

Memorandum

TO: TRANSPORTATION AND
ENVIRONMENT COMMITTEE

FROM: John Ristow

**SUBJECT: SHARED MICRO-MOBILITY
PERMIT PROGRAM UPDATE**

DATE: November 13, 2019

Approved

Date

RECOMMENDATION

Accept the status report on the implementation of the adopted Micro-Mobility regulations, as directed on December 18, 2018 by the City Council.

BACKGROUND

On December 18, 2018, City Council approved the regulatory framework for the shared micro-mobility program, commonly referred to as the e-scooter permit program. Council established a new permit system for e-scooter operations in the public right-of-way and an administrative citation for prohibited conduct, and approved the addition of a Transportation Specialist position in the Department of Transportation (DOT) to manage the program. Per Council's direction, shared micro-mobility permits include important safety and data sharing provisions, and restrict permit issuance to operators that can develop technology-based solutions to deter sidewalk riding on pedestrian dense streets. Council further directed staff to report to the Transportation and Environment (T&E) Committee on the status of the e-scooter permit program in the fall 2019.

This report highlights permitted e-scooter activity in the City and emerging new devices, reviews the progress DOT has made implementing the regulations governing e-scooter operations, and examines the challenges experienced with e-scooters, along with measures being taken to address these challenges.

Current Shared Micro-Mobility Operations

To date, five operators have been issued permits, for up to a total of 5,600 e-scooters.

Table 1. E-Scooter Operators and Devices Permitted

Operator	Date of Permit	Devices Permitted
Lyft	06/03/2010	900
Bird	06/10/2019	1,200
Lime	06/10/2019	2,300
Spin	08/16/2019	1,000
CLEVR	09/03/2019	200

The number of devices deployed to date is less than those permitted for several reasons. Most operators have only recently obtained a permit, with deployments happening gradually from June through October per DOT's request to avoid a sudden oversaturation of devices. Additionally, permitted operators in San José have reportedly deployed between 40% and 90% of their fleets due to scheduled device maintenance, product upgrades and modifications, and other operational needs. All operators in San José report they are developing and launching improved device models and expect to phase out older models soon. Nevertheless, as operators overcome these operational constraints, they will aim at deploying as many devices as permitted.

Based on operators' ridership assessments, staff estimates more than three million trips have been completed by e-scooter in San José since February 2018. Current estimates of usage and ridership rates are based on semi-static trip data feeds and operator reports.

Table 2. Estimated Trip Data from All Operators, June-October, 2019

Approximate average rides per device	2-3 rides/device/day
Average time spent on ride	8-12 minutes/ride
Average ride distance	0.7-1.2 miles/ride

DOT expects to obtain more accurate e-scooter ridership and usage estimates, among other data, with the development of a micro-mobility dashboard that will enable staff to intake and analyze trip data directly.

Program Management and Administration

The Shared Micro Mobility Permit Program requires a significant amount of technical and staff resources to effectively address all the regulatory, administrative, planning, and community engagement and outreach needs. In May 2019, DOT filled the new staff position approved by Council to administer the program. Areas of initial focus include aspects of safety centered on sidewalk riding prevention and enforcement of the speed limit cap; outreach and education; customer service; and accessibility to low-income programs.

ANALYSIS

DOT is advancing its monitoring capabilities to oversee the permit program, and staff is continuously evaluating effective regulatory approaches to address all aspects of permit compliance. As the City's monitoring and enforcement capabilities increase, DOT will shift to proactive support for long-term and goal driven shared micro-mobility operations. Proactive support includes continuing to advance research related to micro-mobility parking policies, accessibility, mode-shift, and sustainability; and collaborating with other cities in developing best practices for planning and regulating micro-mobility operations.

The analysis section of this report includes the following sub-sections:

- A. Safety
- B. Sidewalk Riding
- C. Parking and Clutter
- D. Fees and Fines
- E. Education and Outreach
- F. Equity
- G. Data Sharing
- H. Enforcement Support
- I. New Operators and Emerging Devices
- J. Follow-Up Reporting

A. Safety

Between April 1, 2019 and August 10, 2019 there were seven reported motorized scooter crashes in San José, six of which involved a motor vehicle. These crashes resulted in four minor and three moderate level injuries. It is unknown if motorized scooters involved in these crashes were shared scooters or individually owned devices. Only one minor, aged 17, was involved in a reported crash. DOT will continue to monitor crash data involving e-scooters to identify potential measures the City can adopt to mitigate safety concerns.

Minor Riding

To comply with permit requirements, operators have implemented safety measures to deter the utilization of shared micro-mobility devices by minors, including requiring in-app ID verification that all users are at least 18 years-old. Staff is currently coordinating with operators on the development of rider education outreach events focused on minor riding in areas of concern.

Speed Limit Cap

Initially, e-scooter speeds were capped at 12 mph in the City's downtown core. Due to recent concerns raised about operators exceeding the speed limit within this area, permitted scooters are now capped at 12 mph citywide. DOT requires operators to perform regular speed-limit tests under standardized conditions to verify that all devices are effectively capped at 12 mph.

Helmet Use

DOT requires operators to educate users about the importance of helmet use. For example, some operators instruct users via their mobile applications about helmet use every time a user unlocks a device. DOT recently began to collaborate more proactively with operators to develop safety campaigns and events supporting helmet use.

Product Safety

Operators are iteratively improving device models and deploying new devices with added safety features like wider standing decks, improved braking systems, added suspension, and anti-theft features to address vandalism and minimize electronic waste. DOT will continue to learn about the performance of these new scooter models to identify best product and safety standards for San José.

Vandalism

Between December 2018 and April 2019, the Environmental Services Department (ESD) removed at least 41 e-scooters from the City's waterways. With improved device status visibility through data dashboards, staff will be better equipped to identify potentially lost devices into the City's streams. Once staff can identify these devices, DOT will coordinate with operators, ESD, and creek stewards, to facilitate their appropriate recovery and disposal.

B. Sidewalk Riding

The Shared Micro-Mobility Permit Program requires operators to develop technology to prevent sidewalk riding. In June 2018, DOT began hosting an innovation zone to pilot and evaluate the effectiveness of these technology applications within a designated area (see Attachment A).

Operators have been testing a variety of proprietary technologies and gathering data on their effectiveness. Operators are providing regular updates to DOT about the research methodologies applied and their preliminary results. Staff will start evaluating the effectiveness of proposed technology applications on January 31, 2019, and will continue to assess sidewalk riding prevention technology on a regular basis.

Following this pilot's results, DOT may host additional innovation zones to test the scalability of the proposed technology applications to other areas of high pedestrian traffic in the City, prioritizing areas where conflicts between e-scooters and pedestrians have been reported.

C. Parking and Clutter

The City of San José has a relatively open e-scooter parking policy. E-scooters can be parked at the furniture zone of a sidewalk as long as the devices are not blocking ADA required space, pedestrian and/or transit accessibility, or accessibility to utilities and emergency services. This parking policy has significant advantages, as it facilitates point-to-point trips and is relatively easy for users to understand.¹ However, e-scooters that are not properly parked may impede access to pedestrians and/or transit accessibility. Even if e-scooter blockages only constitute a small fraction of cases, these can have detrimental effects to people's mobility and may trigger negative public perception of e-scooters.

¹ NACTO Policy 2018, "Guidelines for the Regulation and Management of Shared Active Transportation," <https://nacto.org/wp-content/uploads/2018/07/NACTO-Shared-Active-Transportation-Guidelines.pdf>, accessed October 24, 2019.

To better assess the e-scooter parking situation in the City, staff conducted e-scooter parking surveys on a sample of downtown streets in the summer of 2019, which found that roughly 94% of observed e-scooters were appropriately parked: only 18 of 289 e-scooters were parked inappropriately. The same results were found during a subsequent e-scooter parking survey in Willow Glen in October 2019, with 94% of scooters surveyed parked appropriately. A study conducted by the Mineta Transportation Institute between June and July 2018 in Downtown San José found similar results: 90% of 530 observed e-scooters were parked appropriately per the City's current regulations.²

Notwithstanding the relatively small percentage of e-scooters found to be parked inappropriately in San José, none of the illegally parked devices reported to operators during the surveys were re-parked or removed by operators within two hours of the reports, which is the required time to remove or repark devices according to permit requirements. Beyond administrative citations, staff is researching potential measures to incentivize operators to quickly respond to parking complaints and to address perceived clutter, including implementing parking corrals and parking drop-off and pick-up zones in critical areas.

Testing of potential e-scooter parking treatments will occur on street segments where most parking issues have been identified, and within existing bike parking infrastructure with the capacity to accommodate some scooter parking. Pending viability, staff will also consider on-street placement of scooter parking areas.

DOT will continue to conduct sporadic scooter parking surveys to identify variances in parking patterns and concerns, and to be able to contrast observed data with device-generated trip data.

E-Scooter Distribution

Staff communicates regularly with operators about the status of device deployments and areas of operation to anticipate potential issues related to increased fleet sizes or e-scooter distribution. With improved data analytics, staff expects to quickly identify areas of over saturation of devices and may impose deployment limits in these areas. Additionally, analysis of scooter distribution will help ensure deployment requirements are met or exceeded in underserved communities.

D. Fees and Fines

Permit fees for fiscal year 2019-2020 are based on a per-device permit fee of \$94, and a permit application fee of \$2,968. Permit fees in future years may be adjusted based on anticipated e-scooter activity and costs associated with program administration. DOT is also evaluating opportunities to incorporate fees to address specific e-scooter impacts in the public right-of-way.

² Kevin Fang et al, "Where Do Riders Park Dockless, Shared Electric Scooters? Findings from San Jose, California," *San Jose State University Scholar Works: Mineta Transportation Institute Publications*, November 2018, <https://transweb.sjsu.edu/sites/default/files/1713-WP2-Scooter-Parking.pdf>, accessed October 24, 2019.

No administrative citation fees have been collected to date as the City has not yet finalized a process for issuing citations. DOT is finalizing a citation appeal procedure through the Finance Department, and expects to be able to issue citations, if observed, by January 2020.

E. Education and Outreach

Staff continuously collaborates with operators to maximize e-scooter riding education events, safety campaigns, community outreach, and accessibility for low-income people and communities. Operators have been utilizing informational materials developed by DOT to share appropriate parking etiquette and riding information with users and residents, and during safety and riding education events required by the City throughout the first week of deployment following permit issuance.

Staff has recently compiled a comprehensive list of local organizations supporting low income communities in San José to share with operators, so they can better focus their outreach efforts and promote participation in access programs. Additionally, DOT recently started coordinating with the Parks and Recreation Department to facilitate participation of e-scooters in City events like Viva Calle. Staff will continue to develop opportunities for operators to deploy additional outreach events centered on rider education, accessibility, and safety.

F. Equity

Per permit regulations operators are required to deploy at least 20% of e-scooters in Communities of Concern. In the absence of a data dashboard to evaluate scooter deployment, staff has received partial reports about low-income membership from two operators. As recently permitted operators further develop their programs over the following months, DOT expects to receive more comprehensive information from operators. Some operators have reported important gains in providing access to low-income individuals.

Table 3 on the following page summarizes the low-income programs available per e-scooter operator in the City of San José. It is important to note that operators may modify the structure of their access programs after publication of this report, as long as they continue to offer at least a 50% discount of current fees to low-income individuals.

In the next six months, DOT expects to receive complete information about deployments and operations to better assess accessibility of shared micro mobility in underserved communities.

Table 3. Low Income Shared Micro-Mobility Programs Available in San Jose

Operator	Low-Income Program	Low-Income Users	Low-Income Frequent Users
Lime	Lime Access <ul style="list-style-type: none"> \$0.50 to unlock \$0.07 per minute 	160	N/A
Lyft	Community pass <ul style="list-style-type: none"> \$5 per month for unlimited 30-minute rides 	492	85 users, two rides per day
Spin	Spin Access <ul style="list-style-type: none"> \$0.50 to unlock \$0.07 per minute 	N/A	N/A
Bird	Bird Access <ul style="list-style-type: none"> The first 50 rides of 30 minutes or less each month are free of charge 	N/A	N/A
CLEVR	<ul style="list-style-type: none"> Has not deployed yet. Needs to define details of access program for San José 	N/A	N/A

G. Data Sharing

To obtain reliable device trip data to process and analyze trip information and assess e-scooter operations, DOT issued a Request for Quotes (RFQ) in July, 2019 to obtain software and data analytic services. Staff received 10 responses and are evaluating the responses received, expecting to select a consultant by the end of December 2019. Staff anticipates that a shared micro-mobility data dashboard will be developed in early 2020.

While the City gains access to comprehensive trip data, most operators have provided access to interim dashboards. These dashboards provide summarized and aggregated trip information, but not advanced analytics or mechanisms for the City to assess data integrity.

In the interim, DOT has been working with SharedStreets, a non-profit organization that provides open source software to facilitate safe exchanges of mobility data, to ensure operators will be ready to provide the City reliable trip information per the permit's data sharing policies.

H. Enforcement Support

The City does not have on-street enforcement resources to manage e-scooter parking violations. To address this situation, DOT is evaluating the possibility of contracting a third-party vendor that will track and document violations. This would augment the City's capacity to track parking violations, and enable DOT to administer citations when warranted with accurate and sufficient documentation.

I. New Operators and Emerging Devices

DOT regularly engages with permit applicants. As of November 2019, staff is reviewing a new permit application for up to 900 devices with a seating option and enhanced balancing features, which may appeal to a broader micro-mobility user base. Additionally, DOT is also evaluating the applicability of the permit to an electric moped-like device to be operated exclusively in the roadway, which would broaden the current offer of micro-mobility options in San José.

J. Follow-up Reporting

The Shared Micro-Mobility Permit Program aims to evolve from a permit administration program to a sustainable mobility program integrated with the City's public transportation system. Making this transition requires understanding the relationship between e-scooter operations and other transport modes. To understand this relationship, DOT is advancing its accessibility to data and information systems. These efforts will allow the City to identify and implement potential measures that can support the long-term sustainability of the e-scooter permit program. DOT will report back to the T&E Committee in Spring 2020 with an updated progress report.

COORDINATION

This report has been coordinated with the City Attorney's Office and the City Manager's Budget Office.

/s/
JOHN RISTOW
Director of Transportation

Attachment A: Designated Area for Testing Sidewalk Riding Technology

For questions, please contact Andrea Arjona Amador, DOT Transportation Specialist, at 408-975-3250.