



Board Report

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Agenda Number: 32.

EXECUTIVE MANAGEMENT COMMITTEE NOVEMBER 21, 2019

SUBJECT: METRO BIKE SHARE PROGRAM UPDATE

ACTION: RECEIVE AND FILE

RECOMMENDATION

RECEIVE AND FILE report on Metro Bike Share Program Update.

ISSUE

The Metro Bike Share program ("MBS") was launched in July 2016. The micro-mobility market is constantly evolving, and Metro needs to continue to assess its bike share program in relation to the goals of the program and the market changes. This report provides an annual update on the MBS.

BACKGROUND

In January 2014, the Board-approved Motion 58 by Directors Garcetti, Yaroslavsky, Bonin, Fasana, and Knabe authorized the CEO to procure, contract, and administer a countywide bike share program. With this Motion, Metro became the first transportation authority to launch a countywide bike share program. The business model approved by the Board was to implement bike share in a phased approach, with a single-point agency (Metro) to ensure inter-operability among the different jurisdictions and integration with the TAP card.

At that time, only the cities of Santa Monica and Long Beach had established publicly-owned bike share programs. In July 2016, the MBS Program officially launched Phase 1 in downtown Los Angeles with 1,000 bikes. In 2017, Phase 2 expansion of 700 bikes was launched in Pasadena, Port of Los Angeles, and Venice. In May 2018, Phase 3 expansion of 1,400 bikes was authorized for contiguous expansion of the downtown and westside Los Angeles and Venice service areas, including historically underserved communities as measured by the CalEnvironScreen metric. MBS currently has a total of 3,065 bikes, of which 353 are electric and 932 are smart bikes.

The business model also outlined a cost sharing formula for capital costs and operations and maintenance costs between Metro and the partner cities. Since the inception of the MBS, privately-owned bike share and electric scooter providers have emerged with a no-cost business model for the cities in the region. However, those programs have not provided a reliable and consistent first/last mile transit solution.

In order to respond to the competitive operating environment, staff developed a new MBS Business Plan ("Business Plan") (Attachment A) which was approved by the Board in May 2018. In September 2018, Board item No. 2018-0479 committed staff to provide an annual update on MBS including performance data under the new Business Plan authorized in May 2018.

Phase 3 expansion is now nearing completion with new stations added to downtown, central, and westside Los Angeles and a new service area in North Hollywood bringing public bike share for the first time to the San Fernando Valley. Most recently, the Culver City council also authorized the implementation of MBS during a special meeting on September 16, 2019.

DISCUSSION

Regional Vision & Current Status

The micro-mobility market is evolving rapidly in Los Angeles County. Less than two years ago, MBS was competing with private dockless bike share providers. Presently, most of the private bike share providers have transitioned to electric scooters (e-scooters). Other than MBS, there is only one private micro-mobility bike share provider (JUMP) and two municipal bike share programs (Santa Monica and Long Beach) available in Los Angeles County. MBS is the only bike share program available that serves across jurisdictional boundaries throughout Los Angeles County.

Consistent with MBS's role in leveraging the Metro transit system, there are also considerable efforts to recognize bike share systems as a public transportation service or transit facility. In July 2019, the Congressional Bike Caucus introduced The Bikeshare Transit Act of 2019 which defines bike share in US federal statute and makes bikeshare systems eligible to receive funding. This proposed statute represents broadened opportunities to fund bikeshare and to systematically plan and design for such transportation services.

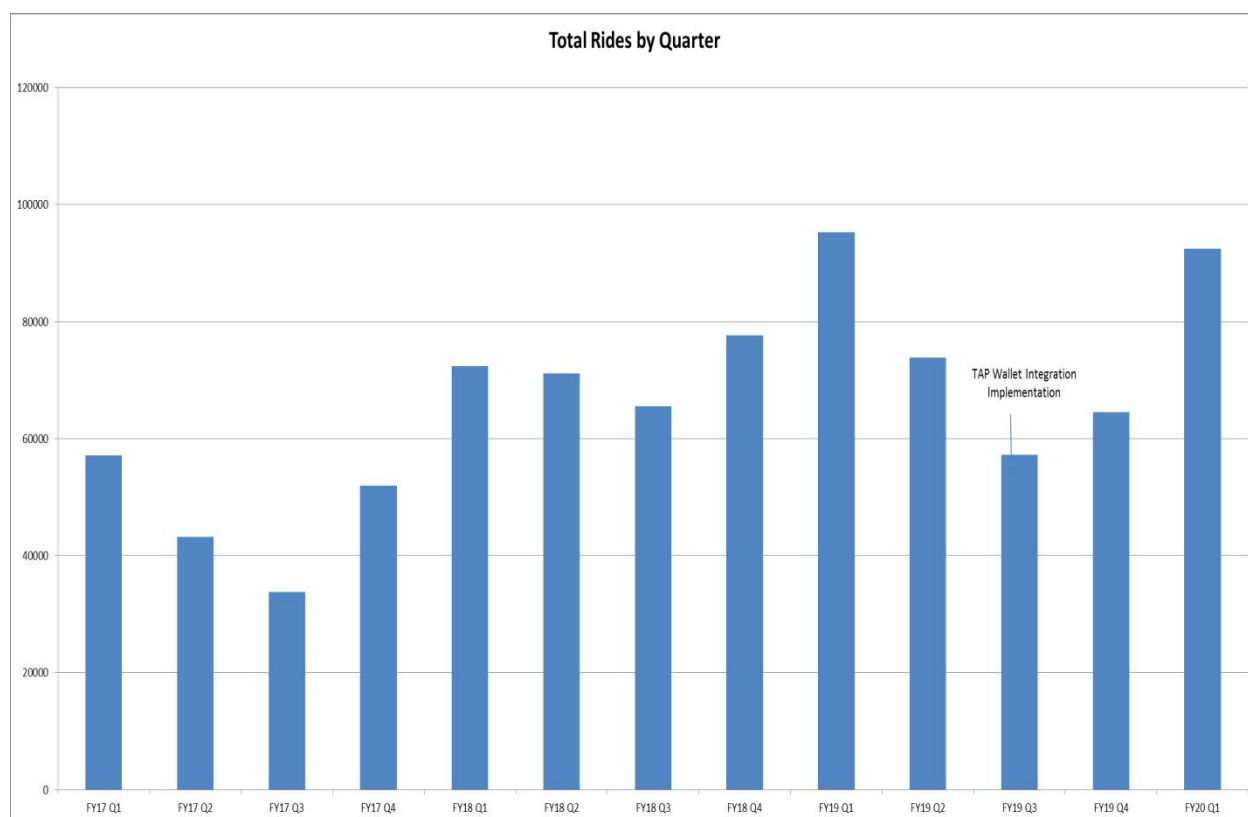
The continued progress of the MBS is attributed to the strategies adopted in the new Business Plan. Since May 2018, several enhancements have been initiated and implemented for the program including a new fare structure, performance measures, equity measures, new technology, a review of other potential revenue sources, marketing, and a review of cost efficiencies. Below is a discussion on the progress made on each of these items.

Performance Measures

As of September 2019, a total of 856,236 trips have been taken, more than 2.6M miles have been traveled, and 2.4M pounds of CO2 have been averted with MBS, which is equivalent to removing over 100 automobiles annually out of the congested traffic in Los Angeles County. The program continues to expand and position itself as public transit service.

Metro Bike Share (rides per quarter)

	FY17	FY18	FY19	FY20	Average
Q1	57,114	72,375	95,294	92,521	74,928
Q2	43,202	71,190	73,877		62,756
Q3	33,786	65,494	57,285		52,188
Q4	51,923	77,647	64,528		64,699
TOTAL	186,025	286,706	290,984		254,572

**Planning Framework**

Metro funds up to 50% of the total capital costs and up to 35% of the total operations and maintenance costs, with the local municipality partner funding the rest. Staff has received twenty-two (22) letters of interest from different jurisdictions, inquiring about more information and potential implementation of MBS. The communities that have submitted letters of interest are being evaluated and will ultimately be prioritized based on criteria established in the Business Plan. The prioritization list will inform potential future expansion in an operationally-sustainable manner consistent with Metro goals.

Evaluation Framework

A method for performance monitoring by actual ridership was defined in the Business Plan to ensure the program is operating in an efficient manner. Stations that have witnessed underperformance

have been optimized. For example, the redeployment of the Pasadena equipment to central Los Angeles has resulted in a 25% increase in usage. A comprehensive performance evaluation will be compiled upon the completion of the MBS Phase III expansion, which is currently ongoing. Metro staff will continue to identify lower performing stations and evaluate them for relocation to optimize equipment performance.

Equity

Progress has been made on several of the measures for implementing Metro's Equity Platform in the Business Plan. Below is a summary:

Define and Measure

- Developed and implemented an equity index, based on CalEnviroScreen scores, for prioritizing MBS expansion communities.
- Conducted annual customer survey to measure demographic and socioeconomic characteristics of users. Future surveys will include existing and potential users and will seek a diversified sample of Bike Share participants and non-participants.

Listen and Learn

- Presented program information to Neighborhood Councils to gather feedback on station siting. The MacArthur Park Community Council meeting included a bilingual presentation.
- Provided online community crowdsourcing maps that allowed the public to like/dislike and/or provide comments on each potential location. The central LA map (MacArthur Park, Koreatown, Silver Lake and Echo Park) was available in English, Spanish, and Korean. The North Hollywood map was available in English and Spanish.
- Over 90 flyers were posted throughout central LA in English, Spanish, and Korean directing locals to the crowdsourcing map URL and a phone number for those with limited internet access. Similar flyers were posted throughout other implemented areas, such as North Hollywood, in both English and Spanish.
- Annual customer surveys also provide constructive feedback that has been used to inform decisions with MBS including the desire to offer more payment and pass options.

Focus and Deliver

- The new fare structure was introduced in part by recommendations from a previous effort to listen and learn from partners working to improve the equity reach of MBS and be consistent with transit use.
- In March 2019, discounted Bike Share passes were made available for Reduced Fare TAP cardholders including seniors (62+ years old), students (16+ years old), and disabled patrons. Reduced Fares for MBS provides over 50% off of regular fares and is automatically applied at checkout.

- Similar discounts are currently being developed by TAP upon their recent completion of updates to the Low Income Fares are Easy (LIFE) program. Once complete, discounted MBS passes will be available for purchase for LIFE participants.
- Based on customer feedback, additional pass options were introduced for casual riders including the 24-Hour Access Pass which can now be purchased at kiosks.
- Additionally, allowing cash payments is being explored to serve those who do not have bank accounts. Although the payment infrastructure exists within the TAP Wallet, Metro needs to establish an alternate form of collateral to ensure users return bikes to the system.
- Over 80 stations were sited based on the community-driven process outlined above in the “Listen and Learn” section.

Train and Grow

- The following educational and outreach materials are being planned for areas in central Los Angeles with large concentrations of CalEnviroScreen scores above 40:
 - MBS safety classes and rides.
 - MBS safety educational material including handbooks and brochures.
 - MBS safety advertisements, including geotargeted social media and billboards.
 - MBS postcards with bicycle safety tips.
- Regular collaboration with Bicycle Education and Safety Training to offer classes and rides incorporating MBS.

Technology

Fleet Mix

- **Smart Metro Bikes:** Over the last two years, the transportation world has evolved rapidly with a wide array of bicycle and e-scooter choices that provide door-to-door transport for users. Based on recommendations in the Business Plan, smart bike technology that allows for this flexibility in trip making was incorporated into the MBS fleet for the westside and North Hollywood expansions. With the Smart Metro Bike, users have the option to end their trip outside of a station for a convenience fee. Smart Metro Bike stations utilize a smaller footprint or can be geo-fenced requiring less right-of-way. Since launching in March 2019, over 500 Smart Metro Bikes have been added to the fleet with over 15,000 trips taken.
- **Electric Metro Bikes:** Electric pedal-assist bikes provide greater accessibility to biking due to the extra boost. This makes biking more appealing for longer distances, hilly landscapes, and for people that want a low-effort ride. In May 2019, MBS launched Electric Metro Bikes in the downtown and central Los Angeles areas, as well as in the Port of Los Angeles. Approximately 350 Electric Metro Bikes have been added to the fleet with almost 50,000 trips generated since launch and an average of four rides per bike per day.

TAP Integration

In September 2018, MBS user registration, payment, and account information was integrated with TAP. This provided benefits toward a more seamless user experience for multimodal trips and

account management. A single TAP card can provide access for users to bike, bus, and rail and TAP Wallet provides users a central account to pay for and track their bike, bus, and rail passes.

This integration provided the ability to offer reduced fares across all modes. Once TAP approves a participant as a senior (62+ years old), student (16+ years old), or a disabled person, they are automatically recognized as a user eligible for reduced fares in the MBS; no additional registration is needed, and the discount automatically appears on the checkout page. Similar discounts will soon be available for low-income individuals through the LIFE program.

TAP integration is the first step toward implementing cash payments, TAP rewards program and integrating MBS into the upcoming TAP mobile app.

Metro Bike Share and TAP Marketing partnered to promote bike share integration with taptogo.net, including numerous advertisements on bus and trains in bike share service areas.

Mobile App

The MBS mobile app provides key features such as station mapping, real-time bike and dock availability, and customer support contacts. Most recently, mobile checkout has also been introduced to the app allowing more bike checkout options for patrons when kiosks are unavailable, or a TAP card is not on hand. The TAP mobile app is currently under development and will make it easier for users on the go to purchase passes and enroll.

Fare Structure

A pivotal program update was the change in price structure that brought MBS fares in alignment with the Metro bus and rail fare structure from \$3.50 per 30-minute ride to \$1.75 per 30-minute ride. This resulted in a more cohesive and consistent customer experience for transit riders. Comparing ridership before and after the same period (July to September) of 2017 and 2018, there was a 32% increase in ridership. MBS remains the most affordable option amongst the dynamic market of micro-mobility options available in Los Angeles County. Dockless scooters and e-bikes in Los Angeles County charge riders an average of \$2-3/mile (based on samples taken from Metro staff rides) while MBS charges riders an average of \$.60/mile.

The program has experienced high demand for Electric Metro bikes. In order to encourage use at its introduction, Electric Metro Bikes were offered at the same fare as regular Metro Bikes. However, electric bikes require additional operating resources to ensure the battery life is reliable. To offset these additional costs, a \$1.00 surcharge to unlock Electric Metro Bikes will be added to the fare structure for walk-up users in November. This fee will be waived for any pass-holders with 30-day or 365-day passes.

Smart Metro Bikes allow patrons the option to dock at locations without returning to a MBS station. With the option of parking and returning at non-designated locations, an additional \$2.00 fee (within the service area) or \$20.00 (outside the service area) will apply.

Additional Pass Options

- Reduced Fare Pass: \$5/month or \$50/year for eligible seniors, students, and

disabled/Medicare (coming soon for low-income individuals). Over 150 users have received these discounts.

- Bike Share for Business: \$10/month with three options for employee/employer cost sharing. Almost 500 business pass holders are currently active.
- Bulk Passes: Up to 50% off when single-ride passes are purchased in bulk. Over 200 passes have been sold in bulk.

Currently private micro-mobility providers offer a similar menu of discount options, but they are not transparently advertised on the platform like MBS.

Free transfers between MBS, bus, and rail will be facilitated through the forthcoming TAP Rewards program. MBS will be the first program to pilot TAP Rewards. Patrons will earn points with their pass purchases that can be used towards products across modes. This would facilitate cross-promotional opportunities between MBS, Metro bus, Metro rail, and other municipal transit services offered through TAP. This program is currently under development and is anticipated to launch in early 2020. Additional development to enable more seamless free transfers will continue to be explored.

Other Revenue Sources

The new Business Plan provided the added flexibility to consider non-title sponsorships. Several potential sponsorships have been considered over the past year but ultimately were deemed incompatible with Metro's mission. Additional opportunities will arise with the addition of new neighborhoods, corridors, and equipment being deployed under the ongoing system expansion. Metro will also explore partnering with Long Beach and Santa Monica bike share systems to make the system more attractive to corporate sponsorship. For example, New York Citibike, Portland Biketown, Boston Bluebikes, Philadelphia Indego and other public bike share systems have been successful in attracting sponsorship with regional coverage that includes access to all major attractors and destinations. In an effort to shed more light on the availability of sponsorship and advertising, MBS has also offered trial periods to several potential clients.

To help facilitate these additional opportunities, MBS's contract operator, Bicycle Transit Systems (BTS) has established a dedicated staff lead to coordinate locally in Los Angeles County. Metro staff have extended support of Metro Marketing's revenue advertising contractors, Intersection and Outfront, to explore their corporate rolodex for potential sponsors aligned with the MBS program. MBS has a growing social media presence on Twitter (10.3K followers), Facebook (9K followers), and Instagram (4.4K followers). The ability to partner and utilize this presence represents another creative sponsorship opportunity.

Bike Share Marketing

To date, several marketing campaigns and promotions have been implemented to message ongoing expansion efforts, TAP integration and first/last mile connectivity, and to emphasize the program's affordability. Over 1,300 users have signed up for 30-day passes with the "More Metro Bikes"

promotion. Additionally, MBS has participated in over 150 events since August 2018 with an estimated total attendance of almost 200,000 people. This includes the recent Heart of LA Open Streets event that generated over 2,300 rides in one day. Below are several key events for MBS.

Key Event	Estimated Attendance
Smorgasburg LA	8,000+
Ciclavía Heart of LA	50,000
COAST	10,000
LA CoMotion	500+

In addition to the Bike Share for Business program, which encourages usage in partnership with nearby employers and their employees, MBS has launched incentive programs, including:

- The Pedal Perks program launched in January 2019 incentivizes users to ride more often to earn points towards limited-edition MBS gear. To date, almost 100 redemptions have been made (each requiring at least 50 rides per person) through Pedal Perks indicating high ridership amongst core users.
- A Rider of the Month program is anticipated to begin early 2020 and will highlight users with the highest usage to encourage healthy competition amongst members.

To continue effective marketing efforts, a Strategic Marketing Plan has been drafted. The Plan will ensure efficient use of resources, maximize retention efforts, and educate the public. Metro's Communication staff are working with the Bike Share team to finalize this plan. Once final, it will establish measurable goals and objectives and distinguish MBS as a viable transportation option.

Cost Efficiencies

The MBS contract with Bicycle Transit Systems (BTS), the equipment provider and operator, is a fixed, firm price contract through July 2022 with pre-determined numbers of bikes and stations per phase. Program expenditures are shared between Metro and partner cities, and offset by program revenue and grant funding.

MBS has invested in a high-quality, long-term product. Other local public bike share programs have selected products that are now obsolete and they are no longer able to obtain parts to support ongoing operations. MBS's capital equipment has a longer life span, requires less frequent fleet replacement and continues to have availability of replacement parts.

As of June 2019, the total cost for the program (Phases 1, 2 and 3) totals \$36.4M of which \$13.5M was allocated for capital expenditures, with \$9.1M of the total reimbursed by grants. The total cost for pre-launch activities, which includes station siting, installation, and marketing was \$5.3M. Operations and maintenance since inception of the program to June 2019 was \$17.5M. After cost reimbursement from the cities, Metro's total investment to date on the Bike Share program has been approximately \$9.7M. See the following table for a summary of costs.

Phases I,II, III (as of June 2019)					
	Total	Grants	User Revenue/ Fare Box Recovery***	Cost Reimbursed from Partner Cities**	Metro Costs
Capital*	\$13,497,653	(\$9,083,425)		(\$2,030,499)	\$2,383,729
Pre-Launch	\$5,354,780			(\$3,480,607)	\$1,874,173
O&M	\$17,539,755		(\$1,969,269)	(\$10,120,816)	\$5,449,670
Total	\$36,392,189	(\$9,083,425)	(\$1,969,269)	(\$15,631,922)	\$9,707,573

*Includes one-time capital expenses for life of the program.

**Program expenses are offset by grants and user revenue. The net costs are split between partners and Metro per Board policy (50/50 Capital; 65/35 O&M).

***Includes bike replacement fees and one-time partner contribution, which are not used to offset shared costs.

There have been multiple cost efficiencies through grant opportunities and reallocations. For example, for a portion of the Phase 3 expansion, solar panels were utilized and allowed for reduction in capital infrastructure costs as well as eliminated ongoing utility costs. BTS also trained and certified their staff to install the equipment, providing additional cost savings that were not invoiced to the project.

There have also been other efficiencies introduced that will over time reduce operational and maintenance needs. This includes:

- Establishing a Standard Operating Procedures Manual to streamline customer service. The Manual is updated regularly with common scenarios and is used as a feedback mechanism for improvements to the customer experience.
- Automation of reporting through Tableau. This service ensures higher accuracy than manual reporting and provides easy access to the most up-to-date data.
- Additional digital marketing using grant funds to promote new stations and bike share safety to disadvantaged communities in central Los Angeles. This will include geo-targeted digital ads, email blasts, programmatic and native displays, paid search, and a new safety webpage.
- Refining service level agreements (SLAs) based on initial performance data to better fit observed needs. The SLAs for the Electric Metro Bike and Smart Metro Bikes were revisited several months after launch and adjusted to meet the needs based on actual usage data.

Bicycle Fleet Loss Prevention

Unlike bus and rail, bike share systems across the board are uniquely vulnerable to fleet theft. MBS is not immune to this issue, but has employed a multifaceted strategy to address bicycle loss. The total number of bicycles missing or stolen is 973 bicycles and 329 have been recovered based on the latest inventory report. Metro continuously works in partnership with law enforcement officials and our contractor to recover all missing or stolen bicycles. In anticipation of this issue, bike

replenishment is built into the operations and maintenance costs; including but not limited to the repair, safety evaluation, redeployment, and/or replacement of missing and stolen bicycles. These costs are offset by user fees collected for bicycles that go missing or are stolen due to improper docking or misuse. The program also has insurance coverage to cover any replenishment costs accumulated above the budgeted amount. Staff continues to coordinate with the MBS contractor, transit security, and LAPD on bicycle recovery and to enforce laws that protect bike share operations. This includes hardware and software enhancements, as well as marketing and communications strategies to prevent further abuse.

SCAG Analysis

Over the past year, the Southern California Association of Governments (SCAG) conducted an analysis of MBS and Santa Monica Breeze (Attachment B). The results of the study are intended to inform future system investments and new shared mobility programs in the region. This includes identifying the different needs that each type of system serves. From a regional context, MBS plays a critical role in leveraging the Metro transit system and providing a reliable commuter option while Breeze plays an essential role in filling mobility gaps at the local level and supporting a range of trip purposes.

Key findings for MBS survey respondents include:

- 97% average customer satisfaction rate
- Exceeded service target rates in 9 out of 9 metrics
- 40% respondents use MBS for commuting
- 50% respondents use MBS to connect to bus, train, or light rail
- 57% respondents decreased their use of personal vehicles
- 57% respondents increased their use of public transit because of Bike Share
- 51% respondents decreased their use of ride hailing services

In terms of preferred service improvements, the existing users noted that they preferred more stations, a larger service area, free or low-cost transfers, electric bikes and dockless stations.

Based on the SCAG evaluation study, 64% of MBS members are male and 55% of them have annual income over \$95,000 per year. It is a demographic identifier consistent with bicycle riders across the region. However, through Metro's equity effort, MBS will continue to focus on equitably delivering and promoting the program to more demographic groups.

Per the study recommendations, Metro should continue to prioritize the customer experience, remain nimble in this evolving market, and continue transit integration. Recommendations for additional steps include investing in equitable access, identifying additional revenue opportunities, incentivizing operators, updating system equipment, making streets safer, and integrating with mobility hubs. Many of these efforts are already underway.

Office of Extraordinary Innovation Assessment

The Office of Extraordinary Innovation (OEI) supports the SCAG study recommendation to continue

to operate and expand the MBS program. Based on the study's finding, Metro should continue to invest in the growth and development of MBS as it is a vital first/last mile option for our customers to access transit and for short trips. Additionally, the working group that Metro OEI will convene to develop a Regional New Mobility Roadmap for LA County will consider the challenges and opportunities associated with emerging new mobility systems, like dockless bikes, e-scooters and e-bikes, and what MBS' role is in leveraging the Metro transit system.

Policies and planning around MBS should be evaluated alongside the rapid proliferation of micro-mobility, such as dockless e-scooters and e-bicycles, in Los Angeles County. These services are heavily subsidized by venture capital, do not allow for a seamless mobility experience across city boundaries, and the management of these systems is resource intensive and has the potential to be a drain on city resources. There should be future exploration of how we can best partner with private firms to provide robust micro-mobility coverage across Los Angeles County.

If we are successful in right-pricing more mobility services in Los Angeles County, MBS will likely prove more popular and more financially sustainable. Approximately 80% of trips in LA County are made driving alone. Currently the price to drive alone does not account for the external costs of traffic, safety, and air pollution placed on others. If the true cost of driving alone was more accurately reflected in the price of tolls, gas, and parking, the price of alternatives to driving alone would be much more attractive. This right-pricing of driving alone will be further investigated in Metro's congestion relief pricing study.

MBS should be considered for investment and expansion in areas that are transit rich and can best serve as a quick, reliable, affordable, equitable, healthy connection to bus and rail transit. MBS and all micro-mobility maximize the return on Measure M and R capital investments by seamlessly connecting customers to transit stations.

Equity Platform

MBS provides an additional affordable mobility alternative, and a first and last mile option to connect with the Metro transit system. Metro will continue to solicit feedback from disadvantaged communities to determine the barriers to using MBS and make adjustments for it to be a more equitable system. Metro will continue to implement the program in disadvantaged communities and continue to work with the TAP team on participating in the LIFE fare program.

DETERMINATION OF SAFETY IMPACT

Providing an update on the MBS will not have any adverse safety impacts on Metro employees and patrons. Safety education is an existing part of MBS.

IMPLEMENTATION OF STRATEGIC PLAN GOALS

MBS supports the following Strategic Plan goals:

1. Provide high-quality mobility options that enable people to spend less time traveling;
2. Deliver outstanding trip experiences for all users of the transportation system;

3. Enhance communities and lives through mobility and access to opportunity.

NEXT STEPS

Staff will continue their efforts to implement the new Business Plan including the following:

- Complete Phase III expansion and monitor ridership performance;
- Outreach with potential users in under-represented communities to better understand barriers to use;
- Continue exploring ways to offer free transfers with bus and rail;
- Offer discounts for low-income individuals and continue exploring ways to enable cash payments for those who do not have bank accounts;
- Pursue federal and state funding for MBS;
- Collaborate with other shared mobility programs to identify innovative solutions and potential future integration;

Staff will report back in 12 months.

ATTACHMENTS

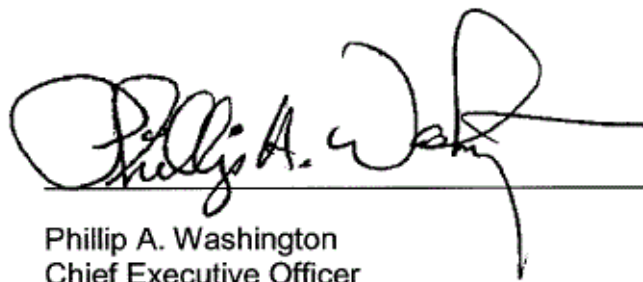
Attachment A - MBS Business Plan FY19-20

Attachment B - Bike Share in Los Angeles County - SCAG Evaluation Report

Attachment C - MBS Service Area Map

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