

M E M O R A N D U M

DATE: September 4, 2012

TO: SFMTA Board of Directors
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THROUGH: Edward D. Reiskin
Director of Transportation

THROUGH: Bond M. Yee
Director of Sustainable Streets

FROM: Cari Paine
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SUBJECT: Private Shuttle Policy Development

This memo responds to the San Francisco Municipal Transportation Agency (SFMTA) Board of Directors' request for an update on the SFMTA's work to develop policies for private shuttles. This memo summarizes new information gathered about the shuttle sector and describes the key goals and objectives of the policy development process. A presentation on the contents of this memo will be presented at the September 14, 2012 Policy and Governance Committee meeting.

Background

The Muni Partners Program responds to a growing sector of privately operated shuttles in San Francisco. Funded by Metropolitan Transportation Commission's (MTC's) Innovative Climate grant program, Muni Partners is one element of a larger Integrated Transportation Demand Management (TDM) project, which is jointly being conducted by SFMTA, the San Francisco County Transportation Authority, the Department for the Environment, and the Planning Department.

The Muni Partners Program supports the following SFMTA's 2013-2018 Strategic Plan objectives:

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

Through the Muni Partners Program, the SFMTA is working collaboratively with shuttle providers in the Muni Partners Program to:

- Collect information about the benefits and effects of the private shuttle sector in San Francisco
- Establish clear curb use policies
- Develop a shuttle identification system
- Foster effective communications between private shuttle providers and the public sector

Data Collection

Over the past nine months, the SFMTA has collected a series of data to better understand where shuttle activity is happening, the nature of shuttle impacts, and the extent of shuttle benefits. Table 1 outlines the data that has been collected to date.

Data	Method	Purpose	Status
Consolidated Shuttle Provider Inventory	SFMTA outreach and interviews with shuttle providers	Provides inventory of known shuttle services that operate wholly or partially within San Francisco	Completed— February 2012, with ongoing updates and additions
Shuttle-Related Public Communications	SFMTA consolidation of received communications from members of the public, including comments received via San Francisco Supervisorial offices and the 311 system	Compiles range of communicated concerns and complaints, identifying hot spots of potential impacts	Ongoing
Citywide Weekday Shuttle Activity	Shuttle operators provided stop locations, schedules, and routes across San Francisco. These were	Quantifies magnitude of shuttle activity at intersections and corridors	Completed – June 2012

	then mapped to illustrate activity by location and time		
Stop Level Observation Data	Multi-day stop level observations analysis of 15 shuttle stop locations, capturing information about shuttle and Muni frequency, delay, and operational conflicts.	Investigate and quantify characteristics of a variety of kinds of stops with regard to intensity of use, conflicts with Muni and other users, and other local-level impacts.	Completed – July 2012
Fleet mix, Fuel use, Average Daily Boardings, Runs	Shuttle provider surveys and interviews by SFMTA, analysis by MTC's evaluation consultant	Provides information about route-level ridership, vehicle size for routes, and route frequency to quantify environmental benefits	Completed—August 2012
Rider survey (frequency of shuttle use, mode of access to shuttle, non-shuttle trip modes, auto ownership rates, etc.,)	Web-based surveys for regional and Intra-San Francisco providers to 27 providers; of these, 14 employers and institutions distributed to their riders. Analysis by MTC's evaluation consultant	Quantifies environmental benefits and provides information about how shuttle use impacts mode of non-commute trips, auto ownership rates, etc..	Completed—August 2012

Key Findings

Shuttle Riders:

- Average intra-SF shuttle rider uses a shuttle 3 days/week; average regional riders use the shuttle 4 days/week
- 29% of regional shuttle riders live in zero-car households; 18% of intra-SF shuttle riders live in a zero car household; 21% of all San Franciscans live in a zero-car household
- 40% of regional shuttle riders live in the Mission, Nob Hill, Castro, and Noe Valley neighborhoods, with the remainder spread across other San Francisco neighborhoods

- 25% of intra-SF shuttle riders are residents of the Haight, Cole Valley, and Inner Sunset neighborhoods, with another 25% of intra-SF shuttle riders residing outside of San Francisco, with the remaining riders live in other neighborhoods across San Francisco
- If the intra-SF shuttles were not in place, 27% of intra-SF shuttle riders state that they would drive alone; 5% would not make the trip at all; the remaining 67% would walk, bike, take transit, or carpool to get to work or school
- If the regional shuttles were not in place, 49% of riders state that they would drive alone, 31% would not be able to get to work or would not choose to have the job they have; the remaining 20% would get to work by transit, carpooling, or other sustainable modes
- 83% of regional shuttle riders walk to their shuttle stop; the most popular ways for intra-SF shuttle riders access their shuttle stops are by public transit (41%) and walking (31%)

Providers:

- There are at least 18 employers/institutions providing intra-SF shuttle service and 9 employers/institutions providing inter-county (mostly San Francisco to the Peninsula or South Bay) shuttle service
- Most institutions and employers contract out their shuttle service to shuttle vendors. Several own and operate their own shuttles.

Operations:

- Informal coordination between shuttle operators results in distribution of shuttles across the legs of intersections and over several blocks for high-demand locations
- Many shuttle operators train their operators to avoid impacts on Muni service by establishing and following operations guidelines such as:
 - Giving Muni buses priority
 - Allowing Muni buses to pass and access a stop before the shuttle accesses it
 - Not staging in bus stops
 - Quick boarding and alighting

Shuttle Trips:

- More than 35,200 individual trips are taken on private shuttles on an average weekday: 28,700 on intra-SF shuttles, and 6,500 on regional shuttles

Shuttle Stops:

- Shuttle providers load and unload at a combination of Muni zones and white loading zones
- Shuttle stops are clustered along several corridors (Van Ness, 24th St., Divisadero, Geary, Market, Townsend) and around transit hubs (BART, Muni Metro, and Caltrain stations); field data collection and shuttle provider reports demonstrate that providers spread themselves across different legs of intersections and across several blocks to avoid bunching with others
- Most layovers and staging activity take place at unoccupied metered spaces (early in the morning), outside of San Francisco (regional service), and in freight loading zones/cut-outs
- Most stops that are used by both shuttles and Muni have a higher Muni frequency than shuttle frequency during peak hours

Impacts:

- Conflicts include:
 - Shuttles blocking moving traffic (including bike lanes) either because of double parking to load/unload passengers, pulling only partway to a curb
 - Shuttles preventing use of Muni zone by Muni while they pick-up/drop-off passengers
 - Double parked loading shuttles blocking Muni view of passengers waiting at stops, resulting in Muni passing up a stop
 - Shuttle or Muni loading/unloading away from curb causing safety concern for passengers
- Findings regarding conflicts:
 - Conflicts are affected by the length of the bus bay/zone (longer zones experience fewer conflicts and are more easily shared), the presence of on-street parking immediately preceding the bus bay/zone (making it

more difficult to pull all the way into the stop), and frequency of Muni service at the stop

- Neighborhood streets, where Muni service is less frequent and bus bays are less constrained, experience fewer conflicts than arterials, which have higher-Muni frequency and are often more constrained
- The majority of observed shuttles dwelled at a stop for less than 1 minute to load or unload passengers. Exceptions took place at locations where the number of boardings required longer and where boarding and alighting took place in a commercial loading bay

Rider benefits:

- Access to school/work: If the shuttle was not an option, over 30% of regional shuttle riders would not be able or choose to take the job they have; 5% of Intra-SF shuttle riders would not be able or choose to take the job/go to school where they do
- Cost: The shuttles are free to eligible users. Additionally, shuttle riders experience cost savings from lower car use: 39% of regional shuttle riders have forgone purchasing a car, and 20% have gotten rid of a car because they are able to use the shuttle; 12% of Intra-SF shuttle riders have forgone purchasing a car and 6% have shed a car as a result of being able to use the shuttles

Environmental benefits:

- San Francisco-serving shuttles displace over 45 million vehicle miles travelled per year
- San Francisco-serving shuttles reduce over 11,000 metric tons of greenhouse gas emissions per year (this is the equivalent of the emissions from burning 25,581 barrels of oil)¹

Other benefits:

- Overall congestion decrease from reduced private vehicle trips (note: there may be local congestion impacts at some locations)
- Decrease in parking demand at and around institutions, employment centers, medical centers

¹ <http://www.epa.gov/cleanenergy/energy-resources/calculator.html>

- Decrease in residential parking demand associated with lower car ownership rates
- Increase in use of sustainable modes for all trips: 50% of intra-SF shuttle riders and 66% of regional shuttle riders state that they take sustainable modes (walk, bike, transit) for trips more since they began taking the shuttle

Policy Considerations

The primary policy considerations and issues associated with the private shuttle sector are:

- Public safety: Safety of all users is the most important consideration
- Environmental and transportation system benefits: Policy approaches should acknowledge shuttle benefits as they minimize shuttle impacts
- Interaction with Muni and general circulation patterns: Policies that guide shuttles should prevent negative impacts on Muni operations and general circulation
- Shuttle stops and curb use: Identifying where and when shuttles may stop will support their operations and create certainty for all stakeholders.
- Shuttle identification and communication between all parties: Responding to inquiries, complaints and providing on-going communication and information exchange between shuttle providers and the city is an on-going need
- Institutional considerations: how policies will be enforced, administered, and funded must be addressed as policies are developed

Next steps

Staff will work over next few months to develop policy options and will bring proposed direction and implementation approaches to MTAB in late Winter 2013.

