

May 29, 2020

via Email Submission

U.S. Department of Transportation
Docket Operations
1200 New Jersey Avenue SE
Washington, DC 20590

Re: Comments Concerning Occupant Protection for Automated Driving Systems
Docket Number: NHTSA-2020-0014

The Disability Rights Education and Defense Fund (DREDF) is pleased to submit in response to the National Highway Traffic Safety Administration (NHTSA) request for comments regarding occupant protection for automated driving systems. DREDF thanks NHTSA for its work to date and planned research to ensure safety for disabled passengers, pedestrians and bicyclists.

DREDF is a leading national civil rights law and policy center directed by individuals with disabilities and parents who have children with disabilities. Our mission is to advance the civil and human rights of people with disabilities through legal advocacy, training, education, public policy and legislative development. DREDF demonstrated an early interest in the development of equitable autonomous vehicle policy in its drafting of the 2015 National Council on Disability report, *Self Driving Cars: Mapping Access to a Technology Revolution*. The report examines the challenges and advances in automated driving system (ADS) technology, and proposes directions for research, development, and necessary infrastructure changes. The report also explores potential policies and legislation needed to ensure full access.

More than half a million people with disabilities never leave home and cite transportation difficulties. Many people with disabilities cannot drive or lack access to a personal vehicle. Vehicles equipped with ADS have the potential to improve the lives of people with disabilities. The American with Disabilities Act (ADA) guarantee of accessible transportation, equivalent service and anti-discrimination provides a needed framework for provision of ADS-equipped vehicle service.

The promise and safety of ADS-equipped vehicles will only be realized if vehicles equipped with ADS and without steering wheels are fully accessible, and with safety elements that take into account the needs of people with disabilities. DREDF views this time of innovation and reimaging as an opportunity to not only maintain the current level of protection and performance offered by the 200 Series Federal Motor Vehicle Safety Standards (FMVSS), but also to improve the levels of safety and accessibility that they afford. To that end, we ask you to consider the following.

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I. Regarding proposed changes to Standard 208

A. S19.2.2 – Advanced Air Bag Suppression Telltale for Passenger Air Bags

NHTSA proposes to equip each front outboard passenger seat with telltales which emit light whenever the associated front outboard passenger air bag system is deactivated and does not emit light whenever the associated front outboard passenger air bag system is activated.

We urge you to take into consideration the needs of passengers who may be seated in the front outboard seats who are blind, deafblind, or low vision. Any light that is emitted must be substantial enough for people with low vision to notice the telltale. Auditory and haptic signals should also be added. For example, a series of beeps that are standard could alert blind passenger to the status of the airbag. Haptic signals should be added for deafblind passengers to be alerted as well.

We note the research outlined in NHTSA's November 2019 meeting on vulnerable and disabled road users that seeks to address, among other issues, effective display/communication options for users across disability categories. We hope you will look to that research and contact the U.S. Access Board and advocacy organizations representing blind, low vision, and deafblind individuals for solutions.

B. S.19.5 and S.19.51 - Treatment of ADS Vehicles with Driving Controls When Children Are in the Driver's Seat

NHTSA proposes to minimize the risk that a child could ride in a front driver's seat without the protections afforded by advanced air bags, and seeks comment on whether ADS-equipped vehicles that have manual controls should not be capable of motion if a child is detected in the driver's seat. DREDF is concerned that child protections that limit the vehicle's motion would have the unintended consequence of prohibiting access and discriminating against adult drivers of short stature. A vehicle's sensors would not know the difference between a child and an adult driver whose weight and height may be similar. We recommend reaching out to Little People of America and the U.S. Access Board to identify potential solutions.

II. Regarding necessary additional changes

This NPRM seeks to address ambiguities in applying current crashworthiness standards to ADS-equipped vehicles without manual steering, including in sections of the FMVSS where a driver's designated seating position is referenced. Changes to the FMVSS are meant to address potential barriers to develop and deploy autonomous vehicles. For these vehicles to uphold their promise of mobility for people with disabilities, they will need to be wheelchair accessible.

A. For multi-purpose vehicles manufactured for operation by persons with disabilities

Please consider necessary changes to FMVSS 208 S4.2 and S.4.2.1.2.

S4.2 defines trucks and multi-purpose vehicles manufactured for operation by persons with disabilities. Current FMVSS text states:

“These vehicles incorporate a level change device (e.g., a wheelchair lift or a ramp) for onloading or offloading an occupant in a wheelchair, an interior element of design intended to provide the vertical clearance necessary to permit a person in a wheelchair to move between the lift or ramp and the driver’s position or to occupy that position, and either an adaptive control or special driver’s seating accommodation to enable persons who have limited use of their arms or legs to operate a vehicle.”

“For purposes of this definition, special driver’s seating accommodations include a driver’s seat easily removable with means installed for that purpose or with simple tools, or a driver’s seat with extended adjustment capability to allow a person to easily transfer from a wheelchair to the driver’s seat.”

Please consider adding language to these section that takes into consideration ADS-equipped vehicles without manual controls or a driver’s seat. Please include reference to a front left outboard seat.

S4.2.1.2(b) provides a standard for seatbelt options in vehicles manufactured for operation by persons with disabilities and requires a Type 2 or Type 2A seat belt assembly to be installed for the driver’s seating position. A Type 2 seat belt assembly is required for each other outboard designated seating position. Please consider whether language should be included to ensure safety for passengers seated in the front left outboard seat in an ADS-equipped vehicle.

B. Guiding Principles

The NPRM provides 4 guiding principles NHTSA is using to address FMVSS reform and regulatory barriers. These include: (1) maintaining current performance requirements, (2) reducing unnecessary barriers and uncertainty for manufacturers, (3) maintaining the current regulatory text structure, and (4) remaining tech neutral.

DREDF acknowledges USDOT’s repeated stated commitment to improving access and mobility for people with disabilities and older adults in AV 3.0 and AV 4.0, and at the Access and Mobility for All Summit held last fall. DREDF urges NHTSA to adopt a fifth guideline: “Ensuring access and safety for all passengers and road users, including passengers with disabilities and older adults”. The guidelines would be a reminder to staff, and all stakeholders of the commitment and potential of this work going forward.

C. Consulting with the Community

In addition, DREDF recommends that NHTSA work in consultation with the US Access Board and representatives from the disability community as new technology, vehicle designs and safety features are developed to ensure full accessibility and safety for all.

Thank you, again, for the opportunity to provide comment. DREDF acknowledges and is grateful for NHTSA's aforementioned research regarding disabled road users, and on the automated wheelchair securement system. We look forward to commenting on proposed changes to crash avoidance standards and standards that pertain to telltales, indicators, alerts, and warnings in ADS-equipped vehicles.

Please contact Carol Tyson, Government Affairs Liaison, at (202) 878-9186 or ctyson@dredf.org with any questions. DREDF looks forward to continuing to work with NHTSA and the broader AV stakeholder community to ensure access, safety, and equity are realized.

Sincerely,

A handwritten signature in blue ink that reads "Susan R. Henderson" with a horizontal line extending to the right.

Susan Henderson
Executive Director