



## Powered Scooter Share Permit Program: Appendix 6 Sustainability Guidelines and Requirements

### OVERVIEW

This document provides guidelines for complying with requirements and specifications of the Powered Scooter Share Permit Program which are related to SFMTA's Sustainability and Climate Action Program. These requirements are consistent with the City's Guiding Principles for Emerging Mobility Services and Technologies, which aim to ensure that emerging services, such as Powered Scooter Share, support the city's commitment to improving the quality of life and the environment by reducing greenhouse gas (GHG) emissions and expanding access to zero- or low-emissions transportation options. The following guidelines instruct permittees on how to avoid or mitigate negative environmental externalities associated with Powered Scooter Share programs, and clarify best practices for monitoring and sharing relevant data with the SFMTA.

### PURPOSE

The existing Powered Scooter Share Pilot Program has yielded notable public benefits as a useful component of San Francisco's transportation system. Initial findings suggest that powered scooters may replace Transportation Network Company (TNC) trips and induce transit trips, and thereby serve as an effective and low-emission last-mile solution. However, non-revenue vehicle miles traveled (VMT)—i.e. mileage associated with operations activities such as recharging, rebalancing, and maintenance—have also been substantial, and the overall environmental impact of scooter share programs is still unknown.

The SFMTA is committed to improving the quality of life and the environment in San Francisco. Both the SFMTA's Strategic Plan and the Transit First Policy describe this commitment to sustainable transportation:

#### SFMTA Strategic Plan Goals and Objectives

Goal 2 - Make transit and other sustainable modes of transportation the most attractive and preferred means of travel.

- Objective 2.2: Enhance and expand use of the city's sustainable modes of transportation.

Goal 3 - Improve the quality of life and environment in San Francisco and the region.

- Objective 3.3: Guide emerging mobility services so they are consistent with sustainable transportation principles.

#### Transit First Policy Principles

1. To ensure quality of life and economic health in San Francisco, the primary objective of the transportation system must be the safe and efficient movement of people and goods.



2. Within San Francisco, travel by public transit, by bicycle and on foot must be an attractive alternative to travel by private automobile.
3. Decisions regarding the use of limited public street and sidewalk space shall encourage the use of public rights of way by pedestrians, bicyclists, and public transit, and shall strive to reduce traffic and improve public health and safety.
4. The City and County shall encourage innovative solutions to meet public transportation needs wherever possible and where the provision of such service will not adversely affect the service provided by the Municipal Railway.

The Sustainability Guidelines and Requirements strive to accomplish the following:

1. Ensure permittees incorporate best practices in scooter design;
2. Ensure permittee operations maximize energy efficiency and utilize clean energy sources; and
3. Ensure permittee's compliance with the City's Zero Waste, and Producer Responsibility Policies.

## **SUSTAINABILITY GUIDANCE**

Permittees shall describe how the operator will adhere to the following in their Recharging, Maintenance, Cleaning, and Sustainability Plan:

1. Device Best Practices
  - a. Incorporate Swappable Battery Design
    - i. Swapping batteries on-site stands to increase the longevity of powered scooter devices, improve efficiency by reducing the need to remove scooters from the street for servicing, and decreases fire risks and other hazards from unsupervised contractor charging in private homes.
  - b. Battery Requirements
    - i. Proof of UL 2271 and 2272 battery certifications from manufacturer, and
    - ii. Test results from a qualified independent lab demonstrating each model scooter put into service meets or exceeds California Vehicle Code 21223.
2. Energy Usage and Efficiency
  - a. Use clean energy sources, such as the 100% greenhouse-gas-free energy offered through the City's CleanPowerSF program.
  - b. Incentivize or require devices to be recharged within San Francisco.
  - c. Research and invest in durable powered scooters to increase fleet's longevity and to minimize scooter production environmental footprint.
  - d. Streamline recharging/redistributing activities to minimize Non-Revenue VMT to the extent possible, and consider employing non-auto modes (i.e. cargo bicycle) for non-revenue/operations activities.



3. Transit-Friendly Best Practices
  - a. Employ variable rates, gamification, or other incentives to prioritize short trips, maximize fleet availability, and discourage an overconcentration of scooters.
  - b. Offer and promote incentives to start or end trips along key transit lines or at transit hubs, and encourage connections to transit as a last-mile solution.
  - c. Establish a plan for modifying service to facilitate travel throughout the City in the event of a major issue that interrupts regular transit service.
4. Zero-Waste and Producer Responsibility
  - a. Life-Cycle Analysis (LCA) Requirement
    - i. Demonstrate and verify environmental impacts associated with all stages of scooter model(s) life span, including any adaptive models. Can include social impacts as well, and share steps that will be taken to incorporate findings into the company's operations (i.e. prioritizing deployment of the less impactful model, or adjusting the model's design to reduce harmful impacts).
  - b. Take responsibility for scooters throughout their life cycle, including:
    1. Ensure scooter fleet is appropriately sized to maintain minimum number of active scooters without excessive consumption/waste;
    2. Proactively reduce the need for new scooters through repair, resale, or redistribution for reuse;
    3. Reuse scooter parts where possible;
    4. Properly manage hazardous components including batteries; and
    5. Recycle all components of non-working scooters to the maximum extent possible.
  - c. Designate a company contact person/employee to collect permittee's scooters that are lost, damaged, or abandoned on the street, or that end up in the solid waste stream.

## **DATA & REPORTING REQUIREMENTS**

Permittee shall track and report the following metrics monthly to the SFMTA:

1. Redistribution, Charging, and Maintenance Activities.
  - a. Number of trips generated by operational activities, including collecting, redistributing, and recharging scooters, and
  - b. Non-Revenue VMT for operations vehicles performing cleaning, maintenance, repair, recharging and rebalancing tasks.
    - i. i. and ii. will be reported as monthly and year-to-date totals, and will also be broken down by vehicle type and/or fuel efficiency.
    - ii. i. and ii. pertain to both employees and independent contractors.



- iii. Strong applications will clearly describe a process to monitor and report metrics pertaining to both employee and contractor operational activities.
      - c. Record of maintenance activities, including but not limited to the scooter identification number and type of maintenance performed (reported to the SFMTA on an as-requested basis).
  2. Charging Location(s), Energy Source(s), & Use
    - a. Description of the location(s)/building(s) and specific room(s) where the scooter will be charged, including address
      - i. Source/provider of electricity used to recharge scooters, and the location(s) where charging occurs.
        - a. Pertains to charging activities conducted by both employees and contractors. Where electricity source of contractor is unknown, charging location may be reported instead.
      - ii. Whether the room require(s)(d) any modifications to the electrical outlets or system
      - iii. Number of scooters charged in this space at one time
      - iv. Is the space sprinklered?
      - v. Does the space have smoke detection connected to a fire alarm system?
    - b. Fleet-wide average number of kilowatt hours per mile per scooter.
    - c. Fleet-wide average lifespan of powered scooters.
  3. Zero Waste Goals
    - a. Number of scooters in use on the first and last days of the month
    - b. Number of working scooters resold or donated during the month
    - c. Number of scooters lost or missing on the last day of the month
    - d. Number of non-working scooters in storage on the last day of the month
    - e. Number of non-working scooters disassembled for parts during the month
    - f. Number of non-working scooter parts that are sent to landfill during the month, broken down by part type.
      - i. Number of non-working scooter parts in storage but not yet sent to landfill during the month, broken down by part type.
      - ii. Percentage of non-working scooter parts that are recycled during the month, broken down by part type.
    - g. The total weight of non-working scooters and scooter parts recycled off-site during the month
    - h. The total weight of non-working scooters and scooter parts sent to landfill during the month
    - i. The number, size and chemistry of scooter batteries disposed, location of disposal, and receipt(s) verifying disposal. Refer to the California Department of Toxic Substances Control's [Universal Waste Fact Sheet](#) for guidance on proper management of spent or unwanted scooter batteries.
      - i. The number, size, and chemistry of non-working batteries in storage, either on-site at operations facilities, or at offsite warehouse(s), not yet disposed.



### Reporting Format

The above metrics will be reported in the monthly report as specified in the Data Reporting Guidelines and Requirements. A reporting template will be provided prior to permit issuance. The SFMTA may choose from time to time to add or remove specific metrics from the monthly reports. Note that these reports may be posted online by the SFMTA and will be considered public. See Section 69 of the Permit Terms and Conditions.

Permittees must monitor the above requirements. Failure to comply with the applicable terms and conditions may result in administrative penalties and/or permit revocation.