Underserved Edges: The Role of Micro-mobility

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Urbanism Next
May 2019
New Mobility Group

Alta Innovation Lab: https://blog.altaplanning.com/alta-innovation-lab/home
TRB Forum on AVs & Shared Mobility

Link to TRB Forum 2018 White Paper: https://altaplanning.com/resource_categories/industry-resources/
TRB Forum Website: http://www.trb.org/TRBAVSMForum/AVSMForum.aspx
“All shared-use fleets of small, full, or partially human-powered vehicles such as bikes, e-bikes, and e-scooters.” - NACTO

Source: NACTO Shared Micromobility in the U.S.: 2018
Multimodal Private Sector

Expanding the Suite

2018+
NACTO Shared Micromobility in the US: 2018

84 Million Trips on Shared Micromobility in 2018

- Scooter share
- Dockless bike share
- Station-based bike share

Source: NACTO
Expanded Choice
Expanded Choice – for whom?
Equity in Bike Share

Among cities with station-based bike share systems, 32% have an income-based discount program, ... a 33% increase since 2016.

Equity in Bike Share

A large majority of survey respondents said... eligibility for a discounted membership was very important to their decision to get a bike share membership.

Equity in Bike Share

Is not knowing enough about bike share a barrier?

• 34% of low-income people of color
• 19% of higher income people of color
• 7% of higher income white people.

Other concerns among people of color:
- Traffic safety
- Personal safety
- Liability and hidden fees

Equity in Bike Share

City Lab research shows that affordability and other equity improvements cannot make up for lack of geographic access.

Shifts in Micromobility

Seattle (2017): 30 percent of the city’s population tried dockless bike share, a percentage which is roughly the same across the city’s largest racial groups.

Portland (2018): 74 percent of local users reported never riding BIKETOWN and 42 percent never bicycling.
Shifts in Micromobility

Affordability

- Fees and average distance vary by market
- Station-based bike share systems reducing fees

- NACTO, Shared Micromobility in the U.S.: 2018
Affordability

Mode Choice

San Francisco (2018):
• 53% said that they chose Lime’s scooter over a car for their last trip
• 39% of riders reported that they used Lime to get to or from public transportation

Portland (2019):
• 34% of Portland riders took an e-scooter instead of driving a personal car or ridehailing
• This percentage jumped to 48% for visitors.
Managing for Equity

Seattle: (2017): if 2,000 vehicle, must operate 20% in priority areas.

Los Angeles (2018): Cap at 3,000 with option to add 2,500 vehicles if operating in disadvantaged communities, another 5,000 if operating in San Fernando Valley + 70% reduced per vehicle fee

Portland (2019): up to 1,250 vehicles; if meets or exceeds an average of 2-3 trips per scooter per day in East Portland may be eligible for up to 35% allotment increase
Equitable Rights of Way

Complete Streets 2.0 Principles

- Prioritized Uses
- Safe by Design
- Point-to-Point Trips
- Multimodalism
- Complete Networks
- Digital Infrastructure
- Adaptability
- Outcomes Based
Strategies for Equity

- Alternatives to digital platform
- Integration with transit fare payment/programs
- Affordability
- Community programming + safety outreach
- Service area reach + vehicle availability
- Complaint response time to preserve right of way
- Multilingual