



# A National Scan of Bike Share Equity Programs: Best Practices and Lessons Learned

*TREC Webinar*

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# *Webinar Outline*

- Background and earlier bike share equity research
- National Scan of Bike Share Equity Programming
- Bike Share Equity Briefs
- Lessons from MoGo Detroit

# ***What we know about bike share equity***

## Past research tells us:

- Bike share stations are less likely to be located nearby for people who are
  - Lower Income
  - African-American or Black
- Bike share users are disproportionately:
  - White or Caucasian
  - Higher income
  - Male
  - Age 25-34
- Even when stations are placed in low-income and minority communities, usage has been low.

# ***Breaking Barriers Research (2015 - 2017)***



## **Breaking Barriers to Bike Share** Insights on Equity

Transportation Research and Education Center (TREC)  
at Portland State University  
National Institute for Transportation  
and Communities (NITC)

- Studied bike share equity programs in Philadelphia, New York and Chicago
- Surveyed
  - Residents in underserved communities (n=1885)
  - Bike share users (n=874)
  - Bike share operators (n=56)

# *Breaking Barriers key findings*

- **Potential:**

- Bike share can fill a mobility gap
  - though viewed more as recreational
- Overall positive views toward bike share
- Interest in using more

- **Barriers:**

- Cost
- Fees and liability
- Insufficient knowledge or misconceptions about how to use
- Traffic safety

# ***Breaking Barriers key findings***

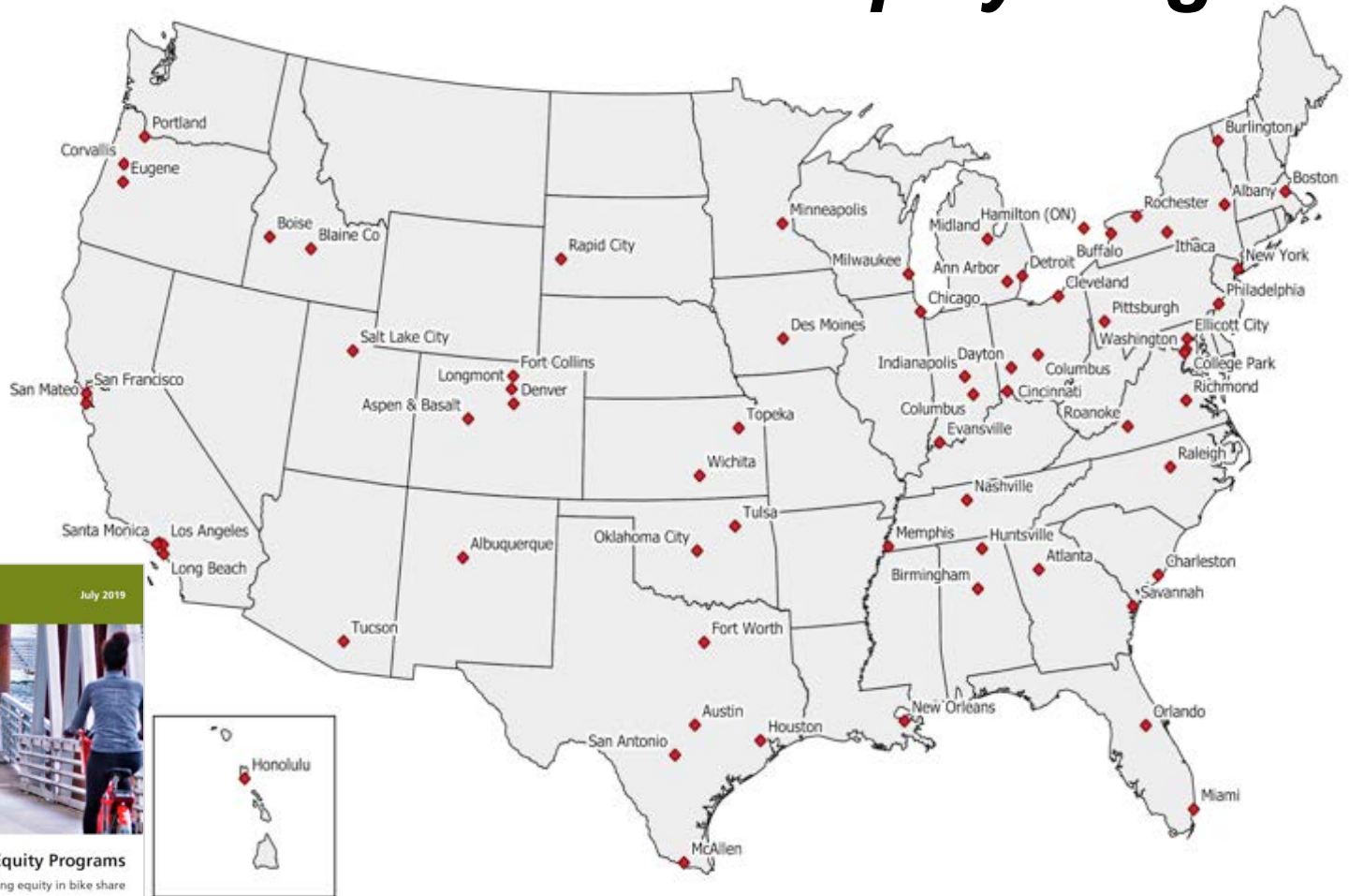
- **Outreach needs:**

- Spreading information about existing programs and discounts
- Combatting misinformation
- Make people familiar with how to use bike share

- **User experiences:**

- Once members, usage by target users is consistent with other users.
- Target users report travel cost savings

# National Scan of Bike Share Equity Programs



## National Scan of Bike Share Equity Programs

Approaches and best practices for promoting equity in bike share

Portland State University  
Nathan McNeil  
John MacArthur  
Joseph Broach  
Austin Cummings

Toole Design  
Rae-Leigh Stark  
Rebecca Sanders  
Adrian Witte

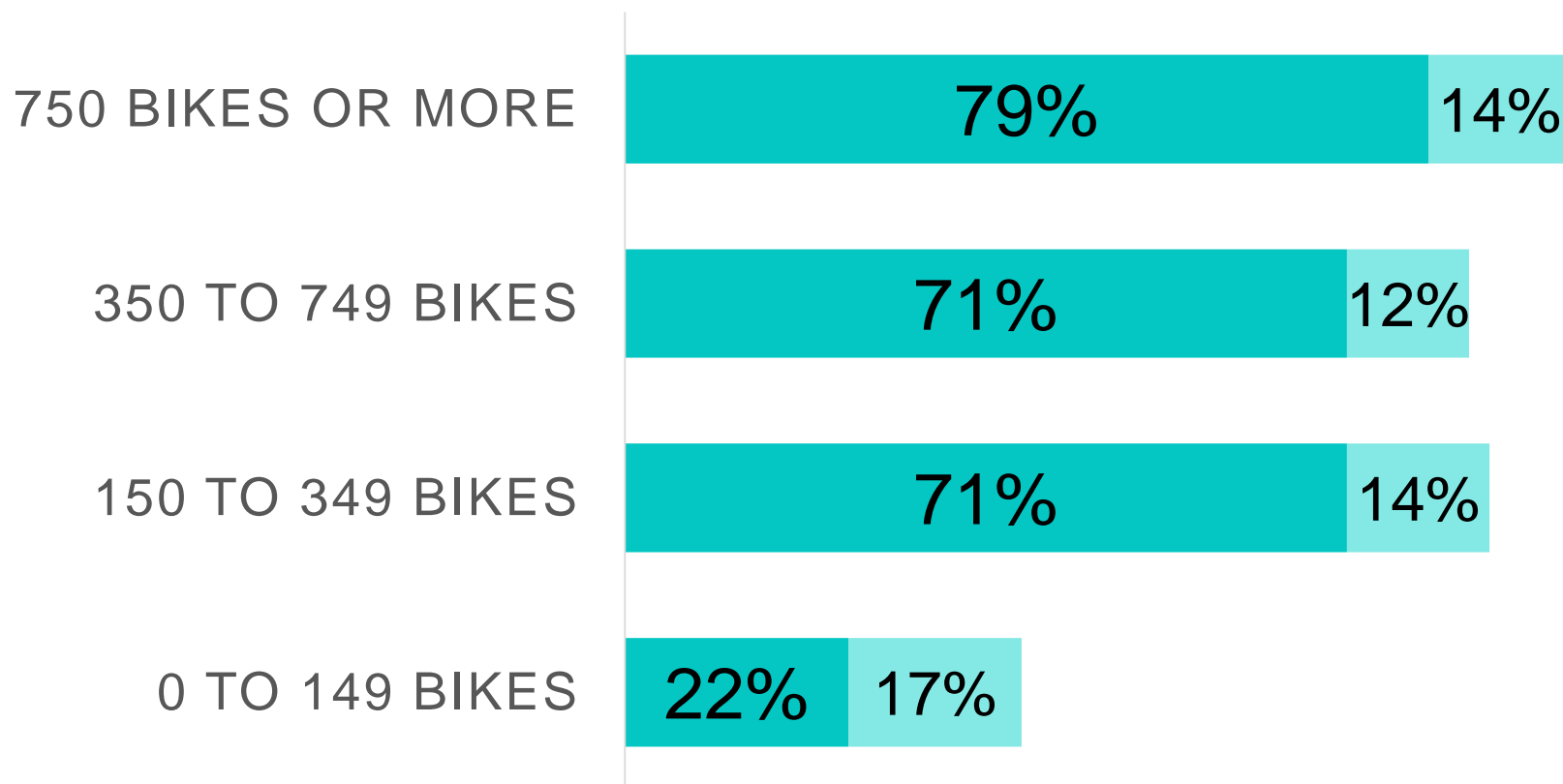


# *Report elements*

- ❖ Defining and articulating equity
- ❖ Equity programming topic areas covered include:
  - Station siting, service areas, and balancing
  - Payment and fees
  - Education or facilitation programs
  - Marketing, information and materials
  - Mixed fleet options
  - Internal operations/workforce
  - Transit integration
- ❖ Equity successes, challenges, and improvements
- ❖ Cases studies

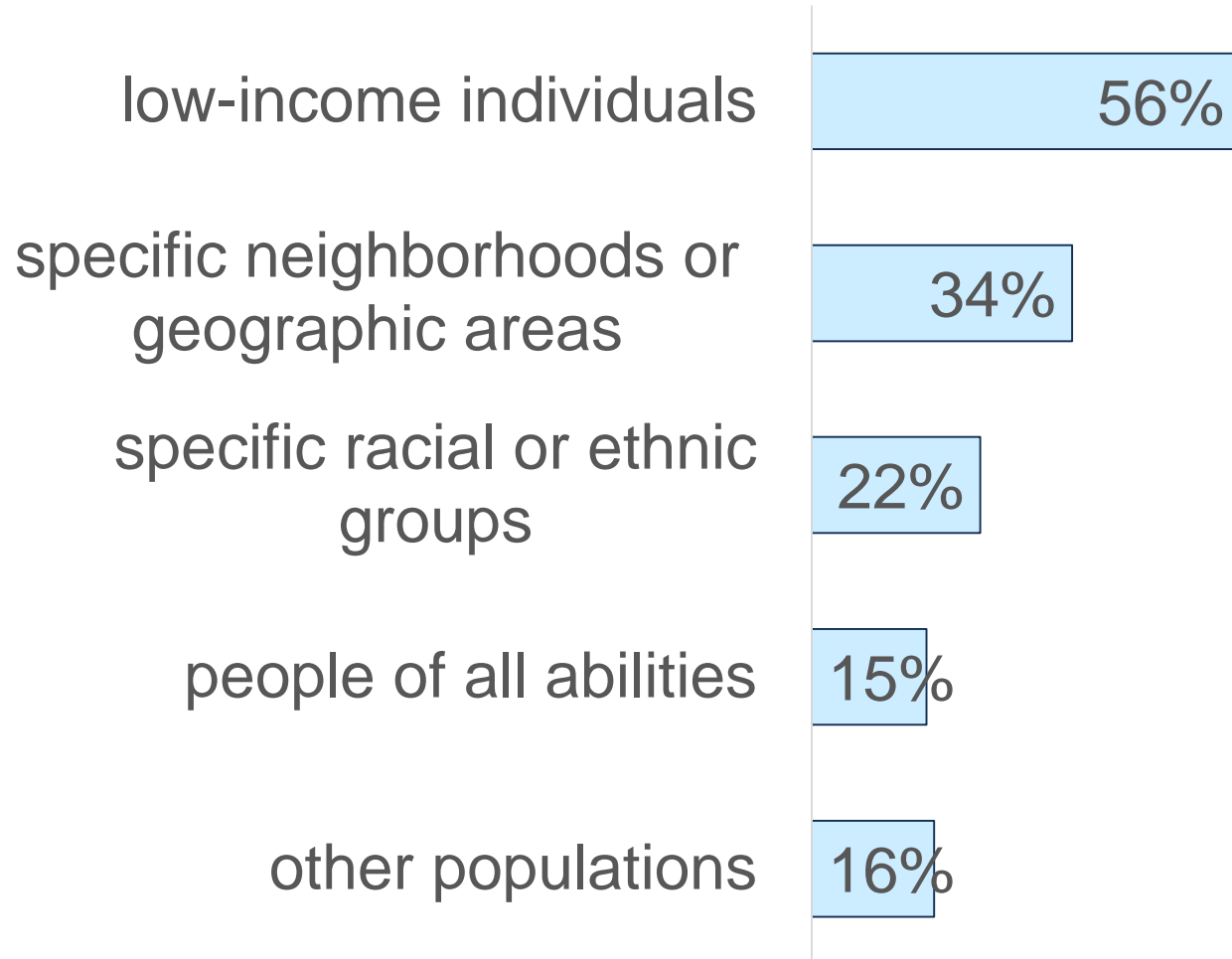


# *Which systems have equity programs?*



- Has specific equity program
- No specific programs, but equity efforts in parts of the system

# *Who are those programs targeting?*



# *More holistic approaches are linked to greater effectiveness*

<b>System size</b>	<b>Average # of programs</b>	<b>Average # of elements per program</b>	<b>Overall effectiveness rating</b>
0-149 bikes	1.1	4.7	6.6 / 10
150-349 bikes	1.8	5.3	6.2 / 10
350-749 bikes	1.8	5.6	7.8 / 10
750+ bikes	3	5.9	7.9 / 10
Total	2	5.5	7.4 / 10

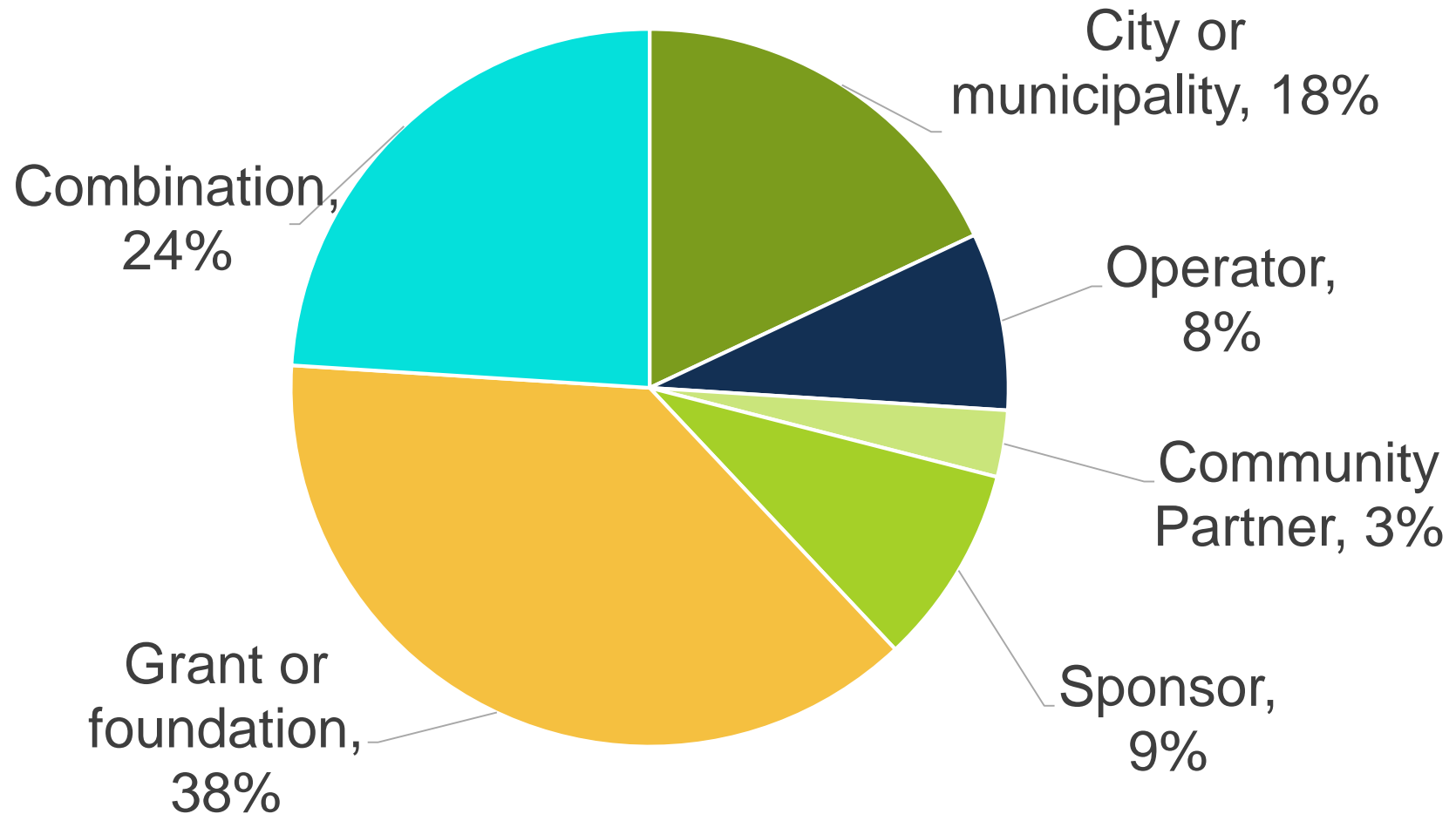
\*Approaches: Station siting, rebalancing; Payment and fees; Education; Marketing; Mixed fleet options; Internal operations; Transit integration

# *Equity Program Costs*

Program Cost	% of Programs
Cost information provided	
\$200k or more	13%
\$50k to \$199k	11%
\$20k to \$49k	12%
up to \$19k	13%
Subtotal	49%
No cost or cost information not provided	
\$0	15%
Unable to specify (staff time, etc.)	11%
No cost information provided	25%
Total	100%

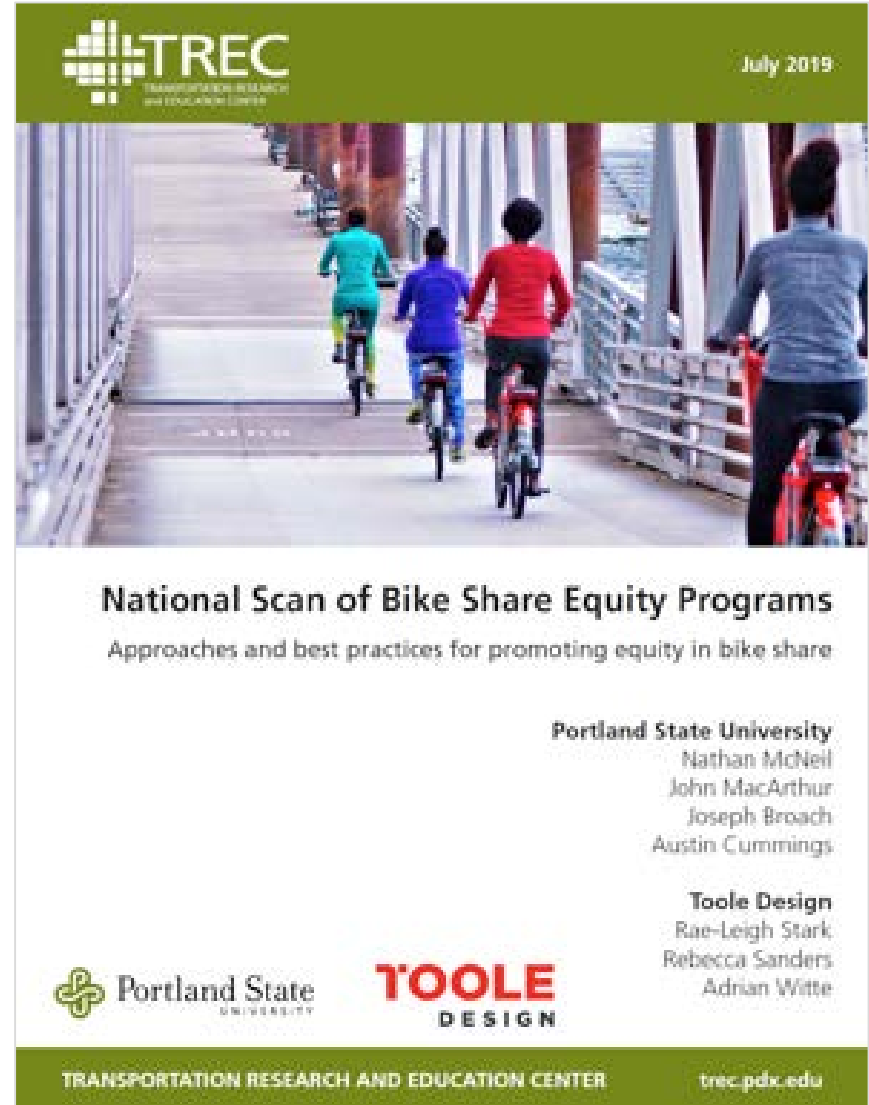
\*Total includes any program for which we were provided information about the cost of the program, or about funding sources

# Equity Program Funding Sources



# *Building off the report*

- 136 pages, including 5 case studies
- Survey findings for all equity programming approaches and elements
- Too much detail for most people!
- Solution: Develop 2-page briefs on key topics



# Brief Topics

- Equity Policies
- Funding Equity Work
- Workforce Development
- Marketing
- Data Collection and Metrics
- Community Partnerships
- Payment and Access Technology
- Integrating Bike Share and Transit
- Emerging Devices in New Mobility
- Adaptive Bike Share



<https://trec.pdx.edu/research/bikeshare>

# 2-Page Briefs – Format

Breaking Barriers to Bike Share

## Adaptive Bike Share

Topics in Bike Share Equity - 10 of 10



### 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<sup>1</sup>. 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 BIKE TOWN 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.

### 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 than 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)

<sup>1</sup> 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.



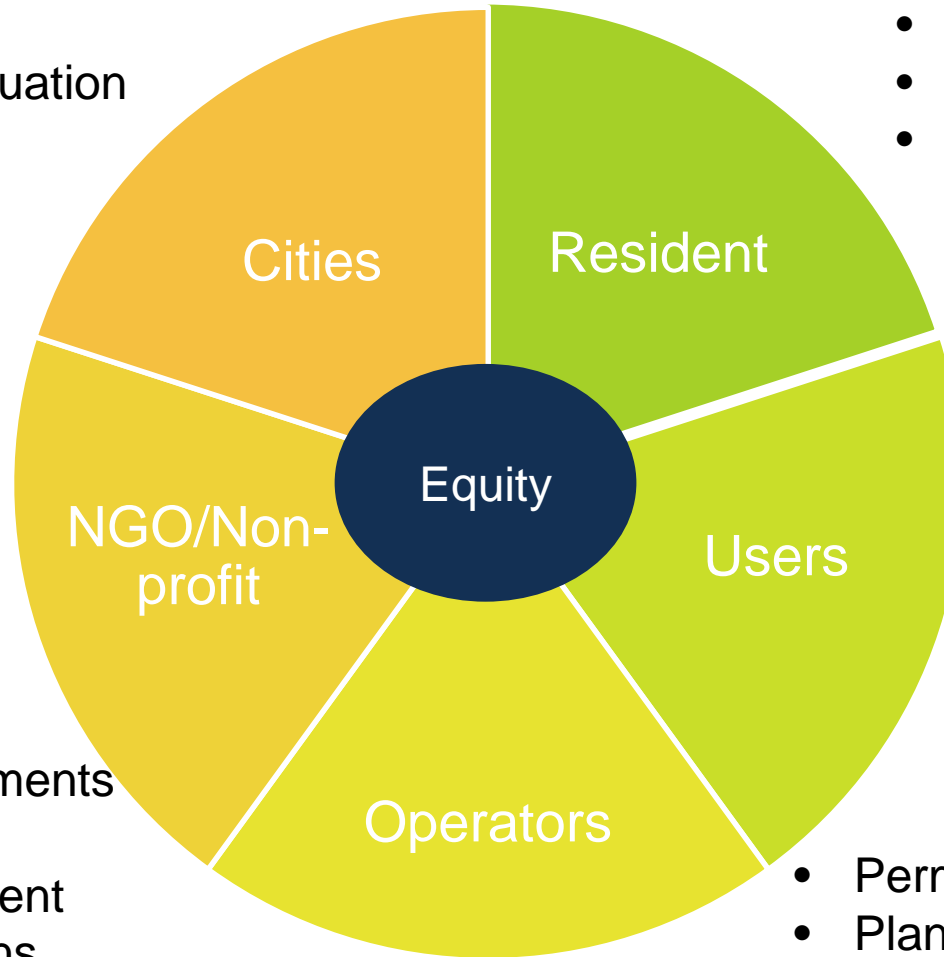
Adapted from the “National Scan of Bike Share Equity Programs” report, this is part of the “Breaking Barriers to Bike Share” resource series. Comprised of ten topics, this series looks at bike share through an equity lens and provides successful approaches and recommendations for stakeholders to implement.



# Achieving Equity Across Partners

- City goals
- Program evaluation
- Enforcement
- Planning
- Funding

- Communication
- Needs
- Feedback



- Use
- Needs
- Feedback

- Contract requirements
- Planning
- Active management
- Internal operations

- Permit requirements
- Planning
- Active management
- Internal operations



# Equity Policies Brief

Articulating a specific policy helps to establish goals, build in accountability and provides an opportunity to assess progress.

- Establishes goal of the program
- Identify targeted specific populations
- Build in accountability
- Include internal operations
- Contractual inclusion of equity with partners

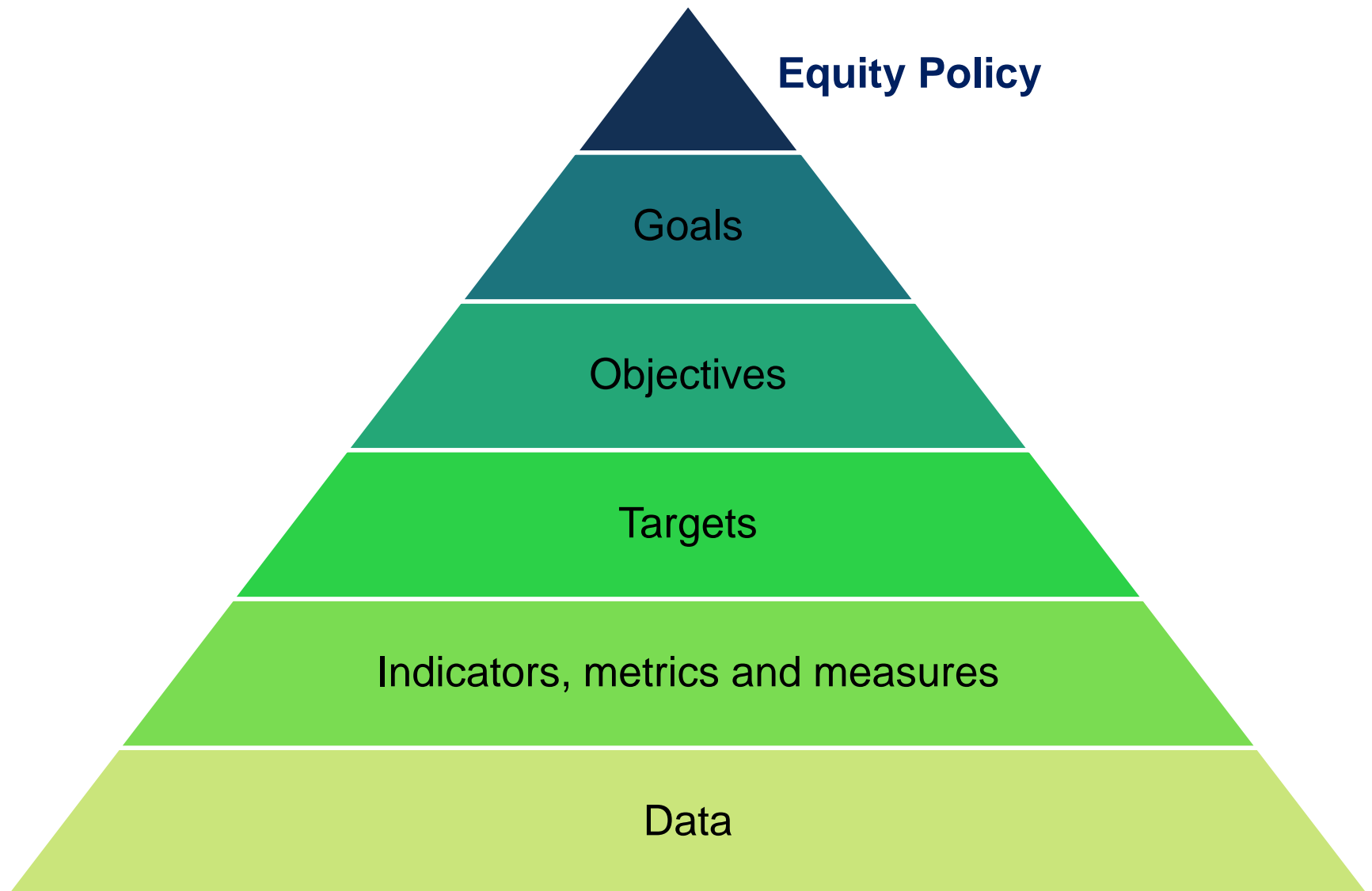


Source: Robert Wood Johnson Foundation

## Tradeoffs:

specificity vs. generality, brevity vs. detail, practical vs aspirational

# *Measuring towards success*





# ***Data Collection & Metrics Brief***

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.

## Common approaches

- Periodic general member surveys – Often not addressing equity programs
- Usage data (trips) and frequency data (# events)
- Data collection limited to simple frequency data--number of events, stations, sign ups, etc.—lacking the capability to translate into adequate program effectiveness measures.
- Many rely on qualitative feedback (stories, examples, etc.) to gauge program effectiveness, but often do not have mechanisms in place to collect that data in any systematic way

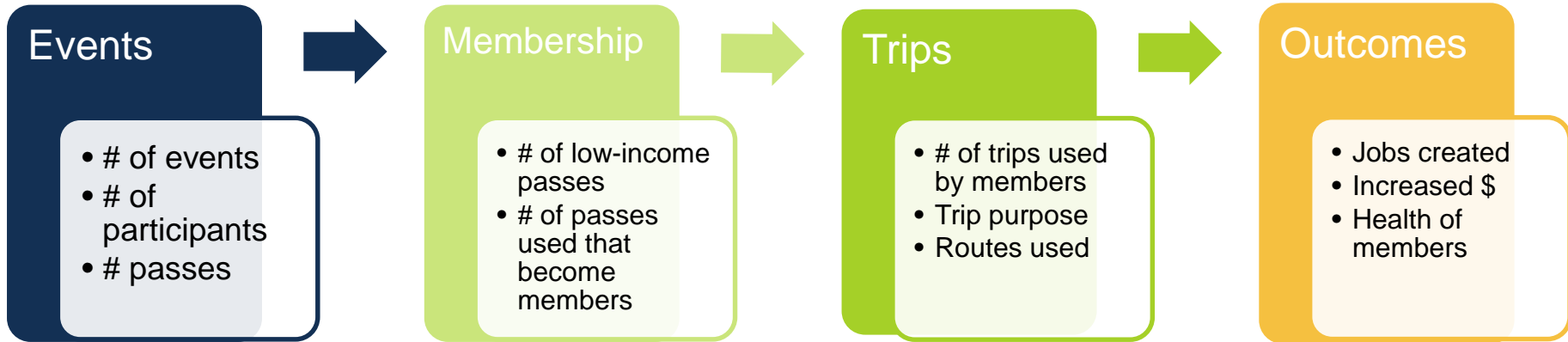
Challenges: inadequate resources, tools, staff, and skills to collect, analyze & evaluate data.

# *Considerations*

- Do you have technical capacity to access and use the data?
- Does trip data provided by vendors have the right information to measure your goals?
- Will you be able to link specific people or groups to program participation or bike share use?
- Could targeted intercept or residential surveys help you measure specific program impacts or reach groups otherwise left out?
- Is the data collected able to answer key program questions including program delivery and equity outcomes?

# Linking Data to People and Outcomes

## Creating Data Stories

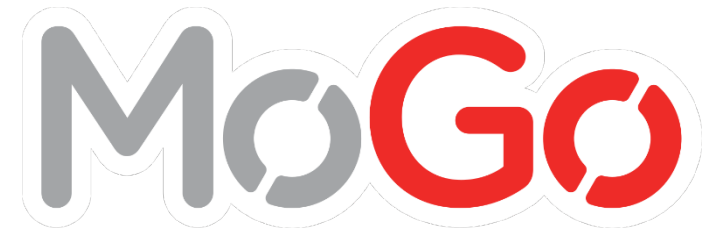


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