

Cities and bike share operators should have equity policies that direct or guide the system to serve residents equitably, including making the system accessible to traditionally underserved communities. At its core, equity means understanding and providing people what they need to be successful at an endeavor. The graphic in Figure 1 provides a simple distinction between equality (where each receives the same item), and equity. Articulating a specific equity policy helps to establish goals, build in accountability, and provides an opportunity to assess. A solid equity policy is an important first step in delivering an equitable bike share system.



Equality vs. Equity

Photo Credit: Robert Wood Johnson Foundation

CURRENT APPROACHES

In our recent survey of cities and bike share operators, fewer than one in three systems had specific equity policies or statements, while another 20% had either equity definitions passed down from the city that they used, or had working definitions based on programmatic activity. Large systems of 750 bikes or more were most likely to have equity policies or statements. Equity policies may identify:

- Who currently is excluded from the benefits
 of bike share? Identify specific underserved
 groups, such as low-income individuals or minority
 communities, or neighborhoods with the greatest
 need and/or fewest transportation options.
- What system actions or program elements should be undertaken? A general definition is to focus energy and resources on those experiencing barriers to bike share and listening to needs to eliminate the challenges that exist. Others might be more specific, such as providing reduced-cost passes to income-qualified individuals and a cash option for those unable to pay with a credit card.
- How will you will manage your team? Policies may specify staffing representation and contractor hiring requirements.

- What past injustices and current circumstances necessitate current action?
 Policies may detail reasons why certain residents have been excluded or face a disadvantage, including describing the consequences of the past injustices.
- What end outcomes are sought? Policies
 may specify end goals of equity programming,
 including that bike share should be accessible
 and available to support residents daily lives,
 improve public health, and connect residents to
 services, recreation, community and economic
 opportunities.







In crafting an equity policy or statement, systems must consider tradeoffs between specificity vs. generality, brevity vs. detail, and straightforward vs. aspirational. Specific, detailed and aspirational policies provide the most guidance and set a high bar, while general, brief and straightforward policies may be more digestible, flexible and attainable.



Identify Specific Populations: Depending on the local context, systems may want to name specific equity populations they seek to serve (such as low-income residents, specific populations, etc.) in order to both acknowledge and commit to serving them. General goals such as "serving all residents" leave commitments open-ended, which can reduce accountability.



Build in Accountability: Specific actions, commitments and targets (e.g. signing up "X" members of a target community) provide both direction and accountability, while general approaches and goals (such as "provide a service that is inclusive, accessible, and affordable to all users") can help guide day to day operations and how a system approaches equity programming.



Include Internal Equity: Internal equity policies may cover how the system hires and trains employees and makes programming and other decisions. Regardless of the focus of the statement (internal operations vs external activities), systems choose how public their policies become - are they posted on the website, articulated at public meetings, on kiosks, etc.



Contractual Inclusion of Equity with Partners: Cities should include contractual clauses with vendors addressing equity. They may have existing equity policies that would apply to bike share operators/vendors in their city, or that can be incorporated by the operators into their policy.

RESOURCES

Before crafting an equity statement, get familiar with key information, including:

- Understanding overall trends in bike share usage, including who tends to participate, who is left out, and what the key barriers are.
- Understanding the local context, such as the underserved populations and neighborhoods, and what stakeholders and groups should be engaged in the bike share process.

Recommended reading for developing a policy statement: "Planning for Equity Policy Guide" from the American Planning Association.

Credits for statement examples: Eugene, OR, Des Moines, IA, Memphis, TN, Portland, OR, Pittsburgh, PA, Chicago, IL, Philadelphia, PA, Milwaukee, WI, Boston, MA, New York, NY

MEASURING AND EVALUATING

Equity policies provide the opportunity and responsibility to periodically gauge progress and needs:

- In order to assess progress, cities and operators need to ensure that system data is available, including anonymized data for agencies or research. Policies and/or resulting programs should establish data practices that allow them to analyse trips or memberships in zip codes facing economic hardship.
- Establish regular (every 6 or 12 months) checkins with staff, stakeholders or boards to assess progress around the equity policy goals and targets. Specific targets make it easier to assess progress, and harder to equivocate on successes or failures.process.
- Equity policies and goals should be reflected in line items on program budgets. Budget expenditure change over time on equity programming could be a metric.



Adequate, ongoing funding is at or near the top of the list of necessary resources for bike share equity programs. Funding may be needed to subsidize riders or memberships, purchase equipment, hire staff, support community partner organizations, fund marketing campaigns, and more. Many bike share systems are struggling to find revenue sources to cover both their capital and operating costs. Further, permits and contracts can be for short periods of a year or less, making it challenging to seek funding and implement initiatives. Equity programs are rarely, if ever, viewed as driving revenue. Cities and systems are more often looking to municipal funding allocations or grant-based funding, both of which are often time- limited. As bike share programs mature, systems will need to grapple with how to secure ongoing funding streams for equity work.

CURRENT APPROACHES

In our survey of cities and operators running bike share systems, funding challenges were identified as a top concern and barrier for bike share equity programming. Knowing how to fund equity work, having a consistent stream of funding, and having funded equity-dedicated staff were all challenges that we heard.

Grants and foundations were the most common sources of funding, especially for small and mid-sized systems, but these sources were also generally less than \$100,000 and limited in duration (mostly one to two years). This limited and insecure nature of equity funding leaves systems with a few challenging options: either figure out how to incorporate equity programming into their operating budgets, seek new sources of external funding, or scale back programming.

| FUNDING SOURCE FOR BIKE SHARE EQUITY PROGRAMS | 0-149 bikes | 150-349 bikes | 350-749 bikes | 750+ bikes | # of Programs |
|---|----------------|------------------|------------------|---------------|------------------|
| City or municipality | | | 29% | 25% | 12 |
| Operator | | 27% | | 4% | 5 |
| Community partner | | | | 7% | 2 |
| Sponsor | 33% | 7% | | 11% | 6 |
| Grant/foundation | 17% | 40% | 53% | 32% | 25 |
| Combination | 50% | 27% | 18% | 21% | 16 |
| # of Programs | 6 | 15 | 17 | 28 | 66 |

Funding sources for bike share equity work, by system size

Grant and foundation funding were primary funding source for 51% of education programs, 48% of marketing and information programs, 43% of mixed fleet (electric or adaptive) programs, 41% of station siting programming, 40% of transit integration programming, and 34% of payment and fees programming. Cities were frequent funders of mixed fleet option programs (43%). Other primary funding sources for these program types were generally combinations of funding sources.

Since 2015, the Better Bike Share Partnership has provided over 30 grants to fund equity work, ranging from several thousand to \$75,000 per grant. Other foundations, system sponsors, cities, MPOs, transit agencies and system operators are also funding equity programs.







EXAMPLES OF CURRENT APPROACHES TO FUNDING EQUITY WORK

Identify new funding sources: In Ithaca, the bike advocacy organization Bike Walk Tompkins applied for a grant through the New York State Energy Research and Development Authority (NYSERDA), and infused equity work (discounts, outreach, education and more) into the overall grant that brought bike share to Ithaca. Other systems have used funds from the Transportation Alternatives Program (TAP), Congestion Mitigation and Air Quality (CMAQ) funding, the National Aging and Disability Transportation Center (NADTC), as well as grants from foundations, sponsors, private donors, along with donated time from operators and transportation agencies.

Get innovative: BIKETOWN in Portland, Oregon initiated a program to allow and encourage members to donate credits collected through returned bikes to select stations (or from outside station areas), and have that credit go toward "BIKETOWN for All" participants' first month in the system. In the first year of the program, over 300 members had their first month paid for. In New York City, Citi Bike partnered with a sponsor, Healthfirst, to scale up their equity efforts and offer discounted memberships citywide.

Plan for the long term: Red Bike in Cincinnati received a two-year grant from Interact for Health, a regional health-focused foundation, to cover half the salary of an education and outreach manager, along with a program budget for printing, events, and ambassador support. Red Bike intends on absorbing the equity program into the operating budget going forward, while continuing to seek sponsor funding to support the equity activities.

CONSIDERATIONS



While we identified a broad spectrum of potential sources for funding equity programming in our survey of systems and operators, we also found that many systems had to explore multiple options, combine sources, and think creatively. Even then, most had trouble identifying ongoing funding.



Weigh cost-savings from reducing spending on ambassadors and community partners against the potential value of having consistent knowledgable ambassadors on-staff (compared to seasonal ambassadors paid a small stipend, possibly with high turnover year to year) and having community partners dedicating staff time to promoting bike share (even enthusiastic community partners may not have the capacity to be effective bike share supporters without a budget for staff time).

RESOURCES

- Systems should transition from grants or single time cost allocations to ongoing expenditures for equity programming.
- Cities should require private operators to support equity programming as part of their contracts, incorporating it into the operating costs of the system. Cities could consider matching those funds to further expand equity programming.
- Additional Reading: FHWA's Pedestrian and Bicycle Funding Opportunities details U.S. DOT funding streams that can be used for various purposes, including for bike share.

MEASURING AND EVALUATING

Efforts to measure the effectiveness of equity programming and funding should consider the system's equity goals and metrics, along with considering the long term effects of equity work. Both quantitative and qualitative measures can be important to show the effectiveness of the additional funding, such as outreach or a discount program.

"When we asked system operators how they would spend a hypothetical \$100,000 on equity work, smaller systems allocated more to subsidize memberships costs, while larger systems were more likely to focus on education and helping people sign up."





Running an equitable bike share system starts with equitable practices at the hiring stage and in ongoing training of staff. Many operators have made explicit commitments to hiring a diverse workforce. One element of this commitment is providing training and employment opportunities to individuals from lower-income and disadvantaged communities.

CURRENT APPROACHES

Only about a quarter of systems surveyed viewed hiring and training as a specific equity program. Equitable practices were noted for hiring diverse workforces, providing pathways to skilled employment and training for underserved workforces were shared by system operators. These include hitting specific target percentages of employees from diverse and disadvantaged backgrounds, along with hiring bilingual staff. To reach diverse communities, systems reached out to community partner organizations for assistance in recruiting staff and sharing job openings. Some examples highlighted in our recent report on bike share equity:

Recruitment for the job: Some operators make explicit commitments to hiring a diverse workforce. The High Road Hiring program (BIKETOWN, Portland, OR) targets low-income groups and people from other disadvantaged and/or nontraditional bike industry backgrounds to work for BIKETOWN. The program collaborates with partner organizations to recruit employees from diverse and disadvantaged backgrounds with specific target percentage goals.

Training for the job: Equity hiring practices include encouraging individuals from lower-income and disadvantaged communities to learn bike repair and maintenance skills. Bublr (Milwaukee, WI) partnered with the Boys & Girls Club of Greater Milwaukee and DreamBikes, a non-profit bike shop, to teach local teens how to fix and maintain bikes. After six months of learning from mechanics and bike shop operators, participants can be placed in paid internships, work toward the Bike Tech Certification Exam, and possibly gain seasonal employment with Bublr.



(Photo Credit: Bublr Bikes) Through multiple partnerships, Bublr Bikes hosts a B3 Workforce Development Program which provides young adults a 24-week course in bike repair to expand their skill sets and career opportunities.









One of the best ways to serve a diverse community is to have **a workforce that reflects that diversity**. Starting with hiring, systems should work to ensure that their hiring processes are not unnecessarily restrictive or excluding candidates.



Once in the workforce, there should be **opportunities for professional growth and enrichment**, including ensuring that diversity extends to all levels of the organization (e.g including leadership / management).



Partner with other organizations and community partners to better understand how to conduct outreach with targeted groups and train staff to be responsive to various rider needs. For example, MoGo (Detroit, MI) partnered with Programs to Educate All Cyclists to lead trainings on how to best promote the Adaptive MoGo program to people who are not physically able to ride a standard MoGo bike, along with how to best support Adaptive MoGo riders.



Use weekly meetings to discuss barriers and brainstorm approaches to addressing community needs.



Policies should be in place to ensure that **contracted services promote diversity** as well, including promoting Minority and Woman Business Enterprises, local and community-based businesses, along with hiring from within the community and meeting diversity goals

Many systems promote job opportunities to youth and individuals who live in the neighborhoods they are trying to reach. One respondent mentioned the importance of hiring a team of Latinx residents to manage and operate the program. This commitment gave that community a feeling of ownership and connection to the system. Others mentioned how ambassador programs provided youth job opportunities that gave them work skills and built pride and esteem.

RESOURCES

Workforce Diversity Toolkit - The North American Bikeshare Association (NABSA), partnered with the Better Bike Share Partnership (BBSP), to produce this 2019 toolkit that provides guidance on creating diverse workforces through hiring, supporting diversity in the workplace, and community partnerships.

<u>Sample Job Descriptions/postings</u> - Compiled by BBSP, these can help systems attract a diverse candidate pool.

MEASURING AND EVALUATING

In addition to creating opportunities for employees to provide input and feedback, systems can use metrics to assess the progress of hiring and training programs:

- # of positions held or hours worked by employees reflecting demographic diversity and a practice to hire from a diverse pool of candidates; representativeness of staff to the community being served.
- % of employees trained on implicit bias, antiracism, cultural competency, etc.



Marketing is an important tool in sharing the existence, benefits and details of bike share equity programs, such as available discounts. This is especially important to bringing in new users. How do you get the word out about your system, communicate that it is fun and useful, and do so in a way that connects meaningfully with the community members you are trying to reach? A successful marketing campaign understands where people are at - both in terms of their information and views on bike share, as well as how and where they get their information.

CURRENT APPROACHES

In our recent survey of cities and bike share operators, half of the systems with equity programming had a program with a primary focus on marketing. Their marketing campaigns used a variety of mediums, including social media, press releases, billboards, bus-stop displays and bike station panels, flyers and promotional materials for ambassadors and community partners to distribute, emails and more.

Reach riders where they are: Bike station kiosks are the first place many people learn about bike share. All the information people need to get started, including equity program information, should be featured there. Bike share systems have also advertised elsewhere around the neighborhood and city landscape, including bus stop shelters and on transit.

Connect in person: A lot of marketing of equity programs happen in-person, such as when bike share ambassadors or other representatives present in the community, table at events, etc.

Get creative online: Social media is a common approach, direct from the bike share system and partners, but also through organic avenues to create buzz. A recent example is creating unique bike frame designs applied to only a limited number of bikes, and encouraging people to seek out these "unicorns" in the system. Often, these "unicorn" bikes are part of a series of unique designs, which can be used to highlight particular neighborhoods, communities, cultural histories, and more.



(Photo Credit Nathan McNeil) Indego's "Faces of Indego" campaign highlighted their ambassadors.









Don't discount the value of traditional media, including stories in local news. Our prior research* found that people of color were less likely to learn about bike share from online sources, but were more likely to learn about it from television or radio.



Marketing can help overcome key information gaps. Lower-income individuals and people of color may be less likely to have friends or family that have used bike share*. Social connections are an important way for people to discover bike share and envision themselves using it. Marketing and programming will have to do more to engage these communities and to make bike share a viable option for transportation and/or recreation.



People need to see themselves in promotional materials. Whether or not it's the explicit objective of the marketing campaign, promotional materials need to convey to people that bike share is for them. The people featured in the materials should be representative and inclusive of the community you're focused on reaching. The material should be in a language that the community understands. Materials can also be targeted to the specific needs or use scenarios- for example explaining how bike share could help people with limited transit options make first and last mile connections to transit stops.



Once might not be enough. The concept of "effective frequency" in marketing suggests that people need to hear about an idea or product more than once before they really start to consider taking action. To get the message across, someone might need to see a billboard, talk to someone at a community event, and then hear a news story about bike share before they give it a try.

Many bike share operators couple their equity programs with targeted marketing and public outreach to increase awareness. Information isn't enough. The marketing should also offer motivation and confidence for people to see themselves using bike share. As one system representative put it: "Marketing is key! What good is a program that no one knows about?"

RESOURCES

NACTO's Strategies for Engaging Community report offers ways to advance community-oriented mobility goals. While the entire report is recommended reading, section three is focused on increasing awareness and community support for bike share.

*Breaking Barriers to Bike Share: Insights from Residents of Traditionally Underserved Neighborhoods is a report released by members of this research team back in 2017.

MEASURING AND EVALUATING

Metrics that speak to simple engagement (e.g. number of views, clicks, etc.) can be useful if paired with outcomes. Which marketing efforts result in more people signing up and more use of the system (particularly for equity target members)?

- Analytics on social media campaigns
- Tracking promo code redemption rates
- Surveying users on their information source or reason to join / ride; perception of messaging and the equity program.
- Holding focus groups on how people perceived messaging.
- # of enrollees by language (particularly for in person sign-ups or via non-English language web page or click-through source).



Well-considered data metrics should enable bike share operators to identify equity gaps and to support program evaluation, including what is working, what isn't, and why. However, common sources of data for many systems, periodic member surveys and usage data, may not be enough to measure progress toward equity goals. Challenges include finding staff or partners with the skills to collect and analyze data, and paying for evaluation given already limited funding. The limited duration of most equity programming makes it hard to gather consistent data over time, but that's often what is needed to better measure equity outcomes.

CURRENT APPROACHES

About 61% of the equity efforts described in a recent survey of cities and operators included at least some data collection component. For certain popular program types, though, data collection was absent or too limited to provide much guidance – only 34% of marketing campaigns and 39% of ambassador programs included any data gathering effort. Many programs reported collecting only simple frequency data--number of events, stations, sign ups, trips, etc.—lacking the capability to translate into adequate program effectiveness measures. While a number of systems indicated using qualitative feedback (stories, examples, etc.) to gauge program effectiveness, they often do not have systems in place to collect that data in any regular or systematic way.

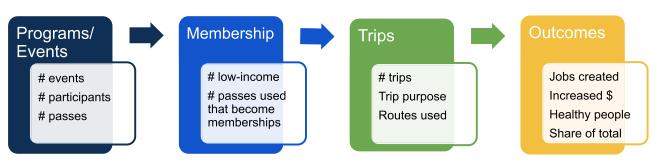
Setting measurable goals up front -- either overarching equity goals or program-specific -- is key to identifying specific data and analysis needs. Data and metrics

should make it possible to tell the story of how a program or policy connects to specific equity goals and outcomes. To do so, different categories of data need to link -- to each other and to the people and groups that benefit.

Privately-provided dockless bikeshare is changing the landscape of equity programming and data collection in a number of ways. Such systems tend to generate a lot of data about the bikes but little about the people using them. Agencies that can anticipate data needs to support equity analysis up front will be at an advantage. One option is to set data-driven goals for private providers to meet and regularly report on.

"We know how many people are opting for this option, but we don't know how many of those people are low-income vs. simply prefer the monthly installment option." -CoGo (Columbus, OH)

CREATING DATA STORIES









Identifying suitable metrics and choosing a data collection approach should be integral parts of an equity program or strategy. Without careful consideration, it is easy to realize halfway through a program that there is no system in place to collect vital information, or at the end of the year discover that the data collected does not provide any measures that demonstrate program effectiveness. A few questions to keep in mind:

- Do we have technical capacity to access and use the data?
 - Does trip data provided by vendors have the right information to measure our goals?
 - Will we be able to link specific people or groups to program participation or bike share use?
 - Will confounding factors like system expansion or neighborhood change make it hard to make comparisons before and after our program?
 - Are some user groups or use types missing: casual (non-member) users? adaptive bikes?
 - Could targeted intercept or residential surveys help us measure specific program impacts or reach groups otherwise left out?
 - How are we addressing privacy concerns around user data?

Ensure that data collection itself doesn't become an obstacle to program participation. Some respondents use short, optional surveys for those enrolling as part of an equity program. MoGo bike share (Detroit) sent a survey link via text message so that new discount pass members could complete an intake survey at their convenience instead of slowing down sign up. In addition to initial information, several agencies noted the importance of tracking how membership and use evolves over time with follow up data collection and analysis.

"We can get subscription metrics from the bikeshare operator, but there is limited demographic information to evaluate this from an equity perspective." —UH Bikes (Cleveland)

RESOURCES

Data collection and analysis can require additional funding and technical skill, and many operators leverage local expertise via university partnerships. Indego (Philadelphia) partnered with Temple University to conduct equity panels and surveys. Divvy (Chicago) and Zyp (Birmingham) worked with local universities to conduct equity analyses.

An emerging option worth exploring is providing open bike share data to encourage others to conduct analyses. Agencies would need to strike a balance between providing enough user information to support equity analysis while protecting user privacy.

"Of those who activated their free DDOTxMoGo pass, we saw much higher ridership rates than the average MoGo rider."

—Mogo (Detroit)

MEASURING AND EVALUATING

Agencies should consider evaluating data collection and metrics themselves in terms of their usefulness and impact. How did they work? Were the data collected able to answer key program questions including program delivery and equity outcomes? Did data and metrics inform future program decisions? Which metrics seem worth maintaining over time to capture longer-term trends for specific groups or programs? Of the system as a whole? Potential data points and metrics (see pgs. 87-88 in the full report):

- user surveys;
- membership data;
- trip data:
- outreach, education and events;
- bike data;
- payment, revenue and renewal;
- station and location data;
- community surveys;
- focus groups and interviews;
- and, employees and internal operations.





Community partnerships help cities to bridge gaps between bike share equity programs and the communities that they're seeking to serve. Partners play many roles: from guiding initial equity program development, to organizing community connections, and on through program delivery and assessment. Community-based Organizations (CBOs) and local advocacy groups may have the staff, programs, local presence, and deep understanding of specific communities that bike share programs often lack. Collaborations and partnerships require nurturing and investment, but provide unique opportunities for bike share systems to make meaningful connections with communities and residents.

CURRENT APPROACHES

In our recent survey of cities and operators running bike share systems, 78% of bike share equity programs included at least one outside partner, and over half included more than one. CBOs and local advocacy groups are most common, but private companies, system sponsors, and foundations are also collaborators. Partners support all phases of programming, but most often take a lead in promotion, sign-up, and bike education.

Community Outreach: In the simplest case, a community partner can offer bike share sign ups (often at a discounted rate) at their own sites or via existing programming. For example, Divvy (Chicago) teamed up with Local Initiatives Support Corporation (LISC) to offer discounted cash memberships in person at their Financial Opportunity Centers around the city. In other cases, community partners may serve as ambassadors for bike share, promoting and supporting community members to join and use the system. Capital Bikeshare (DC)'s Community Partners Program relied on a network of over 30 different partners to link their need-based clientele with discounted memberships. Others took it a step further with partners co-developing equity programs. MoGo Detroit offered competitive minigrants to local organizations to develop innovative promotion and sign up ideas through their Mobility and Opportunity Task Force program. WE-Cycle (Basalt/Aspen, CO) worked with multiple CBOs to develop effective programming for local Latinx populations in creating Movimiento en Bici.

Bike Education: Typically led by local bicycle advocacy groups, these programs leverage existing bicycle education work to help those needing a little extra training to get comfortable trying out bike share. Programming may simply be group rides that incorporate promotional use of bike share, while others may include training on bicycling and how to use bike share. Relay Bike Share (Atlanta) organized a multi-partner training and promotion team for its Westside Atlanta Bike Champions program including local bicycle-focused advocacy and community groups Atlanta Bicycle Coalition; Red, Green, and Bike; WeCycle. Adaptive bike share is a specific area where specialized expertise may be essential. MoGo Detroit worked with Programs to Educate All Cyclists (PEAC) to develop and implement their adaptive bike program.









Plan for ongoing management and support. Partnerships place additional management and other burdens on both the bike share program and the community partner. Agencies often cited challenges with adequately supporting their partners, especially where specific funding is absent or limited. Agencies might also have to broker coordination between community partners and the bike share operator.



Don't spread yourself too thin. Engaging a broad range of partners may seem great on paper, but adapting to multiple partner programming and working styles can be challenging.



Understand how bike share fits your partner's core mission. Is biking part of their core mission, or are they more about serving the specific community/population/neighborhood?



Don't overlook the basics. A significant barrier to bike share use in underserved communities is simply not knowing about the bike share system, who it's for, and how to use it. This gap is compounded by members of these communities also lacking friends and family that have used the system. Community-based groups can help to fill the information void in a way that acknowledges local context.



Support your CBO partners with more than appreciation. Show that you value the expertise and relationships that community partners are bringing to the table with a cash grant or stipend.

Promise and Pitfalls of Partnerships - Insight from the report:

When asked about notable equity accomplishments, many of the systems we surveyed mentioned building trust in communities through successful partnerships. The partnerships also raised awareness with partner organizations about the role biking can play in providing transportation to people who use their services. However, managing the process of engagement and community relationships has been a challenge for some systems. Some systems mentioned the importance of managing expectations with partners and building relationships with organizations that are aligned with the mission of bike share. Lack of long term funding and staff turnover, particularly among ambassadors, can make managing relationships more challenging.

RESOURCES

Here are some key resources to support the development of your community partnerships:

- <u>Strategies for Engaging Community</u> NACTO (see pgs 44-45)
- Bringing Equitable Bike Share to Bed-Stuy -Bedford Stuyvesant Restoration Corporation
- Partnering with Community-Based Organizations for More Broad-Based Public Engagement -Institute for Local Government (ILG)

MEASURING AND EVALUATING

Coordination with partners doesn't stop at program delivery. Agencies also need to clarify who will measure and evaluate equity initiatives and their outcomes. Bike share may be new to partners, even if they're used to program evaluation. Beyond simply noting what and how to measure, partners should be informed why they are collecting each piece of data and how it will be used. For more on this topic, see our companion brief in this series: Data Collection and Metrics for bike share equity programs.





Technology-enabled new mobility options such as e-scooter and bike sharing, along with online/mobile information, reservation and payment platforms, are transforming how people conceptualize and navigate cities. Technology offers the potential of expanding connections to jobs, education and social opportunities on an efficient on-demand basis. This potential could be most valuable to those who may have fewer transportation options currently, including lower-income residents, immigrants and communities of color. However, that same technology has pitfalls and can create new barriers. Knowledge of available options and how to access them, having a smartphone and cell service, and being able to pay for services are among key barriers that could prevent these communities from participating in bike share and maximizing the value of new mobility options and services.

CURRENT APPROACHES

Because of the premise of having a smartphone to locate and unlock a bike and a credit card to pay for a rental, bike share operators face the issue on how to serve unbanked or underbanked users who don't own a smartphone. Some bike share operators provide opportunities to pay with cash and check out bikes via text messaging services and codes or smart cards. In our recent survey of bike share systems, around a third of the systems had alternative payment options, which most felt was very effective.

Alternative payments: For some systems, cash payment programs are only available to low-income or other equity program members. Others will allow anyone to pay with cash. Some systems rely on a central bike share office or community center to collect cash payments. The more common approach is to go through a vendor network such as PayNearMe that accepts a cash payment and credits it to a user's account. Online payment systems, such as PayPal, were also mentioned as alternatives to credit or debit card payments. Lastly, a handful of systems waive the first month's fee so members can start riding or put down a cash deposit in lieu of a credit card number, which can be refunded in the future.

Smartphone barriers: Dockless bike share systems may require mobile technology for use. Even when not required, smartphones are often important in locating and unlocking bikes. Though smartphone ownership is high, even in lower-income communities, the expense of mobile data plans associated with smartphone use is another barrier to new mobility options for low-income individuals. Golub et al. (2018) found that survey respondents were almost 40% more likely to have canceled cell service because of the costs and limits of their data plan. The lack of knowledge of how to use the system app, locate bikes and use the bicycle network are big barriers for individuals.

"Having those who are unbanked given the opportunity to use bikeshare has been great. The cash payment option is often used as an entry point for users who are nervous about using a credit or debit card online. These users often switch to a digital payment option once trust in the bike share system is established."







Some considerations for addressing technology and payment barriers include:



Provide a non-smartphone bike access option. Potential options are using smart cards or account codes, which could be distributed by local partners and affiliated organizations. Work with the operator to minimize overhead cost. Consider partnering with transit agencies to allow integration into their payment system or cards. There may be a need to maintain bikes in certain locations that are easy to find, such as stations, so people without smartphones can locate bikes when needed.



Accept cash payments. In addition to discounted memberships, it is important to accept cash payments, particularly for unbanked and underbanked users. The PayNearMe program is an example of a program where individuals have widespread access to commercial or public locations that have wideranging operating hours and are easily accessible by public transit. Because users don't have a credit card on file, systems have accepted some of the damage liability as part of operating the system.



Develop a policy for protecting customer privacy. New technology, including smartphone enabled data collection, can help systems deliver better service, but also puts users at risk. A strong and clear privacy policy can help users, particularly those who may be wary of providing personal information, be more comfortable with using the system. This is particularly important for immigrant communities where concerns of privacy are of high importance.

RESOURCES

Several survey respondents shared their need for education and resources on topics like organizational needs to better understand how to get software to facilitate their programming, including offering discounts, payments, and verification.

Some resources for understanding this population:

<u>Federal Deposit Insurance Corporation (FDIC)</u> (2018). 2017 National Survey of Unbanked and Underbanked Households

<u>Pew Research Center (Pew) (2015) The Smartphone</u> Difference

Cover Photo Credit: Alyson West

¹ Golub, A., Serritella, M., Satterfield, V., & Singh, J. (2018). Community-based assessment of smart transportation needs in the City of Portland, NITC-RR1163. Portland, OR: Transportation Research and Education Center (TREC).

MEASURING AND EVALUATING

Evaluating access and payment programs is critical to understanding how to better serve all users. Some ways to develop insights on the barriers facing potential users:

- Work with community partners to survey or conduct focus groups of non-users about barriers to using the system.
- Survey users that used cash payment options.
- Track engagement in marketing campaigns about understanding of and access to the system and payment options.

Examples of metrics to track:

- # of sign-ups by payment type; location of signups
- # of rides by cash payers; location of rides by payment type (within target neighborhoods)
- Ride characteristics ride duration; overage fees; etc.
- % of cash payers switching to credit payment (over time).





For bike share systems, transportation integration means improving connections to and with existing public transportation, making bike-to-transit trips easier and reducing barriers to utilizing either system. Transit integration can range from simply siting stations near existing transit stops to creating an integrated payment system. Communities of color tend to be more transit dependent but live in areas with less reliable and frequent service. The goal of transit integration is to expedite transit and bike share transfers and expand the reach of service without a "double payment" for a single trip. Integration facilitates equitable access by consolidating payment methods, easing first and last mile journeys, and facilitating greater overall connectivity among modes.

CURRENT APPROACHES

In our national survey of cities and bike share operators, integrating transit was a major component of equity programming for about a third of the systems. Current approaches include:

- integrated payment systems,
- free transfers between bike share and transit,
- utilizing the same transit passes across systems,
- integrating reduced-fare programs and eligibility,
- and placing bike share stations and bike racks at public transportation stops.

A common way bike share systems integrate transit is by siting stations near existing transit stops (bus, light rail, etc.), which many systems may do without considering it an equity program. Users have direct access to either transfer from bike to transit or transit to bike and continue to their final destination. Going further, some cities are specifically looking at transit lines used by low-income or targeted populations to enhance service and connections. For example, WE-cycle connects the towns of Basalt and Aspen, CO by providing access to bike share as a link between transit, employment centers, neighborhoods and recreation areas, with particular focus on the local Latinx community.

Another main focus is on enhancing rides through integrating payment systems by linking card access

or otherwise allowing inter-system transfers, or by sharing reduced fare programs. In Pittsburgh, transit riders using a linked Connect Card get a free 15 minute bike ride when they unlock a bike using their transit card. Tugo Bike Share (Tucson) partners with transit agency Sun Tran to integrate eligibility requirements - anyone who already has a Sun Tran Economy Pass is automatically eligible for a \$5 "Tugo for All" annual bike share membership. Other systems are implementing various ways of integrating bike share and transit payment, branding, and information. These include the introduction of unlimited bus and bike share passes (e.g. RideKC in Kansas City), RFID stickers that enable transit cards to also serve as bike share access cards (e.g. Bublr in Milwaukee), and integrated planning apps that show transit and bike share, along with transit announcements that identify upcoming bike share connections (e.g. Milwaukee County Transit System).

Integrating bike share and public transportation systems aims to address equity issues through lowering barriers to system use through pricing structures, payment methods, easing bike to transit trips for transit captive populations, and facilitating greater connectivity.









Be intentional about equity when integrating bike share with transit: Low-income and underserved communities are often more transit-reliant and stand to gain the most from quick first and last mile connections, but cities and bike share systems need to plan and assess interventions in this area to ensure they are providing improved multimodal services and connections to target populations.



Transfers should be simple and provide value: Bike share could be seen as a competitor or alternative to transit, rather than an extension of public transportation. Why would someone pay for two different transportation modes when they might be able to get by with one? Low-income individuals with limited resources may not try bike share because of the additional cost. Making transfers easy, both logistically and financially, will be necessary to make integration an effective equity approach.



Inter-agency and public-private coordination is essential: Bike share and transit systems are usually owned and operated by different agencies or companies. Payment systems are often incompatible, and coming to an agreement on cost and revenue sharing may be challenging. Looking for easy wins, such as cross-system promotion, station siting, and data-sharing, can start to build the story of integrated bike share and transit mobility in your city while helping to develop working relationships.



Partner with transit advocates: Local transit advocates may be able to inform how transit and bike share can better work together for underserved communities.

RESOURCES

Resources may be needed to integrate payment or verification systems, and both organizations may need to work with vendors to evaluate options. For example, where bike share and transit systems run on different software, updates and/or changes may be needed to create a single and consistent fare that works with both modes of transportation. In other cases, space at transit stops may need to be provided in order to place bike share stations or racks. Bike share systems could co-brand their bikes and/ or stations with the transit agency's name (where a sponsor could otherwise put its name at a cost) at no cost to the transit agency.

Many of the barriers to using bike share and transit are shared, particularly as both move toward more app-based systems for payment and information. Implementing solutions for people without a smartphone, data plan, or credit card can improve access to both bike share and transit.

MEASURING AND EVALUATING

Tracking shared bike share/transit fare purchases is a practical way of measuring the effectiveness of transit integration. An increase in shorter distance, one-way trips on bike share to and from transit stops would be another way of identifying a successfully integrated system. To ensure that these changes are promoting equity, it would be necessary to distinguish whether those benefiting from the changes belong to a targeted equity population that would have had a harder time accessing either bike share or transit prior to the changes. This may be accomplished through intercept surveys or other observations. Other possible measures include:

- MAP transit service, especially in communities of concern. Highlight bike share station locations that enhance or support transit use.
- **SURVEY** ridership for bike share and transit to understand first/last mile needs and potential usage for bike share.
- TRACK number of trips and distance travelled for transit stops, ridership by people with transit passes, and user demographics.



The rapid roll-out of dockless electric scooter (e-scooter) sharing systems in the past couple of years has marked a major disruption in urban mobility. As of spring 2019, about 10 scooter companies were operating in approximately 70 U.S. cities. E-scooters, electric bicycles (e-bikes) and other new devices offer new mobility options, but they have also raised concerns and issues about how they are being deployed and used in relation to bike share systems, especially related to low-income communities. Over the next few years, as cities and operators determine how these new devices fit into the overall mobility landscape - it is critical that they are intentional in maximizing the benefits of these services for residents with the greatest need and the most barriers.

CURRENT APPROACHES

In our recent national survey of cities and bike share operators, most indicated that it was too early to tell the real impact that e-scooters will have on bike share programs, systems and users. The rollout of e-scooters has changed the business model for docked and dockless bike share, especially privately-owned systems like Lime and JUMP. Many of the approximately 44,000 dockless pedal bikes in the U.S. at the end of 2017 are no longer in operation or have transitioned to e-scooters. Many dockless bike share companies have retooled their fleets to focus primarily on e-scooters.

E-bikes and seated e-scooters are also broadening the micromobility options in some cities, which may complement existing bike share systems and appeal to residents looking to make longer trips, overcome disabilities or physical limitations, and navigate steep terrain. Research has found that lower-income people of color were more likely to perceive distances as being too long to ride on a bike and also more likely to say physical limitations or health issues pose significant barriers to cycling (McNeil et al., 2017). E-bikes, including adaptive ones, are often targeted at people of all abilities and viewed as a means of increasing ridership and access for people not able to ride a standard pedal bike.

Are e-scooters taking ridership from bike share systems? The City of Portland found that only 5% of e-scooter trips replaced a personal bicycle, and most riders were not members of the bike share system BIKETOWN. Nice Ride in Minneapolis estimates that e-scooters took away 10% of bike share trips in 2018. E-scooter use is more likely poaching casual bike share users, which has the potential to impact the bottom line. Erosion of revenue could challenge the business model for public bike share systems. Most operators have kept these systems independent of each other, especially related to low-income discount programs.

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Scooter

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E-bikes and e-scooters have the potential to expand mobility options for underserved residents, but cities will need to ensure they are accessible, affordable, and complement existing bike share offerings.



Pricing: The issue of cost has been raised with systems that have both electric and standard bicycles, where the use of e-bikes can cost an additional \$1-2 per ride or more. Equity fares should be available and priced at comparable rates as the bike share system.



Type of Vehicle: E-bikes and e-scooters enable individuals to travel farther, easier and faster. In addition, seated e-scooters and adaptive bicycles allow a broader range of individuals to travel.



Integration: Services 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.



Permitting: Often the e-scooter companies fall under a separate permitting system. This has created independent systems that have different pricing and user interfaces.



Payment: The ability to access and pay with cash to use dockless vehicles should be made available. Some companies, like Lime, have national programs focused on low-income individuals to reduce the cost of rides and the ability to pay cash through partnerships like PayNearMe.



Access: Often the people that have the least travel options are the ones with the biggest needs, including for recreational purposes. Consider requiring a percentage of level of service in areas of need. Portland, OR requires 15% of its fleet to be deployed daily within neighborhoods that have limited transportation options and have higher percentages of low-income and minority residents.



Education & Outreach: Create educational and outreach programs to explain these new technologies, how and where to use the vehicles in a safe manner. Cities need to work with operators to provide culturally appropriate information and programs.

RESOURCES

Cities will need innovative planning, contracting, permitting, data collection, and revenue models as well as dedicated staff to creatively manage these programs to meet the city's equity goals. Data sharing across the systems is crucial to determining how the different systems are being used and by whom. Cities should work with operators and third-party organizations to create data sharing agreements that will allow cities to track usage and understand how services are supporting equity goals. In addition, cities should work with operators to provide education materials on appropriate use of vehicles.

MEASURING AND EVALUATING

Potential ways to evaluate the integration of bike share and new mobility vehicles include:

- **MAP** all new mobility services and usage data, especially in communities of concern.
- **SURVEY** residents and users to understand the needs, potential usages, mode substitution and barriers of all transportation options. Why do people use or don't use the different vehicles?
- TRACK the number of trips and distance travelled for each service, ridership of people using discount passes/memberships, intercept surveys of riders using both systems.





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-to-point 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.







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.