



SFMTA
Municipal
Transportation
Agency

SFMTA Rail Capacity Strategy

February 24, 2016

SFCTA Citizens Advisory Committee

- Rail Capacity Strategy
 - Purpose & Need
 - Scope
- Methodology
- System-wide Investments
- Near-Term Investments
- Workshops & Outreach
- Medium/Long-Term Investments
- Next Steps & Discussion



- Prioritized over next two CIP cycles (0-10 year)
 - Specific projects (scope, schedule, budget) that leverage SOGR opportunities and can be added to CIP
- Prioritized Mid & Long Term (10-20+ year)
Capacity Improvement and Expansion Corridor Concepts
 - Order of Magnitude/Unit Cost Based Cost Estimates



Assess

- Identify capacity constraints of existing system
- Quantify capacity shortfall at most crowded points

Develop

- Brainstorm potential capacity enhancing solutions
- Develop concept descriptions

Screen

- Screen concepts for high level feasibility
- Group concepts into tiers for further analysis

System-wide Investments



Vetag switches/crossovers



Terminal/Tail track



Station/Platform
Enhancement



Switches/crossovers



Transit "Red Carpet"/
Raised Trackway



Transit Signal Priority

NAME / PROJECT DESCRIPTION	BENEFITS	TIMELINE	COST
West Portal Conflict Reduction: <ul style="list-style-type: none"> Restrict conflicting turn movements Replace magnetized rail segments 	<ul style="list-style-type: none"> Improved Reliability Improved Travel Time 	<3 Years	\$1.5m (Pilot only)
Muni Metro Extension Turnback Track: <ul style="list-style-type: none"> Construct pocket track east of Harrison Street 	<ul style="list-style-type: none"> Improve Passenger Comfort Improve Reliability Improve Travel Time 	4–5 Years	\$8.5m
Muni Metro Extension Surface Train Control System: <ul style="list-style-type: none"> Upgrade existing Transit Signal Priority along Embarcadero from Ferry Portal to 4th and King and south along 3rd Street to 16th Street 	<ul style="list-style-type: none"> Improved Passenger Comfort Improved Reliability Improved Travel Time 	3–5 Years	\$10.5m
Church & Duboce Portal Conflict Reduction: <ul style="list-style-type: none"> Analyze vehicle or turn prohibition and improved pedestrian and bicycle circulation 	<ul style="list-style-type: none"> Improved Reliability Improved Travel Time 	2–5 Years	\$0.5m (Planning only)

Systemwide & Near-term Investments

RAIL CAPACITY STRATEGY

- West Portal Conflict Reduction
- Muni Metro Extension Turnback Track
- Muni Metro Extension Transit Signal Enhancements/Embarcadero Tramways
- Church and Duboce Portal Conflict Reduction

\$20M

MUNI FORWARD

- 22 Filmore: 16th St Transit Priority Project
- 14 Mission: Downtown Mission Transit Priority Project
- L Taraval: Transit and Streetscape Enhancements
- See Muni Forward Implementation Plan for additional projects

\$225M

MAJOR CORRIDORS

- Van Ness Bus Rapid Transit
- Geary Bus Rapid Transit
- Better Market Street
- M-Line/19th Avenue Core Capacity Project

\$475M

SPOT IMPROVEMENTS

- Transit Spot Improvements & Red Lanes
- Overhead Catenary System

\$115M

Total Need: \$835M

Funding Gap: \$144M

Estimated Revenue: \$691M



FY 2022-2026



FY 2017-2021



Current Rail System

-  Existing SFMTA Rail Network
-  Caltrain
-  BART

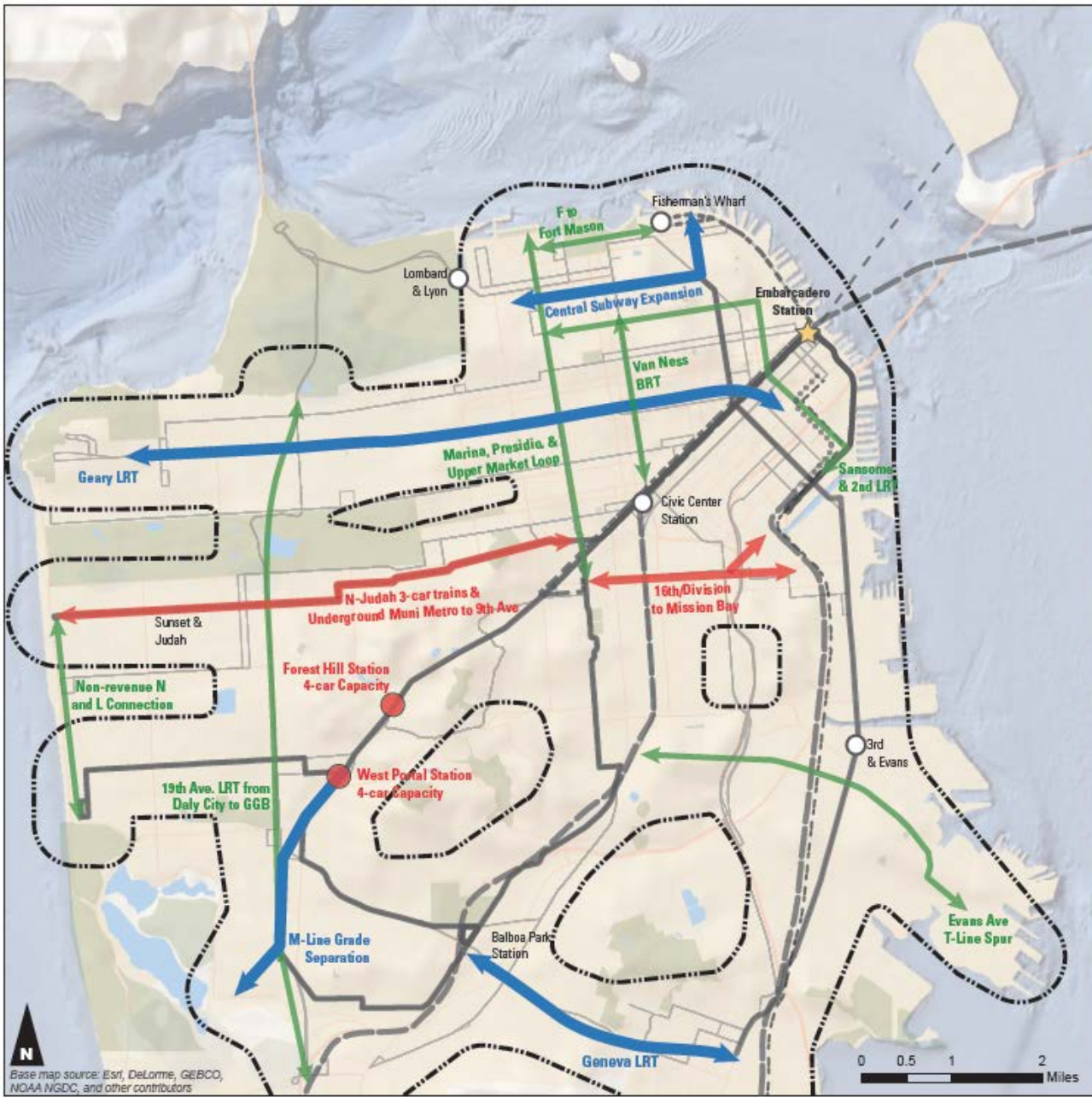
Less Frequently
Recommended
Concept



More Frequently
Recommended
Concept



Long-Term Investments



Tier 1



Tier 2



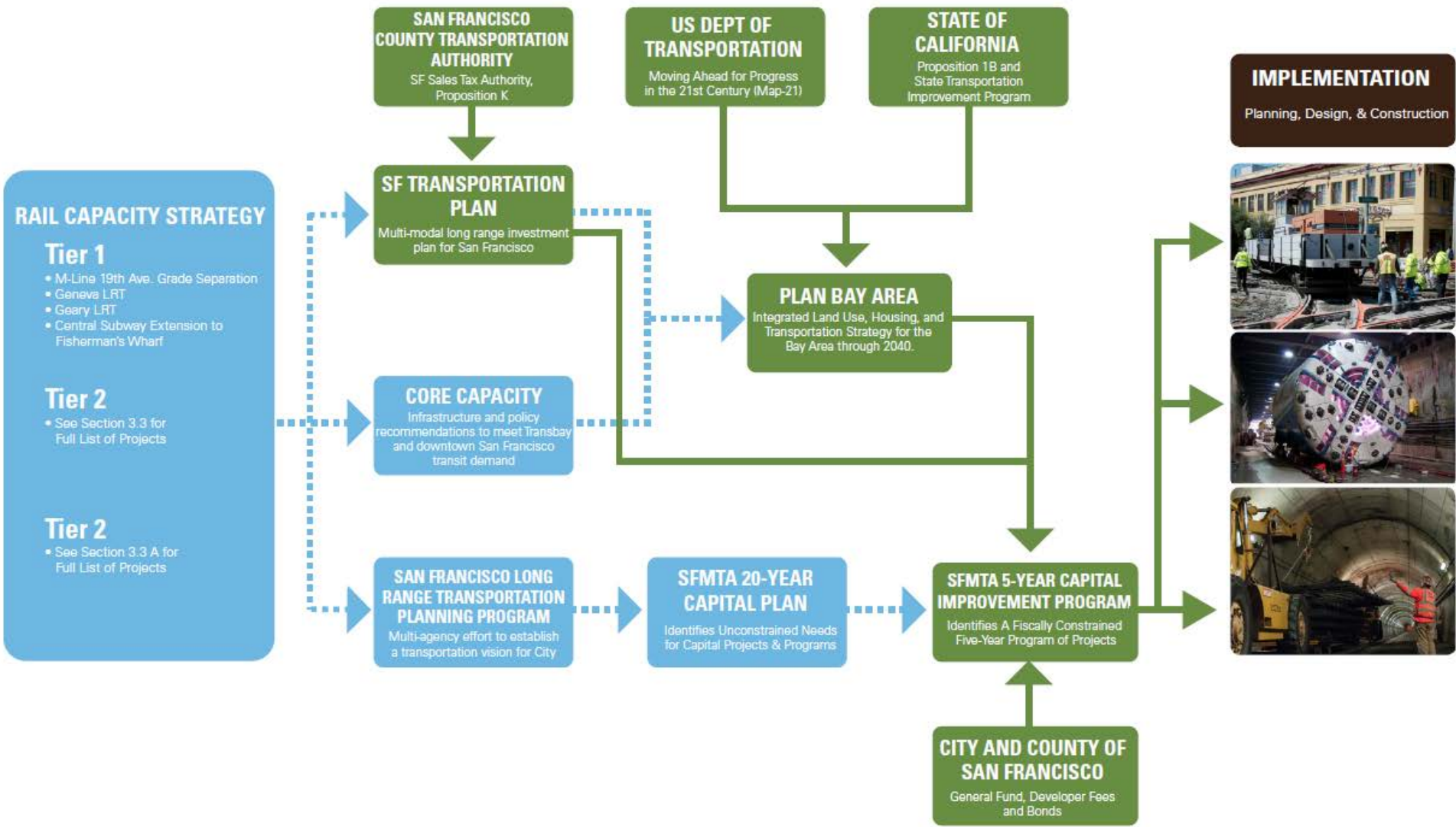
Tier 3



Current and Planned Transit System

- Muni Rapid Bus Network
- Historic Streetcar
- Muni Metro Network
- - - Planned High Speed Rail
- - - Treasure Island Ferry
- Regional Rail (BART/Caltrain)
- ***** Planned Regional Rail

Long-Term Implementation Roadmap





Grahm Satterwhite
Principal Transportation Planner
Grahm.Satterwhite@sfmta.com