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Access Needed to Autonomous Vehicles

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Autonomous vehicles (self-driving cars) are likely to be the primary transportation available to all of us within the next 10 years. Will autonomous vehicles (AVs) be accessible to people with disabilities, including those who use wheelchairs and other wheeled mobility aids?

AVs are likely to benefit cities, reducing congestion, and opening up space for development, parks, bicycle lanes and dedicated mass transit. The most significant change will probably be the enhanced travel possibilities available to people who are currently physically unable to drive.

For example, blind people will be able to travel independently in a motorized vehicle for the first time in history. This, in and of itself, would be remarkable; however, the development of ride-hailing apps seemingly overnight should remind us all that technology improvements happen whether we are able to imagine them or not.

For that matter, who could have imagined the internet 25 years ago, but the availability of the Internet has revolutionized the way we work, learn, communicate and socialize.

To be sure, there will be new problems created by autonomous vehicles. While driving safety will improve because controls and sensors on vehicles will largely eliminate human error, there is likely to be massive unemployment associated with AVs.

Bus and truck drivers, taxi drivers, yes, even Uber drivers, will become unnecessary. Even the concept of car ownership will change. Why own, maintain and store a vehicle when one can be summoned quickly, take you where you want to go, and another can bring you back, leaving the purchase and maintenance to a third party?

Mass transit operators will have to provide accessible service if they deploy AVs because this is required by the Americans with Disabilities Act (ADA). But what about car-sized autonomous vehicles?

AVs (or at least some) should be accessible to all, not just to those who can walk or who currently can drive. People will be living, working, and socializing longer than ever.

All of the sensors and controls on AVs that would be affected by an accessibility retrofit scream out for a factory-built solution. Otherwise, wheelchair users will become a very expensive, perhaps too expensive, afterthought.

Things AV manufacturers should consider providing are wheelchair lifts or ramps in some factory-built models; designing vehicles with lower floors to accommodate wheelchairs; accessible door handles; storage space for wheelchairs; and securement options.

AV passengers will not be driving but will need to interact with the vehicle to plan the trip, enter and exit the vehicle, and monitor their route. Without adaptive technologies this can be impossible for those who cannot see or hear, and for those with cognitive disabilities. The development of an accessible user interface is fundamental if people with disabilities are to use AVs.

An interesting website to explore, that provides in-depth information on AVs, is www.sharedusemobilitycenter.org. The National Council on the Disabled and the Ruderman Family Foundation have both issued reports on AV access for people with disabilities.

We should expect that AVs be available and accessible to people with disabilities, so they can travel with and without colleagues, friends and relatives when and where they desire, as is their right.