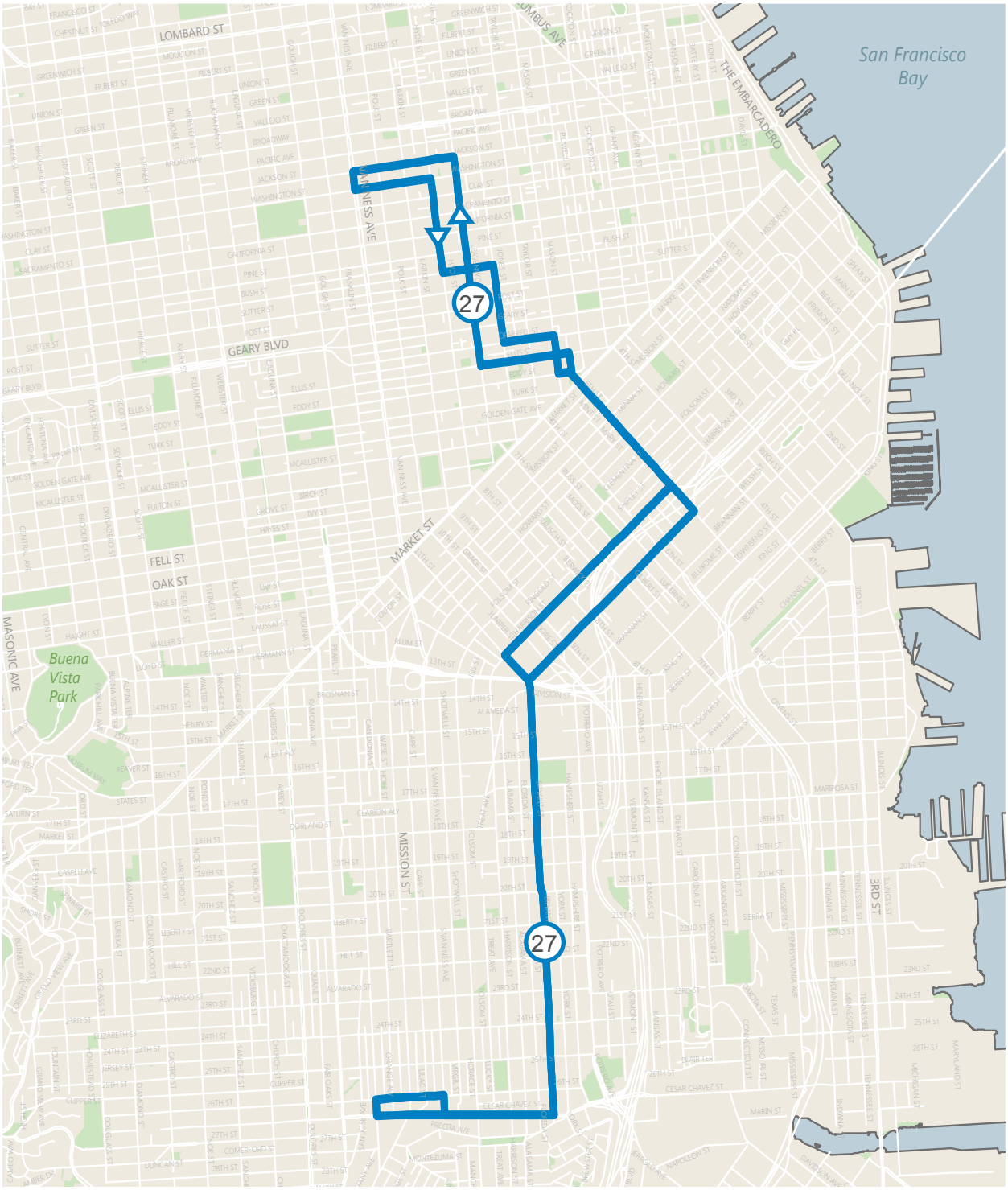
25 Treasure Island

Connector

Recommended Route

27 Bryant



Grid

Recommended Route

27 Bryant

Overview

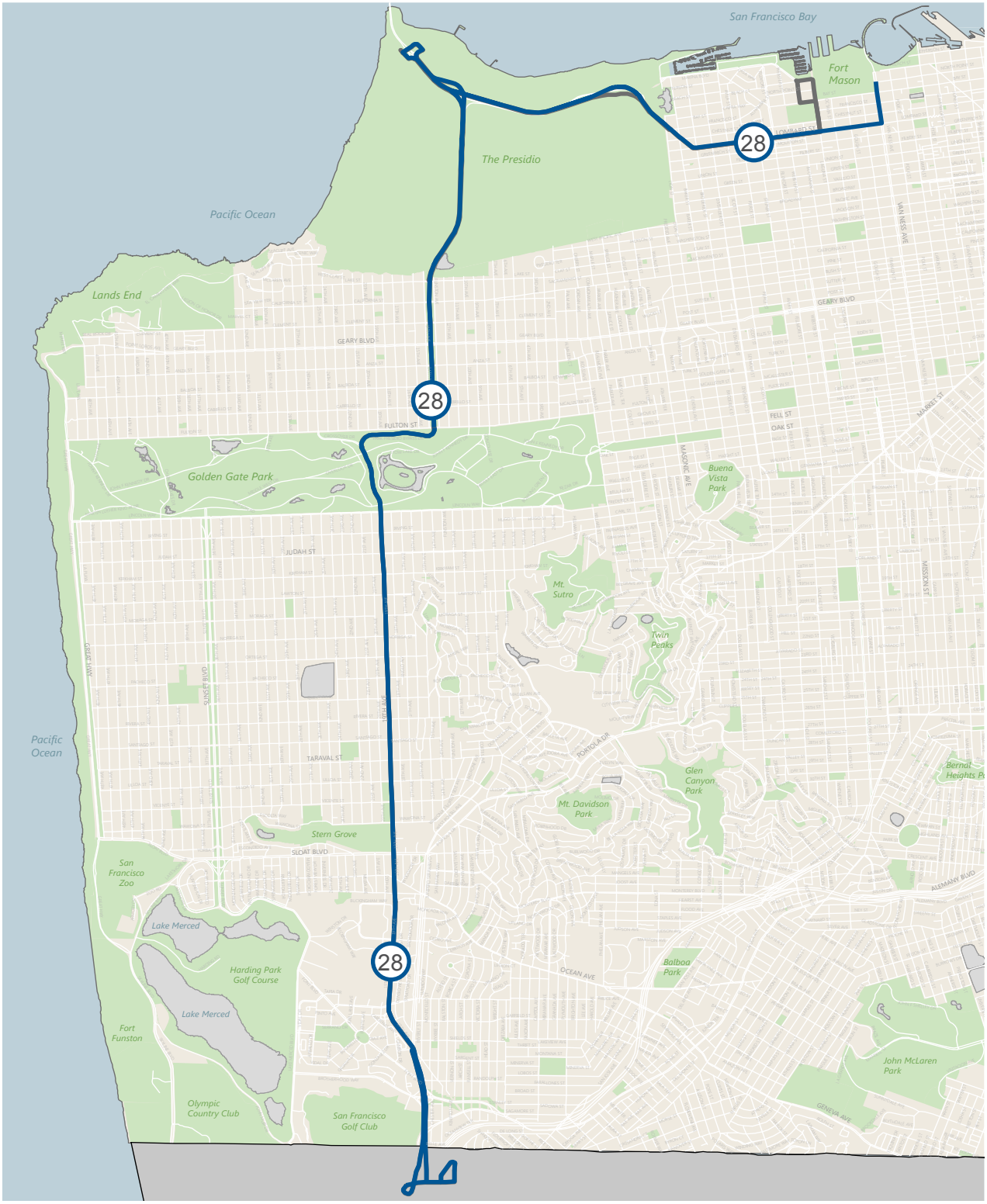
- No changes are planned for the 27 Bryant service; it will retains its current alignment and service.

Frequency

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

	Current	Approved	Frequency
AM	15	15	=
PM	15	15	=

28 19th Avenue



Frequent Local

Recommended Route

Segment Proposed for Elimination

Feature Summary

RA HC

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

28 19th Avenue

Overview

- 28 19th Avenue service to the Marina District via the Golden Gate Bridge will be retained.
- The 28 19th Avenue will continue eastward on Lombard Street and serve a new northern terminal at Van Ness Avenue and North Point Street. Service to Fort Mason will be provided by Route 43 Masonic.
- Midday frequency change from 12 to 9 minutes.
- Transit Priority Project is proposed to reduce transit travel time on this corridor.

Frequency

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

	Current	Approved	Frequency
AM	10	9	+
PM	10	9	+

Budget

Project Phase	Total
South of Golden Gate Park - Design & Construction	$22,965,000
Lombard St - Design & Construction	$5,200,000
Total	$28,165,000

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

28R 19th Avenue Rapid

Rapid

- Recommended Route
- Segment Proposed for Elimination

Feature Summary

RA EH HC

BUS STOPS SIG-NALS ROAD-WAYS

28R 19th Avenue Rapid

Overview

- The 28R 19th Avenue Rapid will serve a new northern terminal near California Street and Park Presidio, and will no longer serve the Marina District. A new terminal location is tentatively planned for Funston Street between California and Lake streets.
- New streets are on sections of Alemany Boulevard, between Sagamore Street and San Jose Avenue; I-280 between Ocean and Sickles avenues exit, Brotherhood Way, between Junipero Serra Boulevard and Sagamore Street, on Niagara Avenue between Alemany Boulevard between Niagara and Geneva avenues (to accommodate the terminal loop).
- Midday service will operate every 9 minutes.
- Limited-stop service would operate seven days a week from 6 a.m. to 8 p.m. with wider stop spacing than current 28L 19th Avenue Limited (currently limited-stop service operates weekdays only approximately 7 - 9 a.m. and 2 - 4 p.m.).
- A Transit Priority Project is proposed to reduce transit travel time on this corridor.
- The southern terminal will be located on Geneva Avenue midblock between Mission Street and Alemany Boulevard. The terminal loop will be right onto Mission Street, right onto Niagara Avenue, and right onto Alemany Boulevard. This will require a reduction of up to five parking spaces. Accommodating the 28R 19th Avenue Rapid at this location will require the removal of up to 10 parking spaces.
- In October 2011, the 28L 19th Avenue Limited was extended to Fort Mason, with express service from Park Presidio Boulevard and California Street to Lombard Street. Currently there is a temporary reroute due to the major Doyle Drive reconstruction underway which requires the utilization of California Street to access the Marina District.

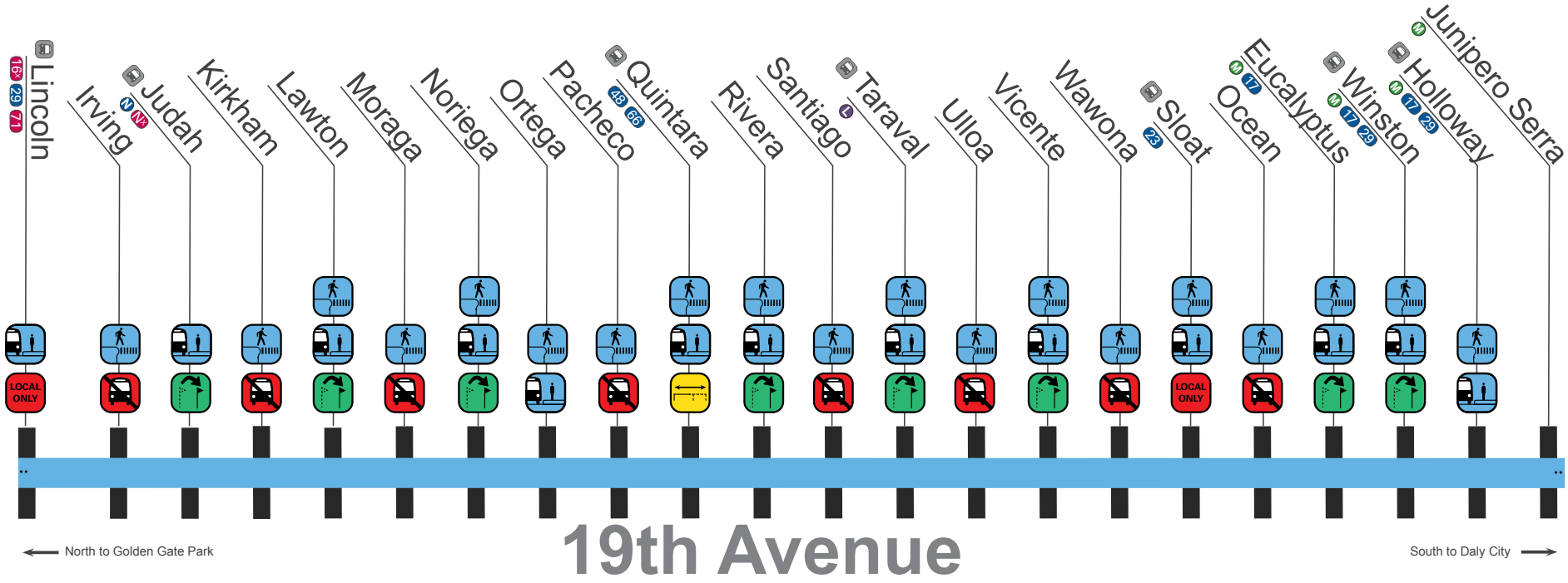
Frequency

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

	Current	Approved	Frequency
AM	10	9	+
PM	N/A	9	+

28R 19th Avenue Rapid

28 19th Avenue - South of Golden Gate Park Transit Priority Project



Summary of Proposals

- Stop Relocation
- Local-Only Stop
- Stop Removal
- New Transit Bulbs
- New Pedestrian Bulbs
- Bus Zone Extension

Current 28L Stop
29 Muni Connections

28 19th Avenue Corridor Overview

Muni's 28 19th Avenue and 28R 19th Avenue Rapid bus routes together carry about 17,500 daily customers on an average weekday. The route's study corridor is 3.4 miles of 19th Avenue between Lincoln Way and Junipero Serra Boulevard. The M Ocean View Line also travels through a portion of the study area.

Within the study corridor, 28 19th Avenue and 28R 19th Avenue Rapid together serve over 8,500 customers on an average weekday and the M Ocean View Line serves an additional 5,400 customers at the stops located along 19th Avenue at Holloway Avenue and Winston Drive.

Within the study area during the p.m. peak period, the 28 19th Avenue local service operates at an average speed of 9.2 miles per hour and the 28 19th Avenue Rapid operates at an average speed of 11.5 miles per hour. The main sources of delay are closely spaced bus stops and traffic congestion.

28 19th Avenue - South of Golden Gate Park Transit Priority Project Overview

In order to reduce transit travel times and improve reliability, the SFMTA proposes a variety of improvements within the study area. The proposals include:

- Increasing bus stop spacing from one block to two blocks. Currently, the 28 19th Avenue local service stops at every block between Lincoln Way and Eucalyptus Drive. This proposal moves toward a two-block spacing for most stops. By stopping fewer times, the bus would take less time to move through the corridor.
- Reducing number of limited service stops. Currently, the 28R 19th Avenue Rapid has seven stops in each direction within the study area. This proposal would provide stops at major transfer points and destinations, including Judah Street, Taraval Street, Winston Drive and Holloway Avenue.
- Optimizing bus stop locations at five intersections. Relocating bus stops from the near-side to the far-side of intersections allows buses to take advantage of planned transit signal priority improvements that will allow traffic signals to be programmed to hold green lights for approaching buses.
- Adding transit bulbs at 14 intersections. Transit bulbs are sidewalk extensions alongside bus stops that allow buses to pick-up and drop-off customers without having to pull out of the travel lane into a bus stop and then wait for a gap to merge back into traffic. Transit bulbs enhance the ability of buses to take advantage of planned all-door boarding. Transit bulbs provide 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.
- Adding pedestrian bulbs at 11 intersections. 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. Reducing pedestrian crossing distances can provide flexibility in traffic signal timing that can reduce Muni delays.

- Shortening one left-turn lane on northbound 19th Avenue at Winston Drive. Shortening the left-turn lane that is currently shared with inbound M Ocean View trains would reduce delays for trains which currently must wait for the left turn queue to dissipate before proceeding through the intersection. By shortening the left-turn lane that is shared with the M Ocean View, the space for non-transit vehicles to queue in front of trains would be reduced, thereby allowing both the non-transit vehicles and trains to clear the intersection in one left-turn signal phase.

Summary

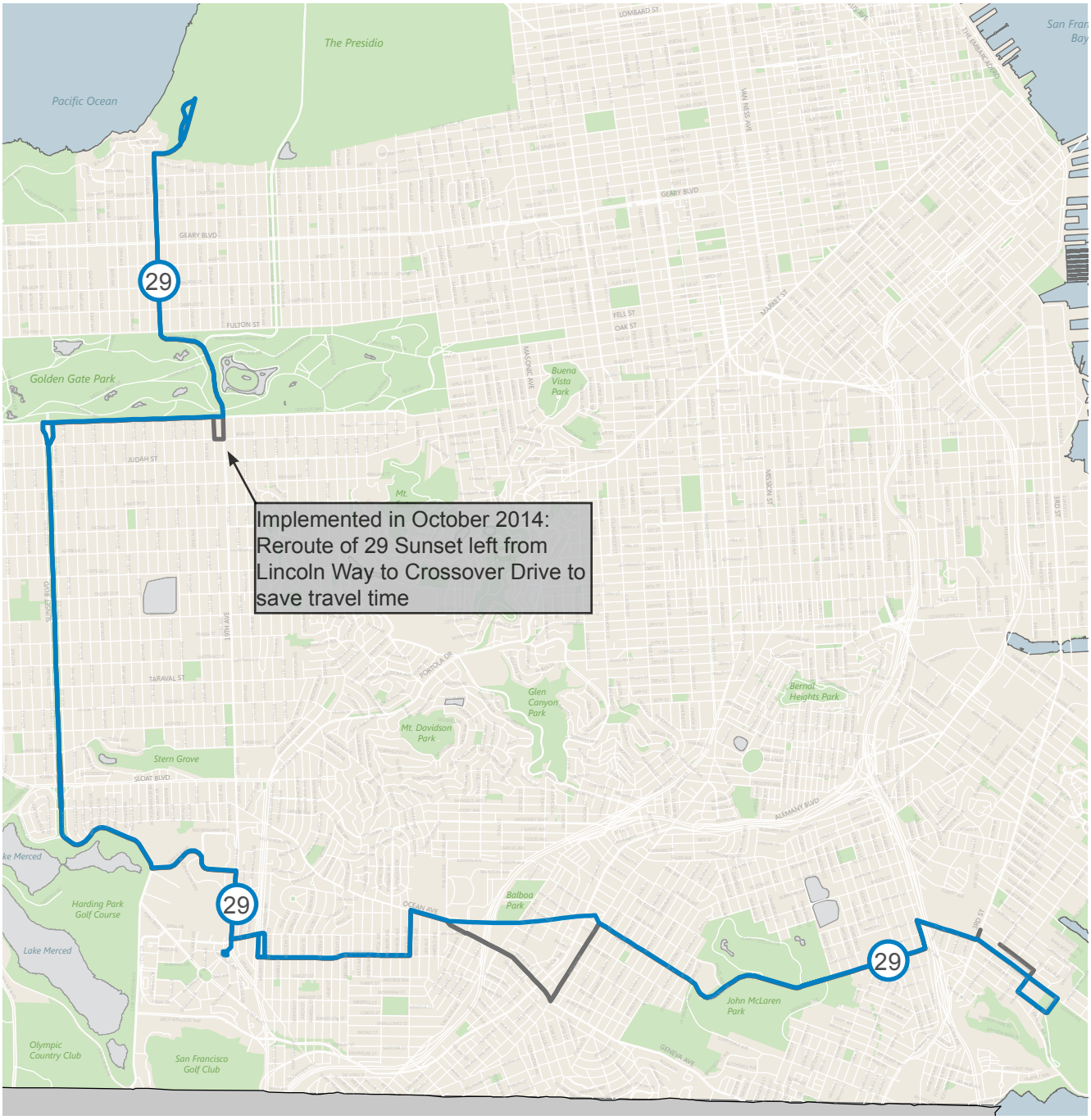
Together, the proposed changes are anticipated to reduce the travel time of the 28 19th Avenue local service by more than 5 minutes in each direction (11 minutes total) within the study area (25 percent reduction), improving the average operating speed to 12.2 miles per hour and improving service reliability. The proposed changes are anticipated to reduce the travel time of the 28R 19th Avenue Rapid by 1.5 minutes in each direction (3 minutes total) within the study area (nine percent reduction), improving the average operating speed to 12.7 miles per hour. Transit signal priority improvements are anticipated to save an additional 40 seconds in each direction for the 28 19th Avenue local service and 1.5 minutes each direction for the 28R 19th Avenue Rapid. Other changes such as 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.

San Francisco's Pedestrian Safety Task Force, created through Executive Directive 10-03: Pedestrian Safety In San Francisco, identified several high injury density corridors that encompass less than seven percent of City streets but account for over half of serious and fatal pedestrian injuries, including 19th Avenue. The transit bulbs and pedestrian bulbs recommended as part of this travel time reduction proposal can improve pedestrian safety and could be further enhanced with additional pedestrian safety treatments.

28 19th Avenue - Lombard Transit Priority Project

For this proposal, the Transit Priority Features would be applied along a segment of the 28R 19th Avenue Rapid route (portion of U.S. 101). The Transit Priority Features would be implemented along the following streets: Van Ness Avenue, Lombard Street and Richardson Avenue. This part of the 28 19th Avenue Rapid corridor extends from the intersection of Beach Street and Van Ness Avenue to the intersection of Lyon Street and Richardson Avenue (US 101 N). This would improve an east-west portion of the Rapid Network connecting the future Van Ness BRT with the 28R 19th Avenue Rapid, which provides transit connections through the Marina and the Presidio to the Richmond and Sunset Districts.

29 Sunset



Grid

- Recommended Route
- Segment Proposed for Elimination

Feature Summary

RA HC

29 Sunset

Overview

- Will provide a more direct route on Ocean Avenue to Balboa Park Station (instead of current route on Mission Street and Geneva Avenue).
- Route will extend from Persia Avenue to Ocean Avenue to Plymouth Avenue. New street segment on Persia Avenue between Mission Street and Ocean Avenue in association with Persia Triangle Improvements.
- Service will be eliminated on Mission Street between Persia and Geneva Avenues and on Geneva Avenue between Mission Street and Ocean Avenue.
- Two-way service on Gilman Avenue will simplify route to/from Candlestick Park; service on Fitzgerald Street will be discontinued.

Persia Triangle Improvements

The Persia Triangle Improvements would change the pedestrian and transit circulation along the intersections of Mission Street and Ocean Avenue, Mission Street and Persia Avenue, and Ocean and Persia avenues, which form the “Persia Triangle.” The proposed project would include improvements to complement the realignment of the 29 Sunset route to travel along Ocean Avenue between Mission Street and the Balboa Park Station. Currently, the inbound 29 Sunset route turns left onto southbound Mission Street from Persia Avenue, turns right onto westbound Geneva Avenue from Mission Street, and proceeds along Geneva Avenue to the Balboa Park Station. The revised inbound (northbound) route would continue on Persia Avenue across Mission Street and turn left onto Ocean Avenue to proceed to the Balboa Park Station. The new segment of the 29 Sunset route would operate in both the inbound and outbound directions. The existing 29 Sunset route along Persia Avenue (east of Mission) would remain unchanged.

A new transit stop would be added on the east side of Persia Avenue between Mission Street and Ocean Avenue. There are two possible locations under consideration for this new stop on Persia Avenue; one would be nearside at the intersection with Ocean Avenue, and the other would be farside at the intersection with Mission Street. This transit stop would include the construction of a transit bulb. As part of the project, curb radii modifications at the T-intersection of Persia and Ocean avenues would also be completed by installing a pedestrian bulb at the southwest corner of the intersection to improve the turning radius for outbound buses traveling from Ocean Avenue to Persia Avenue. The new transit stops with transit bulbs would be approximately 60 feet in length by six feet in width and the pedestrian bulb approximately 20 feet in length by six feet in width.

In addition, two new transit zones with transit bulbs (approximately 60 feet in length by six feet in width) would be constructed along Ocean Avenue at the intersection with Persia Avenue for the 49R Van Ness-Mission Rapid route. One would be located on the north side of Ocean Avenue midblock between Persia Avenue and Mission Street. The other stop would be located on the nearside of the intersection of Ocean Avenue with Persia Avenue for the inbound 49R Van Ness-Mission Rapid route. A pedestrian bulb approximately 20 feet in length by six feet in width would be added on the northwest corner of the intersection of Ocean Avenue and Mission Street and a

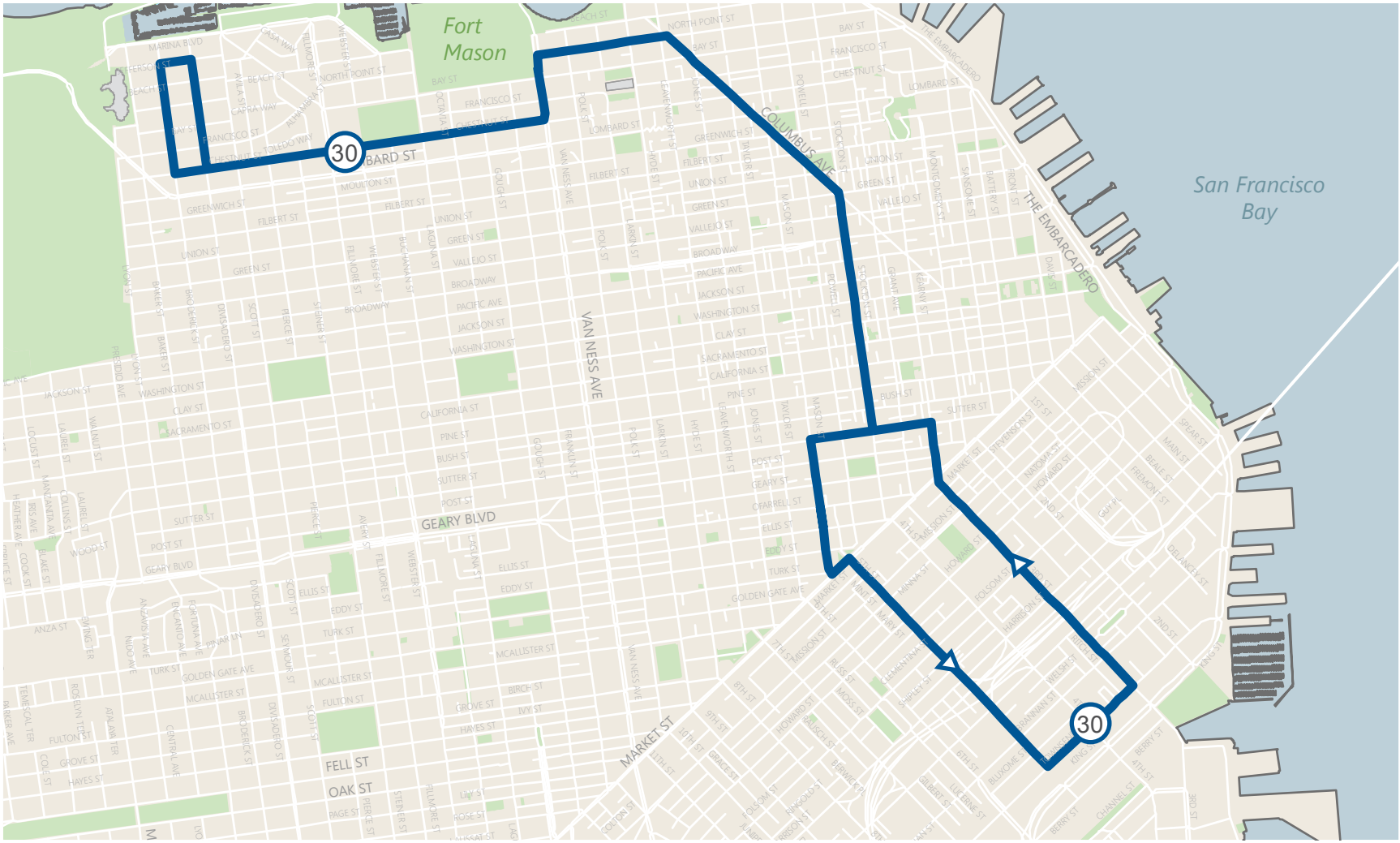
new transit stop with a transit bulb would be added on the southwest corner of this intersection to serve the 14 Mission and 14R Mission Rapid routes. Up to five existing parking spaces would need to be removed to construct the improvements for the Persia Triangle Improvements project.

Frequency

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

	Current	Approved	Frequency
AM	9	8	+
PM	10	10	=

30 Stockton



Frequent Local

- Recommended Route
- Segment Proposed for Elimination

Features

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

30 Stockton

Overview

- No route changes proposed.
- Subject to equipment availability, all service on Stockton Street will be provided by 60-foot articulated buses to reduce crowding and improve reliability.
- Currently, there is a temporary reroute in the southbound direction along Mason and Fifth streets to accommodate the Central Subway Project construction. The reroute is expected to be in place for several years.
- A Transit Priority Project is proposed to reduce transit travel time along this corridor.

30 Stockton Corridor Overview

Muni's 30 Stockton bus route carries about 28,000 daily customers on an average weekday. The route's study corridor is 2.2 miles long and includes Van Ness Avenue, North Point Street, Columbus Avenue, Stockton Street, Sutter Street, and Kearny Street. Portions of the 45 Union-Stockton and 8X/AX/BX Bayshore Expresses also travel through the study area and would benefit from the proposed improvements.

Within the study corridor, the 30 Stockton serves over 17,600 customers. Combined with the 45 Union-Stockton and the 8X/AX/BX Bayshore Expresses, within the study corridor the routes serve over 27,500 customers during an average weekday.

Within the study area, the 30 Stockton operates at an average speed of 5.6 miles per hour during peak periods. The main sources of delay are closely spaced bus stops, narrow traffic lanes in Chinatown, and traffic congestion.

30 Stockton - East of Van Ness Ave Transit Priority Project

In order to reduce transit travel times and improve reliability, the SFMTA proposes a variety of improvements within the study area. The proposals include:

- Increasing bus stop spacing from one block to two blocks. Currently, the 30 Stockton stops at almost every block on Columbus Avenue and on North Point Street. This proposal moves towards at least a two-block spacing throughout the route. By stopping fewer times, the bus would take less time to move through the corridor.
- Optimizing bus stop locations at four locations. Relocating bus stops from the near-side to the far-side of intersections would allow buses to take advantage of planned transit signal priority improvements.
- Adding transit bulbs at 12 locations. Transit bulbs are sidewalk extensions alongside bus stops that allow buses to pick-up and drop-off customers without having to pull out of the travel lane into a bus stop and then wait for a gap to merge back into traffic. Transit bulbs enhance the ability of buses to take advantage of planned all-door boarding and provide space for transit shelters and other customer amenities.
- Extending existing transit bulbs at four locations. Transit bulbs in the southbound direction on Stockton Street are currently sized for one articulated 60' bus. Often times due to the high

frequency of transit service in this direction, two or more buses will arrive at a stop at the same time, delaying the second vehicle as it waits to service the stop. With a longer transit bulb, up to two articulated 60' buses would be able to serve the stop at the same time, reducing delays.

- Adding transit-only lanes at three locations. In areas of high traffic congestion, transit-only lanes can save significant travel time for the 30 Stockton by giving the bus its own exclusive lane.
- Widening travel lanes on Stockton Street between Broadway and Columbus Avenue. Within this two block segment of Chinatown, the travel lanes on Stockton Street are too narrow to allow large vehicles such as buses or delivery trucks to pass one another in opposite directions without one of the vehicles coming to a complete stop. For example, when a 30 Stockton bus is headed northbound within this segment, it generally has to drive over the double yellow line due to the narrow lane widths. If a large vehicle such as a bus or delivery truck is headed in the opposite direction, one vehicle must stop to let the other pass by. This condition has made Stockton Street between Broadway and Columbus Avenue the slowest segment of the route. By widening the travel lanes through parking removal on the east side of the street, delays to transit would potentially be reduced.

Summary

Together, the proposed changes are anticipated to reduce the travel time of the 30 Stockton by about 3.5 minutes in each direction (seven minutes total) within the study area (15 percent reduction), improving the average operating speed to 6.6 miles per hour and improving service reliability. Transit signal priority improvements are anticipated to save an additional two minutes in each direction. Other changes such as 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.

30 Stockton - Chestnut St Transit Priority Project

For this proposal, the Transit Priority Features would be applied along a segment of the 30 Stockton route. The Transit Priority Features would be implemented along Chestnut, Broderick, Divisadero and Jefferson streets, from the intersection of Van Ness Avenue and Chestnut Street to the intersection of Jefferson and Broderick streets. This would improve an east-west portion of the Rapid Network connecting the future Van Ness BRT with the 30 Stockton to provide transit connections between the Marina, Russian Hill, Civic Center, the North Waterfront, North Beach, Chinatown, Union Square, the Financial District, SoMa and the Caltrain Station.

30 Stockton

Frequency

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

East of Van Ness Ave.

	Current	Approved	Frequency
AM	4	3.5	+
PM	4	4	=

West of Van Ness Ave.

	Current	Approved	Frequency
AM	8	7	+
PM	12	12	=

Budget

Project Phase	Total
East of Van Ness Ave - Design & Construction	$5,039,000
Stockton Street - Design & Construction	$3,350,000
Chestnut St - Design & Construction	$9,578,000
Marina Terminal - Design & Construction	$4,307,000
Total	$22,274,000

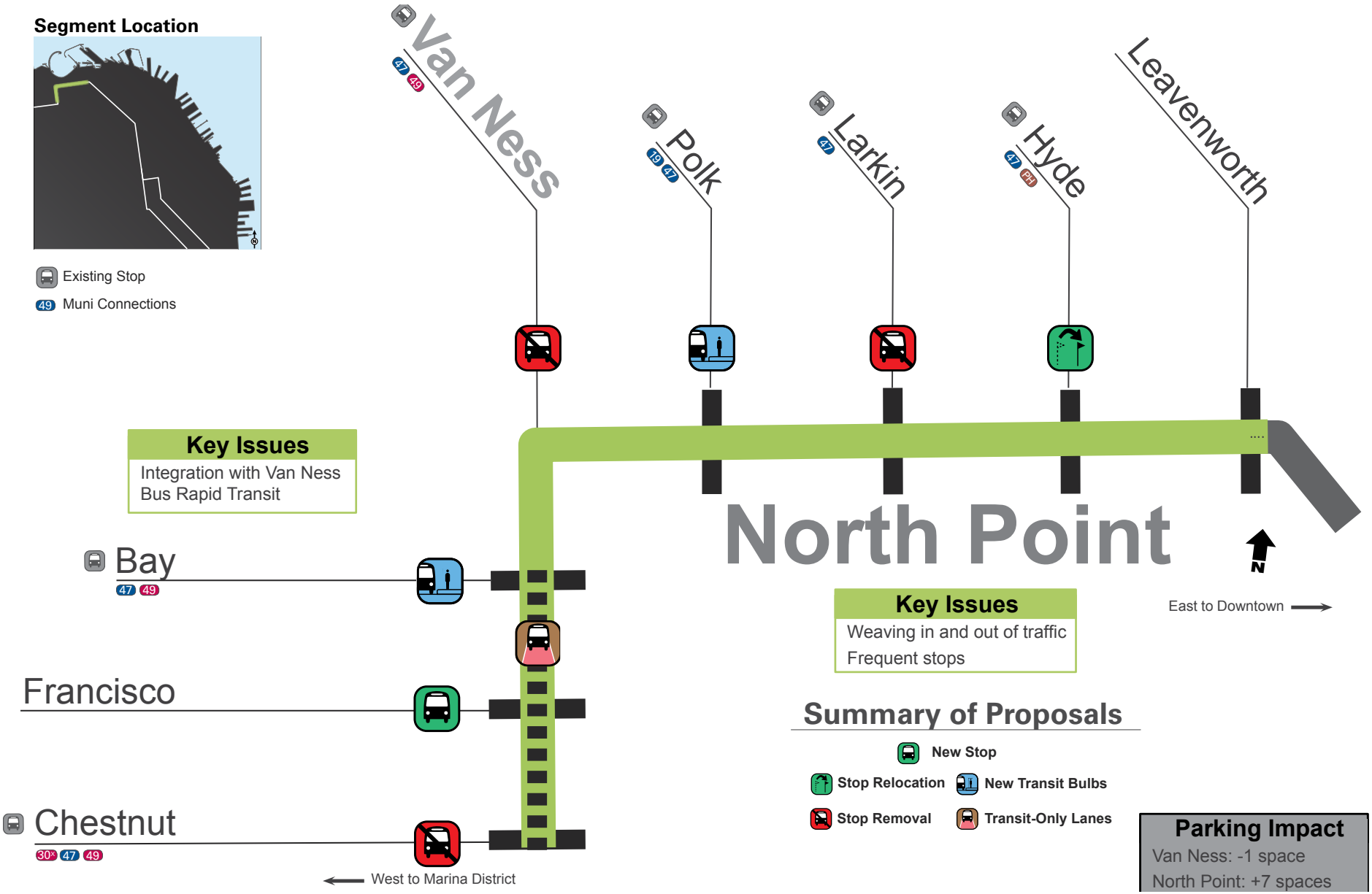
* The budget displayed above will be supplemented by Proposition K local funds, which will be used for project planning, conceptual engineering, and design.

30 Stockton - East of Van Ness Ave Transit Priority Project

Segment Location

Existing Stop

49 Muni Connections



Key Issues

Integration with Van Ness Bus Rapid Transit

Key Issues

Weaving in and out of traffic

Frequent stops

Summary of Proposals

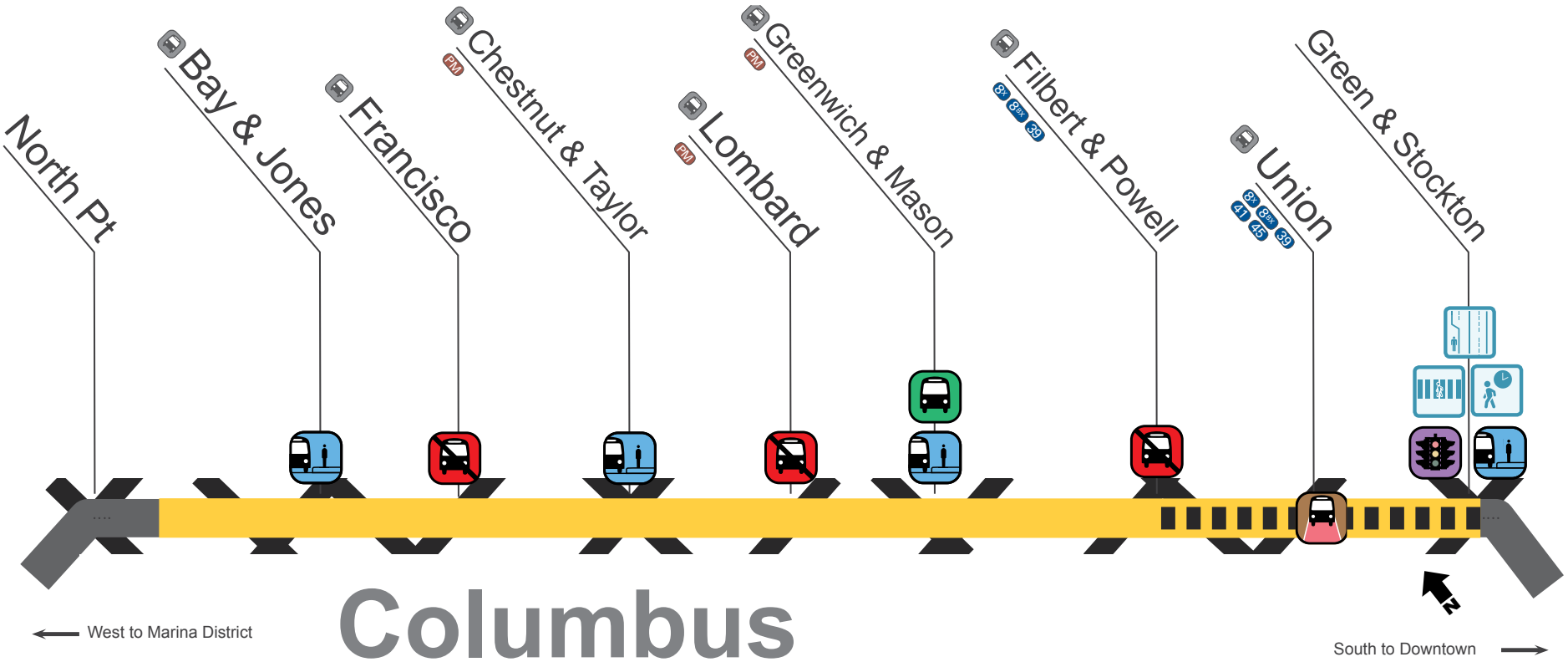
- New Stop
- Stop Relocation
- New Transit Bulbs
- Stop Removal
- Transit-Only Lanes

Parking Impact

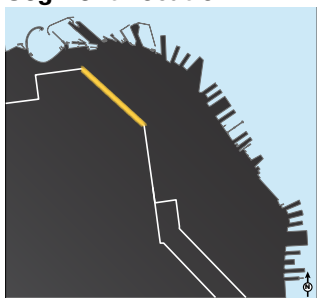
Van Ness: -1 space

North Point: +7 spaces

30 Stockton - East of Van Ness Ave Transit Priority Project



Segment Location



Existing Stop

49 Muni Connections

Summary of Proposals

Muni Forward

- New Transit Bulbs
- New Stop
- Traffic Signal Changes
- Stop Removal
- Transit-Only Lanes

Walk First

- Leading Pedestrian Intervals
- Pedestrian Bulb-Outs
- Continental Crosswalks

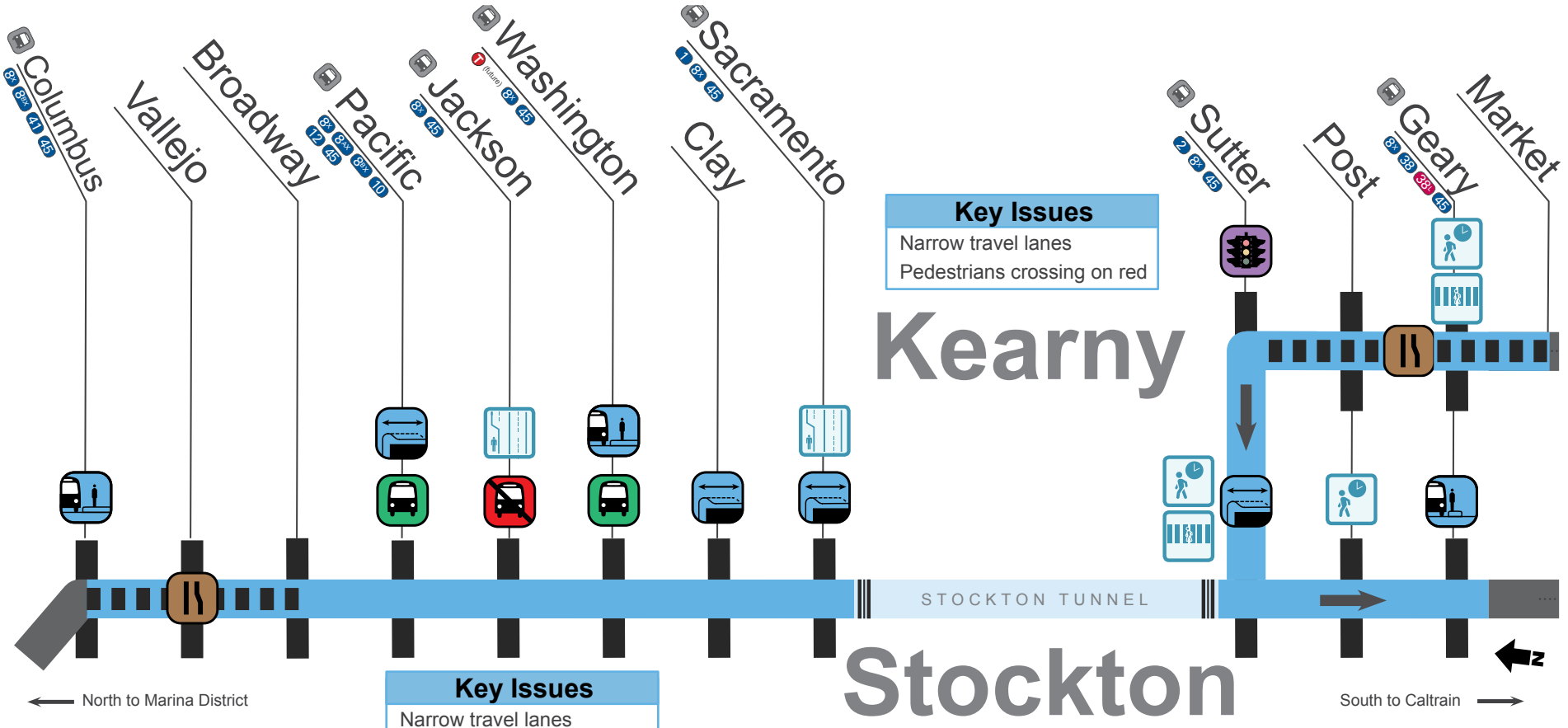
Key Issues

Weaving in and out of traffic
Frequent stops
Congestion
Pedestrians crossing on red

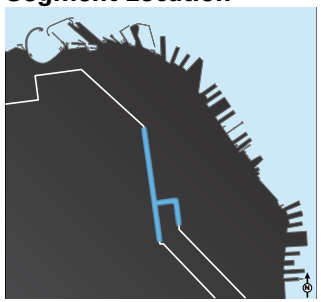
Parking Impact

+5 spaces

30 Stockton - East of Van Ness Ave Transit Priority Project



Segment Location



Existing Stop

49 Muni Connections

Summary of Proposals

Muni Forward

- Stop Relocation
- Extend Transit Bulbs
- Lane Widening
- New Stop
- New Transit Bulbs
- New Transit Island
- Traffic Signal Changes

Walk First

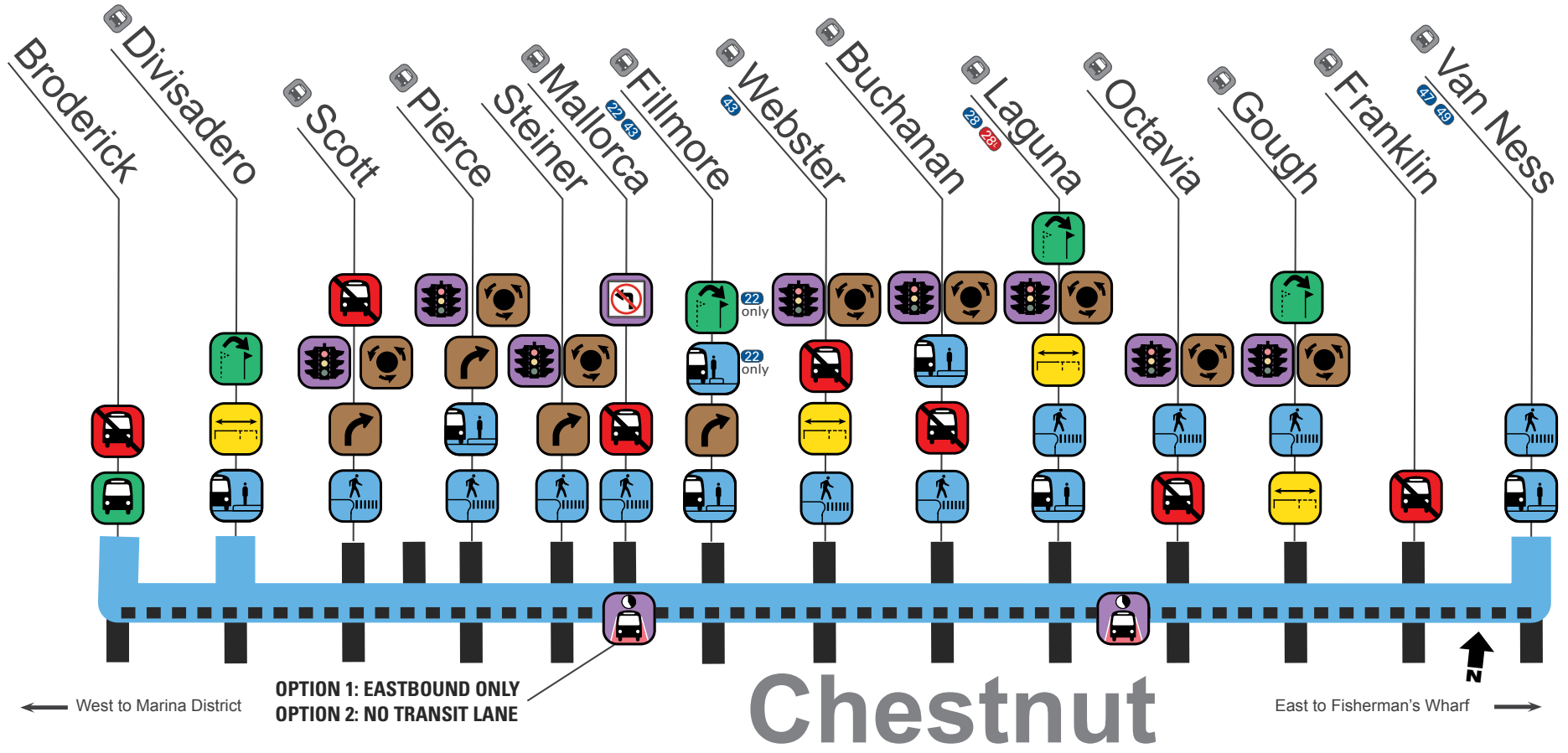
- Leading Pedestrian Intervals
- Pedestrian Bulb-Outs
- Continental Crosswalks

Parking Impact

Alternative 1: -50 spaces

Alternative 2: -43 spaces

30 Stockton - Chestnut Street Transit Priority Project



Summary of Proposals

- Stop Relocation
- Stop Removal
- New Turn Pockets
- Turn Restrictions (on side street)
- Peak Hr Transit Lane
- New Stop
- Bus Zone Extensions
- New Traffic Signals OR Traffic Calming

Existing Stop

49 Muni Connections

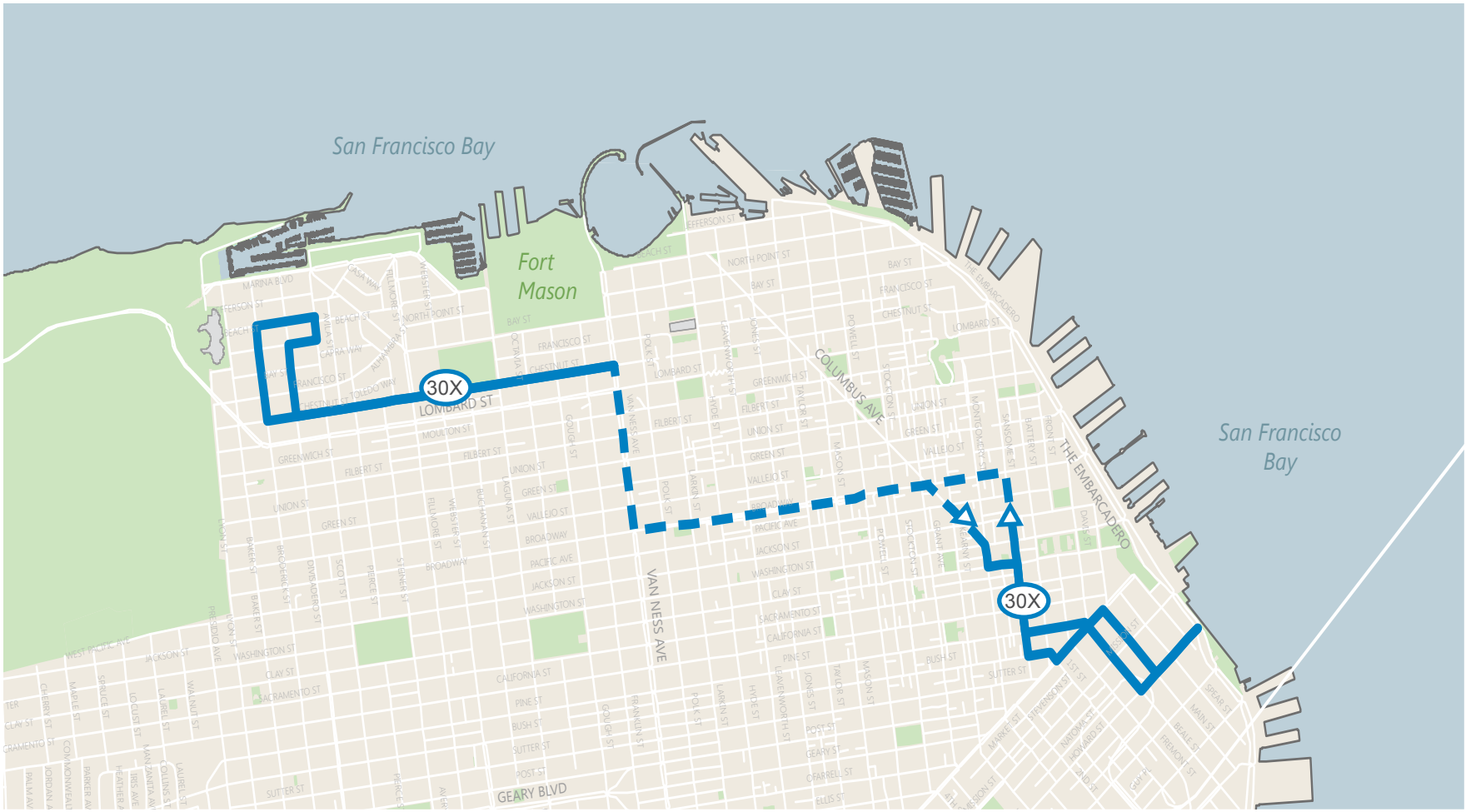
Bulbs

- New Pedestrian Bulbs*
- New Transit Bulbs*

OPTION 1: Bulbs will only be placed on north side of Chestnut to stay clear of transit lane.

OPTION 2: Bulbs will be on both sides of Chestnut.

30X Marina Express



Express

- Recommended Route
- Express Segment (no stops)

Feature Summary

HC

30X Marina Express

Overview

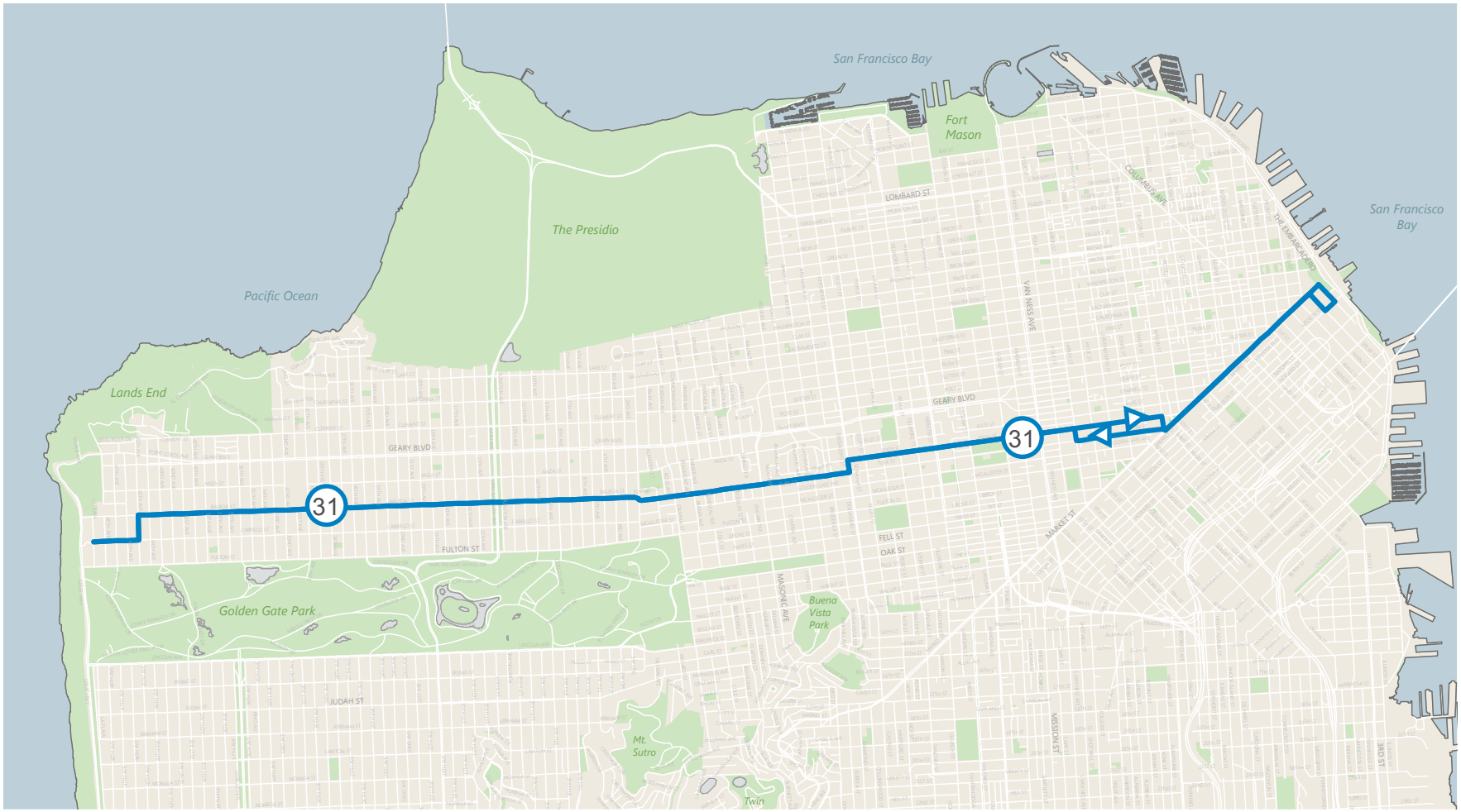
- No route changes proposed.
- In the a.m. peak period, the 30X Marina Express will use 60-foot articulated motor coaches instead of standard 40-foot motor coaches.

Frequency

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

	Current	Approved	Frequency
AM	4.5	4	+
PM	7.5	7	+

31 Balboa



Grid

Recommended Route

Feature Summary

HC

31 Balboa

Overview

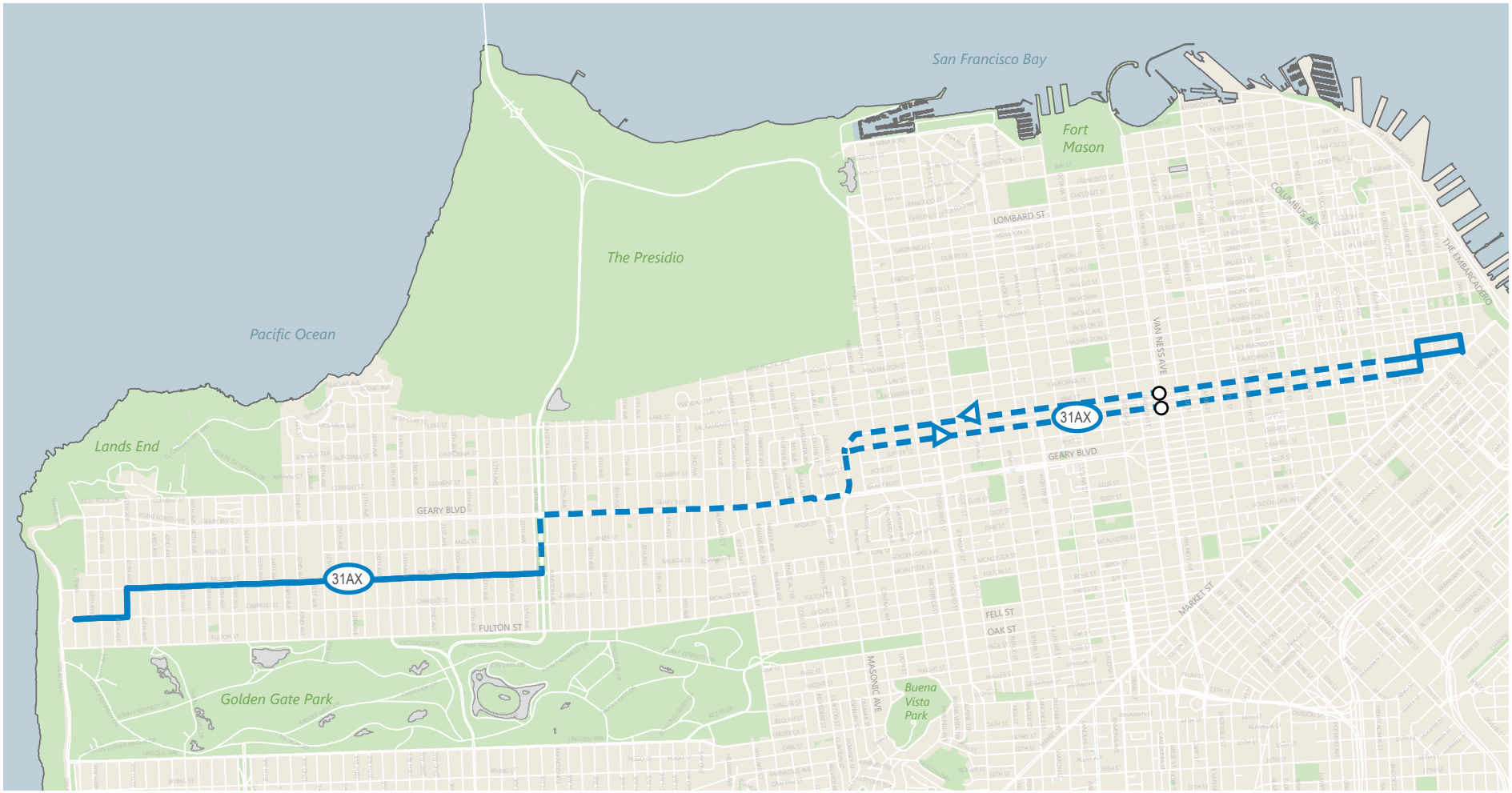
- No route changes proposed.

Frequency

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

	Current	Approved	Frequency
AM	12	12	=
PM	14	12	+

31AX Balboa Express



Express

- Recommended Route
- Express Segment (no stops)

31AX Balboa Express

Overview

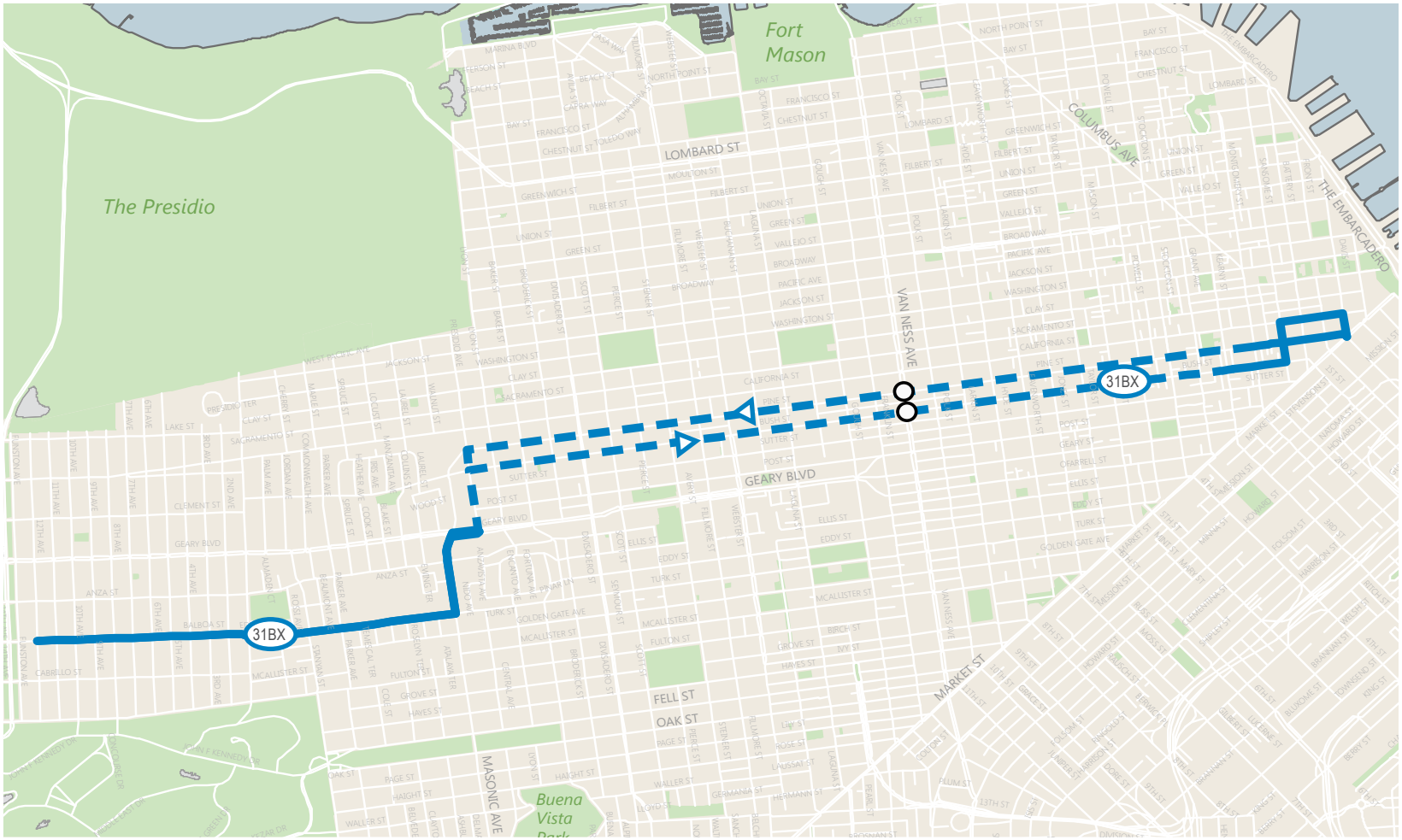
- No route or service changes proposed.
- New Stop at Van Ness Avenue.

Frequency

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

	Current	Approved	Frequency
AM	10	10	=
PM	10	10	=

31BX Balboa Express



Express

- Recommended Route
- Express Segment (no stops)

Features

New stop at Van Ness

31BX Balboa Express

Overview

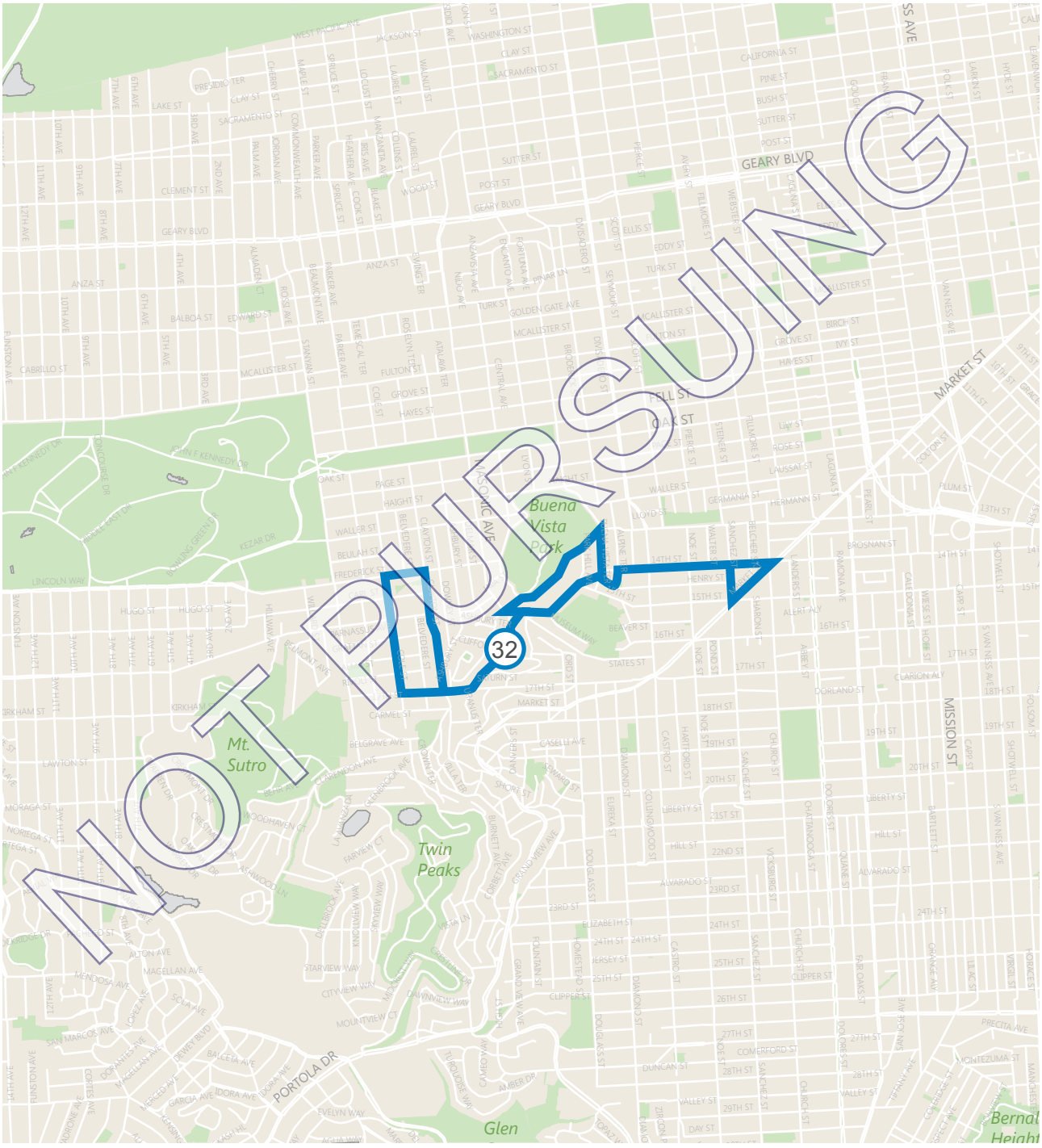
- No route or service changes proposed.
- New Stop at Van Ness Avenue.

Frequency

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

	Current	Approved	Frequency
AM	10	10	=
PM	12	12	=

32 Roosevelt - NOT PURSUING



Connector

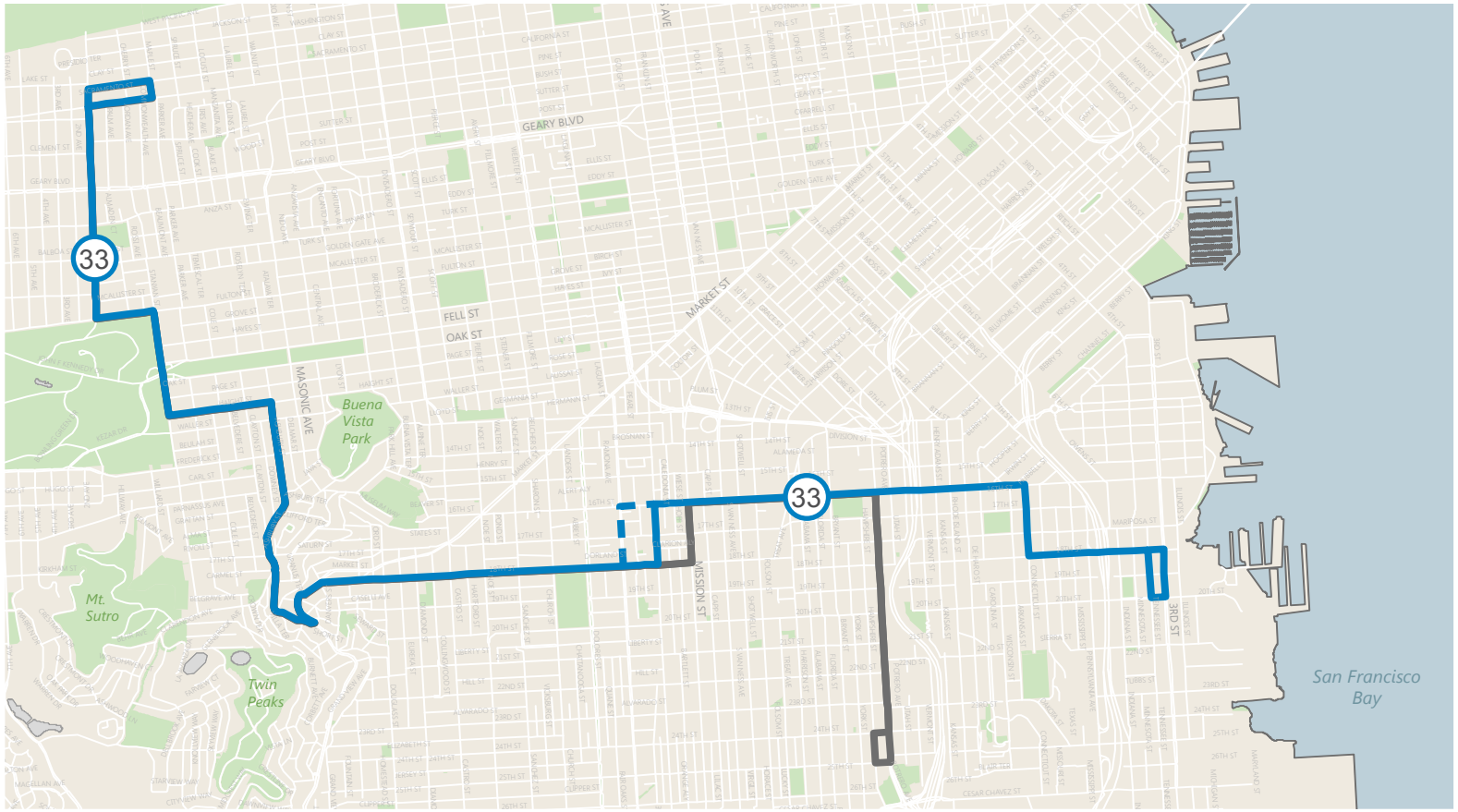
Recommended Route

32 Roosevelt - NOT PURSUING

Overview

- Not pursuing this proposal

33 Ashbury-18th St



Grid

- Recommended Route
- Segment Proposed for Elimination

Feature Summary

RA HC

33 Ashbury-18th St

Overview

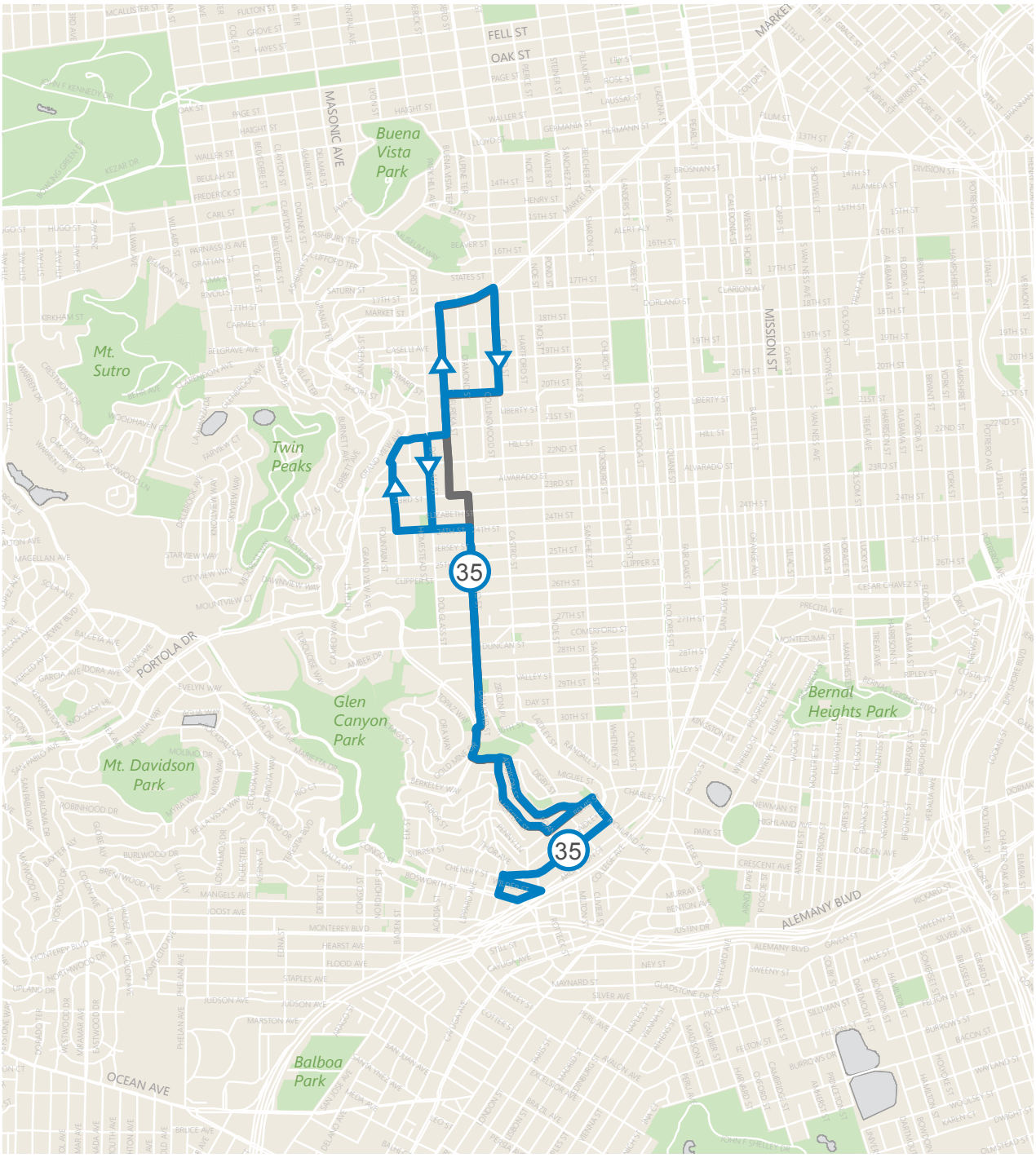
- Service will be routed to Dogpatch in order to provide service coverage to area eliminated on 22 Fillmore under the Mission Bay reroute proposal.
- Service will be extended on 16th Street between Potrero Avenue and Connecticut Street, Connecticut Street between 17th and 18th Streets, 18th Street between Connecticut and Third Streets, Tennessee and Third Streets between 18th and 20th Streets, and 20th Street between Third and Tennessee Streets.
- Service will be rerouted onto either Valencia Street between 16th and 18th streets (new street segment) or Guerrero Street between 16th and 18th streets (new street segment) to alleviate transit congestion on Mission Street and provide better connections with the 22 Fillmore. Further outreach will determine final alignment.
- Service will be discontinued on 18th Street between Valencia and Mission Streets, Mission Street between 16th and 18th Streets, Potrero Avenue between 16th Street and Cesar Chavez Street, 24th and Cesar Chavez Streets between Hampshire Street and Potrero Avenue, and Hampshire Street between 24th and Cesar Chavez Streets. Potrero Avenue customers will use Route 9 San Bruno/9R San Bruno Rapid.

Frequency

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

	Current	Approved	Frequency
AM	15	12	+
PM	15	12	+

35 Eureka



Connector

- Recommended Route
- Segment Proposed for Elimination

Feature Summary

HC VC

35 Eureka

Overview

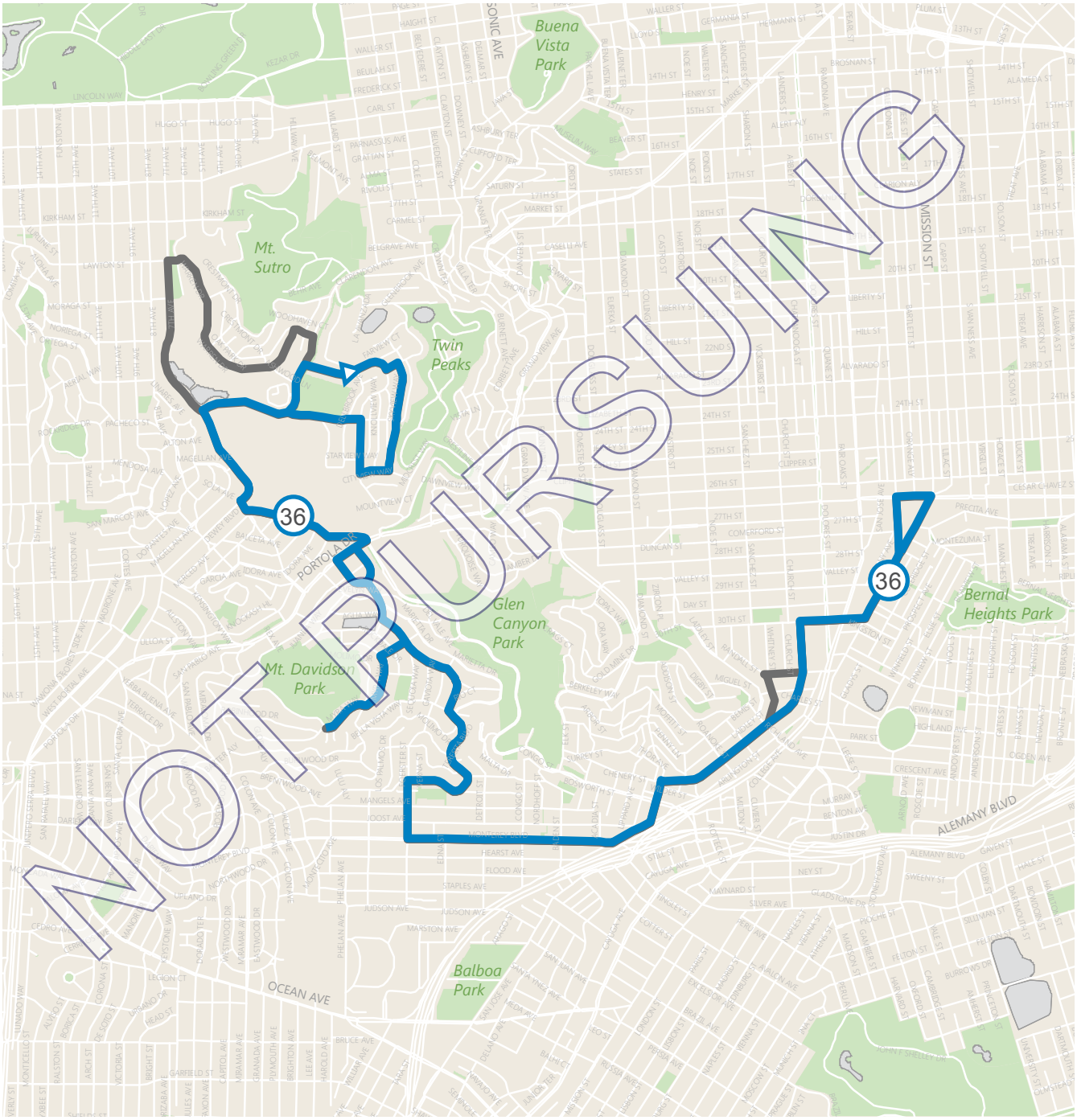
- The 35 Eureka will be extended to Glen Park BART and into a portion of Noe Valley. Service will be added on 21st Street between Eureka Street and Grandview Avenue, Hoffman Avenue between Grandview Avenue and 24th Street, Douglass Street between 21st and 24th Streets, 24th Street between Hoffman Avenue and Diamond Street, Miguel Street between Bemis and Chenery Streets, Chenery Street between Miguel and Diamond Streets, Diamond Street between Chenery and Bosworth Streets, Bosworth Street between Diamond and Arlington Streets, Arlington Street between Bosworth and Wilder Streets, and Wilder Street between Arlington and Diamond Streets.
- Service will be discontinued on Eureka Street between 21st Street and 23rd Street, 23rd Street between Eureka and Diamond Streets, and Diamond Street between 23rd and 24th Streets.

Frequency

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

	Current	Approved	Frequency
AM	30	20	+
PM	20	20	=

36 Teresita - NOT PURSUING



Connector

- Recommended Route
- Segment Proposed for Elimination

36 Teresita - NOT PURSUING

Overview

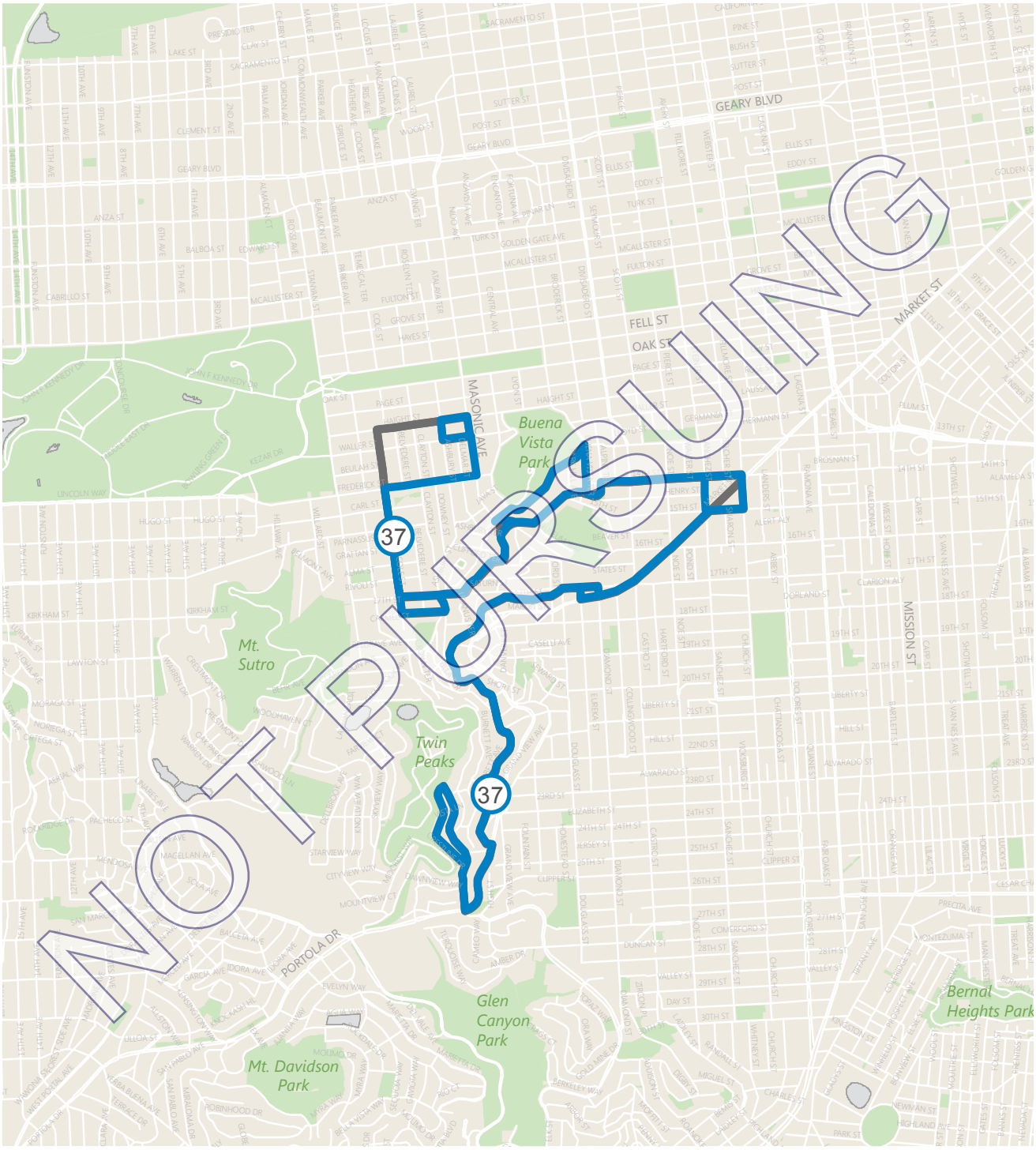
- No changes from current route or frequency.

Frequency

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

	Current	Proposed	Frequency
AM	30	30	=
PM	30	30	=

37 Corbett



Connector

- Recommended Route
- Segment Proposed for Elimination

37 Corbett

Overview

- No changes to current route alignment.
- PM peak frequency will increase to every 15 minutes.

Frequency

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

	Current	Approved	Frequency
AM	15	15	=
PM	20	15	+

** Route changes will not be pursued however frequency increase during PM peak period is planned