# Bike Share & Micromobility White Paper

## Overview

This white paper is intended to provide information, generate discussion, and inform an eventual update to the regional business plan and the future of bike share in the Sacramento region. It provides information about the evolution of the region's bike share system, a status update on the current system, recent trends in shared micromobility, and an analysis of various bike share operating models. It also provides options and ideas for the region to consider at this inflection point; a time of considerable change, contraction, and instability in the bike share industry–due to both the changing economics of the market and the impact of the global pandemic. This white paper is not a full update to the regional bike share business plan created in 2013; it does not include analyses or recommendations regarding equity program improvements, system fleet size, service area geography, user pricing, or a financial plan. Rather, this paper is intended to guide short- and medium-term decision-making considering the business reorganization of our regional vendor, the near-term expiration of the regional contract, the impact of the pandemic, and a quickly changing micromobility market. A summary of key findings is included at the end of the paper.

## Background

In 2013, the region developed a Bike Share Business Plan that recommended one of two operating models for bike share in the region: a nonprofit model or a publicly owned/privately operated model. Using the recommendations in that business plan, the Sacramento Metropolitan Air Quality Management District (SMAQMD) was the lead applicant for funding from the Sacramento Area Council of Governments (SACOG) 2013 funding round. In 2015, SACOG became the lead agency on the project and advanced the project as a publicly owned/privately operated hub-based bike share system.

After extensive stakeholder outreach and in-depth industry analysis, a lengthy procurement process in 2016 led to the selection of Social Bicycles, Inc. (SoBi) to implement a regional, hub-based system. The system was to be publicly owned but operated by SoBi under a revenue sharing agreement. At the time, however, the bike share industry began experiencing major disruptions. New dockless bike share companies began operating privately owned systems in cities nationwide, without public agency involvement or investment. This development created an opportunity for SACOG and the cities of Davis, Sacramento, and West Sacramento (city partners) to shift to a more innovative bike share model. The SACOG Board directed staff to transform the region's approach to bike share to be more agile and accessible.

The result was a completely new approach negotiated by SACOG—a public-private partnership under which SoBi (eventually JUMP/Uber and later Lime) owned and operated the bike share system, but agreed to certain service level requirements, advertisement and sponsorship revenue sharing, and the implementation of an equity plan. The SACOG Board of Directors approved the project modification in 2017, and JUMP launched the full bike share system in 2018.

In 2018, the Sacramento region worked with JUMP/Uber (now Lime) to launch a fleet of 900 e-bikes, the largest all-electric-assist fleet in North America. By the end of 2019, the regional bike share system generated over 1.3 million trips, making the Sacramento region JUMP's second highest market globally

measured in total trips. In mid-March of this year, JUMP suspended bike share operations in response to the local stay-home orders due to COVID-19.

Then, on May 7, 2020, SACOG and the city partners learned that Lime acquired Uber's ownership interest in JUMP and was proposing to take over JUMP operations. In August, the Bike Share Policy Steering Committee (PSC) approved the assignment of the JUMP agreement to Lime, with interim amendments through November 30. Since that time, SACOG, in close coordination with city partners, has continued to attempt to negotiate a longer-term agreement with Lime while simultaneously examining the potential to implement other bike share operating models in the region. This paper provides background information and analysis of the various bike share operating models to inform decisions on a path forward for bike share in the region.

## Regional Bike Share System Performance

The regional bike share system has exceeded all expectations in terms of number of total riders and trips per vehicle per day (TVD). Traditional docked systems aim for an average of two TVD. The Sacramento system almost immediately doubled or tripled that ridership. This could be due in part to the low introductory pricing, but the system did not see a large reduction in total trips after increasing prices in September 2019. From April through September of 2019, the system saw an average of five TVD.[1] In June 2019, over 36,000 unique users rode over 140,000 trips. The average trip was 2 miles long, with an average duration of 12 minutes, with a modest decrease in trip length and duration as a result of price increases.

A few months after launch, the University of California, Davis (UC Davis) Institute of Transportation Studies conducted a survey of JUMP bike riders in the region and found that 30 percent of JUMP bike trips replaced car trips. That aligns with national data from the North American Bike Share Association's (NABSA) 2019 Shared Micromobility State of the Industry report, which showed that 36 percent of shared micromobility trips replaced car trips. That means that the regional bike share system likely reduced around 390,000 car trips in 2019.

Before the fleet was pulled due to stay-home orders in March 2020, the region had nearly 1,000 Boost (low-income program) memberships and 1,900 student memberships. While we do not have demographic data on who was riding the bikes (including, but not limited to, the number of active Boost and student membership users), we know that 75-80 percent of trips were beginning and/or ending in low-income and/or high-minority census tracts. JUMP reported that the Sacramento market had among the highest Boost users across all its markets.

The current bike share system, now operated by Lime, relaunched on August 28, 2020. There are currently 250 bikes in the cities of Sacramento and West Sacramento, with ongoing discussions for a relaunch of the Davis system in early 2021. Lime is actively working to increase the number of bikes to 600 across the two cities. The pandemic and extremely smoky air from wildfires in the summer and fall of 2020 have dampened ridership, with the system seeing an average of only approximately one to two TVD. However, Lime has reported that as it increases the number of bikes, ridership is continuing to grow.

[1] This is a conservative estimate based on numbers reported by JUMP.

## Industry Overview – From Bike Share to Shared Micromobility

The bike share industry has changed dramatically since development of the 2013 Sacramento Regional Bike Share Business Plan. At that time, most bike share systems were launched by public or nonprofit entities, with very few privately owned bike share systems. Nearly all major bike share systems were dock-based, with equipment almost exclusively served by one of two firms: PBSC or B-Cycle (these are still the two largest companies that sell bikes, racks, and software solutions to public and nonprofit agencies; although Lyft is larger than both in terms of number of total bikes in operation). By the time the region received proposals from bike share vendors in 2016, Portland was about to launch a hybrid, non-electric, dockless bike share system with SoBi.

In 2017, privately owned dockless bike share companies backed by venture capital were entering markets across the country, sometimes without approval from cities, and operating without public subsidies. The companies initially claimed to support their capital and operating costs through user fees alone. Seemingly overnight, many of these same companies began launching dockless scooters in the fall of 2018. These two devices now comprise what is known as the shared micromobility industry.

Over the last two years, the shared micromobility industry has continued to see rapid change, with companies aggressively entering markets to gain the greatest market share only to pull out of those markets months later. For bike share specifically, companies folded and merged leaving two main players in the privately owned and operated bike share space: Lyft and Lime. Spin offered bikes in 2017, shifted its focus to scooters in 2018, and recently announced plans to relaunch e-bikes of its own soon. There are also a few smaller companies that provide bike share services through contracts with public/nonprofit agencies, including HOPR, Gotcha, Bicycle Transit Systems, Shift Transit, and Drop Mobility.

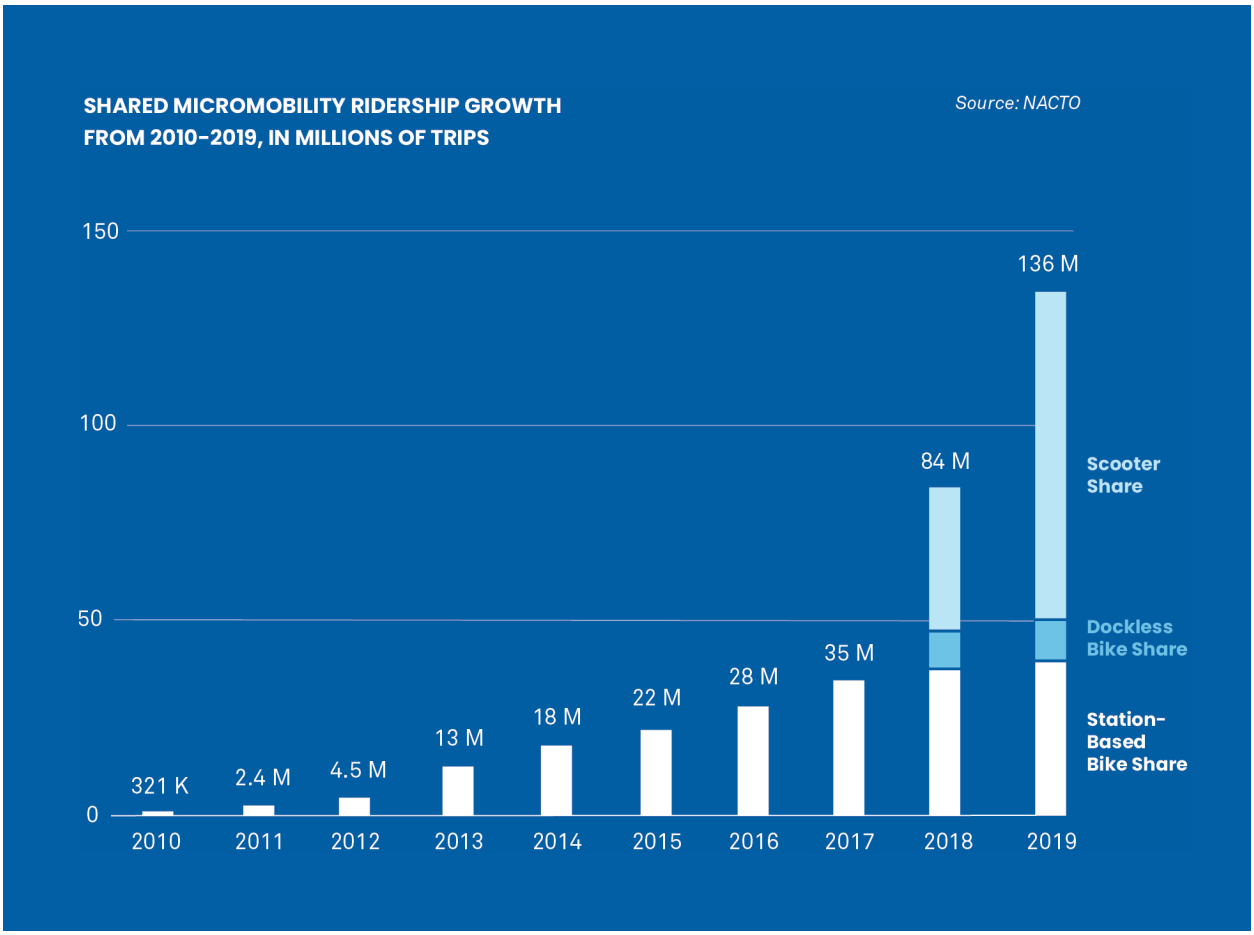
In 2018, many micromobility companies began focusing exclusively on scooters. Today, the City of Sacramento has permitted Bird, Spin, Lime, and Razor to operate scooters. Spin and Lime also have permits from the City of West Sacramento. While Lyft, Lime, Gotcha, Shift Transit, and HOPR could all apply for operating permits in the Sacramento region, companies are increasingly hesitant to launch bikes in new markets due to the higher operating costs compared to scooters, particularly if they are required to pay fees and do not have market exclusivity.

### State of Shared Micromobility

The North American Bike Share Association (NABSA) released its first annual report this year on the state of the shared micromobility industry. The National Association of City Transportation Officials (NACTO) also released its fourth Shared Micromobility Snapshot report. Findings from these reports are outlined below.

According to NACTO, scooter-sharing emerged as the biggest player in U.S. micromobility in 2018 and 2019. A recent Bloomberg article puts the numbers in perspective, stating that "Two-thirds of all shared micromobility trips since 2010 have been made in the last two years. 2019's shared micromobility ridership alone would be the equivalent of the fifth-busiest subway or light rail system in the country."[2]

[2] Schneider, Benjamin (2020). U.S. Scooter Ridership Surged in 2019. Now What? https://www.bloomberg.com/news/articles/2020-08-27/how-big-was-2019-s-scooter-boom-and-what-s-next

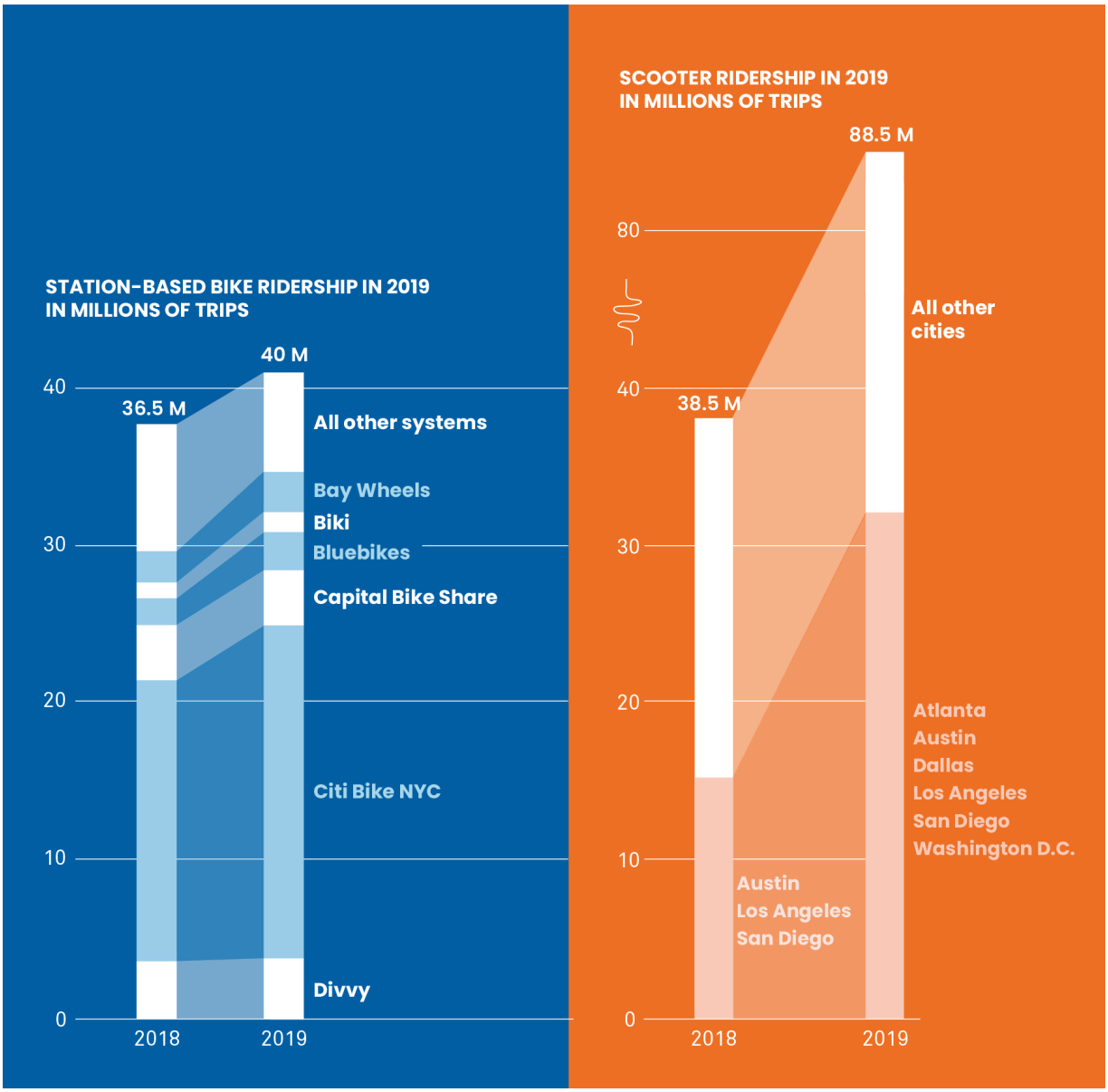



*Credit: NACTO Shared Micromobility In the US: 2019*

NACTO's Snapshot report assesses ridership in 2019:

> In 2019, people in the United States took 136 million trips on shared bikes, e-bikes, and scooters, 60 percent more than 2018…. People took 40 million trips on station-based bike share systems (pedal and e-bikes) and 96 million trips on dockless e-bikes (10 million trips) and scooters (86 million trips). In 2019, 109 cities had dockless scooter programs, a 45 percent increase from 2018. This contributed to a more than 100 percent increase in trips taken on scooters nationwide. Scooter expansion was in some cases unstable, with scooter companies exiting markets at the end of the year (prior to the pandemic), possibly due to over-competition and other market pressures.
>
> ….
>
> Ridership increases for bike share systems were largely driven by the largest, most-established bike share systems. Riders took 17 percent more trips on the six largest bike share systems than in 2018. In Boston, for example, the city expanded the Bluebikes system by 540 bikes and added 50 stations, resulting in a ridership increase of 45 percent. Smaller systems did not experience

the same gains; while bike share ridership increased overall, driven by the largest systems, ridership declined in 75 percent of systems.[3]




*Credit: NACTO Shared Micromobility In the US: 2019*

## *Micromobility Utilization and the Economics of Shared Micromobility*

As the Bloomberg article notes, "The poor performance of smaller-market station-based bike share systems points to another one of [NACTO's] findings: Scooters get the highest utilization ([measured in] trips per vehicle per day [or TVD]) in fleets with fewer total scooters, while docked bike share bikes get the highest utilization in the largest systems." NACTO states that "In general, for station-based bike share systems, trips per vehicle per day [TVD] increases with system size. Larger systems of more than 2,500 vehicles average around three TVD. Smaller systems, less than 2,500 vehicles, average 0.8 TVD.

[3] NACTO (2020). Shared Micromobility in the US: 2019. https://nacto.org/shared-micromobility-2019/

For scooter share, the opposite relationship seems to hold true. In cities with smaller scooter systems, the average utilization is around 4 TVD. This decreases to 2.6 TVD in cities with more than 2,500 scooters available."

By comparison, in 2019 the Sacramento region had approximately 2,500 vehicles (bikes and scooters) from different vendors and JUMP reported a summer average of 5 TVD for bikes and 7 TVD for scooters.

Clearly, more data will be needed to determine the lessons to be learned from this early utilization data. Until then, questions abound. What is the optimal fleet size and mix for our region for reducing vehicle trips or for serving other community and/or regional goals and objectives? Is lower TVD acceptable if the system provides reliable transportation options beyond the downtown grid to neighborhoods that have higher concentrations of BIPOC and/or low-income people? How do you optimize fleet size, coverage, profitability, and efficiency in our region given our geography, transit service, transportation network, etc.? Are the larger docked-based systems seeing higher ridership because they are dense, metropolitan areas with extensive transit networks? How can we increase reliability and confidence in users' ability to find a device nearby? Are bikes and scooters replacing different types of trips, and to what extent are they generating new trips? Do scooters tend to thrive in sprawling, warm-weather cities, while docked station-based bike share perform best in more dense, older cities? And how does the delivery model for micromobility impact the answers to these questions?

The experience of other regions should help inform our answers. For example, Kansas City recently discontinued scooters, concluding that scooters appeared to serve mostly a recreational (non-transit supportive) market and should be left to private companies, while bikes should be continued and be subsidized because they provide a better opportunity for commuter trip replacement and connections to the region's transit system.

NACTO's bike share utilization data does appear consistent with early indications in the Sacramento region: a larger system, with a greater number and density of vehicles to provide more reliability of available vehicles, may be important to drive ongoing high utilization and permanent mode shift. Without more data, it is still too early to discern whether the key factors in the region's high utilization rates are system design (number and type of bikes; service area size and locations; connections to other community amenities and transit; dock and hub configuration), geography and demographics, land uses, transportation network, etc. These will be important questions to explore in an update to the bike share business plan.

The data also points to a trade-off between optimal utilization for system profitability and accessibility to a broader community. Whether public or private, you want the system to have high utilization to support financial viability, but you also want the system to be broadly accessible to support other community and regional goals. As noted in the Bloomberg article "this trade-off already prompted something of a micromobility reckoning at the end of 2019, as Lime and Lyft (which also owns most of the country's largest bike share systems) pulled their scooters out of several cities in order to focus on their most popular markets. Around the same time, Uber handed off its JUMP business, purveyors of popular dockless electric bikes, to Lime."[4] To make the economics of a shared micromobility system financially sustainable, companies aim to have high utilization of their devices and therefore are only

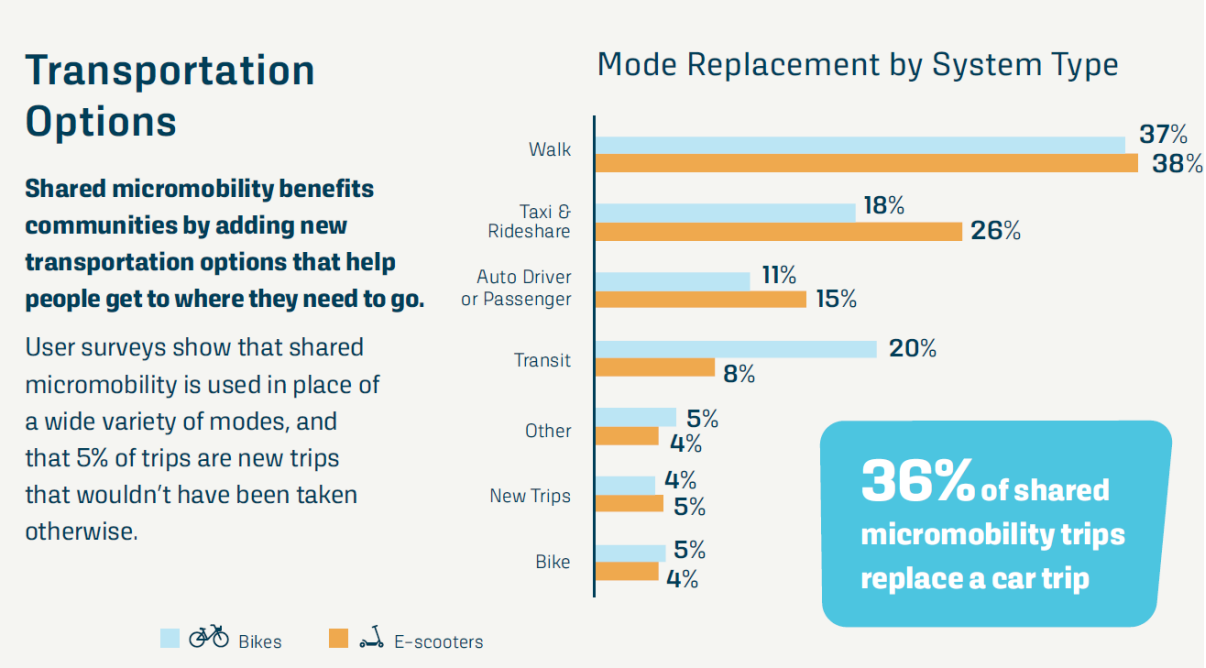
[4] Schneider, Benjamin (2020). U.S. Scooter Ridership Surged in 2019. Now What? https://www.bloomberg.com/news/articles/2020-08-27/how-big-was-2019-s-scooter-boom-and-what-s-next

going to expand their systems to a point. It is worth noting that the Sacramento region is one of the nation's more popular markets that continues to attract micromobility companies.

### *Mode Shift*

Shared micromobility provides people with more options for short trips. Scooter rides in 2019 averaged only one mile, while station-based bike share members' trips averaged 1.5 miles.[5] This aligns with data in the Sacramento region, where bike trips averaged two miles and scooter trips averaged only one mile. The short trips made by bikes and scooters are important. As measured by the SACOG's Regional Household Travel Survey, 31 percent of car trips in the region are under two miles, which means there is ample opportunity for mode shift.

As shown in the graphic below, NABSA reports that approximately 36 percent of shared micromobility trips replaced car trips in 2019. The report also shows that scooters are replacing more car trips compared to docked bike share systems. This could be because shared bikes and scooters tend to be used for different trip types and bike share replaces more transit trips. It could also be the result of a reduction in bike share systems, as a number of docked systems have folded over the last year. Kansas City, Seattle, and Portland all found that scooter trips in their cities were often concentrated in entertainment districts or downtown cores, and tended to be more common in the afternoons, evenings, and weekends. Station-based bike share trips were highly concentrated during commuting hours. These experiences suggest that bike and scooter share systems could be complementary, with bikes serving less dense areas with longer travel distances while scooters serve more dense areas with shorter trips and as a replacement to taxi or ride-hailing trips.



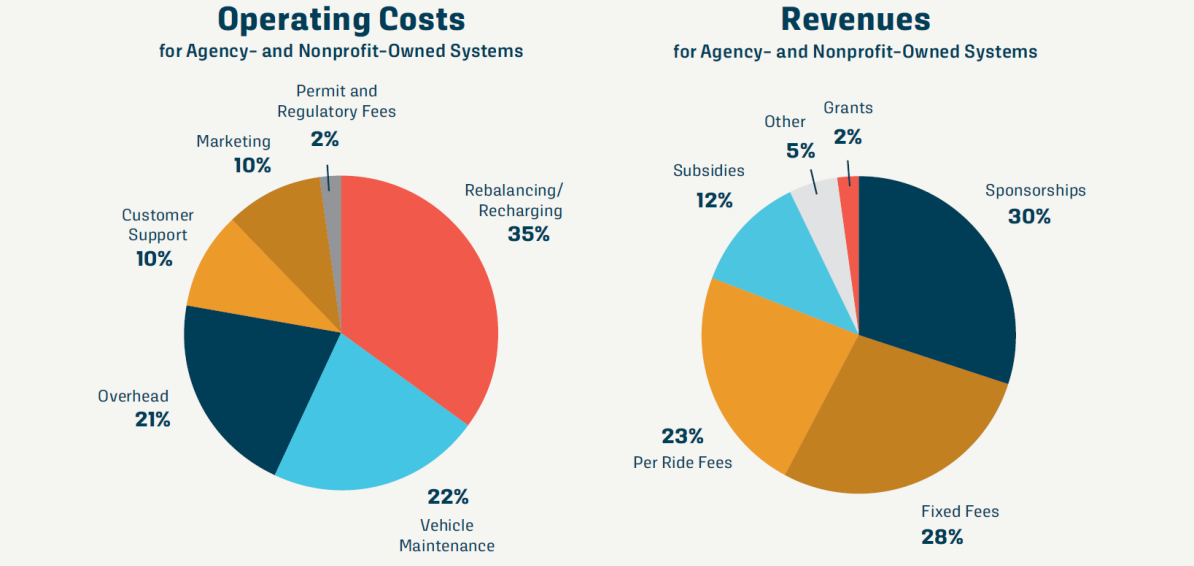

*Credit: NABSA 2019 State of the Industry Shared Micromobility*

[5] NACTO (2020). Shared Micromobility in the US: 2019. https://nacto.org/shared-micromobility-2019/

### *Shared Micromobility as Public Transportation*

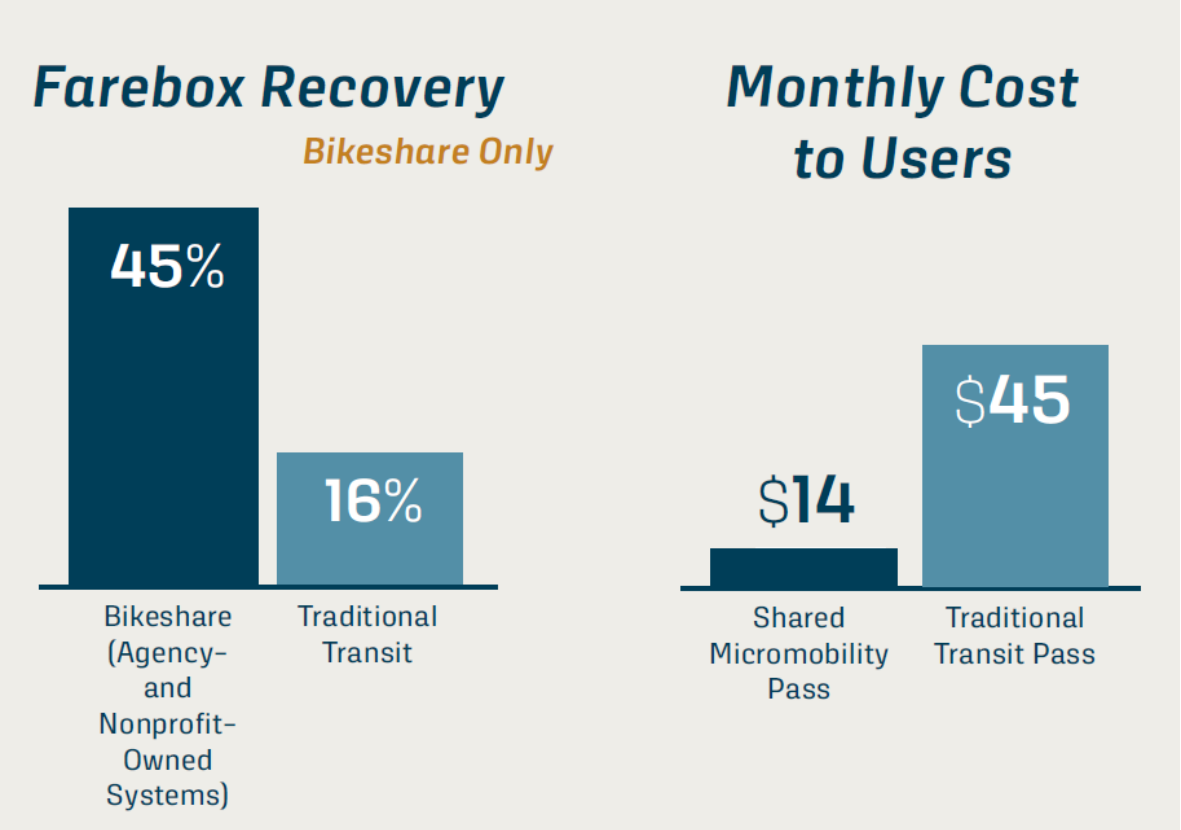
According to NABSA, "shared micromobility can be thought of as a human-powered public transportation system. As a flexible transportation option with comparatively low overhead and operating costs, shared micromobility can complement higher-volume fixed-route transit services by offering mobility services for many trips at a lower per-traveler cost." Shared micromobility can expand the reach of transit systems by providing a first/last mile connection. Increasingly, transit agencies are integrating or merging micromobility into their systems, including Austin, Dayton, Kansas City, Los Angeles, Las Vegas, and others.[6]

Below is a breakdown of typical operating costs and revenues reported to NABSA by agency- and nonprofit-owned docked bikeshare systems, as well as a comparison of farebox recovery and monthly user costs between shared micromobility and traditional transit options in the same cities.




*Credit: NABSA 2019 Shared Micromobility State of the Industry Report*

[6] NABSA (2020). 2019 Shared Micromobility State of the Industry Report. https://nabsa.net/about/industry/




*Credit: NABSA 2019 Shared Micromobility State of the Industry Report*

### *Changes in Bike Share Operating Models*

The arrival of privately owned and operated dockless systems in 2017 pushed the bike share industry to explore new operating models, which has led to cities increasingly shifting away from public/nonprofit owned and operated systems toward privately owned and operated systems. While these privately owned and operated systems did not require public investment in 2017, many bike share systems are now executing public-private partnership contracts through competitive application processes. According to a development plan updated this year for Capital Bikeshare, Washington D.C.'s bike share system, the bike share industry is increasingly "moving away from fee-for-service operating contracts toward greater cost/risk sharing. Vendors are taking on responsibility for sponsorship and advertising revenue acquisition, as well as member recruitment and retention."[7]

NACTO reports that "as of December 2019, 21 of the 50 largest U.S. cities have used RFPs or some other competitive application process to determine which companies, and how many, can operate shared micromobility [in their jurisdictions] – a 60 percent increase from 2018." NABSA found that last year, 67 percent of shared micromobility systems were privately owned, 24 percent were publicly owned, and 16 percent were nonprofit owned.

While this shift is not specific to bike share, recent examples of this shift are found in the bike share systems in Chicago, Denver, Minneapolis, Philadelphia, Portland, and Seattle. Denver's local nonprofit

[7] Kittleson & Associates, Inc. and Foursquare Integrated Transportation Planning (May 2020). *Capital Bikeshare Draft Development Plan Update.* https://d21xlh2maitm24.cloudfront.net/wdc/DRAFT-Capital-Bikeshare-Plan-Update-2020-04-22.pdf?mtime=20200422171147

(Denver Bike Sharing) folded in 2019 when it was not able to secure enough sponsorship funding to maintain operations. After piloting a permit process for dockless providers, Denver recently released a request for qualifications calling for vendors that can provide bike share as part of their fleets. Denver is currently in the process of selecting one or two providers to have exclusive rights to operate in the city. Last year, Chicago signed an agreement with Lyft to be the bike share concessionaire for nine years. The deal includes revenue sharing and comes with expansion of the system at no cost to the city. Minneapolis, Philadelphia, Portland, and Seattle have also recently executed similar concessionaire or franchise agreements with single providers.

### *COVID-19 Impacts*

The high utilization of shared micromobility and dramatic shifts in operating models are now faced with a new challenge to navigate – the impact of a pandemic on ridership. The following is adapted from the Bloomberg article:

> While scooters hogged the micromobility spotlight over the last two years, docked bike share systems have been the workhorse of the Covid-19 recovery. Even in the depths of the pandemic in April and May, bike share ridership in the [six] largest markets decreased an average of 44 percent, which is less than the 68-72 percent drops in driving and transit usage. Since then, ridership in those markets has returned to close to normal, as more people choose bikes for neighborhood errands, exercise, or to avoid public transit.
>
> In July, New York Citi Bike saw 2.1 million rides, just shy of July 2019's ridership of 2.2 million. Meanwhile, New York City subway ridership is at about 20 percent of normal. Other bike share comebacks have not been quite as dramatic as Citi Bike's, but nearly all the major established systems are seeing strong ridership. Scooter use is also gradually recovering.
>
> Many shared micromobility providers operating in larger markets have reported that rides for scooters and bikes have grown longer during the pandemic, and have shifted from downtowns to more residential neighborhoods. Lyft has recently introduced e-bikes in more of its bike share systems and claims it is also yielding higher utilization and longer trips.
>
> It is possible that the pandemic may end up being a micromobility industry boon. Axios recently reported that sales of e-bikes in the U.S. increased 190 percent this June compared to June 2019[8] and bike shops are reporting shortages of entry-level bicycles.

In the Sacramento region by comparison, shared micromobility fleets were pulled in March and began a modest return only in mid-July. As a result, there is not a lot of data to compare to the experiences of these other systems, and admittedly these larger markets operate in different conditions in terms of size, geography, density, overall economic activity, and transit service. Since relaunching in July, total micromobility ridership has been down in our region, and trips have mostly occurred in downtown and Old Sacramento. But as cities begin to reopen, micromobility providers are hopeful the continued need to social distance will result in far greater demand for service. According to a recent micromobility report released by the Governors Highway Safety Association, "an April 2020 survey of 25,000 Americans found that of those who regularly ride mass transit, 20 percent would no longer do so, while

[8] Ashley Gold (August 2020). Electric bikes see a pandemic-driven spike. https://www.axios.com/electric-bike-sales-coronavirus-pandemic-11d0cb2e-9af7-4f7e-9b67-c35288128ebc.html

another 28 percent would do so less often. The following month, micromobility providers in Columbus, OH, Oklahoma City, OK, Portland, OR, and Washington, DC, reported increases in the lengths of scooter trips, which suggests that riders may be making their full commutes on micromobility devices rather than just using them for first-mile, last-mile connections as they had prior to the pandemic. Chicago officials announced in April that it would launch a four-month pilot program that would bring 10,000 scooters (up from 2,500) to the city.[9] The pilot began in mid-August and will run through mid-December, with permits awarded to Bird, Lime, and Spin.

### Looking Ahead

As our communities continue to deal with the global pandemic, it is uncertain what will come next for the micromobility industry. The industry is likely to continue to see vendor consolidation as companies work to recapture ridership that declined due to stay-home orders. It appears that venture capital will likely, or already has, run dry and companies that do not find a sustainable business model will fold or need to merge with larger companies. Public systems could struggle to retain sponsors and public funds as they deal with the longer-term economic impacts of the pandemic.

But many leaders in the industry (both public and private operators) believe that micromobility could come back stronger than before. This may be particularly true for systems that have e-bikes. Governors Highway Safety Association notes that "a recent study commissioned by Deloitte predicted use of e-bikes worldwide will grow 50 percent by 2023. Most e-bikes will travel at least 25 miles or farther depending on the level of power assist the rider engages. They can also be used to haul gear and transport packages and food to customers."

While pedal bikes accounted for the greatest share of station-based system rides in 2018 at 30 million, station-based e-bikes (6.5 million) had double the usage of their non-electric counterparts. Madison, WI, converted its entire bike share fleet to electric in 2019 and found that e-bikes generated up to five times as many trips as standard bikes, while usage declined in cities where e-bikes were removed from their systems' fleets.

As our communities continue to open for business, people will be looking for ways to get around that allow them to practice social distancing. Public and private systems have already been adapting their operations to deploy devices in different areas due to new travel patterns that are a result of more people working from home.

## The Case for Bikes

The upheaval in the micromobility industry since the region's launch of bike share, and particularly the shift toward, and popularity of, scooters begs the question: does the region need bike share? If private bike share operators will not come to the region without incentives, will privately operated scooter share adequately serve the region's goals around equity, transit integration, and mode shift? The answers are not yet clear. Not only is the marketplace still in a state of flux, but the region has little data to date comparing bike and scooter ridership, patterns, and demographics. However, there is evidence

[9] Governors Highway Safety Association (2020). Understanding and Tackling Micromobility: Transportation's New Disruptor. https://www.ghsa.org/resources/understanding-and-tackling-micromobility-transportations-new-disruptor

to suggest that there is a strong case for bike share and that scooters will not achieve all the region's goals.

First, bikes and scooters likely serve different trip purposes. As noted, Kansas City, among others, found that people use bikes during commute hours to connect to transit, while scooters are more commonly used during evenings and weekends for more recreational purposes, as distinct from transit supported trips. Bike trips average about two miles, while scooter trips average about one mile. If the region aims to expand the geography of shared micromobility options beyond the urban core, then bike share is going to be key. Bikes can also be used to haul light cargo (such as groceries) and can withstand rougher pavement conditions compared to scooters.

Second, scooters and bikes likely serve different types of users. Not everyone who has used bike share in the region would use scooters if bike share were no longer an option, and vice versa. People of different abilities and preferences will gravitate toward different device options based on their comfort levels. While NABSA found that shared micromobility users have broadly similar demographic profiles, survey results showed that people 18-24 used scooters more than bikes, while people 25-44 used bikes more than scooters.

Third, travel by bicycle is less likely to result in a crash than traveling by scooter. According to NACTO, there were 9 scooter share fatalities for every bike share fatality in 2019. Scooter users in California are prohibited from scooting on sidewalks but often do out of perceived safety concerns. This might make scooter riders feel safer from car collisions, but it can result in collisions with pedestrians. The Insurance Institute for Highway Safety (IIHS) recently found that 3 out of 5 e-scooter injuries happen on the sidewalk.[10] Many cities are expanding their bikeway networks for bikes and scooters. In 2019, Santa Monica used the fees it collected from operators to make improvements to 19 miles of bike lanes.[11] More of these investments would likely reduce the number of fatalities for scooter riders.

Finally, scooter share is likely a complement to bike share, not a replacement. NABSA found that scooter users reported that 41 percent of their trips were replacing car trips, while bike share users reported only 29 percent of their trips were replacing car trips. Removing bike share does not mean that all those bike share trips would shift to scooter trips. Some of the bike trips would likely shift back to car trips. The difference in trip replacement between bikes and scooters could also be due to the sheer volume of scooters and the markets in which they operate. In 2019, there were 112,000 scooters compared to 82,000 bikes across 292 markets in North America.[12] Scooter companies focus on markets with dense urban cores, where short trips are frequent and easy to make via scooter. This further supports the case that bikes may likely be a better option for people who live further from urban cores and where land uses require longer travel.

Maintaining and improving the bike share system in the Sacramento region is an opportunity to continue to learn about the different use cases of different micromobility devices and their ability to

[10] Teale, Chris (October 2020). Most scooter injuries happening on sidewalks: study. https://www.smartcitiesdive.com/news/most-scooter-injuries-happening-on-sidewalks-study/587224/

[11] NACTO (2020). NACTO (2020). Shared Micromobility in the US: 2019. https://nacto.org/shared-micromobility-2019/

[12] NABSA (2020). Shared Micromobility State of the Industry Report 2019. https://nabsa.net/about/industry/

create mode shift, provide equitable access to transportation, integrate with public transit, and serve the less dense areas of our region.

## Leading in Innovation

The Sacramento region has been on the cutting edge of the bike share industry since its bike share journey began in 2013. After witnessing a large shift in the industry from publicly owned systems to privately owned systems, the region pivoted its structure to execute an innovative public private partnership agreement that is now the common model for bike share systems. With this shift, the region launched the largest all-electric-assist fleet in North America and quickly saw ridership numbers that tripled and quadrupled the ridership of most station-based bike share systems.

The region is once again at an inflection point, with an opportunity to reconsider the regional goals for the system, identify new goals in light of the pandemic and other social changes, and to innovate. Potential areas for consideration include the following.

Increased focus on underserved communities, racial disparities, and diversity. The downtown grid and adjacent neighborhoods in Sacramento and West Sacramento include several low-income, high-minority communities that could benefit from an affordable and accessible mode of transportation. Are there strategies to better serve these communities, increase awareness and education, and improve safety?

Bike share as a tool for addressing climate change. There is an opportunity to reconsider how well the system has performed in terms of mode shift, transit integration, and reducing vehicle miles traveled to address climate change. The region can continue to improve how the system has worked in achieving these goals and create an implementation plan that more clearly reaches them.

Bike share during a pandemic. Are there ways for bike share to better our communities during the pandemic, including access for essential workers and adaptations for our large working-at-home population? For example, since 31 percent of car trips in the region are under 2 miles, the region could test how bike share can support the “15-minute neighborhood” concept and improved access to local businesses and services.

Transforming mobility for our colleges and universities. How can bike share be better integrated into the transportation plans for our colleges and universities? University of California, Davis (UC Davis) in particular has discussed the potential for a large-scale pilot project that could reduce the need for students to purchase individual bikes. At the end of each semester, UC Davis sees thousands of bikes abandoned, creating clutter that university staff is left to clean up. What if the region were able to supply thousands of bikes through discounted student memberships that were offered when students sign up for housing or meal plans? The potential is a system with high ridership, integrated with the City of Davis, that could significantly reduce the number of bikes abandoned throughout the school year, creating a more environmentally sensitive and sustainable system. Similar concepts could be explored with other colleges and universities in the region.

And don’t forget parking! Protecting accessible public rights of way has been the most intractable bike share challenge. The Sacramento region is not alone in this challenge. The next generation of bike share in the region needs to explore and pilot management and technological solutions, including parking bikes on the street (like cars) where bike racks/corrals are not widely available, launching in-app push notifications, and/or testing sidewalk detection technologies to change rider behavior.

The following section will provide an analysis of different operating models to help the region consider how it should proceed with the next phase of bike share.

## Analysis of Operating Models

This section analyzes three main operating models for bike share: public/nonprofit owned and operated, publicly/nonprofit owned and privately operated, and privately owned and operated. For each of these models there are examples, cost estimates, SWOT (strengths, weaknesses, opportunities, threats) analyses, and other considerations for implementation.

Each of the three operating models can be implemented through different organizational structures, operating agreements, participating agencies and private entities, etc. These details can impact the strengths, weaknesses, opportunities, and threats for a particular model and are identified below. All cost estimates assume 3 years of operations and 900 active bikes across all three cities. These assumptions are just a starting point and are used only for comparison purposes. The cost estimates are very high-level averages and do not include the detail that a financial business plan would provide. The economics of the system would change based on higher or lower numbers of bikes, ridership, and user fees.

The descriptions and analyses that follow are compiled from online research and interviews from over 20 bike share systems in North America. It is important to note that the economic environment for micromobility companies has changed significantly in the last year. While the privately owned and operated model still exists as an option, the marketplace is seeing a consolidation of, and reduction in, private operators providing bike share at no cost to the public sector. Most micromobility providers are still paying local regulatory fees to operate scooters, but fewer companies are operating bike share systems that require fees compared to 2018. For example, Lime is beginning to relaunch bikes in some of the preexisting JUMP markets operating prior to COVID-19, but it is requesting that cities allow them to also operate scooters and to reduce city fees for bike share. Lyft and Gotcha are focusing on markets where they have exclusive operating rights under contracts with operating subsidies or sponsorships. For example, Portland is not using public funds to pay Lyft, but the company is receiving a large portion of the sponsorship revenue from Nike. Denver apparent plan is to select only one or two companies that can provide bike share in the city.

### Publicly/Nonprofit Owned and Operated

Under this model, a public agency or nonprofit plans, designs, implements, and operates the bike share system. The public agency or nonprofit also owns all the assets of the system and carries all financial risk. The implementing agency operates the system through its own employees or contracts with a nonprofit corporation or another government agency.

#### *Examples*

Of the20 bike share systems researched for this report, 13 are publicly owned, but only one is also operated by a public agency – Austin B-Cycle. Austin is transitioning operations from a local non-profit to Capital Metropolitan Transportation Authority and is now branded Metro Bike. Four other systems are operated by non-profit agencies: Boulder, Hamilton, Kansas City, and Pittsburgh. The remaining eight publicly owned systems subcontract operations out to private companies and therefore fall under the publicly/nonprofit owned and privately operated model.

Kansas City (RideKC Bike) is a unique partnership between the Kansas City Area Transit Authority, BikeWalkKC (non-profit), and Drop Mobility (private company). BikeWalkKC owns and operates the system by securing many small sponsorships and leveraging the resources of local partners. They work closely with the transit agency to integrate services.

Healthy Ride in Pittsburgh is also owned and operated by a local non-profit, Pittsburgh Bike Share. The system relies on three major funding sources: title sponsorships, state/federal grants, and donations/grants from the philanthropic community. Pittsburgh Bike Share purchases bikes and docks, and then employs 13-20 staff members (depending on time of year) to operate and maintain the system.

### *Estimated Cost – $4,600,000*

The costs for a publicly/nonprofit owned and operated system are difficult to estimate without a thorough financial analysis and business plan given that the annual subsidy amount is dependent upon many variables, including local ridership, user pricing, service area geography, overhead costs, and other revenue from sponsorships or advertisements.

The estimate below assumes a public agency would own and operate a system of 900 active bikes with ridership of 2 trips per bike per day. The operating costs could be lower than these estimates if a nonprofit managed the system, since nonprofits often have lower overhead costs compared to public agencies. Operating costs could also be dramatically lower if the region returned to the ridership it saw in 2019. At a minimum, the region would need to plan for a large capital investment to purchase bikes and potentially more racks. The cost estimate below does not include future capital costs associated with replacing bikes that are damaged, stolen and/or reach the end of their useful life.

| Item | Year 1 | Year 2 | Year 3 | Total |
|---|---|---|---|---|
| Staff time (negotiations, procurement, launch, ongoing management) | $500,000 | $300,000 | $300,000 | $1,100,000 |
| Capital (bikes and racks) | $2,000,000 | $0 | $0 | $2,000,000 |
| Operations Subsidy | $500,000 | $500,000 | $500,000 | $1,500,000 |
| Total | $3,000,000 | $800,000 | $800,000 | **$4,600,000** |

### *Strengths, Weaknesses, Opportunities, and Threats*

Most of the strengths, weaknesses, opportunities, and threats of a publicly owned and operated system are the same as those of a nonprofit owned and operated system. However, there are differences worth noting; they are called out in the table below.

**Strengths**

*Specific to Public Agencies:*

- Public agencies are often more experienced in securing and working with public funds.
- Partners maintain full control of the program including operating standards, brand, look, and user fees.
- Ensures public transparency and accountability.

*Specific to Nonprofit Agencies:*

- A nonprofit can be nimbler and more responsive compared to a public agency since the nonprofit is able to focus exclusively on bike share and may not be subject to all the requirements of a public agency.
- Public agencies could appoint board members to represent their interests on a Board of Directors.
- Nonprofit agencies are a preferred form for securing donations and foundation grants.

*Both Public and Nonprofit Agencies:*

- Partners can prioritize the desired goals of the system—e.g., addressing parking and safety, supporting transit use, encouraging mode shift, serving underinvested communities, addressing inequity, etc.
- Could create branding consistency and reliability for riders where a privately owned and operated system is more prone to external market forces, but this is only true if the public/nonprofit is able to secure sustainable funding for multiple years of operation.

**Weaknesses**

*Specific to Public Agencies:*

- Public agencies often have higher overhead costs compared to nonprofit and private operators.
- Public agencies often have slower and less efficient processes for making decisions.
- Politics can have more influence on the service area and operational priorities.
- Liability and risk management are issues that will take additional time for public agencies to navigate prior to launch.

*Specific to Nonprofit Agencies:*

- The goals and metrics set by the nonprofit may not meet public agencies' expectations.
- Nonprofit staff may not be familiar with requirements tied to public funds.

*Both Public and Nonprofit Agencies:*

- Creating a governance structure to determine which agency will own and/or operate the system can take a long period of time to negotiate.
- It can take additional time to hire staff and gain expertise in operations.
- Risk, liability, and ongoing financial responsibility are held by the partners.
- Pursuing goals that are not profit oriented will cost money.
- Public/nonprofit sector ownership and operation is not seen as conducive to innovation (in an area that has been driven by innovation) and the lack of competition could dampen both innovation and service delivery.
- The region would not benefit from ongoing capital investments and latest innovations that are funded by private companies; the region would have to go out to bid and pay for new equipment and technological upgrades.
- Partners would need to secure significant funding for capital and operations.

**Opportunities**

*Specific to Nonprofits:*

| | |
|---|---|
| | • Establishing a nonprofit could allow for engagement of a broader range of stakeholders, including public, private, and community organizations through representation on the board of directors.<br>• Opportunities for donations and foundation grants.<br><br>*Both Public and Nonprofit Agencies:*<br>• A diverse set of regional partners can allow for pooling of resources to diversify revenue streams and share the financial risk across all partners.<br>• Partners could leverage one another's resources and expertise with regards to securing funding, obtaining warehouse space, and conducting community engagement.<br>• Partners could streamline decision-making for bike share goals, policies, and operations by establishing a single lead agency to be responsible for the planning, procurement, implementation, operations, and future expansion of the system.<br>• A system with more certainty and long-term brand might provide better opportunities to secure sponsorships. |
| **Threats** | • Without long-term funding commitments from a sponsor, public partners, and/or revenue from a bond or sales tax measure, this model may not be any more sustainable than the current privately owned and operated structure in the region.<br>• Financial and operating performance is not the only priority.<br>• Given the financial challenges we are seeing in transit agencies, it could be difficult to secure public funding, especially if bike share is viewed as competing with transit service.<br>• Some regions/cities have seen their bike share nonprofits fold when they are not able to secure additional sponsorships or public funds. |

### *Other Considerations*

Many bike share systems operate within the jurisdiction of a single city. To own and operate a public or nonprofit system across all three cities, partners would need to determine whether they want to establish a nonprofit, create a Joint Powers Authority (JPA), execute memoranda of understandings (MOUs), or identify some other means of establishing a single consortium or unifying entity to clearly define partner roles, responsibilities, and ownership of assets, and to establish consistent rules and procedures for operations. Whether the system is owned by a public or nonprofit agency, partners will need to pay for the system with public and/or sponsorship funds.

Most cities have established nonprofit organizations or recruited existing nonprofits to own and/or operated local bike share systems. These nonprofits do everything from managing operations to securing funding, procuring capital and software, and marketing the system.

## Public/Nonprofit Owned and Privately Operated

In this model, the government or nonprofit owns the assets and a private entity operates the system. This can be a simple fee-for-service system, like in Barcelona, or a station-based system, like in Shanghai where the fee is based on the number of bikes in the system. The procurement of bicycles can be done

by the public/nonprofit agency or it may be the responsibility of the operator. All other assets—software, control center, stations—are typically owned by the public/nonprofit agency.

### *Examples*

This was the model originally envisioned for bike share in the Sacramento region; the city partners were to own the bike share assets and contract with SoBi to operate the system. SACOG negotiated a deal with SoBi that shared risks, costs, and revenue between public and private sectors. It also relied on sponsorship funds to obtain profitability. However, the model that was ultimately executed in the region was a privately owned and operated system.

Portland's BIKETOWN 1.0 system is noted in the Bikeshare Planning Guide as a good example of this model. BIKETOWN 1.0 was owned by the city, which allocated $2 million in federal funding toward capital investments. After that, the system was operated by Motivate, with SoBi providing the equipment and backend softwarewith no additional public funding required. Unlike the detailed service level agreements ultimately included in the Sacramento agreement with JUMP, Portland's contract with SoBi included "few specific requirements for rebalancing or maintaining capacities at stations," according to the Bikeshare Planning Guide. This flexibility was "intended to encourage the operator to run bike share like a business—as efficiently and cost-effectively as possible," and this principle "was further incentivized through a requirement that the operator cover any financial losses in the first three years of operation. However, the company received 60 percent of any program surplus (with the rest going back to the city)."[13]

Portland's BIKETOWN 2.0 system (launched in September) is an example of the shift from a publicly owned and privately operated system to a privately owned and operated system. Similar to our current system, Portland will require specific service level agreements aimed at equity and transportation goals. The system is supported by a $12 million sponsorship from Nike.

Of the 20 systems researched for this report, 9 of them are publicly/nonprofit owned and privately operated. Six systems of those systems (Chicago, Detroit, LA Metro, Minneapolis, Philadelphia, and Toronto) own the capital assets but subcontract operations to private companies. The remaining three (Denver, Portland, and Washington D.C.) were publicly owned systems, but have recently transitioned to privately owned systems with unique concessionaire or franchise agreements that include varying levels of cost/risk sharing between the public agency and the vendor. Denver, for example, no longer has a nonprofit owned system and has solicited private operators to provide bike share by limiting the number of operators permitted to operate in the city. The selected companies will have to provide bikes and scooters to receive a permit. This year, Seattle will limit the number of micromobility companies by offering only three permits: one for standing scooters, one for seated scooters, and one for a mixed fleet of bikes and scooters. LA Metro recently released a Request for Information for a system that would come at little or no cost to the public sector, signaling that it is also looking to shift to a privately owned and operated system.

### *Estimated Cost - $2,900,000*

Some private operators are willing to share the cost of capital investments in new systems in exchange for branding, exclusive operating rights, and/or revenue sharing contracts. The estimate below assumes

[13] ITPD (2018). The Bikeshare Planning Guide 2018 Edition. https://www.transformative-mobility.org/assets/publications/The-Bikeshare-Planning-Guide-ITDP-Datei.pdf.

the region would be able to negotiate cost savings on capital and operations. The cost estimate below does not include future capital costs associated with replacing bikes that are damaged, stolen, and/or reach the end of their useful life.

| Item | Year 1 | Year 2 | Year 3 | Total |
|---|---|---|---|---|
| Staff time (negotiations, procurement, launch, ongoing management) | $500,000 | $250,000 | $250,000 | $1,000,000 |
| Capital (bikes and racks) | $1,000,000 | $0 | $0 | $1,000,000 |
| Operations Subsidy | $300,000 | $300,000 | $300,000 | $900,000 |
| Total | $1,800,000 | $550,000 | $550,000 | **$2,900,000** |

### *Strengths, Weaknesses, Opportunities, and Threats*

**Strengths**

- Public/nonprofit agency typically has some control during key phases of the project, but day-to-day operating and system financial and liability risk generally fall on the private operator.
- Partners could potentially maintain full control of the program including the brand, look, and operating standards.
- Private operator manages all logistics, which usually results in time and cost savings to the public/nonprofit agency because it is contracting with a vendor that is experienced in operating bike share systems.
- No need to hire and train public/nonprofit staff.
- Contract deliverables for vendor can prioritize the desired goals of the system—e.g., addressing safety and parking, supporting transit use, encouraging mode shift, serving underinvested communities, addressing inequity, etc.—over traditional private-sector objectives or motives, such as profitability.
- Could create branding consistency and reliability for riders if long-term sustainable funding is secured, while a privately owned and operated system is more prone to external market forces .
- Public/nonprofit agency benefits from innovations in the latest equipment and software brought by the private sector.

**Weaknesses**

- Reliant on a third-party vendor to execute the goals of the program when the vendor might prioritize operational efficiencies over program goals.
- Public/nonprofit agency would still be responsible for securing substantial funding for capital and operations.
- The public/nonprofit agency may need to be more flexible on service level agreements, including rebalancing and user pricing to create a system that is financially sustainable for the private company.

**Opportunities**

- Instead of a traditional fee for service model, the public/nonprofit agency could negotiate an agreement in which the public sector shares some of the financial risk with the private operator, or agrees to subsidize the system in order to achieve transit integration, equity, proper parking, or other goals.
- Service level agreements and financial commitments could be included in competitive procurement processes and further negotiated before executing an agreement with a private operator.

| | |
|---|---|
| | • In some cases, shorter contracts can be negotiated if the operator has no investment in the infrastructure. This offers more flexibility for the partners in switching operators if service is not meeting standards, but can also compromise long-term stability, service, and reliability. |
| **Threats** | • It can be more difficult to enforce day-to-day operational requirements around equity, reliability, parking, and safety.<br>• There are a limited number of vendors that offer operation-only services which could increase costs over the longer term.<br>• Operators could go out of business which could cause service disruptions until another operator is identified.<br>• This model may require more staff time for planning (issuing requests for proposals, negotiating, signing a contract potentially every year) and contract management compared to privately owned and operated systems.<br>• Without long-term funding commitments from a sponsor and/or public partners, this model may not be any more sustainable than the current privately owned and operated model in the region. |

### *Other Considerations*

Like the public/nonprofit owned and operated model above, partners would need to determine whether they want to establish a nonprofit, create a Joint Powers Authority (JPA), execute memoranda of understandings (MOUs), or identify some other means of establishing a single consortium or unifying force that will clearly define partner roles, responsibilities, and ownership of assets, and to establish consistent rules and procedures for operations. After a governance structure is established, the partners could release one or more solicitations for a third party (or parties) to provide equipment, operations, marketing, sponsorship and advertising, marketing and promotion.

## Privately Owned and Operated

Under this model, one or more private entities own the assets and provide the service, while the public agency grants access to public space and the rights-of-way. The public agency often establishes a regulatory framework, including fees, permits, and operating conditions. Ultimately, the government grants the rights, in the form of regulation and street space, to operate, but the capital assets are owned and operated privately.

### *Examples*

Privately owned and operated systems are very attractive to cities that have struggled—or completely failed—to raise enough funds to support bike share. This is the model the Sacramento region ultimately used to launch bike share in 2018. The system is privately owned and operated through a partnership agreement that requires Lime to meet service level agreements around equity, redistribution, pricing, parking, and customer service. The agreement included an investment in bike parking (with those investments continuing to be owned by city partners) but the financial risk and operating responsibilities are held by Lime.

While we have seen a decrease in the number of private companies willing to bring bike share to cities without any public funding, there are still a number privately owned and operated bike share systems across the U.S. Of the 20 systems researched for this report, six have privately owned and operated systems: Bay Area, Denver, Miami, New York, Portland, and Seattle. Other regions also are transitioning

to privately owned and operated systems, including LA Metro, Minneapolis, Santa Monica. Most of these systems offer some form of exclusivity, subsidy, and/or sponsorship funds in exchange for their bike share systems. Denver and Seattle do not offer full exclusivity to bike share vendors, but they do have caps on the number of operators in their markets.

### *Estimated Cost – $675,000 to $1,065,000*

Our current understanding from scanning the shared micromobility marketplace and observing what has happened locally is that there are not currently any shared mobility providers that are willing to pay regulatory fees to cities in exchange for a permit to operate bike share within a city. There are companies willing to pay fees to operate scooters (and currently do so to operate in the region) but they struggle to be profitable and their business models are evolving.

Therefore, it is unlikely that city partners can expect a zero-cost bike share system, as there will be staff costs for monitoring the system at a minimum. However, there is the potential to have a system that comes at a relatively low cost, particularly when compared to the other two delivery models.

The high-end estimate for a privately owned and operated system is reflected in the table below. It assumes that partners would release a joint procurement to attract a private vendor. Procurement processes for bike share services are lengthy and require extensive negotiation. If the region were to go out to bid for a new vendor, it would also require staff time for planning and launching the new system. If the region can reach a deal with Lime to keep the existing bike share system, the estimate would be reduced because a procurement process would not be necessary. We selected the bike share vendor through a competitive process and have the right to extend that agreement without releasing another solicitation.

In either case, the region should assume that it will either need to reduce the number of companies allowed to operate in the region or commit to some level of subsidy for a bike share system because it appears there are not currently any bike share vendors that are willing to pay fees to compete with multiple vendors to operate a bike share system. If the region were to limit the number of shared micromobility providers in the region and grant the right to collect sponsorship and/or advertisement revenues to one or two vendors, it is possible that the region could negotiate a deal that would not require any ongoing subsidy from partners. Alternatively, the region could subsidize a bike share system, either in the form of permit fee waivers/reductions or direct payments to a vendor. Any potential subsidy will, of course, also need to consider how the public agencies fund staff time needed to oversee the system.

| Item | Year 1 | Year 2 | Year 3 | Total |
|---|---|---|---|---|
| Staff time (Procurement, Negotiations, Planning, Launch and Contract Management) | $300,000 | $200,000 | $175,000 | $675,000 |
| Annual Subsidy | $130,000 | $130,000 | $130,000 | $390,000 |
| Total | $430,000 | $330,000 | $305,000 | **$1,065,000** |

### *Strengths, Weaknesses, Opportunities, and Threats*

Most of the strengths, weaknesses, opportunities, and threats of selecting any private operator are the same as those the region might be able to negotiate as part of a longer-term agreement with Lime. However, there are differences worth noting and those are called out in the table below.

It is worth highlighting that one of the greatest strengths of a privately owned and operated system is that companies are constantly investing in new equipment and technologies that they bring to all of their markets. With a public or nonprofit owned system, partners would need to continually reinvest in, and go out to bid for, equipment and software upgrades.

**Strengths**

*Any vendor:*

- Substantially lower cost to public partners compared to other options.
- Most of the financial risks and all the operation responsibilities fall to the vendor.
- Provides the best opportunity for access to the latest innovations and technologies in bike share.
- Likely avoids the need for cities to budget public funds to directly subsidize bike share–if they are able to reduce or eliminate permit fees for the vendor.
- Cities could potentially receive revenue (if a revenue sharing agreement were negotiated) that could cover the cost of staff time required to monitor the system and install additional bike parking.
- Releasing a competitive bid would ensure the region is getting the best deal possible by comparing options in the current market.

*Specific to reaching agreement with Lime:*

- Residents in the region already recognize JUMP bikes as a brand and system.
- Significant time and cost savings compared to other options because no additional procurement procedures are needed.
- Bikes are already in Sacramento and West Sacramento, with ongoing discussions about relaunching in Davis.

**Weaknesses**

*Any vendor:*

- Can be more difficult (compared to the other two options) to prioritize the desired goals of the system—e.g., addressing parking and safety, supporting transit use, encouraging mode shift, serving underinvested communities, addressing inequity, etc.
- In the current environment, fewer operators (compared to two years ago) are willing to operate bike share without a reduction in, or elimination of, fees or competition–there is likely some cost to city partners.
- Due to the current economics of micromobility companies, and the unknowns around ridership during and coming out of the pandemic, it is unclear whether releasing an RFP at this time would result in a favorable deal for the region.
- Partners would have little or no control over brand and look of system.
- Private companies may focus more on financial goals that may not align with partners' goals.

**Opportunities**

*Any vendor:*

- Could potentially identify a vendor that has expertise in securing sponsorships that would both subsidize the system and help cover staff time for monitoring the system.
- Companies may be interested in piloting new mobility solutions, including transit payment integration and new micromobility vehicles, and the Sacramento region could be a testbed for those pilots.

| | |
|---|---|
| | • Releasing an RFP could provide an opportunity to solicit proposals for residential and suburban areas outside the urban core such that other SACOG members could opt in to subsidizing bike share in their communities.<br>*Specific to reaching agreement with Lime:*<br>• Potential to restore the level of service the region had prior to shelter in place orders more quickly.<br>• Partners could take time to update the bike share business plan and draft an RFP that solicits innovative contract models.<br>• The region could continue to collect information about trips and ridership of bikes compared to scooters for achieving equity and mode shift goals. |
| **Threats** | • Even if companies agree to a long-term deal, companies could merge or go out of business, which could cause service disruptions until another operator is identified.<br>• This would likely result in companies only willing to provide scooters.<br>• Companies could fold, merge or be unwilling to pay fees in the future, leaving the region without any micromobility options.<br>• Many of the franchise and concessionaire contracts in other cities have public or sponsorship funds to subsidize the system if it does not meet ridership goals. |

### *Other Considerations*

Under a privately owned and operated system the region could consider three paths for implementation:

1. Negotiate a mid-term (2-3 year) deal with Lime that includes revenue sharing while updating its business plan to inform a longer-term direction for bike share;
2. Begin work to release an RFP for competitively selecting a bike share vendor and potentially limit the number of micromobility vendors authorized to operate in the region; or
3. Continue with permit application model in which vendors pay fees to cities for access to the public right of way.

The current agreement with Lime in the Sacramento region is a privately owned and operated system that is structured as public-private partnership in which Lime owns and operates the bike share system while meeting service level agreements. The interim agreement approved by the Bike Share Policy Steering Committee in August includes a temporary extension of fee renewal requirements with the cities of Sacramento and West Sacramento. After November 30, Lime will be required to pay annual device and per trip fees. Lime may be interested in committing to a longer-term deal, but it has asserted that it will not continue bike share operations unless it receives some financial incentive or fee waivers or reductions. Given the lower profit margins for bikes versus scooters, the uncertainty around ridership during the current pandemic, and the uncertainty about what the marketplace will look like post pandemic, Lime is hesitant to commit to a mid- or longer-term bike share agreement without economic concessions. Preliminary discussions with Lime have focused on connecting any incentives or fee concessions to bike utilization and the potential for revenue sharing if bike utilization reaches certain targets.

The second option is one that many cities have taken in recent years to bring down the costs of public systems and ensure cities/regions are getting the best deal available. According to NACTO, as of

December 2019, 21 of the 50 largest U.S. cities have used RFPs or some other competitive application process to determine which companies, and how many, are permitted to operate shared micromobility – a 60% increase from 2018. Many regions have shifted toward a competitive process for awarding one or two vendors exclusive rights to operate in their areas. These agreements often come without the need for subsidies or sponsorships, but staff time at a minimum is needed to manage the contract. The contracts Lyft has in other cities are supplemented with sponsorship revenues. It is important to note that this option would result in service disruption between the time the Lime contract would expire, and a new vendor would be selected. Further, as noted in the SWOT analysis, it is unclear whether the region would be able to negotiate a favorable deal in the current market, given that ridership is lower due to the pandemic.

The third option would likely result in no vendors providing bike share in the region. The cities of Denver and Seattle are currently in the middle of transitioning from permit processes in which bike share providers pay fees to the cities, to systems that offer exclusive contracts with one or two vendors, with stronger service level requirements and reduced fees. In the case of Denver, the selected operator(s) will not pay any fees to the city. SACOG staff was not able to identify any markets in which vendors are paying fees to operate bike share without some additional benefit to the vendor, such as a cap on other providers and/or exclusive sponsorship/advertising rights.

## Summary

At this point of inflection, with considerable change, contraction, and instability in the bike share industry–due to the both the changing economics of bike share systems and the impact of the global pandemic–the region has an opportunity to innovate and lead in the shared micromobility space. This white paper provides information, generates discussion, and informs a further effort to update the regional business plan, consider options, and shape the future of bike share in the region. The key findings of this report include:

- The Sacramento region had one of the strongest shared micromobility markets in the nation (in terms of vehicle utilization) prior to the pandemic.
- Under the current market conditions, bike share does not appear to be self-sustaining, at least as a stand-alone business, particularly when designed to achieve policy goals that do not directly relate to profitability. Public funding and/or sponsorships are needed to achieve goals around equity, mode shift, and transit integration. However, given the strong micromobility market in the region, it is likely possible that the region could attract bike share vendors willing to pay some fees to cover public oversight costs if the region considers some incentives, such as limiting the number of providers and/or offering exclusive sponsorship/advertising rights.
- A publicly owned and operated system will give partners the most control over day-to-day operations and the ability to achieve policy goals, but it will require substantially more funding (either from public funds or sponsorship) compared to a privately owned and operated system.
- Operating models are shifting back toward public-private partnerships in which costs and risks are shared between partners.
- Micromobility options are beginning to integrate and partner more directly with public transit providers.
- Travel patterns are in flux due to the pandemic. People are working from home but still want to get outside for errands and recreation.

- Scooters and bikes have different uses and could be set up as complementary and holistic systems. Scooter trips in some cities have been concentrated in entertainment or downtown districts, and have tended to be more common in the afternoons, evenings, and weekends. Station-based bike share trips have been highly concentrated during commuting hours. It's possible that bikes could serve areas that are less dense and have land uses that require people to travel longer distances, while scooters can more easily serve dense areas where people are looking to replace a taxi or ride-hail trip.