



Federal Accessibility Standards for Fully Autonomous Vehicles

Nicholas Giudice, University of Maine

Paul Fink, University of Maine

Summary

Self-driving technology is uniquely positioned to benefit people who cannot drive, including people with travel-limiting disabilities and many older adults. However, the lack of federal policy guiding the development of this technology has led to piecemeal recommendations that largely fail to guarantee accessible use in both public and private implementation scenarios. To leverage the full potential of self-driving technology, the Department of Transportation (DOT) should adopt accessibility standards to support autonomous transportation for people with disabilities and older adults. The Biden-Harris Administration has an important opportunity to reimagine accessible transit, capitalize on ongoing federal research programs such as the Inclusive Design Challenge, and extend the benefits of self-driving technology to those who need it most. If enacted, these recommendations will lead to increased independence, workforce participation, and mobility in the future of transportation.

Challenge and Opportunity

Fully autonomous vehicles (FAVs) are poised to dramatically increase independence and mobility among the nearly 26 million Americans who experience travel-limiting disabilities¹ and the estimated 600,000 older adults who stop driving every year in the United States.² However, despite the potential benefits and wide-reaching impact of FAVs, current policies guiding their development fail to support accessible interactions in public transportation networks utilizing FAV technology. While longstanding legislation³ does much to ensure that human bus and shuttle drivers provide accessible boarding and transit experiences to people with mobility, sensory, and cognitive disabilities, an analogous regulatory approach for FAVs is currently lacking. Aggravating this problem — and extending it to privately-owned FAV scenarios — are recent state laws that require driver licensure in autonomous vehicles regardless of the extent of vehicle automation. Since 2016, eighteen states and the District of Columbia have passed laws requiring operators of autonomous vehicles to have a valid driver's license.⁴ In ten of these states, an autonomous vehicle operator is required to have a traditional driver's license even in a fully autonomous vehicle, in which driving is not even possible. While these efforts are intended to provide safeguards during semi-autonomous vehicle deployment, they also severely limit practical and much-needed testing and research with fully autonomous vehicles among those who do not possess a driver's license (i.e., many people with disabilities and older adults). Should the current trajectory continue, both public and private FAV deployment scenarios will effectively preclude autonomous vehicle use by those who would benefit most from this new class of transportation.