POLICY STATEMENT

ASSOCIATION OF PEDESTRIAN & BICYCLE PROFESSIONALS

Expertise for Active Transportation

POLICY STATEMENT: SHARED MICROMOBILITY PROGRAMS

Overview of APBP Policy Statements

The Association of Pedestrian and Bicycle Professionals (APBP) supports the community of professionals working to create more walkable, bikeable places through facilitating the exchange of professional and technical knowledge and by promoting fundamental positions that are broadly acknowledged and acted upon by APBP members.

APBP Policy Principles:

1. APBP represents the professional expertise and practical experience of its members in transportation policy discussions to advance active, healthy, and sustainable communities.
2. APBP recognizes the impacts of systemic and institutionalized racism, and we recognize our responsibility to identify and address inequities.
3. APBP endorses active transportation as an integral part of transportation systems through all stages of planning, design, funding, and implementation.
4. APBP supports connected, convenient, accessible, and safe streets and pathways in every community and planning with the input of every member of a community.
5. APBP advances a safe system approach that leverages active transportation to create equitable access for everyone in every place.

Position:

APBP supports the development of shared micromobility programs and supporting policies as a key element of a community's comprehensive transportation system. APBP believes that shared micromobility programs have the potential to improve access and reduce barriers to schools, parks, libraries, food, services, and jobs; increase transportation options; reduce congestion on city streets; act as a catalyst for infrastructure that increases safety for all vulnerable users; improve air quality; and support local economic development. To ensure an effective, equitable, and sustainable program, communities must take a proactive approach to managing shared micromobility.

Recommendation summary:

1. Be ready for the arrival of shared micromobility providers and new transportation devices.

2. Evaluate your community's access needs and establish program requirements (including business licenses, operation agreements, and data-sharing requirements) that meet the community's—and not just the provider's—needs.
3. Weigh the pros and cons of different business models and vendors to determine what best suits your community. At program launch, implement the rules, regulations, and policies needed to facilitate the arrival of the system(s).
4. Seek the experience of other communities as your community considers a program; share your experiences with other communities to support better outcomes.
5. Study the safety of your shared micromobility system post-launch, and adjust operations and infrastructure as necessary.

Definition:
Shared micromobility programs are established by municipalities, hospital campuses, multi-family communities, corporate campuses, transit agencies, state transportation departments, and others to create a framework and regulatory environment for one or more shared micromobility systems. Shared micromobility systems are components of shared micromobility programs. Shared micromobility systems include bikeshare (traditional human-powered bikes, electric-assist bikes (also known as e-bikes), and adaptive bikes/trikes); shared electric scooter systems (e-scooters); and other systems based on emerging small, lightweight, low-speed transportation devices. By definition, shared micromobility programs are on-demand, open to the public, and accessed through a membership or per-trip rental fee. While some devices are electric-assist, shared micromobility devices all require some type of physical engagement by the user in the form of balancing and/or propulsion. With the range of shared micromobility modes, these systems have the potential to engage a broad range of people and encourage more community members to participate in active transportation.

This policy statement does not consider all forms of electric transportation devices and vehicles as shared micromobility systems. Vehicles such as mopeds, small cars, neighborhood electric vehicles (NEVs), and minibuses are not considered under the umbrella of micromobility. Individually owned bikes, e-bikes, e-scooters, and other small transportation devices are not considered in this policy statement because they are not part of shared systems.

This policy recognizes but does not pertain to private systems that are not available to the public, such as a comprehensive hospital campus like Humana. APBP encourages these private systems to integrate with and support adjacent publicly accessible micromobility systems.

This policy also does not consider "automated guideway transit systems, such as a fixed monorail system which includes multiple shared riders in a vehicle. This policy also excludes automated delivery drones. Automated delivery drones are for package delivery.

Background:
Traditional bikeshare systems required significant capital investment and utilized public-private partnerships and funding from grants (federal, state, and local), sponsorships, and user revenues to

launch and maintain operations. In 2017, private companies backed by venture capital funding began operating in several U.S. cities without public funding. This model opened up shared micromobility systems to many more cities than before, and systems have since appeared in multiple Canadian cities. The long-term funding and profitability of these systems is still unknown.

Shared micromobility programs have successfully increased transportation options for communities across North America and have recently grown in size and popularity. Since 2010, traditional bikeshare programs (defined as programs requiring stations, docks, and payment kiosks) have been implemented using the technologies and resources available at the time. Traditional bikeshare programs were designed so that bikes could be checked out and returned to designated stations.

Over the past few years, bicycles and smartphones have advanced so that designated stations are no longer necessary, electric-assist bicycle technology has developed to now allow e-assist bikes to be an option for some bikeshare programs, and new funding models have allowed the private sector to greatly increase its delivery of these programs. Now, users can find and unlock bikes using smartphones, and bikes do not need to be parked at stations. Recently an increasing number of bikeshare programs have become “dockless” and incorporated e-assist bikes. Similarly designed programs for e-scooters have also launched in cities across the country and are growing rapidly. Traditional bikeshare programs are no longer the only model available to communities that wish to increase active transportation and expand mobility options. These new, shared transportation systems, which include dockless bikes, e-bikes, and e-scooters, are collectively part of the shared micromobility ecosystem.

Application:
Shared micromobility programs can be developed in cities of various sizes and in campus environments such as academic, military, or employment campuses. Programs have launched in cities with a wide range of demographic, economic, climatic, and topographical conditions. Communities can use a combination of public and private bicycle- and scooter-based systems to meet their specific needs.

Key factors and principles:

- *Policy or Ordinance:* The foundation of a shared micromobility program is a policy or ordinance that applies to publicly and privately owned shared micromobility systems. The policy or ordinance can include regulations on fleet size, service area, pricing, safety education and in-person or in-app training, provision of helmets, equity programs, data sharing, and maintenance. Where possible, policies and ordinances should be consistent across nearby communities so that user experience and expectations are consistent.
- *Program Ownership and Management:* One of the key decisions in the development of a shared micromobility program is to determine whether it will include a publicly owned system, one or more privately owned systems, or both. Many traditional bikeshare programs are owned by a government agency or a local nonprofit; however, many of the new shared micromobility systems within a local program are owned and operated by private companies. Some communities have both types of systems. The decision about which types of systems to provide becomes the cornerstone of the program and can result in different outcomes depending on the

goals of the community. Agencies may have less control and less ability to achieve the principles outlined below when systems are privately owned.

- *Equity:* A shared micromobility program should have equity as a key consideration. Designing an equitable program means making systems accessible and encouraging participation—both in the initial planning process as well as eventual use of the system(s)—by historically underserved communities, low-income populations, and communities of color. Steps to increase access to shared micromobility systems include requiring cash payment options, having check-out options that do not require a smartphone, and developing fee schedules with discounted fares and flexible pricing options. Service areas should include historically underserved areas and provide a sufficient density of micromobility devices in these areas. System operations must also be equitable in how and when micromobility devices are collected, redistributed, and repaired, and in where stations are placed and how well they are maintained. It is not enough to plan for equity; systems also need to foster and maintain it.
- *Partnerships:* Communities with successful micromobility programs that serve all members of the community focus on building partnerships. Potential partners include government agencies, private system providers, community organizations, public health entities, advocacy groups, transit agencies, and visitor and tourism bureaus.
- *A Sustainable Business Model:* Although technology may bring about changes in shared micromobility systems, users desire continuity of service and a reasonable level of consistency. For publicly owned systems, balancing long-term operational and capital expenses with a robust and diversified set of revenue streams will assist the system's longevity. Revenue can be generated through a variety of sources, including sponsorships, permit fees, advertising, grants, corporate memberships, and individual rider memberships and usage fees. The long-term financial sustainability of privately owned systems is yet unknown, so communities should develop contingency plans in case all privately owned systems end operations in that locale. For example, Denver's bikeshare ended when its grant funding ended. Conversely, nearby Boulder, Colorado, decided to continue its program once outside funding ended by supplementing a grant-funded operations budget with City funds.
- *System Density and Coverage Area:* Stations and/or micromobility devices should be conveniently available, ideally within a quarter mile or less than a five-minute walk. Agencies have much greater control over this aspect when systems are publicly owned. Check-out locations are fixed stations in traditional bikeshare systems (see the NACTO Bike Share Station Siting Guide in the Resources section). For dockless systems, shared micromobility devices can be left anywhere, and a smartphone application is typically available for users to locate devices. Some systems offer a hybrid approach, such as dockless bikes that are occasionally collected and redistributed to bikeshare "hubs." Even with completely dockless systems, redistribution is still a key factor in making micromobility devices available—particularly in lower-demand and/or underserved areas—and should be written into the requirements for privately owned systems. Micromobility device placement is also key to developing a seamless modal network. Mobility hubs should provide for distribution at transit centers and other key points in the transportation network. Geofencing and/or additional fees can be used in some dockless programs to

encourage users to return shared micromobility devices to designated locations where they may be most desirable.

- *Fleet Size:* Micromobility programs should specify the minimum and maximum number of devices that can be in operation in specific areas, and criteria for when and how systems can be expanded. These standards can be used to prevent an oversaturation or a scarcity of devices, especially if more than one privately owned system is present.
- *Flexible and Integrated Pricing Options:* Monthly (rather than only annual) membership, single-ride pricing similar to transit rides, and discounts focused on low-income and other price-sensitive riders can increase system use. Visible pricing schemes and clear communication regarding price changes, as well as up-front estimates of ride cost, would increase transparency of the system. Integrated platforms for finding, reserving, paying, and transferring to complementary modes such as TNCs, taxis, transit, parking, etc., improve the flexibility and reliability of the system for users.
- *Supporting Infrastructure Network:* Low-stress infrastructure, including separated bikeways and traffic-calmed streets, maximizes comfort and safety for shared micromobility users and reduces conflicts with motor vehicle traffic and pedestrians. Many communities had to quickly react to increase the amount of low-stress infrastructure after privately owned systems arrived. Instead, agencies should proactively plan and budget for the expansion of interconnected low-stress networks in shared micromobility system service areas before launch.
- *Operational Regulation:* Depending on local context and preferences, communities can regulate the operation of shared micromobility devices based on location. For example, communities may choose to limit speeds, prohibit operation on sidewalks, and regulate where dockless devices can be parked. In addition to legal regulation, geofencing technology can be used to control the operation of shared micromobility devices. Geofencing can be used to allow devices to be parked only in designated areas in the right-of-way, which can help reduce clutter and barriers for people with disabilities to comply with ADA requirement in public spaces. Such technology can also be used to force devices to operate at lower speeds or outright prohibit their operation in sensitive areas, such as pedestrian-heavy paths.
- *Data Collection:* All shared micromobility systems can be made to generate data pertaining to where devices are checked out and checked in, while many can also track the route that users take. This data is incredibly valuable to transportation agencies that analyze safety, plan and provide infrastructure for bicycle and micromobility users, and measure equity. All shared micromobility systems should be equipped to collect data on origins/destinations, route selection, and demographics, and vendors (companies) should be required to provide this data in aggregated and anonymized format to municipalities and other agencies.

Recommendations (cont.):

6. Be ready for the arrival of shared micromobility providers and new transportation devices.

Regardless of a community's plans for publicly procured shared micromobility systems, all communities should be ready for the arrival of shared micromobility providers and new transportation devices. As the popularity of private venture-backed providers grows, so too does the frequency of these systems

appearing in communities—regardless of jurisdictional desires. Public agency procurement orders are no longer the only way to launch a micromobility system, and communities now must take a proactive approach to anticipating and managing their shared micromobility programs.

7. Evaluate your community's access needs, and establish program requirements (including business licenses, operation agreements, and data-sharing requirements) that meet the community's—and not just the provider's—needs.

Communities wishing to launch a shared micromobility program can start by evaluating the community's access needs and establishing program requirements (including business licenses, operation agreements, and data-sharing requirements) that meet the community's—and not just the provider's—needs.

8. Weigh the pros and cons of different business models and vendors to determine what best suits your community. At program launch, implement the rules, regulations, and policies needed to facilitate the arrival of the system(s).

   Many communities with programs that include privately owned and operated shared micromobility systems have a contract or a permit system to regulate these systems. Most of these cities charge the operator a permit fee and other operating fees to cover the use of the right-of-way and any agency expenses incurred as a result of the system, which can include staff time to oversee or evaluate the program, enforcement and impoundment, and other costs associated with program administration. While some private systems have promised to help fund parking and safer infrastructure, there has been little success in receiving funding from these companies for these purposes. Cities considering a new micromobility program or system should weigh the pros and cons of different business models and vendors to determine what best suits their community.

9. An agency desiring to launch a micromobility program should take steps to prepare comprehensively to ensure the viability and sustainability of the system. Steps include seeking the experience of other communities as your community considers a program; share your experiences with other communities to support better outcomes.

Shared micromobility programs should also be considered and included in municipal transportation plans and policies. A city considering a shared micromobility program could begin with a feasibility study, pilot program, or implementation plan and weigh the benefits of launching a publicly owned system versus relying on privately owned systems.

At program launch, cities should implement the rules, regulations, and policies needed to facilitate the arrival of the system(s). A proactive approach can limit the amount of uncertainty and public pushback that micromobility systems can generate as well as prepare for the possibility of statewide regulations. While each community will differ from the next, these recommendations and the key factors and

principles discussed previously are broadly applicable to most shared micromobility programs and can be tailored to meet each community's needs.

> Establish a system of evaluation which includes equity, safety, and cleanliness, and conformance with health standards as established by the jurisdiction's health department. Evaluation should be done periodically with indicated adjustments to operations and infrastructure as necessary.

It is noted that because some shared micromobility devices include new technologies—specifically e-scooters—it is unclear what the safety implications are. Contrary to e-scooters, there have been numerous studies evaluating the safety implications of bikeshare. While broad research on the overall safety of these new devices is needed, it is also important for agencies to study the safety of their own shared micromobility system post-launch and adjust operations and infrastructure as necessary.

Resources:

APBP recommends the following resources to help cities plan and implement micro-mobility:

- Better Bike Share Partnership (focuses on equity issues): http://betterbikeshare.org/
- North American Bikeshare Association: http://nabsa.net/
- Measuring Equitable Access to New Mobility (2018): https://www.populus.ai/research
- The Shared Micromobility Playbook (2019): http://playbook.t4america.org/
- The micromobilityRevolution (2018): https://www.populus.ai/micro-mobility-2018-july
- APBP's four-part webinar series on bikeshare systems[1] recorded in 2013-2014: https://apbp.site-ym.com/store/ViewProduct.aspx?id=2701239
- The Bike-Share Planning Guide (2013) https://www.itdp.org/the-bike-share-planning-guide-2/
- NACTO Bike Share Practitioner's Papers
- NACTO Bike Share Station Siting Guide (2016)
- NACTO Guidelines for Regulating Shared Micromobility (2019) https://nacto.org/sharedmicromobilityguidelines/
- Bike Sharing in The United States: State of the Practice and Guide to Implementation (2012 report) http://www.pedbikeinfo.org/programs/promote_bikeshare.cfm
- Bike share systems: Recent research on their growth, users' demographics and their health and societal impacts: http://journalistsresource.org/studies/environment/transportation/bikeshare-research-growth-user-demographics-health-societal-impacts

[1] Individual sessions in the series include:
#1, Introduction to Bikeshare Transit Systems
#2, Funding Bikeshare Transit Systems
#3, Institutionalizing Bikeshare Transit Systems
#4, The Future of Bikeshare Transit Systems

- Portland Bureau of Transportation 2018 E-Scooter Findings Report (2018). https://www.portlandoregon.gov/transportation/article/709719

APBP's policy statement development

The Association of Pedestrian and Bicycle Professionals (APBP) relied on the professional experience of its members and widely available information and tools to draft its policy statement on Shared Micromobility Programs. This policy statement was developed by the APBP Policy Committee in conjunction with APBP member volunteers and was originally approved by the Board of Directors on November 21, 2019, then updated and revised on February 18, 2021. APBP members can suggest changes to any policy statement by contacting the association's executive director, Policy Committee chair, or a board member. For more information, contact: Melanie Bowzer, Executive Director, at mbowzer@amrms.com.