

New Technologies in Transit Help to Assist Older Adults and Those with Disabilities

Summary of Article from The Washington Post, Local Transportation Section

By Ronnique Bishop, PRTC's Professional Development Fellow

Two of the most sensitive populations that transportation systems serve are older/aging adults and people with disabilities. According to the National Aging and Disability Transportation Center (NADT), by 2020 one in every five Americans are expected to be 65 or older. Data continues to tell a story of how the aging population are making changes to their lifestyle. According to the American Association of Retired Persons (AARP), 90 percent of older adults decide to age in place inside their homes and within their communities. Aging in place puts a great emphasis on the importance of accessible transit in urban, suburban and rural communities. In terms of transportation, data states that over 75 percent of caregivers provide or prepare rides for their loved ones. Family caregivers have the responsibility of ensuring that their loved ones get the medical care they need and make sure their daily needs are met. How can our transportation systems help to make that burden easier to carry?

Data of Americans with disabilities are more fluid, as age is not a determining factor of whether or not a person has a disability. Additionally, a disability is categorized in a variety of ways. The 2017 American Community Survey (ACS) states that approximately 12.6 percent of Americans have a disability. The truths about these two sensitive populations are that not all older adults have disabilities, those with disabilities vary in age, and some disabilities are either conditional, permanent, temporary or any combination of the three. Our transportation systems must continue to grow in a way that represents this diversity by being accessible to all users. Technology can certainly get us there. These statistics should guide and hold some weight in the improvements in the region's transportation system, and as of recently, it has.

In fall 2020, Metro will launch a new smartphone app that provides audio-based navigation for riders. This pilot will include about 20 percent of the Metro system. Select Metrorail stations and Metrobus stops with significant senior and disabled ridership where chosen as a part of this pilot. Depending on the pilot's success, the app will eventually cover all Metrorail stations. This app, deemed the Beacon Wayfinding Project, may use Wi-Fi, Bluetooth, and/or other technologies to accurately locate users. Small location devices called beacons are already in use throughout some of the Metrorail stations. Beacons have the ability to recognize and interact with smartphones. When a person approaches a beacon while using the app, the app will play a prerecorded track giving information about that specific location. Beacons are currently installed at Gallery Place, Metro Center, L'Enfant Plaza, Fort Totten, Silver Spring, Rosslyn, and Navy Yard-Ballpark Metrorail stations. Over a year's span, the beacon's technology has advanced from being accurate within five or six yards to being accurate within one yard. As time proceeds, the beacon's accuracy should increase and may become as precise as a few centimeters by the time Metro launches the pilot later next year.

The app will have special features for wheelchair users and haptic alerts are able to be sent to those who are hearing impaired. A website will also supplement the app. The website will provide the opportunity for users to plan their trip in advance using an online planning program. Users will be able to journey through their trip by familiarizing themselves with the route through images of landmarks, etc., that the software will produce. The great thing about this app and website is that it will be beneficial for all, especially for the blind or vision impaired and those with any type of disability. Tourists and everyday riders can find this app useful to navigate unfamiliar stations or to get more information on the next bus or train. This is a great example of how our transportation systems can grow with available technology to further enable people to navigate on their own and increase their safety.

How Will OmniRide Access Paratransit Service Use Technology to Better Serve Customers?

According to the 2017 ACS, in Prince William County, about 13 percent of the population is 60 years or older and about eight (8) percent of the population have a disability. Over the past seven years, these statistics have increased by three (3) percent and two (2) percent, respectively. OmniRide is now in the position to provide paratransit service to serve the older population and those who have disabilities that live within Prince William County, City of Manassas, and City of Manassas Park. This service, OmniRide Access, will officially launch in December 2019 and provide origin to destination paratransit service to customers under ADA regulations. The implementation of this service will positively affect our OmniRide local service. Currently, our local routes may follow a deviation that allows buses to travel up to $\frac{3}{4}$ of a mile from its basic route. To serve such deviations, local buses can take up to 40 minutes (double the average time) to complete the route from start to end. Deviations will soon be served by OmniRide Access – it will cover a $\frac{3}{4}$ mile radius of the local routes that serve the western part of the County. As a result, OmniRide local service will provide riders with a direct, fixed route. It is expected that ridership and on-time performance will increase and the amount of time riders spend on the bus will decrease.

Eligibility for paratransit will likely be determined through an online process. Using an online tool to determine eligibility status is a new method for OmniRide and it may come with some growing pains for customers who are seniors and/or have disabilities as they learn to become acquainted with the online portal.

National data show that although majority of seniors use the internet (67 percent) and have a positive perspective on technology and its uses (58 percent), seniors also experience some challenges with their capability to use new technology devices and services. Challenges include lack of confidence, physical ability and general knowledge about technology. Statistics from the Pew Research Center say that 62 percent of seniors are either somewhat confident or only a little confident when using electronics to complete necessary tasks while only 26 percent of seniors say that they are very confident. The challenge of a disability introduces different limitations. In general, those with disabilities are less likely to go online or own a smartphone and/or computer. Considering all of these factors, digital accessibility is important to consider when making any type of technology shift to OmniRide services.

Hampton Roads Transit (HRT) and Greater Richmond Transit Company (GRTC) both operate paratransit services and use online platforms to improve the customer experience. Both agencies approve eligibility of applicants for their paratransit services through ADARide. HRT and GRTC also use technology for scheduling rides and managing trips. GRTC uses an app called Amble and HRT has an online, web-based portal. Both agencies provide user guides to lead customers through the process of scheduling a ride, how to use the application online or using a smartphone, and other important details about the service and expectations.

Outside of using web-based resources, it is important to ensure that other sources of information are available to guide and support customers such as paper documents, user guides, telephone assistance, and advisory committees. As the OmniRide Access service begins, grows and matures, the agency should consider implementing online tools just as HRT and GRTC has done. Establishing an online portal that is accessible through our website to schedule and manage trips or enhancing our OmniRide mobile app to include OmniRide Access trip features should be ideas that are welcomed in the future.