



Memorandum

AGENDA ITEM 12

DATE: July 21, 2020

TO: Transportation Authority Board

FROM: Hugh Louch - Deputy Director for Planning

SUBJECT: 07/28/20 Board Meeting: Update on the 15 Third Bus Study [NTIP Planning]

RECOMMENDATION ☒ Information ☐ Action

None. This is an information item.

SUMMARY

In December 2019, the Transportation Authority approved \$30,000 in District 10 Neighborhood Transportation Improvement Program (NTIP) Planning funds for the 15 Third Bus Study. At the request of Commissioner Walton, we have been conducting the study to evaluate the viability of returning the 15 Third bus to service, which was replaced by the T Third light rail line in 2007. The community has raised concerns about the T Third related to delays, switchbacks and train switching required at the Muni Metro East facility and the timeline to improve travel time and reliability of the current service. The request was made to evaluate returning bus service in advance of the signal improvements planned as part of the Central Subway.

We have reviewed existing conditions and identified two potential express bus routes for consideration to provide faster service to downtown. The service options included an express service along Third Street, terminating at Arleta Ave and Bayshore Blvd, and a loop service through Hunters Point, primarily using Hudson Avenue, Ingalls Street, and Palou Avenue. Both services are expected to attract significant numbers of riders - approximately 7,000 each. Some riders would be expected to shift from existing services but about 2,000 to 3,000 riders are expected to be new Muni riders on each service. Both services have characteristics similar to other express services.

San Francisco Municipal Transportation Agency (SFMTA) is currently pursuing implementation of a 15 Third express route in conjunction with the reopening of rail service in August.

- ☐ Fund Allocation
- ☐ Fund Programming
- ☐ Policy/Legislation
- ☒ Plan/Study
- ☐ Capital Project Oversight/Delivery
- ☐ Budget/Finance
- ☐ Contract/Agreement
- ☐ Other: _____



BACKGROUND

The NTIP is intended to strengthen project pipelines and advance the delivery of community supported neighborhood-scale projects, especially in Communities of Concern and other underserved neighborhoods and areas with at-risk populations (e.g. seniors, children, and/or people with disabilities).

In 2007, San Francisco began service on the new T Third Muni metro line, the first new light rail line in over half a century. Planned as part of a major expansion of transit service within San Francisco, the T Third route has long experienced delays, operational challenges, and poor reliability. While some improvements have been made to the current service and more are planned as part of the Central Subway, community members have expressed significant frustration with the current service and many have requested the return of the 15 Third bus service that the T replaced.

At the request of Commissioner Walton, the Transportation Authority staff, in coordination with staff from the SFMTA, conducted a technical evaluation of returning the 15 Third bus route to service to address community concerns.

DISCUSSION

The study was scoped as a technical analysis of a proposed addition of a new 15 Third transit service. The steps of the study included:

- Reviewing the current T third service (as of Fall 2019) and former 15 Third service operations, ridership, and performance, using readily available data.
- Summarizing existing and proposed changes in land use and development since the transition from the 15 to the T.
- Conducting a transit and walking tour of the corridor.
- Identifying potential options for a 15 Third bus service and reviewing with the Supervisor's office.
- Based on the potential service options, conducting two model runs to evaluate the potential impact of a restored bus service. As noted above, this analysis was conducted assuming that the T Third service would be retained as it was in the Fall of 2019.
- Developing a draft and final report.

Background Conditions. The current T Third service is less frequent, but higher capacity, than the prior 15 Third service that operated in this corridor. The first phase of this service also included a more circuitous route, traveling along The Embarcadero and entering the Market Street subway, while the prior bus service used Third and Fourth Streets to make a faster connection to downtown. A more direct connection will be restored when the Central Subway



opens in 2021, but the long delay in implementing this project has meant a significant delay in benefits to travelers in the Southeastern neighborhoods.

Since the implementation of the T Third, there has also been ongoing development in the corridor, including major projects in progress or completed along the waterfront from Mission Bay to Hunters Point. There has also been significant development in the Bayview and Hunters Point, with over 2,400 new units. Much of this development took place either immediately following the opening of the T Third or in more recent years.

Existing transit travel times and ridership were carefully reviewed to identify gaps in existing services. Travel patterns were also evaluated by time of day to help determine what type of service would be best support travel, confirming the need to improve connections from the Bayview and Hunters Point to downtown in both peak periods and the middle of the day.

Evaluated Options. Two options were evaluated to address the issues raised in the analysis:

- An express bus service on Third Street from Arleta Avenue and Bayshore Boulevard to Third/Fourth streets and Market Street. This service would operate as an express from Islais Creek south to SoMa to provide enhanced travel times for Bayview residents. This route has been labeled the 15AX.
- An express bus service that would loop through Hunters Point, primarily using Hudson Avenue, Ingalls Street, and Palou Avenue. This service also would operate as an express service from Islais Creek south to SoMa to provide enhanced travel times for Hunters Point and Bayview residents. This route has been labeled the 15BX.

The two services were each evaluated with 8-minute headways in the AM Peak, 10-minute headways mid-day, and 10-minute headways in the PM peak. These headways are generally consistent with other express services, with the exception of the mid-day service, which is not provided on most express routes. Given travel patterns from the Bayview and Hunters Point to downtown, a mid-day period was identified as appropriate to evaluate.

These two services were modeled using the San Francisco Chained Activity Modeling Process (SF-CHAMP), which can evaluate the impact of changes in land use, transportation networks, and services on travel patterns of San Francisco and regional travelers. The analysis was conducted for 2020 as if travel behavior continued as it was before the COVID-19 pandemic.

The project timeline and budget allowed for two model runs. We conducted modeling of the 15AX service alone – the primary service requested – and with the 15AX and 15BX together. These two runs were chosen to ensure that the analysis did not overcount the number of expected riders where the two services overlap.

Stakeholder Feedback. This study was scoped primarily to conduct rapid technical analysis with limited engagement. We had begun to conduct limited engagement with community groups in March, but these efforts were put on hold due to the initiation of shelter in place requirements.



Evaluation. The evaluation process considered several metrics, including:

- Transit ridership of the proposed routes, including by time of day and direction
- Net transit ridership of the routes, including riders who shift from existing services
- Operating cost of the proposed routes and cost per passenger mile, for comparison to other similar services

The key findings of the analysis included:

- Approximately 7,000 riders are expected to use each service on an average weekday. Slightly more riders use the 15AX service when both services are provided, but these come exclusively from people traveling from downtown to the 4th and King Caltrain station
- A net of 2,000 riders are expected to use the 15AX and a net of 2,800 riders are expected to use the 15BX, excluding riders who shift from an existing Muni rail or bus service. The shifts come primarily from the T Third, other bus services in the Bayview and Hunters Point (19, 24, 29, 44, and 54), the 30 Stockton service (which would overlap with the proposed services on Third and Fourth Streets), and to some extent the 8 and 9 services.
- Ridership on these routes is consistent with other express services operated today. About 1,000 riders travel in peak period and direction (inbound AM and outbound PM) on each of the services, which is consistent with the number of riders using the 1BX and 7X, and is substantially higher than the 38AX/BX, 80X, 31AX/BX, 1AX, and 82X but somewhat less than the 30X, 14X, and 8AX/BX.
- The two services both also see significant levels of ridership in the mid-day.

Next Steps. We will be finalizing the analysis of this study, including conducting a review of expected operating costs and cost per passenger mile for each. The SFMTA is also pursuing short term implementation of a 15 Third bus service as part of the return of rail service in August. Building on the work completed in this report, SFMTA will work with stakeholder from the community to define a small number of route options for community consideration. We will present the final report to the Board for approval in Fall 2020.

FINANCIAL IMPACT

None. This is an information item.

CAC POSITION

None. This is an information item. This item was agendized at the July 22 CAC meeting but continued due to time constraints. We are offering briefings to interested CAC members and will bring back an action item to the CAC for approval this fall.



SUPPLEMENTAL MATERIALS

- Attachment 1 – 15 Third Bus Study Presentation

15 Third Bus Study [NTIP Planning]



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Authority

Agenda Item #12

July 22, 2020

Study Purpose

NTIP planning project
requested by
Commissioner Walton

Technical evaluation of
returning the 15 Third
Street Bus to service



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Prior Community Feedback

Bring back the 15 Third Street bus
Current challenges with the T-Third

- Delays/travel time
- Train switching mid-route
- Slow implementation of improvements tied to the Central Subway



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Study Goals

Improve access from
Bayview/Hunters Point to
downtown

Avoid impacts on T Third

Provide cost effective
service



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District 10 Mobility Management Study

November 2018

SAN FRANCISCO COUNTY
TRANSPORTATION AUTHORITY



Third Street Transit - Past and Present



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Headway	15	T
Peak	5-8 minutes	7-9 minutes
Off-Peak	10 minutes	10-18 minutes

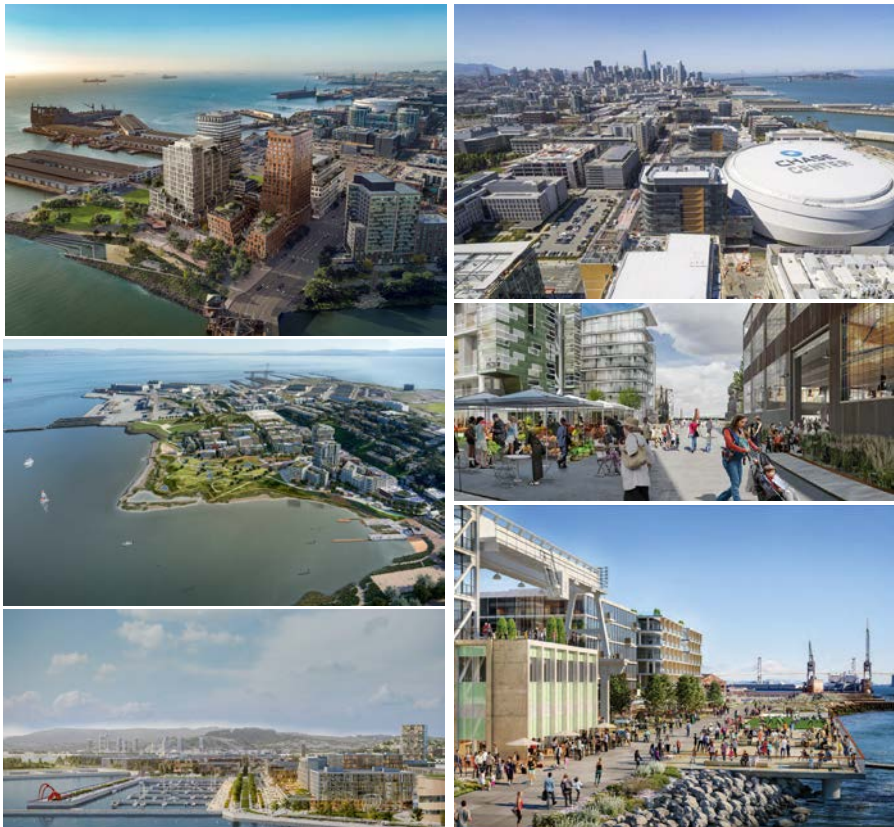
SCHEDULE

Service	3rd & Palou	3rd & 20th	4th & Townsend	Kearny & Market	Total Time
15	8:30	8:40	8:46	8:57	27
T	8:29	8:40	8:50	9:05	36
Added Time (minutes)		+1	+4	+4	

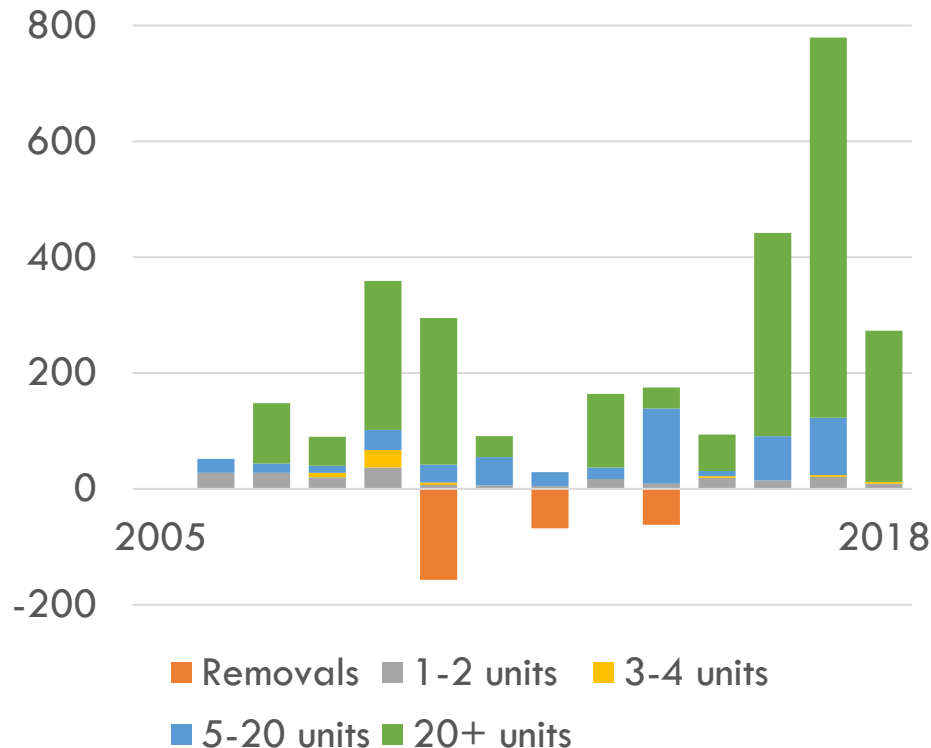
Land Use Changes - Current and Planned



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Bayview Housing Units Constructed

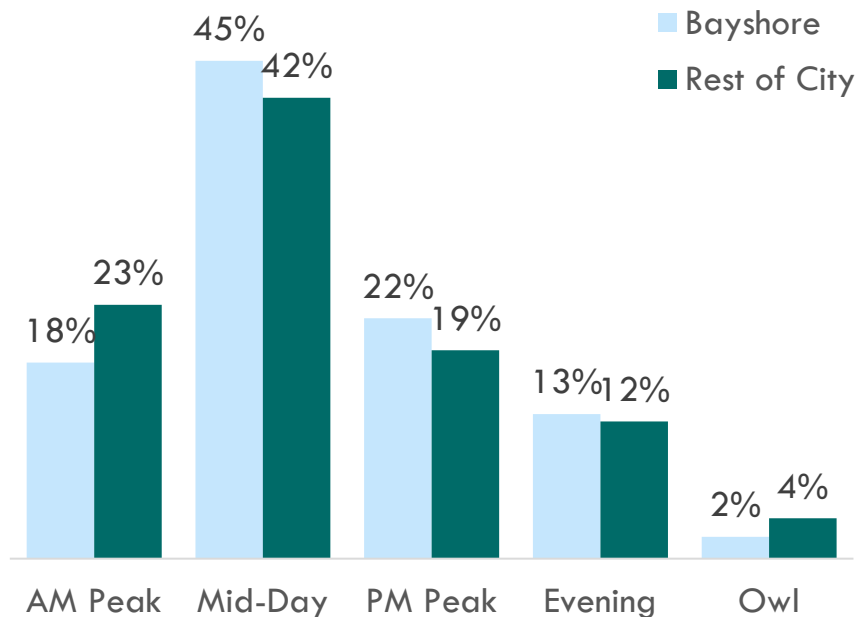


Travel by Time of Day

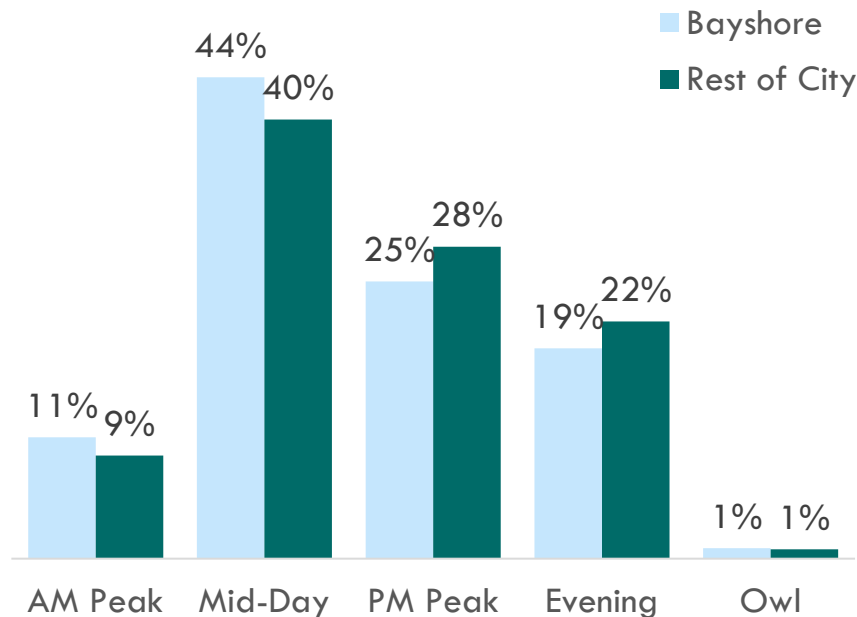


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Trips Inbound to Downtown



Trips Outbound from Downtown



Alternative Evaluation



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15AX - Third Street Express

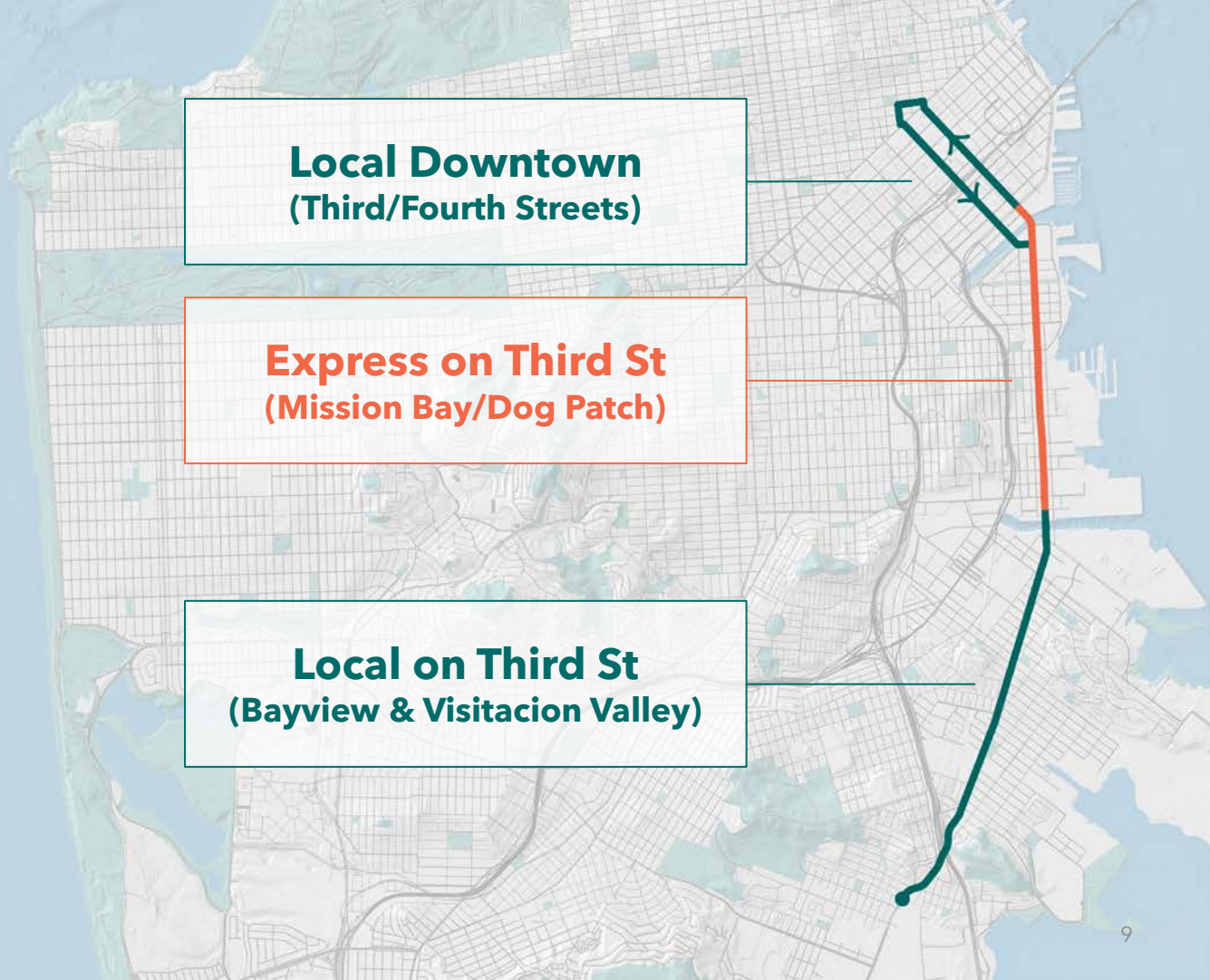
Local Downtown
(Third/Fourth Streets)

Express on Third St
(Mission Bay/Dog Patch)

Local on Third St
(Bayview & Visitacion Valley)



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15BX - Hunters Point Express

Local Downtown
(Third/Fourth Streets)

Express on Third St
(Mission Bay/Dog Patch)

Loop on Third/Hunters Point
(Hudson, Ingalls, Palou)



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Evaluated Headways

	AM Peak	Mid-Day	PM Peak
15AX	8	10	10
15BX	8	10	10
<i>Existing express services (as of January 2019)</i>			
38AX	10		15
8AX	6		6
8BX	7		7
14X	8		9
1AX	10		15
1BX	7		15
30X	6		10



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Evaluation

GOAL	METRIC
Transit Access	<ul style="list-style-type: none">• Travel time to downtown• Transit ridership on the new service• Net transit ridership

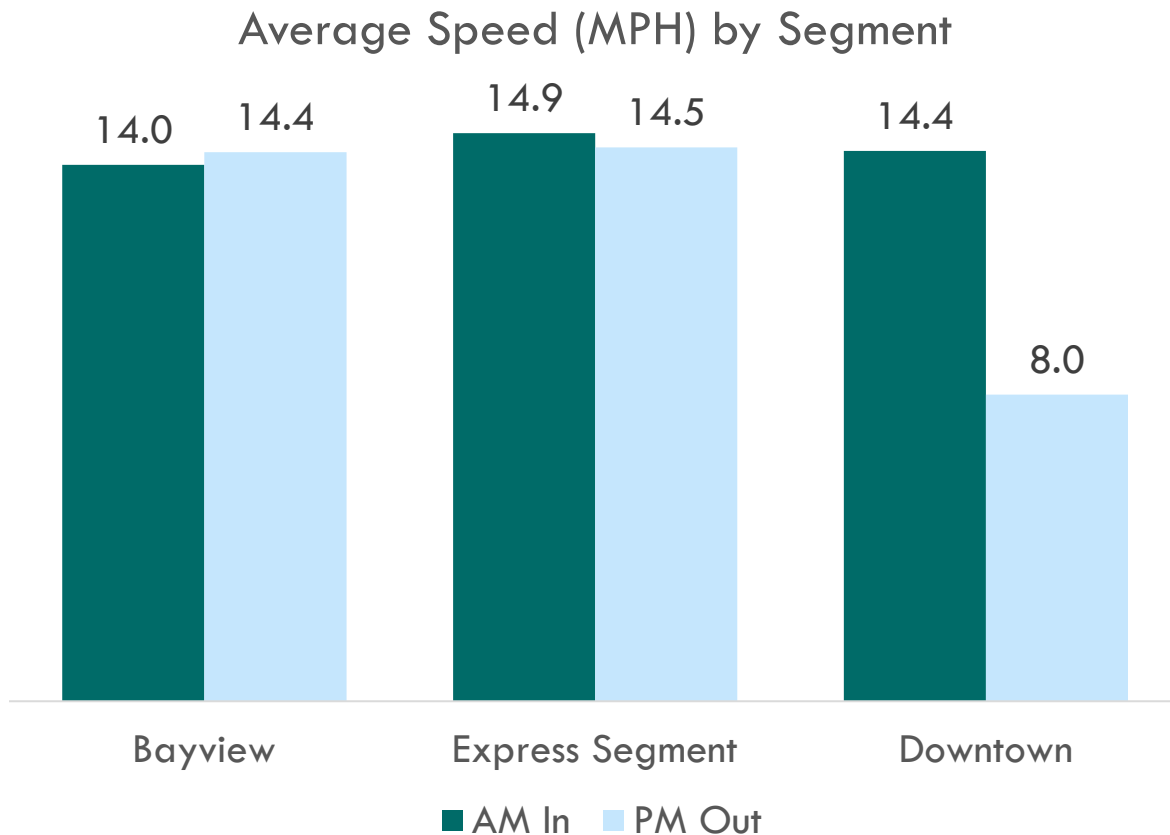
Cost effectiveness

- Cost
- Cost per passenger mile



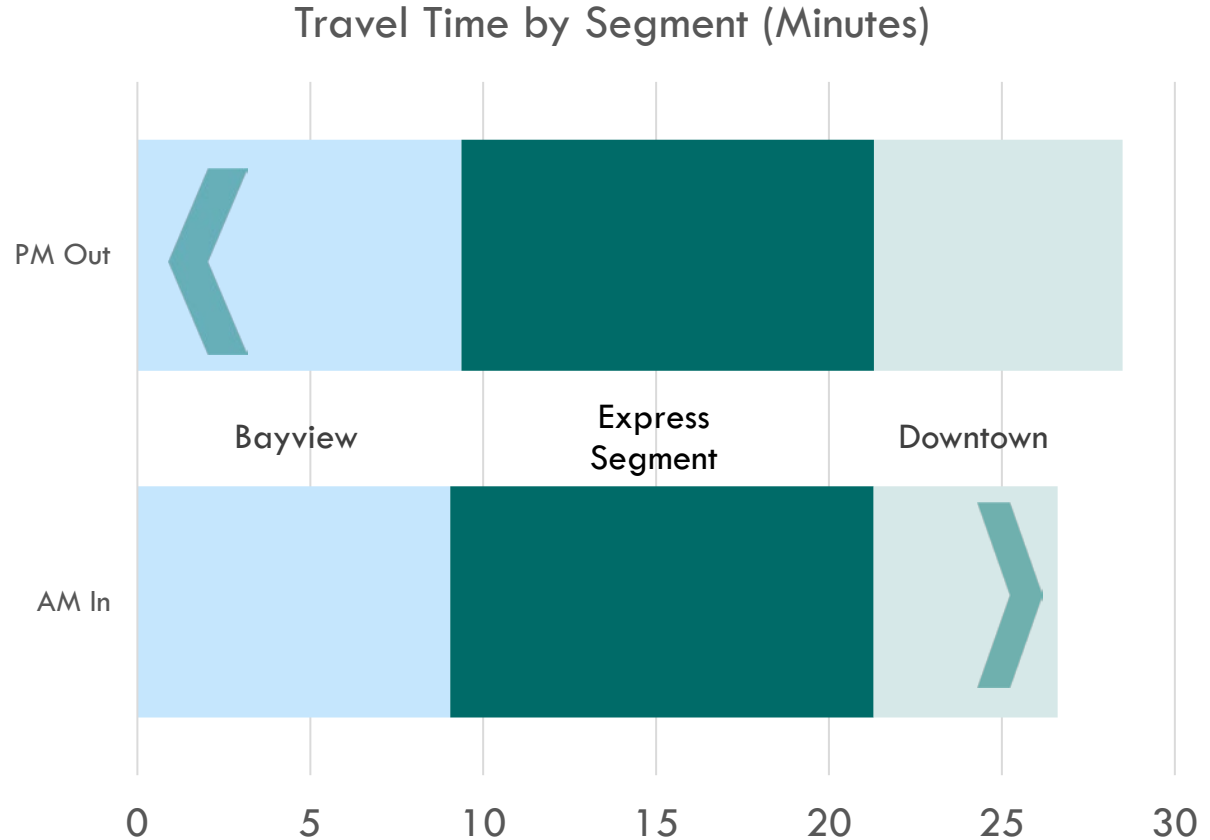
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15AX Bus Speeds (Including Stops)



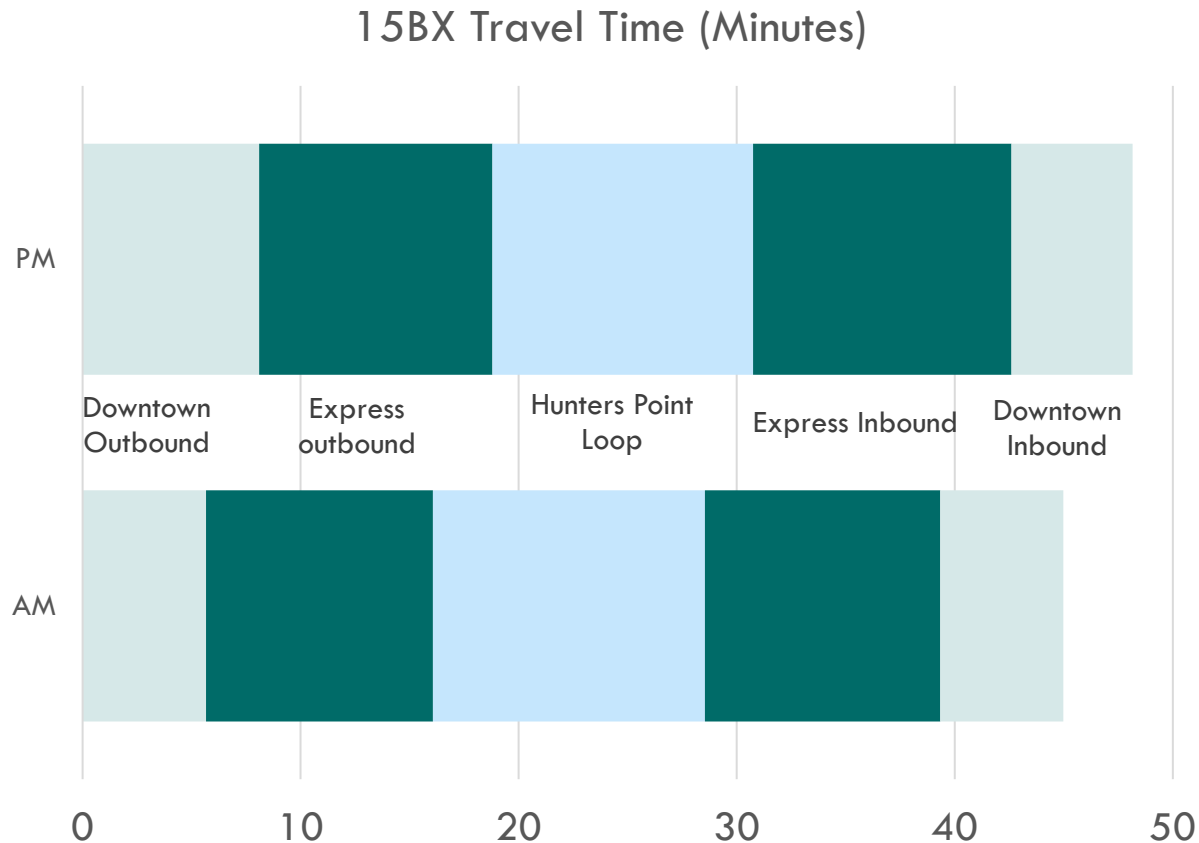
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15AX Travel Times (including stops)



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15BX Travel Time (including stops)

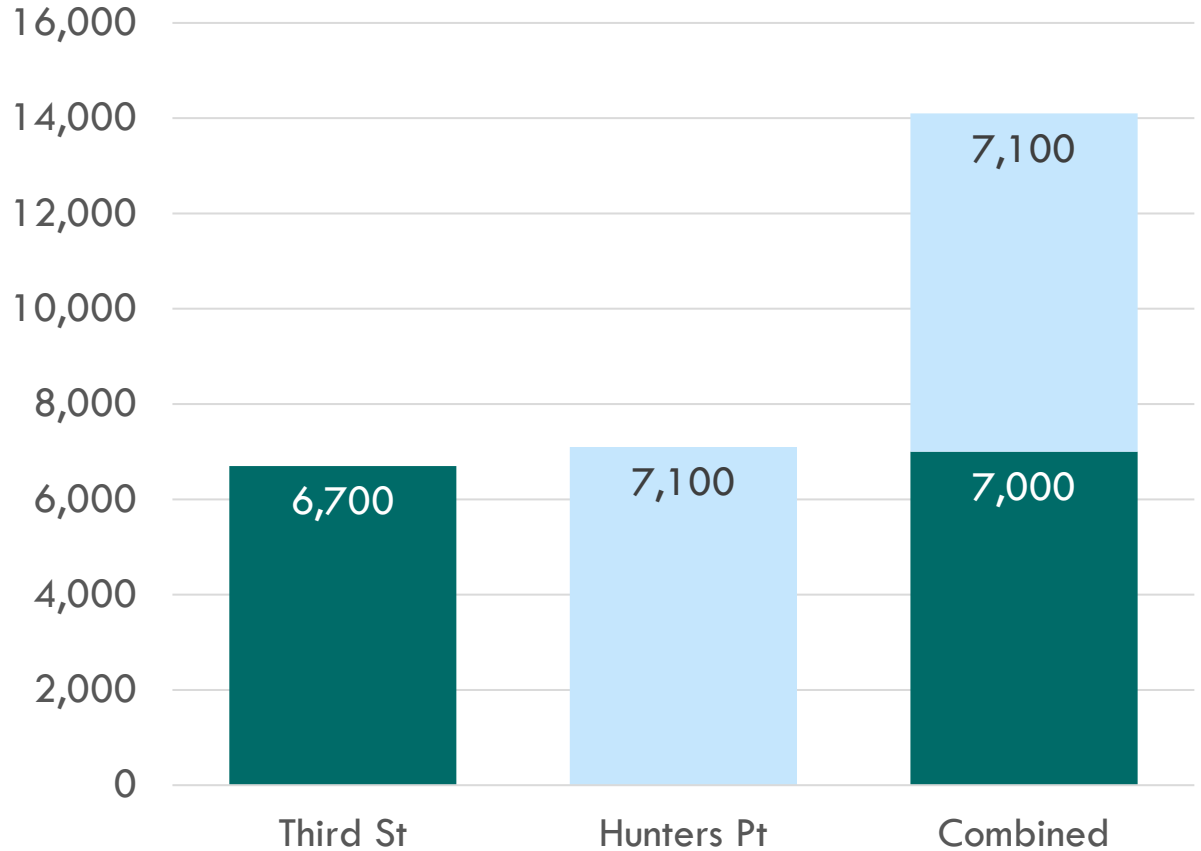


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Total Daily Ridership



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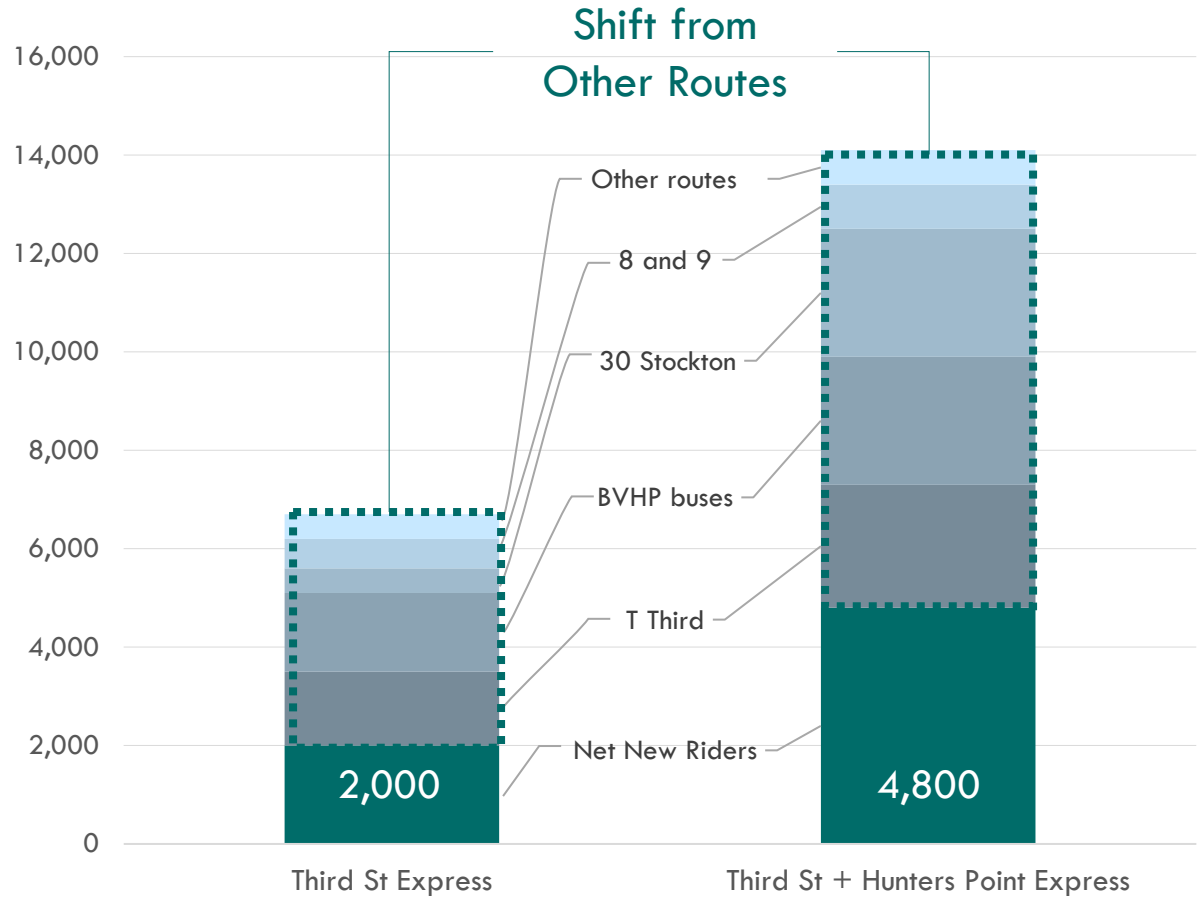


Ridership estimated from CHAMP-SF Travel Demand Model

Total Daily Ridership - Shifting & New Riders



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Ridership estimated from CHAMP-SF Travel Demand Model

Shifts from Other Muni Routes

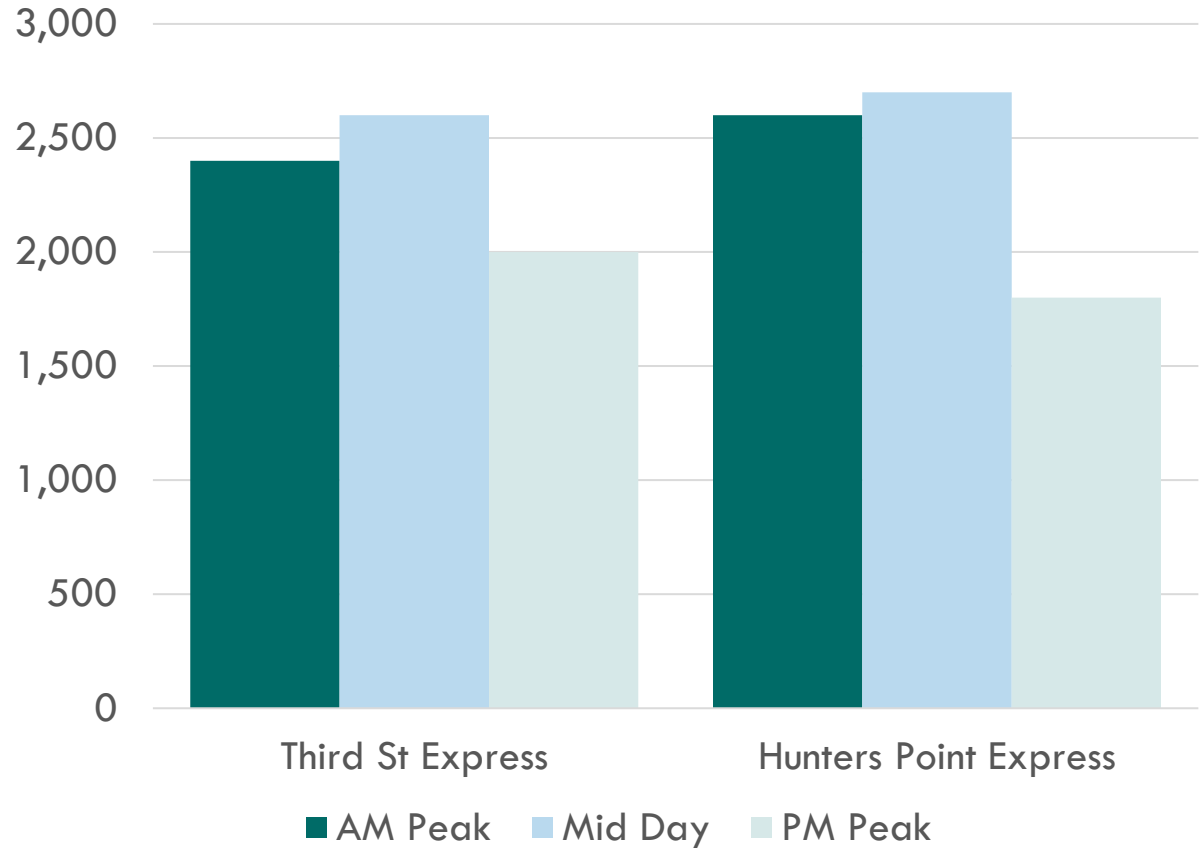
	Third St Express	% change	Third St Express & Hunters Point Express	% change
T Third	-1,500	-3%	-2,500	-5%
19	-100	-1%	-200	-3%
24	-500	-3%	-400	-3%
29	-400	-2%	-300	-2%
44	-400	-3%	-1,500	-10%
54	-300	-13%	-400	-16%
30	-500	-1%	-2,600	-6%
8AX/8BX	-400	-1%	-300	-1%
9/9R	-200	-1%	-600	-2%
Other	-500		-700	



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Ridership estimated from CHAMP-SF Travel Demand Model

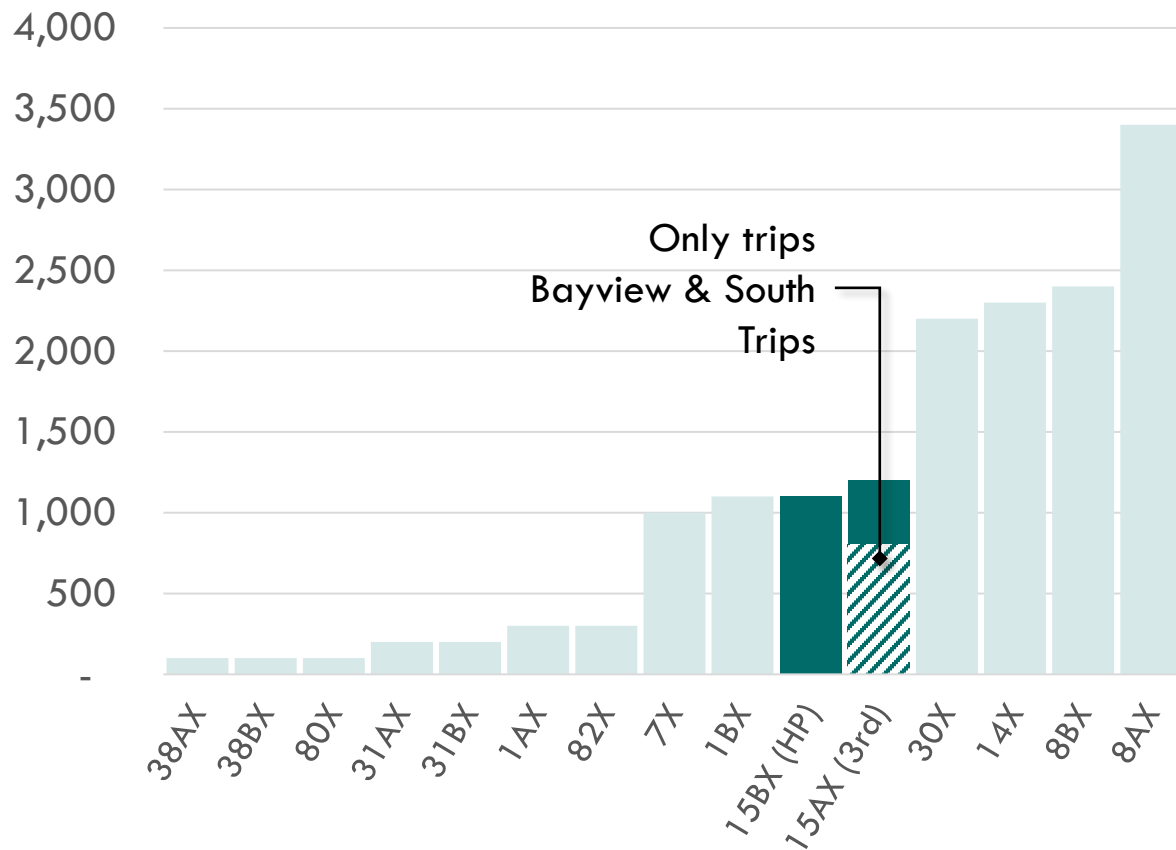
Total Riders - Time of Day



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Ridership estimated from CHAMP-SF Travel Demand Model

Comparison to Express Bus Services



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Ridership estimated from CHAMP-SF Travel Demand Model

Next Steps

Complete cost effectiveness analysis

Final report

SFMTA exploring short term implementation

- Expected when the Metro rail system returns in August
- Next step is to work with stakeholders to define up to three route options
- Survey the public on route options
- Gather feedback on the service and modify as needed



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Thank you. Any Questions?

hugh.louch@sfcta.org

415-522-4830



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