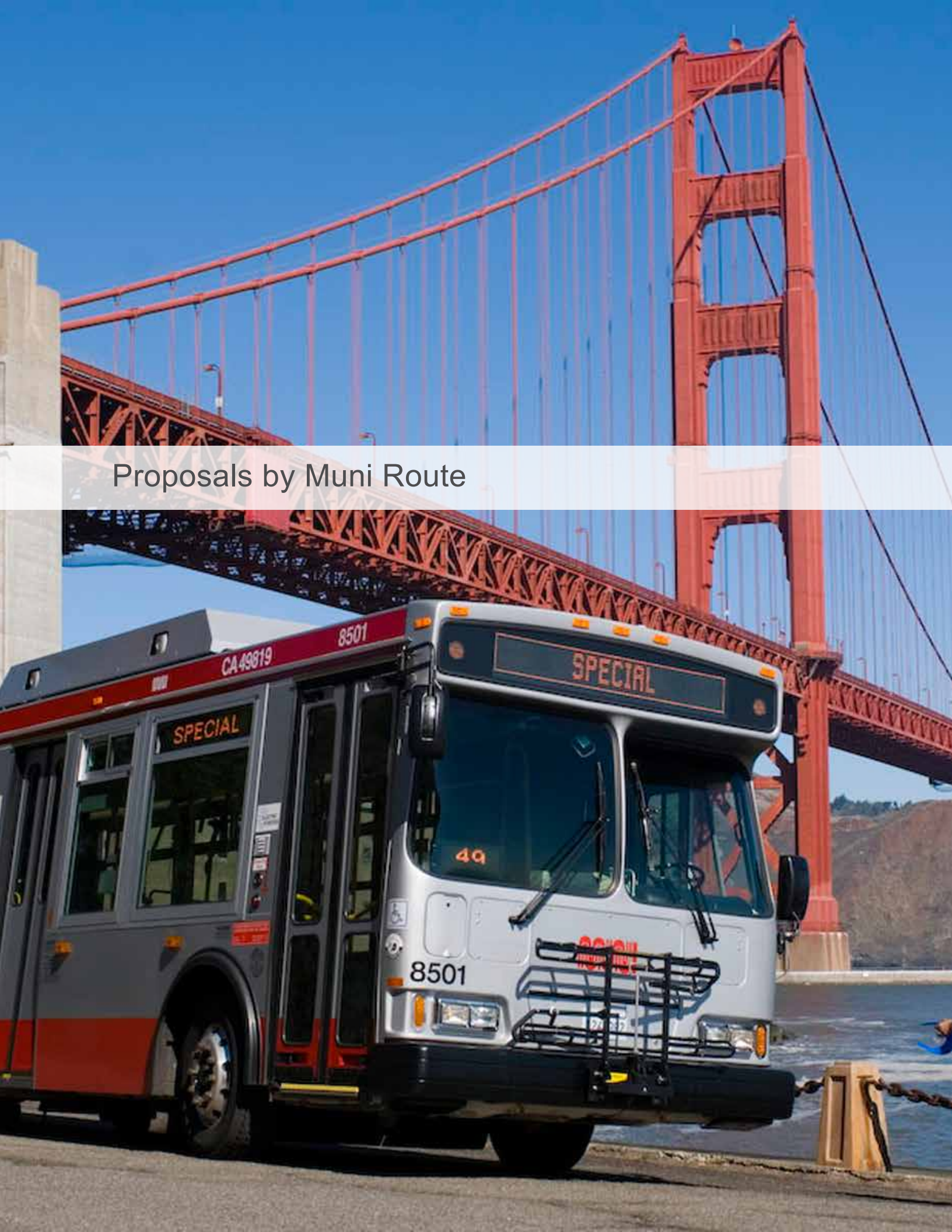
Proposals by Muni Route



Muni Network Summary

The following chapter provides detail on improvements and features identified for each Muni Route. The below proposals incorporate public feedback and comments received to date. Before implementation additional outreach will be conducted for each project. For a description of how each Muni route's proposal has changed thus far from the original proposal, please refer to the "Revision History" chapter below. Muni routes listed in the table of contents that include a * indicates the project proposal has been modified based on stakeholder feedback. For details each implementation feature, please visit the "Implementation Features" chapter above.

Feature Summary

Improvements to Muni Routes described in this Implementation Workbook consists of various features designed to improve Muni Reliability and Create a Rapid network. The following typology lists the various implementation features included for each Muni Route:

1 - Muni Service Changes

NR	New Route	HC	Headway Change
RE	Route Elimination	VC	Vehicle Type Change
RA	Route Alignment	EH	Expanded Hours

Implementation Status Legend

- **Implemented**: The service change or transit priority project is in effect.
- **Approved**: The service change or transit priority project has been legislated by the SFMTA Board of Directors but has not yet been implemented. (Please note: approved service changes may not be implemented).
- **Proposed**: The service change or transit priority project is pending further community outreach.

2 - Transit Priority Features

MUNI STOP LOCATIONS

BUS STOPS

Relocate Stops
Adjust Stop Spacing

PEDESTRIAN ENVIRONMENT

PEDES-TRIAN

New Transit Bulb
New Ped Bulb/Island
Boarding Island
Widen Sidewalk
Extend Bulb
New Crosswalk
Extend Boarding Island

CURB SPACE

CURB SPACE

New Loading Zone
New Tow-Away Zone
New Bus Zone
Remove Loading Zone
Extend Loading Hours
Extend Tow-Away Hours
Extend Bus Zone
New No Parking Anytime

SIGNALS AND RULES OF THE ROAD

SIG-NALS

New Traffic Signal
Bus Only Signal
Turn Restrictions
Extend Transit Hour Lanes
Remove Stop Sign

ROADWAYS

ROAD-WAYS

New Transit Lane
Traffic Calming
Reconfigure Lanes
New Bike Lanes
New Turn Pocket

Muni Route Index

PROPOSALS BY ROUTE

Route	Features	Revision
E Embarcadero	NR	
F Market & Wharves	HC	
J Church	HC	BUS STOPS, SIG-NALS, ROAD-WAYS, CURB SPACE, PEDES-TRIAN
KT Ingleside / Third Street	HC	BUS STOPS, SIG-NALS, ROAD-WAYS, CURB SPACE, PEDES-TRIAN
L Taraval	HC	BUS STOPS, SIG-NALS, ROAD-WAYS, CURB SPACE, PEDES-TRIAN
M Ocean View	HC	BUS STOPS, SIG-NALS, ROAD-WAYS, CURB SPACE, PEDES-TRIAN
N Judah	HC	BUS STOPS, SIG-NALS, ROAD-WAYS, CURB SPACE, PEDES-TRIAN
Nx Express		BUS STOPS, SIG-NALS, ROAD-WAYS, CURB SPACE, PEDES-TRIAN
1 California	HC	BUS STOPS, SIG-NALS, ROAD-WAYS, CURB SPACE, PEDES-TRIAN
1AX California “A” Express		BUS STOPS, SIG-NALS, ROAD-WAYS, CURB SPACE, PEDES-TRIAN
1BX California “B” Express	RA, HC	BUS STOPS, SIG-NALS, ROAD-WAYS, CURB SPACE, PEDES-TRIAN
2 Clement	RA, HC, VC, EH	
3 Jackson	HC	✳
5 Fulton / 5R Fulton Rapid	NR, RA, HC, VC, EH	BUS STOPS, SIG-NALS, ROAD-WAYS, CURB SPACE, PEDES-TRIAN ✳
6 Haight-Parnassus	HC	BUS STOPS, SIG-NALS, ROAD-WAYS, CURB SPACE, PEDES-TRIAN ✳
8 Bayshore	HC	BUS STOPS, SIG-NALS, ROAD-WAYS, CURB SPACE, PEDES-TRIAN ✳
8AX Bayshore “A” Express	HC	BUS STOPS, SIG-NALS, ROAD-WAYS, CURB SPACE, PEDES-TRIAN ✳

Muni Route Index

PROPOSALS BY ROUTE

Route	Features	Revision
8BX Bayshore “B” Express	HC; BUS STOPS, SIG-NALS, ROAD-WAYS, CURB SPACE, PEDES-TRIAN	✳
9 / 9R San Bruno	HC; BUS STOPS, SIG-NALS, ROAD-WAYS, CURB SPACE, PEDES-TRIAN	✳
10 Sansome	RA, HC, EH	
11 Downtown Connector	NR	✳
12 Folsom/Pacific	RE	✳
14 Mission	VC; BUS STOPS, SIG-NALS, ROAD-WAYS, CURB SPACE, PEDES-TRIAN	
14R Mission Rapid	RA, HC, VC, EH; BUS STOPS, SIG-NALS, ROAD-WAYS, CURB SPACE, PEDES-TRIAN	
14X Mission Express	HC; BUS STOPS, SIG-NALS, ROAD-WAYS, CURB SPACE, PEDES-TRIAN	
17X Noriega Express	RA	
57 Park Merced	RA, HC	✳
18 46th Avenue	RA	
19 Polk	RA	✳
21 Hayes	HC	
22 Fillmore	RA, HC, VC; BUS STOPS, SIG-NALS, ROAD-WAYS, CURB SPACE, PEDES-TRIAN	
23 Monterey	RA	✳
24 Divisadero	HC	
27 Bryant	RA	✳

Muni Route Index

Route	Features	Revision
28 19th Avenue	RA HC	BUS STOPS SIG-NALS ROAD-WAYS CURB SPACE PEDES-TRIAN ✳
28R 19th Avenue Rapid	RA HC EH	BUS STOPS SIG-NALS ROAD-WAYS CURB SPACE PEDES-TRIAN ✳
29 Sunset	RA HC	
30 Stockton	HC VC	BUS STOPS SIG-NALS ROAD-WAYS CURB SPACE PEDES-TRIAN
30X Marina Express	HC	
31 Balboa	HC	
31AX Balboa Express	**No Changes**	
31BX Balboa Express	**No Changes**	✳
32 Roosevelt	**Proposal Dropped**	
33 Ashbury-18th St	RA HC	
35 Eureka	RA HC VC	✳
36 Teresita	**No Changes**	✳
37 Corbett	RA HC VC	✳
38 Geary	HC	
38R Geary Rapid	EH	
38AX Geary Express	**No Changes**	
38BX Geary Express	**No Changes**	

Muni Route Index

Route	Features	Revision
39 Coit	**No Changes**	
41 Union	HC	
43 Masonic	RA HC	✳
44 O'Shaughnessy	HC	
45 Union-Stockton	**No Changes**	
47 Van Ness	RA HC VC	✳
48 Quintara-24th Street	RA HC	✳
49R Van Ness-Mission Rapid	BUS STOPS, SIG-NALS, ROAD-WAYS, CURB SPACE, PEDES-TRIAN	
52 Excelsior	RA HC	
54 Felton	RA HC	✳
56 Rutland	**No Changes**	✳
58 24th Street	RA	
66 Quintara	**No Changes**	
67 Bernal Heights	**No Changes**	
7/7R Haight-Noriega	RA HC EH; BUS STOPS, SIG-NALS, ROAD-WAYS, CURB SPACE, PEDES-TRIAN	✳
76X Marin Headlands	RA	
81X Caltrain Express	**No Changes**	

Muni Route Index

Route	Features	Revision
82X Levi Express	**No Changes**	
88 BART Shuttle	**No Changes**	
90 Owl	HC	✳
91A Owl	RA	✳
91B/N Owl	RA	✳
25 Treasure Island	**No Changes**	

E Embarcadero

Historic Streetcar

Recommended Route

Feature Summary

NR

E Embarcadero

Overview

- A new historic streetcar line would be established to connect Fisherman's Wharf and the northeast waterfront to AT&T Park and the Caltrain Station.
- The line would start at the F Market & Wharves' northern terminus at Jones Street, then travel south along The Embarcadero to Market Street, and then follow the N/T Line alignment to King Street to the E Embarcadero terminus at the Caltrain Station at Fourth and Townsend streets.
- A capital project is proposed to develop a new independent terminal for the E Embarcadero at the north end of the route near Jones and Beach streets. The terminal would facilitate independent movements of E and F streetcars, which would improve reliability for both routes by allowing for independent terminal departures.
- Initially, beginning in the summer of 2015, the E Embarcadero will provide service on weekends only between 11am and 7pm with 15 minute headways. In the spring of 2016, the E Embarcadero service will be introduced every day of the week.

New Terminal at Jones Street/Beach Street - Capital Project

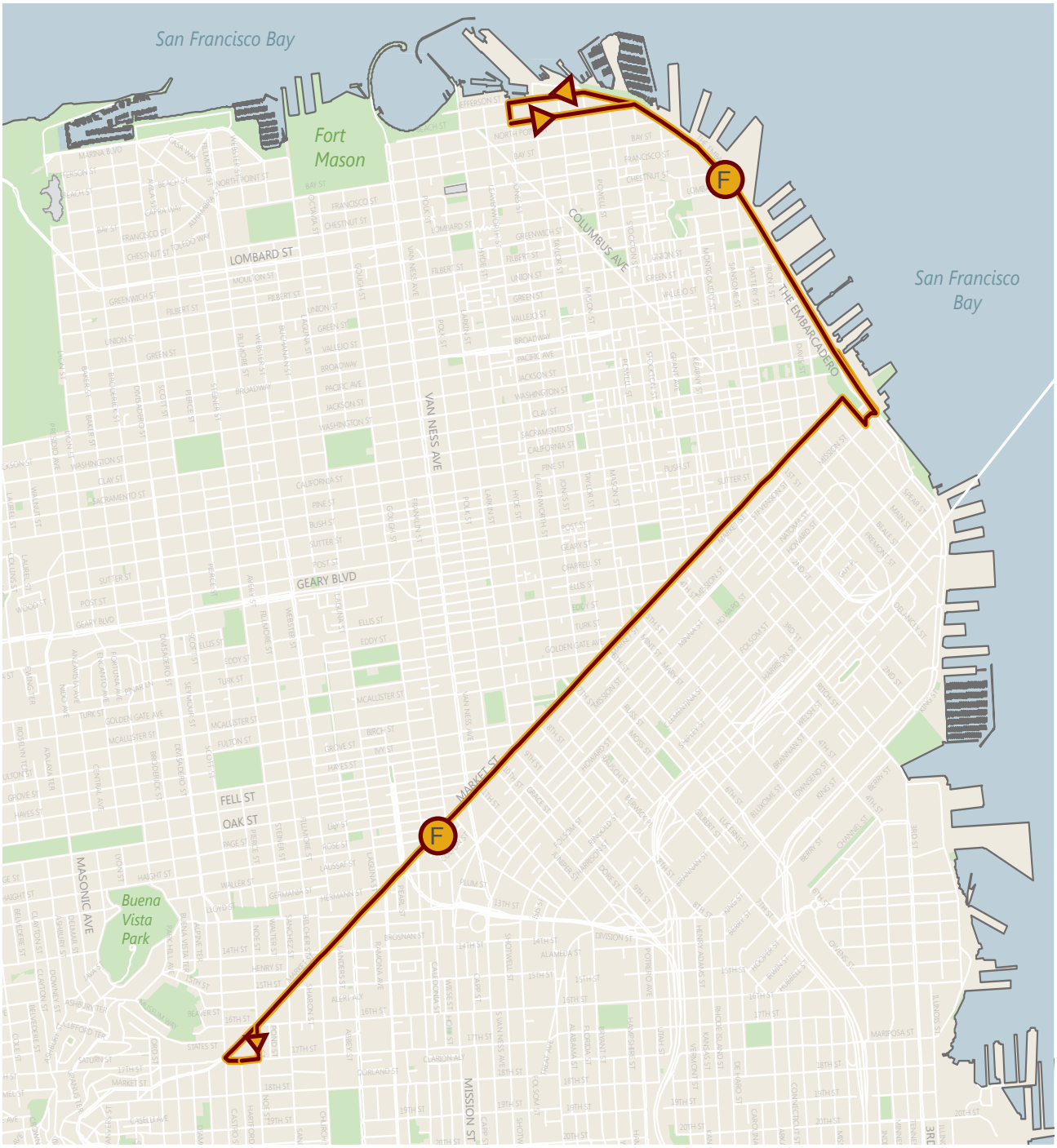
This project would build a new independent terminal stop for the E Embarcadero Line at the north end of the route near Jones and Beach streets. A separate stop would facilitate independent movements of E Embarcadero and F Market & Wharves streetcars at its northern terminus, which would improve reliability for both routes by allowing for independent terminal departures and preventing trains on one route from getting delayed behind trains from the other route. Development of the new terminal would require the installation of new bypass rails, track work turnouts, track switches, and overhead wires and poles, and possibly sidewalk modifications.

Frequency

Service during peak periods (headway between vehicles, in minutes)

	Current	Approved	Frequency
AM	N/A	15	N/A
PM	N/A	15	N/A

F Market & Wharves



Historic Streetcar

Recommended Route

Feature Summary

HC

F Market & Wharves

Overview

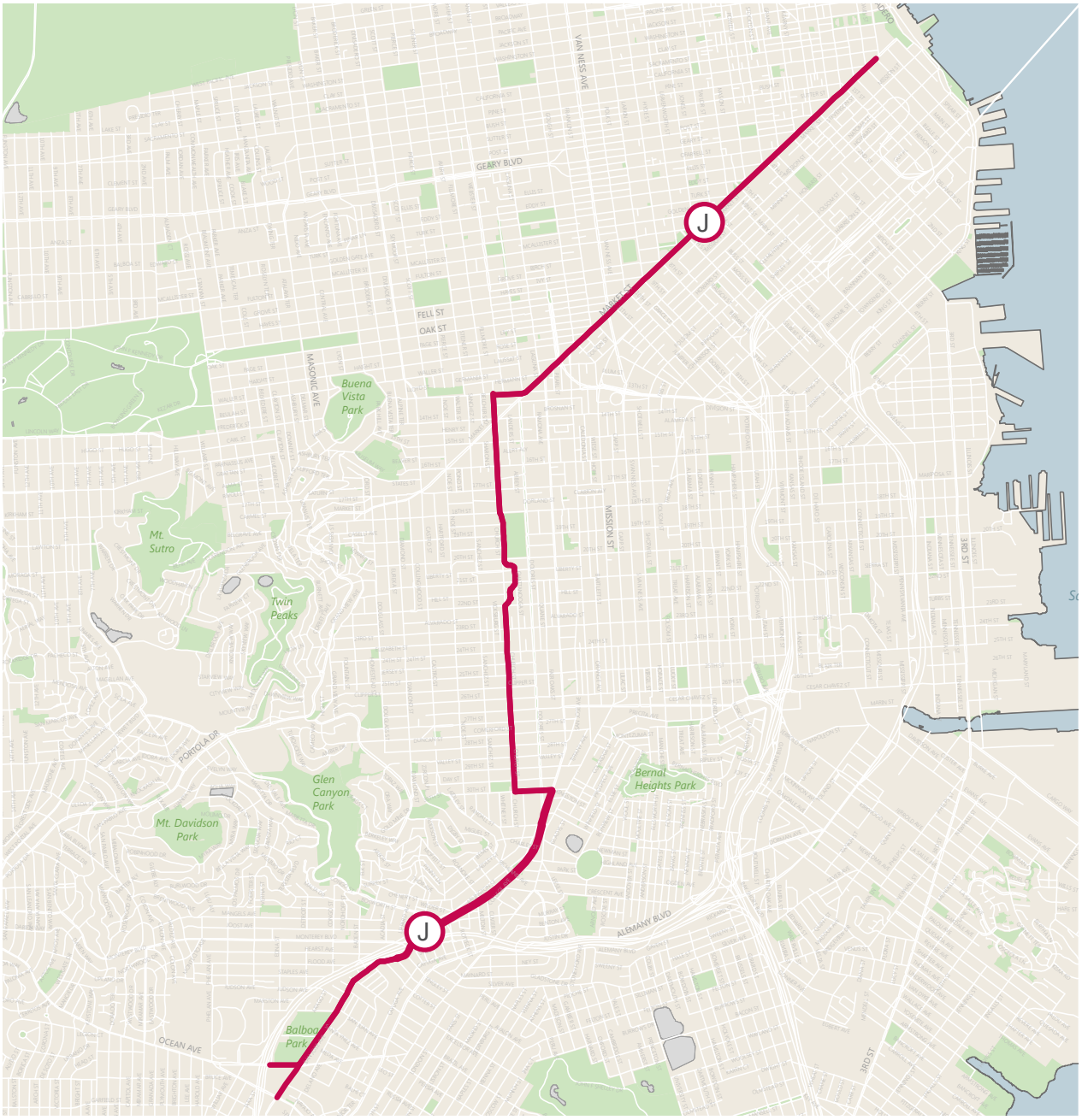
- No route changes proposed.
- Frequencies would be reduced in the morning due to the additional capacity provided by the new E Embarcadero Line.
- Midday frequency would change from 6 to 5 minutes.

Frequency

Service during peak periods (headway between vehicles, in minutes)

	Current	Approved	Frequency
AM	6.5	7.5	−
PM	6	5	+

J Church



Muni Metro

Recommended Route

Feature Summary

HC | BUS STOPS | SIG-NALS | ROAD-WAYS | CURB SPACE | PEDES-TRIAN

Overview

- The J Church line is one of the highest ridership Muni corridors and carries more than 14,000 daily customers on an average weekday.
- The Transit Priority Project is proposed to improve transit travel time, improve reliability, and decrease delay caused as a result of long passenger loading and unloading times, traffic signal delay, traffic congestion, a high number of STOP signs along the route and areas of closely spaced transit stops.
- The J Church project study area is the four mile stretch between Church and Duboce and the J Line's terminal at Balboa Park Station.
- The proposed changes are anticipated to reduce the travel time of the J Church within the study area by about 6.5 minutes total in both directions (12% reduction), resulting in an average operating speed of nine miles per hour and improving service reliability.
- Other changes such as transit signal priority improvements, operational improvements and network enhancements would further improve travel times along the corridor and add valuable customer amenities such as NextBus displays. The travel time savings would also reduce operating costs on the line and allow for service to be cost effectively increased.

J Church Transit Priority Project

This project is designed to improve transit travel time and reliability along the corridor between Church and Duboce and the J Line's terminal at Balboa Park Station. Within the study area, the J Church operates at an average speed of eight miles per hour during peak periods. There are 19 transit stops in the inbound direction and 18 transit stops in the outbound direction. The average transit stop spacing between Duboce Avenue and Randall Street is 975 feet, with stops located about every two to four blocks. In the southern part of the line between Santa Rosa Avenue, and Balboa Park Station, the average stop spacing is 1,380 feet, or about every two to three blocks.

The main causes of delay to the J Church include long passenger loading and unloading times, traffic signal delay, traffic congestion, a high number of STOP signs along the route and areas of closely spaced transit stops. In order to reduce transit travel times and improve reliability, the SFMTA proposes a toolkit of measures within the study area. The proposals include:

- Replacing all-way STOP-controlled intersections with traffic signals or traffic calming measures at four intersections. Traffic calming measures such as corner bulbs, speed humps, and sidewalk extensions provide improved pedestrian safety by reducing the roadway crossing distance, making pedestrians waiting to cross the street more visible to approaching motorists and reducing the speed of motorists turning from cross streets.
- Adding a transit-only lane on three blocks. In areas of high traffic congestion, transit-only lanes can save significant travel time for the J Church by giving the train its own exclusive lane.
- Turn Restrictions at two intersections. Left-turn restrictions can reduce transit delay by ensuring that auto traffic does not block intersections while waiting to turn left.
- Adding pedestrian bulbs at one intersection. Pedestrian bulbs are sidewalk extensions at intersection corners that improve pedestrian safety by reducing the roadway crossing distance, making pedestrians waiting to cross the street more visible to approaching motorists, and reducing the speed of motorists turning from cross streets.

- Optimizing transit stop locations at three intersections. Relocating transit stops from the near-side to the far-side of intersections at existing and proposed traffic signals would allow streetcars to take advantage of planned transit signal priority improvements. At all-way STOP-controlled intersections, transit stops would be relocated from the far-side of the intersection to the near-side, eliminating the need for streetcars to stop once for the STOP sign and again for customers to board the train.
- Create more consistent stop spacing. The J Church stops an average of once every two blocks for a majority of its route. However, at two locations, this distance is shortened to as little as once every block. This proposal moves towards at least a two-block spacing throughout the route. By stopping fewer times, the train would take less time to move through the corridor
- Adding transit bulbs at seven intersections. Transit bulbs are sidewalk extensions alongside transit stops that allow passengers to get on and off without having to walk between parked cars and cross a lane of traffic. They enhance the ability of streetcars to take advantage of all-door boarding and provide extra space for transit shelters and other customer amenities. Transit bulbs also improve pedestrian safety by reducing the roadway crossing distance, making pedestrians waiting to cross the street more visible to approaching motorists, and reducing the speed of motorists turning from cross streets.
- Extending boarding islands at two intersections. Boarding islands are dedicated waiting spaces for customers located between travel lanes. Extending existing boarding islands would cover the full length of the train and allow for passengers to be picked up and dropped off without having to walk between parked cars or cross a lane of traffic when the train arrives.

Frequency

Service during peak periods (headway between vehicles, in minutes)

	Current	Approved	Frequency
AM	9.5	8	+
PM	9	9	=

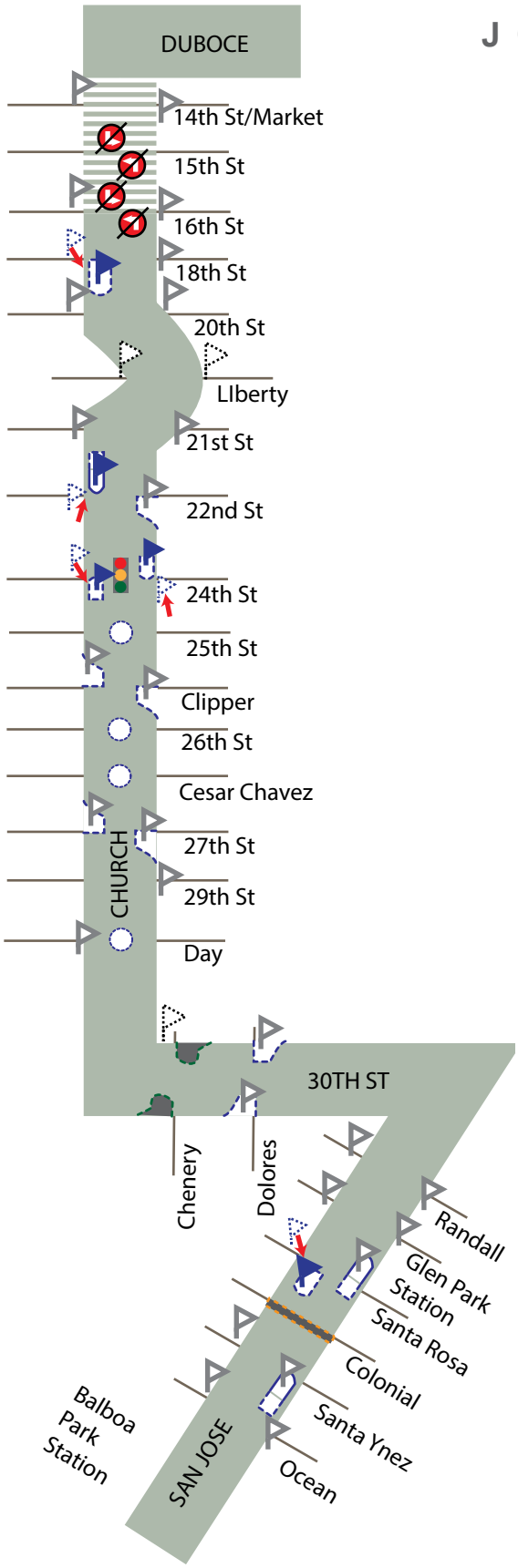
*Increasing light rail service is dependant upon vehicle availability. Fleet rehabilitation is underway and is scheduled for completion by the end of 2015.

Budget

Project Phase	Total
Construction	$10,800,000

* The budget displayed above will be supplemented by Proposition K local funds, which will be used for project planning and conceptual engineering.

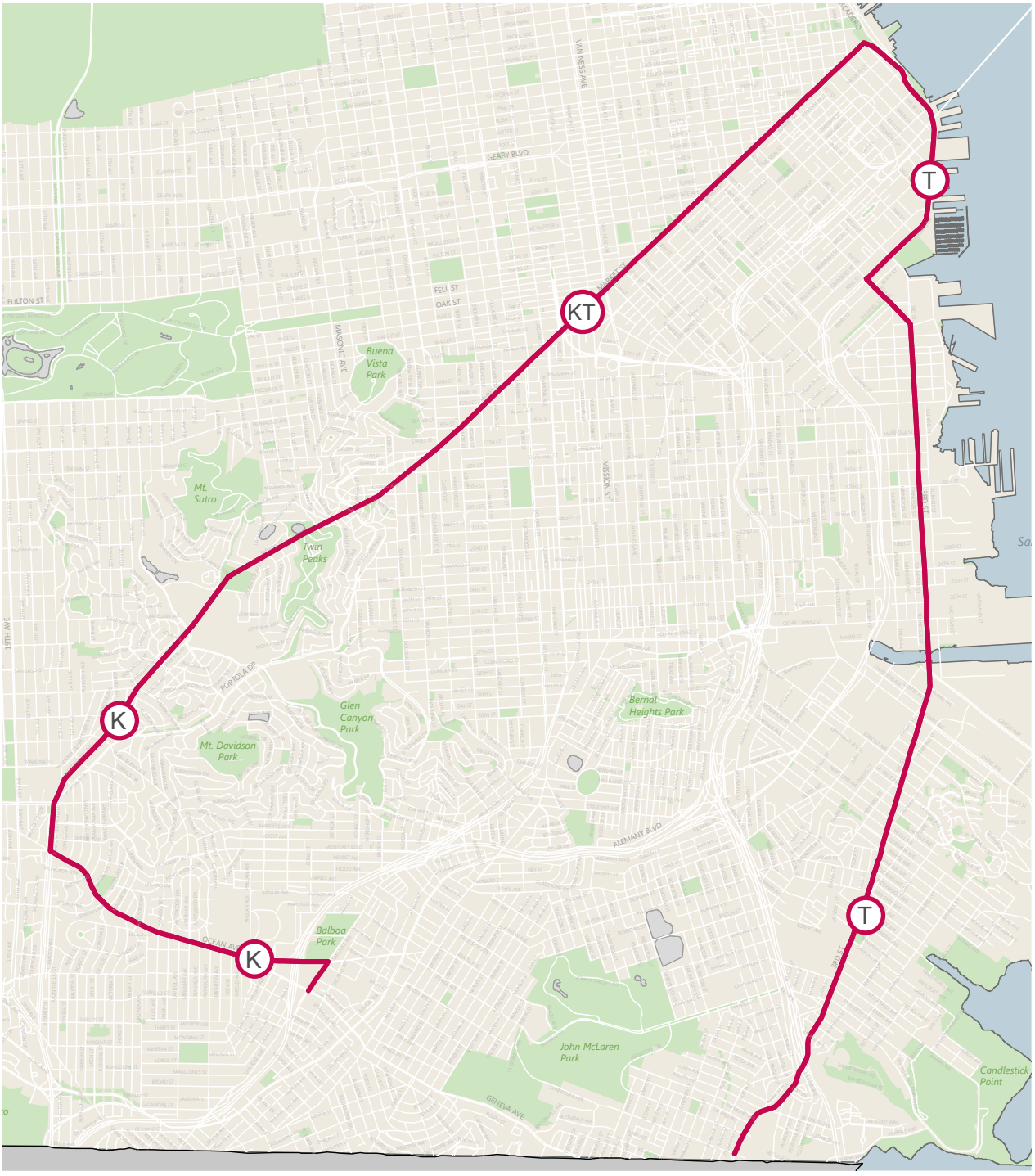
J Church Transit Priority Project



Features

- Existing Stop
- Stop Removal
- Stop Relocation
- New Transit Bulb
- Extend Existing Boarding Island
- Proposed Transit Only Lane
- Traffic Calming
- New Traffic Signal
- New Boarding Island
- No Left Turn Restrictions
- New Pedestrian Bulbs
- Crosswalk

KT Ingleside / Third Street



Muni Metro

Recommended Route

Feature Summary

HC | BUS STOPS | SIG-NALS | ROAD-WAYS | CURB SPACE | PEDES-TRIAN

KT Ingleside / Third Street

Overview

- The KT Ingleside/Third Street line is one of the highest ridership Muni corridors.
- The KT Ingleside/Third Street Transit Priority Project will improve transit travel time, improve reliability, and decrease delay caused as a result of various factors such as long passenger loading and unloading times, traffic signal delay, traffic congestion, a high number of STOP signs along the route and areas of closely spaced transit stops.
- The proposal is a program-level project where specific treatments have not been identified at this time.
- The proposal study area stretches from the intersection of San Jose Avenue and Oneida Street (Balboa Park Station) to Sloat and Junipero Serra boulevards.

KT Ingleside/ Third Street Transit Priority Project

This proposal is a program-level project where specific treatments have not yet been identified for the corridor. For this and other programmatic proposals, the Transit Priority Features would be applied along Junipero Serra Boulevard and Ocean Avenue, from the intersection of San Jose Avenue and Oneida Street (Balboa Park Station) to Sloat and Junipero Serra boulevards.

This Rapid Network corridor provides transit connections between the West Portal, St. Francis Wood, and Ingleside neighborhoods as well as the City College of San Francisco (CCSF) main campus and vicinity and Balboa Park Station. Inbound, the K Ingleside enters the Muni System underground at West Portal Station. From West Portal Station the K Ingleside becomes the T Third Street and continues to Embarcadero Station, providing connections from the above neighborhoods to Forest Hill, Midtown Terrace, the Castro/Eureka Valley/Corona Heights, Duboce Triangle, Church and Market streets vicinity, and destinations in Civic Center and Downtown before resurfacing after Embarcadero Station to provide transit service along the Embarcadero, through SoMa and Mission Bay, to Potrero Hill, Hunter's Point, Bay View and Visitacíon Valley neighborhoods.

KT Ingleside / Third Street

Frequency

Service during peak periods (headway between vehicles, in minutes)

	Current	Approved	Frequency
AM	9	8	+
PM	9	8	+

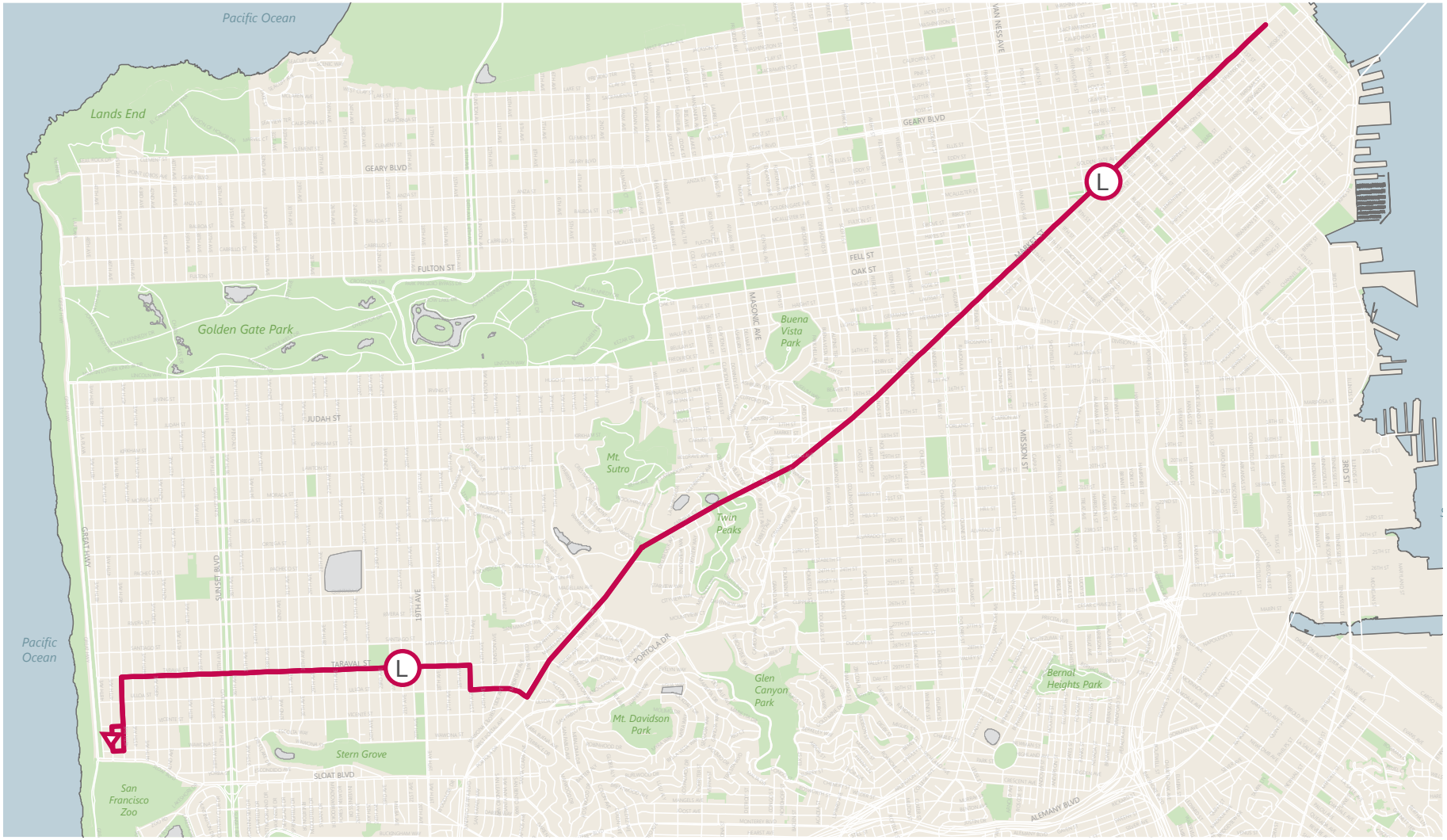
*Increasing light rail service is dependant upon vehicle availability. Fleet rehabilitation is underway and is scheduled for completion by the end of 2015.

Budget

Project Phase	Total
Design & Construction	$4,720,000

* No funding source identified for this project through 2018.

L Taraval



Muni Metro

Recommended Route

Feature Summary

HC | BUS STOPS | SIG-NALS | ROAD-WAYS | CURB SPACE | PEDES-TRIAN

L Taraval

Overview

- The L Taraval line is one of the highest ridership Muni corridors.
- The L Taraval Transit Priority Project is proposed to improve transit travel time, improve reliability, and decrease delay caused as a result of long passenger loading and unloading times, traffic signal delay, traffic congestion, a high number of STOP signs along the route and areas of closely spaced transit stops.
- The proposed improvements are anticipated to reduce travel time of the L Taraval within the study area by about 6.5 minutes total in both directions (12% reduction), resulting in an average operating speed of nine miles per hour and improving service reliability.
- Other changes such as transit signal priority improvements, operational improvements and network enhancements would further improve travel times along the corridor and add valuable customer amenities such as NextBus displays. The travel time savings would also reduce operating costs on the line and allow for service to be cost effectively increased.
- No service route changes are proposed.

Frequency

Service during peak periods (headway between vehicles, in minutes)

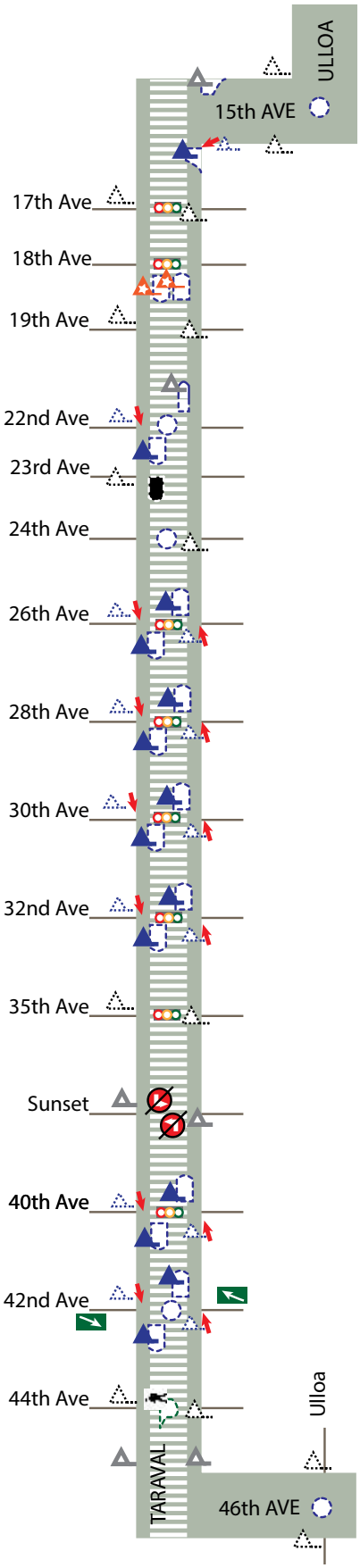
	Current	Approved	Frequency
AM	8	7.5	+
PM	7.5	7.5	=

*Increasing light rail service is dependant upon vehicle availability. Fleet rehabilitation is underway and is scheduled for completion by the end of 2015.

Budget

Project Phase	Total
Design & Construction	$21,739,000

* The budget displayed above will be supplemented by Proposition K local funds, which will be used for project planning and conceptual engineering.



L Taraval Transit Priority Project

Features

- Existing Stop
- Stop Removal
- Stop Relocation
- New Transit Bulb
- New Pedesrian Refuge Island
- New Boarding Island
- Extend Boarding Island
- New Traffic Signal
- Remove Stop Signs and Replace with Traffic Calming Measure
- New Stop
- No Left-Turn Restriction
- Center Transit-Only Lanes (both directions)
- Remove Exist. Boarding Island
- Right-Turn Only Restrictions