

OVERVIEW

For people with disabilities and older adults, limited mobility can mean limited independence and fewer opportunities to engage in physical and social activities. Older adults and people with disabilities often make fewer trips than they would like to because they lack adequate transportation ¹. Adaptive bike share has the potential to make cycling a real option for them. Bike share systems are exploring the right way to include accessible options but are challenged by cost, resources, bicycle types, program implementation and infrastructure.

CURRENT APPROACHES

Adaptive cycles (e.g. trikes, hand cycles and recumbents) provide options for people who are not physically able or comfortable riding a standard bicycle or need assistance in the form of riding with another person (e.g. tandem). Adaptive bike share programs generally function in two forms:

Bike/trike "library," where the user would pick-up and return their adaptive cycles at a specific location, such as a recreation center or rental store. The benefit of this model is that staff can be available to assist the user in selecting and fitting the right cycle option, as well as providing storage for the user's belongings, such as mobility devices. Portland's BIKETOWN and Detroit's MoGo program both provide adaptive bike rental services for people with varying levels of ability, offering a mix of adaptive options. Both programs are based around the model of providing a fleet of adaptive bikes for rent on an hourly basis, with rentals occurring at a single location next to popular trails. These programs work with local organizations to run and manage the program.

One system noted that the goal of the program was "to provide a range of options that were suitable for seniors as they made their way from not having bicycled in years and having balance issues to bicycling again on a regular two-wheeler bike." Another noted "we'll have trikes on hand for those that are not yet comfortable with balance." Integrate the bikes into the existing point-topoint docked or dockless system. The benefit of this form is that it more closely resembles the transportation benefits of existing bike share. In 2019, Bublr Bikes in Milwaukee, WI integrated 22 adaptive bicycles, mostly trikes, into their system that can be locked at standard Bublr stations. This integrated system allows users to use the standard system and pricing to check out bikes.



(Photo Credit: MoGo Detroit) MoGo provides a range of adaptive bike share options in Detroit.







CONSIDERATIONS

There is no one solution that can be universally applied for all people with disabilities and older adults. Some considerations include:



Service to be provided: This is key to developing a program. Is the intent to integrate adaptive bikes into the existing system or provide a rental service? This decision will impact other considerations and the level of service to be provided.



Partnerships: Look for local partners to help design the program based on input from the disability community.



Pricing: Will the program price the use of these bikes the same as the regular system and/or will equity fares be available?



Type of vehicles: There are a variety of bikes to choose from at different price levels, including electrified versions. Work with an operator to determine the best mix of adaptive cycles for your system. New models are always being developed, and e-bikes and tricycles might be a first step.



Integration: All services provided in the city should be easily accessible to all people, including ensuring data feeds for open trip planner applications and payment options for unbanked and non-digital access.



Access: Having space to access, mount and dismount the bikes, along with adequate parking space, require particular consideration. Storage space, both for personal mobility devices or other equipment (such as medical equipment) either at the bike pickup location or on the bike themselves should be considered.



Education/Outreach: Create educational and outreach programs to explain the program and how the bikes work. These programs should be developed with community members who understand the needs and motivations of people who would use these bikes.

RESOURCES

Depending on the type of program a city decides to roll out, the biggest resources needed are the bikes themselves, which tend to be significantly more costly then standard bikes. If integrating the adaptive cycles into the standard bike share system, docking and access options and equipment will be necessary. Programs have looked for additional funding from sponsors and foundations to pay for the bikes, program administration and outreach. Many programs have partnered with local shops to help administer the service because of their retail space, maintenance services and expertise.

MEASURING AND EVALUATING

Plan for a program evaluation to understand how the new program is meeting goals and to provide valuable feedback on the successes and challenges of the roll-out. Work with your project partners to set expectations for the program at the onset, and determine how to measure them. This may be accomplished through user surveys and interviews/ focus groups. In addition, you will want to track the number of trips and distance travelled by users and the cost of managing the program.

Cover Photo Credit: frantic00 (istockphoto.com)

¹ Musselwhite, C., C. Holland and I. Walker (2015) "The role of transport and mobility in the health of older people." Journal of Transport & Health. 2(1), 1–4.



Adapted from the "National Scan of Bike Share Equity Programs" report, this is part of the "Breaking Barriers to Bike Share" resource series. Comprised of ten topics, this series looks at bike share through an equity lens and provides successful approaches and recommendations for stakeholders to implement.

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