Commuter Shuttle Program

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EXECUTIVE SUMMARY

The City of San Francisco has taken a proactive approach to managing the impacts of commuter shuttles (sometimes referred to as "Google Buses") by creating a voluntary permit program. State law allows commuter shuttles to operate in San Francisco, and the City has experienced the impacts that these vehicles can have on the transportation network without the presence of regulation. In response, the San Francisco Municipal Transportation Agency (SFMTA) has implemented a regulatory approach to managing Commuter Shuttles with the objective of minimizing conflicts with Muni, reducing emissions, improving traffic flow, enhancing pedestrian safety, and keeping larger buses off smaller non-arterial streets.

Participating shuttle operators agree to abide by a set of rules and regulations in exchange for access to designated commuter shuttle zones where they can load and unload passengers. Shuttle operators pay a fee of \$7.31 each time they stop at a shuttle zone. In Fiscal Year 2017, permit fees totaled \$5.7 million. Funds generated from stop events fully cover the cost to administer this program, including enforcement and dedicated staff to address concerns and amend the program in response to feedback from stakeholders.

A pilot program launched in August 2014 provided insight and a regulatory framework. The Pilot helped shape the current Commuter Shuttle Program, which went into effect in April 2016. In order to evaluate how well the shuttle program is working to address shuttle impacts identified in the Pilot, the SFMTA routinely evaluates commuter shuttle data. In the fall of 2016, the SFMTA released the 2016 Status Report which analyzed data from the first six months of program, April to September 2016.

This report is the second program evaluation

report produced by the SFMTA and analyzes data from October 2016 to December 2017. Key findings from this analysis include:

Shuttle Activity

- Shuttle Volumes: Approximately 450 unique shuttle vehicles operate on San Francisco streets every day, which represents a 15 to 25 percent increase from the 360 to 390 unique vehicles that operated daily on San Francisco streets at the time of the 2016 Status Report
- *Stop Events*: The number of daily stop events increased from 3,150 daily stop events in September 2016 to 3,470 daily stop events in December 2017, an increase of around 10 percent. A "stop event" is defined as an individual instance of a shuttle vehicle stopping at a zone in the shuttle zone network
- Shuttle Zones: Between September 2016 and December 2017, the SFMTA removed 19 commuter shuttle zones and added 10 new ones, decreasing the total number of zone from 109 in September 2016 to 100 in December 2017. A number of these zone changes were made in direct response to community concerns.

Cleaner Vehicles

At the time of the 2016 Status Report, 76 percent of shuttles belonging to registered operators were model year 2012 or newer. In January 2018, the percentage of registered shuttle vehicles model year 2012 or newer had increased to 83 percent.

Ridership

An estimated 8,900 people board commuter shuttles at designated Commuter Shuttle Program stops in San Francisco each day. This represents a ten percent increase since spring

Executive Summary

2016, when approximately 8,100 people boarded shuttles at designated shuttle stops.

Fees & Fines

- The SFMTA collected \$5.7 million in permit fees in Fiscal Year 2017 and \$3.1 million in the first half of Fiscal Year 2018.
- In Fiscal Year 2017, a total of \$596,000 in administrative penalties were issued for violations of the terms of the permit program. In the first six months of Fiscal Year 2018, a total of \$211,500 in administrative penalties have been issued.

Reduced Potential for Conflicts with Muni

The Commuter Shuttle Program aims to minimize conflicts between shuttles and Muni vehicles.

- The number of shared Muni-commuter shuttle zones fell from 80 to 67 between September 2016 and December 2017, while the number of shuttle-only white loading zones increased from 29 to 33. Of those shared Muni zones, seven have been extended to provide additional capacity at peak times, up from four in September 2016.
- In December 2017, 35 percent of stop events occurred in standard, non-extended Muni zones, down from 48 percent in September 2016. Another 15 percent of December 2017 stop events occurred in Muni zones that are extended at peak times to allow Muni and shuttles to access the curb at the same time, up from 8 percent in September 2016.

Far Fewer Shuttles on Smaller or Restricted Streets

In December 2017, an average of eight shuttles operated on unauthorized streets per day, and an average total of 163 shuttles operated on unauthorized streets per month. This represents a 47 percent decrease from an average of 15 shuttles operating on unauthorized streets per day and a 51 percent decrease from an average total of 334 shuttles operating on unauthorized streets per month in August 2016.

Dedicated Enforcement

A detail of SFMTA Parking Control Officers is specifically focused on Commuter Shuttle Program enforcement. Parking Control Officers issued 2,830 citations worth \$389,288 to permitted shuttle vehicles in Fiscal Year 2017 and 1,301 citations worth \$136,495 in the first half of Fiscal Year 2018. Parking citation revenue goes to the SFMTA general fund.

Conclusion

Data collected between October 2016 and December 2017 shows that even as shuttle ridership is up and there are more shuttle vehicles on San Francisco streets the Commuter Shuttle Program has continued to reduce the number of shuttles on restricted streets or in conflict with transit. The establishment of a regulatory framework by the SFMTA has created a mechanism by which the agency has been able to take an active role in regulating vehicles that are legally allowed on San Francisco streets. This regulation is making our streets safer and helping to mitigate a myriad of conflicts while reducing the impacts of large shuttle vehicles. It also provides the tools and flexibility necessary to manage what is a rapidly evolving landscape of transportation opportunities and challenges.

INTRODUCTION

This report provides an update on the Commuter Shuttle Program, adopted by the San Francisco Municipal Transportation Agency (SFMTA) Board of Directors in November 2015 and launched on April 1, 2016. The SFMTA has taken the proactive step of regulating commuter shuttles to improve the City's overall transportation network.

State law allows commuter shuttles to operate in San Francisco. The city's regulatory approach is focused on enhancing pedestrian safety, minimizing conflicts with Muni, reducing emissions, improving traffic flow, keeping larger buses off smaller non-arterial streets, and limiting unsafe boarding situations.

Background

Prior to 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 non-arterial streets. Shuttles loaded and unloaded passengers in a variety of places whether it was legal or not, 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 neighbors, inconsistent enforcement, and real and perceived conflicts with other transportation modes.

The SFMTA developed a regulatory approach to address these issues that included (a) creating a shuttle operator permit that defined terms of compliance for permit holders, and (b) identifying of a set of locations that permitholding shuttles were allowed to use for loading and unloading passengers. In January



Introduction

2014, the SFMTA Board approved an 18-month Pilot Program to test the regulations. The Pilot Program began in August 2014. It created a network of select stops shared by Muni and commuter shuttles as well as dedicated shuttle only loading zones for permitted commuter shuttles during specific times of day.

Based on an evaluation of the Pilot Program¹, the SFMTA recommended a number of changes for a new Commuter Shuttle Program moving forward. Regulations that were adopted as part of the current program to address needs identified in the evaluation of the Pilot included restricting shuttles over 35 feet in length to the California Department of Transportation (Caltrans) designated arterial streets and requiring new shuttle vehicles to meet 2012 California emissions standards.

In November 2015, the SFMTA Board passed legislation creating the current Commuter Shuttle Program. The Commuter Shuttle Program went into effect on April 1, 2016 with a one-year term limit. In October 2016, the SFMTA completed a six-month evaluation of the program to evaluate its impact². Data collected between April and September 2016 showed that the shuttle program improved shuttle vehicle behavior with fewer shuttles on restricted streets or in conflict with transit even as shuttle ridership increased. On February 21, 2017, the SFMTA Board voted to approve the Commuter Shuttle Program. The vote allowed the SFMTA to continue regulating operations of commuter shuttles in San Francisco and charging a per-stop fee beyond March 31, 2017.

Principles of the Commuter Shuttle Program

Based on the results of the Pilot evaluation, the air quality analysis conducted as part of the San Francisco 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 current Commuter Shuttle Program policy:

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

¹ Commuter Shuttle Pilot Program Evaluation Report, October 5, 2015. <u>https://www.sfmta.com/sites/default/files/projects/2015/Evaluation%20Report%20</u> -%20Oct%205%202015.pdf

² Commuter Shuttle Program April-September 2016 Status Report, November 2016. <u>https://www.sfmta.</u> <u>com/sites/default/files/projects/2016/Commuter%20</u> <u>Shuttle%20Program%20Mid%20Term%20Sta-</u> <u>tus%20Report.pdf</u>

COMMUTER SHUTTLE PROGRAM OVERVIEW

The current Commuter Shuttle Program applies to privately-operated transportation services that move commuters to, from, and within San Francisco. Participation in this program is voluntary.

Rules adopted as part of the current program include the following:

- Shuttles over 35 feet in length operating under a permit may only travel on Caltransdesignated arterial streets when in San Francisco;
- The number of shuttle stop locations is capped at 125;
- To operate in the permit program, any new shuttle vehicle must meet 2012 California emissions standards;
- Shuttle operators must provide a Service Disruption Prevention Plan describing how they deal with service disruptions, including those due to potential labor disputes;
- Shuttle operators must provide the SFMTA with continuous real-time GPS tracking data for all vehicles registered in the program; and
- Shuttle operators must submit Accessibility Plans describing their procedures for providing service to people with disabilities.

Commuter Shuttle Network

SFMTA's Commuter Shuttle Program requires that permit-holding shuttles longer than 35 feet travel only on streets designated by Caltrans as arterials. By requiring larger vehicles to use arterials, a large portion of shuttle vehicle travel is shifted off of smaller streets. Permit-holding shuttles shorter than 35 feet long are permitted to travel on non-arterial streets, as long as the streets do not have other restrictions. No commuter shuttles are permitted to travel on 3-ton weight-restricted streets or 9-passenger capacity-restricted streets (Figure 1). As the Commuter Shuttle Program's rules and regulations apply only to shuttle operators who wish to use designated commuter shuttle zones, shuttles that are not in the Program may operate on any street in the city except those with weight or capacity restrictions and may stop a legal loading locations such as white passgenger loading zones, yellow commerical loading zones, and other available curb space as long as the vehicle does not block traffic.

Commuter Shuttle Zones

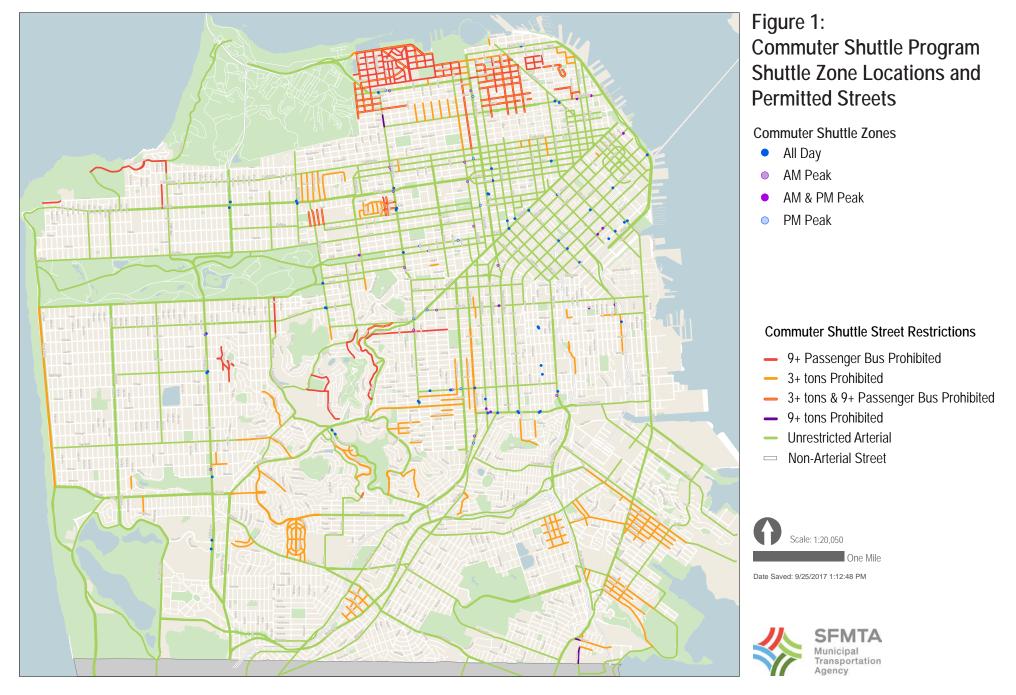
There are currently 100 shuttle zones in the shuttle network of which 67 are shared Municommuter shuttle zones and 33 are permitted commuter shuttles-only white zones. The Program allows up to 125 zones in the City (see Figure 1 for current shuttle zones).

Zone Changes

The SFMTA regularly makes changes to the commuter shuttle stop network to improve safety, reduce conflicts with Muni, and address neighborhood concerns (Figure 2). Staff takes a number of factors into consideration when proposing potential commuter shuttle zones. First and foremost are safety concerns for people walking and biking. Others include potential conflicts with Muni; parking impacts and blocked driveways; trees and curb bulbs that could prevent shuttles from pulling out of traffic; adjacent land uses; shuttle activity and volumes; and proximity to other shuttle stops.

Between September 2016 and December 2017, the SFMTA removed 19 commuter shuttle zones and added 10 new ones.

• *Total zones*: The total number of designated commuter shuttle zones in San Francisco decreased from 109 in September 2016 to 100 in December 2017.



Commuter Shuttle Program Overview

- Zone type: The Commuter Shuttle Program aims to minimize conflicts between shuttles and Muni vehicles. The number of shared Muni-commuter shuttle zones fell from 80 to 67 between September 2016 and December 2017, while the number of shuttle-only white loading zones increased from 29 to 33. Of those shared Muni zones, seven have been extended to provide additional capacity at peak times, up from four in September 2016. Two of the shared Muni zones are open to shuttles only at offpeak hours.
- Zone position: Large vehicles stopped at the "near-side" approach to an intersection can obstruct turning drivers' view of pedestrians entering the crosswalk. The number of near-side stops decreased from 35 to 31 between September 2016 and December 2017. Just 11 of these remaining near-side stops are at unsignalized intersections, and none of these sees more than 20 stop events per day.

Zone changes implemented since September 2016 include:

- A new stop on Mission Street near Spear Street to replace a stop on Howard Street that posed conflicts with a bike lane (Spring 2017)
- Changes to stops along 24th Street in Noe Valley (Summer 2017 see inset)
- Adjustment of a stop on 16th Street in the Castro to address neighbor concerns and ensure shuttles do not block travel lane (Summer 2017)
- Replacement of stops on Divisadero Street in Lower Pacific Heights (Fall 2016 and Fall 2017 – see inset)
- Changes to stops in the Chinatown/North Beach area to minimize conflicts with Muni and ensure safer shuttle routing (Fall 2017)

Zone Change Outreach

Members of the public have opportunities to comment on proposed shuttle zones in



Figure 2 Commuter Shuttle Stop Changes, September 2016 to December 2017

Sep-16 Dec-17

Noe Valley Stop Changes

During the Commuter Shuttle Pilot Program, the SFMTA recorded more complaints from Noe Valley than any other neighborhood. Many of these complaints were about the impact of large shuttle vehicles travelling on small neighborhood streets. To address that concern, the Commuter Shuttle Program requires shuttles over 35 feet in length to travel only on state-designated arterial streets.

When this requirement went into effect in April 2016, shuttles became increasingly concentrated on 24th Street, the only eastwest arterial street in the area. By Spring 2017, over 80 shuttles were stopping at the shared Muni zone at the southwest corner of 24th & Church Streets each morning, with a similar number stopping at the Muni zone in the westbound direction each evening. Many residents expressed concerns about this congestion, as traffic often backed up for blocks behind shuttles waiting to get into the shuttle stop, and Muni had to load and unload passengers in the street.

In April 2017, the SFMTA held an open house attended by dozens of neighbors, including a number of shuttle riders, to discuss how the shuttle stops along 24th Street could be relocated to address congestion and impacts on Muni. Residents proposed locations where shuttles could stop along the corridor and the SFMTA evaluated these options from an engineering perspective. Based on this public input and engineering analysis,

person or through written communication at Engineering Public Hearings and SFMTA Board meetings. Staff posts notices on nearby light poles, contacts nearby businesses, notifies commuter shuttle operators and mails notices to all addresses within two blocks along the street and one block on either side of proposed the SFMTA proposed creating a new shuttle only loading zone at 24th & Church Streets in the morning, and allowing shuttles to stop at an extended Muni zone at 24th & Dolores Streets in the evening.

The SFMTA Board approved the proposal in July 2017, and it was implemented in September 2017. Staff collected data at the stop before and after the changes went into effect and found that conditions significantly improved. At the previous morning (eastbound) stop, 43 percent of shuttles blocked the travel lane while loading. After the new stop was implemented, that number declined to eight percent. Three Muni vehicles were blocked from accessing the curb in the morning before the change, while none were obstructed afterwards. At the previous evening (westbound) stop, up to 12 vehicles queued up behind shuttles unloading passengers, extending two blocks down the street, while no queuing was observed at the new stop.

While the SFMTA continues to receive reports of shuttle problems in the area, these complaints have become more focused on issues like idling, staging, and travel on restricted streets, rather than operational issues at the shuttle stop. New schedule coordination between shuttle operators is expected to continue to reduce the number of shuttles blocking the travel lane, and the agency is engaging with shuttle operators to address idling and staging issues on neighborhood streets in the morning.

shuttle loading zones before Engineering Public Hearings. Updates are sent to the SFMTA's email list before SFMTA Board meetings, and staff members often contact interested neighborhood organizations, merchant groups and Supervisors' offices.

Commuter Shuttle Program Overview

The SFMTA received comments from at least 60 members of the public about stop changes between September 2016 and December 2017. Comments came both from shuttle riders and from other neighborhood residents. Many residents were concerned about restrictions on parking and the impact of shuttles on their neighborhood streets, and some riders opposed stop changes that could make the stop locations less convenient. Other riders and neighbors supported changes to address issues at existing stops.

The SFMTA altered a number of stop proposals in response to community feedback when other feasible alternatives were identified. Staff continues to closely monitor conditions at shuttle zones across the city and to explore potential changes when technical issues arise.

Impacts on Automobile Parking

Permitted commuter shuttle-only white zones now restrict parking in a total of 117 parking spaces during morning peak hours and 83 parking spaces in the evening peak, an increase from 89 spaces in the morning and 70 in the evening in September 2016. There are appoximately 280,000 on-street parking spaces in San Francisco so this represents a very minimal amount of the overall parking supply. Some of the busiest shared Munishuttle zones in the city along corridors like 24th Street and Divisadero Street were removed and replaced by separate shuttle only loading zones or extended shared Muni zones nearby that restrict parking during peak hours on weekdays.

Permit Fee

The SFMTA charges each participating shuttle operator a permit fee based on the number of stop events each operator makes. A "stop event" is defined as an individual instance of a shuttle vehicle stopping at a zone in the shuttle zone network. The current "stop event" fee is \$7.31 per stop event. For example, a shuttle service provider that has 10 vehicles making 10 stop events each per day is charged for 100 stop events per day or a total of \$731 per day. Permittees offering service that is free and open to the public are exempt from stop event fees. The permit fee covers the costs to SFMTA to administer the program, including deployment of Parking Control Officers to monitor shuttle behavior. The SFMTA collected \$5.7 million in permit fees in Fiscal Year 2017 and \$3.1 million in the first half of Fiscal Year 2018.

Permittees

Shuttle operators must apply for a permit to participate in the Commuter Shuttle Program and permits must be renewed each year. There are currently 16 shuttle service providers with Commuter Shuttle permits:

- Bauer's Intelligent Transporation, Inc.
- Bishop Ranch
- Black Tie Transportation
- Compass Transportation
- Corinthian International Parking Services
- Hallcon Transportation (formerly Loop)
- Kaiser Permanente
- Lux Leasing
- Lux Bus America
- MV Transportation/Mission Bay TMA
- Pure Luxury Transportation
- Royal Coach Tours
- San Francisco Minibus
- Storer Coachways
- Transmetro
- WeDriveU

Divisadero Stop Changes

With the implementation of the Commuter Shuttle Pilot Program in 2014, shuttles were allowed to stop at the Muni zones on Divisadero Street at California Street in the north and southbound directions. Other stop locations in the Pacific Heights area were on non-arterial streets and had to be removed when the new Commuter Shuttle Program went into effect, resulting in an increase in traffic at the stops on Divisadero at California Streets.

The northbound shuttle stop on Divisadero at California Streets was difficult for shuttles to access via the arterial network, so staff proposed removing it from the shuttle network and instead allowing shuttles to stop at the northbound Muni zone at Divisadero and Bush Streets. The proposal included extending the Muni stop by two parking spaces during evening peak hours, as well as reconfiguring loading zones on the block to make them more useful for businesses. The SFMTA Board approved these changes in December 2016 and they were implemented in early 2017.

The SFMTA also received complaints about the southbound stop on Divisadero at California Streets, specifically shuttles blocking the travel lane at and preventing Muni from pulling to the curb at this busy transfer point. To address these issues, the SFMTA proposed removing the stop at Divisadero and California Streets and designating the southbound Muni stop at Divisadero and Pine Streets for shuttle use instead. In order to accommodate shuttle vehicles, staff proposed extending the Muni stop during morning peak hours, restricting two parking spaces.

When discussing the proposed change in the southbound direction with nearby businesses, the SFMTA found that most were not opposed to this proposal, but businesses were not in favor of the restriction of parking during the evening peak hours at the northbound stop across the street because it reduced available customer parking for adjacent businesses open during the evening hours. Staff observed the stop during evening peak hours and based on the data collected found that extending the Muni zone was not necessary, as there were no instances where a shuttle and a Muni vehicle arrived at the same time. As a result, staff proposed restoring private car parking in those spaces during the evening commute hours.

In September 2017, the SFMTA Board approved restoring parking at the northbound stop during evening rush hours and moving the southbound stop to Divisadero and Pine Streets. Staff collected data at the southbound stop before and after it was moved and found that the proportion of shuttles blocking the travel lane fell from 28 percent to eight percent. At the old stop, two Muni vehicles had to load in the street due to shuttles occupying the stop, while at the new stop no Muni vehicles were affected. Since the change the SFMTA has not received any complaints about shuttle behavior in either direction.

SHUTTLE ACTIVITY

Stop Events

The number of daily stop events increased from 3,150 daily stop events in September 2016 to 3,470 daily stop events in December 2017, an increase of around 10 percent (Figure 3).

The composition of stop events also changed due to changes in the commuter shuttle zone network. In December 2017, 35 percent of stop events occurred in standard, nonextended Muni zones, down from 48 percent in September 2016. Another 15 percent of December 2017 stop events occurred in Muni zones that are extended at peak times to allow Muni and shuttles to access the curb at the same time, up from 8 percent in September 2016, while the proportion of stop events at shuttle-only white zones rose to 50 percent from 44 percent during the same period. (Figure 4)

Figure 5 lists the ten shuttle zones with the highest number of daily stop events. These zones are generally located along high volume

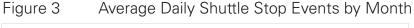
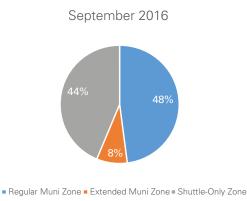


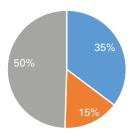


Figure 4

Proportion of Stop Events by Stop Type







Regular Muni Zone Extended Muni Zone Shuttle-Only Zone

Shuttle Activity

arterial corridors such as Van Ness Avenue, Lombard Street, and Market Street.

Figure 6 shows the total number of daily shuttle stop events that occurred at all active zones within the shuttle network in December 2016. Stop event totals at shuttle zones ranged from 0 to 123 stop events per day.

Shuttle Volumes

Approximately 450 unique shuttle vehicles operate on San Francisco streets every day, which represents a 15 to 25 percent increase from the 360 to 390 unique vehicles that operated daily on San Francisco streets at the time of the 2016 Status Report. A single shuttle vehicle may make multiple trips to and from or within San Francisco throughout the course of a day.

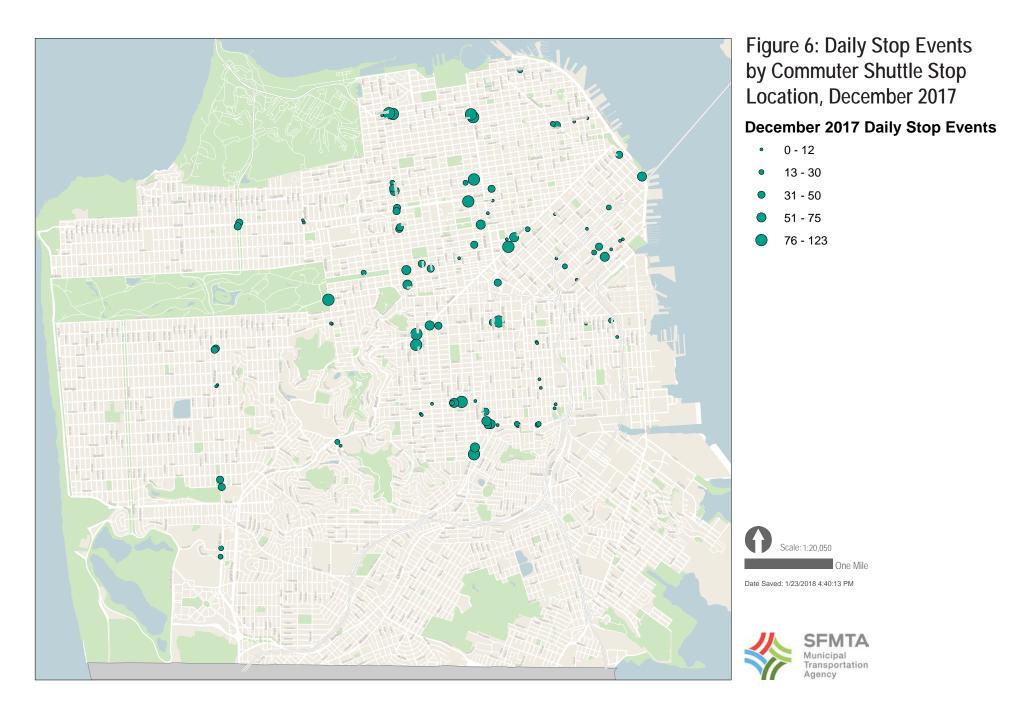
The vast majority of shuttle activity occurs between the hours of 5 a.m. to 11 a.m. and 4 p.m. to 10 p.m. with the p.m. period seeing the highest level of shuttle volumes. In December 2017, the daily average number of shuttles travelling during the morning hours (5 a.m. to 11 a.m.) was around 390 unique vehicles, and the daily average of shuttles travelling during the evening hours (4 p.m. to 10 p.m.) was around 400 unique vehicles.

Shuttles volumes have increased since the 2016 Status Report. At the time of the 2016 Status Report, the daily average number of shuttles travelling during morning hours ranged between 204 and 240 unique vehicles, and the daily average number of shuttles travelling during evening hours was between 189 and 227 unique vehicles.

Shuttle travel activity is distributed throughout San Francisco, but is particularly concentrated along certain corridors within the city (Figure 7). SFMTA staff used real-time shuttle GPS data to identify which corridors experienced the highest levels of shuttle activity in December

Figure 5 Most Utilized Commuter Shuttle Stop Locations, December 2017

Stop location	Daily stop events
9th St & Market St, SE corner (AM and PM stop)	120
Van Ness Ave & Union St, SE corner (PM stop)	111
Franklin St & Bush St, NE corner (PM stop)	109
Lombard St & Scott St, SE corner (AM stop)	105
Van Ness Ave & Filbert St, SW corner (AM stop)	105
Lombard St & Scott St, NW corner (PM stop)	103
Gough St & Geary Blvd, SW corner (AM stop)	93
16th St & South Van Ness Ave, NW corner (AM and PM stop)	91
Stanyan St & Waller St, NW corner (AM and PM stop)	84
24th St & Dolores St, NW corner (PM stop)	83



Shuttle Activity

2017. Staff used distinct counts of license plate numbers to identify the number of unique vehicles traveling hourly on each of the corridors identified below.

Cesar Chavez Street and Van Ness Avenue (north of Market Street) are the two corridors that experience the highest shuttle volumes during both the morning and evening travel periods. Cesar Chavez Street experiences a total of over 200 unique hourly shuttle trips during the morning and the evening commute periods. The corridors with the highest shuttle volumes during the morning commute period are generally the same corridors with the highest shuttles volumes in the evening commute period, with a few exceptions (Figure 7).

Service Area

Commuter shuttles provide both intercity and intracity service. Intercity service represents trips with a start or end point within San Francisco and the other point outside of the City, while intracity trips begin and end within San Francisco. The majority of daily shuttle trips are intercity trips. 92 percent of daily shuttle trips occur on intercity routes, while only eight percent of daily shuttle trips begin and end within San Francisco³. At the time of the 2016 Status Report, approximately 85 percent of daily shuttle trips occurred on intercity routes.

Ridership

An estimated 8,900⁴ people board commuter shuttles at designated Commuter Shuttle Program stops in San Francisco each day. This represents a ten percent increase since spring 2016, when approximately 8,100⁵ people boarded shuttles at designated shuttle stops. The number of daily boardings on intracity circulator shuttles in the program fell from 528 to 384, a decrease of over 25 percent, while the number of daily boardings on regional shuttles rose from approximately 7,500 to 8,500, an increase of over 13 percent.

The morning shuttle-only zone on Van Ness Avenue at Filbert Street saw the highest ridership in the city with over 600 daily boardings. The next-busiest stops were on Mission Street between Steuart and Spear Streets, with nearly 600 daily boardings, Gough Street and Geary Boulevard, with just under 500 daily boardings, and 24th and Church Streets, with over 400 passengers boarding shuttles each morning. Ridership is highly concentrated among a small number of stops, with the top 15 stop locations comprising over 60 percent of daily boardings.

³ This number is based on route data provided by shuttle operators in August 2017.

⁴ This number is an estimate based on ridership data provided by shuttle operators from December 6, 2017. Some shuttle operators' ridership sensors do not differentiate between boardings and alightings, so the number of boardings was estimated based on time of day and directionality.

⁵ This number was revised since this shuttle ridership data was originally published. This number no longer includes ridership from stops that are not in the Commuter Shuttle Program stop network and corrects errors in the ridership data of two shuttle operators.

Shuttle Activity

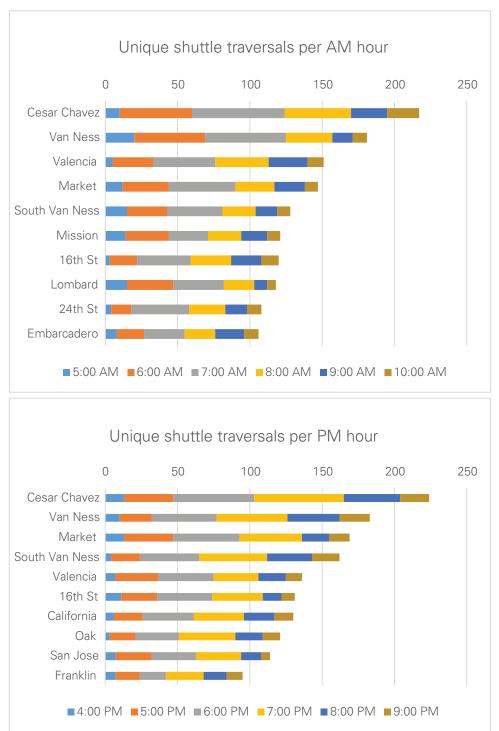


Figure 7 Shuttle Volumes on the 10 Most Traveled Corridors, December 2017

SHUTTLE VEHICLES

There are currently 966 vehicles registered in the Commuter Shuttle Program. This includes back up vehicles that do not operate on a daily basis. On an average day, around 450 vehicles are operating in commuter shuttle service in San Francisco.

Vehicles by Size

Of the 966 vehicles registered in the Commuter Shuttle Program, 731 vehicles are "large" vehicles greater than 35 feet in length, and 234 vehicles are "short" vehicles less than 35 feet in length. Vehicles greater than 35 feet in length are required to travel on the Commuter Shuttle Program's designated arterial network while vehicles under 35 feet in length may operate on any street that does not possess a weight or passenger restriction.

The total number of vehicles registered with the Commuter Shuttle Program has grown by 33 percent since the 2016 Status Report. The proportion of large vehicles as a percentage of the registered vehicle fleet has decreased from 80 percent to 75 percent, and the proportion of small vehicles as a percentage of the registered vehicle fleet has increased from 20 percent to 25 percent. In specific cases, some shuttle operators have replaced large vehicles with vehicles under 35 feet in length in order to continue to operate on non-arterial streets.

Clean Vehicles

Shuttles in San Francisco have become noticeably cleaner following the implementation of the current Commuter Shuttle Program due to program requirements which stipulate that any new vehicles registered with the program - that were not used in the pilot program must be vehicle model year 2012 or newer or be equipped with a power source that complies with emissions standards applicable to model year 2012 vehicles of the same type. As of January 1, 2020 the program will require that all shuttles belonging to permitted operators be model year 2012 or newer. Newer coach models are increasingly fuel efficient and produce lower quantities of particle emissions than their older counterparts.

At the time of the 2016 Status Report, 76 percent of shuttles belonging to registered operators were model year 2012 or newer. In January 2018, the percentage of registered shuttle vehicles model year 2012 or newer had increased to 83 percent.

COMPLAINTS AND ENFORCEMENT

A key element of the Commuter Shuttle Program is the agreement of permittees to comply with a set of shuttle permit terms and conditions. The SFMTA enforces these terms via real-time vehicle GPS tracking data and a team of dedicated parking control officers. Permittees who fail to comply with permit terms and conditions are subject to citations and administrative penalties. Commuter shuttle permit terms and conditions include but are not limited to:

- Shuttles with placards may use zones in the commuter shuttle network. Shuttles without placards may not use any zone in the designated network.
- Shuttles may use designated stops only while actively loading and unloading.
- Shuttles are to pull as far forward as they can and to the curb. They must not block crosswalks or impinge on bike lanes, interesctions or other traffic lanes.
- Shuttles must follow all existing traffic laws, including street restrictions and CPUC permitting requirements.

- Shuttles over 35 feet in length must travel only on Caltrans-designated arterial streets.
- Shuttles must transmit live GPS location data to SFMTA servers whenever they are in shuttle service in San Francisco.

Citations

A detail of SFMTA Parking Control Officers is specifically focused on Commuter Shuttle Program enforcement. Parking Control Officers issued 2,830 citations worth \$389,288 to permitted shuttle vehicles in Fiscal Year 2017 and 1,301 citations worth \$136,495 in the first half of Fiscal Year 2018. Parking citation revenue goes to the SFMTA general fund.

Commuter shuttle citation numbers vary widely month to month and may not indicate specific trends. Factors affecting citation numbers range from Parking Control Officer staffing and allocation, to shuttle volumes and compliance. Permitted commuter shuttle vehicles received an average of 235 citations per month between October 2016 and December 2017. (Figure 8)

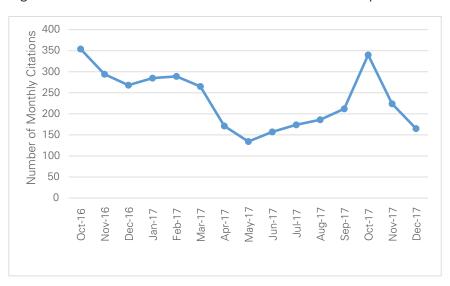


Figure 8 Number of Shuttle Vehicle Citations by Month

Complaints and Enforcement

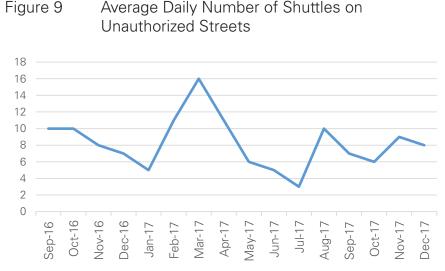
Administrative Penalties

Permit-holding shuttle operators are required to provide real-time GPS data regarding shuttle vehicle movements. This data enables the SFMTA to track when a given vehicle travels onto an unauthorized street (either a non-arterial street or a weight or passenger capacity restricted street). Vehicles longer than 35 feet in length operating under a permit are prohibited from traveling on streets that are not a part of the state-designated arterial network. Permit holding vehicles under 35 feet in length may travel on streets off of the arterial network but are prohibited from operating on streets with weight or passenger restrictions. Shuttles that travel on unauthorized streets are subject to fines or administrative penalties.

The SFMTA monitors all weekday shuttle activity and issues a fine of \$250 to any vehicle that operates on unauthorized streets on a given day. For example, if a vehicle travels on a non-arterial street every day of a five-day work week, the operator would be fined \$1,250.

In December 2017, an average of eight shuttles operated on unauthorized streets per day, and

an average total of 163 shuttles operated on unauthorized streets per month. This represents a 47 percent decrease from an average of 15 shuttles operating on unauthorized streets per day and a 51 percent decrease from an average total of 334 shuttles operating on unauthorized streets per month in August 2016.



While the average number of shuttles operating on unauthorized streets per day has fluctuated since August 2016, it has generally remained below the August 2016 benchmark of 15 shuttles per day. The one exception was in May 2017, when the number of shuttles operating on unauthorized streets per day grew to 16. Figure 9 shows the total number of shuttles operating on unauthorized streets per day between September 2016 and December 2017.

As noted earlier, shuttles can receive administrative penalties for operating on either non-arterial streets (in the case of large shuttles) or streets with weight and passenger restrictions. The majority of violations for which administrative penalties have been issued are for shuttle activity on non-arterial streets. In Fiscal Year 2017 a total of \$596,000 in administrative penalties was issued. In the first six months of Fiscal Year 2018, a total of \$211,500 in administrative penalties have been issued.

Complaints and Enforcement

Complaints

The SFMTA receives complaints from the public through a number of sources, including 311, San Francisco Board of Supervisors' offices, and direct emails and phone calls from members of the public to staff. Staff log these complaints and communicate them with a request for action to the relevant shuttle operator(s). As needed, staff also follow up with the commuter shuttle enforcement detail.

The SFMTA received 939 complaints about shuttle behavior between September 2016 and December 2017. The number of complaints per month varied widely, from 21 in July 2017 to 107 in February 2017. (Figure 10) At least 143 individuals submitted complaints about shuttle behavior (several dozen were submitted anonymously). One particularly active community member from the Noe Valley area submitted around 58 percent of the total number of complaints received during this period.

Complaints about commuter shuttle behavior relate to a number of issues (Figure 11).

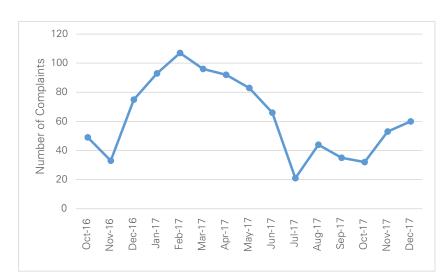
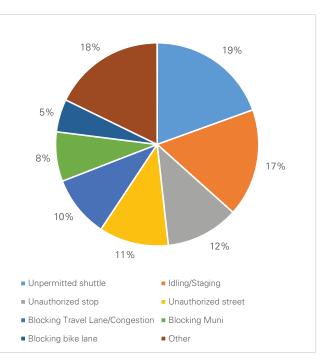


Figure 10 Total Number of Monthly Complaints

Figure 11 Complaints by Type, October 2016-December 2017



The most common complaints were about unpermitted shuttles using shuttle zones, shuttles idling and staging in neighborhoods, and shuttles stopping in unauthorized locations. In the first six months of the Commuter Shuttle

> Program, between April and September 2016, shuttles traveling on unauthorized streets comprised 32 percent of complaints, falling to 11 percent in the period since September 2016. Idling and staging complaints have increased from ten percent to 17 percent in the same timeframe.

CONCLUSION

Data collected and analyzed for this evaluation report on the Commuter Shuttle Program shows ongoing progress in achieving the objectives of the program and continued improvement in compliance with the rules and regulations of the program by participating shuttle operators, despite a 15 to 25 percent increase in daily shuttle volumes and a 10 percent increase in ridership.

Since September 2016:

- The total number of shuttles zones has decreased from 109 to 100 as of December 2017.
- The number of shared Muni zones decreased from 80 to 67, reducing the potential for conflicts between shuttle vehicles and Muni buses. In addition, three shared Muni zones were extended to provide more room for vehicles to pull to the curb.
- Continuous real-time GPS tracking data for all vehicles registered in the program has enbled the SFMTA to identify any vehicles travelling on unauthorized streets resulting in:
 - A 51 percent decrease in the total number of shuttle vehicles operating on unauthorized streets each month (334 shuttles in August 2016 to 163 shuttles in December 2017). In April 2016, 3,696 shuttles operated on unauthorized streets each month.
 - A 47 percent decrease in the daily average number of shuttle vehicles operating on unauthorized streets. In December 2017, an average of eight shuttles per day operated on unauthorized streets, compared to 15 shuttles per day in August 2016. At the start of the program in April 2016, 195 shuttles operated on unauthorized streets per day.

• The percentage of vehicles model year 2012 or newer has increased from 76 percent in September 2016 to 83 percent in December 2017, helping to reduce environmental impacts.

In addition, a number of changes were made to the stop network in areas identified in the 2016 Status Report and based on feedback from community members. Those changes include:

- A new stop on Mission Street near Spear Street to replace a stop on Howard Street that posed conflicts with a bike lane (Spring 2017)
- Changes to stops along 24th Street in Noe Valley (Summer 2017)
- Adjustment of a stop on 16th Street in the Castro to address neighbor concerns and ensure shuttles do not block the travel lane (Summer 2017)
- Replacement of stops on Divisadero Street in Lower Pacific Heights (Fall 2016 and Fall 2017)
- Changes to stops in the Chinatown/North Beach area to minimize conflicts with Muni and ensure safer shuttle routing (Fall 2017)
- Expanded hours at evening shuttle-only white zones to reduce instances of shuttles double-parking in the travel lane outside the designated shuttle zone hours, when the white zones revert to regular parking spaces and are no longer available for shuttles to use.

While the Commuter Shuttle Program continues to evolve to address needs and issues as they arise, data and experience shows that there are still areas of the current program where adjustments are needed:

• Some locations within the denser neighborhoods of San Francisco are more than a 10-minute walk to the nearest shuttle stop. While locations such as the Marina

Conclusion

have weight restricted streets limiting the placement of shuttle zones, coverage in the Mission neighborhood could be improved with the addition of new shuttle zones.

- The implementation of the arterial network has shifted shuttle traffic off of small streets. However, this has resulted in increased concentration of shuttle volumes on select streets such as Valencia Street. While Valencia Street is defined by Caltrans as an arterial, it also is part of the City's designated bike network and one of the most heavily bike routes in the City. Given this, looking at parallel street options in the Mission neighborhood could reduce the potential for conflicts between shuttles and cyclists.
- The SFMTA uses the Caltrans arterial network to define the streets on which streets shuttle vehicles larger than 35 feet must travel. While the Caltrans arterial network generally addresses public concerns regarding keeping large vehicles off smaller streets, the current program has highlighted areas where this network does not necessarily reflect the needs of the City and the program:
 - Early in the current program, shuttle operators identified a number of small gaps in the Caltrans-designated arterial network that forced large shuttles to drive far out of their direction of travel in order to avoid receiving administrative penalties. For instance, all of Golden Gate Avenue and Turk Street between the Inner Richmond and Market Street are designated arterials with the exception of one block of Golden Gate and two blocks of Turk west of Van Ness Avenue. The SFMTA analyzed these gaps in the network based on criteria including width, grade, and

predominate land use and designated 17 short one- or two-block non-arterial segments on which shuttle operators would not receive penalties for large shuttle travel.

• Residents on Waller Street in the Haight have complained that their street is a Caltrans-designated arterial even though it is narrow and residential in character. Other small residential streets like 36th Avenue in the Richmond and 28th Avenue in the Sunset are designated arterials as well.

While this is an evolving program, this evaluation shows that the Commuter Shuttle Program is working. Shuttle ridership is up, but there are fewer shuttles on restricted streets or in conflict with transit. The establishment of a regulatory framework allows the SFMTA to take an active role in regulating vehicles that are legally allowed on San Francisco streets. This regulation is making our streets safer and helping to mitigate a myriad of conflicts while reducing the impacts of large shuttle vehicles. It also provides the tools and flexibility necessary to manage what is a rapidly evolving landscape of transportation opportunities and challenges.