

# 157 MILLION TRIPS

Across the U.S. and Canada in 2023





# A NEW RECORD

Shared Micromobility Trips Taken in the U.S. and Canada

**157**

**MILLION TRIPS**

in 2023

**131**

**MILLION TRIPS**

in 2022



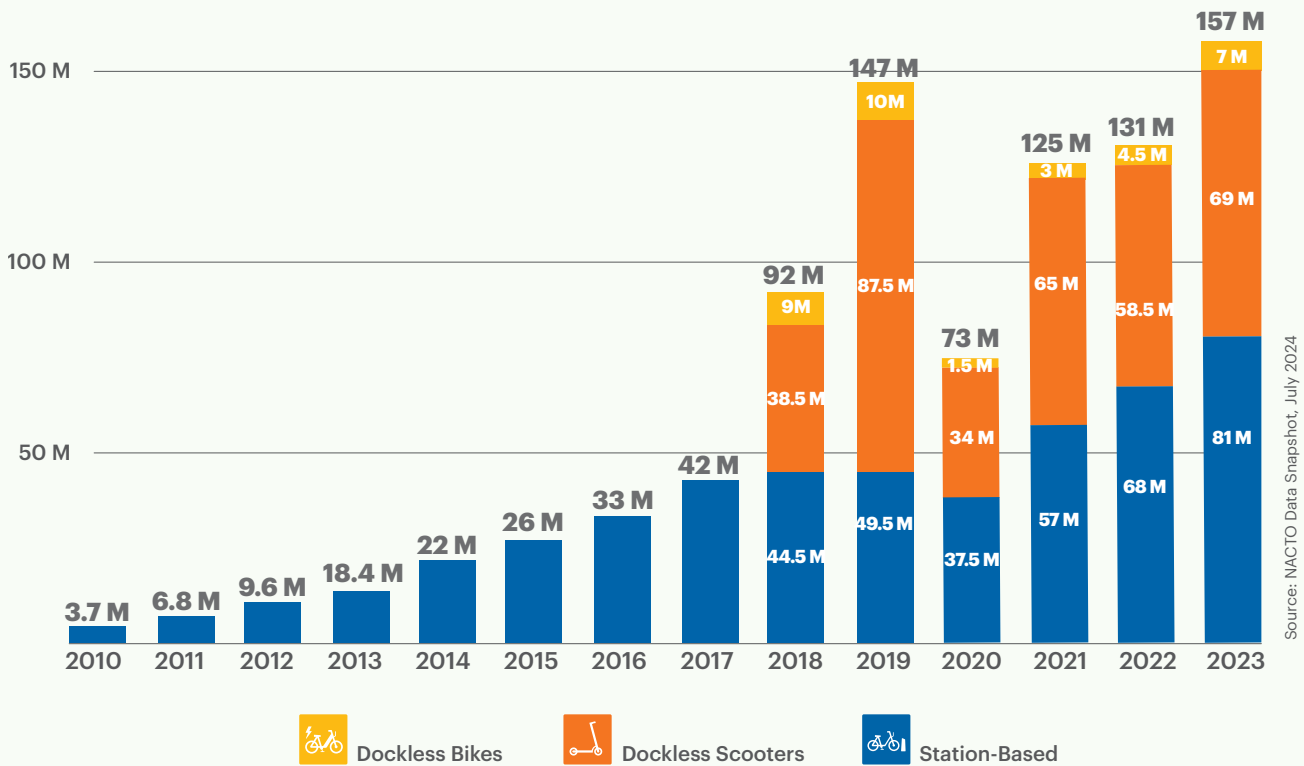
Cover picture: Milwaukee, WI  
Credit: City of Milwaukee

On this page: Vancouver, BC  
Credit: David Niddrie

In cities across the U.S. and Canada, shared micromobility is a popular and growing form of public transportation, often replacing short car trips and extending the reach of public transit. In just 13 years, people have taken 887 million trips on shared bikes and scooters in the U.S. and Canada.



## Shared Micromobility Ridership in the U.S. and Canada, 2010-2023

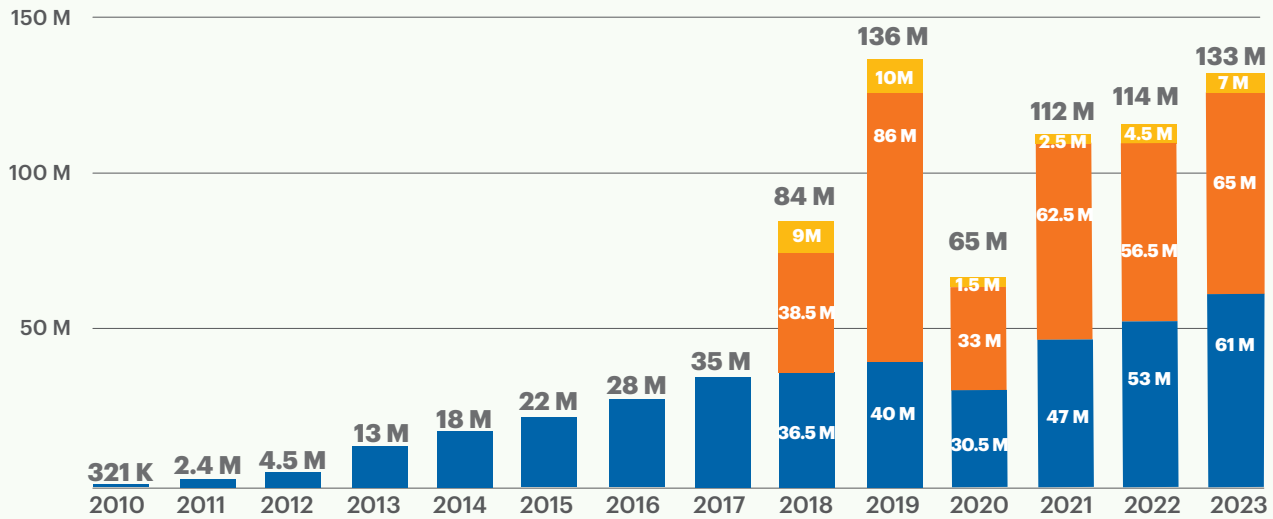


Total trips on shared micromobility **increased by 20%** from 2022, surpassing the pre-pandemic 2019 peak of 147 million trips across both countries. People took **133 million trips** on shared micromobility in the U.S. and **24 million trips** in Canada. Shared micromobility trips in Canada **increased by a whopping 40%** in 2023, due to the continued expansions of station-based systems and the introduction of dockless e-scooters into new markets. Trips in the U.S. **increased by 16%** in 2023, driven largely by the continued growth of e-bike trips on larger station-based systems.

Yet despite the overwhelming popularity of these systems, many cities are grappling with the challenges of providing this essential service while facing limited financial and operational resources. A volatile private operator landscape coupled with increasing user costs threatens to limit the potential for shared micromobility to be affordable and accessible to all. Shared micromobility is at an inflection point; it is imperative that cities design durable operational models to ensure the long-term viability of this increasingly relied-on transportation mode.



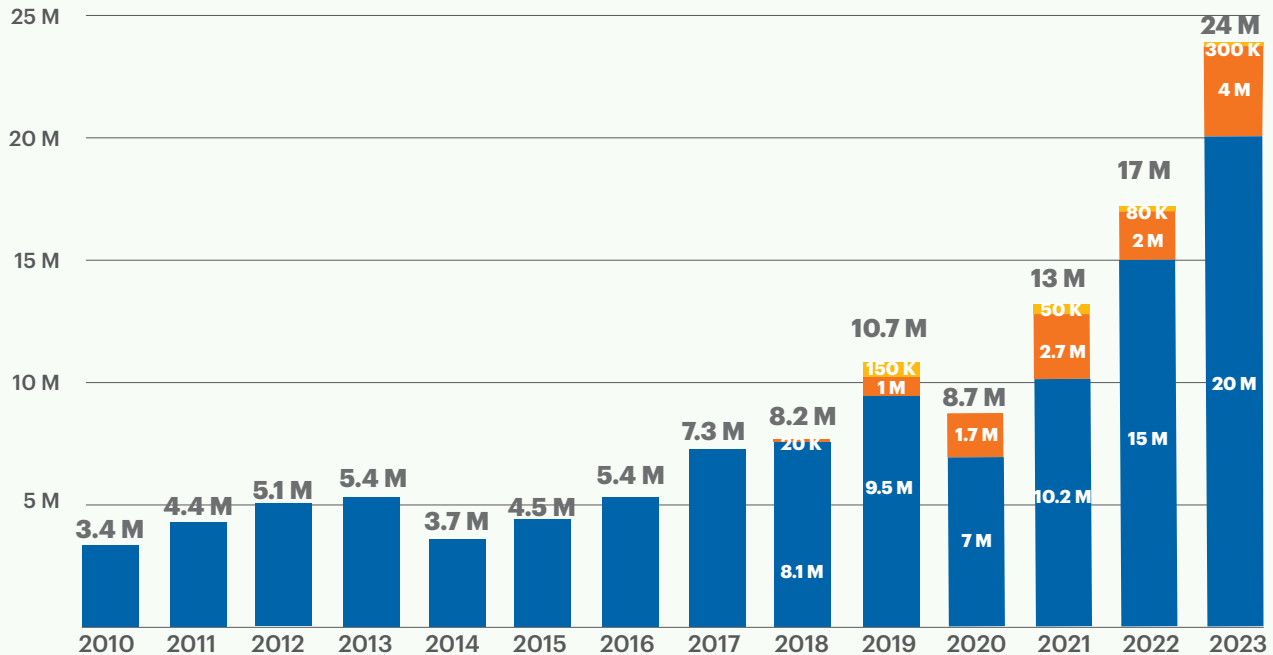
## Shared Micromobility Ridership in the U.S. 2010 - 2023



Source: NACTO Data Snapshot, July 2024



## Shared Micromobility Ridership in Canada 2010 - 2023



Source: NACTO Data Snapshot, July 2024



Dockless Bikes

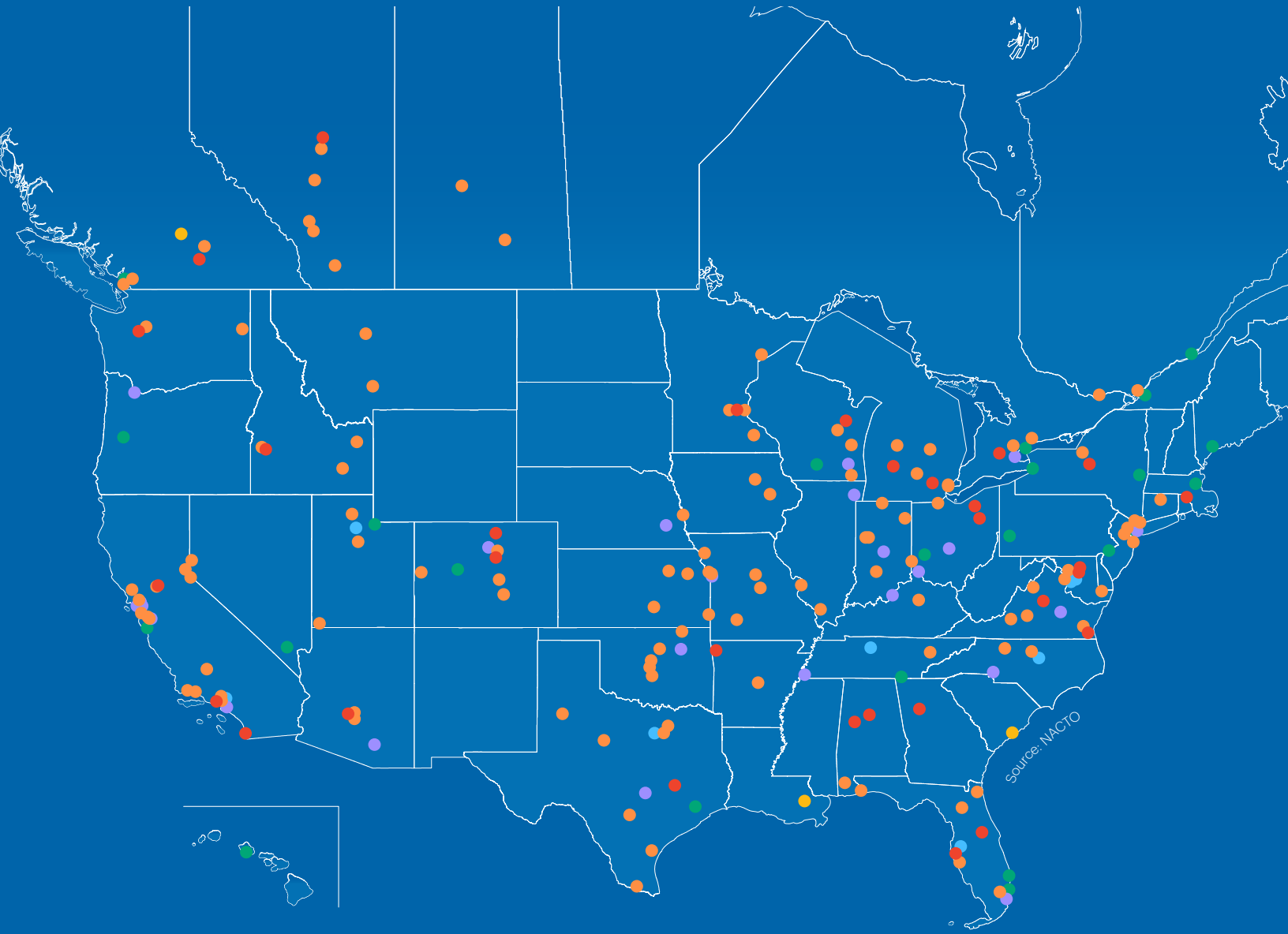


Dockless Scooters



Station-Based

# Shared Micromobility Across the U.S. and Canada



Station-based bike share only



Dockless bikes only



Station-based bike share and scooters



Scooters only



Station-based bike share, scooters, and dockless bikes



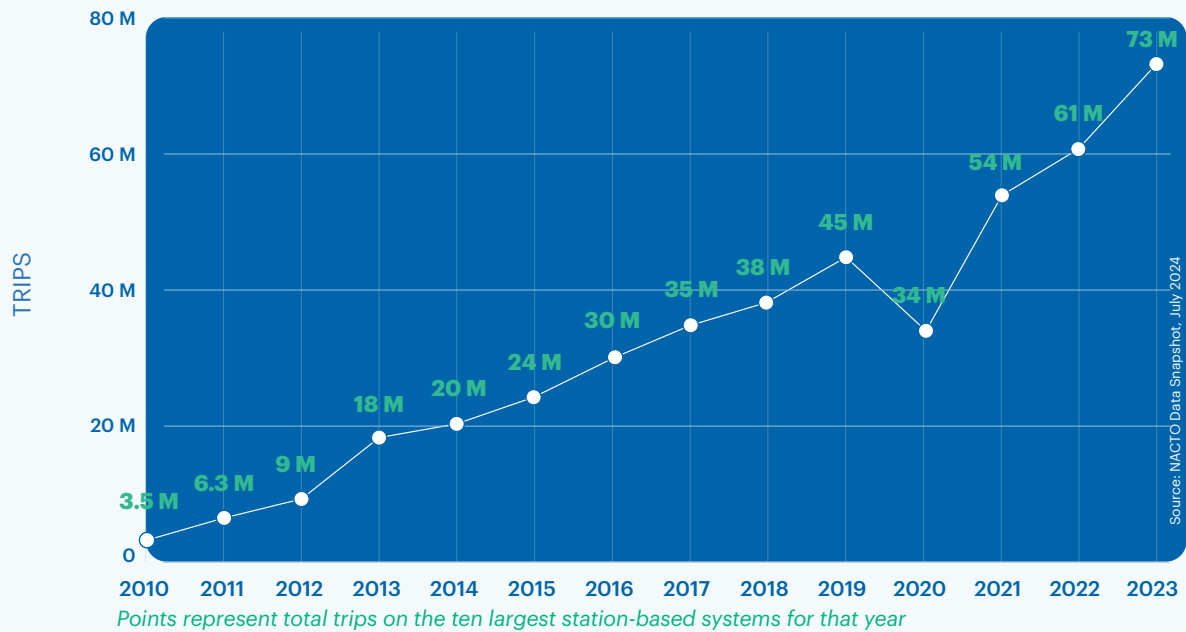
Scooters and dockless bikes



# THE LARGEST STATION-BASED BIKE SHARE SYSTEMS CONTINUE TO INCREASE IN POPULARITY

## RIDERSHIP ON THE TOP 10 STATION-BASED SYSTEMS

U.S. and Canada, 2010-2023



**Ridership growth on station-based systems jumped to 81 million trips in 2023 from 67 million trips in 2022.**

In the U.S., people took 61 million trips on station-based bikes, compared to 53 million in 2022. This increase was driven by the popularity of station-based e-bikes: **trips on e-bikes grew from 20 million trips in 2022 to 28 million trips in 2023—a 40% increase.** E-bike trips accounted for 46% of all station-based bike share trips made in the U.S. in 2023, and e-bikes represented a third of the total station-based bikes available. Trips on station-based pedal bikes decreased very slightly to 32.5 million trips in 2023, from 33 million in 2022, coinciding with a decreasing percentage of pedal bikes in station-based systems.

People in Canada took 20 million trips on station-based bikes in 2023, up from 15 million in 2022. Station-based pedal bike ridership drove a majority of this growth: riders in Canadian cities took **15 million trips on pedal bikes in 2023, a nearly 40% increase from 11 million trips in 2022.** While the number of e-bikes available grew by 60%, trips on station-based e-bikes only increased 13% in 2023 (4.5 million trips in 2023 vs. 4 million trips in 2022).



## E-Bikes are the Popular Choice for Many Station-Based Systems

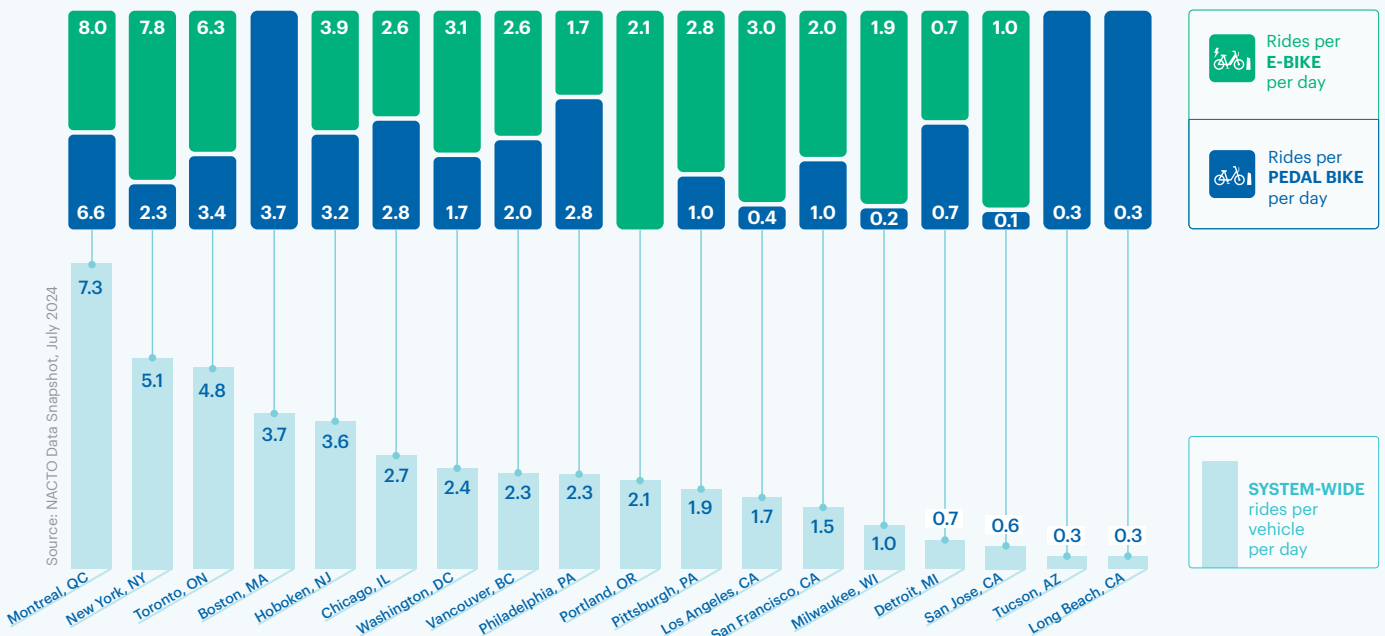
To understand use across systems with different populations, weather patterns, and densities of available bikes, a measure of trips taken per available device per day is used. In September 2023, e-bike utilization in Los Angeles was similar to that in Washington, DC despite the DC region having 44% more e-bikes available. Meanwhile, Bixi in Montréal, Bike Share Toronto, and Citi Bike in NYC were the busiest bike share systems in North America, with each bike in the systems taken out an average of 6 to 8 times per day.

In looking at the average number of trips taken per device per day, e-bikes are used significantly more than pedal bikes in systems that offer both. In Los Angeles, e-bikes were ridden nearly 8 times more than pedal bikes, and in New York City, nearly 4 times as much. Los Angeles quadrupled the number of e-bikes available between 2022 and 2023, from 7% to 16% of the entire fleet. As a result, trips on e-bikes nearly tripled from 87,000 trips in 2022 to 232,000 trips in 2023. New York City also increased the number of e-bikes available from 20% of the overall fleet to a full 25% of the fleet—and trips on e-bikes increased by 50%.

### Despite seeing more trips per bike per day, e-bikes should not replace all pedal bikes in systems.

Ridership remains robust for both options; in hilly Montréal, pedal bike use outpaced e-bike use in nearly every North American system. And with no e-bikes in the system in 2023, the Boston area's Bluebikes system served more trips per bike per day than almost every other station-based system—even with their e-bikes.

## TRIPS PER STATION-BASED BIKE PER DAY, SEPTEMBER 2023





## Affordability is a Growing Challenge for Bike Share Users

The upfront costs of an annual or monthly pass increased dramatically over the past five years: from 2019 to 2023, annual pass costs increased by 30% in Boston, 32% in Chicago, and 21% in New York City, Hoboken, Jersey City, and Toronto. In most cities, the cost of an annual pass is now more than \$100 (not including tax), and has reached over \$200 in the New York City area.

Having a pass is not the only expense for riders. While pedal bike trips of predetermined length (often 30-60 minutes) are typically included in the cost of a monthly or annual pass, fees for e-bikes tack on an additional \$0.10 to \$0.20 **per minute**. The average per-trip cost for annual passholders is generally lower than the pay-as-you-go model, but still significant: often \$3.00 to \$5.00 or more per 30- to 35-minute e-bike ride, even with a \$100+ or \$200+ annual pass.

Riders must also pay sales tax on each bike share trip, even for publicly-owned and managed systems, such as Capital Bikeshare in the DC region. Other forms of publicly available transportation, such as buses and trains, are not taxed in the same way.

**Bike share prices are now significantly higher than other public transportation options, especially for those taking pay-as-you-go trips.** On average, a trip costs around \$3.00 for the first 30 minutes of riding. After that half-hour, users pay an additional \$0.10 to \$0.20 for each minute. If someone wants to use an e-bike, those additional fees, on average, add an extra \$0.22 per minute. For a typical 30- to 35-minute pay-as-you-go trip on station-based bike share, this results in an average cost of \$3.85 for a one-way pedal bike trip and \$7.00 or more for a one-way trip on an e-bike. **These costs quickly become unattractive for potential users, adding up to \$14 per day for commuting.**



Photo: Boston, MA  
Credit: City of Boston

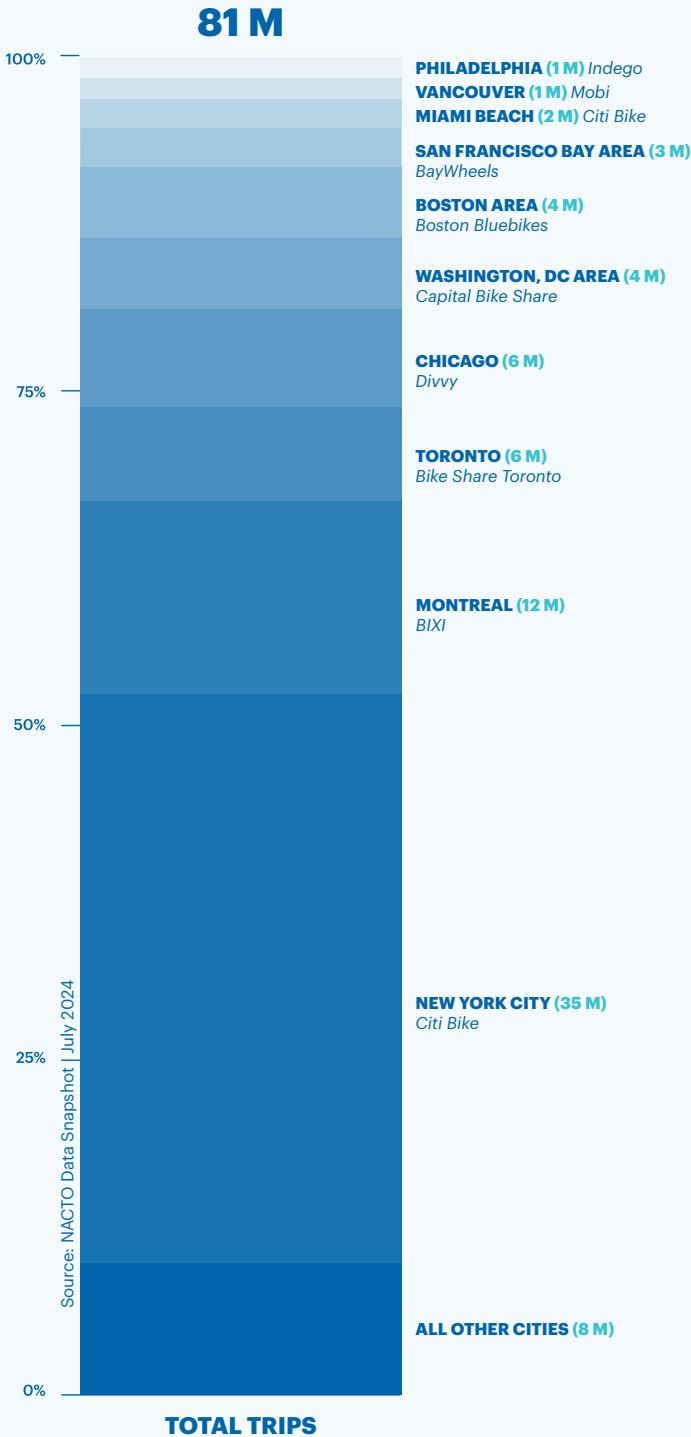




## Station-Based Bike Share Ridership

U.S. and Canada, 2023

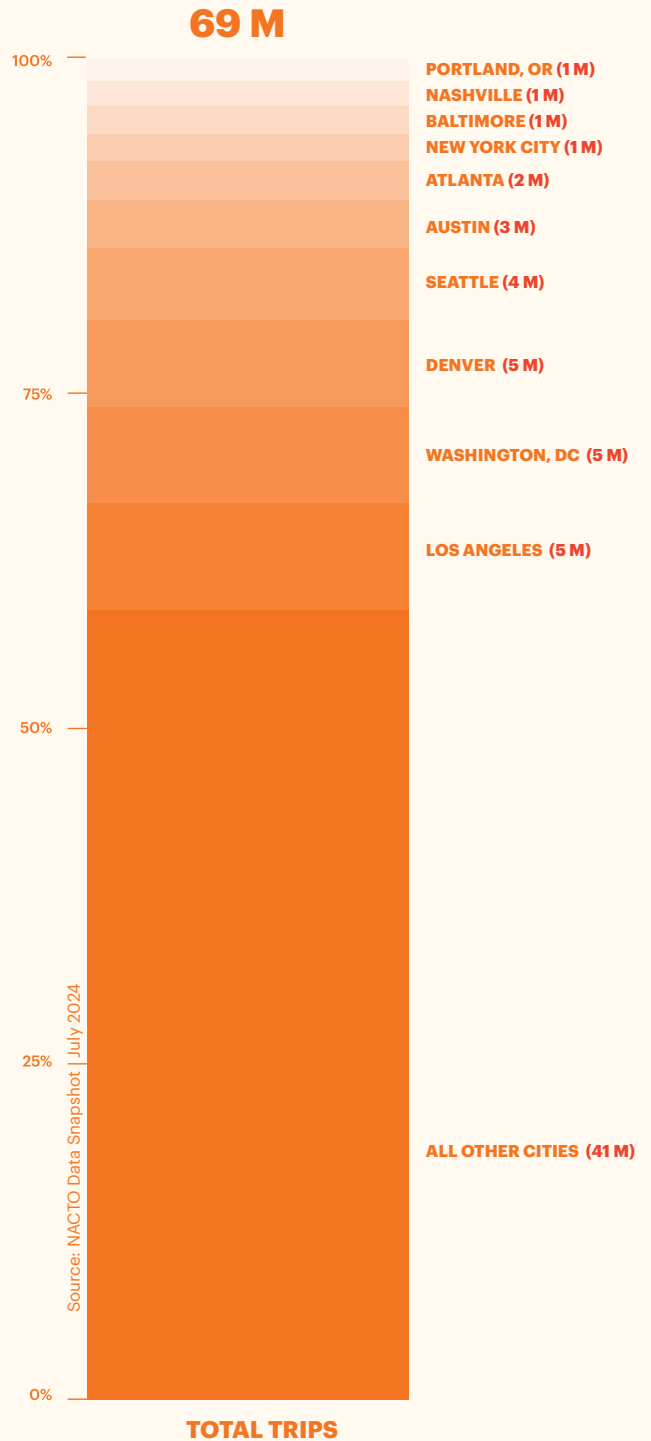
90% percent of all station-based bike share trips took place on 10 systems:



## Dockless E-Scooter Ridership

U.S. and Canada, 2023

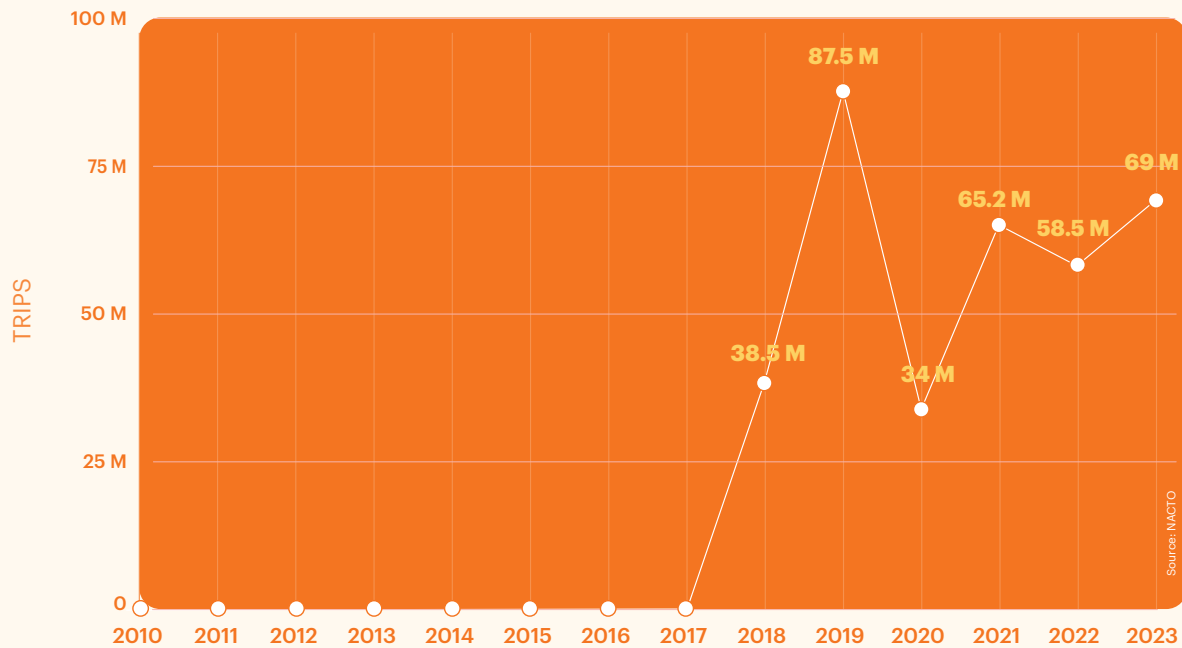
40% percent of all dockless e-scooter trips took place in just 10 cities:





## DOCKLESS E-SCOOTER USE REBOUNDS AFTER BRIEF DOWNTURN IN 2022

**RIDERSHIP ON E-SCOOTERS**  
*U.S. and Canada, 2010-2023*



**After a drop in trips in 2022, e-scooter systems began to bounce back in 2023 with a 15% increase in trips in the U.S. and Canada: 69 million in 2023 compared to 58.5 million in 2022.**

E-scooter use increased dramatically in Canada as e-scooters entered brand-new markets throughout Alberta and British Columbia. **The number of e-scooters in Canada increased by nearly two-thirds (65%), and as a result, trips doubled to 4 million in 2023 from 2 million in 2022.**

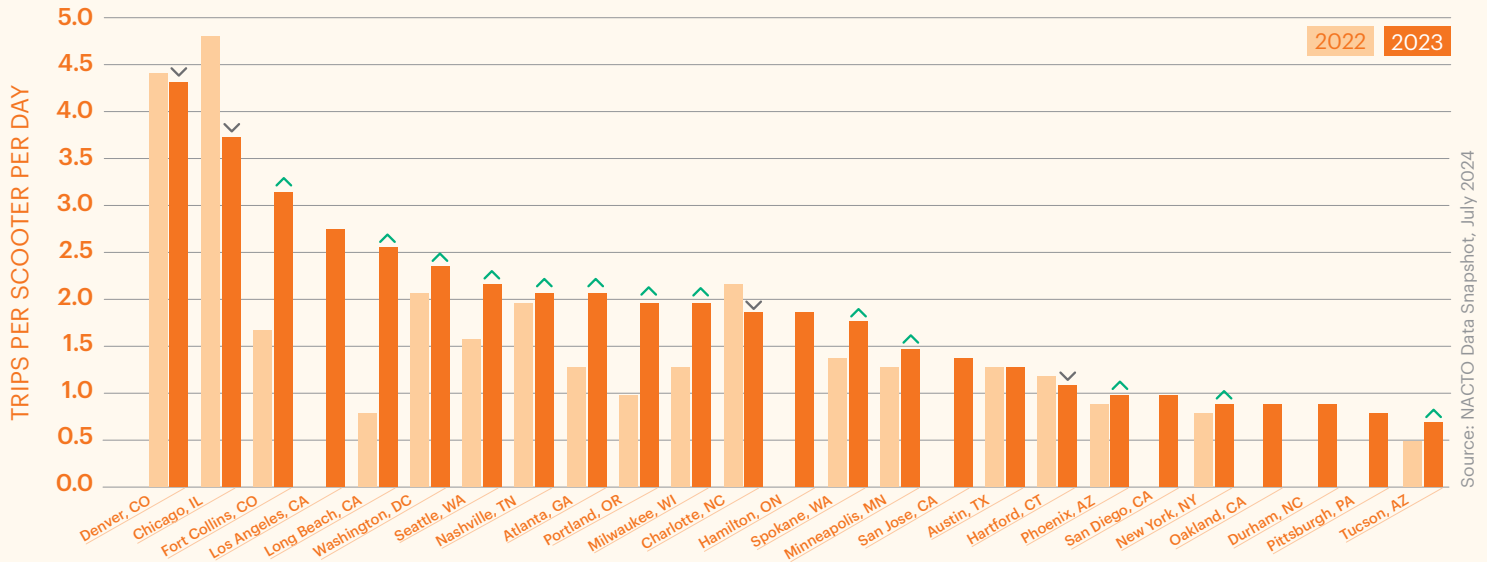


In the U.S., people took **65 million** trips on dockless e-scooters compared to 56.5 million trips in 2022. Forty percent of all dockless e-scooter trips took place in just 10 cities: Los Angeles; Washington, DC; Denver, CO; Seattle, WA; Austin, TX; Atlanta, GA; New York City, NY; Baltimore, MD; Nashville, TN; and Portland, OR.

San Diego, which boasted a ridership of 3 million trips in 2022 and was among the busiest markets for e-scooters, had only 360,000 trips in 2023. In August of 2022, the City implemented stricter policies for e-scooter use, and reduced the number of e-scooters available from 6,500 per day to around 2,500 per day, due to significant theft and vandalism of devices. By November of 2023, all four permitted e-scooter companies had vacated the city.

Scooter utilization, measured by the average number of trips taken per e-scooter per day, grew in 2023. Residents and visitors to Long Beach, CA, Portland, OR, and Fort Collins, CO could choose from three to four companies in each city, boosting overall e-scooter ridership.

### TRIPS PER SCOOTER PER DAY September 2022 & 2023



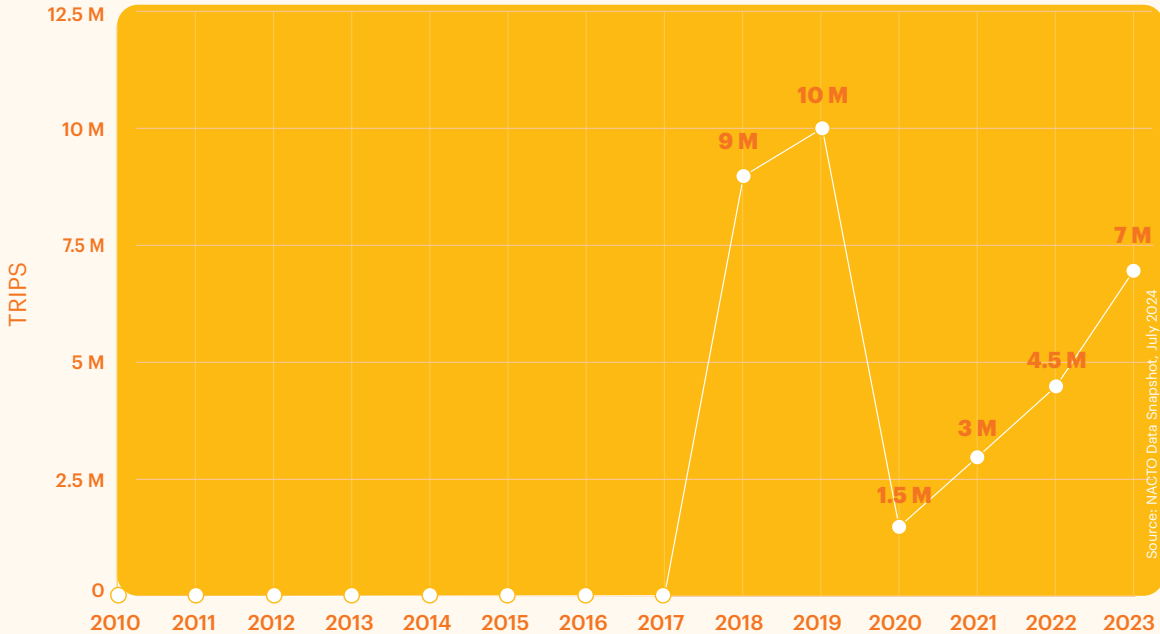
Source: NACTO Data Snapshot, July 2024



## DOCKLESS E-BIKES SEE ROBUST GROWTH

### RIDERSHIP ON DOCKLESS E-BIKES

U.S and Canada, 2010-2023

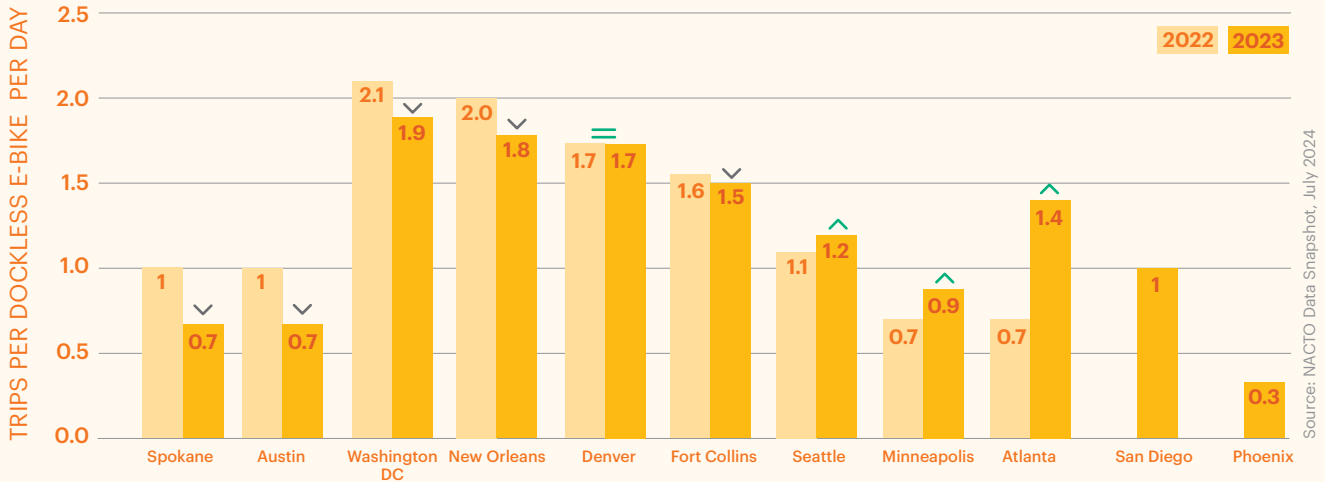


**In 2023, dockless e-bikes made up 10% of all shared micromobility devices in the U.S. and Canada, and accounted for 4% of shared micromobility trips.** Despite representing the smallest group of shared micromobility devices, the use of dockless e-bikes has grown in the past year. In Canada, trips nearly quadrupled, from less than 100,000 in 2022 to 300,000 in 2023. In the U.S., people took 6.7 million trips on dockless e-bikes, a nearly 50% increase from 4.5 million trips in 2022.



## Dockless E-Bike Utilization Varied

### TRIPS PER DOCKLESS E-BIKE PER DAY September 2022 & 2023



Source: NACTO Data Snapshot, July 2024

Dockless e-bike use varied across cities, and appeared to grow in popularity in mild-weather cities. In late 2022, after multiple requests from the public, including service industry, construction, and shift workers, Atlanta extended operating hours for shared dockless devices from 9:00 PM to midnight, resulting in a surge of daily use on e-bikes and e-scooters.





## Trips on E-Scooters and Dockless E-Bikes are Very Short, Yet Exceedingly Expensive

E-scooters and dockless e-bikes are valuable shared micromobility options, especially in cities without station-based systems. However, the high user costs of these devices limit their long-term viability as an affordable choice.

The typical trip length on a dockless e-bike and e-scooter is 11 to 12 minutes—much shorter than pay-as-you-go station-based bike share trips, which are 30 to 35 minutes on average. Despite the quick trips served by these modes, riders are paying a lot more per trip. The average cost of a one-way trip on a dockless e-bike or e-scooter was around \$6.00 in 2023, with the most expensive trips ranging from \$11 for a 15-minute trip in Arizona to nearly \$9.00 for a six-minute trip in North Carolina. At these rates, e-scooters and e-bikes are not an affordable everyday option for most people.

Most dockless e-bike and e-scooter operators offer reduced-fare pricing for qualifying users—usually half the cost of a single trip. These programs serve only people with the very lowest incomes and are not the sole solution for broad affordability long-term.





## PUBLIC FUNDING ENSURES RELIABLE, AFFORDABLE SERVICE

Another unstable year in the industry demonstrates that it is more important than ever to secure sustainable funding models for shared micromobility programs. Bankruptcies and mass layoffs across multiple private operators continued to disrupt service in the U.S. In 2023, multiple cities lost their shared micromobility programs overnight. Further consolidation of large firms has led to inconsistent communications between cities and operators. Some cities are facing the challenge of “too much” success—their shared micromobility programs are wildly popular, but the demand for more devices and longer operating hours has outpaced program staff and budget capacities.

Cities with privately financed systems weren't the only ones subject to service disruptions due to lack of financing. Decade-old station-based programs in Cincinnati, Houston, and Minneapolis faced shutdowns when their major sponsors pulled out in 2023, leaving programs without alternative sources of funding. The financial volatility for even heavily-used systems prompted a number of cities and agencies to shore up durable financing and subsidies for shared micromobility, through public funding, foundation support, and longer-term sponsorships.



Photo: Los Angeles  
Credit: LADOT



## STABILIZE SYSTEMS

Some shared micromobility systems are owned by public agencies, including municipalities and transit agencies that have fully integrated shared micromobility into their systems. These systems have received public funding, often via grants, but also from municipal or agency capital budgets. **In some cities, transit agencies are stepping in to provide shared micromobility after other funding and ownership models have faltered.**

After discovering the bike share system was at risk of closing in late 2022, the nonprofit operators of Houston BCycle began collaborating with transit agency Houston METRO to connect the two services, much like nearby Austin's bike share system just a few years prior. Six months later, the METRO board approved a partnership that would have resulted in an improved bike share system that would have been fully integrated into Houston's public transit network. While the partnership is now in jeopardy, this kind of creative problem-solving is often needed to serve residents with affordable and easy transportation options.

## LOWER USER COSTS

More cities are using public subsidies to ensure that shared micromobility is affordable. The City of Boston introduced the Boston Bikes Pass pilot in 2023 to address rapidly rising costs in the region. **The program, subsidized through city funds, allows residents of Boston to purchase an annual Bluebikes pass for \$60, less than half of the system's annual pass cost of \$129.** The City also subsidized the annual pass for income-eligible residents (defined as 400% of the federal poverty line) to \$5.00, a 90% discount on the region's \$50 annual pass for those residents.

In the San Francisco Bay Area, the Metropolitan Transportation Commission announced in late 2023 that it would invest \$20 million into the Bay Wheels bike share system, one of the largest public investments in shared micromobility in the U.S. that year. The investment, a response to the increasingly high cost of living in the Bay Area, decreased user fees and annual membership costs by 10% for the 2024 season.

## PLAN FOR GROWTH TO UNLOCK SPONSORSHIP OPPORTUNITIES

Sponsorship funding models are valuable for supporting shared micromobility programs, especially when paired with a clear plan for long-term growth. In late 2022, Bike Share Toronto released its Four-Year Growth Plan, a vision to expand the bike share network to all of the city's 25 wards. Shortly after, the system announced a five-year partnership with Tangerine Bank, whose sponsorship will support the addition of 380 new stations. **Cities that clarify their program goals before seeking funding can better size sponsorship requests to meet system needs and improve communication and long-term alignment with their sponsor.**





## Realizing the Potential of Shared Micromobility



Over the past decade, shared micromobility has firmly woven itself into the fabric of North American transportation networks. In cities across the U.S. and Canada, people of all ages and backgrounds are biking or scooting to work and school, to pick up groceries, or to spend quality time with friends, family, and community. When cities commit to making these systems affordable across incomes and build connected networks of protected bike lanes, they support the potential for even more ridership.

### TRUE AFFORDABILITY GOES BEYOND THE FEDERAL POVERTY LEVEL

While often looked at in isolation, affordability in a city is determined by a mix of income, housing prices, and transportation costs. Increasing housing costs can be offset by robust and affordable transit and shared micromobility networks.

To date, most shared micromobility programs have addressed affordability through discounted pricing or memberships only for those at the lowest income levels. However, this does not address the growing cost-of-living crisis squeezing the working and middle class in cities across North America.

In NACTO member cities, income-based discounts were available in nine out of ten (91%) station-based systems and two out of three (67%) dockless systems. Most discounted memberships are only available to those with the very lowest incomes, leaving out many still struggling with rising cost-of-living expenses. To qualify for discounted pricing in the U.S., individuals must typically earn below 200% of the federal poverty level—that’s an upper limit of about \$50,000 annually for families of three living in high-cost cities like Los Angeles or New York City.

As the costs of operating and maintaining shared micromobility systems result in relatively high, ever-increasing charges for the average user, cities should explore funding sources and begin subsidizing shared micromobility like the public asset it is. Cities must look beyond income-eligible programs as their primary mechanism for providing affordability. Instead, they should consider ways to make their shared micromobility systems more affordable for every rider.

## WELL-PLANNED SYSTEMS CONNECT WHERE PEOPLE ARE TO WHERE THEY WANT TO GO

Shared micromobility is transportation. People use it when bikes and scooters are readily available nearby and when protected bike lanes, slower-speed streets, and safe intersections get them where they want to go. Both research and practice have continuously proven that well-connected, protected bike lane networks encourage bike ridership, and that a large number of densely-distributed stations and shared micromobility devices within walking distance of residences, employment hubs, and other popular destinations is critical for supporting trips on shared bikes and scooters. Many of the most heavily used shared micromobility systems in North America are in cities that have spent the past decade investing in safer streets and building out extensive, well-connected networks of protected bike lanes; as a result, they continue to see growing ridership on shared micromobility year after year.

Recent research on protected bike lane investments in Hamilton, ON supports this connection between safer infrastructure and more bike share ridership. **Researchers found specifically that the greatest increases in bike kilometers traveled came from concrete-barrier-protected bike lanes and protected lanes on arterials that were well-connected to other protected segments.** Hamilton has seen some of the steadiest year-over-year ridership increases on its bike share system since its launch in 2015, including a 30% increase in trips between 2022 and 2023.



Photo: Philadelphia, PA  
Credit: Rashiid Marcell

# LOOKING FORWARD

The coming year will be an exciting one for shared micromobility, as cities across the U.S. and Canada celebrate one billion trips on shared bikes and scooters. The hard-won success of this transportation mode should not go unnoticed—shared micromobility has proven to be tremendously resilient in the face of early skepticism, major shakeups and disruptions, a global pandemic, and ongoing concerns about long-term viability.

The number of people using shared micromobility is at an all-time high, and can be attributed to the consistent and collaborative efforts of cities, operators, government agencies, and their community partners to get people on shared bikes and scooters, and ensure people have safe places to ride. However, shared micromobility continues to have an uncertain financing model in many cities, and is becoming increasingly unaffordable. Now is the moment to fully consider whether shared micromobility serves as public transportation, or primarily as a downtown economic development tool. For cities that wish to provide shared micromobility as a public service, a hard look at finances, subsidies, and affordability is necessary for this to continue to be an accessible transportation mode.



## Recommendations

- > Invest public money in shared micromobility capital and operating costs: consider public ownership of systems and public subsidies to make shared micromobility services more broadly affordable and reliable.
- > Eliminate sales tax on shared micromobility: Riders on other forms of public transportation don't have to pay sales tax—eliminate this added expense for users.
- > Build the infrastructure to get people where they want to go, safely: support trips by building well-connected, protected bike lane networks and placing shared micromobility devices and stations close to homes and popular destinations.



## METHODOLOGY

NACTO counts all bike and scooter share systems with over 150 vehicles. For purposes of clarity and analysis, smart bike systems—where the electronic components are incorporated into the bike itself, and use of a dock is optional—are included in station-based share counts throughout the report. Dockless systems (e-scooters, e-bikes) are counted as those that are designed to be free-floating and never require the use of a dock for operations.

Data consistency and accuracy remain ongoing issues. Cities have found discrepancies between what is reported by companies and what they find during spot checks. There is a growing conversation about data specifications and tools to audit and verify company-reported data.

To calculate the total number of shared micromobility trips, NACTO collected trip data from shared micromobility operators and from cities.

NACTO also surveyed its member cities to collect more detailed data. Member cities that participated in the survey for 2023 include: Arlington, VA; Atlanta; Austin, TX; Boston; Boulder, CO; Charlotte, NC; Chattanooga, TN; Chicago; Detroit; Durham, NC; Fort Collins, CO; Grand Rapids, MI; Hamilton, ON; Hartford, CT; Hoboken, NJ; Indianapolis; Long Beach, CA; Los Angeles; Louisville, KY; Madison, WI; Milwaukee; Minneapolis; Nashville, TN; New York City; New Orleans; Oakland; Philadelphia; Phoenix; Pittsburgh; Portland, OR; San Diego; San Francisco; San José, CA; Seattle; Spokane, WA; Toronto, ON; Tucson, AZ; Vancouver, BC; and Washington, DC.

### RIDES PER VEHICLE PER DAY:

There is variance in how shared micromobility companies and regulators calculate rides per vehicle per day. For the purposes of this analysis, city specific utilization was reported by individual cities.

### AVERAGE TRIP COST:

I. The average station-based member trip costs were calculated using annual membership and per-trip pricing provided by the following cities:

A. Station-based bike share system annual and monthly passholders: Boston; Chicago; Hoboken; Los Angeles; Montréal; New York City; Oakland; Philadelphia; San Francisco; San Jose; Toronto; Washington, DC.

II. NACTO calculated the average single-trip costs on station-based bike share and dockless shared micromobility by calculating the average unlock charge and the average per minute charge, weighted by the number of trips in a system. The average trip cost was then calculated as the cost of an average length trip. Unlock charges and per-minute charges were calculated using pricing provided by the following cities:

A. Station-based single-trip: Boston; Chicago; Detroit; Long Beach; Los Angeles; Milwaukee; New York City; Philadelphia; Pittsburgh; Portland, OR; San Francisco; Toronto; Tucson; Vancouver, BC; and Washington DC.

B. Dockless e-bikes and e-scooters single trip: Atlanta; Charlotte; Denver; Fort Collins; Hartford; Long Beach; Minneapolis; Nashville; New Orleans; New York City; Phoenix; Portland, OR; Sacramento; Santa Monica; Seattle; Spokane; Tucson; and Washington DC.

### **CORRECTION FROM 2022:**

In the 2022 Shared Micromobility in the U.S. and Canada Report, NACTO reported a grand total of 130 million trips for the U.S. and Canada in 2021. This total was adjusted to 131 million trips in the 2023 report with updated trip data from Citi Bike Miami.

## **ACKNOWLEDGEMENTS**

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