ROCH 2019 AUTONOMOUS VEHICLES BACKGROUND RESOURCES

What are self-driving or autonomous vehicles (AVs)? The Society of Automotive Engineers has defined levels of AVs, ranging from Zero in which the human DRIVER performs all driving tasks to level 5, full automation, in which the VEHICLE performs all driving functions under ALL conditions. United Spinal is supporting the manufacturing of level 5 AVs that are **universally accessible** for people with disabilities (PWD).

The benefits of AV for those with disabilities, especially those of us who use a wheelchair, include a truly accessible, on-demand, ride from an Uber or a Lyft and of course from our local paratransit service. Currently, the first widespread consumer use of AVs is expected be through ride-sharing/ride-hailing services. According to the Shared-Use Mobility Center, "In the U. S., more than 57 million individuals, have a disability. Of those, some six million currently have difficulty getting the transportation they need. Additionally, more than one in five elderly Americans can no longer drive. Meanwhile, the population of U.S. residents over the age of 65 is expected to skyrocket from 40 million to 88 million by 2050." The Ruderman Foundation's 'Self-Driving Cars and the Impact on People with Disabilities, January 2017, has suggested that accessible AVs could empower 2 million individuals with disabilities new opportunities for employment and save $19 billion in health care expenditures every year.

A major roadblock with AV for wheelchair users: Automakers are already planning and producing AVs that are not designed to accommodate or be accessible for wheelchair users. In response to lead an effort to create a new coalition of national disability organizations, We Will Ride (WWR):

- American Association of People with Disabilities
- National Council on Independent Living
- Disability Rights Education and Defense Fund
- Paralyzed Veterans of America
- United Spinal Association

are urging auto manufacturers to begin building wheelchair accessible passenger vehicles now, from the ground up, from concept to design.

AV mission statement: United Spinal is also building other partnerships with the commitment to delivering reliable, on-demand, safe and accessible AV ride sharing transportation for people with mobility disabilities and the disability community at large as well as the nation as a whole. As United Spinal President and CEO James Weisman has said, "for untold millions of Americans, a universal accessible manufactured autonomous vehicle would be a life's game changer." We are equally committed to making the development and deployment of autonomous vehicle technologies a collaborative effort.   Importantly, as a part of our mission statement, United Spinal endorses both the DREDF Fully Accessible Vehicle Checklist & Comments and the Consortium for Citizens with Disabilities AV Principles.

Additional United Spinal AV partners we are working with to design and deploy universal accessible AV technologies:
-Auto Alliance: https://autoalliance.org/avsaccessibility/
-The Volkswagen Group's Inclusive Mobility Initiative: https://media.vw.com/en-us/releases/1154
-Partners for Automated Vehicle Education (PAVE):   https://pavecampaign.org
-Self-Driving Coalition for Safer Streets: https://www.selfdrivingcoalition.org
- Uber Advanced Technologies Group: https://www.uber.com/info/atg/
- Uber Accessibility: https://accessibility.uber.com/
- US Department of Labor, Office of Disability Employment Policy's (ODEP) virtual AV community: https://transportationinnovation.ideascale.com/a/index   And its outreach efforts: Autonomous Vehicles: Driving Employment for People with Disabilities Information-Gathering Session Summary Report
- US Department of Transportation: Preparing for the Future of Transportation Automated Vehicles 3.0. (See also United Spinal's comments about AV 3.0)

Federal legislation: in the last Congress, United Spinal supported as a good first step a bill introduced by U.S. Senator John Thune (R-SD), S. 1885, the AV Start Act would address several AV issues. According to Senator Thune , the bill provided enhanced safety oversight, reinforced federal, state and local roles, reduced barriers to deployment and would have improved "mobility for Americans with disabilities by preventing the denial of a license to operate a self-driving vehicle on the basis of a disability. Develop[ed] best practices regarding self-driving vehicle accessibility." United Spinal supported the bill to speed testing of autonomous vehicles on the nation's roadways by establishing national standards for testing in order to avoid a patchwork of 50 different state standards. Uniform national standards would allow people with disabilities to travel seamlessly across various states. United Spinal's letter of support is here.

To view all the linked documents on one webpage, visit: https://unitedspinal.org/roll-issues/2019