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Local Government Strategies to Improve Shared Micromobility Infrastructure

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Issue

Shared micromobility (bikesharing and scooter sharing) experienced market growth since 2021, rebounding from the pandemic across markets in the US, Mexico, and Canada. In partnership with the North American Bikeshare and Scootershare Association (NABSA) and Toole Design, researchers at the Transportation Sustainability Research Center (TSRC) at UC Berkeley have collaborated on the data collection and analysis of the shared micromobility industry metrics through a series of annual reports beginning in 2019. This includes a series of operator and agency surveys.¹ Most recently, TSRC researchers collaborated on an Operator Survey (n=29) and an Agency Survey (n=52), distributed between January 2023 and June 2023, of all known shared micromobility operators and agencies as part of the 2022 state-of-the-industry report. Similar surveys were deployed in January 2022 and May 2022. These surveys include questions about shared micromobility systems² operating within those agency jurisdictions and operator markets.

Key Research Findings

In 2021 bikesharing and scooter sharing filled critical accessibility gaps in essential mobility.

Fifty percent of agencies responding to the surveys provided programs to enable essential workers to use bikesharing or scooter sharing, such as discounted or free rides. Over 60% of survey respondents implemented “slow streets” or repurposed street space for active transportation.

Shared micromobility continued to rebound and demonstrate resilience, with the total number of systems growing past pre-pandemic levels. In 2022, an estimated 401 cities in North America had at least one bikesharing or scooter sharing system and 121 had both. This is 35% higher than in 2021 and includes:

- 363 cities in the United States
- 29 cities in Canada
- 9 cities in Mexico.

In 2022, there were 265 scooter sharing systems and 256 bikesharing systems, with a mix of docked, dockless, and hybrid³ systems, with some cities having multiple systems of different types; 55% of cities with bikesharing systems have fleets that include e-bikes, and 79% of all systems include e-devices (e-scooters or e-bikes).

Key Terms

Shared Micromobility: The shared use of a bicycle, scooter, moped, or other low-speed vehicle or device that provides travelers with short-term access on an as-needed basis.

Bikesharing: A service that provides travelers on-demand, short-term access to a shared fleet of bicycles, typically for a fee. Bikesharing service providers may own, maintain, and provide charging (if applicable) for the bicycle fleet.

Scooter Sharing: A service that provides the traveler on-demand, short-term access to a shared fleet of scooters for a fee. Scooter sharing service providers typically own, maintain, and provide fuel/charging (if applicable) for the scooter fleet. Service providers also may provide insurance.

¹For more information on these reports, see <https://nabsa.net/about/industry/>

²A “system” is defined as at least three stations or 20 dockless devices that are not on a closed campus. In addition, systems are automated with back-end management software.

³A “hybrid system” is defined as a system that uses branded stations or hubs and also allows some degree of free-floating device use outside of branded stations.

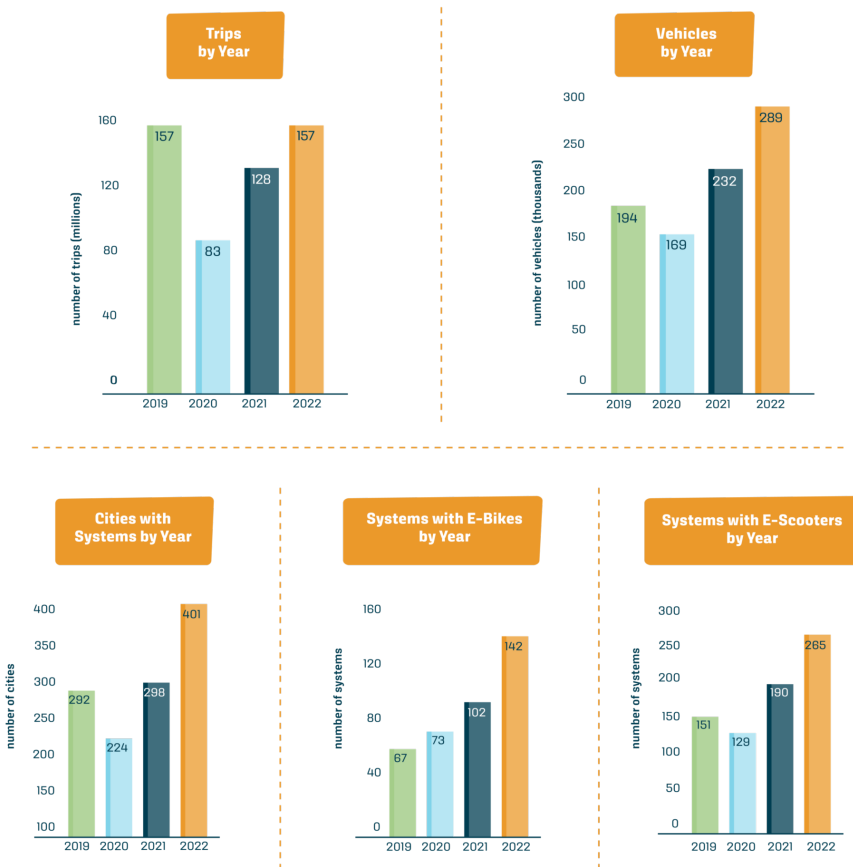


Figure 1. Number of Shared Micromobility Systems, Trips, and Vehicles by Year (2019 to 2022) Image Source: North American Bikeshare and Scootershare Association (NABSA) 2022 State of the Industry Report, graphic created by Toole Design (2023)

Practitioner Recommendations

In response to the pandemic, many local governments encouraged operational changes and established policies that improved shared micromobility infrastructure, particularly in urban centers and in the vicinity of public transportation. While many local governments employed quick fixes and temporary pop-up infrastructure changes (e.g., street closures and bike lanes), some changes were made permanent due to their successful implementation during the pandemic. Common policy changes and infrastructure strategies included:

- Converting motor vehicle travel lanes to active transportation use (e.g., lane closures) and partial street closures to vehicle traffic (e.g., closing part of or the entirety of a street);
- Adding more bike lanes (e.g., shared vehicle lanes, buffered lanes, and protected bike lanes);
- Establishing or expanding designated parking places for active transportation (referred to as corrals); and
- Enhancing multimodal transfers by creating mobility hubs for public transit, shared mobility, and active transportation.

References

North American Bikeshare and Scootershare Association (NABSA). (2023). 4th Annual Shared Micromobility State of the Industry Report. North American Bikeshare & Scootershare Association.

Shaheen, S., Martin, E., Cohen A., Broader, J., and Davis, R. (2022) Managing the Curb: Understanding the Impacts of On-Demand Mobility on Public Transit, Micromobility, and Pedestrians. Mineta Transportation Institute: San Jose. <https://doi.org/10.31979/mti.2022.1904>

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