



SFMTA
Municipal
Transportation
Agency

Commuter Shuttle Program Policy

October 16, 2015

1. Executive summary

Shuttles taking workers and students to jobs or schools have operated for decades in San Francisco, but have become more common in the past several years. This has led to an increase in issues related to Muni operations and complaints from residents. To address this growing commute choice, the San Francisco Municipal Transportation Agency (SFMTA) created a Commuter Shuttle Pilot Program (“Pilot”) to gather accurate and up-to-date information on commuter shuttle activity and operations and to determine if active management of shuttles can reduce traffic conflicts and other issues. The timeline of the Pilot was as follows:

- January 2014: approval of Pilot by the SFMTA Board of Directors
- June 2014: pre-pilot field data collection
- August 2014: official launch of Pilot
- June 2015: field data collection during pilot
- October 2015: publication of Pilot Evaluation Report

This document sets the policy for an ongoing Commuter Shuttle Program, which is based on lessons learned from the Pilot, as set forth in the Evaluation Report, environmental review, and input from elected officials, community members, the SFMTA’s transit and traffic engineering teams, shuttle operators, employers, and other interested stakeholders.

The Commuter Shuttle Program builds upon the Pilot in the following ways:

- Requires participating shuttle operators to phase in the use of newer vehicles, which ensures lower greenhouse gas emissions from the shuttle fleet overall
- Requires buses over 35 feet long to travel on the major and minor arterial street network as defined by the California Department of Transportation (during the transition to the Commuter Shuttle Program, SFMTA staff will work with participating shuttle operators to either relocate stop-events currently made outside of the arterial street network, or accommodate those stop-events using smaller vehicles)
- Permits shuttles that are free and open to the public to use the shuttle zone network without charge (as long as those shuttles comply with all other Commuter Shuttle Program requirements)
- Increases enforcement resources devoted to shuttle zones and corridors, and recovers the costs as part of the fee for participation in the program
- Increases capital improvements at shuttle zones and corridors, with such costs recovered, at least in part, as part of the fee for participation in the program
- Improves real-time GPS data collection and reporting to help better manage commuter shuttle operations and target enforcement

- Requires increased data sharing from participating shuttle operators, and requires that participating shuttle operators demonstrate for each vehicle that data feeds are regular and accurate before receiving a permit
- Requires participating shuttle operators to comply with the San Francisco Board of Supervisors' March 2015 Labor Harmony Resolution, including the submission of a Service Disruption Prevention Plan that describes the shuttle operators' efforts to ensure efficient and consistent service in the event of potential disruptions, including labor disputes.

2. Introduction

Privately operated commuter shuttles, which transport workers from their neighborhoods to places of work or transportation hubs, have become increasingly common on the streets of San Francisco. Commuter shuttles provide a commute choice to thousands of employees, students, and other residents of the City, and provide alternatives to drive-alone trips. Shuttles are associated with reduced auto ownership and the increased use of transit, walking, and bicycling for non-commute trips.

Numerous employers, educational institutions, medical facilities, office buildings, and transportation management associations offer shuttle service to their employees, students, and clients. Some buildings are required to provide shuttle service as part of their conditions of approval, and an employer may comply with San Francisco's Commuter Benefits Ordinance by offering a free commute shuttle to employees. The majority of the commuter shuttles are closed systems that provide service to a specific population and are not open to the general public. Most shuttles are provided for free to employees (or students, tenants, etc.). The private shuttle sector encompasses:

- **Sponsors:** The buildings, employers, hospitals, schools, and other institutions that offer the service, either by contracting out to operators or by operating their own shuttles. Sponsors also include third party shuttle coordinator firms hired by companies to manage contracted shuttle systems.
- **Shuttle service providers:** The companies and individuals, often charter party carriers, who operate the shuttle vehicles and provide the service on a day-to-day basis.
- **Riders:** The people who use shuttles for their commute trips.

There are two distinct markets within the shuttle sector: those that operate within San Francisco (intra-city) and those that operate between San Francisco and another county (regional).

Before August 2014, San Francisco did not regulate commuter shuttles. Shuttles operated throughout the City on both large arterial streets, such as Van Ness Avenue and Mission Street, and smaller residential streets. Shuttles loaded and unloaded passengers in a variety of zones, including white loading zones, red Muni zones, and other vacant curb space. When curb space was unavailable, shuttles often would load or unload passengers in the street. The lack of rules for loading and unloading resulted in confusion for shuttle operators and neighborhood residents, challenges for enforcement, and real and perceived conflicts with other transportation modes.

To address these issues, in January 2014, the SFMTA Board of Directors approved an 18-month Pilot to test the sharing of designated Muni zones with eligible commuter shuttles that pay a fee and receive a permit containing terms and conditions for use of the shuttle zone network, as well as to gather data on commuter shuttle operations. The Pilot launched in August 2014, and created a network of shared stops for use by Muni and those commuter shuttle buses that chose to participate, and restricted parking during peak commute hours of the day in a few locations in order to create passenger loading (white) zones exclusively for the use of permitted commuter shuttles.

3. Pilot evaluation

The SFMTA conducted an extensive evaluation of the Pilot. The Pilot Evaluation Report was published on October 5, 2015. The key findings from the Pilot Evaluation Report that have informed the Commuter Shuttle Program are:

- The vast majority of community feedback focused on large shuttles being unwelcome on residential streets.
- The Pilot allowed for the collection of an unprecedented amount of data regarding shuttle activity.
- Effective and accurate real-time shuttle vehicle data assists the SFMTA in regulating and managing commuter shuttle activity.
- 47% of shuttle riders said they would drive alone to work if a shuttle were not available.
- Shuttles reduce the amount of vehicle miles traveled on the region's streets by nearly 4.3 million each month.
- An average of 2.7% of shuttle stop-events resulted in blocking Muni access to a zone.
- Shuttles block travel and bike lanes about 35% of the time that they stop to load or unload.
- Citation data may not reflect enforcement's success in keeping streets safe, keeping transit moving, and preventing shuttle-zone blockages.
- More enforcement staffing at shuttle zones and along shuttle routes would assist in keeping traffic flowing smoothly throughout the shuttle zone network and help speed Muni.

4. Guiding principles

Based on the results of the Pilot evaluation, the air quality analysis conducted as part of the Planning Department's environmental review of the Commuter Shuttle Program, and other input received from elected officials and the public, the following principles inform the Commuter Shuttle Program policy:

1. Provide a safe environment for all street users in support of the SFMTA's Vision Zero policy to eliminate all traffic deaths
2. Prevent service disruptions, including any related to labor relations issues
3. Ensure that commuter shuttles do not adversely affect operations of public transportation in San Francisco
4. Consistently and fairly apply and enforce any regulations/policies governing shuttle operations
5. Work collaboratively with shuttle sector to refine policies and resolve concerns and conflicts
6. Integrate commuter shuttles into the existing multi-modal transportation system
7. Establish a program structure that meets current needs and has the potential to evolve as the sector grows and evolves
8. Ensure more focused enforcement, ease of administration and on-going oversight

5. Related SFMTA Strategic Plan goals

The Commuter Shuttle Program supports the following SFMTA Strategic Plan goals:

- 1.3: Improve the safety of the transportation system
- 2.3: Increase use of all non-private auto modes
- 3.2 Improve the transportation system's positive impact to the economy
- 4.4 Improve relationships with our partners and stakeholders

The Commuter Shuttle Program aims to maximize the benefits shuttles deliver while minimizing their impacts.

6. Commuter Shuttle Program eligibility

The Commuter Shuttle Program applies to privately operated transportation services that move commuters to, from, and within San Francisco. Services that are arranged by an employer, building, or institution to provide transportation from home to work, work to home, last-mile to work, or work site to work site are eligible to participate. These services warrant a program because:

- Service is routine (following set schedules) and involves a relatively uniform number of vehicles
- Service reduces greenhouse gas emissions and vehicle miles traveled by replacing drive-alone trips
- Operations are conducive to sharing curb space with Muni at certain stops
- Operators are commercially licensed and subject to regulation, including safety and insurance requirements, by the California Public Utilities Commission (CPUC), and comply with commercial CPUC requirements
- Operations complement, but do not duplicate, existing public transportation services

The following users are not conducive to sharing zones with Muni and are not eligible to participate in the Commuter Shuttle Program, for the reasons stated:

- Tour buses, recreational buses, and long-distance interurban buses:
 - Long dwell times
 - Irregular stopping activity
- Party buses:
 - Long dwell times
 - Irregular stopping activity
 - Few demonstrated benefits to the transportation system
- School buses:
 - Long dwell times
 - Already have designated loading (white) zones in many cases
- On-call point-to-point services (airport shuttles, limousines, other on-demand transportation):
 - Long dwell times
 - Irregular service
- Private individual-fare transportation (jitneys, ride-share or transportation network companies (TNCs)):
 - Long dwell times in some cases
 - Irregular use and stopping activity
 - Some services duplicate Muni service
 - Benefits to the transportation system have not been demonstrated
 - Drivers do not have commercial licenses
- Vanpool vehicles:
 - Exempt from CPUC safety, training, inspection regulations
 - Drivers do not have commercial licenses
- Services that replicate Muni routes:
 - Commuter Shuttle Program intended to support transportation services that expand transportation options through providing point-to-point services that are not provided by public transportation

7. Commuter Shuttle Program overview

The following is a brief overview of the provisions of the Commuter Shuttle Program:

- The SFMTA creates a shuttle zone network that caps shared Muni and shuttle-only zones at 200 across the City
 - The existing shuttle zone network from the Pilot, which is the product of thorough vetting by internal agency stakeholders and input from community members, will be used at the outset of the Commuter Shuttle Program
 - The Commuter Shuttle Program allows for changes to the network to address shifting demand, community concerns, and other operational issues that arise. Changes to the shuttle zone network would be subject to the standard public review and hearing process.
- Shuttle operators apply for a permit to use the shuttle zone network, and pay a fee for permit. The permit fee is adjusted on a regular basis.
- Shuttle operators are responsible for ensuring that their operators comply with agreed-upon operating guidelines, including displaying a placard that identifies them as a permitted user

- SFMTA enforcement officers enforce parking and stopping at zones in the network, and along shuttle routes, in order to:
 - Reduce safety hazards
 - Keep zones safe for pedestrians and other users
 - Ensure that Muni buses get priority at shared zones
 - Limit the use of such stops only to Muni and shuttle operators
 - Prevent parking and stopping violations by shuttle operators
 - Keep shuttles and other traffic along shuttle routes and near shuttle network zones moving smoothly
 - Prevent unnecessary idling or layovers by shuttle operators
- Shuttle operators must share data on operations with the SFMTA, following specifications established by the SFMTA

8. Commuter Shuttle Program benefits

Through its regulatory requirements, the Commuter Shuttle Program delivers benefits to both the City and its residents, as well as to the shuttle sector.

Benefits to the City and its residents include:

- Increased safety for all users, including pedestrians, bicyclists, public transit riders, and private vehicle drivers as shuttles operate according to agreed-upon guidelines, including mandatory safety training
- Reduced conflicts with Muni operations and other vehicles
- Shift commuters onto, and keep commuters using, sustainable transportation modes
- Ability to quickly resolve conflicts, using identification and shared data
- Designated point of coordination for resolving conflicts, questions, and issues
- Data to support more effective management of the roadway network for all users
- Information on shuttle activity, allowing effective communication and planning

Benefits to the shuttle sector include:

- Ability to propose and coordinate with SFMTA on approved locations for passenger loading/unloading
- Clarity on which stops are permissible to use and which are not, and a clear framework of enforcement and consequences for violators
- Signage at approved zones will communicate allowed use to members of the public and enforcement
- Upgrades of some stops to accommodate shuttle vehicles as added users
- Ability to address issues and concerns quickly through partnership with the City
- Coordination with SFMTA on further improvement of transportation services and conditions
- Information about upcoming construction projects, street closures, and planning projects of interest to, or that may affect, shuttle services

9. Commuter shuttle zone network

9.1 Initial zone network

At its outset, the Commuter Shuttle Program uses the shuttle zone network in place at the conclusion of the Pilot. The Pilot shuttle zone network was established through consultation with shuttle operators, community groups and residents, and Muni. Over the course of the 18-month Pilot, the SFMTA made the following changes to the shuttle zone network (either shared Muni zones or shuttle-only white zones) to respond to issues such as street improvements, Muni service changes, shuttle ridership demand, construction, community concerns, and other operational considerations:

- Removed 10 zones;
- Added 29 zones; and
- Adjusted hours at two zones.

As a result, the present Pilot shuttle zone network is the SFMTA's best estimate of an effective zone network at the time of the Commuter Shuttle Program's launch. As described below, the shuttle zone network will continue to evolve as necessary to best meet the needs of the City.

9.2 Changes to the shuttle zone network

The SFMTA receives suggestions about changes to the shuttle zone network from any interested groups, including shuttle operators and community members. SFMTA staff regularly solicits input from the SFMTA's transit and traffic engineering divisions and other City agencies to ensure that the shuttle zone network is not working in opposition to their goals. In addition, in considering whether to make a change to the shuttle zone network, the SFMTA solicits input from:

- Community members (via public notice/posting and a public hearing) regarding specific street and traffic conditions; and
- Shuttle operators regarding the types of vehicles that would use the zones, and the hours and frequency of the proposed zone use.

SFMTA transit service planning and engineering staff review any proposed zones or zone changes, identifying potential impacts provided by community input as well as information about Muni operations and stop configurations.

Where existing Muni zones are not long enough to accommodate shuttle use and an extension of the zone is warranted, the SFMTA may suggest lengthening the zone or creating an adjacent shuttle zone by restricting use of adjacent parking spaces during peak hours, subject to a public hearing. Staff may also suggest the creation of separate white zones to accommodate shuttles at locations where sharing is not feasible, which would also be subject to public hearing.

The SFMTA reserves the right to reject a proposed space or remove it from the approvals process at any time and for any reason.

Any changes to the shuttle zone network will be submitted for public review and comment at a SFMTA Traffic Engineering hearing and/or a SFMTA Board of Directors meeting.

The SFMTA ensures that the shuttle zone network is consistent with the assumptions included in environmental review.

Any Muni stop not part of the shuttle zone network remains, by default, not an allowable or permissible stop for private shuttles. Violators are subject to citations.

10. Permit fee

The SFMTA charges each participating shuttle operator a permit fee based on the number of stop-events each provider makes. A “stop-event” is defined as an individual instance of a shuttle vehicle stopping at a zone in the shuttle zone network. For example, a shuttle service provider that has five vehicles making 10 stop-events each per day is charged for 50 stop-events per day.

The permit fee covers the costs to SFMTA, including, but not limited to:

- Development of zone network, monitoring and updates
 - Evaluation of proposed stops
 - Sign installation
- Enforcement of the zone network and along shuttle corridors
- Capital improvements to zone network and along shuttle corridors
- Signage and placard design
- Signage and placard production
- Sign installation and curb treatments
- Data management system development and management
- Permit processing and renewals
- Day-to-day oversight and administration
- Communications with shuttle operators and community members
- Billing, collection, payment processing

The exact per-stop-event fee for each shuttle operator is based on total stop-events identified by approved permit applicants, and is updated on a regular basis.

10.1 Permit and vehicle placard applications

Shuttle operators must apply for a permit to participate in the Commuter Shuttle Program. Permits must be renewed each year. Permit renewal takes place at a set time each year, so that a shuttle operator that joins the program mid-year is required to renew during the general renewal period.

To be approved for a permit to operate vehicles in the Commuter Shuttle Program, the shuttle operator must provide the following information:

- Company name, designated point of contact, and contact information
- Copy of applicable California Public Utilities Commission (CPUC) certifications, registrations and permits
- Documentation of compliance with CPUC insurance requirements
- Copy of the most recent Safety Compliance Report from the California Highway Patrol (CHP)
- Anticipated number of placards that will be requested for shuttle service
- Signed agreement to comply with all terms of permit

For each vehicle to be used in the Commuter Shuttle Program, shuttle operators must apply for a vehicle placard. Vehicle placards must be renewed each year. Placard renewal takes place at a set time each year, so that a vehicle placard approved mid-year must be renewed during the general renewal period. Placards are assigned to the shuttle operator, rather than to individual vehicles, to allow for flexibility of fleet management.

To be approved for a vehicle placard, shuttle operators must provide the following information for each vehicle for which they may use a placard:

- Manufacturer and model name
- Size (length, weight, and passenger capacity)
- Model year
- Fuel used
- License plate number
- Vehicle registration information

Shuttle operators are required to keep the above information current, even when not applying for or renewing a permit or placard.

10.2 Fee collection

The SFMTA invoices approved shuttle operators at the time of permit approval and each month. Shuttle operators are required to update their estimated total stop-events each month.

The SFMTA conducts a stop-event reconciliation every six months to compare the number of estimated stop-events with the number of stop-events actually made, and invoices shuttle operators for any additional stop-events made. The SFMTA does not issue refunds for estimated stop-events that are not made. If actual stop-events exceed the number of estimated stop-events by more than 10 percent, the SFMTA assesses a penalty fee of 10 percent of the unpaid cost in addition to invoicing for the additional stop-events.

Any invoices sent by the SFMTA are due and payable within 30 days of invoice date. Late payment is subject to interest and penalties.

Payment of all outstanding fees, penalties and outstanding citations must be made prior to the issuance of any continuing permit.

The SFMTA may also impose an administrative fee for lack of compliance or performance with permit conditions.

The SFMTA does not reimburse any shuttle permit and fees for any reason.

11. Permit terms

The permit authorizing shuttle operators' (Permittees') commuter shuttles to participate in the Commuter Shuttle Program and make use of the zones in the Commuter Shuttle Program's shuttle zone network ("Designated Stops") contains the following conditions and requirements:

1. Permittee must comply with the San Francisco Board of Supervisors' March 2015 Labor Harmony Resolution. Such compliance includes submission of a Service

Disruption Prevention Plan that describes Permittee's efforts to ensure its efficient operations while avoiding any potential disruptions to SFMTA operations by addressing the principles and concerns set forth in such Resolution. Upon issuance of a permit, Permittee must ensure its operations do not cause or contribute to any service disruptions. Failure to comply with this provision will result in denial or revocation of permits.

2. Permittee must certify that all of their operators who drive a shuttle in San Francisco have viewed the SFMTA's Large Vehicle Urban Driving Safety video, which can be accessed at <https://youtu.be/LbC3FQeZgc>.
3. Permittee must indemnify SFMTA and the City of San Francisco for injuries or damage resulting from Permittee's use of Designated Stops, including associated bus shelters and other related sidewalk features.
4. Permittee vehicles must display a placard issued by SFMTA at specified location on the front and rear of vehicles at all times when operating commuter service in San Francisco.
5. Permittee must comply with operating guidelines:
 - a) *Muni priority*: Muni buses have priority at and approaching or departing Designated Stops.
 - b) *Yield to Muni*: Where Muni or other public transit buses are approaching a Designated Stop and when safe to do so, allow such buses to pass so they may stop at Designated Stops first.
 - c) *Stay within the network*: Permittees shall stop only at Designated Stops or other non-Muni zones, and may not stop at Muni zones outside the network.
 - d) *Active loading; no unnecessary idling*: Designated Stops may be used only for active loading and unloading; shuttles must load and unload riders as quickly and safely as possible. Unnecessarily idling is not permitted.
 - e) *Move forward*: Shuttle drivers shall pull forward in a Designated Stop to leave room for Muni or other shuttles.
 - f) *Pull in*: Shuttle drivers shall pull all the way to, and parallel with, the curb for passenger boarding and alighting; shuttle vehicles shall not be stopped or parked so as to obstruct the flow of pedestrian or vehicular traffic; loading and unloading shall not take place in a vehicle or bicycle lane, or in a manner that impedes travel in these lanes.
 - g) *Comply with all applicable traffic laws*: Shuttles shall operate in accordance with all applicable state and local traffic laws.
 - h) *Circulation*: Permitted shuttle vehicles longer than 35 feet may travel only on the major and minor arterial street network as determined by the California Department of Transportation. All shuttle vehicles shall stay on the major and minor arterial street network and avoid steep and/or narrow streets to the extent possible. Permittees shall comply with all relevant street and lane restrictions.

- i) *Training*: Permittees shall ensure that training for shuttle drivers addresses these operating guidelines.
 - j) *Follow instructions from officials and traffic control devices*: Shuttle drivers shall follow instructions from police officers, authorized SFMTA staff (including Parking Control Officers) and traffic control devices in the event of emergencies, construction work, special events, or other unusual traffic conditions.
 - k) *Use of Designated Stops limited to permit-related activity*. Shuttle vehicles that display a placard but are not making commuter shuttle-related trips may not use Designated Stops.
6. Provide data feeds per SFMTA specifications, and demonstrate for each vehicle that data feeds are regular and accurate before receiving a permit.
 7. Pay permit fees. Permittees shall pay all permit fees by the due dates, except that any stop-events made by permitted shuttle vehicles that are free for use by the public, and display the words “Free to the Public” on the loading side of the vehicle in letters at least four inches tall, shall be exempt from this permit fee requirement but subject to all other permit terms.
 8. Promptly pay any outstanding traffic citations.
 9. Designate a representative to receive comments or concerns about driving issues by permitted shuttle drivers, and place a sticker on all permitted shuttle vehicles that states “How is my driving?” and provides a number to reach that designated representative.
 10. Demonstrate compliance with all applicable regulatory requirements imposed by the CPUC, including registration/permitting, insurance, vehicle inspection requirements, and driver training.
 11. All shuttle vehicles not already approved for use in the Pilot as of January 31, 2016 must be either model year 2012 or newer, or be equipped with a power source that complies with emissions standards applicable to the 2012 class of vehicle. As of January 1, 2020, all shuttle vehicles used by Permittees in the Commuter Shuttle Program must be model year 2012 or newer. After January 1, 2020, all shuttle vehicles used by Permittees in the Commuter Shuttle Program must be no more than eight model years old. SFMTA ensures compliance with this condition through the annual permit renewal process, which requires submittal of vehicle registration and, in the case of vehicles older than model year 2012, documentation to show compliance with applicable emissions standards.

An administrative penalty fee may be issued and/or a permit may be denied or revoked for failure to comply with permit terms.

11.1 Identification of shared stops

The zones in the shuttle zone network bear signage indicating that they are part of the network. The signage uses a logo and design consistent with the on-vehicle shuttle placards.

11.2 Regulation and enforcement

The SFMTA issues placards that identify permitted shuttle vehicles. Enforcement personnel rely on signage at shuttle zones and display of the placard on the front and rear of the vehicle to verify legitimate users of the shuttle zone network. Additionally, the placards each bear a unique identification number that is associated with the shuttle operator so that the SFMTA may easily contact the correct shuttle operator regarding any issues or concerns. Each shuttle must have a placard affixed in agreed-upon visible locations on the front and rear of the vehicle during permit-related operation in San Francisco.

SFMTA enforcement officers enforce compliance with the program, issuing citations for actions such as:

- Non-permitted shuttles using shared stops
- Any shuttle (permitted or not) using Muni stops not designated as part of the shared network
- Any shuttle (permitted or not) loading or unloading in a bicycle or mixed flow lane, which creates a hazard and/or unsafe conditions.

In addition to parking citations, other penalties associated with the program include:

- Interest imposed on late payments.
- Stop events exceeding those paid for and permitted: If actual stop-events exceed the number of estimated stop-events by more than 10 percent, the SFMTA assesses a penalty fee of 10 percent of the unpaid cost in addition to invoicing for the additional stop-events.
- Non-compliance with permit terms: The SFMTA may impose an administrative penalty fee and/or revoke a permit for lack of compliance or performance of any of the permit conditions.

12. Data

12.1 Fleet and estimated activity data

Shuttle operators are required to provide the following data about their vehicles and the activity of those vehicles:

- Vehicle data
 - Shuttle operator identification number (assigned by SFMTA)
 - Vehicle placard number (must match a number on placard issued to shuttle operator)
 - Manufacturer and model name
 - Size (length, weight, and passenger capacity)
 - Model year
 - Fuel used
- Estimated vehicle activity data (to be updated each month)
 - Daily stop-events by zone
 - Monthly vehicle miles traveled in commuter shuttle service in San Francisco (including any deadheading)

- Average daily boardings in commuter shuttle service in San Francisco
- Average daily occupancy for each vehicle upon exiting San Francisco (if applicable)
- Average daily occupancy for each vehicle upon arrival at destination
- Typical routes, and average number of runs per route
- Average number of daily shuttle vehicles in operation

12.2 Real-time location and movement data

Shuttle operators are required to provide real-time data regarding shuttle vehicle movements. This data enables the SFTMA to continue to manage the impact of shuttles on the transportation network, respond to any on-street issues that arise, and track and compare actual shuttle activity to estimated shuttle activity provided monthly by shuttle operators. Data feeds from individual providers and vehicles allow targeted communications to address conflicts and resolve problems, and are fundamental to effective auditing.

The data fields that are required of shuttle operators include:

- Stop-events (date, start time, end time)
- Movement of shuttles via periodic real-time location data indicating a pinpointed location of the particular vehicle (also called “telemetry” data)

This GPS data provides the granularity and consistency of information needed to achieve the following:

- Focus enforcement efforts: queries to assess where stops are being made outside of the network
- Respond to complaints: identifying specific shuttle operators associated with complaints
- Audit: collect fees for stop-events made that exceed those estimated and paid for
- Prioritize stops for passenger amenities: zone use helps inform which zones could receive potential capital improvements
- Respond to hot spots: identification of areas where there is a high concentration of shuttles may result in parking and traffic changes to address the high demand for loading/unloading space
- Prevent delay on key corridors: identification of delay hot spots could lead to suggested shuttle route changes
- Establish average traffic speeds: understand how speeds and system operation are affected by temporary and permanent projects
- Engage in dynamic communications and routing: address public concerns, special events, emergencies, construction, and other routing needs with appropriate operators

Permittees are required to equip each shuttle vehicle with an on-board device that provides the real-time location data described above to the SFMTA, and shall maintain a continuous feed of the specified data while the shuttle is used in San Francisco for commuter shuttle service.