



**SFMTA RAIL CAPACITY STRATEGY**

*Rail Investment Opportunities by Priority Focus Area*

Focus Area	Solution	Focus Area	Solution
Enhance Existing Lines	5 Car Castro-embarcadero shuttle	Expand/Extend the Light Rail System	Creation of a Evans Ave-Bayview-Sunnydale-Candlestick Line
	Additional Police enforcement		Double deck the Kirkland yard
	Divert passengers from F Line to Central Subway		Extend Central Subway down Lombard to the Golden Gate Bridge
	Double berthing in subway		H line from Marina to Hunters Point
	Double track at Duboce		LRT expansion onto Geary and Van Ness into protected ROW
	Grade separate M		More maintenance facilities
	J Church should be more frequent		Subway stop at art museums in GGP
	L needs dedicated ROW in the Sunset		T loop in Mission Bay
	M Spine to 4th and King		Rail on South Van Ness to Hunter's Point
	Make J Church a streetcar on surface of Market		Extend T to Bayshore Baylands
	Separated ROW on T line to Bayview		Extend F to The Presidio
	Transit priority on Duboce between West Portal and Sunset Tunnel		T third should go around the horn to the Embarcadero
	Connect Sunset tunnel underground to Market St subway		Create rail extensions on Geary
	Restrict autos on Market St		Create rail on 19th St from Daly City to GGB
	Site new routes or those that have the most mixed traffic conflicts underground		Create rail on Van Ness North of Market
	Increase capacity on street for J,K,L,N,M up to 4 car trains		Create Geary-Soma-BART-East Bay line
Transit signal priority for existing routes above ground outer J, K, L, N, T	Extend Caltrain for downtown connection		
Run J out to cover western portion of M to ParkMerced	Connect Central Subway to Fisherman's Wharf		
Open Bottlenecks	Improve turn around at Embarcadero		Create N connection through 16th street to Mission Bay
	Maintenance track should be added in subway		Rail to replace 22 Fillmore
	Platforms on both sides in Subway		Create downtown circulator
	Pocket track after Castro		Ring on Lombard, California or Geary
	Pocket track around Glen Park		Reroute J thru SOMA
	Restrict autos at Duboce and Church		Rail on Geneva to connect Green and MME, Balboa to T line
	Four car stations at West Portal and Forest Hill		Create USF-UCSF-Daly City connection
	4th and King intersection improvements		Create express rail bypass tracks
	Church and Duboce bike flyover or north side bike lane		High speed shuttles to Embarcadero from West Portal
	Incremental station expansion		2nd transbay tube for BART, Caltrain, HSR, and Amtrak
	L Turnaround capacity and flexibility improvements		Extend J to 3rd st and/or Caltrain via 16th st
	Bayshore intermodal station		Extend F to Fort Mason
	Update ATCS in portals & subway		Add maintenance facilities at Pier 80
	Fix J, K, and M Line terminals at Balboa Park and improve intermodal connections		Extend T service to Brisbane
Build System Resiliency	Increase/install storage at Far Yard		Spur from T to Hunters Point
	Rail on Geneva to connect Green and MME, Balboa to T line		Light Rail Vehicles should have perimeter/longitudinal seating
	Ring on Lombard, California or Geary	Increase Light Rail Vehicle fleet size	
	Create N connection through 16th street to Mission Bay	Bicycles on LRVs	
	Allow LRVs to operate on Market Street during emergencies/Subway shutdowns	Increase historic vehicle fleet	
	Connect L and N line terminals or via Sunset		
	Improve and expand connections between lines so all five don't need to go through the Market St tunnel		
	M-Line to Daly City		
Reroute J thru SOMA			
		Expand the LRV Fleet	

# Rail Capacity Strategy Workshop #1 Results

## Proposed Bottleneck Improvements



### Legend

- Least requested improvement
- ↓
- Most requested improvement

### Current Rail System

- Muni Rapid Bus Network
- Caltrain
- Historic Streetcar
- BART
- Muni Metro Network
- Treasure Island Ferry



0 0.5 1 2 Miles

Base map source: Esri, DeLorme, GEBCO, NOAA NGDC, and other contributors



# Rail Capacity Strategy Workshop #1 Results

## Proposed Line Upgrades



### Systemwide enhancements:

- High boarding platforms
- Greater enforcement of dedicated right-of-way (ROW) for transit
- Greater vehicle capacity on surface operating segments
- Four-car train operations

### Legend

- Least requested enhancement
- ↓
- Most requested enhancement

### Current Rail System

- Muni Rapid Bus Network
- Historic Streetcar
- Muni Metro Network
- Caltrain
- BART
- Treasure Island Ferry



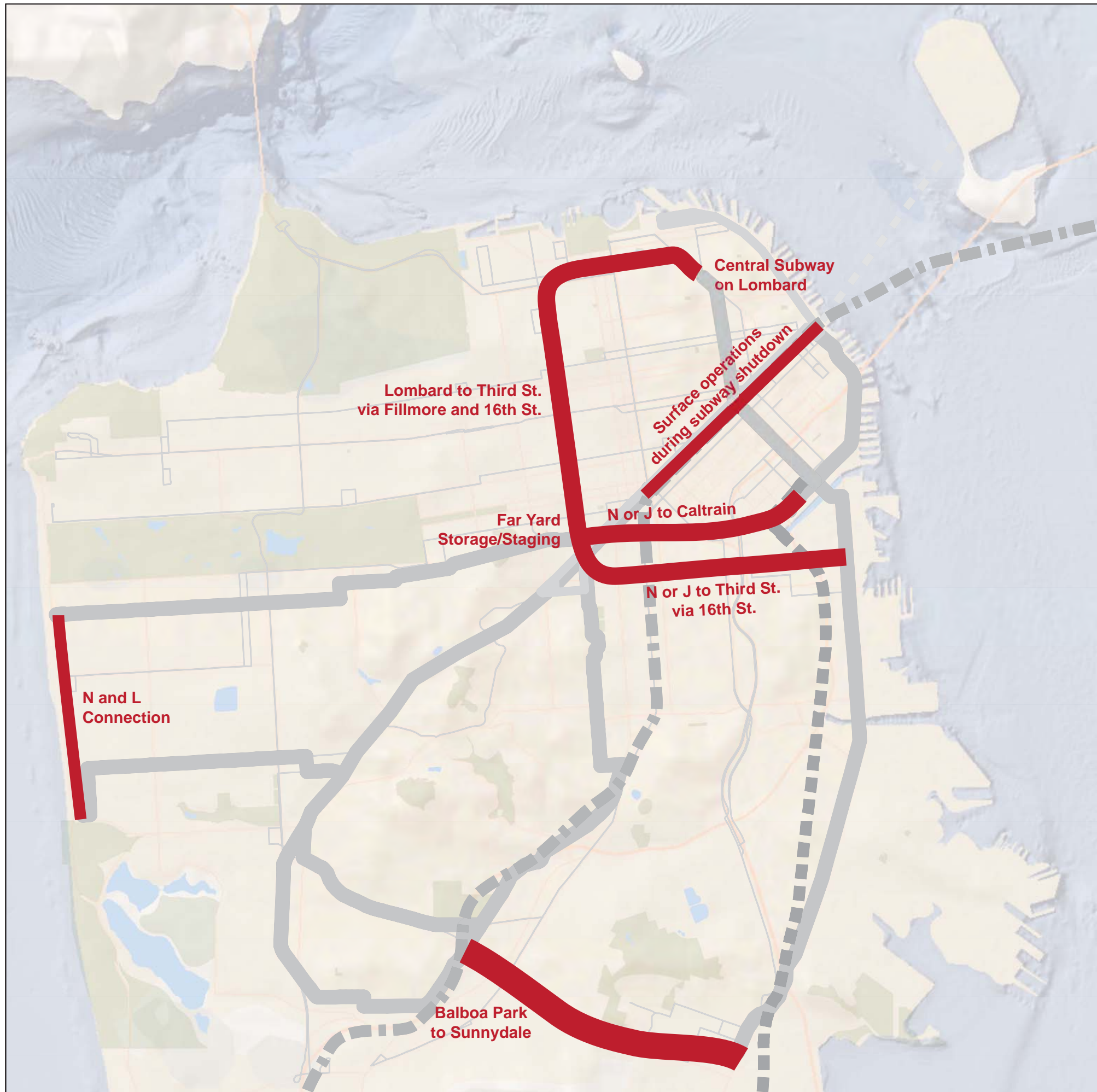
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Base map source: Esri, DeLorme, GEBCO, NOAA NGDC, and other contributors






# Rail Capacity Strategy Workshop #1 Results



## Proposed System Resiliency



### Legend

-  Least requested connection
- 
-  Most requested connection

### Current Rail System

-  Muni Rapid Bus Network
-  Historic Streetcar
-  Muni Metro Network
-  Caltrain
-  BART
-  Treasure Island Ferry



0 0.5 1 2 Miles

Base map source: Esri, DeLorme, GEBCO, NOAA NGDC, and other contributors









# Rail Capacity Strategy Workshop #1 Results

## Proposed System Expansion







### Systemwide expansion:

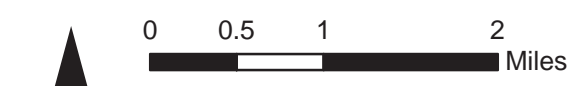
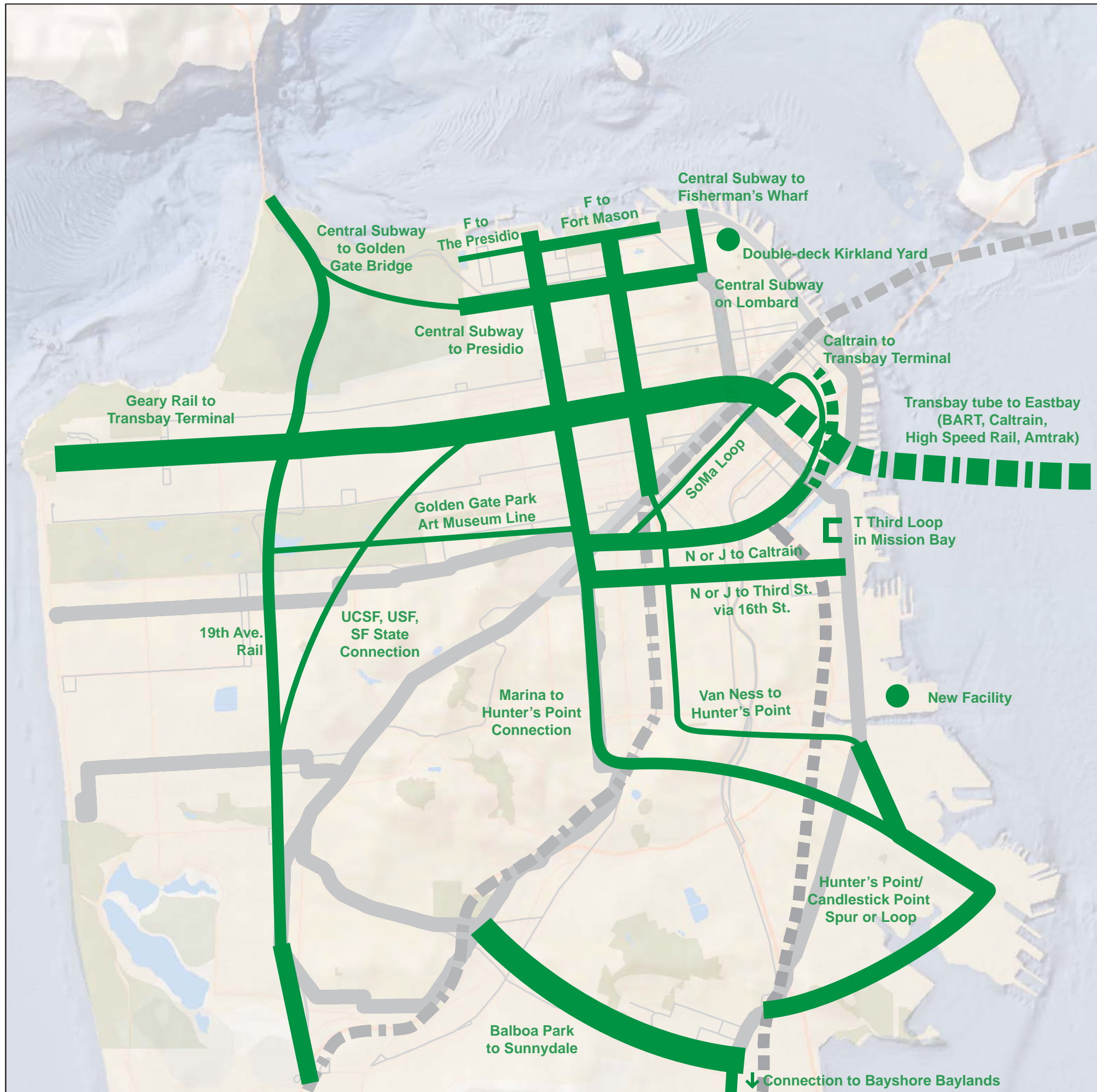
- Express rail bypass tracks

### Legend

-  Proposed Muni facility expansion project
-  Proposed Caltrain expansion
-  Proposed BART expansion
-  Least requested expansion project
- 
-  Most requested expansion project

### Current Rail System

-  Muni Rapid Bus Network
-  Historic Streetcar
-  Muni Metro Network
-  Caltrain
-  BART
-  Treasure Island Ferry

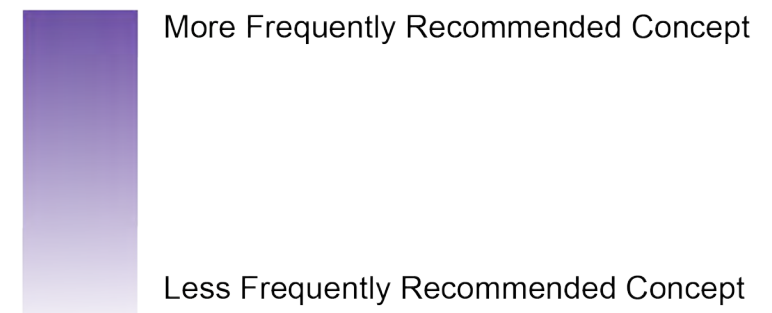


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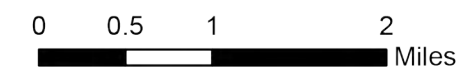
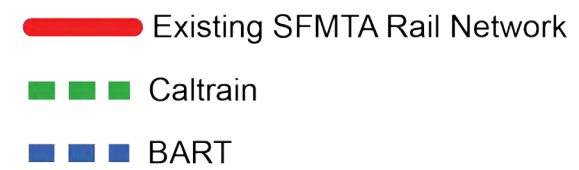


# Rail Capacity Strategy Online Stakeholder Feedback

## Legend



## Current Rail System



Base map source: Esri, DeLorme, GEBCO, NOAA NGDC, and other contributors



# Rail Capacity Strategy Workshop #2 Results

## Highest Priorities Overall



### Systemwide Priorities:

- ATCS Improvements in portals and subway
- Four-car trains on surface operating segments
- Transit Signal Priority for all above ground lines
- Increase Light Rail Vehicle fleet size

### Legend

- Muni Rail Bottleneck
- Muni Rail Enhancement Priorities
- Muni Rail Expansion Priorities
- Muni Rail Redunancy Priorities

### Current Rail System

- Muni Rapid Bus Network
- Historic Streetcar
- Muni Metro Network
- ■ ■ Caltrain
- ■ ■ BART
- ■ ■ Treasure Island Ferry

