

Powered Scooter Share Permit Program



TO: Powered Scooter Share Program Staff and Interested Parties

FROM: Kate Toran, Director of Taxis, Access & Mobility Services Division *Kate Toran*

THROUGH: Jeffrey Tumlin, Director of Transportation *JT*

DATE: June 21, 2022

SUBJECT: Powered Scooter Share Program Permit Term Extension

Section 916 of the San Francisco Transportation Code allows the Director of Transportation to grant Powered Scooter Share Permits with a term of up to two years. The [Powered Scooter Share policy directive](#) issued on June 25, 2021, authorized staff to issue permits for a one-year term with an option to extend permits, for an additional year, at the discretion of the Director of Transportation, based on compliance with Permit Terms and Conditions. This policy directive instructs SFMTA Powered Scooter Share Program staff, regarding the option to extend permits for powered scooter share operations in San Francisco. This directive reflects due consideration of the public interest and safety of the transportation system and is based on findings and analysis by the SFMTA.

In accordance with San Francisco Transportation Code Sec. 916, SFMTA Powered Scooter Share Program staff are directed to:

- Exercise the one-year option term for the three Powered Scooter Share permittees and extend the existing expiration for the permits issued to Lime, Scoot, and Spin to June 30, 2023.
- Initially allow up to the same number of devices that permittees are currently allowed to operate under initial term of their respective permits.
- Retain the maximum combined number of permitted scooters, for all permittees, at the same level as for the initial year of the 2021-2022 Powered Scooter Share Program, which is up to 10,000 scooters total.
- Provide additional guidance to permittees regarding sidewalk detection technology to deter unsafe riding behavior, including best practices that may exceed the commitments promised in each permittee's Safe Scooter Riding & Parking Plan submitted in their application.
- Clarify the minimum size requirements for the unique identifier for each device (Permit Term #36) and the "No Sidewalk Riding" sticker (Permit Term #39).
- Clarify the Mobility Data Specification (MDS) version 1.1 requirements, per Appendix 4 of the Permit Terms and Conditions.

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- Continue to monitor and evaluate, throughout the extended permit period, the overall impact to the City from scooter deployment and the performance of each permittee to determine their adherence to the permit terms and conditions. As part of this ongoing evaluation, the SFMTA will evaluate compliance with all plans and proposals submitted in the permittee's original applications, which remain incorporated into each permit by reference.

BACKGROUND

The SFMTA granted three powered scooter share permits for the 2021-22 permit cycle. The SFMTA issued these one-year scooter permits to the applicants that met San Francisco's high standards for safety, equity and accountability – Lime, Scoot and Spin – with an option to extend the permits for an additional year at the discretion of the Director of Transportation.

On December 29, 2021, the Agency issued a [policy directive](#) providing guidance to staff regarding how to evaluate the requests for permit term extension, additional guidance to permittees regarding the SFMTA's criteria upon which the one-year optional extension of the permit term will be granted and highlighting the importance of rider accountability and safety. This guidance was issued in addition to and does not supplant the criteria in Appendix 5 of the [2021-2022 Powered Scooter Share Program Permit Terms and Conditions](#).

In April 2022, all three scooter permittees submitted a request to extend their permit for an additional year.

PERMIT TERM EXTENSION EVALUATION

The SFMTA has established extensive requirements that it may consider when considering whether to extend the term of the permit at the end of the initial one-year term, including fleet deployment and distribution requirements, labor harmony requirements, compliance reports, safe scooter riding plan, among other requirements. Staff evaluated each permittee's permit term extension request following the guidance and standards established by Appendix 5 of the [Permit Terms and Conditions](#) and the December 29, 2021 [policy directive](#).

To assist staff in the evaluation, permittees were required to submit a self-assessment checklist in addition to the required monthly and quarter reports. Below is a brief summary of the standards staff evaluated along with a summary of each permittee's compliance status.

Summary of Key Permit Term Extension Standards:

- Fleet Deployment in the Core Service Area: requires that permittees deploy no more than 400 devices per 1,000 permitted scooters in the Downtown Core at any one time with an allowance for an additional 100 devices deployed for each additional 500 permitted scooters:

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- Scoot has 1,500 permitted scooters, which entitles them to deploy up to 500 devices. Scoot met this standard.
 - Lime and Spin both have 2,000 permitted scooters, which entitles them to each deploy up to 600 devices. Both Lime and Spin met this standard.
- Low-Income Plan Participation: requires each permittee to have one low-income plan member per every two permitted scooters:
 - Scoot has 1,500 permitted scooters, and they are required to have 750 low-income designated memberships. Scoot has over 1,000 low-income memberships.
 - Lime and Spin both have 2,000 permitted scooters and are required to have 1,000 low-income designated memberships. Lime has 2,000 low-income memberships and Spin has over 3,000 low-income memberships.
- Complaints Database: requires each permittee to maintain a database containing all public complaints related to poor user behavior (e.g. sidewalk riding) and track case status through complaint resolution:
 - All permittees have maintained a complaints database.
- Escalating Penalty Structure: requires each permittee to document enforcement for unsafe riding and parking behavior, including evidence that the permittee is investigating and taking all complaints seriously, and following the penalty structure as defined in their permit application.
 - All permittees have reported to SFMTA that they are penalizing riders for unsafe riding a parking behavior:
 - Lime has penalized approximately 2,000 users;
 - Scoot has penalized approximately 3,000 users; and
 - Spin has penalized approximately 3,000 users.
- Citations per Trips: each permittee must have fewer than 10 parking citations per 1,000 trips in the third quarter of the permit term:
 - All permittees have met this requirement:
 - Lime has 3.6 citations per 1,000 trips;
 - Scoot has 9.6 citations per 1,000 trips; and
 - Spin has 3.7 citations per 1,000 trips.
- Labor Harmony: requires each permittee to report on compliance with commitments made in their Labor Harmony plan submitted as part of their application:
 - All permittees are in compliance with their labor harmony plan.
 - All permittees used the City's First Source Hiring Program and worked with community-based organization hiring programs to facilitate direct employment of qualified and economically disadvantaged San Franciscans.
 - Lime converted their operations team to W-2 employees and they will receive the same benefits as the Lime Executive Team.
 - Scoot subcontracted to three local contractors to help manage their fleet.
 - Spin's employees are members of Teamsters Local 665.

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- On-Street and Complementary Adaptive Scooter Programs: requires permittees to deploy approved adaptive scooter devices at a minimum of 5% of the overall deployed fleet, and provide a complementary adaptive program for prearranged pick-up/drop-off of other adaptive scooter devices.
 - All permittees have met the Complementary Program requirement.
 - All permittees have demonstrated an ability to meet the 5% minimum at one time but have not been able to consistently maintain the required number of on-street adaptive devices due to supply chain and staffing issues.
- Safe Scooter Riding and Parking Plan: requires that permittees develop mechanisms for safe parking and riding and to specifically deter users from sidewalk riding:
 - All permittees have implemented safe parking and riding measures, including:
 - Lime has an in-app message that pops up every time the rider opens the app with a reminder not to ride on the sidewalk, and Lime also sends refresher messages about rider safety and proper parking via the app, email and text message. To close out the trip, Lime riders must submit a photo of a properly parked device.
 - Scoot has app notifications to riders reminding them to ride responsibly and safely; Scoot riders see pop-up messages with reminders not to ride on the sidewalk every time they open the app. Scoot provides incentives to riders for safe riding, and Scoot emphasizes messages about safety by blog and social media posts.
 - Spin has push notifications in the app that warns riders not to ride on the sidewalk and in-app refresher training for riders that include videos about safe riding and a mandatory quiz.
 - All permittees have begun implementation of their sidewalk riding detection technology.

ADDITIONAL SAFETY CRITERIA FOR UNSAFE RIDING

The SFMTA takes compliance with laws and regulations seriously, including those related to sidewalk riding and safe parking. Scooter sidewalk riding is illegal pursuant to the California Vehicle Code Section §21235(g) and poses significant risk to pedestrian and scooter rider safety. In line with the Board of Supervisors' [resolution 211208](#), which urges permittees "to promptly install and otherwise implement sidewalk detection technology designed to prevent illegal riding on sidewalks," SFMTA has worked with the permittees to implement sidewalk riding technology best practices that exceed the commitments promised in each permittee's Safe Scooter Riding and Parking plan submitted in their application.

On December 1, 2021, and May 12, 2022, each powered scooter share permittee demonstrated their sidewalk riding detection technology to SFMTA and other City representatives. The technology enables the device to detect sidewalk riding in real time. Once detected, the scooter

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automatically slows the rider to a safer speed. SFMTA staff believe that sidewalk riding technology has a strong potential to curb scooter riding on sidewalks in San Francisco.

During the time from the December to the May demonstration, staff noticed key areas of improvement for all permittees, including a better ability to detect the sidewalk and all three permittees had audible warnings when the scooter mounted the sidewalk.

Because the sidewalk detection technology is still in its infancy, the SFMTA has not required a specific solution, but has required a plan to ensure user compliance with applicable laws and regulations, specifically those related to safe riding. SFMTA will continue to work with the permittees to identify, test and implement sidewalk detection technology best practices.

Based on the sidewalk riding detection technology demonstrations, staff identified the following best practices:

- Continuous audible message to riders when the scooter detects the rider has mounted the sidewalk. The scooter should give an audible message such as “No Sidewalk Riding”. Permittees should consider including this message in Spanish, Cantonese, or other commonly spoken languages in San Francisco. An audible message is preferable to a beep or other non-language sound.
- Scooter should actively decelerate upon mounting the sidewalk to a speed of 3 miles an hour within a 5 to 10 second period and thereafter come to a complete stop.
- Continuous audible message and the active deceleration should make it clear to riders that sidewalk riding is not allowable.
- Audible non-verbal sounds in the bike lane to alert other bike lane users of an approaching scooter.
- Technology that most reduces false positives for sidewalk riding detection is preferable to not affect other roadway/bikeway users that could cause additional safety concerns.
- Technology that identifies where sidewalk riding is occurring so that additional targeted strategies to reduce sidewalk riding can be implemented by permittees or by the SFMTA and other City agencies.
- Advanced GPS technology and camera detection both showed promise as underlying technologies for sidewalk detection. The demonstration indicated that machine learning with an accelerometer is not as effective as a technology.

As part of their commitment to deterring sidewalk riding, each permittee is in the process of rolling out their respective sidewalk detection technology solution.

Lime deployed their sidewalk detection technology in about 50 devices at the Embarcadero in April 2022. They implemented a new “Low Speed Zone (brain technology)” in the devices, which decreased speed to 5 miles an hour when on a sidewalk to signal to a rider that sidewalk riding is not allowed.

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Scoot also deployed their sidewalk detection technology in 100 devices at the Embarcadero in April 2022. They implemented a “No Sidewalk Riding Zone (brain technology)” in the devices, which emit a loud beep sound and decrease speed to 5 miles an hour when on a sidewalk, in order to deter sidewalk riding.

Spin deployed their sidewalk detection technology in 50 devices at the Embarcadero in March 2022. They implemented a “Drover IOT (brain technology)” in the devices, which emitted a chirp sound and decreased speed to 5 miles an hour. In addition, they equipped devices with a multilingual hangtag and a camera to detect city infrastructure.

In addition to the standards summarized above, there are some requirements that the permittees are not meeting, such as distribution requirements, the adaptive fleet requirement and response time requirements. Due to the continuing challenges associated with COVID-19, and the surge related to the Omicron variant at the beginning of 2022, and supply chain issues, the SFMTA recognizes that each permittee has faced subsequent challenges. Each permittee has demonstrated their commitment to achieving compliance and has been working with the SFMTA staff on areas that need improvement. Given the substantial compliance on whole, staff recommends approval of the permit term extension for all three permittees.

Clarification of Permit Terms and Conditions

In order to provide additional clarity regarding standards to be applied to certain of the existing permit terms and conditions, SFMTA offers the following guidance:

#36: Each unique identifier shall be at least 1 inch in size and shall be prominently displayed on the Powered Scooter.

#39: The sticker with language stating “No Sidewalk Riding” shall be affixed in a visible location on the Powered Scooter and shall be at least 1 inch in size.

Clarification of the Mobility Data Specification (MDS) Version 1.1

Appendix 4 of the Permit Terms and Conditions states that “the SFMTA intends to upgrade to MDS version 1.1 during the permit term” and requires permittees to implement the new specifications within 90 calendar days of written notification from SFMTA. After having worked with the permittees on this matter from the beginning of the permit term, SFMTA provided written notification of the MDS version 1.1 upgrade specifications on March 9, 2022.

SFMTA is incorporating the MDS version 1.1 specifications into this document as Appendix A.

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PERMIT PROGRAM AND NEXT STEPS

By July 1, 2021, the SFMTA will extend the term of the three existing powered scooter permits issued to Lime, Scoot and Spin for one additional year term. This means that each of the three powered scooter share permits will expire on June 30, 2023.

SFMTA will continue to collect data regarding compliance with parking and riding rules, which may result in policy recommendations for regulating the scooter share program going forward, including amendments to the Transportation Code, if necessary.



Appendix A Mobility Data Specification (MDS) v1.1

Effective no later than July 1, 2022, Powered Scooter Share Permittees are required to provide SFMTA with accurate and authenticated data on its entire permitted fleet through documented Application Programming Interfaces (APIs) built to the Mobility Data Specification (MDS) version 1.1 available at:

<https://github.com/openmobilityfoundation/mobility-data-specification>

Data must be exposed for all devices operating within the City of San Francisco, and not just the permittee's service area. Permittees will retain data and keep it accessible via all required endpoints for at least two years after it is generated.

Specifically, the following functionality of version 1.1 is required:

1. Provider API
 - a. Trips endpoint
 - b. Status Changes endpoint
 - c. Vehicles endpoint
 - d. Reports endpoint
 - i. Include support for the following possible values for `special_group_type`:
 - `low_income`: per the specification
 - `all_riders`: per the specification
 - `adaptive_scooters`: all MDS-enabled adaptive scooters operating in San Francisco
 - ii. Include support to process data according to geographies provided by SFMTA
2. Geography API
 - a. Include support to consume data from a SFMTA-hosted Geography API and process data provided by the Reports endpoint according to those geographies

Permittees shall maintain support for MDS version 0.3.2 endpoints until SFMTA provides written notification that they are no longer needed.

Service Level Agreement



Latency: data will be available in the Provider API no more than one hour after events have occurred.

Availability: the API endpoints will be available 99.5% of the time over the course of a year.

Response Time: 85% of TCP API replies within 1.5 seconds, and 99.5% of TCP replies within 4 seconds of receiving a request over the course of a month.