second task, a literature review of technology adoption by older adults, researchers found that, while older drivers may have safety concerns because of decreased reaction times, eyesight, or cognitive issues, they may perceive AVs as even riskier as AVs represent a loss of control.

In the third task, the research team surveyed 459 Florida residents to assess their knowledge of, interest in, and willingness to adopt and use AVs. The survey also asked for respondent preferences among AV ownership models, price points, and perceived benefits and concerns related to AVs. Older adults, who were a large fraction of participants, were mostly supportive of AVs, yet they cited many technical, legal, insurance, and safety hurdles to be cleared.

The research team then mined social media, specifically Twitter, to develop a picture of public perception of and attitudes towards AVs. Over 7,000 tweets were collected, screened, and scored. The results suggested that Floridians had generally positive attitudes toward AVs.

Project Benefits

AVs can assist older adults in maintaining independence, mobility, and overall life satisfaction. This project helps chart a path on how best to inform older adults about this opportunity.

For more information, please see dot.state.fl.us/research-center



This autonomous car navigates smoothly through traffic.