

April 2, 2019
Via electronic delivery

Finch Fulton
Deputy Assistant Secretary for Transportation Policy
Office of the Assistant Secretary for Transportation Policy
U.S. Department of Transportation
1200 New Jersey Ave, SE
Washington, DC 20590

Dear Deputy Assistant Secretary Fulton,

The undersigned disability advocacy organizations and allies write in regards to the Automated Driving Systems (ADS) Demonstration Grants and the Federal Transit Administration's Integrated Mobility Innovation (IMI) Demonstration program. Our understanding is that the IMI program will include funding of automated driving system testing and research as well.

As you know, autonomous vehicles (AVs) have the potential to drastically improve mobility for people with disabilities. Affordable, accessible transportation can decrease isolation and provide access to school, work, healthcare, and even running ordinary errands for family. Fully accessible AVs could improve vehicle and pedestrian safety, and increase opportunities for people with disabilities to participate and contribute to their communities. However, the promise and safety of AVs will only be realized if the vehicles and the surrounding infrastructure are fully accessible.

Now is the time to address AV accessibility. Transit systems that have embedded accessibility in their original designs also better serve the general public. The opposite has been true for legacy systems that were created generations prior to universal design requirements.

We were reassured to see safety, data for safety analysis and rulemaking, and collaboration as goals for the ADS Demonstration program. We heartily support the focus areas, especially funding of projects that create significant public benefit, address market failure, reflect a diversity of projects serving a variety of communities, and projects that will benefit transportation challenged populations.

As USDOT staff review the ADS demonstration applications and release the IMI opportunity, we hope you will consider the following:

- Research and testing are needed to support development of fully accessible vehicles of all sizes, including buses, shuttles and vehicles seating 2-7 passengers. **Features that ensure the accessibility of a vehicle will also ensure the safety of the passengers** and can be tied to new Federal Motor Vehicle Safety Standards. The human machine interface (HMI) must allow people to recognize and communicate with the vehicle, as

well as identify the vehicle's location in space at all times. Additionally, ramps, securement and maneuvering clearance must be taken into consideration.

- **Research and testing are needed that identify the accessibility of the public rights of way.** Shared curb space, accessible crosswalks, curb cuts, sidewalks, and audible pedestrian signals are key to a complete trip and the full benefits of AVs for people with disabilities.
- **Research and testing are needed to accelerate development of universal wheelchair securement devices, restraints and standards.** Wheelchair Tiedown and Occupant Restraint System (WTORS) manufacturers and the US Access Board should be consulted.
- **Research and testing are needed to identify accessibility challenges in linking with existing transit infrastructure.** Users must be able to transfer between AVs and other transit options, like bus rapid transit, intracity rail, and commuter trains. Much of the existing public transit structure remains inaccessible.
- **Tests by public entities must comply with the Americans with Disabilities Act (ADA) and Title VI of the Civil Rights Act.** Any testing of an ADS by a transit agency must meet the ADA's equivalency standards. An ADS is required to provide fully accessible service or the agency must ensure the same level of on-demand service is provided with WAVs and other vehicles as necessary.ⁱ These laws provide a useful and necessary framework to ensure access to communities that are often transportation-disadvantaged.
- **Please be cognizant of the need for ADS testing to complement and even lead to increased transit ridership.** On-demand services can lead to unintended diminishing of fixed route and paratransit service areas. On-demand services remain largely inaccessible to motorized wheelchair users,ⁱⁱ continue to deny service to passengers with guide dogs, and can be more expensive than transit. A maintenance of effort requirement should be encouraged to ensure continued fixed route and related paratransit service continues.
- **Projects should be prioritized that seek to identify and respond to a community need,** engage and collaborate with transportation-disadvantaged populations, and encourage development of workforce transition plans.
- **Encourage performance metrics** that measure achievement of accessibility and equity goals for people with disabilities, transportation-disadvantaged communities, and the workforce.ⁱⁱⁱ

We ask you to consider taking steps internally to support awardees and development of fully accessible vehicles.

- Technical guidance should be provided to assist public entities and partners in adhering to the ADA, Title VI, and existing shared mobility guidance. AV developers should be encouraged to use the full array of accessibility standards and guidance promulgated by the US Access Board and the Federal Communications Commission pursuant to §§ 255, 303 and 716 of the Communications Act for HMI.
- Please consider providing additional incentives to automobile manufacturing companies to build fully accessible vehicles seating 2-7 passengers. Technical assistance should be provided and include addressing the needs of the full range of people with disabilities. Engineering challenges such as ensuring access for motorized wheelchair users should be tackled. Consider sponsoring a design challenge and advantaging the winning collaborator.
- Please consider creating an office within USDOT that specifically addresses development of fully accessible AVs, how standards can be researched, and useful information exchanged. The office should identify stakeholders, including: disability community representatives;^{iv} representatives of transit, paratransit, community and private transportation providers; the US DOL's Office of Disability Employment Policy (ODEP); the US Access Board and engineers with accessibility expertise; wheelchair manufacturers, UMTRI, and RESNA; OEMs and other interested parties.
- Please consider working with the US Access Board to develop a "best practices" document detailing accessibility and safety standards developed for vehicles seating 2-7 passengers, shuttles and buses.
- We request any future meetings that concern ADS with the disability community and transportation providers include the FTA, OST, FHWA, JPO, ATTRI, NHTSA, ODEP and US Access Board representatives, and that timelines and deliverables are shared. In addition, we ask that the Non-Traditional and Emerging Transportation Technology (NETT) Council include in its priorities, ensuring access and safety for people with disabilities across all non-traditional modes.
- Finally, please consider the need for additional funding within the FTA, NHTSA and US Access Board to support these efforts. Staff with necessary policy technical backgrounds must be identified and dedicated.

Thank you for prioritizing the development of accessible AVs and systems that will benefit the disability and transportation-disadvantaged communities. Our organizations are available for engagement and seek to support your efforts. Please do not hesitate to contact Carol Tyson, ctyson@dredf.org, (202) 878-9186, or Adam Ballard, aballard@accessliving.org, (312) 640-2195 with any questions.

Sincerely,

Access Living

American Council of the Blind

American Foundation for the Blind

American Network of Community Options and Resources

Association of Programs for Rural Independent Living

American Association of People with Disabilities

Community Transportation Association of America

Disability Rights Education and Defense Fund

National Council on Independent Living

Paralyzed Veterans of America

Perkins School for the Blind

The Arc of the United States

Union of Concerned Scientists

United Spinal Association

CC: K. Jane Williams, Acting FTA Administrator
Vince Valdes, FTA Associate Administrator for Research, Demonstration and Innovation
Heidi King, NHTSA Deputy Administrator
Jennifer Sheehy, Deputy Assistant Secretary, Office of Disability Employment Policy

ⁱ Equivalent service is defined in 49 CFR 37.105

ⁱⁱ Taft, Molly. "Why Can't Uber and Lyft Be More Wheelchair-Friendly?" *CityLab*, 11 Dec 2018.
www.citylab.com/transportation/2018/12/ride-hailing-users-disabilities-wheelchair-access-uber/577855

ⁱⁱⁱ Performance measures should include assessment of equivalent service for all riders, and the identification of dark-skinned pedestrians as reported in the *Vox* March 6, 2019 article, "A new study finds a potential risk with self-driving cars: failure to detect dark-skinned pedestrians." <https://www.vox.com/future-perfect/2019/3/5/18251924/self-driving-car-racial-bias-study-autonomous-vehicle-dark-skin>

^{iv} Disability community representatives should include those that participated in the USDOT, ODEP October 2018 Listening Session, as well as signatories to this letter.