

June 2019

Innovations in Volunteer Transportation: Examples of Technology Enhancing the Performance of a Volunteer Driver Program

Mobility is necessary to engage with one's community and reach critical destinations, but the lack of available, affordable, and accessible transportation is a barrier for many. Age, physical and cognitive ability, income, and geography are all factors that can impede access to reliable transportation. Volunteer driver programs are one way that communities are addressing these gaps. As the demographics of the United States continue to shift (the US Census Bureau predicts that persons 65+ will outnumber children under age 18 by 2035¹), volunteer driver programs expect to experience an increase in travel demand. In response, some volunteer transportation providers are reworking their traditional models and incorporating technology to expand capacity.

TRADITIONAL OPERATING MODELS AND THE POTENTIAL OF TECHNOLOGY

Volunteer driver programs provide an alternative to driving or public transit for many individuals unable to access such options. They operate out of human service agencies, non-profit organizations, faith-based entities, and transit authorities. In addition to their organizational foundation, programs vary a great deal in the type of trip destination covered, method for scheduling and dispatch, and degree of passenger support provided, as well as a myriad of other ways. At their most rudimentary, volunteer transportation programs connect an individual seeking a ride with an available driver using a telephone, notepad, and writing instrument, with little to no computer involvement. While user-friendly, this method can be time consuming. Utilizing various technologies can increase output while decreasing staff time spent on managing the program.

In *Introduction to Senior Transportation: Enhancing Community Mobility and Transportation Services*,² authors Kerschner and Silverstein establish five areas in which technology can support a volunteer driver program:

- 1) Daily operations – increase scheduling capacity and the availability to monitor rides
- 2) Passenger support – track rider preferences to provide a higher level of consumer assistance
- 3) Data management – analyze ridership trends to understand a community's or service population's transportation needs
- 4) Collaboration – facilitate communication and relationships across programs
- 5) Fundraising – assist in grants management

¹ https://www.census.gov/content/dam/Census/library/publications/2018/demo/P25_1144.pdf

² Helen K. Kerschner and Nina M. Silverstein, *Introduction to Senior Transportation: Enhancing Community Mobility and Transportation Services* (New York: Routledge, 2018), 103

These five categories provide a framework for examining the ways in which technology can enhance the functionality of volunteer driver programs. This paper highlights examples of volunteer driver programs using technology to improve daily operations and passenger support, assist with data management, and facilitate collaboration through a peer network.

EXAMPLES OF PROGRAMS LEVERAGING TECHNOLOGY TO IMPROVE CAPACITY

Needham Community Council (Massachusetts)

Daily Operations and Data Management

In Needham, Massachusetts (a suburb of Boston), the non-profit Needham Community Council (the Council), operates a “Transportation of Last Resort” program. Initially, the program used volunteer drivers to provide Needham residents who lacked their own transportation with rides to medical appointments. Riders would contact the Council to request transportation through an administrative volunteer who would then schedule the trip with an available volunteer driver. Despite having a pool of drivers to pull from, the Council was not able to fulfill all ride requests. Executive Director Sandra Robinson thought that supplementing her existing volunteer driver program with the services of a transportation network company (TNC),³ like Uber or Lyft, would increase her ability to meet trip demand.

Robinson partnered with Lyft, using money from her transportation budget to cover the cost of the TNC rides. The Council first tries to match the rider with a volunteer driver. If no volunteer is available and the rider is open to a TNC ride, then the administrative volunteer requests a trip using Lyft’s Concierge service, which allows staff to book and pay for consumers’ rides through an online portal. Because the Council no longer solely relies on volunteers to fill trip demand, it has been able to meet a larger number of transportation requests. This in turn allowed the Council to increase its transportation offerings and open up the service to ride requests beyond medical appointments. The program now provides rides to parent-teacher conferences, for emergency needs, to the food pantry, and for other requests approved by the Council. And because Lyft Concierge allows real-time trip tracking through the online portal, staff is able to monitor each ride and assist should any challenge or confusion arise. For example, the Council found that riders and TNC drivers were having difficulty connecting at large medical centers due to multiple possible areas for pick-up. Because the Council can track each trip in real-time, staff can communicate the location of the driver to the rider, alleviating pick-up location complications.

In addition to the partnership’s benefits for consumers, the organization also experienced a number of advantages. Staff members decreased the amount of time spent managing rides and re-directed their efforts to the Council’s other programs. By monitoring ridership numbers and trends, the Council determined that more transportation options would be advantageous for its

³ For more information about partnering with TNCs, read MassMobility’s “Partnering with Transportation Network Companies to Improve Mobility for Older Adults, People with Disabilities, and Low-income Individuals in Massachusetts” (April 2019). The report is available at the following link: www.mass.gov/service-details/partner-with-a-transportation-network-company-to-improve-community-mobility

consumers. In response, the organization entered into a van-sharing agreement with a local YMCA to utilize their vehicle for a portion of the day on Mondays, Wednesdays, and Fridays, further increasing the Council's transportation offerings.⁴

Volunteer Transportation Center (New York) *Daily Operations and Data Management*

Because Needham is located in Greater Boston, TNC drivers are readily available to complement the Council's volunteer transportation. Not all volunteer driver programs, however, are located in areas well-served by TNCs. In rural upstate New York, where TNCs are scarce, the Volunteer Transportation Center (VTC), a non-profit based in Watertown, NY, provides rides to the counties of Jefferson, Lewis, and St. Lawrence. VTC largely offers transportation to medical appointments and destinations that address social determinants of health. They provide transportation for New York State Medicaid and Department of Social Services, as well as for school systems.

When VTC was looking for software to assist with managing their volunteer program, they found that many pre-existing systems were unable to accommodate their unique needs. So, they created their own software. It tracks vehicle location and trip details, and facilitates communication between the volunteers and the main office. It also has trip optimization to show the best possible routes available. This feature allows VTC to group riders together to maximize shared rides, as well as track deadhead miles (distance driven without a passenger in the vehicle). These features allow VTC to stretch its funding, because drivers are reimbursed by mileage and not by the number of individuals driven or trips taken. In addition, the software shows where ridership is lacking, allowing VTC to target their marketing efforts to those communities.

VTC replicates their services for communities wanting to implement a volunteer driver program through their "VTC in a box" program. VTC handles all aspects of the program (software, marketing and recruitment, training and managing volunteers, billing, etc.) until a local non-profit is able to assume operations. VTC varies the amount of support they provide based on the host community's needs and preferences. This service is provided at no fee to the host organization, with money from VTC contracts and fundraisers covering any associated costs. VTC recently brought its services to the New York counties of Genesee and Erie.

New Star (Illinois and Indiana) *Passenger Support*

New Star, a Midwestern nonprofit that serves individuals with developmental disabilities in Illinois and Indiana, also developed its own software application for scheduling and dispatching rides. The organization recognized transportation as a major barrier for the people it serves in accessing employment opportunities, social engagements, and other destinations. Many do not drive their own vehicle and have difficulty accessing public transit or ride-hailing services. In

⁴ Needham organizations share van. *MassMobility Newsletter*. October 2018. Issue 73. Available at: <http://myemail.constantcontact.com/MassMobility---Issue-73--October-2018.html?soid=1110714961086&aid=up2lduQjNos#LETTER.BLOCK38> (As of the publication of this report, the vanshare program is temporarily on hold.)

response, New Star developed Stronger Community Opportunities through Organized Transportation (SCOOT), a mobile app that provides both on-demand and scheduled transportation for consumers.

The software application functions like a TNC, but unlike other ride-hailing services, all SCOOT drivers are direct service professionals, and all fees are based on a low- or no-cost mileage reimbursement rate. SCOOT riders are able to select their drivers based on profiles available through the application. Information such as certifications, years of experience as a direct service professional, and other qualifications are included. This allows riders to select drivers who are best able to serve their unique needs. Similarly, drivers are able to see riders' profiles, which include information about accommodations or assistance the passengers may need. This allows for increased passenger assistance and support.

In an effort to make this software application available to programs outside of the agencies with which New Star works, the non-profit is planning to sell licenses to other organizations for a fee, allowing the purchaser to operate the application independently. The host organization will be able to customize the settings to fit its volunteer driver program's unique needs. For example, hosts will be able to set or cap the mileage reimbursement rate and create their own pool of drivers.

Innovative technologies with the potential to improve program delivery can also attract the attention of funders. Part of the capital for SCOOT came from the 2018 "Arc Tank" competition. Hosted by the Northeast Arc and the John F. Kennedy Library and Museum, the Arc Tank encourages applicants to think outside the box and create unconventional services that improve the lives of people with disabilities. One of three winning proposals in 2018, New Star was awarded \$70,000 for further development of the application.

Statewide Volunteer Driver Program Network (Massachusetts) *Collaboration*

In Massachusetts, volunteer driver programs operate out of non-profit organizations, Councils on Aging (COA), and Regional Transit Authorities. To improve communication efforts and enhance connections between volunteer transportation providers, MassMobility, a statewide transportation initiative based out of the Massachusetts Executive Office of Health and Human Services, established the Massachusetts Volunteer Driver Program Network (VDPN) in 2014. VDPN uses technology to improve communication efforts and enhance connections between volunteer driver programs across the Commonwealth. This peer-to-peer network is open to anyone who operates a volunteer driver program and to those interested in starting one. Through an email listserv, volunteer driver program staff share information about upcoming VDPN meetings, highlight relevant conferences and webinars, pose questions to peers, and share resources with one another. For example, a COA that operates a volunteer driver program shared the indemnification form it has all drivers sign waiving their right to sue the town should any injury occur to their person during the course of volunteer driving for the organization.

While the listserv is valuable, program staff also enjoy and benefit from face-to-face connections. The VDPN holds periodic meetings in locations across Massachusetts and offers the opportunity for program to connect with one another in person. Meetings provide time for participants to share updates on their volunteer driver programs and pose questions to the group. They often feature a presentation on a relevant topic of interest, such as innovative recruitment techniques for volunteer transportation. These connections, fostered by email technology, allow volunteer driver programs to break out of their silos and work across organizational and geographic boundaries.

Seniors' Resource Center (Colorado)
Daily Operations and Passenger Support

As with the Massachusetts VDPN, programs do not need to utilize expensive software applications to effectively incorporate technology. In Denver, Colorado, the Seniors' Resource Center's (SRC) volunteer transportation program uses Google Doc⁵ to manage rides.

SRC uses Google Doc so that drivers can assign their own rides, reducing staff time spent matching requests to drivers. SRC's Google Doc features a chart that lists all upcoming ride requests with the time needed for departure, arrival, and pick up; any mobility needs; the estimated mileage/time of the trip in total; and a section for volunteers to mark if they are available to drive round trip or only one way, as well a column indicating whether or not the driver confirmed the trip with the rider. The Google Doc does not contain any personally identifiable information, such as exact address for pick-up or drop-off. Only after the volunteer signs up to drive do they receive an email with this information. Drivers do not need a password to access the Google Doc. Once they have joined SRC as a volunteer driver, the program administrator adds their name to an email list that is sent out daily. Drivers are able to view rides six days in advance and self-assign rides based on availability. Google Docs provides a free option for programs that do not have funds available for scheduling and dispatch software, but want to decrease the amount of staff time spent dedicated to coordinating rides.

CONCLUSION

Volunteer driver programs are a crucial part of the community transportation network because of their relatively low cost of operation and ability to offer personalized assistance to riders. Incorporating technology can increase the capacity of volunteer driver programs to better address unmet transportation needs. This technology can be as complex as custom-built software or as simple as using free services such as Google Docs. When thinking about how technology can best serve your volunteer driver program, it is important to consider which option or options will best suit the needs of your service population, volunteer drivers, and staff. No matter the type of technology implemented, proper training of the individuals utilizing it is critical to success.

⁵ A free, web-based application offered through Google Drive that allows users to create documents and edit with others simultaneously.

CONTACT INFORMATION

Please contact hstmobility@state.ma.us for additional information or technical assistance, or visit www.mass.gov/info-details/develop-a-volunteer-driver-program.

ACKNOWLEDGEMENTS

Thanks very much to the following individuals for their assistance compiling this report: Hank Braasksma, Sam Purington, Sandra Robinson, and Dan Strick.

REFERENCE

Jennifer Henning. (2019) Innovations in Volunteer Transportation: The Role of Technology in Enhancing the Performance of a Volunteer Driver Program. Executive Office of Health and Human Services, Human Service Transportation Office, Quincy, MA