THIS PRINT COVERS CALENDAR ITEM NO.: 11

SAN FRANCISCO MUNICIPAL TRANSPORTATION AGENCY

DIVISION: Sustainable Streets

BRIEF DESCRIPTION:

Amend the Transportation Code, Division II, to authorize a permit program to allow commuter shuttle service providers to use designated Muni zones and white curb loading zones for passenger loading and unloading, approve a permit fee for the program, and adopt a Commuter Shuttle Program Policy to govern the SFMTA's implementation of the commuter shuttle permit program.

SUMMARY:

- For decades in San Francisco, shuttle buses have been used to transport workers and students, among others, to or from jobs, schools or other facilities; the use of such shuttles has increased significantly in the past several years.
- The SFMTA launched a Commuter Shuttle Pilot Program (the "Pilot") in August 2014 to determine if active regulation of shuttles could reduce traffic conflicts and other issues.
- Under the Pilot, the SFMTA established a permit program and fee to enable eligible shuttle service providers to use a network of designated Muni and white curb loading zones to load and unload passengers; the SFMTA also gathered data on shuttle activity.
- The SFMTA published an Evaluation Report on the Pilot in October 2015, which assessed the success of the Pilot and suggested areas for improvement.
- The proposed Commuter Shuttle Program would continue the regulation of commuter shuttles beyond the end of the Pilot period, with certain regulatory revisions including phasing in a newer and greener fleet, limiting large shuttles to the major and minor arterial street network, allowing shuttles that are free to the public to use the zone network without a fee, increasing enforcement, and requiring a plan to address service disruptions, including those arising from labor issues.

ENCLOSURES:

- 1. SFMTAB Resolution
- 2. Transportation Code Division II Amendment
- 3. Commuter Shuttle Program Policy
- 4. Pilot Project Evaluation Report
- 5. Map of Caltrans major and minor arterial street network

APPROVALS:	DATE
DIRECTOR	<u>11/7/15</u>
SECRETARY	<u>11/7/15</u>

ASSIGNED SFMTAB CALENDAR DATE: November 17, 2015

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PURPOSE

The purpose of this item is to request that the SFMTA Board of Directors approve: (1) Transportation Code amendments to authorize a commuter shuttle permit program to allow commuter shuttle service providers to use designated Muni zones and white curb loading zones for passenger loading and unloading, and (2) adoption of a Commuter Shuttle Program Policy to govern the SFMTA's implementation of the commuter shuttle permit program, including approval of the designated Muni zones and white curb zones.

GOAL

The proposed program supports the following SFMTA Strategic Plan goals:

- 1. Create a safer transportation experience for everyone.
- 2. Make transit, walking, bicycling, taxi, ridesharing and carsharing the preferred means of travel.
- 3. Improve the environment and quality of life in San Francisco.

DESCRIPTION

Commuter shuttles, typically used for taking workers and students to jobs or schools, have operated for decades in San Francisco, but their use has significantly increased over the past several years. This has led to an increase in issues related to Muni operations, street safety, and complaints from residents. Under law, commuter shuttles are allowed to drive on most of San Francisco's streets, and the SFMTA cannot ban shuttles from the City. Commuter shuttles provide alternatives to single-occupant vehicle trips, and are associated with reduced auto ownership and increased use of transit, walking, and bicycling for non-commute trips. In order to address the issues arising from the increased use of commuter shuttles, in 2014 the SFMTA created a Pilot to gather accurate and up-to-date information on commuter shuttle activity and operations and to determine if active regulation of shuttles could reduce traffic conflicts and other issues.

To create the shuttle zone network, the SFMTA invited shuttle service providers to propose stops to be included in the network, and SFMTA transit service planning and engineering staff evaluated the requested stops in light of community input and Muni operations. Shuttle service providers initially requested more than 240 zones; the Pilot ultimately created a shuttle zone network of a total of 101 designated Muni zones and white loading zones around the City.

Under the Pilot, shuttle service providers wishing to use the designated zones were required to obtain a permit from SFMTA. The permit contained conditions for shuttle operation, including:

- Giving priority and yielding to Muni
- Staying within the shuttle zone network
- Active loading; no unnecessary idling
- Pulling forward to leave room for Muni and other shuttles
- Pulling all the way to the curb
- Complying with all traffic laws
- Training for shuttle drivers
- Using the shuttle zone network only for permit-related activity

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The permit also required participating shuttle service providers to provide SFMTA with substantial data about their activity and operations. The permittee's vehicles participating in the program were required to display SFMTA-issued placards. In addition, the Pilot established a permit fee tied to the number of stops each service provider's shuttles make at the designated stops. Presently, the fee is \$3.67 for each stop event at a designated stop. Stops at other locations, or outside of San Francisco, are not counted. On the whole, shuttle service providers have paid their fees: since the start of the Pilot in August 2014, the SFMTA has billed shuttle service providers for over \$3,000,000 in fees, of which all but about \$3,000 has to date been collected, with collection discussions underway for the remaining amount.

Over the course of the Pilot, the SFMTA made substantial changes and updates to the shuttle zone network to respond to issues such as street improvements, Muni service changes, shuttle ridership demand, construction, community concerns, and other operational considerations. As a result, the present Pilot shuttle zone network, which now contains 125 zones across the City, constitutes the SFMTA's best estimate of an effective zone network at the conclusion of the Pilot.

The timeline for 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
- January 2016: completion of the Pilot

The SFMTA undertook an extensive evaluation of the Pilot to determine whether the method of regulation used in the Pilot should be continued beyond the Pilot period. 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 miles 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.
- More enforcement staffing at shuttle zones and along shuttle routes would assist in keeping traffic flowing smoothly throughout the shuttle zone network, help increase the speed of Muni service, and ensure safer operations for all street users.

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After evaluating the Pilot, the SFMTA developed a Commuter Shuttle Program Policy for the establishment of an ongoing Commuter Shuttle Program. The proposed Commuter Shuttle Program would continue and enhance the regulatory approach developed under the Pilot. The enhancements to the program are based upon the Pilot Evaluation Report and input from elected officials, community members, the SFMTA's transit and traffic engineering teams, shuttle service providers, employers, and other interested stakeholders.

The Commuter Shuttle Program Policy includes the network of designated Muni zones and passenger loading zones available for use by participating shuttle service providers.

The proposed Commuter Shuttle Program builds on the regulatory scheme developed under the Pilot in the following ways (see enclosed Commuter Shuttle Program policy for more information):

- Requires participating shuttle service providers 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 service providers to either relocate stop-events currently made outside of the arterial street network, or accommodate those stop-events using smaller vehicles);
- Allows 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);
- Improves real-time GPS data collection and reporting to help better manage commuter shuttle operations and target enforcement;
- Increases enforcement at shuttle zones and along shuttle corridors;
- Requires increased data sharing from participating shuttle service providers, and requires that participating shuttle service providers demonstrate for each vehicle that data feeds are regular and accurate before receiving a permit;
- Requires participating shuttle service providers 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 service providers' efforts to ensure efficient and consistent service in the event of potential disruptions, including labor disputes; and
- Requires all shuttle drivers to watch a video regarding the safe operation of large vehicles on crowded City streets around people walking and biking.

The Pilot also identified two areas where some shuttle service providers at times failed to adhere to permit terms. First, while most shuttle service providers provided all required data, some struggled to provide all real-time GPS data regarding their vehicles' locations. The Commuter Shuttle Program addresses this by requiring that shuttle service providers demonstrate that each vehicle provides accurate and timely GPS data before being allowed to participate. In addition, under the Commuter Shuttle Program, the SFMTA will more readily use its powers, under the permit program, to assess administrative penalties or revoke permits if shuttle service providers do no supply the required data. Second, shuttle drivers sometimes took vehicles on streets where those vehicles were not permitted. The Commuter Shuttle Program addresses this by clearly specifying the authorized street network for large vehicles, and by using the GPS data showing

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real-time vehicle location to target enforcement, assess administrative penalties, and revoke permits if necessary.

The permit fee for participation in the proposed Commuter Shuttle Program is a per-stop fee, and will be determined by aggregating the costs to the SFMTA that result from the program, and dividing that total cost by the annual number of stop-events that all program participants plan to make. The actual per-stop fee amount will be calculated once SFMTA has completed the review and approval process for program participation, and will include costs of:

- Increased enforcement resources devoted to shuttle zones and corridors; and
- The shuttle service providers' share of capital improvements at shuttle zones and corridors.

Any increase in the per-stop fee amount, including any increased program costs incurred by the SFMTA before the fee has been recalculated to reflect those increased costs, will be brought to the SFMTA Board of Directors for approval during the Fiscal Years 2017 and 2018 budget process, and the Transportation Code will be amended to reflect the fee. The fee will be reviewed and adjusted as part of the two-year SFMTA budget process.

The City Attorney has reviewed this report.

PUBLIC OUTREACH

The SFMTA maintained an online project page for the Pilot, and members of the public could sign up for email updates about major project developments. During the Pilot, SFMTA staff received extensive comments from the community via, among other avenues: 311 (the City's customer service center), offices of members of the Board of Supervisors, SFMTA engineering hearings, direct telephone or email contact with SFMTA staff, and communications directly from shuttle service providers.

In preparation for the release of the Commuter Shuttle Program policy, SFMTA staff met with members of the Board of Supervisors and the Mayor's office, as well as shuttle service providers and some of the companies that use those shuttle service providers to transport their employees. SFMTA staff also met with various community members who had expressed interest in or concerns about shuttle activity in their particular neighborhoods.

Many comments from community members and shuttle service providers have focused on the need for more enforcement at shuttle zones, and specific changes to the shuttle zone network. In response to these concerns, the Commuter Shuttle Program includes significant resources for parking enforcement at shuttle zones. In addition, the SFMTA has adjusted more than 40 zones in the shuttle zone network over the course of the Pilot, and the Commuter Shuttle Program will adopt this current shuttle zone network that incorporates all of these changes and updates. The SFMTA will continue to make changes to the shuttle zone network during the course of the program to address issues that may arise (e.g., service changes, shuttle ridership demand, construction, community concerns, or other operational considerations).

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The most frequent comments regarding the Pilot from community members and elected officials focused on objections to large shuttles on small streets, and the concerns attendant with that: safety, noise, and emissions. In response to this concern, SFMTA has included in the Commuter Shuttle Program the requirement that large shuttle vehicles travel only on the major and minor arterial street network as defined by the California Department of Transportation.

The SFMTA held an informational open house on the proposed Commuter Shuttle Program for the public on November 4, 2015. Approximately 35 members of the public attended. Overall, the comments were supportive of the proposed changes. There continue to be concerns about vehicles operating on small residential streets however the change to the program that requires large vehicles to only travel on arterial streets addresses that concern.

ALTERNATIVES CONSIDERED

SFMTA considered prohibiting shuttles from all Muni zones and requiring them to use existing white zones, or seek new white zones for operations. This alternative was not pursued because it would require the establishment of a large network of new white zones, many of which would require parking removal, and because the Pilot demonstrated that sharing Muni zones works in most instances (for example, SFMTA's Pilot Evaluation showed that fewer than 3% of shuttle stop-events resulted in blocked Muni buses).

SFMTA also considered allowing shuttles to use all Muni zones, with exception of those Muni zones identified by the SFMTA as particularly unsuitable for sharing. This alternative is very similar to conditions before the Pilot, where shuttles stopped wherever they found space, including in many Muni zones. The problems with this approach include unclear rules and shuttles blocking Muni, which were the motivations for the Pilot and this Commuter Shuttle Program. In addition, allowing commuter shuttles to use all Muni zones could encourage other types of private buses like tour buses or party buses to use Muni zones for loading and unloading, which would result in increased congestion and delays of Muni service.

SFMTA also considered a hub-and-spoke network in which either (a) smaller feeder shuttles would transport passengers from residential areas to large motor coach shuttles located at designated hubs, or (b) shuttles of all sizes would be restricted to a handful of designated hubs and would have extremely limited access to the City's street network. This hub-and-spoke alternative was not pursued for several reasons. First, there are few off-street locations within the City that could accommodate dozens of buses at the same time, or hundreds of buses over the course of a few hours. Second, dozens of buses attempting to access a small number of hubs at the same time, or hundreds of buses attempting to access a small number of hubs over the course of a few hours, would lead to unacceptable negative impacts on local and citywide traffic. Third, dozens of buses attempting to access a small number of hubs at the same time, or hundreds of buses attempting to access a small number of hubs over the course of a few hours, would create unacceptable air quality and quality-of-life concerns near the hubs. Fourth, creating any onstreet hubs would require the removal of very large numbers of parking spaces. Fifth, a hub-andspoke model would force shuttle riders to transfer once or more to get to their destinations, which likely would discourage shuttle ridership and result in an increase in individual car ownership and vehicle miles traveled. Additionally, it is likely that far fewer providers would voluntarily join the program. As such, they would continue to operate outside the regulatory framework of the SFMTA, which would preclude the SFMTA from collecting data about their operations and working expeditiously with the providers on issues important to the residents, businesses and other stakeholders.

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FUNDING IMPACT

The costs of the Commuter Shuttle Program are paid for via the fee paid by participating shuttle service providers. Any future increases in program costs would be covered by corresponding increases to the fee.

ENVIRONMENTAL REVIEW

On October 22, 2015, the San Francisco Planning Department determined that the proposed Commuter Shuttle Program and Transportation Code amendments are exempt from environmental review pursuant to Title 14 of the California Code of Regulations Sections 15301 and 15308 as a Class 1 and Class 8 categorical exemption from the California Environmental Quality Act (CEQA).

The Planning Department's determination is on file with the Secretary to the SFMTA Board of Directors. The proposed action is an Approval Action as defined by San Francisco Administrative Code Chapter 31.

OTHER APPROVALS RECEIVED OR STILL REQUIRED

No other approvals are required.

RECOMMENDATION

The SFMTA recommends that the SFMTA Board of Directors amend the Transportation Code, Division II, to authorize a permit program to allow commuter shuttle service providers to use designated Muni zones and white curb loading zones for passenger loading and unloading, and adopt the Commuter Shuttle Program Policy to govern the SFMTA's implementation of the commuter shuttle permit program, including approval of the network of designated Muni zones and passenger loading zones available for use by participating shuttle service providers.

SAN FRANCISCO MUNICIPAL TRANSPORTATION AGENCY BOARD OF DIRECTORS

RESOLUTION No.

WHEREAS, The use of shuttle buses to provide commuter shuttle service for the benefit of employees, students and others is a growing means of sustainable transportation in San Francisco and the greater Bay Area, and has become increasingly common in the past several years; and,

WHEREAS, Commuter shuttles are free under law to drive on most of San Francisco's streets, and the SFMTA cannot ban shuttles from the City; and,

WHEREAS, Shuttle bus service provides alternatives to single-occupant vehicle trips, and is associated with reduced auto ownership and with increased use of transit, walking, and bicycling for non-commute trips; and,

WHEREAS, The increase in shuttle buses on San Francisco's streets has led to an increase in issues related to Muni operations, street safety, and complaints from residents; and,

WHEREAS, As part of an effort to address these issues, in 2014, the SFMTA created a pilot program (the "Pilot") to gather accurate and up-to-date information on commuter shuttle activity and operations and to determine if active regulation of shuttles can reduce traffic conflicts and other issues; and,

WHEREAS, Under the Pilot, the SFMTA created a permit program and established a shuttle zone network of designated Muni zones and white loading zones around the City that would be made available to shuttle service providers participating in the program, based upon input from the service providers, SFMTA transit service planning and engineering staff, and the community; and,

WHEREAS, Over the course of the Pilot, the SFMTA made the substantial changes and updates to the shuttle zone network to respond to issues such as street improvements, Muni service changes, shuttle ridership demand, construction, community concerns, and other operational considerations; and,

WHEREAS, The present Pilot shuttle zone network is the SFMTA's best estimate of an effective shuttle zone network; and,

WHEREAS, The SFMTA undertook an extensive evaluation of the Pilot to determine whether the method of regulation used in the Pilot should be continued beyond the pilot period; and,

WHEREAS, The Pilot Evaluation Report found that: the vast majority of community feedback focused on large shuttles being unwelcome on residential streets; 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 miles 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; and 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; and,

WHEREAS, After evaluating the Pilot, SFMTA staff developed a Commuter Shuttle Program Policy to establish an ongoing Commuter Shuttle Program that would continue much of the regulatory approach put in place by the Pilot, with several improvements and enhancements based upon the Pilot Evaluation Report and input from elected officials, community members, the SFMTA's transit and traffic engineering teams, shuttle service providers, employers, and other interested stakeholders; and,

WHEREAS, The proposed Commuter Shuttle Program would require participating shuttle service providers to phase in the use of newer vehicles in order to lower greenhouse gas emissions from the shuttle fleet overall; and,

WHEREAS, The proposed Commuter Shuttle Program would require buses participating in the program that are over 35 feet long to travel on the major and minor arterial street network as defined by the California Department of Transportation; and,

WHEREAS, The proposed Commuter Shuttle Program would allow 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; and,

WHEREAS, The proposed Commuter Shuttle Program would require real-time GPS data collection and reporting to help better manage commuter shuttle operations and target enforcement; and,

WHEREAS, The proposed Commuter Shuttle Program would require increased data sharing from participating shuttle service providers, and requires that participating shuttle service providers demonstrate for each vehicle that data feeds are regular and accurate before receiving a permit; and,

WHEREAS, The proposed Commuter Shuttle Program would require participating shuttle service providers 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 service providers' efforts to ensure efficient and consistent service in the event of potential disruptions, including labor disputes; and,

WHEREAS, The permit fee for participation in the proposed Commuter Shuttle Program would be a per-stop fee which will be determined by aggregating the costs to the SFMTA that result from the program and dividing that total cost by the annual number of stop-events that all program participants plan to make; and,

WHEREAS, The Commuter Shuttle Program Policy includes the network of designated Muni zones and passenger loading zones that would be available to participating shuttle service providers; and

WHEREAS, The Commuter Shuttle Program Policy also includes 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; and,

WHEREAS, The per-stop fee amount for the proposed Commuter Shuttle Program will be calculated once the SFMTA has completed the review and approval process for program participation, and will be brought to the SFMTA Board of Directors at a future date for approval and appropriate amendment of the Transportation Code; and, WHEREAS, On October 22, 2015, the San Francisco Planning Department determined that the proposed Commuter Shuttle Program and Transportation Code amendments are exempt from environmental review pursuant to Title 14 of the California Code of Regulations Sections 15301 and 15308 as a Class 1 and Class 8 categorical exemption from the California Environmental Quality Act (CEQA), the SFMTA Board of Directors concurs with this determination, the Planning Department's determination is on file with the Secretary to the SFMTA Board of Directors, and this is the Approval Action as defined by San Francisco Administrative Code Chapter 31; now, therefore, be it

RESOLVED, That the San Francisco Municipal Transportation Agency Board of Directors amends the Transportation Code, Division II, to authorize a permit program to allow commuter shuttle service providers to use designated Muni zones and white curb loading zones for passenger loading and unloading; and, be it further

RESOLVED, That the San Francisco Municipal Transportation Agency Board of Directors adopts the Commuter Shuttle Program Policy to govern the SFMTA's implementation of the Commuter Shuttle Program, including the network of designated Muni zones and passenger loading zones that would be available to participating shuttle service providers.

I certify that the foregoing resolution was adopted by the San Francisco Municipal Transportation Agency Board of Directors at its meeting of November 17, 2015.

Secretary to the Board of Directors San Francisco Municipal Transportation Agency

RESOLUTION

[Transportation Code – Establishing Permanent Commuter Shuttle Permit Program]

Resolution amending the Transportation Code, Division II to establish a Commuter Shuttle Permit Program to authorize certain shuttle buses to stop in designated Muni stops and passenger loading zones for the purpose of loading or unloading passengers, and establish permit conditions for such permits.

NOTE: Additions are <u>single-underline Times New Roman</u>; deletions are <u>strike-through Times New Roman</u>.

The Municipal Transportation Agency Board of Directors of the City and County of San Francisco enacts the following regulations:

Section 1. Article 900 of Division II of the Transportation Code is hereby amended by revising Section 914, to read as follows:

Sec. 914. <u>COMMUTER</u> SHUTTLE STOP PERMITS.

(a) **Definitions**. As used in this Section 914, the following words and phrases shall have the following meanings:

Designated Stop. An SFMTA bus stop or a white zone designated by SFMTA as a stop available for loading and/or unloading of passengers by Shuttle Service Providers that have been issued a Shuttle Permit under this Section 914.

Director. The Director of Transportation or his or her designee.

Shuttle Bus. A motor vehicle designed, used or maintained by or for a charterparty carrier of passengers, a passenger stage corporation, or any highway carrier of passengers required to register with the California Public Utilities Commission that is being operated in Shuttle Service. <u>A Shuttle Bus shall also include any bus that is owned, or being</u> operated on behalf of, a governmental entity and being operated in Shuttle Service.

Shuttle Permit. A permit issued by the SFMTA that authorizes a Shuttle Service Provider to load and/or unload passengers at specified Designated Stops in one or more Shuttle Buses.

Shuttle Placard. A placard issued by SFMTA that is visible from outside the Shuttle Bus at front and rear locations as specified by the SFMTA and that identifies the Shuttle Permit authorizing the Shuttle Bus to use Designated Stops.

Shuttle Service. Transportation by Shuttle Buses offered for the exclusive or primary use of a discrete group or groups, such as clients, patients, students, paid or unpaid staff, visitors, and/or residents, between an organization or entity's facilities or between the organization or entity's facilities and other locations, on a regularly-scheduled basis.

Shuttle Service Provider. Any Person using Shuttle Buses to provide Shuttle Service within the City.

Stop Event. An instance of stopping by a Shuttle Bus at a Designated Stop for the purpose of loading and/or unloading passengers.

(b) Findings.

(1) The use of Shuttle Buses for the purpose of providing Shuttle Service is a growing means of transportation in San Francisco and the greater Bay Area.

(2) Shuttle Service provides significant benefits to the community by replacing single occupant trips with more efficient transportation, contributing to a reduction in parking demand, and supporting the City's goal of having of 50 percent of all-increasing trips made by sustainable modes by 2018.

(3) Shuttle Service currently operating in San Francisco reduces vehicle miles traveled (VMT) in the City by <u>approximately 4,300,000 at least 45 million</u> miles <u>annuallyeach month</u>,

and reduces greenhouse gas emissions from trips originating or ending in the City by 11,000 metric tons annually.

(4) Unregulated use of Muni stops by Shuttle Service Providers has resultedresults in unintended adverse impacts, including delaying transit bus service, increasing traffic congestion, diverting bicyclists from bicycle lanes into mixed-flow lanes, and diverting motor vehicle traffic into adjacent travel lanes, and preventing transit buses from being able to access the curb in order to load and unload passengers.

(5) <u>Prior to implementing a commuter shuttle pilot program in August, 2014, the The SFMTA</u> 's-lacked of complete information about Shuttle Service operations, including routes, frequency of service and stops, which had has been a barrier to resolving and preventing conflicts with Shuttle Service Providers' operations, including adverse impacts on Muni service and increased traffic congestion.

(6) Inconsistent or inaccurate identification of, and lack of contact information for, Shuttle Service Providers <u>has previously</u> made it difficult for the SFMTA to effectively and timely communicate with Shuttle Service Providers to prevent or resolve conflicts and makes enforcement of traffic and parking regulations difficult.

(7) Regulation by the SFMTA of <u>the use of stops</u> use by Shuttle Services to provide safe loading and unloading zones for Shuttle Services, whose cumulative ridership is equivalent to that of a small transit system, is consistent with <u>the</u> City's Transit First policy.

(8) The <u>commuter shuttle</u> pilot program <u>implemented in August 2014</u> established under this <u>Section 914 is intended to</u> enable<u>d</u> SFMTA to evaluate whether shared use of Muni stops by Shuttle Buses is consistent with efficient operation of the City's public transit system. <u>An</u> evaluation of the pilot program conducted by SFMTA showed that the pilot program was successful in addressing the issues described above, and also showed ways that the program could be improved.

SFMTA now seeks to establish a program that continues the successful aspects of the pilot program while building upon the lessons learned.

(c) General Permit Program Requirements.

(1) The Director is authorized to implement a pilot program for the issuance of Shuttle Permits beginning on a date designated by the Director. The duration of the pilot program shall not exceed 18 months from the date of commencement designated by the Director.

(2) The Director may issue a Shuttle Permit for the use of Designated Stops upon receipt of an application from a Shuttle Service Provider on a form prescribed by the SFMTA which application meets the requirements of this Section 914.

(3) The Shuttle Permit shall authorize the Shuttle Service Provider to receive a specified number of Shuttle Placards issued by SFMTA.

(4) The Director is authorized to establish up to 200 Designated Stops for the purposes of this pilot program. The Director may establish additional Designated Stops following a public hearing.

(d) <u>Shuttle Permit</u> Application Requirements. Each application for a permit or renewal of a permit shall contain the following information:

(1) The name, business location, telephone number, fax number and email address of the Shuttle Service Provider;

(2) The name, title and contact information of one or more persons representing the Shuttle Service Provider to be notified by SFMTA in the event of a problem or permit violation relating to the Permittee's Shuttle Service;

(3) The total number of Shuttle Buses the Shuttle Service Provider intends to use to deliver Shuttle Service using Designated Stops, and the make, passenger capacity and license plate number of each of its Shuttle Buses that would be authorized, when bearing a Shuttle Placard, to use one or more Designated Stops;

(4) The total number of Shuttle Placards requested;

(5) The number of shuttle routes for which the permit applicant is proposing to provide Shuttle Service, including the frequency of service on each route, the neighborhoods served by each route, the origin and terminus of each route, and the frequency of Shuttle Service on each route. In lieu of a map, the permit applicant may provide a narrative statement describing the routes. The applicant need only identify the route to the extent that it lies within the City. Where the point of origin or termination is outside of the City, the applicant need only provide the county in which the point of origin or termination is located;

(6) A list of the Designated Stops the permit applicant proposes to use on each shuttle route, along with the proposed frequency of use of each Designated Stop per day, resulting in a calculation of the total number of Stop Events per day at Designated Stops; and

(7) <u>If applicable, d</u>Documentation of the Applicant's registration status with the California Public Utilities Commission ("CPUC"), including any Charter Party Carrier ("TCP") authorization or permits, or registration as a private carrier of passengers, and documentation that the Applicant maintains insurance in compliance with the applicable requirements imposed by the CPUC.

(8) The application shall require the applicant to acknowledge that the Permittee, by acceptance of the permit, agrees to indemnify and hold the City and County of San Francisco, its departments, commissions, boards, officers, employees and agents ("Indemnitees") harmless from and against any and all claims, demands, actions or causes of action which may be made against the Indemnitees for the recovery of damages for the injury to or death of any person or persons or for the damage to any property resulting directly or indirectly from the activity authorized by the permit, including, regardless of the negligence of the Indemnitees.

(9) Applicant shall provide a Service Disruption Prevention Plan which describes Permittee's efforts to maintain consistent and efficient service in the event of potential disruptions. (A) The Service Disruption Prevention Plan must address, at a minimum:

(i) How bus breakdowns or stalls (mechanical or otherwise) will be remedied quickly so as not to block access to bus zones or impede the free flow of traffic;

(ii) Sufficient bus availability to satisfy ridership demand;

(iii) Sufficient back-up driver staffing in the event that drivers are unable to work due to sickness or other reason;

(iv) Contingency routing plans in the case of construction, special events, parades, celebrations, rallies, protests or other activity that may block access to certain city streets; and

(v) Applicant's efforts to maintain positive employment relationships (particularly with regard to shuttle drivers), including information regarding: schedules (including any split-shifts), work hours, working conditions, and wages.

(B) The Service Disruption Prevention Plan may, but is not required to, include statements from third parties describing the Applicant's efforts to prevent service disruptions.

(C) The SFMTA will post the Service Disruption Prevention Plan for each Permittee on the SFMTA website.

(e) Permit Issuance. After evaluating an applicant's permit application, the Director shall grant the Permit as requested, or grant the Permit with modifications, or deny the Permit. Where the Permit is granted with modifications or denied, the notice shall explain the basis for the Director's decision. The Director may issue procedures for reviewing the Director's decision upon request of the permit applicant.

(f) <u>Shuttle Placard Application Requirements.</u> For each vehicle to be used in the Commuter Shuttle Program, Shuttle Service Providers shall apply for a Shuttle Placard. Each application for a Shuttle Placard or renewal of a Shuttle Placard shall contain the following information for the Shuttle Bus that would be authorized, when bearing the Shuttle Placard, to use Designated Stops:

(1) The manufacturer and vehicle make or model name;

(2) The length, gross vehicle weight rating, and passenger capacity;

(3) The model year, or, in the case of vehicles older than model year 2012 that were not previously authorized for use in Shuttle Service under the pilot program, documentation demonstrating compliance with applicable emissions standards for model year 2012;

(4) The type of fuel or power used; and

(5) The license plate number and vehicle registration information.

(g) **Shuttle Placard Issuance.** After evaluating an applicant's Shuttle Placard application, the Director shall grant the Shuttle Placard as requested, or deny the Shuttle Placard application and state the reason(s) for the denial.

(<u>fh</u>) <u>Shuttle</u> Permit Terms and Conditions. The Director shall establish terms and conditions for <u>Shuttle</u> Permits. In addition to any other requirements imposed by the Director, Permits shall include the following terms:

(1) Any Shuttle Bus being operated in Shuttle Service <u>under the Shuttle Permit</u> shall be listed on the <u>permit Permittee's Shuttle Placard</u> application and shall display a valid SFMTAissued Shuttle Placard visible from outside the Shuttle Bus at front and rear locations on the Shuttle Bus as specified by the SFMTA, at all times such vehicle is being operated in Shuttle Service in the City. <u>A</u> Shuttle Placards may <u>be used only for the vehicle listed on the application for</u> <u>that Shuttle Placard</u>, and may not be transferred <u>to any other vehicle</u> between any Shuttle Buses in the Shuttle Service Provider's fleet that are listed on the Permit.

(2) A Shuttle Bus bearing valid Shuttle Placards shall be allowed to stop at any Designated Stop subject to the following conditions:

(A) The Shuttle Bus shall give priority to any transit buses that are approaching or departing a Designated Stop;

(B) The Shuttle Bus shall not stop at any Muni stops other than Designated Stops;

(C) The Shuttle Bus shall use Designated Stops only for active loading or unloading of passengers <u>when in the course of actively providing Shuttle Service</u>, and such loading and unloading shall be conducted as quickly as possible without compromising the safety of passengers, pedestrians, bicyclists or other motorists;

(D) Loading and unloading of passengers shall not take place in, or impede travel in, a lane of traffic or bicycle lane.

(3) A Shuttle Permit and Shuttle Placard shall not exempt a Shuttle Bus from any other Parking restrictions or traffic regulations except as authorized by this Section 914, and a Shuttle Bus stopping or parking at any Muni stop, including a Designated Stop, in violation of the terms and conditions set forth in this Subsection (\underline{fh}) may be cited for violation of California Vehicle Code Section 22500(i).

(4) The Permittee shall comply with all applicable federal, state, and local laws, including this Code, the California Vehicle Code, and <u>applicable</u> CPUC requirements, including those for registration, insurance, vehicle inspection, and regulation of drivers;

(5) The Permittee shall equip each Shuttle Bus with an on-board device capable of providing real-time location data to the SFMTA in accordance with specifications issued by the Director, and shall maintain a continuous feed of the specified data at all times when the Shuttle Bus is being used to provide Shuttle Service within the City. The Permittee shall begin providing a continuous feed of such data to the SFMTA on the first day that the Permittee begins providing Shuttle Service under the Permit unless the Director establishes an alternate date. Notwithstanding the foregoing requirements stated in this subsection (f)(5), if the Permittee is unable to provide the required data in accordance with specifications issued by the Director, the Permittee shall install an on-board device (OBD) prescribed by the SFMTA in each Shuttle Bus. The SFMTA shall not be responsible for any equipment, or for the failure of any equipment, installed inside any Shuttle Bus for any reason, including for the purpose of complying with

this Section 914. If a Shuttle Bus becomes unable to provide the required data for any reason, Permittee shall not operate that Shuttle Bus in Shuttle Service without first notifying SFMTA of the identity of the bus, the route affected, and the time at which Permittee expects the data transmission to be restored. To facilitate SFMTA's monitoring of Shuttle Bus operations, the Director may issue regulations limiting the duration that a Shuttle Bus may operate in Shuttle Service without being able to provide the required data.

(6) The Permittee shall provide the following data regarding its Shuttle Buses, updated each month: average daily Stop Events per Designated Stop for all Shuttle Buses, monthly vehicle miles traveled by Shuttle Buses 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 Shuttle Bus upon exiting San Francisco (if applicable), average daily occupancy for each Shuttle Bus upon arrival at destination, and average number of daily Shuttle Buses in operation.

(67) The Permittee shall, in a timely manner and as otherwise required by law, pay all traffic and parking citations issued to its Shuttle Buses in the course of providing Shuttle Service, as well as all permit fees and penalties for permit violations as set forth in subsections (hj) and (jl) below, subject to the Permittee's right under applicable law to contest such citations or penalties.

(78) Where the Director determines that the continued use of a particular Shuttle Bus listed on a Shuttle Provider's permit application would constitute a risk to public safety, the Director shall notify the Shuttle Provider in writing, and said Shuttle Bus shall immediately be ineligible to use any Designated Stops unless and until the Shuttle Provider has proven to the satisfaction of the Director that the Shuttle Bus no longer constitutes a risk to public safety.

(9) Permitted Shuttle Buses that exceed 35 feet in length travelling in San Francisco may travel only on the major and minor arterial street network for the City of San Francisco, as determined by the California Department of Transportation. (10) Permittee shall certify that all of its operators who drive permitted Shuttle Buses in San Francisco have viewed the SFMTA's Large Vehicle Urban Driving Safety video, which will be made available to all permit applicants.

(11) Any Shuttle Service Provider providing Shuttle Service that is free to the public and provided by Shuttle Buses that display the words "Free to the Public" clearly legible on the loading side of the Shuttle Bus in letters at least four inches tall, shall be exempt from otherwise applicable permit fees for Stop Events made by such Shuttle Buses.

(12) All Shuttle Buses not already approved for use under the SFMTA's commuter shuttle pilot program 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 Buses used by Permittees for Shuttle Service must be model year 2012 or newer. After January 1, 2020, all Shuttle Buses used by Permittees for Shuttle Service must be no more than eight model years old.

(gi) Duration of Shuttle Permits and Shuttle Placards. Shuttle Permits and Shuttle Placards initially issued under this Section 914 shall expire one year from the effective date of the ordinance establishing the commuter shuttle permit program on a permanent basis, and annually thereaftersix months from the date of commencement of the pilot program designated by the Director pursuant to subsection (c)(1), unless a shorter term is requested by the Permittee, the Permit is revoked, or the Director for good cause finds a shorter term is warranted. Permits issued or renewed on or after that six months' date shall expire 18 months from the date of program commencement, unless a shorter term is requested by the Permit is revoked or the Director for good cause finds a shorter term is required.

(hj) Fees.

(1) <u>Unless exempted under subsection (h)(11)</u>, Shuttle Service Providers shall pay a Designated Stop use and permit fee as set forth in Section 902. The fee is intended to cover

the cost<u>s incurred by to-SFMTA as a result</u> of permit program implementation, administration, enforcement, and evaluation. The Designated Stop use fee component shall be determined by multiplying the total number of anticipated daily Stop Events stated in the permit application for each Permittee by the per stop fee set forth below-in Section 902. The Director is authorized, in his or her discretion, to impose pro-rated Designated Stop use fees where a Shuttle Service Provider applies for a permit or permit modification following date of commencement of the pilot-program.

(2) Permittees shall be billed for the Designated Stop use and permit fee upon issuance or renewal of the Permit. and on a monthly basis thereafter. The Designated Stop use and permit fee shall be due and payable within 30 days from the date of invoice. Fees remaining unpaid 30 days after the date of invoice shall be subject to a 10% percent penalty plus interest at the rate of one percent <u>1%</u> per month on the outstanding balance, which shall be added to the fee amount from the date that payment is due.

(3) SFMTA shall reconcile the number of Stop Events for each Shuttle Service Provider against the actual stop data provided to the SFMTA on a semi-annual basis, but reserves the right to conduct such reconciliation on a more frequent basis if necessary. Where the SFMTA determines that a Shuttle Service Provider has used Designated Stops more frequently than authorized under the Provider's Permit, the Provider shall pay the additional Designated Stop use fee due. Where SFMTA determines that the Permittee's use of Designated Stops exceeds the authorized number of daily Stop Events by 10% percent or more, the Provider shall pay the additional Designated Stop use fee due, plus a 10% percent penalty. All such fees shall be due within 30 days from the date of invoice. Fees remaining unpaid after that date shall be subject to interest at the rate of one 1% percent per month on the outstanding balance, which shall be added to the fee amount from the date that payment is due.

$(i\underline{k})$ Grounds for Suspension or Revocation.

(1) The Director may suspend or revoke a permit issued under this Section 914 upon written notice of revocation and opportunity for hearing. The Director is authorized to promulgate hearing and review procedures for permit suspension and revocation proceedings. Upon revocation or suspension, the Shuttle Service Provider shall surrender such Permit and the Shuttle Placards authorized under the Permit in accordance with the instructions in the notice of suspension or revocation.

(2) Where the Director determines that public safety is at risk, or where the Permittee's continued operation as a Shuttle Service Provider would be in violation of the California Public Utilities Code or the California Vehicle Code, the Director is authorized to suspend a permit issued under this Section 914 immediately upon written notice of suspension to the Permittee, provided that the Director shall provide the Permittee with the opportunity for a hearing on the suspension within five business days of the date of notice of suspension.

(3) A permit issued under this Section 914 may be suspended or revoked under this paragraph following the Director's determination after an opportunity for hearing that:

(A) the Permittee has failed to abide by any permit condition;

(B) the Permittee knowingly or intentionally provided false or inaccurate information on a permit application;

(C) one or more of Permittee's Shuttle Buses have, in the course of providing Shuttle Service, repeatedly and egregiously violated parking or traffic laws;

(D) the Permittee's continued operation as a Shuttle Service Provider would constitute a public safety risk; or

(E) the Permittee's continued operation as a Shuttle Service Provider would be in violation of the California Public Utilities Code or the California Vehicle Code.

(j1) Administrative Penalties.

(1) This Section shall govern the imposition, assessment and collection of administrative penalties imposed for violations of permit conditions set forth under Subsection $914(\underline{fh})$.

(2) The SFMTA Board of Directors finds:

(A) That it is in the best interest of the City, its residents, visitors and those who travel on City streets to provide an administrative penalty mechanism for enforcement of Shuttle Bus permit conditions; and

(B) That the administrative penalty scheme established by this section is intended to compensate the public for the injury or damage caused by Shuttle Buses being operated in violation of the permit conditions set forth under Subsection $914(\underline{fh})$. The administrative penalties authorized under this section are intended to be reasonable and not disproportionate to the damage or injury to the City and the public caused by the prohibited conduct.

(C) The procedures set forth in this Section are adopted pursuant to Government Code Section 53069.4, which governs the imposition, enforcement, collection, and administrative review of administrative citations and fines by local agencies, and pursuant to the City's home rule power over its municipal affairs.

(3) Any Service Provider that is operating a Shuttle Bus in violation of the permit conditions set forth under Subsection $914(\underline{fh})$ may be subject to the issuance of a citation and imposition of an administrative penalty under this Subsection $914(\underline{jl})$.

(4) Administrative penalties may not exceed \$250 for each violation. In determining the amount of the penalty, the officer or employee who issued the citation may take any or all of the following factors into consideration:

(A) The duration of the violation;

- (B) The frequency, recurrence and number of violations by the same violator;
- (C) The seriousness of the violation;
- (D) The good faith efforts of the violator to correct the violation;
- (E) The economic impact of the fine on the violator;
- (F) The injury or damage, if any, suffered by any member of the public;
- (G) The impact of the violation on the community;

(H) The amount of City staff time expended investigating or addressing the violation;

- (I) The amount of fines imposed by the charging official in similar situations;
- (J) Such other factors as justice may require.

(5) The Director of Transportation is authorized to designate officers or employees of the Municipal Transportation Agency to issue citations imposing administrative penalties for violations of the permit conditions set forth in Subsection 914(fh), hereafter referred to as the "Charging Official."

(6) Administrative Citation. A Charging Official who determines that there has been a violation of the permit conditions set forth in Subsection $914(\underline{fh})$, may issue an administrative citation to the Shuttle Service Provider permitted under this Section 914. The Charging Official shall either serve the citation personally on the Shuttle Service Provider or serve it by certified U.S. mail sent to the address indicated on the Shuttle Service Provider's permit application.

(7) The citation shall contain the following information: the name of the person or entity cited; the date, time, address or location, and nature of the violation; the date the citation is issued; the name and signature of the Charging Official; the amount of the administrative penalty, acceptable forms of payment of the penalty; and that the penalty is due and payable to the SFMTA within 15 business days from (A) the date of issuance of the citation if served personally, or (B) the date of receipt of the citation if served by certified U.S.

Mail. The citation shall also state that the person or entity cited that it has the right to appeal the citation, as provided in Subsection 914(<u>jl</u>).

(8) Request for Hearing; Hearing.

(A) A person or entity may appeal the issuance of a citation by filing a written request with the SFMTA Hearing Division within 15 business days from (i) the date of the issuance of a citation that is served personally or (ii) the date of receipt if the citation is served by certified U.S. Mail. The failure of the person or entity cited to appeal the citation shall constitute a failure to exhaust administrative remedies and shall preclude the person or entity cited from obtaining judicial review of the validity of the citation.

(B) At the time that the appeal is filed, the appellant must deposit with the SFMTA Hearing Division the full amount of the penalty required under the citation.

(C) The SFMTA Hearing Division shall take the following actions within 10 days of receiving an appeal: appoint a hearing officer, set a date for the hearing, which date shall be no less than 10 and no more than 60 days from the date that the appeal was filed, and send written notice of the hearing date to the appellant and the Charging Official.

(D) Upon receiving notice that the SFMTA Hearing Division has scheduled a hearing on an appeal, the Charging Official shall, within three City business days, serve the hearing officer with records, materials, photographs, and other evidence supporting the citation. The hearing officer may grant a request to allow later service and may find good cause to continue the hearing because of the delay.

(E) The hearing officer shall conduct all appeal hearings under this Chapter and shall be responsible for deciding all matters relating to the hearing procedures not otherwise specified in this Section. The Charging Official shall have the burden of proof in the hearing. The hearing officer may continue the hearing at his or her own initiative or at the request of either party, and may request additional information from either party to the proceeding. The hearing need not be conducted according to technical rules of evidence and witnesses. Any relevant evidence is admissible if it is the sort of evidence on which responsible persons are accustomed to rely in the conduct of serious affairs.

(F) The following provisions shall also apply to the appeal procedure:

(i) A citation that complies with the requirements of Section 914(jl)(7) and any additional evidence submitted by the Charging Official shall be prima facie evidence of the facts contained therein;

(ii) The appellant shall be given the opportunity to present evidence concerning the citation; and

(iii) The hearing officer may accept testimony by declaration under penalty of perjury relating to the citation from any party if he or she determines it appropriate to do so.

(iv) After considering all of the testimony and evidence submitted by the parties, the hearing officer shall issue a written decision upholding, modifying or vacating the citation and shall set forth the reasons for the determination. This shall be a final administrative determination.

(v) If the hearing officer upholds the citation, the hearing officer shall inform the appellant of its right to seek judicial review pursuant to California Government Code Section 53069.4. If the citation is upheld, the City shall retain the amount of the fine that the appellant deposited with the City.

(vi) If the hearing officer vacates the citation, the City shall promptly refund the deposit. If the hearing officer partially vacates the citation, the City shall promptly refund that amount of the deposit that corresponds to the hearing officer's determination. The refund shall include interest at the average rate earned on the City's portfolio for the period of time that the City held the deposit as determined by the Controller.

(G) Any person aggrieved by the action of the hearing officer taken pursuant to this Chapter may obtain review of the administrative decision by filing a petition for review in accordance with the timelines and provisions set forth in California Government Code Section 53069.4.

(H) If a final order of a court of competent jurisdiction determines that the SFMTA has not properly imposed a fine pursuant to the provisions of this Section, and if the fine has been deposited with the SFMTA as required by Section 914(jl)(8)(B), the SFMTA shall promptly refund the amount of the deposited fine, consistent with the court's determination, together with interest at the average rate earned on the City's portfolio.

(9) Upon request by a Shuttle Service Provider owing administrative penalties for violation of permit conditions set forth under Subsection $914(\underline{fh})$, the SFMTA may enter into a payment plan with that Shuttle Service Provider. Any such payment plan shall not extend the time for payment beyond 90 days from the otherwise applicable due date for the most recent penalty encompassed by the payment plan. In no event shall SFMTA establish more than three such payment plans for any individual Shuttle Service Provider-during the term of this pilot program.

(10) Administrative penalties shall be deposited in the Municipal Transportation Fund and may be expended only by the SFMTA.

Section 2. Effective Date. This ordinance shall become effective 31 days after enactment. Enactment occurs when the San Francisco Municipal Transportation Agency Board of Directors approves this ordinance.

Section 3. Scope of Ordinance. In enacting this ordinance, the San Francisco Municipal Transportation Agency Board of Directors intends to amend only those words, phrases, paragraphs, subsections, sections, articles, numbers, letters, punctuation marks, charts, diagrams, or any other constituent parts of the Transportation Code that are explicitly shown in this ordinance as additions or deletions in accordance with the "Note" that appears under the official title of the ordinance.

APPROVED AS TO FORM: DENNIS J. HERRERA, City Attorney

By:

DAVID A. GREENBURG Deputy City Attorney

I certify that the foregoing resolution was adopted by the San Francisco Municipal

Transportation Agency Board of Directors at its meeting of November 17, 2015.

Secretary to the Board of Directors San Francisco Municipal Transportation Agency



SFMTA Municipal Transportation Agency

Commuter Shuttle Program Policy

October 16, 2015

SUSTAINABLE STREETS DIVISION

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 drivealone 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.

SUSTAINABLE STREETS DIVISION

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:
 - o Long dwell times
 - o Irregular stopping activity
- Party buses:
 - Long dwell times
 - Irregular stopping activity
 - Few demonstrated benefits to the transportation system
- School buses:
 - o 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):
 - o Long dwell times
 - o Irregular service
- Private individual-fare transportation (jitneys, ride-share or transportation network companies (TNCs)):
 - Long dwell times in some cases
 - o Irregular use and stopping activity
 - o Some services duplicate Muni service
 - Benefits to the transportation system have not been demonstrated
 - o 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
 - o 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
 - o 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 SUSTAINABLE STREETS DIVISION 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.

- 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 <u>https://youtu.be/_LbC3FQeZqc</u>.
- 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 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)
 - o Manufacturer and model name
 - Size (length, weight, and passenger capacity)
 - o 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)
 - o Average daily boardings in commuter shuttle service in San Francisco
 - Average daily occupancy for each vehicle upon exiting San Francisco (if applicable)

- o Average daily occupancy for each vehicle upon arrival at destination
- o 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.

Commuter Shuttle Program – Shuttle Zone Network

ESTABLISH – ABILITY OF PERMITTED COMMUTER SHUTTLE BUS TO USE MUNI ZONE

- 1. 16th Street, south side, from Mission Street to 130 feet easterly (130-foot zone)
- 2. 18th Street, north side, from Church Street to 75 feet easterly (75-foot bus zone)
- 3. 18th Street, south side, from Church Street to 75 feet easterly (75-foot bus zone)
- 4. 18th Street, north side, from Dolores Street to 75 feet westerly (75-foot bus zone)
- 5. 18th Street, south side, from Dolores Street to 55 feet easterly (55-foot bus zone)
- 6. 18th Street, north side, from Mission Street to 75 feet westerly (75-foot bus zone)
- 7. 18th Street, north side, from Pennsylvania Street to 75 feet easterly (75-foot bus zone)
- 8. 19th Avenue, west side, from Buckingham Way to 120 feet northerly (120-foot bus zone)
- 9. 19th Avenue, west side, from Kirkham Street to 153 feet northerly (153-foot bus zone)
- 10. 19th Avenue, east side, from Kirkham Street to 75 feet northerly (75-foot bus zone)
- 11. 19th Avenue, east side, from Noriega Street to 75 feet southerly (75-foot bus zone)
- 12. 19th Avenue, west side, from Noriega Street to 75 feet southerly (75-foot bus zone)
- 13. 19th Avenue, east side, from Wawona Street to 75 feet southerly (75-foot bus zone)
- 14. 24th Street, north side, from Church Street to 40 feet easterly (40-foot bus bulb)
- 15. 24th Street, south side, from Church Street to 90 feet westerly (90-foot bus zone)
- 16. 24th Street, north side, from Guerrero Street to 75 feet easterly (75-foot bus zone)
- 17. 24th Street, north side, from Noe Street to 70 feet easterly (70-foot bus zone)
- 18. 24th Street, south side, 100 feet west of Noe Street (100-foot bus zone)
- 19. 30th Street, north side, from Sanchez Street to 80 feet easterly (80-foot bus zone)
- 20. 3rd Street, east side, from Palou Avenue to 150 feet northerly (150-foot bus zone)
- 21. 7th Street, west side, from Market Street to 45 feet southerly (45-foot boarding island)
- 22. 7th Street, east side, from Townsend Street to 125 feet northerly (125-foot zone)
- 23. 8th Street, west side, from Market Street to 75 feet southerly (75-foot bus zone)
- 24. 9th Street, east side, from Market to 95 feet southerly (95-foot bus zone)
- 25. Arguello Boulevard, west side, from Geary Boulevard to 100 feet northerly (100foot bus zone)
- 26. Arguello Boulevard, east side, from Geary Boulevard to 106 feet southerly (106foot bus zone)
- 27. Bayshore Boulevard, east side, from Cortland Avenue to 100 feet northerly (100foot bus zone)
- 28. Bryant Street, west side, from 18th Street to 85 feet northerly (85-foot bus zone)
- 29. Bryant Street, east side, from 18th Street to 100 feet southerly (100-foot bus zone)
- 30. Bryant Street, west side, from 22nd Street to 75 feet southerly (75-foot bus zone)
- 31. Bryant Street, east side, from 23rd Street 85 feet southerly (85-foot bus zone)
- 32. Bryant Street, south side, from 7th Street to 80 feet easterly (80-foot bus zone)
- 33. Castro Street, west side, from 25th Street to 100 feet northerly (100-foot bus zone)
- 34. Castro Street, east side, from 25th Street to 100 feet southerly (100-foot bus zone)

- 35. Cesar Chavez Street, south side, from Florida Street to 75 feet westerly (75-foot bus zone)
- 36. Cesar Chavez Street, north side, from Folsom Street to 100 feet westerly (100-foot bus zone)
- Cesar Chavez Street, south side, from Folsom Street to 15 feet westerly (15-foot bus bulb)
- 38. Cesar Chavez Street, south side, from Mission Street to 80 feet easterly (80-foot bus zone)
- 39. Cesar Chavez Street, south side, from Valencia Street to 80 feet easterly (80-foot bus zone)
- 40. Clement Street, north side, from 12th Avenue to 60 feet westerly (60-foot bus zone)
- 41. Davis Street, west side, from California Street to 75 feet northerly (75-foot bus zone)
- 42. Divisadero Street, east side, from California Street to 75 feet northerly (75-foot bus zone)
- 43. Divisadero Street, west side, from California Street to 65 feet southerly (65-foot bus zone)
- 44. Divisadero Street, east side, from Eddy Street to 100 feet southerly (100-foot bus zone)
- 45. Divisadero Street, west side, from Eddy Street to 100 feet southerly (100-foot bus zone)
- 46. Divisadero Street, east side, from Geary Boulevard to 96 feet northerly (96-foot bus zone)
- 47. Divisadero Street, east side, from Oak Street to 106 feet northerly (106-foot bus zone)
- 48. Divisadero Street, west side, from Haight Street to 115 feet southerly (115-foot bus zone)
- 49. Eddy Street, north side, from Fillmore Street to 100 feet easterly (100-foot bus zone)
- 50. Eddy Street, south side, from Fillmore Street to 100 feet westerly (100-foot bus zone)
- 51. Eddy Street, south side, from Mason Street to 120 feet westerly (120-foot bus zone)
- 52. Eddy Street, north side, from Van Ness Avenue to 100 feet easterly (100-foot bus zone)
- 53. Eddy Street, south side, from Van Ness Avenue to 75 feet easterly (75-foot bus zone)
- 54. Ellis Street, north side, from Mason Street to 89 feet easterly (89-foot bus zone)
- 55. Fillmore Street, east side, from Jackson Street to 75 feet northerly (75-foot bus zone)
- 56. Frederick Street, north side, from Ashbury Street to 80 feet westerly (80-foot bus zone)
- 57. Harrison Street, north side, from 2nd Street to 80 feet westerly (80-foot bus zone)
- 58. Harrison Street, north side, from 4th Street to 119 feet westerly (119-foot bus zone)
- 59. Harrison Street, north side, from 7th Street to 80 feet westerly (80-foot bus zone)

- 60. Harrison Street, south side, from The Embarcadero to 100 feet westerly (100-foot zone)
- 61. Hayes Street, north side, from Buchanan Street to 75 feet westerly (75-foot bus zone)
- 62. Hayes Street, north side, from Laguna Street to 75 feet easterly (75-foot bus zone)
- 63. Hayes Street, north side, from Larkin Street to 90 feet westerly (90-foot bus zone)
- 64. Hayes Street, north side, from Masonic Street to 75 feet westerly (75-foot bus zone)
- 65. Hayes Street, north side, from Steiner Street to 73 feet westerly (73-foot bus zone)
- 66. Hayes Street, south side, from Steiner Street to 75 feet easterly (75-foot bus zone)
- 67. Howard Street, north side, from Fremont Street to 74 feet easterly (74-foot zone)
- 68. Judah Street, north side, from 7th Avenue to 75 feet westerly (75-foot bus zone)
- 69. Laguna Street, east side, from Hayes Street to 95 feet northerly (95-foot bus zone)
- 70. Larkin Street, east side, from Grove Street to 80 feet northerly (80-foot bus zone)
- 71. Lombard Street, north side, from Divisadero Street to 80 feet westerly (80-foot bus zone)
- 72. Lombard Street, north side, from Pierce Street to 107 feet easterly (107-foot bus zone)
- 73. Lombard Street, south side, from Pierce Street to 107 westerly (107-foot zone)
- 74. North Point Street, north side, from Mason Street to 100 feet westerly (100-foot bus zone)
- 75. Parnassus Avenue, north side, from Stanyan Street to 90 feet westerly (90-foot bus zone)
- 76. Parnassus Avenue, south side, from Stanyan Street to 93 feet westerly (93- foot zone)
- 77. Polk Street, west side, from O'Farrell Street to 75 feet northerly (75-foot bus zone)
- 78. Polk Street, east side, from Post Street to 80 feet northerly (80-foot bus zone)
- 79. Polk Street, east side, from Union Street to 70 feet northerly (70-foot bus zone)
- 80. Polk Street, west side, from Union Street to 85 feet northerly (85-foot bus zone)
- 81. Post Street, south side, from Gough Street to 50 feet easterly (50-foot bus bulb)
- 82. Post Street, south side, from Powell Street to 100 feet easterly (100-foot boarding island)
- 83. Potrero Avenue, east side, from 25th Street to 110 feet southerly (110-foot bus zone)
- 84. Stanyan Street, west side, from Haight Street to Waller Street (246-foot zone)
- 85. Townsend Street, north side, from 3rd Street to 80 feet westerly (80-foot bus zone)
- 86. Townsend Street, south side, from 3rd Street to 73 feet easterly (73-foot bus zone)
- 87. Townsend Street, north side, from 4th Street to 100 feet easterly (100-foot bus zone)
- 88. Valencia Street, west side, from 24th Street to 80 feet southerly (80-foot bus zone)
- 89. Valencia Street, east side, from 25th Street to 60 feet northerly (60-foot bus zone)
- 90. Valencia Street, west side, from 25th Street to 81 feet southerly (81-foot bus zone)
- 91. Van Ness Avenue, east side, from California Street to 139 feet northerly (139-foot bus zone)
- 92. Van Ness Avenue, west side, from McAllister Street to 75 feet southerly (75-foot bus zone)

93. Van Ness Avenue east side from Union Street to 112 feet southerly (112-foot bus zone)

ESTABLISH - ABILITY OF PERMITTED COMMUTER SHUTTLE BUS TO USE MUNI FLAG STOP

- 94. 100 O'Shaughnessy Boulevard, east side, from Portola Drive (flag-stop)
- 95. 19th Avenue, east side, from Winston Drive (flag-stop)
- 96. 30th Street, south side, from Church Street (flag-stop)
- 97. California Street, south side, from Battery Street (flag-stop)
- 98. Cesar Chavez Street, north side, from Florida Street (flag-stop)
- 99. O'Shaughnessy Boulevard, west side, from Portola Drive (flag-stop)
- 100. Pacific Avenue, north side, from Larkin Street (flag-stop)
- 101. Park Presidio Boulevard, west side, from California Street (flag-stop)
- 102. Park Presidio Boulevard, east side, from Geary Boulevard (flag-stop)
- 103. Park Presidio Boulevard, west side, from Geary Boulevard (flag-stop)
- 104. Portola Drive, south side, from Teresita Boulevard (flag-stop)

<u>ESTABLISH – TOW-AWAY NO PARKING, PERMITTED COMMUTER SHUTTLE BUS</u> ZONE, 6AM-10AM AND 4PM-8PM, MONDAY TO FRIDAY

- 105. 16th Street, north side, from South Van Ness Avenue to 88 feet westerly (88-foot zone)
- 106. 17th Street, north side, from Wisconsin Street to 50 feet westerly (50-foot zone)
- 107. Lombard Street, south side, from Pierce Street to 80 feet easterly (80-foot white zone)

<u>ESTABLISH – TOW-AWAY NO PARKING, PERMITTED COMMUTER SHUTTLE BUS</u> ZONE, 6AM-10AM, MONDAY TO FRIDAY

- 108. 19th Avenue, west side, from 137 feet to 257 feet north of Wawona Street (120foot zone)
- 109. Castro Street, west side, from 18th Street to 100 feet northerly (100-foot zone)
- 110. Church Street, west side, from 15th Street to 100 feet northerly (100-foot zone)
- 111. Divisadero Street, west side, from 118 feet to 188 feet south of Geary Boulevard (70-foot zone)
- 112. Potrero Avenue, west side, from 25th Street to 100 feet southerly (100-foot zone)
- 113. Powell Street, west side, from Union Street to 129 feet northerly (129-foot zone)
- 114. San Jose Avenue, west side, from Dolores Street to 45 feet northerly (45-foot zone)
- 115. South Van Ness Avenue, west side, from 76 feet to 217 feet south of Market Street (141-foot zone)
- 116. Van Ness Avenue, west side, from Sacramento Street to 118 feet southerly (118foot zone)
- 117. Van Ness Avenue, west side, from Union Street to 134 feet southerly (135-foot zone)

ESTABLISH – TOW AWAY NO PARKING PERMITTED COMMUTER SHUTTLE BUS ZONE, 4PM-8PM MONDAY TO FRIDAY

- 118. Castro Street, east side, from Market Street to 90 feet northerly (90-foot zone)
- 119. Church Street, east side, from Market Street to 80 feet northerly (80-foot zone)
- 120. Powell Street, east side, from Filbert Street to 40 feet northerly (40-foot zone)
- 121. San Jose Avenue, east side, from 229 feet to 329 feet south of 29th Street (100foot zone)
- 122. Van Ness Avenue, east side, from Grove Street to 95 feet northerly (95-foot zone)

<u>ESTABLISH – TOW-AWAY NO STOPPING ANY TIME, PART TIME BUS ZONE 6-10</u> <u>AM, MONDAY THROUGH FRIDAY</u>

- 123. 19th Avenue, west side, from Kirkham Street 85 feet to 153 feet northerly (existing bus zone extends part-time by 68 feet)
- 124. Divisadero Street, west side, from 75 feet to 115 feet south of Haight Street (existing bus zone extends part-time by 45 feet)

<u>ESTABLISH – TOW-AWAY NO STOPPING ANY TIME, PART TIME BUS ZONE 4-8</u> <u>PM, MONDAY THROUGH FRIDAY</u>

125. Van Ness Avenue, east side, from 72 feet to 112 feet south of Union Street (existing bus zone extends part-time by 40 feet)

ESTABLISH – TOW-AWAY NO PARKING, PERMITTED COMMUTER SHUTTLE BUS ZONE, 6 AM TO 10 AM AND 3PM-7PM, MONDAY THROUGH FRIDAY

126. 8th Street, west side, from 85 feet to 165, south of Market Street (85-foot zone)

ESTABLISH – TOUR AND COMMUTER SHUTTLE BUS ZONE ONLY, 9:30 AM TO 8 PM

127. Fell Street, north side, from Pierce Street to 160 feet easterly (extends existing tour bus zone hours by an hour in the PM and allows commuter shuttle bus usage)

ESTABLISH – COMMUTER SHUTTLES BUS LOADING ZONE AT ALL TIMES

128. Townsend Street, south side, from 4th Street to 478.5 feet to 638.5 feet westerly (160-foot zone)



SFMTA Municipal Transportation Agency

Commuter Shuttle Pilot Program

Evaluation Report October 5, 2015

SUSTAINABLE STREETS DIVISION

Introduction

This report provides an evaluation of the Commuter Shuttle Pilot Program (the "Pilot Program"), adopted by the San Francisco Municipal Transportation Agency (SFMTA) Board of Directors in January 2014. The ongoing 18-month Pilot Program has provided the SFMTA with an opportunity to test the management of privately operated commuter shuttles by creating a network of shared Muni zones and shuttle-only zones for loading and unloading of passengers.

Background

Privately operated commuter shuttles, which ferry 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 drivealone trips. Shuttles are associated with reduced auto ownership and the increased use of transit, walking, and bicycling for non-commute trips. Shuttles participating in the Pilot Program currently provide approximately 17,000 individual boardings on an average weekday (with one or both ends of the trip in San Francisco), most of these during morning and evening peak hours.

Before August 2014, San Francisco did not regulate commuter shuttles. Shuttles operated throughout the City on both large arterial streets, such as Van Ness and Mission Streets, 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 where and when loading and unloading were permitted resulted in confusion for shuttle operators and neighborhood residents, inconsistent enforcement, and real and perceived conflicts with other transportation modes.

To address these issues, in January 2014, the SFMTA Board approved an 18-month Pilot Program to test 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 shared zones. The Pilot Program began 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 for some hours of the day in a few locations to create passenger loading (white) zones exclusively for the use of permitted commuter shuttles.

Objectives of the Pilot Program

Commuter shuttles have used the streets of San Francisco for decades, but their numbers have increased in the last few years. Without designated curb space for loading and unloading, private commuter shuttle operators have imperfect choices to make about where to load and unload riders. Stopping in the travel lane (adjacent to parked cars)

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blocks auto and bicycle traffic, presents safety hazards for riders boarding and alighting, and risks a parking or traffic citation. Stopping without authorization at a Muni zone enables safer curbside access, but can delay Muni and risks a parking citation.

In addition to potential conflicts at loading points, commuter shuttles present other benefits and challenges for the transportation system. The shuttles take cars off the streets by giving commuters an alternative to driving in order to get to work. However, they are sometimes larger than Muni buses, can produce more emissions per vehicle than smaller vehicles, and can present an unwelcome presence particularly on smaller city streets.

The objectives of the Pilot Program included:

- Create clear and enforceable locations and guidelines for shuttle loading and unloading
- Reduce conflicts with Muni and other vehicles
- Improve safety in shuttle interactions with other users
- Reduce drive-alone trips, vehicle miles traveled, and greenhouse gas emissions
- Provide a positive partnership between City agencies and private sector transportation partners
- Increase acceptance of commuter shuttles by community members
- Gather data regarding shuttle activity in the City

The Pilot Program also allowed SFMTA to collect data regarding the movement of, usage of, and reaction to commuter shuttles in San Francisco. Based on the data collected, this report evaluates how the Pilot Program performed on its objectives. In addition, this Evaluation Report will be used to make recommendations as to (a) whether the program should be continued, and (b) whether any policy or procedural changes should be made if a commuter shuttle program is established.

Summary of findings

Shuttle activity

- The Pilot Program shuttle zone network began with requests from shuttle operators for over 240 zones. The SFMTA established a network of 101 zones, which grew to 124 zones by July 2015.
- Shuttles make an average of nearly 3,000 stop-events every weekday. A stopevent is every time a shuttle stops at a zone with the intention of loading or unloading passengers.
- In July 2015, Van Ness between Union and Market saw an estimated 498 stopevents per day, or 17% of all the daily stop-events in the City.
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- The top 20% of zones saw 58% of all stop-event activity.
- In June 2014, before the official launch of the Pilot Program, shuttles made an estimated 2302 daily stop-events at zones in the network. In July 2015, shuttles made an estimated 2978 daily stop-events at zones in the network, a 29% increase.
- Shuttles participating in the permit program see 356,998 boardings per month, or 17,000 on an average weekday.
- 76% of the monthly boardings are on intercity regional shuttle trips, and 24% are on shuttle trips that begin and end in San Francisco.
- About 8,500 people ride a permitted shuttle round-trip each day.
- Shuttles load or unload an average of 5.7 people per stop-event.
- Intercity regional shuttles travel an average of 47 miles one-way, while intracity shuttles travel an average of two miles one-way.
- Across the Pilot Program, shuttle vehicle miles traveled (VMT) is an estimated 47,484 per weekday, 997,156 per month, and 11,965,877 per year.

Shuttle ridership and shuttles' impact on drive-alone vehicle trips

- Shuttle riders' homes are widely dispersed among neighborhoods in the City, though the top ten neighborhoods of origin are concentrated in the Mission and the northeastern quadrant of the City.
- The vast majority of shuttle riders work in the Peninsula/South Bay.
- 45% of shuttle riders do not own cars, and 45% of those who do not own cars cited shuttles as the "main reason" they did not own a car.
- 47% of shuttle riders said they would drive alone to work if a shuttle were not available.
- Shuttles remove nearly 4.3 million vehicle miles traveled from the region's streets each month.

Traffic, transit and safety issues

- Average shuttle dwell times grew from about 58 seconds to about 62 seconds from June 2014 to June 2015.
- On a per-stop-event basis, instances of shuttles blocking Muni decreased by 35% from the pre-pilot to during-pilot data collection periods.
- Twelve of the 20 zones (60%) observed in June 2015 saw no Muni buses blocked at all.
- An average of 2.7% of shuttle stop-events resulted in blocking Muni access to a zone.

- Across all the 706 shuttle stop-events observed in June 2015, a total of 19 Muni buses were temporarily prevented from accessing the Muni zone.
- The delay per Muni run (Muni makes over 1,200 runs every weekday) is approximately four seconds.
- Seven of the eight shuttle-only zones not shared with Muni saw no blocked Muni buses at all in the June 2015 field data collection.
- Shuttles block travel and bike lanes about 35% of the time that they stop.
- Shuttles block drivers' views of pedestrians, or block crosswalks, less than 2% of the time that they stop.

Enforcement and community feedback

- Between the beginning of the Pilot Program in August 2014 and the end of May 2015, SFMTA enforcement officers issued 1200 citations to shuttle buses, or an average of 103 citations per month.
- The most common citations issued to shuttle buses were for double-parking and non-permitted use of a Muni zone.
- 69% of public comments focused on shuttles being in a place where they are either not permitted or not appreciated: idling on streets, using weight-restricted streets, using unauthorized stops, or simply being unwelcome on the streets of San Francisco.
- Safety-related comments (unsafe driving, blocking crosswalks, and blocking bike lanes) made up 34 of 296 comments, or 11%.

Pilot Program overview

The Pilot 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 in this program.

To implement the Pilot Program, the SFMTA designated, and marked with appropriate signage, approximately 100 Muni zones and approximately 20 limited-hours permitted-shuttle-only loading zones for participating shuttle providers to load and unload passengers. These shuttle zones were determined by first soliciting suggestions for locations from shuttle providers and members of the public via an online map. The suggested shuttle zones were then reviewed with transit and other divisions within the SFMTA to attempt to limit any adverse impacts on Muni operations, traffic flow, or safety for people walking and biking. SFMTA staff worked extensively with shuttle providers to determine the best shuttle zones that would have minimal impacts to the transportation system. The original network of shuttle zones was then approved by the SFMTA Board.

Commuter shuttle zones are indicated by signs and painted curbs (red curbs at Muni zones, and white curbs at loading zones). The Pilot Program did not include modifications to existing Muni transit routes and did not remove or relocate any existing Muni bus stops.

A map and a list of Muni zones and passenger loading white zones currently designated as commuter shuttle zones for the Pilot Program are available on the SFMTA's Pilot Program project page.¹ Over the course of the Pilot Program, some zones have been added, removed, moved or lengthened to accommodate the transportation, safety, or community concerns, such as:

- Muni-dictated changes to the Muni stop network as a result of Muni Forward or other projects
- Changes to pedestrian or bike infrastructure that may eliminate a loading zone
- Tree conflicts or other height-clearance hazards
- Heavier-than-expected (or increased) shuttle demand
- Lower-than-expected (or decreased) shuttle demand
- Streetscape projects that change or prevent commuter shuttles' ability to access an existing loading zone

The Pilot Program required the removal or restriction of a limited number of existing onstreet parking spaces in order to extend the length of a few Muni and loading zones. Added shuttle loading zones typically required the use of 60 to 100 feet of curb space for loading during certain hours, restricting parking at that curb space during those hours only. All changes to zone locations or lengths during the Pilot Program were submitted for public review and comment at publicly noticed SFMTA hearings.

The Pilot Program did not dictate the routing of individual shuttles, though all shuttle providers were required to comply with San Francisco's commercial vehicle, weight, and passenger restrictions for designated streets. Additionally, permitted commuter shuttles were encouraged, through outreach by SFMTA staff to the companies providing shuttle services, to select routes that follow arterial streets and avoid residential streets.

With the approval of the SFMTA Board, the Pilot Program charged a fee to shuttle providers to recover the costs associated with planning, administering, maintaining and updating the program and the network of stops. The fee is charged on a per-stop-event basis, in order to charge more to those participating providers who make more use of the zone network. For Fiscal Year 2016, which began on July 1, 2015, the fee is \$3.67 per

List:

¹ Map:

https://www.sfmta.com/sites/default/files/projects/2015/Pilot%20Shuttle%20Network%20150818%20%28m ap%29.pdf

https://www.sfmta.com/sites/default/files/projects/2015/Shuttles%20Network%20150818%20%28list%29.pd f

stop-event, per shuttle. Thus, a shuttle provider with 10 buses making 10 stop-events each per day would be charged 3.67×10 shuttles x 10 stop-events per day = 367 per day.

The Pilot Program required shuttle providers to apply for permits to participate in the program. In order to receive a permit, shuttle providers were required to provide, among other things: vehicle registration and license information; the estimated number of stopevents the shuttle provider would make at each zone in the network on a typical day; and GPS data regarding the real-time location and stop-events of each shuttle in the Pilot Program. The Pilot Program required that shuttle providers reapply for all permits by February 1, 2015—six months in to the Pilot Program.

Currently, 16 shuttle providers participate in the Pilot Program. Most shuttle vehicles are either cutaway buses (buses/shuttles formed by a small- to medium- truck chassis attached to the cabin of a truck or van, also called "mini buses") or motor coaches (also called "over the road" coaches) of either 40 or 45 feet in length designed for transporting passengers on intercity trips.

The most-used zones see more than 100 shuttle stop-events per day, while some zones in the network see no stop-events at all. The corridors or locations with the most shuttle traffic in the Pilot Program include:

- Lombard,
- Van Ness,
- Divisadero/Castro,
- Valencia,
- 24th/25th Street in the Mission/Noe Valley,
- 30th Street in Noe Valley, and
- Townsend/Fourth Street near the Caltrain station.

Shuttle activity

The Pilot Program shuttle loading zone network

To create the shuttle loading zone network, the SFMTA invited shuttle operators to propose zones to be included in the network, and sought input from community members and Muni operators and inspectors on zones to be included in or excluded from the network and factors to consider in evaluating proposed zones. Shuttle operators initially submitted requests for 240 zones across the City. SFMTA transit service planning and engineering staff evaluated requested stops in light of community input, Muni operations and stop configuration to propose a pilot network of shared stops. The pilot network of shared zones, zone extensions, and shuttle-only zones was submitted for public review at SFMTA engineering hearings.

At the time of the Pilot Program launch, a shuttle loading zone network of 101 zones was created. The shuttle zone network has since grown to 124 zones. Assuming that the shuttle providers' initial requested list of zones is an accurate representation of the locations at which shuttles were loading before the Pilot Program, the Pilot Program's zone network reduced shuttle loading locations by nearly 50%.

As of July 2015, 14 of the approved zones have seen zero stop-events. Of these zones, seven were included in the Pilot Program network despite the fact that they were not requested by shuttle operators, for geographic diversity, in response to residents' requests, and to determine if shuttle operators would use them. The other seven zones that currently see no shuttle stop-events were, in fact, initially requested by the shuttle operators. In contrast, all of the 25 most-used zones were initially requested by shuttle operator). This suggests a few conclusions:

- To some extent, shuttle-riding populations attract shuttle operators to where they live, rather than shuttle-riding populations being drawn to shuttle zones;
- Shuttle demand changes rapidly enough, especially at lower-use zones, that zones that were used one year ago now get no use at all; and
- The high-demand areas before the Pilot Program continued to be high-demand areas during the pilot.

Shuttle stop-event activity

As a requirement of the Pilot Program, each month shuttle operators are required to provide an estimate of daily stop-events made by their shuttle vehicles at each zone in the network. Shuttles make an average of nearly 3,000 stop-events every weekday.

Stop-events tend to be concentrated on certain corridors. In July 2015, Van Ness between Union and Market saw an estimated 498 stop-events per day, or 17% of all the daily stop-events in the City. The top 20% of zones saw 58% of all stop-event activity.

The busiest areas for shuttle stop-events are:

Daily shuttle stop-event distribution, July 2015	
Area	Stop-
	evenis
Van Ness, Union to Market	498
24th & 25th Streets, Castro to Valencia	391
Market & 7th/8th/9th Streets	239
Lombard, Divisadero to Van Ness	202
Townsend & 3rd/4th Streets	188
18th Street, Church to Mission	117
All other stops	1,343
Total	2,978



The number of stop-events made by shuttles has grown over time. In June 2014, before the official launch of the Pilot Program, shuttles made an estimated 2302 daily stopevents at zones in the network. In July 2015, shuttles were estimated to make 2978 daily stop-events at zones in the network, a 29% increase.

In addition, the pilot network of designated zones has grown since the beginning of the Pilot Program. In June 2014, there were 101 zones in the network, compared to 124 in July 2015, a 23% increase. The 26 zones added to the network since June 2014 now see an estimated 344 stop-events per day, while the three zones removed since June

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2014 saw six stop-events per day, for a net change of 338 additional stop-events per day. Because the zone network has grown along with the number of stop-events, the average number of daily stop-events per zone has grown by just one from June 2014 to July 2015, from 23 to 24.

The field data collection effort, which focused on 20 representative zones from before and during the Pilot Program, provides a more detailed look at changes in regulation on traffic and safety at individual zones. That data is analyzed below.

Shuttle rider boardings

Shuttles participating in the permit program see 356,998 boardings per month, or 17,000 boardings on an average weekday (a boarding is one person riding a shuttle in one direction, with origin or destination in San Francisco). Of the total monthly boardings, 270,253 are on intercity regional shuttle trips, and 86,745 are on shuttle trips that begin and end in San Francisco. Assuming that most people board the shuttle twice in a day, this means that an average of 8,500 people ride a permitted shuttle each day. Shuttles load or unload an average of 5.7 people per stop-event.

Shuttle miles traveled

Intercity regional shuttles travel an average of 47 miles one-way, while intracity shuttles, which primarily ferry people between transit hubs and business locations, have average trip lengths of two miles.

Across the Pilot Program, the aggregate shuttle vehicle miles traveled (VMT) in service of commuter shuttle operations is an estimated 47,484 per weekday, 997,156 per month, and 11,965,877 per year.² The table below compares shuttle VMT with estimates of total VMT in San Francisco, San Mateo and Santa Clara Counties.³

Average weekday VMT	VMT	% of total
Pilot program shuttles	47,484	0.06%
San Francisco	8,846,000	12%
San Mateo	18,817,200	26%
Santa Clara	45,459,100	62%

² These numbers include vehicle miles traveled on "deadhead" trips, or trips made by empty shuttles to a waiting or overnight location.

³ Vehicle miles traveled data for San Francisco, San Mateo and Santa Clara counties comes from: http://www.mtc.ca.gov/maps_and_data/datamart/stats/vmt.htm

Shuttle vehicles and occupancy

As of March 2015, shuttle operators had registered 479 vehicles for use in the permit program. The table below shows the different vehicle types and specifications (note that not all registered vehicles are used every day—many permittees register back-up vehicles or whole fleets to enable operational flexibility):

Shuttle vehicle types	
Motor Coaches (typical 40+ passenger intercity bus, including double decker vehicles)	399
Urban buses (low floor 30-40 passenger bus, similar to a Muni bus)	30
Mini buses (20-30 passengers)	40
Vans (6-12 passengers)	10
Total	479

Single-decker motor coach



Double-decker motor coach





The majority of these vehicles are motor coaches, which are as long as most Muni buses and often much taller. The seating capacity of the double-decker motor coaches is more than twice that of the smaller mini buses.

As will be discussed in more detail below, the size of the shuttle vehicles has raised concerns among some community members, who question whether the charter bus-style shuttles are appropriate for narrow, residential streets or streets with high concentrations of people walking and biking. In addition, the SFMTA has received many anecdotal accounts claiming that the large shuttle buses were not full.

To determine (a) the relative occupancy levels of the shuttles and (b) how many vehicles would be added to the streets if those larger buses were replaced with smaller vehicles, the SFMTA obtained from the shuttle operators a sampling of average occupancy rates for regional runs by the larger motor coach shuttles.⁴ The sample included 225 intercity motor coach runs, which carried 6,555 passengers on an average day.

Motor coaches are available as either single-decker or double-decker. Single-decker motor coaches accommodate 50-56 passengers, while double-decker motor coaches accommodate 60-80 passengers. Typical cutaway shuttles accommodate about 30 passengers. For the 225 motor coach runs for which shuttle operators provided data, occupancy upon exiting San Francisco ranged from 4 to 67, with an average occupancy of 29 riders.⁵ Based purely on these numbers, 29 riders per shuttle could be accommodated by 225 smaller 30-seat cutaway vehicles, exactly the number of large motor coaches in the sample. However, by definition, an average occupancy of 29 does not mean that each specific shuttle run has 29 passengers and could be accommodated by a 30-seat bus—some runs have more than 29 passengers, some have fewer. In addition, the total number of 30-seat cutaway vehicles that would be required to accommodate these passengers varies further when including the following considerations:

- Shuttle operators plan for shuttle occupancy not to exceed a certain level, to ensure that riders are not left behind in the event of higher-than-expected ridership on a particular day. A survey of Pilot Program participants indicates that shuttles in the Pilot Program generally plan, on average, not to exceed 75% occupancy.
- If there were a restriction on vehicles larger than 30-seat cutaways, shuttle providers might be able to reshuffle their routes and schedules to ensure that vehicles were as full as possible and reduce the number of buses needed to accommodate the 6,555 passengers from the 225-bus sample. In an ideal world, which is in reality prevented by considerations of geography, schedules, and contingencies, bus runs would be redistributed so that every run has a full bus every time.

These considerations suggest a range of options were there a limitation on the use of large motor coaches: from replacing each current motor coach run with at least one (and sometimes two or more) 30-seat cutaway vehicles running at a maximum of 75% capacity, to a completely reshuffled schedule that fills every 30-seat cutaway bus to 100% capacity. The table below shows the number of 30-seat cutaway vehicles that would be needed to accommodate the riders in the 225-motor coach sample using four different

⁴ For purposes of this analysis, smaller vehicles are excluded, as the smaller vehicles do not present the same space and maneuverability issues as the charter buses. Intracity runs are excluded because they almost exclusively use smaller vehicles.

⁵ It should be noted that some shuttle operators make continued stops along the Peninsula on their way to destinations on the Peninsula and in the South Bay, meaning that the average occupancy of the motor coaches upon reaching their destinations may be well above 29.

assumptions.6

Replacing 225 motor coaches with smaller vehicles	Total 30-seat vehicles needed
Same runs at 75% capacity	398
Same runs at 100% capacity	333
Runs reshuffled at 75% capacity	291
Runs reshuffled at 100% capacity	218

Even assuming that each run currently made by a motor coach would have to be replaced by at least one 30-seat cutaway vehicle, which would nearly double the number of vehicles on the streets, shuttles would continue to compose a small fraction of the total number of vehicles on San Francisco's streets, and would have a negligible impact on overall traffic congestion. However, more buses would mean more vehicle miles traveled, which may marginally increase greenhouse gas emissions and could increase the likelihood of a serious or fatal collision.

Shuttles' impact on drive-alone vehicle trips

Shuttles' impact on transportation choices

In June 2015, the SFMTA distributed a survey via shuttle operators and employer sponsors to shuttle riders to determine the impact of shuttle availability on their transportation choices. 546 shuttle riders responded to the survey; 418 (77%) were intercity regional shuttle riders, while 128 (23%) rode intracity shuttles. This split of riders matches the share of boardings for intercity (76%) and intracity shuttles (24%).

Shuttle riders are widely dispersed among neighborhoods in the City, though the top ten neighborhoods of origin are concentrated in the Mission and the northeastern quadrant of the City. The top ten neighborhoods house 55% of total survey respondents, while the remaining 45% of survey respondents are scattered across 56 other neighborhoods.

Neighborhoods of origin	Total riders
Mission	60
Mission Bay	47
Noe Valley	45
SoMa	36
Nob Hill	21

⁶ This analysis does not address potential other seating configurations for commuter shuttles. For example, some shuttle vehicles are equipped with tables to facilitate working on the bus. These configurations may reduce bus capacity while serving other operational needs.

Castro	20
Marina/Cow	10
Hollow	13
Pacific Heights	18
Lower	16
Haight/NoPa	10
North Beach	16
Other	249
Neighborhoods	240

The vast majority of survey respondents work in the Peninsula/South Bay, with more than half of survey respondents working in Menlo Park. (The survey intentionally did not ask for the names of employers, though the prevalence of Menlo Park as a work destination suggests that many Facebook employees completed the survey.)

Workplace location	Total riders
Menlo Park	298
San Francisco	128
Mountain View	42
Sunnyvale	41
Cupertino	19
All other	18
locations	10

Nearly 72% of survey respondents ride the shuttle every work day:

Shuttle trip	Total	Percent
frequency	riders	of total
Every day	391	71.6%
A few times a week	95	17.4%
A few times a month	40	7.3%
Less than once a month	20	3.7%

Nearly half (45%) of survey respondents do not own cars, and 45% of those who do not own cars cited shuttles as the "main reason" they did not own a car:



Nearly 50% of survey respondents said they would drive alone to work if a shuttle were not available. The table below shows the breakdown of how survey respondents said they would get to work in the absence of a shuttle:

How would you get to work without the shuttle?	Riders	Percent of total
Drive alone	257	47.2%
Public transit	158	29.0%
Get a job closer to home	75	13.8%
Carpool	28	5.2%
Move closer to work	26	4.8%

These numbers suggest that, for 47% of shuttle riders, shuttles displace drive-alone trips. In sum, assuming survey respondents' views of their behavior in the absence of shuttles is accurate, it appears that shuttles take substantial numbers of cars off the streets.

Shuttles' impact on vehicle miles traveled

The principal purpose of employer-sponsored shuttles is to provide commuters an alternative to drive-alone trips. To determine whether shuttles are actually taking cars off the road, the SFMTA collected the following data from participating shuttle operators:

- Monthly boardings (includes all boardings for all trips)
- Average one-way trip length

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• Monthly miles traveled by each shuttle vehicle (includes "deadhead" miles, when empty shuttles return to a starting point or resting place)

As a whole, shuttles saw 356,997 boardings every month—76% on regional intercity shuttles, 24% on intracity shuttles. Assuming that everyone who rides the shuttles takes two trips per day (to work and back), an estimated 8,500 people ride the shuttles in the Pilot Program on an average weekday.

The average shuttle trip length of intercity shuttles was 47 miles, and approximately two miles for intracity shuttles. Below is a calculation of the number of vehicle miles that shuttles remove by taking private automobiles off the streets. This calculation is obtained using the results of the rider survey, and assumptions regarding the amount of driving shuttle riders would do if they drove alone, carpooled, moved closer to home or moved closer to work. As discussed above, the shuttle rider survey showed that 47% of shuttle riders would drive alone to work if a shuttle were not available. Applying that figure, and the one-way shuttle trip length, the table below shows that shuttles reduce the total number of vehicle miles traveled by removing private automobiles from the streets:

Monthly VMT reductions attributable to shuttles	Regional	Intracity
VMT eliminated by shuttles	5,166,396	127,598
Shuttle miles traveled		997,156
Net monthly reduction in VMT	4,296,837	

Traffic, transit and safety issues

A chief objective of the Pilot Program was to dedicate curb space for loading and unloading of private shuttles in order to minimize commuter shuttles' conflict with Muni and other users of the streets. Delays to Muni, boardings away from the curb, traffic back-ups, blocking bike lanes, or blocking crosswalks or pedestrian visibility may occur when multiple vehicles (either more than one shuttle or a shuttle bus and a Muni bus) are competing for limited curb space, or when shuttle drivers do not take care to pull entirely out of the travel lane to load or unload.

Field data collection at representative shuttle zones

The SFMTA conducted field data collection in June 2014, before the start of the Pilot Program, and in June 2015, during the Pilot Program, to examine the impact of the Pilot Program on traffic conflicts and safety issues potentially caused by shuttle activity.

This field data collection effort observed shuttle and Muni activity at 20 shuttle zone locations: 10 in the morning (6:45-9:15am) and 10 in the evening (5:30-8:00pm) commute period. Data was collected in the field by SFMTA staff observing stop activity at the selected locations, usually in 2.5-hour increments.

The field data collection locations were chosen with the following considerations in mind:

- Obtaining a reasonable sample of total stop-events made by commuter shuttles on a typical day. The pre-pilot data collection observed 372 total stop-events, or 16% of the 2302 average daily estimated stop-events in June 2014. The during-pilot data collection observed 706 total stop-events, or 24% of the 2978 average daily estimated stop-events in July 2015.
- **Observing shuttles at various types of zones.** In order to measure the impact of shuttles on various types of zones and streets, the SFMTA identified four zone types:
 - Muni rapid/frequent zone
 - Muni non-rapid/frequent zone
 - o Non-Muni zone
 - On a street with a bike lane
- Observing shuttles in geographically diverse and high-profile locations. To the extent possible, sample zones were chosen to provide geographic diversity, and represent various areas in San Francisco where shuttles operate. Zones range from Lombard/Pierce Streets in the north to Valencia/25th Street in the south, to 19th Avenue and Taraval/Wawona in the west. Zones also cover several sites in the Mission, where shuttle activity has received significant attention.

The during-pilot field data collection effort observed zones that corresponded as closely as possible to the pre-pilot zones observed:

- Geographically: during-pilot zones were either the same zone observed in the prepilot data collection effort, or, in cases where previously used zones had been substituted with zones with lower bus frequencies, the Pilot Program's replacement zone
- Time of day: pre-pilot AM zones were observed in the AM during-pilot; pre-pilot PM zones were observed in the PM during-pilot

The pre-pilot zones, during-pilot zones, and combined "zone names" are shown in the table below.⁷

Pre-pilot zone	During-pilot zone	Zone name
4th St&Townsend St SW-FS/BZ (AM)	Townsend & 4th, Midblock WZ (AM)	4th & Townsend
16th St&Mission NE-NS/BZ (PM)	16th St&Mission SE-FS/BZ (PM)	16th & Mission
	16th St & South Van Ness, SW/WZ	16th & Mission/South
16th St&Mission NE-NS/BZ (AM)	(AM)	Van Ness
19th Ave&Taraval St NE-FS/BZ (PM)	19th Ave & Wawona, SE/BZ (PM)	19th & Taraval/Wawona
24th St&Castro St SE-FS/BZ (AM)	Castro St&25th St, SE-NS/BZ (AM)	Castro & 24 th /25th

⁷ The first street listed in a zone name is the street upon which the zone appears. "FS" means far-side of intersection, "NS" means near-side. "BZ" means bus zone (i.e., an already existing Muni zone). "WZ" means white zone (i.e., a shuttle-only loading zone).

Bro-pilot zono	During-pilot zono	Zono namo
	During-pilot zone	
Church St&16th St NW-NS/BZ (AM)	Church St & 15th St, NW/WZ (AM)	Church & 15"/16"
Church St&Duboce Ave SE-NS/SI	Church St & Market St, NE	
(PM)	corner/WZ (PM)	Church & Market
Divisadero St&Haight St NE-FS/BZ		Divisadero & Haight/Oak
(PM)	Divisadero St & Oak St, NE/BZ (PM)	PM
Divisadero St&Geary Blvd SW-FS/BZ	Divisadero St&Geary Blvd SW-	
(AM)	FS/BZ (AM)	Divisadero & Geary
Divisadero St&Haight St SW-FS/BZ	Divisadero St&Haight St SW-FS/BZ	
(AM)	(AM)	Divisadero & Haight AM
Fillmore St&Jackson St NE-FS/BZ	Fillmore St&Jackson St NE-FS/BZ	
(PM)	(PM)	Fillmore & Jackson
	Lombard St&Pierce St NE-NS/BZ	
Lombard St&Pierce St NE-NS/BZ (PM)	(PM)	Lombard & Pierce
Van Ness Ave&Oak St NW-NS/BZ	South Van Ness & Market St,	
(AM)	SW/WZ (AM)	Van Ness & Market AM
	Valencia St&24th St SW-FS/BZ	
Valencia St&24th St SW-FS/BZ (AM)	(AM)	Valencia & 24th
Valencia St&25th St NE-FS/BZ (PM)	Valencia St&25th St NE-FS/BZ (PM)	Valencia & 25th
Van Ness Ave&Market St NE-FS/BZ	Van Ness Ave&Grove St, NE-FZ, BZ	
(PM)	(PM)	Van Ness & Market PM
Van Ness Ave&Sacramento St NW-	Van Ness Ave & Sacramento St,	
NS/BZ (AM)	SW/WZ (AM)	Van Ness & Sacramento
Van Ness Ave&California St NE-FS/BZ	Van Ness Ave&California St NE-	
(PM)	FS/BZ (PM)	Van Ness & California
Van Ness Ave⋃ St SE-NS/BZ	Van Ness Ave⋃ St SE-NS/BZ	
(PM)	(PM)	Van Ness & Union PM
Van Ness/Union SW/WZ (AM)	Van Ness/Union SW/WZ (AM)	Van Ness & Union AM

Data collection methodology

Data collectors recorded the following information at each shuttle zone:

- Shuttle identifying information (license plate number or Pilot Program placard number)
- Shuttle arrival and departure time
- Number of shuttle passengers boarding/alighting
- Number of Muni vehicle stop-events at the location, or, at non-Muni shuttle zones, the number of Muni vehicles that stopped at the Muni zone nearest the shuttle zone
- Traffic conflicts: whether each shuttle
 - o Blocked travel lane
 - Blocked bike lane
 - Blocked right-turning cars from seeing crossing pedestrians ("right turn/near-side")
 - Double parked (also recorded as blocking travel lane)
 - Could not access stop (because another shuttle, Muni, or another vehicle blocked access)

- o Prevented an arriving Muni bus from accessing stop
- Prevented an arriving shuttle bus from accessing stop
- o Loaded/unloaded in street
- Led to Muni loading/unloading in street
- Any other conflicts (e.g., blocked crosswalk)
- Any other issues that may have affected traffic in and around the stop (e.g., road construction, illegally parked vehicle, etc.)

Most of the selected zones experienced substantial activity, leaving data collectors with limited time. Thus, data collectors did not record the following information:

- Muni arrival or departure times
- Number of passengers boarding/alighting on Muni
- Specific instances of people who experience disabilities (or other platform lift users) being denied access to a Muni bus (note that a Muni bus loading/unloading in the street is a general proxy for the Muni bus, and thus any platform lift users on the Muni bus, being denied access to the curb)

Shuttle frequency

Shuttle frequency (measured by stop-events) at the observed zones increased by nearly 80% from June 2014 to June 2015, while Muni frequency rose by 8.5%.

Average vehicles per hour per stop	Shuttles	Muni
June 2014	7.87	7.83
June 2015	14.12	8.50
Change	80%	8.5%

This substantial increase in stop-events at the observed zones likely results from a combination of:

- The overall increase in shuttle activity over the course of the pilot. Total estimated stop-events by shuttles increased by 29% from June 2014 to July 2015
- A slight increase in the total hours spent observing shuttle activity for the duringpilot field data collection
- A concentration of shuttle stop-event activity at particular high-demand zonesmany of which were included in the field data collection effort—as a result of the Pilot Program's requirement that shuttles limit their loading and unloading to the zone network, rather than at zones across the City. The table below shows a

doubling or tripling of shuttle activity in major zones like Lombard, Van Ness, and Castro:

Shuttles per hour	Pre- pilot	During pilot
4th & Townsend	12	11.2
16th & Mission	9.9	0.4
16th & Mission/South Van Ness	8	6.8
19th & Taraval/Wawona	6	8.8
Castro & 24th/25th	3.6	11.6
Church & 15th/16th	1.6	7.2
Church & Market	2.8	6.4
Divisadero & Haight/Oak PM	7.4	10.8
Divisadero & Geary	8	8.4
Divisadero & Haight AM	8.6	17.6
Fillmore & Jackson	0.4	4.4
Lombard & Pierce	7.6	19.2
Van Ness & Market AM	8.5	14
Valencia & 24th	10.3	16
Valencia & 25th	14	20.8
Van Ness & Market PM	8.8	16.8
Van Ness & Sacramento	9.5	24
Van Ness & California	10	28
Van Ness & Union PM	5.2	17.6
Van Ness & Union AM	15.2	32.4

Average shuttle dwell times were higher, by slightly less than five seconds, for the June 2015 data observations.⁸ This difference likely results from random fluctuations in the data rather than distinct changes to shuttle operations.

Average shuttle dwell times (seconds)	AM zones	PM zones	Average
June 2014	67.2	48	57.6
June 2015	69	55.8	62.4
Change	1.8	7.8	4.8

Shuttle and Muni conflicts

One of the principal objectives of the Pilot Program was to minimize or avoid shuttle

⁸ The 4th & Townsend zone was removed for purposes of the dwell time analysis. With a during-pilot average shuttle dwell time of nearly five minutes, it was almost five times longer than the average dwell time for all other zones, likely due to its proximity to the Caltrain depot.

conflicts with Muni, whenever possible. To that end, the Pilot Program shuttle zone network included zones on lower-frequency Muni lines and exclusive shuttle loading zones near, but not shared with, Muni zones. The table below compares the number of times that a Muni bus was temporarily blocked by a shuttle from accessing a Muni zone, pre- and during-pilot. Zones that are shuttle-only appear in bold.

Blocked Muni vehicles per hour	Pre- pilot	During pilot
4th & Townsend	0.8	0
16th & Mission	0	0
16th & Mission/South Van Ness	0.4	0
19th & Taraval/Wawona	0	0
Castro & 24th/25th	0	0
Church & 15th/16th	0	0
Church & Market	0	0
Divisadero & Haight/Oak PM	0	0.4
Divisadero & Geary	1.2	0
Divisadero & Haight AM	0.2	0.8
Fillmore & Jackson	0.4	0.4
Lombard & Pierce	0	0
Van Ness & Market AM	0	0
Valencia & 24th	0.86	1.6
Valencia & 25th	0	0.4
Van Ness & Market PM	0	0.8
Van Ness & Sacramento	1	0.4
Van Ness & California	0.8	0
Van Ness & Union PM	0	3.2
Van Ness & Union AM	1.2	0

On a per-stop-event basis, instances of shuttles blocking Muni decreased by 35% from the pre-pilot to during-pilot data collection periods (this factors in the 80% increase in shuttle stop-events). Twelve of the during-pilot zones saw no Muni buses blocked at all (60% of the 20 zones observed), compared to 11 pre-pilot. During-pilot, an average of 2.7% of shuttle stop-events resulted in blocking Muni access to a zone. Two locations saw Muni blockages at 10% or more of shuttle stop-events:

Shuttles blocking Muni	Per hour	Percentage of stop- events
4th & Townsend	0	0%
16th & Mission	0	0%
16th & Mission/South Van Ness	0	0%
19th & Taraval/Wawona	0	0%
Castro & 24th/25th	0	0%
Church & 15th/16th	0	0%

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Church & Market	0	0%
Divisadero & Haight/Oak	0.4	4%
PM	••••	.,.
Divisadero & Geary	0	0%
Divisadero & Haight AM	0.8	5%
Fillmore & Jackson	0.4	9%
Lombard & Pierce	0	0%
Van Ness & Market AM	0	0%
Valencia & 24th	1.6	10%
Valencia & 25th	0.4	2%
Van Ness & Market PM	0.8	5%
Van Ness & Sacramento	0.4	2%
Van Ness & California	0	0%
Van Ness & Union PM	3.2	18%
Van Ness & Union AM	0	0%
Average	0.4	3%

Across all the during-pilot field data collection locations, which saw 706 total stop-events, or 24% of the 2978 stop-events that happen at all network zones on a typical day, a total of 19 Muni buses were temporarily prevented from accessing the Muni zone. Assuming that every blocked Muni bus was denied access for the average shuttle dwell time (62.4 seconds), and extrapolating that experience over 2978 total daily stop-events, shuttles add a total of 83 minutes per day of delay into the Muni system. The delay per Muni run (Muni makes over 1,200 runs every weekday) is approximately four seconds.

Seven of the eight shuttle-only zones not shared with Muni saw no blocked Muni buses at all. The shared Muni zones that experienced increased numbers of Muni vehicles blocked pre-pilot to during-pilot also saw considerable increases in the number of shuttle stop-events.

Change in blocked Muni buses and shuttle stop-events,	Blocked Muni per hour	Shuttle stop- event
2014 to 2015	increase	increase
Divisadero & Haight/Oak PM	0.4	46%
Divisadero & Haight AM	0.6	105%
Valencia & 24th	0.7	56%
Valencia & 25th	0.4	49%
Van Ness & Market PM	0.8	91%
Van Ness & Union PM	3.2	238%

In addition, the two zones that saw the most Muni conflicts pre-pilot—Van Ness & Union PM and Divisadero & Geary—were replaced with shuttle-only zones under the pilot program. Those zones both saw the number of blocked Muni buses drop to zero in the during-pilot data collection.

The number of Muni conflicts seen at shared shuttle-Muni zones did not appear to correspond to Muni frequency at those zones: on average, the number of blocked Muni vehicles at shared shuttle-Muni zones varied by 0.2 per hour from low-frequency to high-frequency Muni lines. Van Ness & California, which sees 13.5 Muni buses per hour, had no Muni conflicts, while Valencia & 24th, which sees only 3 Muni buses per hour, had 1.6 Muni conflicts per hour.⁹

While increased shuttle frequency did generally correlate with increased shuttle-Muni conflicts, the three highest-activity shuttle zones saw zero or very few Muni buses blocked. The Van Ness & California zone is notable, since it had the highest shuttle frequency and two high-frequency Muni lines, but no blocked Muni buses.

Shuttle buses and blocked Muni buses per hour	Shuttles per hour	Blocked Muni buses per hour
16th & Mission	0.4	0
Fillmore & Jackson	4.4	0.4
19th & Taraval/Wawona	8.8	0
Divisadero & Haight/Oak PM	10.8	0.4
Castro & 24th/25th	11.6	0
Valencia & 24th	16	1.6
Van Ness & Market PM	16.8	0.8
Divisadero & Haight AM	17.6	0.8
Van Ness & Union PM	17.6	3.2
Lombard & Pierce	19.2	0
Valencia & 25th	20.8	0.4
Van Ness & California	28	0

These data points suggest the following conclusions about shuttle-Muni conflicts:

- While more shuttles may lead to more conflicts with Muni, it is possible to have high shuttle frequency without any Muni conflicts at all, and
- When shuttles are provided exclusive zones for loading and unloading, conflicts with Muni are erased almost completely.

Other traffic conflicts

Shuttles that fail to pull all the way to the curb, or are denied access to the curb by

⁹ This was a known risk of the Pilot Program: that by reducing conflicts at busy stops, less busy stops might seen an increase in conflicts.

another shuttle, a Muni bus, or another vehicle, can cause traffic conflicts by blocking the travel lane or the bike lane.

The Pilot Program attempted to address these issues by, among other things:

- Providing shuttles with permitted Muni zones in which to stop outside the flow of traffic;
- Extending shuttle zones or creating shuttle-only zones; and
- Confining shuttles as much as possible to low-frequency Muni zones where they are less likely to encounter a Muni bus.

Because more shuttle stop-events means greater opportunities for shuttles to block traffic or bike lanes, traffic conflicts would be expected to rise with shuttle stop-events. To control for changes in shuttle stop-events pre-pilot to during-pilot, the table below looks at traffic conflicts as a percentage of stop-events at each zone. Zones that are shuttle-only appear in bold.¹⁰

Hourly blocked travel or bike lanes as a percentage of hourly stop-events	Pre- pilot	During pilot
4th & Townsend	73%	25%
16th & Mission	12%	0%
16th & Mission/South Van Ness	18%	94%
19th & Taraval/Wawona	7%	68%
Castro & 24th/25th	78%	10%
Church & 15th/16th	0%	28%
Church & Market	0%	0%
Divisadero & Haight/Oak PM	100%	15%
Divisadero & Geary	5%	90%
Divisadero & Haight AM	7%	0%
Fillmore & Jackson	100%	73%
Lombard & Pierce	42%	98%
Van Ness & Market AM	12%	0%
Valencia & 24th	29%	105%
Valencia & 25th	29%	17%
Van Ness & Market PM	9%	7%
Van Ness & Sacramento	0%	30%
Van Ness & California	16%	7%
Van Ness & Union PM	23%	0%
Van Ness & Union AM	8%	26%

At five of the eight shuttle-only zones, blocked travel and bike lanes as a percentage of shuttle stop-events increased from pre-pilot to during-pilot, sometimes substantially.

¹⁰ The Valencia & 24th zone saw blocked travel and bike lanes in excess of 100% because two shuttles managed to block both the bike and travel lane at the same time.

A comparison of zones placed on the near side of intersections or mid-block to zones placed on the far side of intersections (which provides more room in front of the zone for shuttles to maneuver to the right and out of travel or bike lanes) shows that far-side zones are much less likely than near-side zones to result in blocking travel or bike lanes:

Hourly blocked travel or bike lanes as a percentage of hourly stop events		
Near-side zones 51%		
Far-side zones23%		

This data suggests the following conclusions:

- Shuttles block travel and bike lanes about 35% of the time that they stop
- Increased training and enforcement may be necessary to ensure that shuttle drivers pull shuttle vehicles completely into the zone and out of traffic or bike lanes
- When possible, far-side zones are preferred for minimizing blockages of travel and bike lanes

Pedestrian safety issues related to shuttle size and placement

In the context of shuttle buses, pedestrian safety issues focus on crosswalks: whether shuttle buses are preventing right-turning drivers from seeing pedestrians who may be crossing in front of a shuttle at a near-side stop, and whether the shuttle bus itself blocks a crosswalk.

Blocking view of right-turn drivers

Because of their size, shuttles at near-side zones often block the view of drivers attempting to make a right turn, but only under all of the following conditions: (a) the shuttle is stopped at the near side of the intersection, (b) a driver in another vehicle is attempting to make a right turn around the shuttle (that is, from the left of the stopped shuttle), and (c) pedestrians are crossing in front of the shuttle and may not be seen by the car driver. Because this issue only arises in limited circumstances, it was observed at 2% of stop-events in both the pre-pilot and during-pilot data collection periods. Twelve of the 16 during-pilot instances happened at Lombard & Pierce, the busiest near-side zone for which data was collected.

Blocking crosswalks

Another infrequent but important pedestrian safety issue is shuttle vehicles blocking crosswalks. This usually occurs when a shuttle driver misjudges a light or attempts to access a zone that is already occupied by another vehicle. Shuttles blocked crosswalks six times out of 706 stop-events observed, or less than 1% of the time.

Conclusions
As with the blocking of travel and bike lanes, the surest solution for the issue of blocking the view of right-turning drivers is to create far-side shuttle loading zones whenever possible. However, it is important to note that while the issue is an important one when it arises, it was very infrequent: the issue arose at only three of the six near-side zones, and did not arise at all at any of the far-side or mid-block zones.

Though blocking of crosswalks by shuttles appears to be an infrequent problem, increased enforcement, and better training for shuttle drivers, likely would be the most effective options to address the issue.

Enforcement, incidents, and community perception of shuttles

One goal of the Pilot Program was to manage the movement of commuter shuttles by providing shuttle operators with clear guidelines on where and when to stop at the curb, and by providing the SFMTA with the funds to enforce violations by shuttle operators and those who block shuttles' access to loading zones. This section reviews how shuttles have fared in terms of compliance with parking/loading rules and permit terms, and how the shuttles have been received by members of the public.

Citations and enforcement

The Pilot Program included funding for a 10-person morning and evening enforcement team known as the "shuttle detail." Members of the shuttle detail patrol the zones in the shuttle network to ensure that:

- Zones are safe for people
- Traffic is flowing as smoothly as possible around the zones
- The zones are being used only by permitted vehicles
- Permitted vehicles are stopping, parking and loading appropriately in the zones
- Resident and community concerns regarding shuttles are addressed

Because the primary goal of the shuttle detail was not to issue citations, but to keep zones safe and to keep traffic flowing smoothly by encouraging vehicles that might be blocking access to shuttle zones to move along, the number of citations issued by the shuttle detail is not necessarily instructive of whether the Pilot Program's goals were met through enforcement efforts.

Between the beginning of the Pilot Program in August 2014 and the end of May 2015, SFMTA enforcement officers as a whole (not just the shuttle detail) issued 1200 citations to shuttle buses, or an average of 103 citations per month.

The most common citations issued by all enforcement officers (not just those on the shuttle detail) to shuttle buses were for double-parking and non-permitted use of a Muni zone, both of which the Pilot Program specifically seeks to avoid. However, a month-by-



month review of those citations shows fairly large fluctuations in citation issuance:

A few examples of the large fluctuations in citation issuance:

- Double-parking citations dropped from 91 (the highest monthly total) in October 2014 to three (the lowest monthly total) the next month.
- February 2015 saw 55 bus-zone citations, the highest of any month to that point. March 2015 then saw 14 bus-zone citations, while April 2015 saw 61 bus-zone citations.
- November 2014 saw 65 citations issued by the shuttle detail, about half of the number of citations issued in April and May 2015.

The fluctuations in citation issuance likely result from: (a) limited staffing for the shuttle detail; (b) shifting the focus of enforcement to respond to specific resident complaints about shuttles; (c) success, at least temporarily, in tamping down certain violations by focusing on them, causing the focus to shift to other issues; and (d) the fact that a small number of enforcement officers cannot address every issued raised in a network of 124 zones that sees thousands of stop-events per day.

As a result, the only firm conclusions to be drawn from this enforcement data are:

- Keeping streets safe, keeping transit moving, and preventing shuttle-zone blockages are not necessarily reflected in citation data
- More enforcement staffing, and a focus on enforcement both at shuttle zones and along shuttle routes, would assist in keeping traffic flowing smoothly throughout the shuttle zone network

 Creative solutions could be used to provide the most coverage possible with limited staffing¹¹

Major traffic incidents

There have been three recorded incidents of shuttle buses becoming stuck on streets with steep inclines: in June 2012, on August 5, 2014, and on September 24, 2015. In the August 5, 2014 incident, the shuttle temporarily blocked the tracks of the J-Church line and resulted in a Muni delay costing \$7,000 (for which the shuttle provider was billed). The SFMTA has been unable to locate records of any collisions involving a permitted shuttle vehicle and is unaware of any additional traffic incidents pertaining to shuttle activity (though there have been a few incidents involving shuttles or tour buses that are not participants in the Pilot Program).

Community feedback

While the Pilot Program was intended to minimize impacts of the shuttles on the streets and neighborhoods of San Francisco, the project also was designed to collect community feedback to improve the regulatory approach and inform a potential shuttle program. Beginning in October 2014, SFMTA staff kept a log of all comments received from community members, most of which came via:

- 311 (the City's customer service center)
- Offices of members of the Board of Supervisors
- Telephone or email contact with SFMTA staff
- Public meetings
- Shuttle operators

Overall, the SFMTA received 296 complaints between October 2014 and June 2015. October 2014 saw the most complaints of any month, with 46, while March 2015 saw the fewest, with 24. As can be seen from the chart below, comments were scattered across 11 categories:

¹¹ One example, tried in the late Summer/early Fall of 2015, is to station enforcement officers at single, high-demand stops for the entirety of their shifts. This allows officers to cover more stop-events, if not more zones, in the course of a shift. In addition, SFMTA can shift enforcement staffing based on resident concerns or staff observations by using shuttle GPS data to determine where enforcement is needed most.



One particularly active community member, a resident of Noe Valley, provided 69 of the 296 comments, or 23% of the total.

The most frequent comments from community members are shown below (the active community member discussed above submitted 31% of the "unauthorized stop" and 81% of the "unauthorized street" comments):



Community comment distribution	Comments	Percent of total
Idling/staging	56	19%
Shuttles disruptive/loud/unwelcome	51	17%
Unauthorized stop	49	17%
Unauthorized street	47	16%
Blocking travel lane	31	10%
All other comments	62	21%

The most frequent comments focused on shuttles being in a place where they are either not permitted or not appreciated: idling on streets, using weight-restricted streets, using unauthorized stops, or simply being unwelcome in a particular location or generally on the streets of San Francisco. Safety-related comments (unsafe driving, blocking crosswalks, and blocking bike lanes) made up 34 of 296 comments, or 11%.

Comments focused on the Mission and Noe Valley neighborhoods numbered 118, or 40% of the total (69 of these were by the active community member mentioned above). In addition to those neighborhoods, the rest of the top ten neighborhoods for community comments were in the northeast quadrant of the city.

Neighborhoods for community feedback	Total comments
Mission	68
Noe Valley	50
Marina/Cow Hollow	32
Castro	29
SoMa	16
Pacific Heights	14
Western Addition	13
Haight-Ashbury	12
Mid-Market	10
Lower Haight/NoPa	8
Other locations	44

The concentration of comments corresponds to the highest-demand shuttle corridors and locations:

- Lombard and Van Ness (Marina/Cow Hollow, Pacific Heights)
- 24th and 25th Streets (Mission/Noe Valley/Castro)
- 4th & Townsend (SoMa)

The feedback does suggest that quality-of-life issues matter to community members, who commented most on idling and large vehicles being unwelcome on certain streets and at certain locations. More and dedicated enforcement—to prevent idling and the use of

unauthorized streets—could resolve some community issues.

The most common suggestion from community members for how to resolve the issues presented by the size of and noise generated by shuttle buses was to limit the size of the shuttle vehicles. As discussed in more detail above, requiring smaller vehicles likely would reduce noise and sound complications while somewhat increasing the number of vehicles on the streets.

Project administration and the alternative to the Pilot Program

Project administration

Most of the administration and management of the Pilot Program was undertaken by two SFMTA employees, one transportation planner and one manager, who devoted only part of their time to the program and the rest to other duties. A junior transportation engineer also spent some time implementing the program, which required on-site duties such as coordinating public notification, signage installation and curb painting. Other sections of the agency, like the Sign Shop and the Paint Shop, and the finance, accounting, and technology teams, also played key roles.

A shuttle program nevertheless would benefit from more resources, specifically a project manager or analyst devoted to the project on a full-time basis.

Compliance with permit terms

The Pilot Program allowed the SFMTA to test the effectiveness of a permit program for use of public curb space. The SFMTA has relied on Pilot Program partners to abide by the rules of the program; due to the limited enforcement resources described above, relying solely on the issuance of citations to keep shuttles out of Muni and other nostopping zones appears to have limited effectiveness.

Shuttle operators have complied with their obligations to provide estimated stop-event, boarding, and vehicle data, register vehicles, and respond to issues raised by SFMTA staff. The shuttle operators have, with a few exceptions, paid their permit fees on time and in full. Penalties have been issued to those who have not paid their fees on time. Most participated in the regular conference call hosted by SFMTA to discuss improvements to the program, though a few providers routinely skipped the conference call. Most providers have stayed informed of changes to the zone network, construction and other issues.

The SFMTA relied on shuttle providers to adjust their routes to accommodate requests by residents for shuttles to avoid certain streets or intersections. This was a less punitive and more effective tack than attempting to enforce shuttle routing, especially since (a) most streets are legal for shuttle use despite residents' concerns, and (b) the SFMTA lacks the authority to enforce moving violations. Some shuttle providers have been more responsive than others to resident complaints about unwelcome shuttle vehicles on their streets.

The Pilot Program required all shuttle operators to provide real-time data on shuttle stopevents and shuttle vehicle movements. This seemed like a straightforward requirement at the outset of the Pilot Program, but has proved to be more complicated than originally contemplated. While all shuttle operators have made at least some effort to provide this data, some have provided the data without interruption or issue, while others have failed provide data regularly and accurately. Some operators who have failed to send data have worked closely with SFMTA staff to resolve data delivery issues, while others have been slow to respond to inquiries from SFMTA staff and do not appear concerned about ensuring the proper delivery of data. Issues with SFMTA's data vendor have complicated the process even further, such that, more than a year into the Pilot Program, the real-time vehicle data is still not flowing completely or accurately from all operators. Limited queries of shuttle activity at certain zones and streets are possible, but take more effort and time than originally envisioned.

SFMTA currently is undertaking a process to bring the data collection and reporting inhouse, which should eliminate vendor issues and allow SFMTA staff to be notified of, and respond to, data interruptions or inaccuracies as quickly as possible. Given the rich data set that this data feed would produce, with benefits not only for the shuttle providers but also for the transportation system as a whole, the SFMTA expected a more concerted effort by the shuttle providers to ensure the data was flowing properly.

Shuttle operator efforts to minimize shuttles' impacts

Shuttle operators have undertaken some efforts to improve their performance and public face on the streets, including:

- As discussed above, in some instances attempting to accommodate community complaints and requests from SFMTA staff to alter shuttle routing, even when the streets they are being asked to avoid are open and unrestricted for shuttle vehicles;
- Coordinating scheduling among themselves to reduce conflicts and overcrowding on high-demand corridors like Van Ness; and
- Providing general and specific training to their drivers about safe driving and parking/loading rules.

Conclusion

Well before the beginning of the Pilot Program, shuttles were making thousands of stopevents at hundreds of locations around the City. By all accounts, a shuttle ride to the job location has become an integral part of the working conditions of thousands of workers in the Bay Area.

The alternative to the Pilot Program was not the disappearance of shuttles, but instead a return to the pre-pilot days, when shuttles stopped at more than twice as many locations

as they do now, and the SFMTA had only limited enforcement resources to issue citations for parking and stopping violations. Given the importance of the shuttles to the businesses that use them, even significant increases in the number of citations likely would have been accepted by the shuttle operators as a cost of doing business.

In this sense, the Pilot Program addressed the principal issue that shuttles present by managing shuttles to minimize their impacts and maximize their benefits to the transportation system.

Based on this Evaluation Report, the key findings that could inform an ongoing commuter shuttle permit program are:

- 47% of shuttle riders said they would drive alone to work if a shuttle were not available.
- Shuttles remove nearly 4.3 million vehicle miles traveled from the region's streets 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.
- Keeping streets safe, keeping transit moving, and preventing shuttle-zone blockages are key objectives of enforcement, but are not reflected in citation data.
- More enforcement staffing, and a focus on enforcement both at shuttle zones and along shuttle routes, would assist in keeping traffic flowing smoothly throughout the shuttle zone network.
- The vast majority of community feedback focused on large shuttles being unwelcome on the streets, especially residential streets.
- The Pilot Program allowed for the collection of unprecedented data about shuttle activity.
- Real-time shuttle vehicle data would greatly assist the SFMTA in regulating and managing commuter shuttle activity.

In response to these findings, an ongoing commuter shuttle program should, among other things:

- Continue the program in a form similar to that of the Pilot Program, to allow continued management of shuttle activity on San Francisco's streets and continue the transportation benefits that shuttles bring;
- Increase enforcement to ensure that shuttles do not block bike or travel lanes;
- Address the perception that commuter shuttle vehicles do not belong on certain streets; and
- Ensure that real-time shuttle vehicle data is flowing and accurate.