# **DRAFT**

# Short Range Transit Plan

Fiscal Year 2015 - Fiscal Year 2030

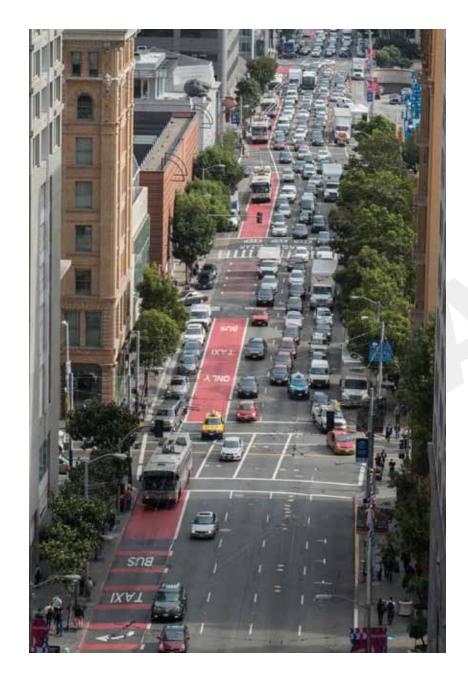
SFMTA.COM



Federal transportation statutes require that the Metropolitan Transportation Commission (MTC), in partnership with state and local agencies, develop and periodically update a long-range Regional Transportation Plan (RTP), and a Transportation Improvement Program (TIP) which implements the RTP by programming federal funds to transportation projects contained in the RTP. In order to effectively execute these planning and programming responsibilities, MTC requires that each transit operator in its region which receives federal funding through the TIP, prepare, adopt and submit to MTC a Short Range Transit Plan (SRTP).

The preparation of this report has been funded in part by a grant from the U.S. Department of Transportation (DOT) through section 5303 of the Federal Transit Act. The contents of this SRTP reflect the views of the San Francisco Municipal Transportation Agency, and not necessarily those of the Federal Transit Administration (FTA) or MTC. San Francisco Municipal Transportation Agency is solely responsible for the accuracy of the information presented in this SRTP.

Anticipated approval by the SFMTA Board of Directors: May 19, 2015



# **TABLE OF CONTENTS**

1. OVERVIEW OF THE SFMTA TRANSIT SYSTEM	7
Brief History	7
Governance	8
Transit Services	12
Overview of the Revenue Fleet	17
Existing Facilities 1	8
2. SFMTA GOALS, OBJECTIVES & STANDARDS	25
The SFMTA Strategic Plan	25
SFMTA Performance Measures	28
3. SERVICE & SYSTEM EVALUATION	33
Current Systemwide Performance	33
MuniTransit Service Structure	36
Muni Service Equity Policy	37
Equipment & Facilities	38
MTC Community-Based Transportation Planning Program	38
Paratransit Services	39
Title VI Analysis & Report	40
FTA Triennial Review	40
4. OPERATIONS PLAN & BUDGET	43
Operations Plan	43
Operations Budget	45
5. CAPITAL IMPROVEMENT PROGRAM	53
SFMTA Capital Planning Goals, Policies & Processes	53
SFMTA Capital Improvement Programs, FY 2015 – FY 2019	53
Transit Capital Programs	56
Other SFMTA Capital Programs	76
6. MAJOR EXPANSION PROJECTS	81
Central Subway	81
Van Ness Bus Rapid Transit Project	85

# **DATA TABLES & FIGURES**

BRIEF HISTORY		CURRENT SYSTEMWIDE PERFORMANCE	
Figure 1. Key Transportation Milestones and Events in San Francisco.	7	Table 9. Transit Performance Indicators – National Transit Database audited annual data, FY 20112– FY 2014	35
GOVERNANCE		Table 10. Key Muni Effectiveness and Efficiency Performance Measures, FY 2012	35
igure 2. SFMTA Organization Chart	9	Table 11. Additional Transit Performance Indicators -	00
Table 1. Budgeted Positions by Division	10	unaudited average annual data, FY 2012 – FY2014	35
Table 2. Budgeted Positions by Division	11		
		MUNI SERVICE EQUITY POLICY	
FRANSIT SERVICES		Figure 6. Muni Equity Strategy Neighborhood Map	37
Figure 3. San Francisco Municipal Railway Service Map.	13		
Table 3. Muni Transit Service Type, Areas, and Fares	14	FTA TRIENNIAL REVIEW	
Table 4. Regional Transit Service Type, Areas, and Fares	15	Table 12. 2013 FTA Triennial Review, Summary of Findings and Corrective Action Status	40
EXISTING FACILITIES			
Table 5. SFMTA Administrative, Operations, Maintenance,		OPERATIONS PLAN	
Fueling, Vehicle Storage and Staging Facilities	18	Table 13. Planned Levels of Service Systemwide, FY 2014 – FY 2030	44
Table 6. SFMTA Stations and Stops	20		
Figure 4. San Francisco Municipal Railway Service Map	21	OPERATIONS BUDGET	
Figure 5. San Francisco Municipal Railway Service Map	22	Table 14. Summary of Revenues for FY 2014 Amended Budget and the FY 2015 and FY 2016 Proposed Budget	45
SFMTA PERFORMANCE MEASURES		Table 15. Summary of Expenditures for FY 2014 Amended Budget	
Table 7. Strategic Plan Key Performance Indicators	29	and the FY 2015 and FY 2016 Proposed Budget	45
Fable 8. Transit Sustainability Project Annual Monitoring Process	30	Figure 7. Operating Expenses, FY 2010 - FY 2014	47
		Figure 8 Operating Revenues, FY 2010 - FY 2014	47
		Table 16. SFMTA Operating Financial Plan (in \$ 1,000s), 2013-2030	48

# SFMTA CAPITAL IMPROVEMENT PROGRAMS, FY 2015 – FY 2019

Figure 9. FY 2015 – FY 2019 Capital Improvement Program Map	54
Table 17. FY 2015 – FY 2025 Summary of Expected Capital Funding by Source, as of December 2014	55
Table 18. FY 2015 – FY 2025 Capital Improvement Program Summary, as of December 2014	55
Figure 10. Muni Forward Transit Priority Projects, status as of January 2015	56
Table 19. Current and Future Muni Forward Projects	57
Figure 11. Better Market Street Project Area	58
Figure 12. Geary Bus RapidTransit Project Area	59
Figure 13. SunsetTunnel Rail Replacement Project Area	61
Figure 14. Twin Peaks Tunnel Rail Replacement Project Area	62
Figure 15. Mission Bay Loop Project Area	63
Table 20. Current SFMTA Bus Fleet Inventory	65
Table 21. SFMTA Fleet Replacement & Expansion through 2030, 60-foot Motor Coach in fixed route service	66
Table 22. SFMTA Fleet Replacement & Expansion through 2030, 40-foot Motor Coach in fixed route service	67
Table 23. SFMTA Fleet Replacement & Expansion through 2030, 30-foot Motor Coach in fixed route service	68
Table 24. SFMTA Fleet Replacement & Expansion through 2030, 60-footTrolley Coach in fixed route service	69
Table 25. SFMTA Fleet Replacement & Expansion through 2030, 60-footTrolley Coach in fixed route service	69
Table 26. SFMTA Fleet Replacement & Expansion through 2030, Light Rail Vehicles in fixed route service	70
Table 27. Motor Coaches Scheduled for Rehabilitation	71

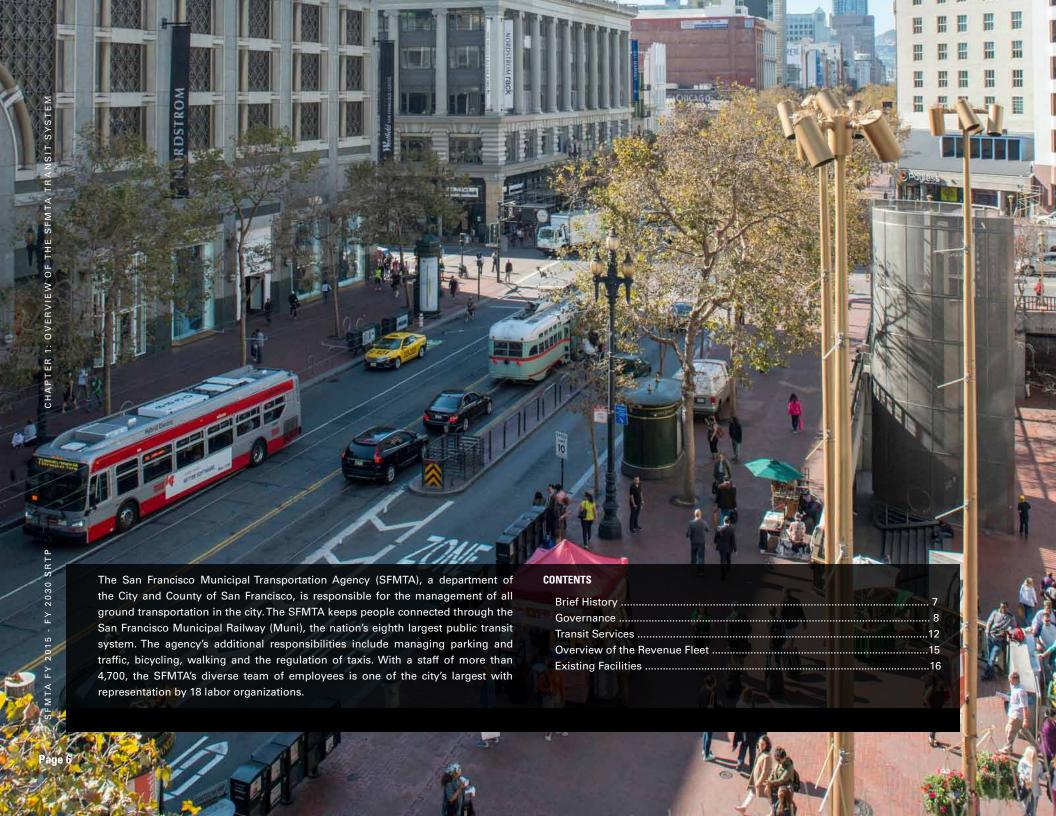
Table 28. Paratransit Vehicle Fleet Inventory	72
Table 29. Current Non-Revenue Vehicle Fleet Inventory	73
Table 30. Projected Development and Implementation Timeline for the SFMTA Enterprise Asset Management System	77

### **CENTRAL SUBWAY**

Figure 16. Map of TThird Phase 2 (Central Subway)	81
Table 31. Central Subway Capital Costs, as of August 2014	82
Table 32. Central Subway Funding Sources, Expenditures, and Cash on Hand, as of August 2014	82
Figure 17. Central Subway Project Schedule	83
Figure 18. Central SoMa Project Area	84
Figure 19. Van Ness Bus Rapid Transit Project Area	85

### **VAN NESS BUS RAPID TRANSIT PROJECT**

Table 33. Van Ness Bus Rapid Transit Project Capital Costs, as of July 2014	85
Table 34. Van Ness Bus Rapid Transit Project Schedule	85
Table 35. Projected Van Ness BRT Operating Cost	86



# **OVERVIEW OF THE SFMTA TRANSIT SYSTEM**

### **BRIEF HISTORY**

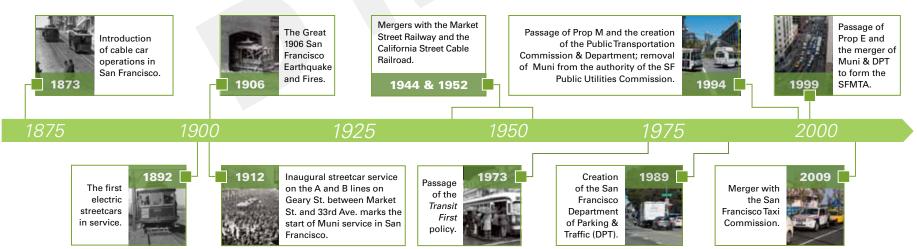
The San Francisco Municipal Railway (Muni) began service in 1912 as one of the first publicly-owned and operated transit systems in the United States. Several privately-run transit systems had operated in San Francisco prior to the Gold Rush and were still in operation in San Francisco at the time. In 1944, Muni merged with the Market Street Railway Company to triple the size of its system, and the 1952 acquisition of the California Street Railroad resulted in municipal ownership of transit service in San Francisco.

In 1999, San Francisco voters approved Proposition E, which amended the City Charter to merge Muni with the city's Department of Parking and Traffic (DPT). Integration of the two organizations into the SFMTA took place in 2002, creating

a multimodal transportation agency to operate transit service, manage city streets more effectively, and advance the city's Transit First Policy, section 8A.115. The SFMTA has continued to evolve by merging with the Taxi Commission in March 2009.

While some of the facilities like the Presidio Division have been in use since the early days of Muni, transit service, its fleet, and facilities have changed and expanded over the years to serve the growing city. The SFMTA currently runs transit service 24 hours a day, seven days a week, providing approximately 700,000 transit trips each weekday on its fleet of cable cars, streetcars, motor coaches, trolley coaches, and light rail vehicles.

Figure 1. Key Transportation Milestones and Events in San Francisco.



### **GOVERNANCE**

The SFMTA is a department of the City and County of San Francisco. As established in Proposition E in 1999, it is governed by a seven-member Board of Directors that provides policy oversight for the agency, including approval of its budget, contracts, and proposed changes of fares, fees and fines. The SFMTA Board also has the authority to appoint the Director of Transportation and serves as ex-officio members of the San Francisco Parking Authority.

The SFMTA Board of Directors is appointed by the mayor and confirmed by the San Francisco Board of Supervisors after a public hearing. Directors serve up to three four-year, fixed, staggered terms, and continue to serve until they resign, are replaced, or when the term expires. At least four of the Directors must be regular riders of public transit and must continue to be regular riders during their terms. The directors must possess significant knowledge of or professional experience in one or more of the fields of

government, finance, or labor relations. At least two of the directors must possess significant knowledge of or professional experience in the field of public transportation. During their terms, all directors are required to ride the system on the average of once a week. At the first regular meeting of the SFMTA Board after the 15th day of January each year, the members of the board elect from among their number a chairman and vice-chairman.

# SFMTA CITIZENS' ADVISORY COUNCIL

The SFMTA Citizens' Advisory Council (CAC) is an advisory body to the SFMTA and was created by Proposition E. The CAC meets monthly to provide recommendations to staff and the Board of Directors with respect to any matter within the jurisdiction of the agency. It is composed of fifteen members appointed by the Mayor and the Board of Supervisors. There are three CAC subcommittees: Engineering, Maintenance & Safety, Finance & Administration, and Operations & Customer Service.

#### **ORGANIZATIONAL STRUCTURE**

In addition to the organizational change that occurred with the merger of Muni and DPT, the SFMTA underwent further reorganization in 2012 to improve delivery of transit, street design, planning, parking and traffic services. The SFMTA currently consists of seven main divisions: Capital Programs & Construction, Finance & Information Technology, Human Resources, Sustainable Streets, System Safety, Taxis & Accessible Services, and Transit. In addition to the seven main divisions, the Office of the Chief of Staff, Communications, Government Affairs, and the Central Subway Program also report directly to the Director of Transportation

Capital Programs & Construction Division (CP&C). The CP&C Division improves the City's transportation infrastructure by designing and delivering the large-scale engineering and construction projects.

Finance & Information Technology Division (FIT). The FIT Division is responsible for managing the agency's finances, collecting fare revenues, leveraging

### **CURRENT MEMBERS AND TERMS OF THE SFMTA BOARD OF DIRECTORS**



Tom Nolan Chairman of the Board

Appointed to the Board in 2006; Elected Chairman in 2009.



Cheryl Brinkman
Vice-Chairman of the Board

Appointed to the Board in 2010; Elected Vice-Chairman in 2012.



**Gwyneth Borden** *Member of the Board* 

Appointed to the Board in 2014.



Malcolm A. Heinicke
Member of the Board

Appointed to the Board in 2008.



Joél Ramos

Member of the Board

Appointed to the Board in 2011.

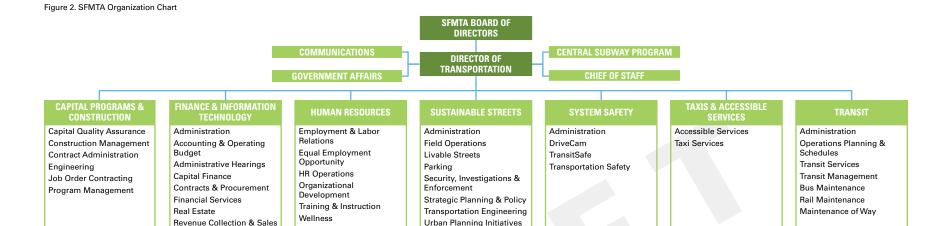


Cristina Rubke

Member of the Board

Appointed to the Board in 2012.

There is one vacancy on the SFMTA Board of Directors.



Workers' Compensation

information technology and effectively utilizing resources to maximize the financial, technological, and physical ability and capacity of the SFMTA.

Technology & Performance

Human Resources Division (HR). SFMTA HR enables the agency to accomplish its goals by supplying necessary support services that include: recruitment, hiring, employment and labor relations, payroll, organizational development and training, employee wellness, equal employment opportunity, and workers' compensation.

Sustainable Streets Division (SSD). The Sustainable Streets Division provides multi-modal transportation planning and engineering to improve San Francisco's transportation system and support sustainable community and economic development. SSD also manages 38 parking facilities, enforces San Francisco's parking regulations, and enforces compliance of transit fares payment. The Division also oversees the dedicated services provided by the San Francisco Police Department (SFPD) Traffic Division.

System Safety Division. This division is responsible for providing a safe environment for riders, employees, and the citizens of the City and County of San Francisco. It maintains a safety program that attains an optimum level of safety and environmental compliance, including: maintaining the record for all accidents/incidents, hazards; internal safety audits and corrective action plans; conducting vehicle safety reviews and internal safety audits; and inspections and performing mandated safety certification.

**Taxis & Accessible Services (TAS).** TAS represents a combination of two distinct functions of the SFMTA that substantially overlap in the regulation of the taxi mode of transportation.

Taxi Services is charged with licensing and regulating the private taxi industry to ensure that the riding public, drivers and vehicles are safe, that taxi service is universally accessible for all regardless of trip origin or destination, without illegal discrimination, at prices that are transparent, uniform and accessible to low- and fixed-income customers, and that there is an

adequate supply of taxicabs to meet transportation demand.

Accessible Services is charged with ensuring ADA compliance for the entire agency and providing technical assistance on accessibility to all areas of the agency's work: fixed route transit, capital projects, parking, bicycle and pedestrian projects. Accessible Services also operates San Francisco's Regional Transit Connection Discount Card (RTC) office and oversees the provision of Paratransit services. All taxis in San Francisco are required to participate in the SF Paratransit Program.

**Transit Division.** The Transit Division provides safe, reliable, clean, accessible and convenient public transit service to any destination in San Francisco. In addition to the planning, scheduling, and delivery of transit operations and services, this division also maintains the fleet, facilities, and infrastructure needed to deliver Muni services.

Table 1 provides a breakdown of the number of employees in each division, including grant-funded positions, budgeted for FY 2014 – FY 2016. The largest groups of employees at SFMTA are in the Transit and Sustainable Streets Divisions, as they include the transit operators and enforcement personnel, respectively.

Table 1. Budgeted Positions by Division

SFMTA DIVISION	FY 2014	FY 2015	FY 2016
Agency Wide	n/a	49	41
Board Of Directors	6	4	4
Capital Programs & Construction	169	156	159
Communications	18	24	27
Executive Director	5	7	7
Finance & Information Technology	335	358	368
Government Affairs	3	5	5
Human Resources	90	76	76
System Safety	66	111	94
Sustainable Streets	777	687	693
Transit	3,358	3,554	3,802
Taxis & Accessible Services	25	27	29
GRAND TOTAL	4,852	5,058	5,305



SFMTA Executive Team (left to right): Ed Reiskin, Director of Transportation; Melvyn Henry, System Safety; Don Ellison, Human Resources; Alicia John-Baptiste, Chief of Staff; Sonali Bose, Finance & Information Technology; Kate Toran, Taxis & Accessible Services; Vince Harris, Capital Programs & Construction; Candace Sue, Communications; Kate Breen, Government Affairs; Rob Maerz, General Counsel; Tom Maguire, Sustainable Streets; John Haley, Transit

# CONTRACTED TRANSPORTATION SERVICES

The SFMTA Transit Division operates the fixed route Muni transit service in San Francisco. The SFMTA also currently provides SF Paratransit Services through a contract with Transdev, formerly called Veolia Transportation, and subcontractors (Baymed Express, Centro Latino, Self Help for the Elderly, and Kimochi) to operate the following paratransit services through the end of 2015:

- SF Access ADA mandated, door-to-door, shared ride van service where riders must schedule trips one to seven days in advance.
- Group Van Specialized van service that picks up and drops off groups of individuals who will be going to the same agency/center. Trips are scheduled with the agency/center and riders must be ADA eligible.
- Shop-a-Round A grocery Shopping Shuttle service that transports seniors and persons with disabilities to grocery stores.
- Van Gogh a shuttle service for seniors and persons with disabilities to social and cultural events in San Francisco. This service aims to reduce social isolation of seniors and persons with disabilities.

In addition to these contracted services, all taxi companies in San Francisco are required to participate in the SF Paratransit program by City ordinance. A user-side subsidy is provided to Paratransit clients, who are issued a debit card to pay for their paratransit taxi trips.

### **LABOR UNIONS**

The SFMTA Employee & Labor Relations team works with the Labor Unions to negotiate the agreements that determine the work rules and compensation packages for approximately 5,000 employees. There are eight SFMTA Service-Critical and 10 Citywide labor agreements for 18 bargaining units within the SFMTA.

Table 2. Budgeted Positions by Division

LABOR UNION	LOCAL BRANCH	LENGTH OF CURRENT CONTRACT				
SFMTA Service-Critical Collective Bargaining Agreements/Memorandums of Understanding						
	Local 250-A (Transit Operators 9163)	July 1, 2014 - June 30, 2017				
Transport Workers' Union (TWU)	Local 250-A (Transit Fare Inspectors 9132)	July 1, 2014 - June 30, 2017				
Transport workers Onion (TWO)	Local 250-A (Automotive Service Workers 7410)	July 1, 2012 - June 30, 2015				
	Local 200	July 1, 2014 - June 30, 2016				
International Brotherhood of Electrical Workers (IBEW)	Local 6	July 1, 2014 - June 30, 2017				
International Association of Machinists (IAM)	Local 1414	July 1, 2014 - June 30, 2017				
Service Employees International Union (SEIU)	Local 1021	July 1, 2014 - June 30, 2017				
Municipal Executives Association (MEA)	Municipal Executives Association (MEA)	July 1, 2014 - June 30, 2017				
Citywide Collective Bargaining Agreements/Memorandu	ms of Understanding applicable to SFMTA					
Consolidated Crafts	The Northern California Carpenters Regional Council, Local 22 Glaziers, Architectural Metal and Glass Workers, Local 718 Sheet Metal Workers International Union, Local 104 Teamsters, Local 853	July 1, 2014 – June 30, 2017				
International Federation of Professional & Technical Engineers (IFPTE)	Local 21	July 1, 2014 – June 30, 2017				
Laborers International Union	Local 261	July 1, 2014 – June 30, 2017				
Operating Engineers	Local 3	July 1, 2014 – June 30, 2017				
Painters	San Francisco City Workers United	July 1, 2014 – June 30, 2017				
Service Employees International Union (SEIU)	Local 1021	July 1, 2014 – June 30, 2017				
Stationary Engineers	Local 39	July 1, 2014 – June 30, 2017				
Teamsters	Local 856 Multi-Unit	July 1, 2014 – June 30, 2017				
United Association of Plumbers and Pipefitters	Local 38	July 1, 2014 – June 30, 2017				

For those employees in job classifications not represented by a labor union or employee organization, Section A8.409-1 of the City Charter has established working schedules, conditions of employment, and methods of payment, effective July 1, 2013.









### TRANSIT SERVICES

The SFMTA operates the oldest and largest transit system in the San Francisco Bay Area, providing over 40 percent of all transit trips in the region. In addition, it is the eighth largest transit system in the nation based on boardings, carrying more than 225 million passengers annually. The Agency's transit fleet is among the most diverse in the world, featuring:

- Biodiesel and hybrid biodiesel motor coaches
- · Electric trolley coaches
- · Modern light rail vehicles
- A historic collection of streetcars from the U.S. and around the world
- The nation's only operating cable cars, listed as a U.S. National Historic Landmark
- A network of paratransit services.

As part of its mission, the SFMTA strives to provide a convenient, reliable, accessible and safe transportation system that meets the needs of all users within the City and County of San Francisco.

#### **MUNI FORWARD**

Informed by the Transit Effectiveness Project, the SFMTA Strategic Plan Goals 2 & 3, and extensive community input, Muni Forward brings together in one place the long list of projects and planning efforts underway to achieve this vision.

Environmentally cleared and adopted by the SFMTA Board of Directors in 2014, Muni Forward's recent route changes and service improvements reallocate limited resources where they are needed most. The Implementation of a Rapid & Transit Priority Network of core routes serving nearly 70% of all riders will provide a more reliable trip. Updating the transit fleet and making important safety and accessibility projects across the city, combined with the WalkFirst projects, better accommodate the needs of families, seniors, and the disabled, and enhance comfort and safety for all customers. Using technology more effectively by improving the integration of our transit system with traffic signals and bringing more real-time information to our customers will make San

More information on Muni Forward can be found at www.muniforward.com. Francisco's transit system smarter and more reliable. To clarify the intended purpose of each Muni Forward project, they are grouped into the following four categories:

- Creating a Rapid Network Making it more efficient to travel on Muni's most heavily used routes.
- Improving Reliability Modernizing the Muni fleet and network to make it more reliable.
- Enhancing Safety and Access Improving the experience of riding Muni by making it easier, safer, and more pleasant to take.
- Making the System Smarter Improving our use of technology and infrastructure to make Muni smarter and more reliable.

#### **MUNI FORWARD SERVICE FRAMEWORK**

In addition to identifying Rapid routes, the Muni service framework organizes all the Muni transit routes into six principle types of transit service in the city:

- Muni Metro & Rapid Bus (10 mins or less & skip stop service): These heavily used bus and rail lines form the backbone of the Muni system. With vehicles arriving frequently and transit priority enhancements along the routes, the Rapid network delivers speed and reliability whether customers are heading across town, or simply traveling a few blocks.
- Frequent Local (10 mins or less service): These routes combined with Muni Metro and Rapid Bus create the Rapid network. They provide highquality, frequent service but with more stops along the route.
- Grid (12 30 mins service): These citywide routes combine with the Rapid network to form an expansive core system that lets customers get to their destinations with no more than a short walk, or a seamless transfer. Depending on demand, they typically operate less frequently than the Rapid Network routes.
- Connector (Over 30 min service): These bus routes predominantly circulate through San Francisco's hillside residential neighborhoods, filling in gaps in coverage and connecting customers to major transit hubs.
- Historic: Historic Street Cars and Cable Cars.
- Specialized: These routes augment existing service during specific times of day to serve a specific need, or serve travel demand related to special events. They include AM and PM commute service, owl service, weekend-only service, and special event trips to serve sporting events, large festivals and other San Francisco activities.

Figure 3. San Francisco Municipal Railway Service Map.



All residential neighborhoods in San Francisco are within a quarter of a mile of a Muni bus or rail line stop.

In conjunction with this modernization of transit service, the SFMTA updated the transit service map to help customers navigate the network and identify the transit lines that work best for them.

Although the Muni routes have been categorized by frequency and type of service, the cost to ride remains consistent across all types of service, with the few exceptions of the cable car and special event fares. Table 3 details the areas types of services, and areas served and the overall fare structure for all Muni service.



Table 3. MuniTransit ServiceType, Areas, and Fares

TYPE OF	MUNI ROUTES & AREAS SERVED	FARE STRUCTURE
TRANSIT SERVICE		(as of September 1, 2014)
Fixed Route Service T	ransit Service	
Muni Metro & Rapid Bus	J Church, KT Ingleside/Third Street, LTaraval, M Ocean View, N Judah, 5R Fulton Rapid, 7R Haight/Noriega Rapid, 9R San Bruno Rapid, 14R Mission Rapid, 28R 19th Avenue Rapid, 38R Geary Rapid	Single Fare Adult: \$2.25 for bus & rail, \$6.00 for cable car  Single Fare Seniors (age 65+), Disabled, Medicare: \$0.75 for bus & rail, \$6.00 for cable car (7am-9pm),
Frequent Local	1 California, 7 Haight/Noriega, 8 Bayshore, 9 San Bruno, 14 Mission, 22 Fillmore, 28 19th Avenue, 30 Stockton, 38 Geary, 47 Van Ness, 49 Van Ness/Mission	\$3.00 (9pm-7am)  Fare for Low/Moderate Income Youth (ages 5-18), Senior (65+), and Persons with disabilities: Free for bus & rail; must register and use a Clipper Card
Grid	2 Clement, 3 Jackson, 5 Fulton, 6 Haight/Parnassus, 9 San Bruno, 10 Townsend, 12 Folsom/Pacific, 18 46th Avenue, 19 Polk, 21 Hayes, 23 Monterey, 24 Divisadero, 27 Bryant, 29 Sunset, 31 Balboa, 33 Ashbury/18th, 43 Masonic, 44 O'Shaughnessy, 45 Union/Stockton, 48 Quintara/24th Street, 54 Felton, 55 Mission Bay Shuttle	Other Single Fare Youth (ages 5-17): \$0.75 for bus & rail, \$6.00 for cable car; children 4 and under are free Monthly Unlimited Pass Adult ("M" Fast Pass): \$68.00 for all Muni service
Connector	11 Downtown Connector, 25 Treasure Island, 35 Eureka, 36 Teresita, 37 Corbett, 39 Coit, 52 Excelsior, 56 Rutland, 57 Park Merced, 66 Quintara, 67 Bernal Heights	Monthly Unlimited Pass Adult with ride on BART in SF ("A" Fast Pass): \$80.00
Historic	California Cable Car, Powell/Hyde Cable Car, Powell/Mason Cable Car, F Market & Wharves	Lifeline monthly Pass (Low Income Adult): \$34.00  Monthly Unlimited Pass Youth (5-17), Senior (65+), Disabled, Medicare: \$23.00 for all Muni service
Specialized (commuter express, shuttles & special events)	NX Judah Express, 1AX California A Express, 1BX California B Express, 7X Noriega Express, 8AX Bayshore A Express, 8BX Bayshore B Express, 14X Mission Express, 30X Marina Express, 31AX Balboa A Express, 31BX Balboa B Express, 38AX Geary A Express, 38BX Geary B Express, 41 Union, 76X Marin Headlands Express, 81X Caltrain Express, 82X Levi Plaza Express, 83X Mid- Market Express, 88 BART Shuttle	Cable Car 1-ride cash fare: \$6.00  1-Day Passport: \$17.00 (effective Jan 2015)  3-Day Passport: \$26.00 (effective Jan 2015)  7-Day Passport: \$35.00 (effective Jan 2015)
Supplemental Service	Supplemental Muni service to middle and high schools in the City and County of San Francisco. Buses start at schools and continue on regularly scheduled routes.	Adult CityPASS*: \$84.00 Children ages 5-11 CityPASS*: \$59.00 Sebest Course Pooldet (15 tickets): \$15.00
Owl Service (late night transit service)	L Owl, N Owl, 5 Fulton, 14 Mission, 22 Fillmore, 24 Divisadero, 38 Geary, 90 San Bruno Owl, 9A Owl, 25 Treasure island	School Coupon Booklet (15 tickets): \$15.00 Special Event Service Adult Round-Trip: \$12.00
Accommodation of bicycles	All hybrid, motor, and trolley coaches that run on the Rapid Frequent, Circulator, Commuter Express, Specialized, and Owl service routes are equipped with external bicycle racks on the front of the vehicle.	There is no extra charge for bicycles on transit vehicles.
	Non-folding bikes are not allowed inside any Muni bus, streetcar, or other transit vehicle at any time. However, as of May 24, 2011, folding bicycles are allowed inside all Muni vehicles except cable cars.	
Demand Responsive	Transit Service	
Seniors and for persons with disabilities, including service	San Francisco Paratransit is a contracted van and taxi service provided 24 hours a day, 7 days a week, 365 days a year citywide for people unable to independently use or access public transit because of a disability or disabling health condition. Service is	SF Access single fare per one-way trip: \$2.25; certified attendants ride free  Shop-A-Round one-way trip: \$2.25
required under the Americans with Disabilities Act	provided within San Francisco, to Treasure Island, and to the northernmost part of Daly City in San Mateo County and to Marin Headlands on weekends mirroring the Muni 76X-Marin Headlands	Shop-A-Round Senior Clipper and RTC Discount ID Card users one-way trip: \$1.00
(ADA)	line. ADA-certified persons who are visiting from outside San Francisco will be served by San Francisco Paratransit.	<b>Taxi Services:</b> \$5.50 for \$30.00 worth of debit card value

In addition to operating fixed route and demand responsive transit services in San Francisco, the SFMTA coordinates with other transit service operators in the Bay Area to provide connections to regional destinations. All connecting services use the Clipper Card, and in some cases provide a discounted transfer to their system.

Table 4. Regional Transit Service Type, Areas, and Fares

TRANSIT Provider	AREAS SERVED	TRANSFER STRUCTURE (as of September 1, 2014)			
Fransfers via Clipper Card is available to all connecting services provided by our partners					
Alameda Contra- Costa Transit District (AC Transit)	ACTransit operates accessible bus service between the Transbay Terminal in San Francisco and the East Bay.	No discounted transfer program.			
Bay Area Rapid Transit (BART)	BART Provides regional transit service in Alameda, Contra Costa, San Mateo and San Francisco, including direct service to San Francisco International Airport.	Transferring from the Daly City BART station to Muni using Clipper: Customers are eligible for two free rides on the 14L, 28, 28L and 54 Muni routes when transferring from the Daly City BART Station and paying the fare using Clipper. The first trip must be taken within 23 hours after exiting BART and the second within 24 hours after exiting BART for the free fares to apply.			
		Muni+BART within San Francisco "A" Pass: Provides unlimited rides on all Muni service, including cable cars, and travel between BART stations (within San Francisco only): \$80.00 per month.			
		Adult Inter-Agency Transfer Cash Fare (Clipper only): \$1.75 (effective early 2015)			
Caltrain	Caltrain provides local, limited and Baby Bullet train service between San Francisco and San Jose, with weekday commute-hour service to Gilroy.	Monthly Caltrain pass users can also purchase a discounted (\$5 off) Muni pass for unlimited rides on Muni vehicles, except cable cars and special routes. The special pass isn't valid on BART.			
Golden Gate Transit	Golden Gate Transit bus lines run from San Francisco over the Golden Gate Bridge to a variety of destinations in Marin and Sonoma Counties. Golden Gate Transit ferries operate from the Ferry Building at the foot of Market Street to Sausalito and Larkspur.	The SFMTA provides a \$0.50 discount off an adult single ride for customers transferring to Muni from Golden Gate Transit when using a Clipper card (does not apply to Cable Car service). Golden Gate Transit also provides a reciprocal \$0.50 single ride discount for Muni customers transferring to their service.			
San Francisco Bay Ferry	The San Francisco Bay Ferry provides weekday, weekend, holiday, and seasonal services to various terminal locations around the bay.	The SFMTA provides a \$0.50 discount off an adult single ride for customers transferring to Muni from San Francisco Bay Ferry Service when using a Clipper card (does not apply to Cable Car service). San Francisco Bay Ferry also provides a reciprocal \$0.50 single ride discount for Muni customers transferring to their service.			
		Muni stickers purchased and applied to monthly passes for an additional \$63.00 per month. These are valid for transfers to and unlimited travel on the entire Muni system, except the cable cars.			
Vallejo/Baylink Ferry	The Vallejo/Baylink ferry operates daily service between Pier 41 (limited departures/arrivals) and the Ferry Building in San Francisco and the Vallejo FerryTerminal.	Muni stickers purchased and applied to monthly passes for an additional \$61.00 per month. These are valid for transfers to and unlimited travel on the entire Muni system, except the cable cars.			

Note: SamTrans in San Mateo County operates some peak-hour service from San Francisco to San Mateo County. There is no discounted transfer program.







#### **RECENT CHANGES IN FARES**

Muni fare increases are based on a formula set in 2009 by the SFMTA Board of Directors to create a more predictable and transparent mechanism for setting charges. The formula is based on a combination of the Bay Area Consumer Price Index for all urban consumers (CPI-U) and labor costs.

In 2014, the SFMTA Board of Directors approved an the first increase to the daily fare since 2009:

- Daily Adult Fare was increased from \$2.00 to \$2.25
- Adult "A" Fast Pass was increased from \$76 to \$80
- Adult "M" Fast Pass was increased from \$66 to \$68
- Lifeline Monthly Pass was increased from \$33 to \$34
- Paratransit Van Service was increased from \$2.00 to \$2.25
- ParatransitTaxi Service scrip book was increased from \$5.00 to \$5.50

More information on the Automatic Indexing Implementation Plan can be found at: http://www.sfmta.com/protected/ automaticindexingplan.pdf.

Additional details on the recent changes in the fares, fees, and fines can also be found on the SFMTA website: http://www.sfmta.com/news/notices/fares-fees-and-fines-changes-fiscal-years-2015-2016

#### FREE MUNI PROGRAM

In FY 2013 and FY 2014, the SFMTA ran a pilot program to provide free Muni for low income youth funded through a variety of grants. As a result of a gift from Google, the program was continued or FY 2015 and FY 2016. Additionally, in May 2015 the SFMTA board extended the definition of youth from 17 to 18. In January 2015, based on an evaluation of the fiscal health of the Agency, the SFMTA Board voted to expand this program. The SFMTA now provides free Muni for low and moderate income 18-year olds, 19-22 year olds enrolled in San Francisco Unified School District programs, seniors, and disabled riders who use a Clipper® card. More information and applications for this program can be found at www. sfmta.com/freemuni.



### **OVERVIEW OF THE REVENUE FLEET**

Comprised of cable cars, historic streetcars, electric trolley coaches, biodiesel and hybrid buses, light rail vehicles, and paratransit vans, Muni has one of the most diverse vehicle fleets in the world. The list below shows a vehicle count as of April 2015, though the SFMTA is currently in the process of a large-scale bus and LRV procurement. Over the next five years the SFMTA will be replacing its entire (non-historic) fleet to improve transit service, improve the overall customer experience, and bring clean, new vehicles that use state-of-the-art hybrid and biofuel technologies to make Muni's fleet, already one of the greenest in the nation, even cleaner.



Invented in San Francisco in 1873 and still in operation on three lines, San Francisco's cable cars are an icon of the city. Cable cars currently provide service for about three percent of system riders.

Vehicle count: 40 cable cars; Type of Service: specialized



Restored historic streetcars from around the world travel from the Castro to Fisherman's Wharf along Market Street and The Embarcadero. The one-of-kind vehicles carry about eight percent of system riders.

Vehicle count: 45 vehicles, including PCC (Presidents' Conference Committee), Milan, and other unique and work vehicles. Type of Service: historic



The all-electric light rail trains run both above and below ground. The six light rail lines serve about 20 percent of system riders.

Vehicle count: 149 vehicles; Type of Service: Rapid



The SFMTA's 30-foot, 40-foot, and 60-foot biodiesel and biodiesel-hybrid buses help connect surrounding communities with central San Francisco. The motor coach sub-fleet is the backbone of Muni service and carries over 40 percent of the system's riders.

Vehicle count: 477 vehicles from various manufacturers; Type of Service: Rapid, Frequent, Grid, Circulator, Express, Specialized



The SFMTA operates the largest trolley coach fleet in North America. These zero-emission vehicles carry about 30 percent of system riders.

Vehicle count: 240 40-foot and 93 60-foot trolley coaches; Type of Service: Rapid, Frequent Local, Circulator, Owl



The SFMTA provides paratransit service to seniors and persons with disabilities who are unable to independently ride the Muni fixed route system. In FY 2014, our SFMTA-owned wheelchair accessible vehicles completed approximately 500,000 trips for more than 8,500 active riders.

Vehicle count: 82 22-foot vans, 5 25-foot vans, and 5 wheelchair accessible minivans; Type of Service: demand-responsive paratransit service

### **EXISTING FACILITIES**

The SFMTA owns and leases a wide variety of facilities and infrastructure that enables the operation, maintenance, planning, engineering, enforcement, and administration of the complex transportation system in San Francisco. The majority of the 29 facilities are dedicated to the maintenance, fueling, storage, and staging of the transit and traffic enforcement vehicles. Also under SFMTA control are 19 public parking garages and 19 metered parking lots.



Table 5. SFMTA Administrative, Operations, Maintenance, Fueling, Vehicle Storage and Staging Facilities

	FACILITY NAME	LOCATION	YEAR OPEN	FACILITY CAPACITY
AGENCYWIDE	SFMTA Headquarters	1 South Van Ness Avenue	2003	Office of the Director of Transportation, Capital Programs & Construction, Communications, Finance & Information Technology, Human Resources, Sustainable Streets Planning and Engineering offices, System Safety, Taxis & Accessible Services, Transit Administration and Operations Planning & Schedules offices
NC)	Transportation Management Center	1455 Market Street	2015	Transit Operations & Traffic Signal Operations Control Centers
AGE	Central Control	131 Lenox Way, West Portal Station	1982	Current Transit Operations Control Center
	Power Control Center	Bryant Street & Alameda	1977	Central facility to monitor electrical system for all SFMTA operations
C	Cable Car Barn	Mason Street & Washington Street	1887; rebuilt and reopened 1984	40 cable cars
LIGHT RAIL & HISTORIC	Beach-Geneva Yard	Geneva Avenue, San Jose Avenue, and I-280	1900	36 75-ft LRVs; 55 50-ft historic streetcars; and 24 historic streetcars under canopy
E SH	Green Division & Green Annex	Geneva Avenue, San Jose Avenue, and I-280	1977 & 1987	76 75-ft LRVs
⊐⊗	Muni Metro East	Cesar Chavez/25th Street and Illinois Street	2008	125 75-ft LRVs
мотов соасн	Flynn Division	15th Street & Harrison Street	1989	102 60-ft Articulated Motor Coaches; currently over capacity at 125 60-ft Articulated Motor Coaches
8	Islais Creek	Cesar Chavez Street & Indiana Street	Under Construction	160 40-ft Motor Coaches
OTO	Kirkland Yard	North Point Street and Powell Street	1950	127 40-ft Motor Coaches; currently over capacity at 135 40-ft Motor Coaches
ž	Woods Division	22nd Street and Indiana Street	1974	30 30-ft Motor Coaches; and 160 40-ft Motor Coaches
TROLLEY COACH	Potrero Division	Bryant Street, Mariposa Street, and 17th Street	1914	75 40-ftTrolley Coaches; 73 60-ftTrolley Coaches
TROI	Presidio Division	Geary Street and Presidio Avenue	1912	142 40-ftTrolley Coaches

Table 5. (Continued) SFMTA Administrative, Operating, Maintenance, Fueling, Vehicle Storage and Staging Facilities

	FACILITY NAME	LOCATION	YEAR OPEN	FACILITY CAPACITY
∞ w	Marin Division	Marin Street & Indiana Street	1990	n/a
AGE	700 Penn	700 Pennsylvania Street	1947	n/a
PARTS STORAGE & SUPPORT SHOPS	Scott Division	15th Street & Division Street	n/a	n/a
STS S	Burke Warehouse	Marin Street & Indiana Street	1969; occupied by SFMTA in 2005	n/a
PAF	Duboce	Duboce & Market	n/a	Temporary storage of Lightt Rail Vehicles and Histroic Streetcars; light mainenance
백병	Overhead Lines	Bryant Alameda, & Division	1893; acquired by Muni 1944	n/a
NAN	Sign, Meter, & Temporary Sign Shops	Bancroft Street and Jennings Street	2012	n/a
NON-VEHICLE MAINTENANCE	Paint & Meter Parking	Yosemite Street & Jennings Street	2012	n/a
N M	Traffic Signal Shop	Bayshore and MacDonald	2013	n/a
	Parking Enforcement	10th Street and Bryant Street	n/a	10 GO-4's, 2 passenger vehicles, 4 boot vans & 2 pickup trucks
F	Parking Enforcement	505-7th Street and Bryant Street	n/a	4 passenger vehicles
PARKING ENFORCEMENT	Parking Enforcement	6th Street and Townsend Street	n/a	208 GO-4 vehicles, 18 passenger cars, 1-12 passenger van; 1 mobile library type van
ARK	Parking Enforcement	Cesar Chavez Street and Kansas Street	n/a	43 GO-4's & 2 passenger cars
EN F	Parking Enforcement	435-7th Street between Bryant & Brannan	n/a	18 passenger cars
	Parking Enforcement	Scott Lot (Harrison & 15th)	n/a	14 GO-4's
	16th & Hoff Garage	42 Hoff Street	n/a	98 parking spaces
	Civic Center Garage	355 McAllister Street	n/a	843 parking spaces
	Ellis-O'Farrell Garage	123 O'Farrell Street	n/a	950 parking spaces
	Fifth & Mission / Yerba Buena Garage	833 Mission Street	n/a	2585 parking spaces
	Golden Gateway Garage	250 Clay Street	n/a	1095 parking spaces
	Japan Center Garage	1610 Geary Blvd	n/a	920 parking spaces
	Lombard Garage	2055 Lombard Street	n/a	205 parking spaces
S	Mission-Bartlett Garage	3255 21st Street	n/a	350 parking spaces
PARKING GARAGES	Moscone Center Garage	255 3rd Street	n/a	732 parking spaces
GA GA	North Beach Garage	735 Vallejo Street	n/a	203 parking spaces
S N S	Performing Arts Garage	360 Grove Street	n/a	598 parking spaces
PARI	Pierce Street Garage	3252 Pierce Street	n/a	116 parking spaces
	Polk-Bush Garage	1399 Bush Street	n/a	129 parking spaces
	Portsmouth Square Garage	733 Kearny Street	n/a	504 parking spaces
	San Francisco General Hospital Medical Center Garage	2500 24th Street	n/a	1657 parking spaces
	St. Mary's Square Garage	433 Kearny Street	n/a	414 parking spaces
	Sutter-Stockton Garage	444 Stockton Street	n/a	1865 parking spaces
	Union Square Garage	333 Post Street	n/a	985 parking spaces
	Vallejo Street Garage	766 Vallejo Street	n/a	163 parking spaces
rowed CARS	Towed Cars (short term)	7th Street and Bryant/Harrison	n/a	Approx. 160 private vehicles
δŞ	Towed Cars (long term)	Bayshore and MacDonald	2012	Required to have at least 300 spaces for police tows, 100 of which must be indoors

#### **STATIONS & STOPS**

In addition to the facilities needed to operate transit service, the SFMTA maintains approximately 3,500 transit stops in San Francisco. In April 2015, the SFMTA adopted a new policy for the Rapid Network transit stops. Over the course of the next several years, the SFMTA and its partners will install: additional signage and transit service branding at Rapid and Metro shelters to make finding and

navigating the Muni network easier; transit poles outfitted with solar powered lanterns – will be visible day or night; redesigned flag signs to better identify route information, intersection names and real-time arrival details; and bright red chevron-style decals to identify it as a Rapid stop. New bicycle racks at Rapid stops will allow for the convenience of Park & Ride and help distribute waiting riders more evenly between the front and rear doors.



Table 6. SFMTA Stations and Stops

	ТҮРЕ	LOCATIONS	YEAR IN USE	BASIC AMENITIES
	Surface Rapid Bus Stops	At most surface transit locations in San Francisco in residential, commercial and industrial areas.	2015	SFMTA red "wave" shelter; transit poles outfitted with solar powered lanterns; flag signs for route information, intersection names and real-time arrival details; bright red chevron-style decals to signal a Rapid stop; new bicycle racks
ro & Rapid Bus	Muni Metro Stations	The Muni Metro stations from West Portal to The Embarcadero are underground. The downtown subway stations (between Civic Center and The Embarcadero) are shared by Muni and the Bay Area Rapid Transit District (BART). These stations are multi-level, with a concourse level, a Muni boarding platform at mid-level and a BART platform at the lowest level. With the exception of Forest Hill, all Muni Metro stations were constructed in conjunction with BART and are BART-owned.	1980 (all except Forest Hill); 1918 (Forest Hill)	In the underground stations (Embarcadero, Montgomery, Powell, Civic Center, Van Ness, Church, Castro, Forest Hill and West Portal), a digital voice announcement system announces the route designation and arrival time of approaching and arriving trains. All underground stations are accessible by elevator. Stairs and/or an escalator are located at each end of every downtown station. Digital signs that provide real-time arrival information are available at Metro stations.
Muni Metro	TThird Surface Stations	Surface stops along the TThird line on The Embarcadero, King Street, Third Street, and Bayshore Boulevard	1998 (The Embarcadero and King Street stations); 2007 (Third Street and Bayshore Blvd stations)	All stations were designed in line with the distinctiveTThird branding. They are all accessible and equipped with transit shelters with digital signs that provide real-time arrival information.
2	Other Surface Light Rail Stops	Outside of the Market Street Subway, Twin Peaks Tunnel and Sunset Tunnel, the light rail vehicles operate on the surface.	Varied	In addition to the standard Rapid Network Stop amenities listed above,key surface light rail stops provide ramps to facilitate wheelchair access. On the M Ocean View line, the accessible stop at San Jose and Geneva avenues has a mechanical wayside lift that elevates customers to the level of the train floor for boarding and exiting.
ocal, Grid, Specialized	Transit Stops	At most surface transit locations in San Francisco in residential, commercial and industrial areas.	Varied	Stops with 125 daily boardings have a shelter within environmental constraints. Many shelters are equipped with digital signs that provide real-time arrival information. Many of these shelters also have "push-to-talk" buttons that, when pressed, provide a voice announcement of the arrival times displayed on the digital sign.  In 2015, the SFMTA and its partners have also started the installation of transit poles outfitted
Sp				with solar powered lanterns and flag signs for route information.
Frequent Local, Connector, Spec	Flag Stops	In residential areas and other low traffic locations where Muni will stop in the street rather than pull to the curb	Varied	The bus stop is marked with yellow paint on a nearby pole and in the street where the bus will stop. In 2015, the SFMTA and its partners have also started the installation of transit poles outfitted with solar powered lanterns and flag signs for route information.
Historic	F Market Historic Street Car Stops	Stops along The Embarcadero and on Market Street between Steuart Street and Castro Street.	1995 (Market Street), 2000 (The Embarcadero)	All include an accessible wayside boarding platform. Between Van Ness Avenue and Steuart Street accessible stops are located at key locations along lower Market Street: wayside platforms at 7th, 3rd and Main streets and Don Chee Way (inbound); wayside platforms are at Don Chee Way, Drumm, Kearny and Hyde streets and Van Ness Avenue (outbound). Accessible lifts are located at inbound stops at Market and Church streets, Market and 5th streets and Market and 1st streets, and at the outbound stop adjacent to Hallidie Plaza.
	Cable Car Stops	Placed along the three cable car lines	Varied	Riders can board at any cable car turntable (the beginning/end of each route) or anywhere a cable car sign is posted.

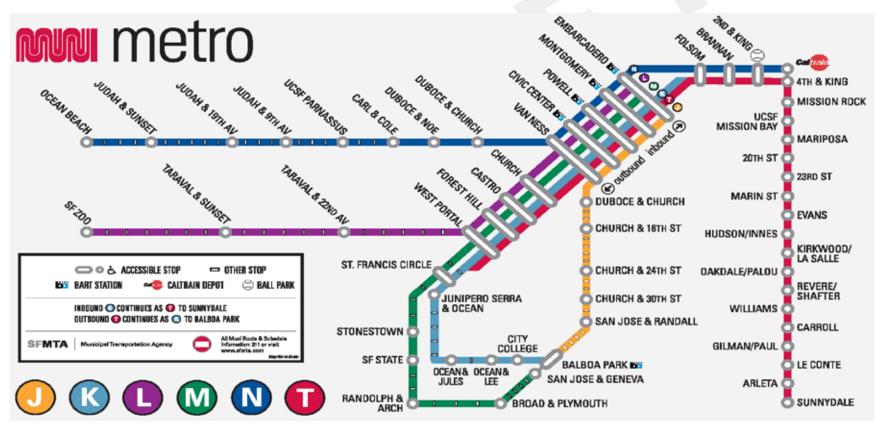
# MUNI METRO FIXED GUIDEWAY INFRASTRUCTURE

With an average weekday ridership of more than 140,000 boardings on fixed route transit in FY 2014, Muni Metro is the United States' third-busiest light rail system after Boston and Los Angeles, operating a fleet of 149 light rail vehicles (LRV). The Muni Metro system consists of 71.5 miles (115.1 km) of standard gauge track, six light rail lines, three tunnels, nine subway stations, twenty-four surface stations and eighty-seven surface stops.

Figure 4. San Francisco Municipal Railway Service Map

In addition to the light rail track way, the SFMTA is in the planning and design phases for several bus rapid transit way projects (including Van Ness Avenue, Geary Boulevard, and 22 Fillmore on 16th Street) and has identified approximately 40 additional miles of transit priority streets in San Francisco. Through the Muni Forward program, the SFMTA is working to reduce travel time, increase reliability, and enhance pedestrian safety on these key transit corridors by implementing features like transit-only lanes, transit signal priority, and streetscape features.





#### **BICYCLE FACILITIES**

The SFMTA is working to make bicycling a part of everyday life in San Francisco. As part of this ongoing work, the SFMTA Sustainable Streets Division is implementing on- and off-street facilities and infrastructure to make the city safer for all road users, whether they are on bicycles, walking, driving, or on transit. These projects are developed based on the recommendations and methodology in the 2013 SFMTA Bicycle Strategy which combines efficient asset management and cost-effective new investments to help the agency reach its quality of life goals. A key factor in this analysis is the the "level of trafic stress" that people on bicycles experience when navigaing the streets of San Francisco. Using this methodology to identify future projects will further the city's ultimate goal to create a network that is comfortable for all users. It will also ensure that the bicycle network and the transit netowrk coordinates and complements one another to provide excellent transportation choices in San Francisco.

As of November 2014, the SFMTA had installed:

- 431 miles of bicycle paths, lanes and routes
- 4,013 bicycle racks on sidewalks
- · 328 racks in on-street corrals
- 32 electronic bicycle lockers in three parking garages
- 35 bikesharing stations with 350 bicycles available

Figure 5. San Francisco Municipal Railway Service Map



The 2013 SFMTA Bicycle Strategy can be found on the SFMTA website at: http://sfmta.com/sites/default/files/BicycleStrategyFinal 0.pdf

### BICYCLES ON TRANSIT VEHICLES AND AT TRANSIT STOPS

The SFMTA is a multimodal agency and integrates transit, walking, and bicycling infrastructure to provide travel choices for the residents, workers, and visitors to San Francisco. In addition to multimodal street enhancements, all Muni buses in regular service have front-loading bike racks able to hold two bikes each. Historic streetcars, cable cars, and Muni Metro light rail vehicles do not have bike racks and full-size bicycles are not currently permitted on those vehicles. Only folding bicycles are allowed inside all Muni vehicles (with the exception of cable cars). They must be folded and kept with their owner, and must not be placed on or block seats, interfere with customer movement, or block wheelchair access and movement.



Bike racks on motor and trolley coaches are available during all hours of operation, on a first come, first served basis, with a limit of two bikes per rack. No service charge or permit is needed.



The Bay Area Bike Share pilot program is multiagency public partnership placing bikeshare pods along the Caltrain corridor and in the dense, transitrich Downtown/SoMa area of San Francisco.



The SFMTA administers and maintains 52 bicycle lockers in six separate garages, mainly downtown. Bike lockers are a great option for bicyclists who commute often and there are waiting lists for some, but not all, locations.



Often requested by area merchants and residents, bicycle corrals provide bike parking on-street in the general parking and loading lane. Over the past several years, as transit service has been updated, the SFMTA has installed several corrals in discontinued bus zones.



The SFMTA is adopting the term "Rapid" for Muni's Limited-stop routes. The new Rapid routes will see significant increases in frequency and reliability in the coming months as the routes, as well as enhancements to the transit stops like branded transit shelters, signage and bicycle racks.



# SFMTA GOALS, OBJECTIVES & STANDARDS

As California cities move forward in partnership with the State to implement the policy objectives embodied in AB 32, the California Global Warming Solutions Act of 2006, and SB 375, the Sustainable Communities and Climate Protection Act of 2008, San Francisco stands at the forefront of innovation in seeking to bring these transformative policy commitments to reality.

San Francisco's transit system, Muni, currently carries 225 million customers a year. In the next 25 years, San Francisco's population is expected to swell to over one million people while growth in both jobs and housing is projected at 35 percent. To prepare for and respond to this growth along with the projected growth in the region, the SFMTA has established a six-year Strategic Plan to guide investment in the transportation network to improve travel choices, reduce congestion, maintain affordability and keep our infrastructure in good condition.

### THE SFMTA STRATEGIC PLAN

The within the framework of regional and state policies, the six-year SFMTA Strategic Plan defines a course for the agency to meet its the mid- and long-term goals for service delivery and financial sustainability. As every two-year budget is approved, each division uses the Strategic Plan to prioritize work products, set milestones, and define performance measures for each employee through a performance evaluation plan in order to ensure consistency and accountability. Each Division Director also leads the implementation of at least one strategic objective, creating a continuous link from the plan's broader policies to the day-to-day work for SFMTA staff.

### THE STRATEGIC PLANNING PROCESS

The FY 2013 – FY 2018 strategic goals were developed through a process led by the SFMTA Leadership Team, with input from SFMTA staff and external stakeholders to determine the most important areas to focus the agency's future efforts. Derived from the initial surveys with the general public and a focused strengths, weakness, opportunities, and threats (SWOT) analysis, five key themes consistently emerged as the highest priority. These were: 1. Customer service for all modes; 2. Internal and external communications; 3. Transportation network improvements for all modes; 4. Operating and capital financial sustainability; and 5. Organizational development. These key themes evolved into the four overarching goals of the Strategic Plan that shapes how the Agency focuses its attention, resources, and staff.

#### STAFF ENGAGEMENT

Using the information gathered from the workshops with internal and external stakeholders, the SFMTA Leadership Team participated in a series of workshops of their own to brainstorm and draft a new vision, mission statement, and the four over-arching goals with their related objectives. After every SFMTA Leadership workshop, the directors presented the proposed plan elements to the SFMTA Stakeholder Group so that each of the plan elements were considered and discussed in depth by more than 60 SFMTA staff members from every part of the agency. The Leadership Team then revised the element under discussion and moved to the next, achieving consensus on each to avoid backtracking later in the process. This cyclical approach to development and vetting allowed the SFMTA to

develop the plan and get buy-in on each element from a large group in a very short timeframe. Additional outreach presentations, workshops and surveys were held at SFMTA facilities around the city to give stakeholders, partner agencies, and all SFMTA staff and the opportunity to participate in the development process as well.

#### **MONITORING & EVALUATION**

The Strategic Plan serves as the foundation on which the agency will develop specific policies, programs, and projects over the course of six years. Every two years, the SFMTA will develop a list of actions, policies, and processes that would help the agency achieve its strategic goals and objectives, updating this list each budget cycle to take into account the progress made towards meeting each objective listed in the Strategic Plan. These initiatives and actions will inform the divisional and individual work plans for each section of the agency. This closed loop process will lead to full accountability at all levels and the achievement of our goals.

In addition to developing staff workplans to implement the Strategic Plan, SFMTA staff will also assess each decision brought to the SFMTA Board for conformance with the Strategic Plan. The summaries of the issue or project posed to the SFMTA Board are required to include a description of how the project, policy, or contract directly advances the goals of the Strategic Plan and outline the impact of the proposed actions in meeting the Strategic Plan's targets.

For a complete discussion of the FY 2013 – FY 2018 SFMTA Strategic Plan, visit: http://www.sfmta.com/about-sfmta/ sfmta-strategic-plan



SFMTA MISSION STATEMENT: We work together to plan, build, operate, regulate, and maintain the transportation network, with our partners, to connect communities.

# FY2013-FY2018STRATEGIC PLAN ELEMENTS

Although the general intent of the FY 2013 – FY 2018 SFMTA Strategic Plan remains consistent with the previous plan, all elements of the plan were updated to better address its broadened responsibilities, opportunities, and challenges since the development of the last plan in 2008.

The framework for the FY 2013 – FY 2018 SFMTA Strategic Plan focuses on a new vision and mission for the Agency and the goals and objectives needed to achieve this vision. The development of strong strategic goals and objectives with specific targets and timeframes guides SFMTA divisions to develop initiatives and actions as part of the two-year budget.

# SFMTA VISION & MISSION STATEMENT

The new vision for the SFMTA identifies what the SFMTA wants to do as an agency and provide for the city by the end of FY 2018. Developed by the SFMTA Leadership Team, the vision and mission statement are intended to be powerful statements to guide the Agency. The new vision statement conveys the agency's commitment to enable a range of choices in how to get around the city while the concise mission statement details what the SFMTA does and how the agency will realize the vision.

**SFMTA Vision:** San Francisco: great city, excellent transportation choices.

**SFMTA Mission Statement:** We work together to plan, build, operate, regulate, and maintain the transportation network, with our partners, to connect communities.

# STRATEGIC PLAN GOALS & OBJECTIVES

As a result of the strategic planning process, the SFMTA stakeholders identified four key areas on which to focus agency efforts. Supporting these four strategic goals are 16 objectives that are the specific ways the agency will accomplish the goals. These goals and objectives are summarized below:

### GOAL 1: CREATE A SAFER TRANSPORTATION EXPERIENCE FOR EVERYONE

The safety of the transportation system, its users and SFMTA employees are of the utmost importance to the agency. Creating a safer transportation experience for everyone means a secure and comfortable system for users of all transportation modes and SFMTA programs, as well as safe facilities and vehicles in which to work.

Objective 1.1: Improve security for transportation system users

Objective 1.2: Improve workplace safety and security

Objective 1.3: Improve the safety of the transportation system

# GOAL 2: MAKE TRANSIT, WALKING, BICYCLING, TAXI, RIDESHARING AND CARSHARING THE MOST ATTRACTIVE AND PREFERRED MEANS OF TRAVEL

As the city looks towards the future and estimates the growth of the city and the Bay Area region, the agency acknowledges the need for increased mobility for residents, workers and visitors without relying on private automobiles. The SFMTA is committed to making non-private auto modes of transportation not just a viable option, but the preferred means of travel in San Francisco.

Objective 2.1: Improve customer service & communications

Objective 2.2: Improve transit performance Objective 2.3: Increase use of all non-private auto modes

Objective 2.4: Improve parking utilization and manage parking demand

## GOAL 3: IMPROVE THE ENVIRONMENT AND QUALITY OF LIFE IN SAN FRANCISCO

One of the keys to a good quality of life is access to a green, clean, efficient, affordable and cost-effective transportation system. With the inclusion of this goal in the Strategic Plan, the SFMTA is committed to understanding the needs of those that use the system. The agency is also committed to allocating resources more effectively and reducing the structural deficit while maintaining a system that will reliably provide connectivity for people and businesses.

Objective 3.1: Reduce the Agency's and the transportation system's resource consumption, emissions, waste, and noise
Objective 3.2: Increase the transportation system's positive impact to the economy
Objective 3.3: Allocate capital resources effectively
Objective 3.4: Deliver services efficiently
Objective 3.5: Reduce capital and operating structural deficits

### GOAL 4: CREATE A COLLABORATIVE ENVIRONMENT TO SUPPORT DELIVERY OF OUTSTANDING SERVICE

The combination of the Municipal Railway, the Department of Parking and Traffic, and the Taxi Commission into one transportation agency has challenged the SFMTA to come together as one agency to support a range of transportation choices for San Francisco. In order to deliver outstanding

services, the SFMTA must create a collaborative and engaging work environment that trains, encourages and supports its staff at all levels, while holding each other and the Agency accountable.

Objective 4.1: Improve internal communications
Objective 4.2: Create a collaborative and
innovative work environment
Objective 4.3: Improve employee accountability
Objective 4.4: Improve relationships and
partnerships with our stakeholders





SFMTA staff assessed the implementation of the Strategic Plan during the first two-year budget cycle. This staff assessment was critical in determining the next steps for the agency to meet its goals and objectives.

# SFMTA PERFORMANCE MEASURES

Under the City and County of San Francisco Charter, Sec. 8A.103, Service Standards and Accountability, the SFMTA is required to meet the following minimum standards for transit service:

- On-time performance: at least 85 percent of vehicles must run on-time, where a vehicle is considered on-time if it is no more than one minute early or four minutes late as measured against a published schedule that includes time points; and
- Service delivery: 98.5 percent of scheduled service hours must be delivered, and at least 98.5 percent of scheduled vehicles must begin service at the scheduled time.

The City Charter also stipulates that the SFMTA Board of Directors adopt standards for system reliability, system performance, staffing performance, customer service, and sustainability. The SFMTA has developed a comprehensive list of performance measures including: the City Charter mandates, the Strategic Plan Key Performance Indicators (KPIs) that relate directly to the achievement of each objective, and those stipulated through the regional Transit Sustainability Project.

#### STRATEGIC PLAN KEY PERFORMANCE INDICATORS

After the update to the Strategic Plan elements in 2012, the SFMTA Leadership Team and the SFMTA Performance Metrics Team revised the performance metrics for the agency. Specific targets for these key performance indicators (KPIs) for each budget cycle were included in the Strategic Plan to underscore the

importance of implementation, accountability, and reporting for the agency.

A key method in regularly evaluating the progress in meeting these targets is the monitoring and reporting on the KPIs to the SFMTA Board's Policy and Governance Committee (PAG). These monthly meetings give the PAG members and the general public the chance to review and discuss the KPIs and other performance metrics that the agency tracks. In addition to monthly reports to PAG, the SFMTA reports on these indicators and ongoing projects and initiatives in the agency's Annual Report.

#### TRANSIT SUSTAINABILITY PROJECT

Established in the Metropolitan Transportation Commission's (MTC) Resolution 4060 in 2012, the Transit Sustainability Project (TSP) was developed to focus on the financial health, service performance, and institutional frameworks of the San Francisco Bay Area's transit operators. Given the significant projected capital and operating budget shortfalls, the need to improve transit performance, and interest in attracting new riders to the system, the MTC formed a steering committee to guide the project processes and recommendations. Made up of representatives from transit agencies, government bodies, labor organizations, businesses, and environmental and equity stakeholders, this group developed performance measures and investment recommendations for the Bay Area's transit operators.

For more information and monthly data reports on all agency performance measures, visit the SFMTA Policy & Governance Committee webpage: http://www.sfmta.com/about-sfmta, organization/divisions-and-units/policy-and-governance-committee-pag

The SFMTA 2014 Annual Report is available online: http:/ www.sfmta.com/annualreport .

Table 7. Strategic Plan Key Performance Indicators

VEV DEDECORMANCE INDICATORS	TARGETS		
KEY PERFORMANCE INDICATORS	FY 2014	FY 2016	FY 2018
Goal 1: Create a safer transportation experience for everyone			
1.1: # of SFPD-reported transit system related crimes (i.e. assaults, thefts, etc.)/100,000 miles	Achieve 10% reduction in incidents each budget cycle		
1.2: # of workplace injuries/200,000 hours (100 FTEs)	Achieve 10% r	eduction in incidents each	budget cycle
1.3: # of preventable Muni collisions/100,000 miles	Achieve 10% r	eduction in incidents each	budget cycle
Goal 2: Make transit, walking, bicycling, taxi, ridesharing and carsharing	g the most attractive and p	preferred means of travel	
2.1: Customer rating: Overall customer satisfaction; Scale of 1 (low) to 5 (high)	Establish baseline and improve satisfaction rating by 0.5 point each budget cycle		
2.2: Percent of transit trips that have less than a 2-minute spacing between vehicles by line and route on the Rapid Network("bunches") Percent of transit trips where gaps in service exceed scheduled headway by more than 5 minutes by line and route on the Rapid Network ("gaps")	Eliminate bunches and gaps for 25% of ridership	Eliminate bunches and gaps for 45% of ridership	Eliminate bunches and gaps for 65% of ridership
2.3: Mode Share	FY 2018 mode split goal - private auto: 50%; non-private auto modes: 50%		
2.4: % average occupancy of public metered parking spaces (SFpark areas and SFMTA garages)	Maintain 75% - 85% range of occupancy in SFpark areas		
Goal 3: Improve the environment and quality of life in San Francisco			
3.1: Annual metric tons of CO2e for the transportation system	25% below 1990 levels by 2017 for the system		
3.2: Customer rating: Business community satisfaction with transportation network's ability to meet their needs; Scale of 1 (low) to 5 (high) $$	Establish baseline and improve satisfaction rating by 0.5 point each budget cycle		
3.3: % of projects delivered on-time and on-budget by phase	Establish baseline and reach 10% improvement over baseline each budget cycle		
3.4: Average annual transit cost per revenue hour	5% reduction in fully allocated cost of transit service per budget cycle		
3.5: Operating and capital structural deficit	Make progress to- wards closing operat- ing and mission critical capital structural deficit	Close operating and mission critical capital structural defi- cit by at least 50%	Close operating structural deficit and mission critical capital deficit
Goal 4: Create a collaborative environment to support delivery of outst	anding service		
4.1: Employee rating: Do you feel you have the information you need to do your job? Do you feel informed about agency issues, challenges and current events? Scale of 1 (low) to 5 (high)	Establish baseline and improve satisfaction rating by 0.5 point each budget cycle		
4.2: Employee rating: Overall employee satisfaction. Scale of 1 (low) to 5 (high)	Establish baseline and improve satisfaction rating by 0.5 point each budget cycle		
4.3: % of employees with performance plans prepared by the start of fiscal year % of employees with annual appraisals based on their performance plans	100% of employees with performance plans at the start of the fiscal year; 100% of employees with annual performance appraisals completed and submitted to Human Resources by completion of the fiscal year		
4.4: Stakeholder rating: Satisfaction with SFMTA decision-making process and communications. Scale of 1 (low) to 5 (high)	Establish baseline and improve satisfaction rating by 0.5 point each budget cycle		

Within the framework of the Transit Sustainability Project, the seven largest transit agencies in the Bay Area must achieve a 5 percent real reduction in at least one of the following performance measures by Fiscal Year (FY) 2017, with no growth beyond the Consumer Price Index (CPI) thereafter:

- Cost Per Service Hour
- Cost Per Passenger
- · Cost Per Passenger Mile

For these measures, the baseline year is set at the highest cost year between FY 2008 and FY 2011. The MTC also has developed the following structured annual monitoring process for the seven largest transit operators in the Bay Area.

Table 8. Transit Sustainability Project Annual Monitoring Process

YEAR	ACTION
FY 2013	Transit agencies are to adopt a strategic plan to meet one or more of the targets and submit to MTC.
FY 2014	Starting this year, the transit agencies submit performance measure data on all three targets to MTC on an annual basis
FY 2015	MTC will analyze agency progress in meeting targets
FY 2016	MTC will link existing and new operating and capital funds administered by MTC to progress towards achieving the performance target

## MONITORING & ACHIEVING TRANSIT SUSTAINABILITY PROJECT TARGETS

In order to achieve the TSP targets, the SFMTA must lower costs in relation to revenue vehicle hours, passenger miles, and/or passengers. Costs can still increase but not as quickly as the increase in vehicle hours, passenger miles or passengers. In order to meet a 5 percent inflation-adjusted target, the SFMTA would have to limit the cost per vehicle hour to \$183.13 in FY 2012 dollars (\$202.61 in future dollars assuming 2.5% inflation), the cost per passenger mile to \$1.24 in FY 2012 dollars (\$1.38 in future dollars), and/or the cost per passenger to \$2.90 in FY 2012 dollars (\$2.83 in future dollars).

As of July 2014, the inflation-adjusted Operating Cost per Passenger Mile and Operating Cost per Passenger as of FY 2013 were reduced by five percent and 4.2 percent, respectively, over the baseline FY 2010. The unit cost reductions have been made possible because ridership (+4.0%) has grown faster than service increases (+1.5%) or inflation-adjusted operating costs (-0.5%). Inflation-adjusted fare revenue has also increased 11.8 percent due to a combination of ridership increases and the SFMTA policy adopted by its Board of Directors in 2009 to raise fares annually

by an indexing formula. Furthermore, San Francisco has committed significant local funds to transit including voter approved general fund and parking revenue allocation.

Although the agency has had some initial success in reducing these unit costs, it still faces significant challenges that will affect its ability to maintain this reduction. The SFMTA plans to address these challenges, increase ridership, and contain operating costs through the implementation of the Muni Forward transit infrastructure projects, the support of the Transportation 2030 initiatives, balanced and fair labor contract negotiations, and motor coach, trolley coach, and light rail vehicle procurement:

Large State of Good Repair needs – this translates into higher operating costs due to older equipment and facilities. With a backlog estimated at \$2.2 billion, the SFMTA requires an investment of \$510 million per year to eliminate the backlog within 20 years. Though the SFMTA and the City and County of San Francisco are pursuing new funding options, many improvements and their beneficial impacts on the operating budget will not be realized before FY 2017.



ACTION: As part of the Full-Funding Grant Agreement for the Central Subway project, the SFMTA has committed to investing an average of \$250 million annually on State of Good Repair projects. These funds are primarily directed towards "Transit Service Critical" investments and are also distributed between upcoming SGR needs and the SGR backlog of \$2.5 billion. In 2014, the SFMTA issued an update to the State of Good Repair Report that provides a comprehensive analysis of the agency's rehabilitation and replacement needs and investments: http://www.sfmta.com/about-sfmta/reports/state-good-repair-report-february-2015.

 An Aging Fleet – The relatively old age of Muni's fleet compared to the rest of the Bay Area and the nation impacts operating costs.

ACTION: Over the next five years, the entire rubber tire fleet will be replaced and new LRVs have been purchased. This investment in the transit fleet will improve transit reliability and reduce maintenance and operating costs.

• Limited System and Vehicle Capacity – Increasing ridership can lower unit costs if there is sufficient capacity on vehicles to absorb new customers. However, the Muni rail system is already at capacity at certain times of the day and Muni buses are some of the most crowded in the nation. Increasing ridership in the future will necessitate increased service and costs.

<u>ACTION</u>: Through the Muni Forward portfolio of projects, the SFMTA is changing service to increase frequency and ease crowding on popular routes.

• Increasing maintenance needs – in order to reduce mechanical breakdowns and improve

system reliability, the SFMTA is focusing on increased bus maintenance, rail maintenance and maintenance-of-way activities. Investing in maintenance support increases unit operating costs but is necessary to improve reliability beyond the five-yearTSP window.

ACTION: Performing the recommend maintenance in a timely manner will help keep the fleet on the road and reduce the likelihood costly breakdowns. Also, the planned capital investment in replacing the Muni fleet should lead to an overall reduction in operating costs as maintenance needs are reduced.

 Uncertain Funding Sources – While the Transportation 2030 initiatives could provide the SFMTA with significant capital investment in safer streets and faster transit, it will require voter approval.

ACTION: The first of several voter-approved measures was approved in November 2014. Propositions A and B will provide both an initial capital investment and a long term increase in funding, but future measures depend on shifts in the political climate of the city.

 Labor Contract Negotiations – Employee wages and benefits are a major factor in determining operating costs. Changes to labor contracts will have a significant impact on the extent to which the SFMTA will be able to achieve these targets.

<u>ACTION</u>: The SFMTA will continue to negotiate and enter into labor contracts that are fair to all parties involved.

Several of the actions listed here require substantial investment in the transit system and may lead to increases operating costs in the short term. However, they are critical to the agency's long-term success in

meeting the intent of the MTC's Transit Sustainability Project.

The SFMTA FY 2015 – FY 2019 Capital Improvement Program has more information on the planned infrastructur upgrades, fleet procurement, and other capital investment that will help the agency meet its Transit Sustainabilit Project's (TSP) goals: http://www.sfmta.com/sites/defaultiles/agendaitems/5-20-14%20Item%2012%20Capital%20Improvement%20Program.pdf



A Muni motor coach under assessment to determine maintenance needs at the Flynn Division.



# **SERVICE & SYSTEM EVALUATION**

### **CURRENT SYSTEMWIDE PERFORMANCE**

The SFMTA recently concluded an extensive evaluation of its system under the Transit Effectiveness Project (TEP). The TEP represented the first major evaluation of San Francisco's mass transit system in thirty years, and combined an extensive, data-supported planning process, engaged the community at various levels, and utilized critical lessons learned through the implementation of pilot projects, all resulting in solutions designed to improve the end-to-end customer experience-the walk, the wait, and the ride-for all Muni customers.

#### **TEP EVALUATION PROCESS**

In 2006, the SFMTA and the Controller's Office undertook a detailed evaluation of the existing San Francisco Municipal Railway (Muni) system to identify ways to improve service, attract more passengers, and increase efficiency. During the initial planning phase, from October 2006 to November 2007, the SFMTA collected and analyzed extensive data, which included market research on customer preferences and priorities for Muni service, changing travel patterns within the City and through out the region, and route-by-route Muni ridership data. Based on this detailed research, best practices from other cities, and input from key stakeholders, the SFMTA developed a set of preliminary recommendations to update the transit network and reflect changing travel patterns.

While the technical information provided an important foundation, the TEP assessment was about more than just data analysis. It was also about how members of the community can contribute to the full understanding of transit issues. SFMTA implemented a comprehensive community engagement effort to share findings,

proposals, and most importantly, to hear directly from Muni customers, who could provide further insight into issues that cannot be easily measured or assessed. The outreach effort was not one size fits all; SFMTA captured valuable community feedback through conversations at town hall meetings and community workshops, presentations at neighborhood meetings and senior centers, focus groups with youth and parents, rider surveys, as well as internal engagement with staff, including operators. During the planning phase of the TEP, the project also had a community advisory committee that met regularly to review findings and provide input.

#### MUNI FORWARD TRANSIT NETWORK IMPROVEMENTS

As mentioned above, the TEP was an in-depth planning process supported by data, engagement with the community at various levels, and critical lessons learned through the implementation of pilot projects. Informed by this study, the SFMTA developed a program of projects called Muni Forward – route changes, service improvements, and comfort and safety enhancements – that will improve the transit system, enable the agency to meet its service standards and goals, and reallocate limited resources where they are needed most.

The Muni Forward proposals were initially developed in 2008 during the planning phase of the project; however, staff re-evaluated and refined them as part of the development of the TEP Environmental Impact Report Project Description in

EP evaluation processes can be found at http://www.sfmta.com/tep /luni Forward Projects & Background information: www.muniforward.com order to capture more recent land use and ridership trends, as well as integrate service changes that were implemented in 2009 and 2010. Below are brief summaries of the final proposals developed through the process:

1. Creation of a new Service Policy Framework that reorganizes Muni service into four transit categories:

The Service Policy Framework discussed in an earlier chapter provides a clear understanding of the roles of transit routes in the city helping to guide investment decisions. It will also guide future transit studies as the SFMTA plans to evaluate transit route performance in comparison to similar routes in its service category rather than comparing routes across the system.

2. Implementation of service changes to reduce crowding, improve system-wide neighborhood connectivity and access to regional transit, and redirect finite resources to where they are needed most. Specifically, these proposals include:

The proposals, initially drafted by SFMTA, were presented to members of the community, and refined through an iterative process of public comment, additional data collection, and technical analysis.

3. Prioritization of Transit Capital Improvements (Rapid Routes)—engineering improvements known as Travel Time Reduction Proposals (TTRPs)—designed to address transit delay, improve reliability, and increase the safety and comfort of customers along the most heavily used Rapid routes. As part of the TEP, detailed proposals were developed for eleven corridors and conceptual proposals were developed for six corridors.

In March 2014, the SFMTA Board of Directors approved the majority of these proposals, including an overall 12 percent service increase. As a continuation of these efforts, SFMTA has initiated the Muni Forward program to implement the proposals approved in the TEP. Details on the program and related projects can be found at the Muni Forward website. While the project is focused on improving service for existing customers, the policies and data analysis methodologies will help Muni identify and respond to the needs of all San Franciscans far into the future.



# SYSTEMWIDE TRANSIT PERFORMANCE INDICATORS

From FY 2010 – FY 2012, the revenue service hours and the revenue service miles have stayed relatively steady, while the number of unlinked trips has risen significantly. While this has reduced the overall operating cost per passenger mile and operating cost per passenger, the Muni rail system is already at capacity at certain times of the day and Muni buses are already the most crowded in the nation. As San Francisco continues to grow, in both population and employment, Muni transit service will need to increase as well.

The National Transit Database (NTD) is the nation's primary source for information and statistics on the transit systems operating in the United States. The SFMTA is required to submit data to the NTD on an annual basis for the assessment of the agency and its service planning practices. The data submitted to the NTD also informs the apportionment of the Federal Transportation Agency's funding in urbanized areas.

#### ADDITIONAL TRANSIT PERFORMANCE INDICATORS

As discussed in the *Goals, Objectives, and Standards* section of this report, the SFMTA adopted several new metrics to track the efficiency and effectiveness of the transit system in 2011. These metrics include the Strategic Plan's Key Performance Indicators and other significant data points that staff have determined to track for future decision-making purposes. Because these figures are not audited and reported to the NTD on an annual basis, the agency uses these metrics to get a snapshot of its performance on a monthly basis. This frequency allows SFMTA staff the opportunity to address any issues with transit service early and effectively.

Each quarter, the SFMTA submits a report to the Board of Supervisors detailing Muni's performance across a broad range of measures, including economic impact of Muni delays. The most recent Transit Performance quarterly report as well as archived editions can be found on www.sfmta.com

Table 9. Transit Performance Indicators – National Transit Database audited annual data. FY 2012 – FY 2014.

METRIC	FY 2012	FY 2013	FY 2014 <sup>1</sup>
Revenue Service Hours	3,010,866	3,031,022	3,193,741
Revenue Service Miles	22,387,450²	22,771,541	24,053,467
Unlinked Passenger Trips	222,125,944	222,991,005	227,977,397

<sup>1.</sup> Cable car data not available

Table 10. Key Muni Effectiveness and Efficiency Performance Measures, FY 2012

METRIC	FY 2012 DATA
Passengers per Revenue Vehicle Hour	69.8
Passengers per Revenue Vehicle Mile	8.31
Revenue to Total Vehicle Hours	\$57.06
Operating Cost per Revenue Vehicle Hour	\$202.50
Operating Cost per Passenger	\$2.90
On-Time Performance	60.1%

Table 11. Additional Transit Performance Indicators - unaudited average annual data, FY 2012 – FY2014

METRIC	FY 2012	FY 2013	FY 2014
Muni collisions/100,000 miles	5.0	5.9	5.9
Muni falls on board/100,000 miles	4.7	4.2	4.5
Percentage of transit trips with <2 min bunching on Rapid Network	5.3%	5.6%	5.8%
Percentage of transit trips with + 5 min gaps on Rapid Network	18.5%	18.0%	18.2%
Percentage of on-time performance for non-Rapid Network routes	61.0%	59.6%	59.0%
Percentage of scheduled trips delivered	96.7%	97.0%	96.3%
Percentage of on-time departures from terminals	76.9%	73.7%	73.9%
Percentage of on-time performance	60.1%	59.0%	58.9%
Percentage of bus trips over capacity during AM peak 8:00a-8:59a, inbound) at max load points	5.9%	7.4%	6.9%
Percentage of bus trips over sapacity during PM peak 5:00p-5:59p, outbound) at max pad points	7.1%	8.6%	6.9%
Mean distance between failure Bus)	3,300	3,310	4,632
Mean distance between failure LRV)	3,137	3,571	3,164
Mean distance between failure Historic)	2,055	2,179	2,045
Mean distance between failure Cable)	2,936	3,835	4,734
Percentage of scheduled service nours delivered	96.7%	97.0%	96.2%
Ridership (rubber tire, average weekday)	490,514	495,311	504,162
Ridership (faregate entries, average weekday)	70,423	72,948	73,522
Percentage of days that elevators are in full operation	93.6%	96.3%	94.4%
Percentage of days that escalators are in full operation	94.2%	88.1%	93.8%
Average annual transit cost per revenue hour	\$202.50	202.67	n/a
Passengers per revenue hour for ouses	68	67	n/a
Cost per unlinked trip	\$2.90	\$2.91	n/a
arebox recovery ratio	32.2%	34%	n/a
Unscheduled absence rate by employee group (Transit operators)	12.2%	8.6%	9.4%

<sup>2.</sup> A new federally-mandated counting methodology used for FY 2014.

# MUNI TRANSIT SERVICE STRUCTURE

The SFMTA operates Muni transit service based on a set of design standards developed by SFMTA staff in response to development patterns, customer needs, system performance, and mandates listed in Proposition E. These standards inform coverage of the city, the headways for each route type, the planned capacity and passenger loads that the system carries, the hours the service runs, and the definition of ontime performance.

**Coverage:** All residential neighborhoods in San Francisco should be within a quarter of a mile of a Muni bus stop or rail line stop.

**Policy Headways:** The following are the minimum weekday headways for transit service established by Muni route type. However, frequencies of individual routes may be higher based on demand.

ROUTE TYPE	DAY	EVENING	LATE NIGHT
Weekday			
Rapid & Local Frequent	10	15	20
Grid	20	20	30
Circulator	30	30	
Specialized		based on dema	nd
Weekend			
Rapid	12	15	20
Frequent	20	20	30
Circulator	30	30	

Passenger Loads: Muni service should be planned to operate service such that the peak hour, peak direction load factor does not exceed 85% of the combined seating and standing capacity (established by vehicle type).

VEHICLE TYPE	PLANNING CAPACITY	85% LOAD STANDARD
30' Motor Coach	45	38
40' Motor Coach	63	54
60' Motor Coach	94	80
40' Trolley Coach	63	54
60' Trolley Coach	94	80
Light Rail Vehicle	119	101
Streetcar	60	51
Cable Car	63	54

\*Crush load is approximately 125% of planning capacity

**Service Span:** Muni service is planned to operate service for the minimum number of hours by route type as listed below.

ROUTE TYPE	SERVICE SPAN STANDARD
Rapid & Local Frequent	18 hours
Grid	18 hours
Circulator	Based on demand
Specialized	Based on demand
Owl	Late night service, generally between 2:00 am - 6:00 am

**On-Time Performance**: On-time performance (OTP) is a service standard mandated by the San Francisco voters in Proposition E when the SFMTA was formed. It measures Muni service delivery according to the schedule, rather than informing the fleet planning and service routes like those listed above.

ROUTE TYPE	DEFINITION	OTP STANDARD
Rapid & Local Frequent	% of trips with a service gap of five minutes above the scheduled headway	Less than 14% of trips with a service gap
Grid		
Circulator	% of time points served within one minute early	85% on-time (schedule adherence)
Specialized	to four minutes late of the scheduled time	
Owl		

# MUNI SERVICE EQUITY POLICY

SFMTA is committed to continually improving Muni service quality across San Francisco and ensuring that service performs equally across all neighborhoods. Working with social justice advocates and the disability community, the SFMTA adopted an equity policy in FY 2014 to improve Muni service in the areas of San Francisco most in need. This neighborhood-based approach focuses on areas with high concentrations of low-income households, minority residents, and households without access to personal automobiles.

Using Census data, customer survey feedback, and community outreach, SFMTA staff identified the San Francisco neighborhoods most in need and will be identifying focus areas for improving transit performance. The SFMTA will be conducting outreach in the summer/fall of 2015 in partnership with community-based organizations (CBO). The SFMTA will be using outreach techniques that are tailored to neighborhoods and may include focus groups, surveys, community and youth workshops, presentations at neighborhood meetings and other methods that have been proven effective in engaging communities.

Each year, the agency will identify critical Muni routes for each neighborhood and analyze data about them. Key factors in this analysis include on-time performance, gaps in service, crowding, customer satisfaction, and travel times to and from key destinations such as grocery stores and hospitals. The SFMTA will then integrate projects to address these service and capital needs into the biannual budget process to fund important equity projects to improve Muni service for San Francisco communities.

Figure 6. Muni Equity Strategy Neighborhood Map









## **EQUIPMENT & FACILITIES**

In 2013, the SFMTA Board of Directors accepted the findings and recommendations of the SFMTA Real Estate and Facilities Vision for the 21st Century Report (Vision Report). The Vision Report provides a roadmap to find ways to reconfigure, consolidate, or expand existing facilities to best meet operational needs, while identifying cost savings and revenuegenerating opportunities. In regard to facilities, the report identified the following major issues:

- · Relocation needs due to leases expiring
- · Facilities operating at or beyond capacity
- · Facilities at or near the end of their useful life
- Inefficient location of functions
- Inadequate outfitting of facilities with necessary equipment

Based on these needs, the report outlines two categories of solutions: (1) independent projects (to be completed at any time) and (2) dependent projects (to be completed in sequence to accommodate the projected fleet growth). For more detail, see the Vision Report accessible online.

Since the acceptance of the initial report, SFMTA Staff has developed the Addendum SFMTA Real Estate and Facilities Vision for the 21st Century Report: Vision Refinement for Coach Facilities (Addendum) in order to address the impacts on facilities needed for the maintenance and operations of a larger and more rapid expansion of the motor and trolley coach fleet. One crucial finding in the Addendum is that the projected number and types of vehicles will require development of a new maintenance and operations

facility, or expansion of an existing facility. On July 15, 2014, the SFMTA Board accepted the findings of the Addendum which can be found online at: http://www.sfmta.com/sites/default/files/Real%20Estate%20 Vision%20Report%20Addendum%20-%20Vision%20 Refinement%20for%20Coach%20Facilities.pdf.

Many of these facilities' improvements are timeand service-critical and the SFMTA has developed a rigorous schedule over the next five years to jump-start the implementation of the Vision Report recommendations. More information on these projects and their scopes can be found in the Capital Improvement Program section of this document.

# MTC COMMUNITY-BASED TRANSPORTATION PLANNING PROGRAM

Involvement in the Metropolitan Transportation Commission's (MTC's) "Community-based Transportation Planning Program" (CBTP) for the City and County of San Francisco has traditionally been led by the San Francisco Country Transportation Authority (SFCTA). With funding from Proposition K, SFCTA planned and completed CBTPs in the following communities: Mission-Geneva (April 2007), Bayview Hunters Point (June 2010), Western South of Market (March 2012), and Broadway-Chinatown (October 2014).

Up until this point, SFMTA's role in this planning effort has primarily been as a resource partner providing information to community members on the possible transportation improvements. In FY 2015, the SFMTA began leading the CBTP effort in Western Addition.

### PARATRANSIT SERVICES

San Francisco Paratransit is a van and taxi program for people unable to independently use or access public transit because of a disability or disabling health condition. Since 1990, the Americans with Disabilities Act (ADA) has required all public transit agencies to provide paratransit services to eligible disabled people. Muni has provided paratransit services since 1978.

SFMTA owns 87 vehicles in the paratransit fleet and contracts with a paratransit broker to manage the service. The paratransit broker subcontracts with van and taxi companies to provide demand-responsive transportation. The SFMTA provides paratransit service within San Francisco, to Treasure Island, to the northernmost part of Daly City in San Mateo County, and to Marin Headlands on weekends mirroring the Muni 76X-Marin Headlands line. In FY 2015, the SFMTA will procure 35 Paratransit vehicles to replace existing vehicles. Many of the replaced vehicles will transferred to the reserve fleet, providing the agency with greater operational flexibility. More information on the vehicle procurement can be found in the description of the SFMTA transit fleet in the Capital Improvement Program section of this document.

San Francisco Paratransit provides three types of service:

- SF Access Van Service SF Access provides pre-scheduled, door-to-door ADA van services. SF Access is a shared-ride service. SF Access customers must make a reservation from one to seven days before the day of the trip, and service is provided within one hour of the requested pick-up time.
- Taxi Services Paratransit taxi is the same curb-

to-curb taxi service that is available to the general public. This is not an ADA mandated service, but many customers find that it better meets their transportation needs.

 Group Van Service - Group Van is a pre-scheduled van service providing door-to-door transportation to groups of ADA-eligible customers attending specific agency programs such as Adult Day Health Care, senior centers, or work sites.

In addition, SFMTA provides specialized paratransit service through the "Shop-a-Round" program which uses vans and taxis to transport people with disabilities to and from the grocery stores. The "Shop-a-Round" Shuttle is a van service that takes groups of up to seven passengers to and from preselected stores on a weekly basis. Taxi-based shopping services provide passengers with a designated allotment of taxi debit card value for use in going to and from the grocery store.

SFMTA expanded the network of paratransit services to include Van Gogh shuttle service to social and cultural events for seniors and persons with disabilities in an effort to reduce social isolation.

SFMTA has a long history of community involvement with paratransit services. The Paratransit Coordinating Council (PCC) is an advisory body for customers, service providers, social service agency representatives and others to provide input on the paratransit program. The Executive Committee of the PCC meets regularly to discuss and provide input to the SFMTA on paratransit services. Also, the Multimodal Accessibility Advisory Committee (MAAC) is a group of seniors and customers with disabilities who regularly use SFMTA services and provide input on accessibility-related projects. MAAC is dedicated to maintaining, improving, and expanding the accessibility of San Francisco's streets and public transportation system.





Group Van Service

# TITLE VI ANALYSIS & REPORT

Pursuant to Circular 4702.1B, SFMTA submitted the agency's Title VI Program Update to the FTA in December 2013. The 2013 document provides an update to the SFMTA's December 2010 Title VI Program, which was submitted to the FTA in December 2010. In addition to the 2013 Update, SFMTA provided results of the monitoring program which compares systemwide transit service standards to the performance of minority and non-minority routes. The update and monitoring report were approved by the SFMTA Board of Directors in January 2014.

In December 2012, the Federal Transit Administration completed the San Francisco Municipal Transportation Agency Title VI Compliance Review Final Report of

a random audit. Because the review process began prior to the adoption of Circular 4702.1B (effective October 1, 2012), it was conducted in compliance with the guidelines as specified in FTA Circular 4702.1A (effective on May 13, 2007).

No deficiencies were found during the 2012 review. The review team noted, however, that SFMTA should consider conducting Title VI monitoring more frequently than the federally required three year interval, as SFMTA is a large agency that made at least two service and/or fare changes each fiscal year (FY) from FY2008 to FY2012. The SFMTA was advised to conduct Title VI monitoring annually to ensure that the end result of its policies and decision-making was equitable service. During the site visit on June 12-14, 2012, the SFMTA agreed that it should conduct Title VI monitoring on a regular and more frequent basis.

### **FTA TRIENNIAL REVIEW**

The most recent FTA Triennial Review of the SFMTA was conducted on December 16-18, 2013. Deficiencies were identified in the following six review areas: Technical Capacity, Satisfactory Continuing Control, Maintenance, Procurement, Disadvantaged Business Enterprise (DBE), and Equal Employment Opportunity (EEO). A schedule for corrective actions was created in order to address these deficiencies and included in the final report completed on January 13, 2014 (copies of the Review are available upon request). As of August 2014, the SFMTA had submitted all necessary information and the FTA has closed the action items.

Table 12. 2013 FTA Triennial Review, Summary of Findings and Corrective Action Status

DEFICIENCY	CORRECTIVE ACTION	RESPONSE DATE	STATUS
Review Area 3. Technical Cap	pacity; Finding: D		
03-Progress reports lack required information	Submit updated and completed progress reports with all required information in TEAM-Web. SFMTA is to provide a listing of corrected progress reports to the regional office. Those progress reports that have not been corrected with all required information must be updated by April 30 as stated below.	January 30, 2014	Information submit- ted. Closed by FTA.
	Submit to the regional office procedures for ensuring that all required information is included in future reports, including missing completion dates.	March 28, 2014	Information submit- ted. Closed by FTA.
	Submit all remaining reports that have been fully updated and completed with all required information in TEAM-Web. SFMTA is to provide a listing of corrected progress reports to the regional office.	April 30, 2014	Information submit- ted. Closed by FTA.
05-Excessive delays in	Submit a cash flow schedule (for federal fiscal quarters two and three) detailing each grant listed in Table 1, (indicating the obligated amount, amount disbursed, last disbursement date, percentage of total federal funds expended, original closeout date and estimated completion date), by activity line item (ALI), and the projected draw down of funds to meet the forecasted close out dates. FTA will monitor adherence to this cash flow schedule quarterly for federal fiscal year 2014.	April 30, 2014 then quarterly through September 30, 2014	Pending.
project implementation	Submit a milestone schedule (for federal fiscal quarters two and three) of all federally funded projects aligned with the 39 open grants (indicating the obligated amount, amount disbursed, last disbursement date, percentage of total federal funds expended, original closeout date and estimated completion date). FTA will monitor adherence to this schedule quarterly for federal fiscal year 2014.	April 30, 2014 then quarterly through September 30, 2014	Pending.
16 Incorrect EED reporting	Correct all quarterly FFR reports in TEAM-Web	January 30, 2014	Information submit- ted. Closed by FTA.
16 Incorrect FFR reporting	Submit to the regional office procedures for correctly identifying and including federal cash on hand at the end of period (as defined by FTA) in the quarterly FFRs.	March 28, 2014	Information submit- ted. Closed by FTA.

Continued: 2013 FTA Triennial Review, Summary of Findings and Corrective Action Status

DEFICIENCY	CORRECTIVE ACTION	RESPONSE DATE	STATUS
Review Area 4. Satisfactory C	Continuing Control; Finding: D		
08 Excessive fixed route bus spare ratio	Submit to the regional office an updated fleet management plan that includes a specific schedule for reducing the motor coach spare ratio to 20 percent.	April 18, 2014	Information submit- ted. Closed by FTA.
Review Area 5. Maintenance			
	Submit to the regional office a monitoring plan for ensuring that fixed route bus PMs are performed timely.	January 30, 2014	Information submit- ted. Closed by FTA.
04-Late vehicle preventive maintenance	Submit to the regional office a summary report on fixed-route bus PM inspection results that has been signed by the Director of Transportation or delegated authority. The report must indicate that the Director of Transportation or delegated authority has reviewed the PM inspections on a monthly basis until the data demonstrates SFMTA has conducted at least 80 percent of its PMs on time for three consecutive months starting February 1, 2014 (for January 2014 data). For each bus that received a PM inspection during the month, include with the submittal a report that lists the bus number, date of the inspection, mileage of the current inspection, mileage of the previous inspection, and the mileage interval between the two inspections.	Beginning April 18, 2014 then monthly through September 30, 2014	Information submitted. Closed by FTA.
	Submit to the regional office documentation of corrective actions implemented for instances where PM inspections were not performed timely.	Beginning April 18, 2014 then monthly through September 30, 2014	n/a
Review Area 6. Procurement;	Finding: D		
35-Responsibility determi- nation deficiencies	Submit to the regional office a process(es) to ensure that the procurement policies and procedures are followed for making and documenting adequate responsibility determinations prior to award of a contract.	April 18, 2014	Information submit- ted. Closed by FTA.
C-Pre-award and/or post- delivery certifications lacking	Submit to the regional office a process(es) to ensure that the procurement policies and procedures are followed for completing the applicable preaward and post-delivery audits certifications for future revenue rolling stock procurements.	April 18, 2014	Information submit- ted. Closed by FTA.
	Submit to the regional office documentation that the procurement of buses complied with the Buy America provisions by completing the after the fact post-delivery Buy America certifications.	April 18, 2014	Information submit- ted. Closed by FTA.
	Submit to the regional office a process(es) to ensure that the procurement policies and procedures are followed for searching the SAM before entering into applicable transactions and documenting the results of the search.	April 18, 2014	Information submit- ted. Closed by FTA.
	Submit documentation to regional office that the SAM search was conducted for the Neoplan coach rehabilitation contractor. SFMTA is to ensure that this contractor is not listed as suspended or debarred from participating in covered transactions. Immediately notify the regional office, if SFMTA needs to implement corrective measures, based upon the results of the SAM search.	April 18, 2014	Information submit- ted. Closed by FTA.
H-No verification excluded	Submit to the regional office a process(es) to ensure that the procurement policies and procedures are followed for compliance with all FTA required procurement elements.	April 18, 2014	Information submit- ted. Closed by FTA.
parties are not participating	Submit to the regional office evidence of the implementation of the above process(es).	Beginning April 30, 2014 then quarterly through September 30, 2014	To be implemented. Completed and approved Master Checklists will be forwarded to FTA for all FTA-funded contracts awarded be- tween April 30th and September 30th.
Review Area 7. DBE; Finding:	D		
20-Uniform reports do not include required information	Develop and submit to the FTA Region IX RCRO procedures for reporting the FTA funded share of awards and commitments in the DBE Uniform Report. The procedures must include how SFMTA will report payments on projects completed during the reporting period.	April 18, 2014	Information submit- ted. Closed by FTA.
Review Area 18. EEO; Finding	y: D		
01-Inadequate designation of EEO Officer	Submit to the FTA RCRO evidence of corrective actions taken to properly designate EEO responsibilities. This could consist of designating an EEO Officer that is independent of the Human Resources Officer	April 18, 2014	Information submit- ted. Closed by FTA.



# **OPERATIONS PLAN & BUDGET**

### **OPERATIONS PLAN**

The SFMTA is responsible for all surface transportation in the city, and the operations plan and supporting budget includes delivery across all modes – transit, walking, bicycling, ridesharing, and automobile movement. Through the implementation of Muni Forward, Vision Zero, and the Strategic Plan, the SFMTA has started several multimodal agencywide initiatives to improve the safety, reliability, and effectiveness of the city's transportation system.

### MUNI SERVICE OPERATIONS FRAMEWORK

Under Muni Forward, the SFMTA will continue to deliver the fixed route service as discussed in previous sections of the document. This service framework enables the SFMTA to focus investment where demand is high, discontinue low-ridership segments in order to add connections between neighborhoods and to regional transit, and expand capacity on heavy-ridership routes.

- Muni Metro & Rapid Bus: These heavily used bus and rail lines form the
  backbone of the Muni system. With vehicles arriving frequently and transit
  priority enhancements along the routes, the Rapid network delivers speed and
  reliability whether customers are heading across town, or simply traveling a
  few blocks.
- Frequent Local: These routes combined with Muni Metro and Rapid Bus create the Rapid network. They provide high-quality, frequent service but with more stops along the route.

- Grid: These citywide routes combine with the Rapid network to form an
  expansive core system that lets customers get to their destinations with no
  more than a short walk, or a seamless transfer. Depending on demand, they
  typically operate less frequently than the Rapid network routes.
- Connector: These bus routes predominantly circulate through San Francisco's hillside residential neighborhoods, filling in gaps in coverage and connecting customers to major transit hubs.
- Historic: Historic Street Cars and Cable Cars.
- Specialized: These routes augment existing service during specific times of day to serve a specific need, or serve travel demand related to special events.
   They include AM and PM commute service, owl service, weekend-only service, and special event trips to serve sporting events, large festivals and other San Francisco activities.

This Service Policy Framework serves multiple purposes. First, it provides a clear understanding of the different roles that transit routes play in the city and sets guidance for the transit planning process. Second, it guides future transit evaluation and investments.

For more information and recent updates on the implementation of Muni Forward, please che http://muniforward.com/. The SFMTA evaluates the performance of its routes on a routine basis. Rather than comparing routes across the system, routes will be compared to similar routes in their service category. For example, if a route is performing better than its category average, it would be evaluated for improvements - such as potential service increases - in close coordination with customers and other key stakeholders.

### **MUNI FORWARD SERVICE IMPROVEMENTS**

The Muni Forward operations plan is the path forward for the agency to achieve its objectives to improve customer service, communications, and transit performance on its fixed route service. The extensive planning, environmental assessment, and community engagement involved in the development these projects and operations plan will ensure that the Muni Forward initiatives stay within the city's, region's, and state's legal and regulatory requirements and the agency's financial constraints.

After the SFMTA's determination of fiscal health in January 2015, the Board of Directors approved a three percent increase in transit service in FY 2015 and a seven percent increase in FY 2016. An additional two percent service increase is proposed for the next budget cycle. Collectively, these service changes will modernize transit system in San Francisco by:

- · Increasing frequency of transit service along heavily used corridors
- · Creating new routes
- Changing existing route alignments
- Eliminating underutilized routes or route segments
- Introducing larger buses on crowded routes
- · Changing the mix of Rapid, Frequent Local, Grid, Connector, and Specialized services

Expanding Rapid services

Though many of these system updates will be delivered without physical infrastructure changes, some of the service changes require capital investments, such as overhead wire and terminal expansions. A brief description of these capital investments can be found in the Capital Improvement Program section of this document.

In addition to the Muni Forward portfolio of projects and service upgrades, the SFMTA will implement a three percent increase in transit service when the Central Subway revenue service starts. As noted below, T Third service in the Central Subway is scheduled to start in FY 2020.

Table 13. Planned Levels of Service Systemwide, FY 2014 - FY 2030

All Transit Modes	FY 2013 (actual)	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
Service Hours	3,031,022	3,031,022	3,121,953	3,340,489	3,373,894	3,407,633	3,407,633	3,509,862	3,509,862	3,509,862	3,509,862	3,509,862	3,509,862	3,509,862	3,509,862	3,509,862	3,509,862	3,509,862
Service Miles	22,771,541	22,771,541	23,454,687	25,096,515	25,347,480	25,600,955	25,600,955	26,368,984	26,368,984	26,368,984	26,368,984	26,368,984	26,368,984	26,368,984	26,368,984	26,368,984	26,368,984	26,368,984

**Muni Forward Central Subway** 

**+** 3 % **-**

# PARATRANSIT & DEMAND RESPONSIVE SERVICES

The SFMTA Accessible Services Program ensures that the appropriate, accessible, Americans with Disabilities Act (ADA)-compliant transportation services will continue to be available to seniors and persons with disabilities in San Francisco. As described in detail in Chapter 3 of this document, customers who cannot access the fixed route system due to their disability have several options available to them: a paratransit van and taxi program that provides door-to-door services; the Shop-a-Round service to local grocery stores and shopping districts; and the Van Gogh Service to cultural and recreational activities.

### **AGENCYWIDE OPERATIONS**

In addition to operating and maintaining the nation's eighth largest public transit system, the SFMTA manages parking and traffic, facilitates bicycling and walking, regulates taxis, and plans and implements community-based projects to improve the transportation network. The Operating Financial Plan supports these operations by funding the predevelopment, planning, and review of capital projects as well as the administration, financial services, regulatory, and communications operations for the agency.

### **OPERATIONS BUDGET**

The San Francisco City Charter requires the SFMTA to submit a balanced, agencywide two-year budget. The SFMTA Operating Budget is based on revenue projections from the following sources: passenger fares (both fixed route & paratransit); fines, fees, and permits; revenues from parking meters and garages; operating grants; and the transfer from the City and County of San Francisco General Fund.

As part of the development of the two-year budget, the public is engaged to provide input throughout the budget process. Outreach includes Town Hall meetings, public hearings before the Board, presentations to the Board of Supervisors, and collection of public comment via other means such as mail and email. The Citizens' Advisory Council also holds several meetings to consider the budget. By May 1, the SFMTA is required to submit a balanced two-year budget to the Board of Supervisors and the

Table 14. Summary of Revenues for FY 2014 Amended Budget and the FY 2015 and FY 2016 Proposed Budget

BUDGET CATEGORY (in millions)	FY 2014 BUDGET	FY 2015 PROPOSED BUDGET	FY 2016 PROPOSED BUDGET
Transit Fares	\$ 196.4	\$ 204.1	\$ 204.2
Operating Grants	\$ 115.7	\$ 128.6	\$ 132.0
Parking and Traffic Fees and Fines	\$ 273.8	\$ 284.8	\$ 290.0
Other (Advertising, Interest, Taxi, and Service Fees)	\$ 33.2	\$ 43.1	\$ 42.8
General FundTransfer (Based on City Charter)	\$ 232.0	\$ 247.9	\$ 256.0
Use of Available Fund Balance	-	\$ 20.0	\$ 20.0
Subtotal Operating Budget	\$ 851.1	\$ 928.5	\$ 945.0
Capital Projects Funded by Operating Revenues	-	\$ 16.7	\$ 18.2
TOTAL	\$ 851.1	\$ 945.2	\$ 963.2

Table 15. Summary of Expenditures for FY 2014 Amended Budget and the FY 2015 and FY 2016 Proposed Budget

BUDGET CATEGORY (in millions)	FY 2014 BUDGET	FY 2015 PROPOSED BUDGET	FY 2016 PROPOSED BUDGET
Salaries & Benefits	\$ 522.5	\$ 576.6	\$ 600.0
Contracts & Other Services	\$ 95.5	\$ 121.6	\$ 115.1
Materials & Supplies	\$ 75.2	\$ 76.9	\$ 78.3
Equipment & Maintenance	\$ 9.9	\$ 13.5	\$ 14.5
Rent & Building	\$ 6.9	\$ 7.0	\$ 6.8
Insurance, Claims & Payments to Other Agencies	\$ 64.0	\$ 65.1	\$ 62.5
Rainy Day Reserve	\$ 10.0	-	-
Services from City Departments	\$ 62.1	\$ 62.7	\$ 62.8
Subtotal Operating Budget	\$ 846.1	\$ 923.4	\$ 940.0
Capital Projects Funded by Operating Revenues	\$ 5.0	\$ 21.8	\$ 23.2
TOTAL	\$ 851.1	\$ 945.2	\$ 963.2

Mayor. The Board of Supervisors may not make any line item changes but may reject the entire SFMTA budget by a 7/11 vote. To date Board of Supervisors has not rejected the SFMTA budget.

Detailed information on the development of the FY 2015 – FY 2016 Operating Budget and what it funds can be found here: http://www.sfmta.com/projects-planning/projects/budgetfiscal-vear-2015-2016

# LONG-TERM PROJECTED OPERATIONS REVENUES AND EXPENSES

The Operating Financial Plan goes beyond the projections for the two-year balanced budget. This financial plan is based on historical information, long term trends, and estimates of projected revenues and expenses for the agency. These projections are not designed to be an accurate forecast for any specific year, but instead help the agency and its stakeholders understand the projected financial picture. Therefore, the Operating Financial Plan reflects a balanced Operating Budget through FY 2016, as approved by the current Board of Directors, and a projection of future operating needs and expected operating revenues. Specifically, the following assumptions were made:

The SFMTA 5-Year Operating Plan (FY 2016 – FY 2020) assumes a 3% annual increase in operating expenses between FY 2017 and FY 2020. These projections are based on the FY 2016 approved operating budget as the starting base and includes certain costs above the base year, including but not limited to, transit service increase, Central Subway service, known negotiated labor increases, and additional lease payments for new facilities. A 10% approved increase in transit service is part of the FY 2016 the base year.

- The SFMTA 5-Year Operating Plan also assumes a 3% annual increase in operating revenues between FY 2017 and FY 2020. These projections are based on the FY 2016 approved operating budget as the starting base and includes certain expected adjustments including a decline in Taxi medallion sales, assumption of a 2% annual increase for operating grants (instead of 3%) except Bridge Tolls which are assumed to be flat amount for all future years based on feedback from MTC, and additional revenue from development fee, cap and trade revenues for operations and fare revenues for additional service increases highlighted above.
- Between FY 2021 through FY 2040, operating expenses are projected to increase by 3-4% annually and revenue by 3-4% except for Bridge Tolls which are assumed to be flat amount for all future years based on feedback from MTC.

## FUNDING SFMTA OPERATIONS & CHANGES IN TRANSIT SERVICE

On March 28, 2014, the Board approved up to a 12 percent Muni Forward transit service increase. Ten percent of this overall increase is to be implemented in the FY 2016 two-year budget cycle – a 3 percent service increase in FY 2015 and a 7 percent service increase in FY 2016.

These approved Muni Forward service increases as well as those associated with the Central Subway project are included in the Operating Expenses section (both labor and non-labor) in the Operating Financial Plan. These expenditures include the annual operating and maintenance (O&M) costs for this service, as calculated by the SFMTA O&M model: staff wages and benefits, fuel (electricity, diesel, and biodiesel, materials and supplies, professional services, etc.

The last line of the Operating Financial Plan shows the projected funding gap for FY 2017 through FY 2030. During each budget cycle, the SFMTA works with policy makers to close that gap through a combination of revenue measures and expenditure reductions.

### **PROJECTED CHANGES IN FARE REVENUES**

Muni fare increases are based on a formula set in 2009 by the SFMTA Board of Directors to create a more predictable and transparent mechanism for setting charges. The formula is based on a combination of the Bay Area Consumer Price Index for all urban consumers (CPI-U) and labor costs. The projected increases in fare revenue are included as a consistent increase in the Operating Financial Plan.

### Free Muni Program

In FY 2013 and FY 2014, the SFMTA ran a pilot program to provide free Muni for low income youth funded through a variety of grants. As a result of a gift from Google, the program was continued or FY 2015 and FY 2016. Additionally, in May 2015 the SFMTA board extended the definition of youth from 17 to 18. In January 2015, based on an evaluation of the fiscal health of the Agency, the SFMTA Board voted to expand this program. The SFMTA now provides free Muni for low and moderate income 18-year olds, 19-22 year olds enrolled in San Francisco Unified School District programs, seniors, and disabled riders who use a Clipper® card. More information and applications for this program can be found at www. sfmta.com/freemuni.

### LABOR AND CONTRACT EXPENSES

The current labor agreements, negotiated in 2014, will end in fiscal year 2017 at which point expenses due to

a labor and service contracts may change. Increased labor and contract expenses are included as an annual increase shown in the Operating Financial Plan.

### PARATRANSIT FUNDING SOURCES

Paratransit Services, both Americans with Disabilities Act (ADA) service and non-ADA demand-responsive services are funded through the mix of federal and local funding sources listed Operating Financial Plan.

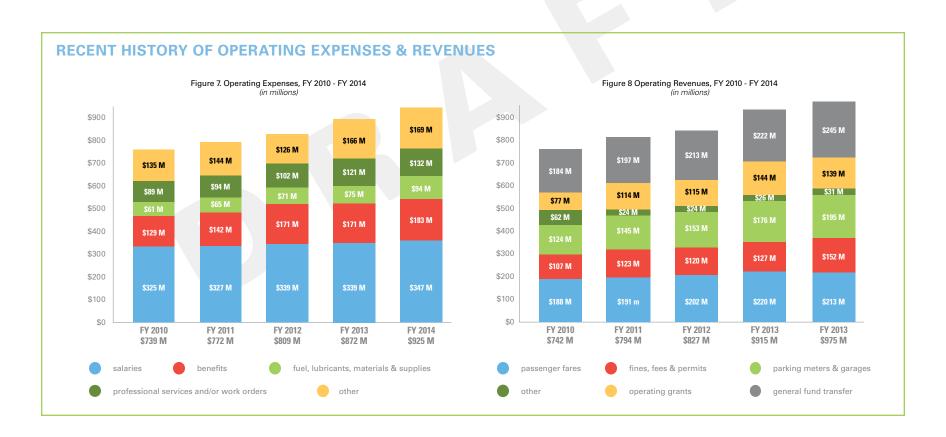








Table 16. SFMTA Operating Financial Plan (in \$ 1,000s), 2013-2030

CATEGORIES	ACTUALS ACTUALS FY 2013 FY 2014		BUDGET (a) FY 2015	BUDGET (a) FY 2016	5-YR PLAN (f) FY 2017	5-YEAR PLAN (f) FY 2018	5-YEAR PLAN (f) FY 2019	5-YEAR PLAN (f) FY 2020
Salaries	339,011	347,044	370,398	395,159	436,801	459,150	477,951	495,523
Fringe Benefits	171,193	182,618	205,465	204,074	212,416	221,755	229,152	236,757
Materials and Supplies	74,740	94,539	92,963	95,318	114,003	117,457	121,680	126,056
Professional Services & Work Orders	120,934	131,790	101,059	91,553	114,779	119,008	123,399	127,956
Other Operating Expenses	78,762	95,389	153,514	153,832	167,434	178,150	181,264	192,506
OPERATING EXPENSES (b)	784,640	851,379	923,399	939,936	1,045,434	1,095,521	1,133,445	1,178,797
Planned Committed Projects (a)	0	0	0	0	0		20.022	42.700
Planned Committed Projects (c)	U	U	U	U	U	U	20,822	42,789
Operating Contributions for Capital Projects, Future Operating Budget and Reserves	86,933	73,752	5,047	5,047	17,647	18,210	18,801	19,419
TSP Impact (% expense reduction starting FY 2018)	0	0	0	0	0	(55,687)	(58,653)	(62,050)
TOTAL OPERATIONAL NEEDS	871,573	925,131	928,446	944,983	1,063,080	1,058,045	1,114,414	1,178,954

a. FY2015 & FY2016 are based on approved SFMTA 2-year AAO budget. Budget data excludes capital project (CPF) included in annual appropriation ordinance.

b. The SFMTA 5-Year Operating Plan assumes an 3% annual increase in operating expenses between FY17 and FY20. These projections are based on the FY16 approved operating budget as the starting base and includes certain costs above the base year, including but not limited to, transit service increase, Central Subway service, known negotiated labor increases, and additional lease payments for new facilities. A 10% approved increase in transit service is part of the FY and 16 the base year. The SFMTA 5-Year Operating Plan also assumes an 3-4% annual increase in operating revenues between FY17 and FY20. These projections are based on the FY16 approved operating budget as the starting base and includes certain expected adjustments including a decline inTaxi medallion sales, assumption of a 2% annual increase for operating grants (instead of 3%) except Bridge Tolls which are assumed to be flat amount for all future years based on feedback from MTC, and additional revenue by 3% except for Bridge Tolls which are assumed to be flat amount for all future years based on feedback from MTC.

c. New Central Subway Transit takes place effective January 2019.

d. Non-Fare revenue includes advertising, rental and supports from other SFMTA functions such as parking and taxi.

e. County sales tax sunsets in FY2022.

f. FY2017 to FY2020 projections are based on Operating 5-Year Plan figures.







Continued: SFMTA Operating Financial Plan (in \$ 1,000s), 2013-2030

CATEGORIES	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	TOTAL FY 2015 - FY 2030
Salaries	512,866	530,816	549,395	568,624	588,526	609,124	630,443	655,661	681,887	705,753	8,668,077
Fringe Benefits	245,043	253,620	262,496	271,684	281,193	291,034	301,221	313,269	325,800	337,203	4,192,182
Materials and Supplies	130,468	135,034	139,761	144,652	149,715	154,955	160,379	166,794	173,465	179,537	2,202,237
Professional Services & Work Orders	132,434	137,069	141,867	146,832	151,971	157,290	162,795	169,307	176,079	182,242	2,235,641
Other Operating Expenses	199,243	206,217	213,435	220,905	228,636	236,639	244,921	254,718	264,907	274,178	3,370,500
OPERATING EXPENSES (b)	1,220,055	1,262,757	1,306,953	1,352,697	1,400,041	1,449,042	1,499,759	1,559,749	1,622,139	1,678,914	20,668,637
Planned Committed Projects (c)	44,073	45,395	46,757	48,159	49,604	51,092	52,625	54,204	55,830	57,505	568,854
Operating Contributions for Capital Projects, Future Operating Budget and Reserves	20,001	20,601	21,219	21,856	22,512	23,187	23,883	24,599	25,337	26,097	313,461
TSP Impact (% expense reduction starting FY 2018)	(61,003)	(63,138)	(65,348)	(67,635)	(70,002)	(72,452)	(74,988)	(77,987)	(81,107)	(83,946)	(893,997)
TOTAL OPERATIONAL NEEDS	1,223,126	1,265,615	1,309,581	1,355,077	1,402,155	1,450,869	1,501,278	1,560,565	1,622,199	1,678,570	20,656,955

a. FY2015 & FY2016 are based on approved SFMTA 2-year AAO budget. Budget data excludes capital project (CPF) included in annual appropriation ordinance.

b. The SFMTA 5-Year Operating Plan assumes an 3% annual increase in operating expenses between FY17 and FY20. These projections are based on the FY16 approved operating budget as the starting base and includes certain costs above the base year, including but not limited to, transit service increase, Central Subway service, known negotiated labor increases, and additional lease payments for new facilities. A 10% approved increase in transit service is part of the FY and 16 the base year. The SFMTA 5-Year Operating Plan also assumes an 3-4% annual increase in operating revenues between FY17 and FY20. These projections are based on the FY16 approved operating budget as the starting base and includes certain expected adjustments including a decline in Taxi medallion sales, assumption of a 2% annual increase for operating grants (instead of 3%) except BridgeTolls which are assumed to be flat amount for all future years based on feedback from MTC, and additional revenue from development fee, cap and trade revenues for operations and fare revenues for additional service increases highlighted above. Between FY21 through FY40, operating expenses are projected to increase by 3-4% annually and revenue by 3% except for BridgeTolls which are assumed to be flat amount for all future years based on feedback from MTC.

c. New Central Subway Transit takes place effective January 2019.

d. Non-Fare revenue includes advertising, rental and supports from other SFMTA functions such as parking and taxi.

e. County sales tax sunsets in FY2022.

f. FY2017 to FY2020 projections are based on Operating 5-Year Plan figures.

Continued: SFMTA Operating Financial Plan (in \$ 1,000s), 2013-2030

CATEGORIES	ACTUALS FY 2013	ACTUALS FY 2014	BUDGET (a) FY 2015	BUDGET (a) FY 2016	5-YR PLAN (f) FY 2017	5-YEAR PLAN (f) FY 2018	5-YEAR PLAN (f) FY 2019	5-YEAR PLAN (f) FY 2020
EVENUE FOR OPERATIONS								
Fares	220,090	212,832	201,584	201,575	207,118	212,814	218,666	224,680
Non-Fare Revenue (d)	328,859	378,672	330,384	335,378	351,906	364,222	383,770	395,966
Other (City General FundTransfer)	222,390	243,910	247,860	256,050	273,397	288,068	299,973	313,112
County SalesTax (e)	8,697	9,147	8,160	8,280	8,440	8,603	8,769	8,938
BART ADA	1,138	1,238	1,020	1,040	1,060	1,081	1,101	1,123
Fund Balance	-	-	20,000	20,000	10,000	10,275	10,558	10,848
Bridge Tolls	-	-	-	-	-	-	-	-
Regional Measure 2 Operating	2,688	2,688	2,688	2,730	2,730	2,730	2,730	2,730
5% State General Fund Revenues	-	-	-	-	-	-	-	-
TDA	-	-	-	-	-	-	-	-
Article 4/8 and 4.5	42,108	41,898	38,000	39,530	40,293	41,071	41,863	42,671
AB 1107	34,812	36,912	36,260	37,260	37,979	38,712	39,459	40,221
STA	-	-		-	-	-	-	-
Revenue-Based	46,576	39,081	34,969	35,490	36,175	36,873	37,585	38,310
Population-based	-	-	-	-	-	-	-	-
Northern Counties/Small Operators	-	-	-	-	-	-	-	-
Regional Paratransit	1,174	939	881	890	907	925	943	961
GasTax	3,055	3,601	2,830	2,870	2,925	2,982	3,039	3,098
Federal Transit Grants	-	-	-	-	-	-	-	-
5307 - 10% ADA Operating	3,759	3,732	3,810	3,890	3,965	4,042	4,120	4,199
TOTAL REVENUE	915,346	974,651	928,446	944,983	976,896	1,012,396	1,052,576	1,086,856
OPERATING SURPLUS/(DEFICIT)	43,773	49,520	0	0	(86,185)	(45,648)	(61,838)	(92,098)

a. FY2015 & FY2016 are based on approved SFMTA 2-year AAO budget. Budget data excludes capital project (CPF) included in annual appropriation ordinance.

b. The SFMTA 5-Year Operating Plan assumes an 3% annual increase in operating expenses between FY17 and FY20. These projections are based on the FY16 approved operating budget as the starting base and includes certain costs above the base year, including but not limited to, transit service increase, Central Subway service, known negotiated labor increases, and additional lease payments for new facilities. A 10% approved increase in transit service is part of the FY and 16 the base year. The SFMTA 5-Year Operating Plan also assumes an 3-4% annual increase in operating revenues between FY17 and FY20. These projections are based on the FY16 approved operating budget as the starting base and includes certain expected adjustments including a decline inTaxi medallion sales, assumption of a 2% annual increase for operating grants (instead of 3%) except BridgeTolls which are assumed to be flat amount for all future years based on feedback from MTC, and additional revenue from development fee, cap and trade revenues for operating and fare revenues for additional service increases highlighted above. Between FY21 through FY40, operating expenses are projected to increase by 3-4% annually and revenue by 3% except for Bridge Tolls which are assumed to be flat amount for all future years based on feedback from MTC.

c. New Central Subway Transit takes place effective January 2019.

d. Non-Fare revenue includes advertising, rental and supports from other SFMTA functions such as parking and taxi.

e. County sales tax sunsets in FY2022.

f. FY2017 to FY2020 projections are based on Operating 5-Year Plan figures.

Continued: SFMTA Operating Financial Plan (in \$ 1,000s), 2013-2030

CATEGORIES	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	TOTAL FY 2015 - FY 2030
VENUE FOR OPERATIONS											
Fares	231,420	238,363	247,897	257,813	265,548	273,514	281,719	290,171	298,876	307,842	3,959,60
Non-Fare Revenue (d) Other	407,845	424,158	441,125	458,770	477,121	496,205	518,535	541,869	566,253	591,734	7,085,24
(City Generanl FundTransfer) County	322,505	333,793	345,476	357,567	370,082	383,035	398,357	412,299	428,791	445,943	5,476,3
Sales Tax (e) BART	9,206	9,528	-	-	-	-	-	-	-	-	69,9
ADA	1,156	1,197	1,239	1,282	1,327	1,373	1,428	1,478	1,537	1,599	20,0
Fund Balance	11,173	11,564	11,969	12,388	12,822	13,270	13,801	14,284	14,856	15,450	213,2
Bridge Tolls	-	-	-	-	-	-	-	-	-	-	
Regional Measure 2 Operating	2,730	2,730	2,730	2,730	2,730	2,730	2,730	2,730	2,730	2,730	43,6
5% State General Fund Revenues	-	-	-	-	-	-	-		-	-	
TDA	-	-	-	-	-	-	-	-	-	-	
Article 4/8 and 4.5	43,951	45,270	46,628	48,027	49,468	50,952	52,480	54,055	55,676	57,347	747,2
AB 1107	41,427	42,670	43,950	45,269	46,627	48,026	49,467	50,951	52,479	54,053	704,8
STA	-	-	-	-	-	-	-	-	-	-	
Revenue-Based	39,459	40,643	41,863	43,118	44,412	45,744	47,117	48,530	49,986	51,486	671,7
Population-based	-	-	-	-	-	-	-	-	-	-	
NorthernCounties/Small Operators	-		-	-	-	-	-	-	-	-	
Regional Paratransit	990	1,019	1,050	1,081	1,114	1,147	1,182	1,217	1,254	1,291	16,8
GasTax	3,191	3,287	3,385	3,487	3,592	3,699	3,810	3,925	4,042	4,164	54,3
Federal Transit Grants	-	-	-	-	-	-	-	-	-	-	
5307 - 10% ADA Operating	4,325	4,455	4,588	4,726	4,868	5,014	5,164	5,319	5,479	5,643	73,6
TOTAL REVENUE	1,119,380	1,158,678	1,191,900	1,236,259	1,279,709	1,324,710	1,375,790	1,426,827	1,481,959	1,539,281	19,136,6
OPERATING SURPLUS/(DEFICIT)	(103,746)	(106,937)	(117,681)	(118,818)	(122,446)	(126,159)	(125,489)	(133,737)	(140,240)	(139,289)	1,520,3

a. FY2015 & FY2016 are based on approved SFMTA 2-year AAO budget. Budget data excludes capital project (CPF) included in annual appropriation ordinance.

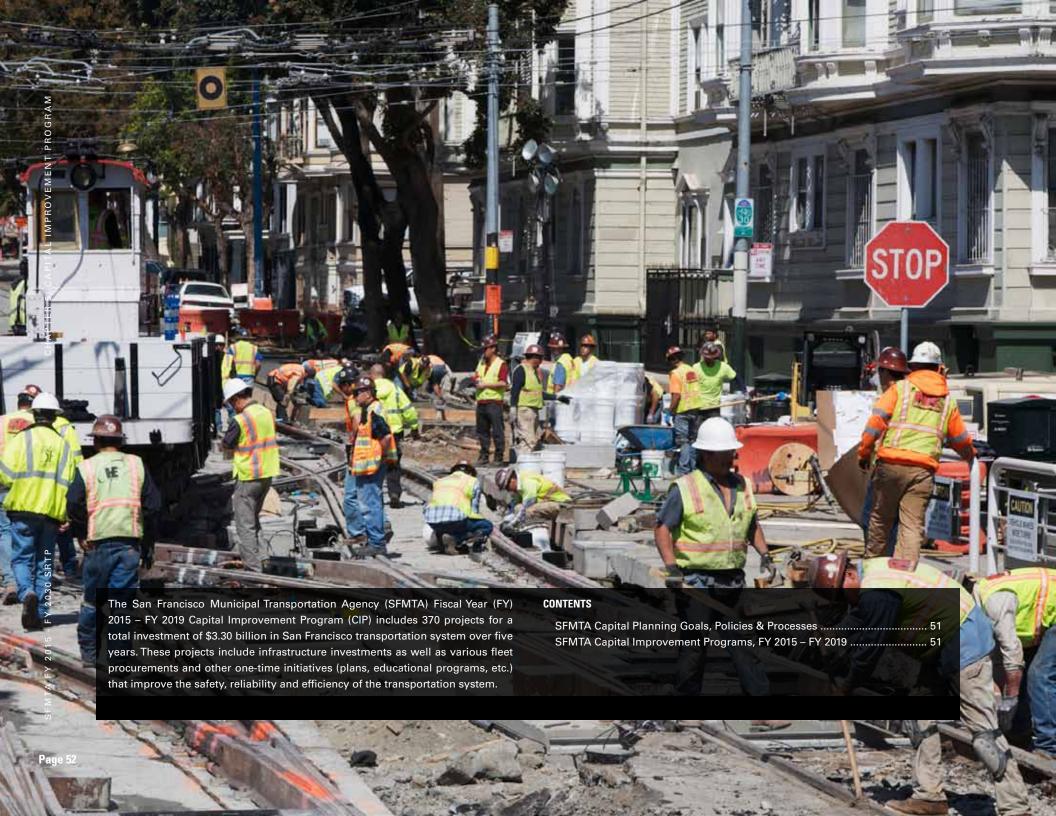
b. The SFMTA 5-Year Operating Plan assumes an 3% annual increase in operating expenses between FY17 and FY20. These projections are based on the FY16 approved operating budget as the starting base and includes certain costs above the base year, including but not limited to, transit service increase, Central Subway service, known negotiated labor increases, and additional lease payments for new facilities. A 10% approved increase in transit service is part of the FY and 16 the base year. The SFMTA 5-Year Operating Plan also assumes an 3-4% annual increase in operating revenues between FY17 and FY20. These projections are based on the FY16 approved operating budget as the starting base and includes certain expected adjustments including a decline in Taxi medallion sales, assumption of a 2% annual increase for operating grants (instead of 3%) except BridgeTolls which are assumed to be flat amount for all future years based on feedback from MTC, and additional revenue from development fee, cap and trade revenues for operations and fare revenues for additional service increases highlighted above. Between FY21 through FY40, operating expenses are projected to increase by 3-4% annually and revenue by 3% except for Bridge Tolls which are assumed to be flat amount for all future years based on feedback from MTC.

c. New Central Subway Transit takes place effective January 2019.

d. Non-Fare revenue includes advertising, rental and supports from other SFMTA functions such as parking and taxi.

e. County sales tax sunsets in FY2022.

f. FY2017 to FY2020 projections are based on Operating 5-Year Plan figures.



# **CAPITAL IMPROVEMENT PROGRAM**

# SFMTA CAPITAL PLANNING GOALS, POLICIES & PROCESSES

The SFMTA develops internal multimodal and mode-specific mid- and long-range strategies to determine the city's transportation capital and operational needs and allocate resources effectively to meet its goals. The 20-year Capital Plan brings the elements of these strategies together and provides an unconstrained list of capital needs and projects. They are prioritized based on performance criteria informed by the SFMTA Strategic Plan and determined by the SFMTA Leadership Team.

The five-year Capital Improvement Program (CIP) takes the prioritized projects, plans, strategies, and initiatives from the 20-Year Capital Plan and matches them with projected funding availability. This matching process results in a financially-constrained five-year program of projects for the transportation system in San Francisco. The CIP also develops a Strategic Investment/Value Analysis for project prioritization and funding, and prevents funding accessibility from being a barrier to project delivery. The CIP also serves as an implementation tool for the SFMTA Strategic Plan and other plans and strategies, ensuring that the actions and recommendations from that planning work are assigned funding and initiated on a predefined schedule. In these ways, the CIP builds credibility with the local, regional, state, and federal funding agencies that allocate funding to the agency.

# SFMTA CAPITAL IMPROVEMENT PROGRAMS, FY 2015 – FY 2019

Building on the goals outlined in the SFMTA's Strategic Plan and 20-Year Capital Plan, the FY 2015 - FY 2019 CIP includes funding for the following: 1) State of Good Repair at an average of \$329 million per year, including full replacement of the Muni bus fleet, an on-going transit fleet overhaul program, and increased funding for traffic signals and facilities; 2) Street-related improvements, including significant funding for implementation of the Vision Zero (Bicycle and Pedestrian Strategies); and 3)The Muni Forward projects, along with an increase in the light rail vehicle and articulated (60-foot) bus fleets.

The CIP was developed through an extensive process that incorporated significant community input, including presentations in more than 30 public and city department forums. Feedback from these presentations formed an integral part of the CIP development process, and was integrated into the final proposed CIP for SFMTA Board Adoption. In accordance with state and federal laws and SFMTA outreach policies, public engagement will continue to serve an essential role in further defining and improving the projects prior to implementation.

The FY 2015 – FY 2019 Capital Improvement Program (CIP) is a living document and projects are adjusted as needs change. Technical adjustments to the CIP are made on an ongoing basis. Recent update and detailed expenditure projections can be found on the SFMTA website at: (http://www.sfmta.com/sites/default/files/agendaitems/5-20-14%20Item%2012%20Capital%20Improvement%20Program.pd

Figure 9. FY 2015 - FY 2019 Capital Improvement Program Map



### **CAPITAL FUNDING SOURCES**

Over the next ten years, the SFMTA's total unconstrained capital need is \$9.0 billion dollars (including a five percent cost escalation rate in fiscal years 2021-2015). The SFMTA projected capital revenues for next 10 years are \$3.8 billion dollars, leaving a projected capital shortfall of about \$5.2 billion dollars over this same period.

In an effort to show local support for transportation, SFMTA and the City and County of San Francisco have undertaken a number of strategies to address transportation funding. The 2013 Mayor's Transportation Task Force recommended issuing two \$500 million general obligation bonds, restoring the state vehicle license fee to 2%, and implementing a half-cent sales tax dedicated to transportation. The first of the two general obligation bonds was approved by voters in 2014, and has been has been programed in the Capital Financial Plan. The next bond, anticipated for 2024, is not yet programmed and will be included as a separate line item in the CIP if and when approved by San Francisco voters. Additionally, the Transportation Sustainability Fee, which replaces and enhances the existing Transit Impact Development Fee (TIDF) for new developments will likely be approved sometime in 2015.

### SFMTA CAPITAL PROGRAMS

For budgeting and capital planning purposes, SFMTA's capital projects are sorted into capital programs that generally reflect the type of enhancement. However, due to the multimodal nature of most SFMTA projects, the line-by-line amount for each program does not reflect the total investment in that type of transportation infrastructure or program. For example, many transit enhancement projects also have elements that will improve accessibility and infrastructure for people walking and bicycling.

Table 17. FY 2015 – FY 2025 Summary of Expected Capital Funding by Source, as of December 2014

FUNDING SOURCE	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	TOTAL REVENUE
Federal	\$ 426,517,267	\$ 267,504,626	\$ 299,377,769	\$ 127,088,751	\$ 117,240,024	\$ 107,235,180	\$ 107,235,180	\$ 107,235,180	\$ 107,235,180	\$ 107,235,180	\$ 1,773,904,340
State	\$ 65,849,120	\$ 19,165,752	\$ 1,780,521	\$ 75,702,000	\$ 6,555,993	\$ 5,996,528	\$ 5,996,528	\$ 5,996,528	\$ 5,996,528	\$ 5,996,528	\$ 199,036,022
Local Subtotal	\$ 377,974,829	\$ 397,996,411	\$ 178,759,346	\$ 237,182,182	\$ 110,570,504	\$ 101,134,813	\$ 101,134,813	\$ 101,134,813	\$ 101,134,813	\$ 101,134,813	\$ 1,808,157,334
General Obligation Bond*	\$ 102,935,987	\$ 103,717,612	\$ 45,485,947	\$ 91,218,395	\$ -	\$ -	\$ -	\$ -	\$ 371,918	\$ -	\$ 343,729,859
Revenue Bond	\$ 21,624,184	\$ 106,053,479	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 127,677,663
Other	\$ 253,414,658	\$ 188,225,320	\$ 133,273,399	\$ 145,963,787	\$ 110,570,504	\$ 101,134,813	\$ 101,134,813	\$ 101,134,813	\$ 101,134,813	\$ 101,134,813	\$ 1,337,121,731
TOTAL EXPECTED FUNDING	\$ 870,341,216	\$ 684,666,789	\$ 479,917,635	\$ 439,972,933	\$ 234,366,521	\$ 214,366,521	\$ 214,366,521	\$ 214,366,521	\$ 214,366,521	\$ 214,366,521	\$ 3,781,097,697

Table 18. FY 2015 - FY 2025 Capital Improvement Program Summary, as of December 2014

	CAPITAL PROGRAMS	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	TOTAL NEED	TOTAL UNFUNDED
	Central Subway	\$ 190,940,203	\$ 150,000,000	\$ 150,000,000	\$ 98,520,516	\$-	\$ -	\$ -	\$-	\$ -	\$ -	\$ 589,460,719	\$-
ram	Facility	\$ 88,172,500	\$ 88,172,500	\$ 88,172,500	\$ 88,172,500	\$ 92,581,125	\$ 97,210,181	\$ 102,070,690	\$ 107,174,225	\$ 112,532,936	\$ 118,159,583	\$ 982,418,740	\$ 827,965,089
Programs	Fleet	\$ 180,295,000	\$ 180,295,000	\$ 180,295,000	\$ 180,295,000	\$ 189,309,750	\$ 198,775,238	\$ 208,713,999	\$ 219,149,699	\$ 230,107,184	\$ 241,612,544	\$ 2,008,848,414	\$ 710,924,093
Transit	Transit Fixed Guideway	\$ 100,950,000	\$ 100,950,000	\$ 100,950,000	\$ 100,950,000	\$ 105,997,500	\$ 111,297,375	\$ 116,862,244	\$ 122,705,356	\$ 128,840,624	\$ 135,282,655	\$ 1,124,785,753	\$ 790,974,090
Tra	Transit Optimization & Expansion	\$ 269,466,000	\$ 269,466,000	\$ 269,466,000	\$ 269,466,000	\$ 282,939,300	\$ 297,086,265	\$ 311,940,578	\$ 327,537,607	\$ 343,914,488	\$ 361,110,212	\$ 3,002,392,450	\$ 2,116,842,667
	TOTAL TRANSIT NEED:	\$ 829,823,703	\$ 788,883,500	\$ 788,883,500	\$ 737,404,016	\$ 670,827,675	\$ 704,369,059	\$ 739,587,512	\$ 776,566,887	\$ 815,395,232	\$ 856,164,993	\$ 7,707,906,076	\$ 4,446,705,938
	Accessibility	\$ 3,660,000	\$ 3,660,000	\$ 3,660,000	\$ 3,660,000	\$ 3,843,000	\$ 4,035,150	\$ 4,236,908	\$ 4,448,753	\$ 4,671,191	\$ 4,904,750	\$ 40,779,751	\$ 8,133,084
	Bicycle	\$ 29,717,500	\$ 29,717,500	\$ 29,717,500	\$ 29,717,500	\$ 31,203,375	\$ 32,763,544	\$ 34,401,721	\$ 36,121,807	\$ 37,927,897	\$ 39,824,292	\$ 331,112,636	\$ 185,019,747
Programs	Communications/ IT Infrastructure	\$ 4,405,000	\$ 4,405,000	\$ 4,405,000	\$ 4,405,000	\$ 4,625,250	\$ 4,856,513	\$ 5,099,338	\$ 5,354,305	\$ 5,622,020	\$ 5,903,121	\$ 49,080,547	\$ 36,249,032
Pro	Parking	\$ 12,370,000	\$ 12,370,000	\$ 12,370,000	\$ 12,370,000	\$ 12,988,500	\$ 13,637,925	\$ 14,319,821	\$ 15,035,812	\$ 15,787,603	\$ 16,576,983	\$ 137,826,645	\$ 129,459,701
Capital	Pedestrian	\$ 18,590,750	\$ 18,590,750	\$ 18,590,750	\$ 18,590,750	\$ 19,520,288	\$ 20,496,302	\$ 21,521,117	\$ 22,597,173	\$ 23,727,031	\$ 24,913,383	\$ 207,138,294	\$ 107,987,114
	School	\$ 7,500,000	\$ 7,500,000	\$ 7,500,000	\$ 7,500,000	\$ 7,875,000	\$ 8,268,750	\$ 8,682,188	\$ 9,116,297	\$ 9,572,112	\$ 10,050,717	\$ 83,565,063	\$ 63,263,594
SFMTA	Security	\$ 5,863,950	\$ 5,863,950	\$ 5,863,950	\$ 5,863,950	\$ 6,157,148	\$ 6,465,005	\$ 6,788,255	\$ 7,127,668	\$ 7,484,051	\$ 7,858,254	\$ 65,336,182	\$ -
	Taxi	\$ 690,312	\$ 690,312	\$ 690,312	\$ 690,312	\$ 724,827	\$ 761,069	\$ 799,122	\$ 839,078	\$ 881,032	\$ 925,084	\$ 7,691,460	\$ -
Other	Traffic Calming	\$ 23,546,500	\$ 23,546,500	\$ 23,546,500	\$ 23,546,500	\$ 24,723,825	\$ 25,960,016	\$ 27,258,017	\$ 28,620,918	\$ 30,051,964	\$ 31,554,562	\$ 262,355,302	\$ 163,571,087
	Traffic & Signals	\$ 9,715,000	\$ 9,715,000	\$ 9,715,000	\$ 9,715,000	\$ 10,200,750	\$ 10,710,788	\$ 11,246,327	\$ 11,808,643	\$ 12,399,075	\$ 13,019,029	\$ 108,244,612	\$ 79,549,574
	Bond Projects (2024)*	\$ -	\$ -	\$ -	\$-	\$ -	\$ -	\$ -	\$ -	\$ 371,918,000	\$ -	\$ 371,918,000	\$ -
	TOTAL OTHER NEED:	\$116,059,012	\$116,059,012	\$116,059,012	\$ 116,059,012	\$ 121,861,963	\$127,955,061	\$134,352,814	\$ 141,070,454	\$ 148,495,895	\$ 155,530,176	\$ 1,293,502,410	\$ 773,232,933
	TOTAL ESTIMATED NEED	\$945,882,714	\$904,942,512	\$ 904,942,512	\$ 853,463,028	\$ 792,689,638	\$ 832,324,119	\$ 873,940,325	\$ 917,637,342		\$ 1,011,695,169		\$ 5,219,938,871
	TOTAL UNFUNDED	\$75,541,499	\$220,275,723	\$ 425,024,877	\$ 413,490,095	\$ 558,323,117	\$ 617,957,599	\$ 659,573,805	\$ 703,270,821	\$ 749,152,688	\$ 797,328,649	\$ 5,219,938,871	

<sup>\*</sup> As part of Transportation 2030, the SFMTA anticipates a second \$500 million bond to continue investing in urgent transportation needs as the City continues to grow and its infrastructure continues to age. For more information on Transportation 2030, its series of funding measures, and project status updates, go to http://sftransportation2030.com/progress/

### TRANSIT CAPITAL PROGRAMS

# TRANSIT OPTIMIZATION & EXPANSION

SFMTA is currently embarking on an ambitious plan to modernize and expand Muni, collectively called Muni Forward. These initiatives will make Muni more efficient, reliable, safe and comfortable for its existing 700,000 daily passengers - and will help prepare the system for future growth. Many of the Muni Forward projects in the Transit Optimization & Expansion CIP were planned through the Transit Effectiveness Project's (TEP) years of data collection, intensive planning and public outreach efforts. The SFMTA is also implementing a combination of policies, programs, information, services, and tools that help optimize transportation infrastructure and operations, and support the use of sustainable modes for all trips. The Major Expansion Projects section of this document has a more detailed update on two ongoing major infrastructure projects, the Central Subway and the Van Ness Bus Rapid Transit Project.

### MUNI FORWARD CAPITAL IMPROVEMENTS

Muni Forward includes engineering improvements—also known as Transit Priority Projects (TPPs)—designed to address transit delay, improve reliability, and increase the safety and comfort of customers along the most heavily used Rapid routes. The TPPs include a variety of standard roadway and traffic engineering features that specifically address the root causes of delay and passenger frustration, including traffic congestion, transit stops that are spaced too close together, narrow travel lanes, and

Figure 10. Muni Forward Transit Priority Projects, status as of January 2015



slow boarding times. These elements are referred to as the Transit Priority Features (TPF) and include lane modifications, traffic signal and stop sign changes, transit stop changes, parking and turn restrictions, pedestrian improvements, and many others.

Detailed proposals have been developed for eleven corridors and conceptual proposals were developed for an additional six. As the TPPs affect the allocation of scarce roadway space among different users by utilizing space for elements that prioritize transit, more than one alternative was typically proposed at locations with limited roadway space, each balancing different trade-offs. The precise components of each Muni Forward Transit Priority Project to be implemented will be decided by the SFMTA Board of Directors, who will consider the details of the project proposals as well as the results of the environmental impact analysis, following public outreach to be held for each individual Muni Route (outreach on some lines is already underway).

Muni Forward Transit Priority Projects will be implemented based on funding and resources available. As of December 2014, more than ten projects (40 miles of investment) are in the preliminary planning and engineering stages, and have funding strategies identified for construction. To minimize customer disruption and optimize financing, projects will be implemented in segments.

The City and County of San Francisco's 2014 Capital Plan and the San Francisco 2030 Transportation Task Force (T2030) have both recommended General Obligation Bond (GO Bond) funding for design and construction of many Muni Forward projects. On November 4, 2014, San Francisco voters approved Proposition A which includes \$150 million in funding proposed to design and build Muni Froward projects. Future funding is expected from other sources for a

combined total funding of \$230 million. Vision Zero improvements, including bicycle and pedestrian capital improvements will be built in coordination with Muni ForwardTransit Priority Projects to improve safe and easy access to transit.

**Project Area:** The Rapid & Transit Priority Network of core routes serves nearly 70% of all riders all over the city. These projects are geographically diverse and improve the network as a whole, thereby improving transit service for all customers.

Estimated Project Cost: The following is only a partial list of the Transit Optimization projects that the SFMTA will implement in the next five years. More information on specific project costs and funding sources is available in the SFMTA FY 2015 – FY 2019 Capital Improvement Program document and the periodic Status Reports to the General Obligation Bond Oversight Committee.

Construction Timeline: The Muni Forward Rapid Network Capital Improvements were environmentally cleared through the TEP planning effort in March 2014. The near-term projects will start construction in the last quarter of FY 2014 and take approximately one year to construct.



More detail on line-by-line enhancements can be found on the individual route pages in the Muni Forward Implementation Workbook posted on: http://www.sfmta.com/projects-planning/projects/muni-forward-implementation-plan

Table 19. Current and Future Muni Forward Projects

RAPID & TRANSIT PRIORITY NETWORK CAPITAL IMPROVEMENTS	ESTIMATED PROJECT COST
Market Street	\$ 155,790,277
Schlage LockTransit and Pedestrian Enhancements	\$ 3,500,000
N Judah - Arguello to 9th Ave	\$ 2,120,000
N Judah – Outer	\$ 14,600,000
LTaraval: Transit Priority Project	\$ 20,610,000
J Church: Transit Priority Project	\$ 11,100,000
5 Fulton: East of 6th Ave Transit Priority Project	\$ 7,640,000
8X Bayshore Express: Geneva Ave & Vis Valley Transit Priority Project	\$ 5,800,000
9 San Bruno: 11th St and Bayshore BlvdTransit Priority Project	\$ 2,418,830
10 Townsend: Sansome Contraflow Signals	\$ 1,871,600
14 Mission: Downtown Mission Transit Priority Project	\$ 20,140,000
14 Mission: Inner Mission Transit Priority Project	\$ 2,693,500
14 Mission: Outer Mission Transit Priority Project	\$ 3,850,000
22 Fillmore: 16th St. Transit Priority Project - Ph. 1	\$ 67,300,000
22 Fillmore - OCS on 16th St & Kansas	\$ 1,000,000
22 Fillmore - OCS on Church/Duboce	\$ 2,000,000
22 Fillmore - OCS on Church/Duboce	\$ 16,500,000
30 Stockton: East of Van Ness Ave Segment Transit Priority Project	\$ 4,976,000
30 Stockton - Chestnut & Terminal (W of VN)	\$ 8,493,900
33 Stanyan - OCS on Guerrero (overhead lines)	\$ 3,100,000
71 Haight-Noriega: Haight StreetTransit Priority Project	\$ 7,826,080
TOTAL	\$ 363,330,187

source: 2014 Transportation and Road Improvement Bond Status Report to the General Obligation Bond Oversight Committee, January 22, 2015

#### **BETTER MARKET STREET**

This project will deliver improvements on Market Street, with the goal to revitalize Market Street from Octavia Boulevard to The Embarcadero and reestablish the street as the premier cultural, civic and economic boulevard. This project will create a sense of place, optimize mobility, and foster economic development by:

- Supporting the City of San Francisco's planned growth and economic development.
- Providing faster and more reliable transit service for all users.
- Improving safety, comfort and mobility for pedestrians and bicyclists.
- Creating thriving public spaces that attract a diversity of people and uses.

There are currently three design options that will be included in the environmental review documents. The specific design varies, but each of the alternatives have elements that will enhance the sidewalks and pedestrian safety, improve the bicycle facilities, and make transit safer, faster, and more reliable.

The Better Market Street project is an interagency effort led by the Department of Public Works with substantial input from the design team consisting of staff from: the Planning Department (urban design lead), the SFMTA (transportation lead), the Public Utilities Commission, the Office of Economic and Workforce Development, and the County Transportation Authority.

Project Area: The project encompasses Market Street between Octavia Boulevard and The Embarcadero, as well as to Valencia Street between Market and

Figure 11. Better Market Street Project Area



McCoppin streets. One design alternative could potentially redesign and provide improvements on McCoppin, Otis, and Mission streets between Valencia Street and The Embarcadero, as well as 10th Street between Market and Mission.

Estimated Project Cost: Better Market Street has many coordinating projects within its scope. In 2014, the SFMTA's Transit Optimization & Expansion CIP initially programmed \$124 million as the SFMTA's contribution to this multi-agency project over the next five years. However, this was based on a preliminary scope of work and as the project develops and goes through the in-depth analysis associated with environmental review, Public Works, the SFMTA, and

the other city departments will develop a strategy to fully fund this approximately \$400 million project.

Construction Timeline: The project is currently under environmental review of the three alternatives developed through the outreach process (2011-2013). The environmental review is expected to end in early 2017, with detailed design finishing in 2017, and construction starting in 2018, pending funding.

More information on the Better Market Street project can be found online at: http://www.bettermarketstreetsf.org/.

Figure 12. Geary Bus Rapid Transit Project Area



#### **GEARY BUS RAPID TRANSIT PROJECT**

Geary Boulevard is the most heavily used transit corridor in the northern part of San Francisco with over 55,000 daily transit riders. The goals of the Geary Bus Rapid Transit (BRT) Project are to improve service for existing riders, attract new transit riders, construct transit and public realm enhancements, and prevent increased auto congestion along the corridor.

The proposed project elements include: dedicated bus lanes, adjustments to local bus stops, restrictions on turn lanes at some intersections, traffic signals and advanced Transit Signal Priority infrastructure, real-time information, high-quality bus shelters, and low-floor buses.

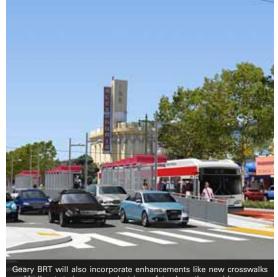
Project Area: The Geary BRT project area consists of the entire length of Geary Boulevard as well as Geary and O'Farrell Streets from Market to Gough Street, and extending to the Transbay Terminal south of Market Street.

Estimated Project Cost: The SFMTA's Transit Optimization & Expansion CIP has programmed just over \$22 million for initial project phases over the next five years. As the project is further defined after the environmental review process, this cost will be refined as needed.

Construction Timeline: This project is currently under environmental review. It is projected that the environmental review of the alternatives will be completed in 2016 with construction of the full project starting 2018-2019. However, after approval of the Environmental Impact Report in 2016, the SFMTA will implement early delivery improvements to provide enhanced transit service along the corridor as soon as possible.







and bulbouts to improve pedestrian safety along the corridor.

### **CENTRAL SUBWAY**

The Central Subway Project will construct a modern, efficient light rail line that will improve public transportation in San Francisco. This new 1.7-mile extension of Muni's T Third Line will provide direct connections to major retail, sporting and cultural venues while efficiently transporting people to jobs, educational opportunities and other amenities throughout the city. With stops in South of Market (SoMa), Yerba Buena, Union Square and Chinatown, the Central Subway will vastly improve transit options for the residents of one of the most densely populated neighborhoods in the country, provide a rapid transit link to a burgeoning technology and digital-media hub, and improve access to a premier commercial district and tourist attraction.

The Central Subway Project is the second phase of the San Francisco Municipal Transportation Agency's (SFMTA) Third Street Light Rail Transit Project. Phase 1 of the project, which was completed in April 2007, constructed a 5.1-mile light-rail line along the densely populated 3rd Street corridor. Phase 2, the Central Subway, will extend the T Third Line from the 4th Street Caltrain Station to Chinatown. Due to the large budget and scope of the project, Central Subway was designated as a separate program in this five-year CIP. More information on the Central Subway project can be found in the *Expansion Projects* section of this document.

### TRANSIT FIXED GUIDEWAY

Muni's Transit Fixed Guideway light rail, streetcar and historic cable car services are a crucial component of transportation in San Francisco. With 70 miles of track and 189,000 daily customers, vehicles on Muni's Fixed Guideway rights-of-way carry nearly 30% of daily Muni ridership.

Muni's Fixed Guideway CIP covers a broad spectrum of capital projects to maintain, replace, and enhance these services. Projects are supported by a combination of local, regional, statewide and federal sources and can span everything from rail grinding to station improvements, including: investing in new train control technology; track replacement; maintenance facility upgrades; and maintaining Muni's over 150 miles of overhead wires.

This capital program is also very closely related to the Communications & Information Technology Infrastructure capital program and the implementation of the projects are coordinated as much as possible to avoid additional disruptions to service. For example, the replacement of the blue light phone system is scheduled during the shutdowns for the Muni Metro Sunset and Twin Peaks Tunnels rail replacement so that all infrastructure upgrades may be constructed at the same time. Similarly, the radio communications system will be upgraded in coordination with fleet procurement and infrastructure upgrades.

Muni Fixed Guideway projects planned for the next five years include investments in new track switching systems at 16 locations throughout the city; track repairs on the L Taraval Line, the F Market/Wharves line, and the M Oceanview Line at 19th Ave and Rossmoor; station repairs and enhancements; and overhead wire replacement on the 33 Stanyan route. Additionally, there are three major near-term fixed guideway upgrades that will improve operations and maintain the agency's infrastructure: the Sunset Tunnel Rail Replacement, the Twin Peaks Tunnel Rail Replacement, and the Mission Bay Loop.

The SFMTA has started a strategic planning effort In assessing needs outside of the next five years, the SFMTA has initiated the Rail Capacity Strategy to identify where rail capacity is needed, and which improvements to infrastructure or transit service will help meet those needs. Recommended strategies include alleviating bottlenecks, improving the vehicle fleet, expanding or extending the light rail system, and building system resiliency. The strategy will also inform the new Metropolitan Transportation Commission (MTC) led Transbay Core Capacity Study as well as the next Regional Transportation Plan.

Figure 13. SunsetTunnel Rail Replacement Project Area



### SUNSET TUNNEL RAIL REPLACEMENT

The Sunset Tunnel Trackway Improvement Project aims to improve the safety and reliability of the N Judah Line by replacing track and other infrastructure inside the Sunset Tunnel. The project will bring the following improvements to the tunnel and the N Judah Metro Line:

- Rail replacement: New track for a smoother, faster ride on Muni
- Overhead Contact System (OCS) replacement:
   An improved overhead wire system to enhance safety and reliability of the N Judah Line
- Fire safety system upgrades: Refurbishing fire water valves
- Seismic upgrades: Structural retrofit of the Sunset Tunnel portal retaining walls and their foundations
- Traffic signal upgrades: Addition of transit signal priority for rail cars at nine intersections

 Accessible platforms: Construction of two accessible platforms at 28th Avenue to provide safe boardings for all customers

Project Area: The Sunset Tunnel Trackway Improvement Project will improve the tunnel infrastructure located between Cole Valley and DuboceTriangle, upgrade the traffic and transit signals at the Irving Street/Sunset Boulevard intersection and along the N Judah corridor from 19th Avenue to Stanyan Street. The new accessible platforms will be constructed at 28th Avenue.

**Estimated Project Cost**: The Sunset Tunnel Rail Replacement project is expected to cost \$29.3 million.

**Construction Timeline:** The construction contract was awarded in January 2014, and weekend construction began in fall 2014. The construction work will occur on weekends over approximately nine months.













Figure 14. Twin Peaks Tunnel Rail Replacement Project Area



### TWIN PEAKS TUNNEL RAIL REPLACEMENT

The rail upgrades to the Twin Peaks Tunnel between the Castro and West Portal Stations will bring the tunnel into a state of good repair, thereby improving the safety and reliability of the Muni Metro system. This project includes:

- Replacing the existing light rail tracks and track fittings
- Replacing the machines which operate the track switching mechanisms
- Seismic upgrades to an existing abandoned station (Eureka Valley Station)
- Improving structure support between West Portal and Forest Hill stations
- Installing fire alarm system at West Portal Station
- Repairing areas on concrete walls and reinforcements

Inspecting and cleaning tunnel's drainage systems

**Project Area:** The Twin Peaks Tunnel Rail Replacement will improve the tunnel infrastructure located between West Portal and the Castro Stations, the geographic center of the city.

**Estimated Project Cost**: The Twin Peaks Rail Replacement project is expected to cost \$44 million.

Construction Timeline: The Blue Light Emergency Telephone Project and the Radio Replacement Project have been integrated with the rail repacement to minimize are impacts to Muni customers and neighboring communities. Construction is expected to start in July 2015 and be completed by the winter, with the Twin Peaks Tunnel work starting directly after and finished in late spring or summer 2016.

Figure 15. Mission Bay Loop Project Area



#### MISSION BAY LOOP

The proposed Mission Bay Loop was designed in 1998 as part of the Third Street Light Rail Project that opened for service in 2007. The Loop will provide turn-around capabilities for the TThird and is required to operate the additional service needed when the Central Subway opens in 2019. The Mission Bay Loop will also enable the removal of disabled trains, and provide a means to turn trains for special events and service increases.

However, due to budget constraints, construction of the Mission Bay Loop was deferred until 2013 when Central Subway was significantly under construction and the federal TIGER Grant funding was secured.

**Project Area**: The proposed Loop would be constructed in the Central Waterfront area of the City and County of San Francisco, on city roads and rights-of-way

on the blocks of 18th, Illinois, and 19th Streets. The existing trackway on 18th and 19th Streets between Third and Illinois Streets would be extended to Illinois Street to complete the Loop. Traffic, pedestrian, and train signals would be installed at the intersections of 18th and Illinois Streets and 19th and Illinois Streets.

**Estimated Project Cost**: The Mission Bay Loop is expected to cost \$6.5 million over the next five years.

**Construction Timeline:** The environmental review has been completed and construction is scheduled to start in 2015. Construction of the project is expected to take approximately one year, and will be complete in 2016.





caption

### FLEET

Muni currently operates over 1,000 service vehicles across 75 transit lines. The Fleet CIP Program ensures that these vehicles are safe, comfortable, clean, and reliable for San Francisco passengers. Renovating or replacing vehicles as they near the end of their useful life helps the agency avoid costly repairs and service interruptions caused by vehicle failures. SFMTA has also prioritized adding more vehicles to the fleet which will alleviate overcrowding on busy routes and enable the transit system to carry more passengers as the city grows. These initiatives all contribute to SFMTA's long-term goals of increasing Muni service on key routes to meet growing demand and eliminating delays caused by outdated vehicles and infrastructure.

# CURRENT SFMTA REVENUE VEHICLE FLEET INVENTORY

The SFMTA operates the oldest and largest transit system in the San Francisco Bay Area, transporting close to 43 percent of all transit passengers in the region. In addition, it is one of the top ten transit systems in the nation based on boardings, carrying more than 225 million passengers annually. The Agency's transit fleet is among the most diverse in the world and features the landmarked cable cars, historic streetcars, modern light rail vehicles, dieselhybrid motor coaches, diesel motor coaches, and electric trolley coaches.

## SFMTA REVENUE FLEET PLANNING FOR REPLACEMENT AND EXPANSION

The 2014 SFMTA Transit Fleet Management Plan (TFMP) maps out a systematic approach to the ongoing management and planning for the replacement and expansion of the SFMTA's fleet of transit vehicles

through 2040. It incorporates projections showing increased housing and employment in San Francisco between now and 2040. The San Francisco County Transportation Authority (SFCTA) 2040 travel demand forecast estimates that in 25 years, the SFMTA will need to carry over one million daily transit boardings, an increase of more than 40 percent than the approximately 700,000 carried today. Much of this growth in ridership occurs along planned routes serving major developments and in the eastern portion of the city. Although many of these projects were included in the previous Transit Fleet Management Plan to varying degrees, the magnitude and timing of these changes in land use, population, and employment have been further refined in this update. The TFMP translates this increase in transit ridership into a service plan and associated vehicle demand projection.

In addition to the ridership projections, the TFMP also outlines the changes to the fleet and additional vehicles needed to operate the expected service increases for the Muni Forward programs in early 2015 and the opening of Central Subway in 2019. Identifying and scheduling the procurement of these vehicles has allowed the SFMTA to spread procurements more evenly to ensure major maintenance investments are not needed all at the same time. Additionally, the detailed fleet planning in the TFMP has made the procurement process more efficient by allowing the agency to partner with agencies on procurements where possible to reduce unit costs and create a shared demand for future parts. Lastly, the long range review of fleet needs has informed the longterm storage and maintenance facility's needs and positioned the agency to develop a detailed five-year CIP to jump-start the implementation of the fleet and facilities programs.

Per MTC policy, the SFMTA plans procurements on a calendar year cycle. Funding for the replacement and expansion vehicles detailed on the following pagers are programmed by the SFMTA during their standard fiscal year.

### Near-term Vehicle Replacement

As Muni service vehicles reach the end of their useful life and are retired, the SFMTA will need to replace these vehicles in order to adequately provide transit service to the city.

Replacement of the 30-ft, 40-ft, and 60-ft Motor Coaches: Over the next five years, the motor coach fleet will be replaced as part of a multi-year contract to phase out SFMTA's fleet of diesel motor coaches that will have reached retirement age. The SFMTA will utilize a multi-year contract to replace 124 60' motor coaches and 261 40' motor coaches. SFMTA's current fleet of motor coaches will have reached the end of their Federal Transit Administration (FTA) lifespan and will be eligible for retirement over the next five years, making this replacement critical to the continuation of transit operations.

### Replacement of the 40-ft and 60-ft Trolley Coaches:

As part of a multi-year joint procurement contract with King County Metro, the SFMTA will replace 93 60' trolley coaches and 175 40' trolley coaches in its fleet. These coaches will have reached the end of their Federal Transit Administration (FTA) lifespan and will be eligible for replacement. The contract will also allow for purchase of at least 12 expansion 60' coaches, which will be offset by decreasing the number of 40' coaches.

### Near-term Vehicle Expansion

The fleet is also projected to expand in order to serve the expanded light rail line and the service increases

Table 20. Current SFMTA Bus Fleet Inventory

MANUFACTURER (YEAR IN SERVICE)	ID#	PERSON CAPACITY	WHEELCHAIR CAPACITY	MODE OF POWER	RETIRE YEAR
30-foot motor coach					
Orion (2007)	8501-8530	45	2	LF Hybrid	2018
40-foot motor coach					
Neoplan (2002)	8101-8159	63	2	Diesel	2014
Neoplan (2003)	8305-8371	63	2	Diesel	2015
Neoplan (2002) - overhauled	8160-8235, 8301-8304	63	2	Diesel	2017
Orion (2007)	8401-8456	63	2	LF Hybrid	2018
New Flyer (2013)	8601-8662	63	2	LF Hybrid	2026
New Flyer (2014)	8701-8750	63	2	LF Hybrid	2025
60-foot articulated motor coach					
Neoplan (2002)	6200-6225	94	2	Diesel	2014
Neoplan (2003)	6226-6299, 6401-6424	94	2	Diesel	2015
40-foot trolley coach					
ETI (2001)	5401-5481	63	2	Electric	2015
ETI (2002)	5401-5640	63	2	Electric	2016
ETI (2003)	5482-5640	63	2	Electric	2017
ETI (2004)	5482-5640	63	2	Electric	2018
60-foot articulated trolley coach					
New Flyer (1994)	7000-7059	94	2	Electric	2014
ETI (2002)	7101-7133	94	2	Electric	2016
New Flyer (2014)	TBD	94	2	Electric	2029
Light rail vehicles					
Breda (1997)	1400-1424	119	4	Electric	2021
Breda (1998)	1425-1451	119	4	Electric	2022
Breda (1999)	1452-1475	119	4	Electric	2023
Breda (2000)	1476-1481	119	4	Electric	2024
Breda (2001)	1482-1507	119	4	Electric	2025
Breda (2002)	1509-1534	119	4	Electric	2026
Breda (2003)	1535-1550	119	4	Electric	2027
Historic Streetcar					
Presidential Commission Cars	n/a	Varies	Varies	Electric	n/a*
Milan Cars	n/a	Varies	Varies	Electric	n/a*
Unique Vintage Fleet	n/a	Varies	Varies	Electric	n/a*
Cable Car					
Hyde and Mason cars	n/a	63	Varies	Electric	n/a*
California cars	n/a	63	n/a	Electric	n/a*

<sup>\*</sup>Due to the nature of the historic vehicles, they are not retired. Instead, these vehicles are rehabilitated to a like-new condition as they age.

Table 21. SFMTA Fleet Replacement & Expansion through 2030, 60-foot Motor Coach in fixed route service

	COACH NUMBER	MANU- FACTURER	YEAR IN SERVICE	MODE OF POWER	ORIGINAL QTY.	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
ST. G	6200-6225	Neoplan	2002	Diesel	26																	
EXIST- ING FLEET	6226-6299, 6401-6424	Neoplan	2003	Diesel	98	98	48															
		TBD	2014	LF Hybrid		26	26	26	26	26	26	26	26	26	26	26	26					
		TBD	2015	LF Hybrid			85	85	85	85	85	85	85	85	85	85	85	85				
		TBD	2016	LF Hybrid				48	48	48	48	48	48	48	48	48	48	48	48			
, E		TBD	2018	LF Hybrid						35	35	35	35	35	35	35	35	35	35	35	35	
PLANNED PROCUREMENT		TBD	2019	LF Hybrid							30	30	30	30	30	30	30	30	30	30	30	30
PLAN OCUF		TBD	2024	LF Hybrid												35	35	35	35	35	35	35
PRO		TBD	2026	LF Hybrid														26	26	26	26	26
		TBD	2027	LF Hybrid															85	85	85	85
		TBD	2028	LF Hybrid																55	55	55
		TBD	2030	LF Hybrid																		35
			Total Veh	nicles at Start	of Fiscal Year	124	124	159	159	159	194	224	224	224	224	224	259	259	259	259	266	266
				Vehi	cles Replaced	26	50	48										26	85	48		35
TICS				Expansio	n/Contraction		+35 1			+35	+30					+35				+7		
STATISTICS					Total Fleet	124	159	159	159	194	224	224	224	224	224	259	259	259	259	266	266	266
TST				Peak Ser	vice Demand	105	131	131	131	158	186	186	186	186	186	206	206	206	206	217	217	217
FLEET				Mainte	nance Spares	19	28	28	28	36	38	38	38	38	38	53	53	53	53	49	49	49
					Spare Ratio	18%	21%	21%	21%	23%	20%	20%	20%	20%	20%	26%	26%	26%	26%	23%	23%	23%
			Α	verage Vehicl	e Age (Years)	9.7	4.8	1.9	2.9	3.3	3.9	4.9	5.9	6.9	7.9	7.8	8.8	8.6	5.7	4.4	5.4	4.8

### Notes:

<sup>&</sup>lt;sup>1</sup> Funding for approximately 22 vehicles of the 35 vehicle expansion has been identified

Table 22. SFMTA Fleet Replacement & Expansion through 2030, 40-foot Motor Coach in fixed route service

	COACH NUMBER	MANU- FACTURER	YEAR IN SERVICE	MODE OF POWER	ORIGINAL QTY.	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
	8101-8159	Neoplan	2002	Diesel	58	8																
g	8305-8371	Neoplan	2003	Diesel	67	67	41															
EXISTING FLEET	8160-8235, 8301-8304	Neoplan (over- hauled)	2002	Diesel	80	80	80	80	50													
ш	8401-8456	Orion	2007	LF Hybrid	56	56	56	56	56	56												
	8601-8662	New Flyer	2013	LF Hybrid	62	62	62	62	62	62	62	62	62	62	62	62						
	8701-8750	New Flyer	2014	LF Hybrid		50	50	50	50	50	50	50	50	50	50	50	50					
		TBD	2015	LF Hybrid			48	48	48	48	48	48	48	48	48	48	48	48				
		TBD	2016	LF Hybrid				41	41	41	41	41	41	41	41	41	41	41	41			
		TBD	2017	LF Hybrid					30	30	30	30	30	30	30	30	30	30	30	30		
۲		TBD	2018	LF Hybrid						36	36	36	36	36	36	36	36	36	36	36	36	
PLANNED PROCUREMENT		TBD	2019	LF Hybrid							45	45	45	45	45	45	45	45	45	45	45	45
PLAN		TBD	2025	LF Hybrid													62	62	62	62	62	62
- BR		TBD	2026	LF Hybrid														45	45	45	45	45
		TBD	2027	LF Hybrid															48	48	48	48
		TBD	2028	LF Hybrid																35	35	35
		TBD	2029	LF Hybrid																	30	30
		TBD	2030	LF Hybrid																		36
			Total Veh	icles at Start	of Fiscal Year	323	323	337	337	337	323	312	312	312	312	312	312	312	307	307	301	301
				Vehi	cles Replaced	50	34	41	30	36	45						62	45	48	35	30	36
IICS				Expansio	n/Contraction		+14			-14	-11							-5		-6		
ATISI					Total Fleet	323	337	337	337	323	312	312	312	312	312	312	312	307	307	301	301	301
T ST				Peak Ser	vice Demand	271	282	282	282	260	260	260	260	260	260	260	260	252	252	249	249	249
FLEET STATISTICS				Mainte	nance Spares	52	55	55	55	63	52	52	52	52	52	52	52	55	55	52	52	52
_					Spare Ratio	19%	20%	20%	20%	24%	20%	20%	20%	20%	20%	20%	20%	22%	22%	21%	21%	21%
			А	verage Vehicl	e Age (Years)	8.0	7.4	6.8	6.5	5.3	4.3	5.3	6.3	7.3	8.3	9.3	7.9	7.1	6.2	5.7	5.5	5.1

### Notes:

<sup>&</sup>lt;sup>1</sup> Funding for approximately 22 vehicles of the 35 vehicle expansion has been identified

Table 23. SFMTA Fleet Replacement & Expansion through 2030, 30-foot Motor Coach in fixed route service

	COACH NUMBER	MANU- FACTURER	YEAR IN SERVICE	MODE OF POWER	ORIGINAL QTY.	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
EXISTING FLEET	8501-8530	Orion	2007	LF Hybrid	30	30	30	30	30	30												
PLANNED PROCUREMENT		TBD	2019	LF Hybrid							26	26	26	26	26	26	26	26	26	26	26	26
PLA		TBD	2031	LF Hybrid																		
			Total Veh	nicles at Start	of Fiscal Year	30	30	30	30	30	30	26	26	26	26	26	26	26	26	26	26	26
				Vehi	cles Replaced						26											
LICS				Expansio	n/Contraction						-4											
STATISTICS					Total Fleet	30	30	30	30	30	26	26	26	26	26	26	26	26	26	26	26	26
T ST				Peak Sei	vice Demand	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
FLEET				Mainte	nance Spares	10	10	10	10	10	6	6	6	6	6	6	6	6	6	6	6	6
					Spare Ratio	50%	50%	50%	50%	50%	30%	30%	30%	30%	30%	30%	30%	30%	30%	30%	30%	30%
			А	verage Vehic	e Age (Years)	8.0	9.0	10.0	11.0	12.0	0.9	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0	11.0	12.0

Table 24. SFMTA Fleet Replacement & Expansion through 2030, 40-foot Trolley Coach in fixed route service

	COACH NUMBER	MANU- FACTURER	YEAR IN SERVICE	MODE OF POWER	ORIGINAL QTY.	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
	5401-5481	ETI	2001	Trolley	21	21	21	0														
TING	5401-5640	ETI	2002	Trolley	108	108	108	108														
EXISTING FLEET	5482-5640	ETI	2003	Trolley	94	94	94	94	94													
	5482-5640	ETI	2004	Trolley	17	17	17	17	17	17												
ED 3E-		New Flyer	2016	LFTrolley				21	21	21	21	21	21	21	21	21	21	21	21	21	21	21
PLANNED PROCURE- MENT		New Flyer	2017	LFTrolley					108	108	108	108	108	108	108	108	108	108	108	108	108	108
PR		New Flyer	2018	LFTrolley						46	46	46	46	46	46	46	46	46	46	46	46	46
			Total Veh	nicles at Start	of Fiscal Year	240	240	240	240	240	192	175	175	175	175	175	175	175	175	175	175	175
				Vehic	cles Replaced			21	108	46												
TICS				Expansio	n/Contraction					-48	-17											
STATISTICS					Total Fleet	240	240	240	240	192	175	175	175	175	175	175	175	175	175	175	175	175
TST				Peak Ser	vice Demand	164	140	140	140	140	140	140	140	140	140	140	140	140	140	140	140	140
FLEET				Mainte	nance Spares	76	100	100	100	52	35	35	35	35	35	35	35	35	35	35	35	35
					Spare Ratio	46%	71%	71%	71%	37%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%
			А	verage Vehicl	e Age (Years)	2.0	2.2	1.0	1.6	2.8	2.3	3.1	3.8	4.5	5.3	6.0	6.8	7.5	8.2	9.0	9.7	10.4

Table 25. SFMTA Fleet Replacement & Expansion through 2030, 60-foot Trolley Coach in fixed route service

	COACH NUMBER	MANU- FACTURER	YEAR IN SERVICE	MODE OF POWER	ORIGINAL QTY.	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
ST. G ET	7000-7059	New Flyer	1994	Trolley	60	28																
EXIST. ING FLEET	7101-7133	ETI	2002	Trolley	33	33	33	33														
- L		New Flyer	2014	LFTrolley		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
INED		New Flyer	2015	LFTrolley			59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	
PLANNED PROCUREMENT		New Flyer	2016	LFTrolley					45	45	45	45	45	45	45	45	45	45	45	45	45	45
PRO		TBD	2030	LFTrolley																		60
			Total Veh	nicles at Start	of Fiscal Year	61	62	93	93	105	105	105	105	105	105	105	105	105	105	105	105	105
				Vehi	cles Replaced	1	59		33													60
LICS				Expansio	n/Contraction				+12													
STATISTICS					Total Fleet	62	93	93	105	105	105	105	105	105	105	105	105	105	105	105	105	105
TST				Peak Sei	vice Demand	46	77	77	83	83	83	83	83	83	83	83	83	83	83	83	83	83
FLEET				Mainte	nance Spares	16	16	16	22	22	22	22	22	22	22	22	22	22	22	22	22	22
					Spare Ratio	35%	21%	21%	27%	27%	27%	27%	27%	27%	27%	27%	27%	27%	27%	27%	27%	27%
			А	verage Vehic	e Age (Years)	16.4	5.6	6.6	2.6	3.6	4.6	5.6	6.6	7.6	8.6	9.6	10.6	11.6	12.6	13.6	14.6	7.0

info from the TFMP; updates forthcoming

Table 26. SFMTA Fleet Replacement & Expansion through 2030, Light Rail Vehicles in fixed route service

	COACH NUMBER	MANU- FACTURER	YEAR IN SERVICE	MODE OF POWER	ORIGINAL QTY.	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
	1400-1424	Breda	1997	LRV 2	25	25	25	25	25	25	25	25	22									
	1425-1451	Breda	1998	LRV 2	27	24	25	25	25	25	25	25	25	23								
5 -	1452-1475	Breda	1999	LRV 2	24	24	24	24	24	24	24	24	24	24	23							
EXISTING FLEET	1476-1481	Breda	2000	LRV 2	6	6	6	6	6	6	6	6	6	6	6	5						
Ξ	1482-1507	Breda	2001	LRV 3	27	26	26	27	27	27	27	27	27	27	27	27	14					
	1509-1534	Breda	2002	LRV 3	26	26	26	26	26	26	26	26	26	26	26	26	26	16				
	1535-1550	Breda	2003	LRV 3	16	15	15	16	16	16	16	16	16	16	16	16	16	16	8			
		Siemens	2017	LRV 4					6	6	6	6	6	6	6	6	6	6	6	6	6	6
		Siemens	2018	LRV 4						18	18	18	18	18	18	18	18	18	18	18	18	18
		Siemens	2019	LRV 4							18	18	18	18	18	18	18	18	18	18	18	18
		Siemens	2020	LRV 4								14	14	14	14	14	14	14	14	14	14	14
_		Siemens	2021	LRV 4									18	18	18	18	18	18	18	18	18	18
PLANNED PROCUREMENT		Siemens	2022	LRV 4										24	24	24	24	24	24	24	24	24
ANNI URE		Siemens	2023	LRV 4											24	24	24	24	24	24	24	24
ROCI		Siemens	2024	LRV 4												24	24	24	24	24	24	24
₽.		Siemens	2025	LRV 4													24	24	24	24	24	24
		Siemens	2026	LRV 4														24	24	24	24	24
		Siemens	2027	LRV 4															24	24	24	24
		Siemens	2028	LRV 4																24	24	24
		Siemens	2029	LRV 4																	18	18
			Total Vel	nicles at Start	of Fiscal Year	140	146	147	149	155	173	191	205	220	220	220	220	226	226	226	242	260
				Vehi	cles Replaced								5	24	24	24	18	24	24	8		
ПСS				Expansio	n/Contraction				+6	+18	+18	+14	+13				+6			+16	+18	
ATIS.					Total Fleet	146	147	149	155	173	191	205	220	220	220	220	226	226	226	242	260	260
T ST,				Peak Sei	rvice Demand	113	113	113	113	113	160	177	179	179	179	179	187	187	187	195	195	195
FLEET STATISTICS				Mainte	nance Spares	33	34	36	42	60	31	28	41	41	41	41	39	39	39	47	65	65
_					Spare Ratio	29%	30%	32%	37%	53%	19%	16%	23%	23%	23%	23%	21%	21%	21%	24%	33%	33%
			А	verage Vehic	le Age (Years)	15.2	16.2	17.1	17.5	16.7	16.1	16.0	15.6	13.9	12.1	10.4	9.2	7.6	6.0	5.8	6.4	7.4

### Notes:

<sup>&</sup>lt;sup>1</sup>Total LRV fleet adjusted for major repairs. Major repairs return to service by 2016. Two vehicles will not return to service until replaced in 2021.

proposed under the Muni Forward initiative to meet growing demand.

**Expansion of the Light Rail Fleet**: The SFMTA will expand its light rail fleet by 64 vehicles in order to serve the future Central Subway route. The new 1.7-mile extension of Muni's T Third Line will provide direct connections to major retail, sporting and cultural venues while efficiently transporting people to jobs, educational opportunities and other amenities throughout the city. New light rail vehicles are needed to provide service on the Central Subway route.

Expansion of the 60-ft Motor Coach Fleet: The SFMTA will also purchase 65 new 60' articulated buses over the next five years. Articulated 60' buses are a cost-effective and efficient method of meeting ridership demands, as they have 1.5 times the capacity of standard 40' buses while still only needing one driver and one vehicle. The up-front investment in new 60' motor coaches also carries a long-term benefit of making SFMTA eligible for a greater allotment of federal funding to replace buses in the future.

#### Revenue Vehicle Rehabilitation

In addition to the projected need for replacement and expansion vehicles based on the accepted lifecycle of the revenue vehicles, the SFMTA has also established a program by which its fleet will undergo extensive rehabilitation/retrofits in order to improve their performance. All types of vehicles will be rehabilitated on a rolling basis, with those vehicles in a worse state of repair prioritized.

**Establishment of Vehicle Overhaul Program**: This project will conduct mid-life overhauls on SFMTA's transit vehicles as vital part of keeping the transit fleet in a state of good repair. Traditionally SFMTA has not had funds for mid-life overhauls despite

high ridership, challenging terrain, and long duty cycles, resulting in more frequent breakdowns, costly vehicle repairs and disruption of transit service. In the FY 2015 – FY 2019 CIP, however, the SFMTA has set aside a funding reserve of \$11.5 million for midlife overhauls for all vehicle types will help SFMTA to improve service reliability.

As of August 2014, the 40-ft motor coaches listed in the table below have been identified for rehabilitation. This contracted maintenance work is expected to add approximately five years of life to each vehicle. As funds are identified and assessments of the vehicles are made, the SFMTA will schedule more of these rehabilitations as needed.

### Light Rail Vehicle (LRV) Component Rehabilitation:

The LRV Propulsion System Campaign will target critical components to improve the reliability of the propulsion system which is responsible for 28 percent of rail line delays. Propulsion systems on the current LRV fleet have exceeded the manufacturer's recommendation for replacement and are past their useful lives. The campaign will replace five subsystems of the propulsion system, repair welding, and execute equipment quality assurance inspections. The LRV Propulsion System Campaign is expected to be a one-year project ending in June 2015.

It will also fund the scheduled replacement and overhauls of truck components in accordance with manufacturer recommendations. The SFMTA operates a fleet of 149 light rail vehicles (LRVs), each of which is equipped with three trucks--two motor trucks and one trailer truck--that serve as suspension systems that support vehicle loads and provide a comfortable ride for passengers. Maintenance data show that rehabilitation of the light rail vehicle trucks will significantly improve vehicle reliability, help to eliminate breakdowns, and prevent service interruptions and costly repairs.

Cable Car Renovation: The SFMTA plans to fund the phased rehabilitation of Muni's cable car fleet, enhancing cable car vehicles and the system's reliability and productivity. It is estimated that the life of a cable car is approximately 60-70 years; a major rehab will extend the life of a cable car by about 30-35 years.

Rehabilitate Historic Streetcars: The historic streetcars used on the F Market/Wharves route are electric rail vehicles from the U.S. and around the world. Due to its historic nature, the streetcar fleet is not replaced on a regular schedule, making a program of regular rehabilitation critical to the long-term operation of the fleet. Over the next five years, the SFMTA will rehabilitate 16 President's Conference Committee streetcars (PCC)s and the Milan and Vintage fleet to

Table 27. Motor Coaches Scheduled for Rehabilitation

COACH NO.	MANU- FACTURER	LENGTH OF VEHICLE	YEAR IN SERVICE	MODE OF POWER	YEAR OF PLANNED REHABILITATION	ESTIMATED COST
8401 - 8456	Orion	40 ft.	2006	Hybrid Diesel	2012	\$382,000/bus (in 2014 dollars)
8501 - 8530	Orion	30 ft.	2007	Hybrid Diesel	2013	\$382,000/bus (in 2014 dollars)
8601 - 8662	New Flyer	40 ft.	2013	Hybrid Diesel	2019	\$456,000/bus (using 3% escalation per year)
8701 - 8750	New Flyer	40 ft.	2014	Hybrid Diesel	2020	\$470,000 per bus

like-new condition, including upgrading electrical and mechanical systems, performing body work, and ensuring systems meet CPUC and ADA requirements. On average, about four cars per year are overhauled.

## REVENUE FLEET VEHICLE REPLACEMENT AND EXPANSION FUNDING

The SFMTA regularly forecasts funding that can be reasonably anticipated over the next five years as part of the Capital Improvement Program. These sources have met the regional needs for vehicle replacement and allow the SFMTA to assume all vehicle replacements will be funded through these sources in the future:

- Regionally-programmed funds: MTC policies prioritize vehicle replacement as the highest priority for a number of federal funding sources it allocates, placing a lower priority on vehicle expansion. The SFMTA assumes additional funding sources will need to be identified for vehicle expansion.
- Local funding: Proposition K sales tax revenues administered by the SFCTA have traditionally provided the primary source of local match to federal funds.
- Potential New Sources of Funding: Given the extent of the needs identified in the TFMP, the SFMTA is working with its partners to find new funding for fleet replacement and expansion. The Mayor's Transportation Task Force identified approximately \$270 million of potential funding for vehicle investments through general obligation bonds, sales taxes, and vehicle license fees. Also, San Francisco voters passed Proposition B in November 2014 that requires the City to adjust funding for transportation each year based on population growth. With these

funds, the City will purchase Muni vehicles and complete street safety and paving projects. In the future new revenue sources could replace the population-based funds to ensure a stable, long-term commitment to improving and maintaining the Muni fleet and city's transportation network.

The MTC Core Capacity Challenge Grant Program has also identified approximately \$400 million of potential funding for vehicle investments through sources such as FTA formula funds, FTA New Starts Core Capacity funds, and Cap and Trade Revenues. The SFMTA is using some of these sources to procure an additional 22 60-foot motor coach vehicles which are planned to be delivered by the end of 2015. Additionally, The SFMTA will continue to investigate funding opportunities for vehicle expansion and adjust vehicle procurement plans as more information becomes available.

## DEMAND-RESPONSIVE PARATRANSIT VEHICLE FLEET PLANNING

The SFMTA plans to replace 35 Class B paratransit vans that will have reached the end of their useful life. A Type II or Type B vehicle is a 22' cutaway van that holds a minimum of 12 passengers and two wheelchair positions. These vehicles provide critical service for customers with limited mobility. The agency will also replace five Class D paratransit minivans that will have reached the end of their useful life. A Class D vehicle is a low-floor minivan that holds two passengers and one wheelchair user. These vehicles provide critical service for customers with limited mobility.

All of the vehicles listed in the table below are in service. The SFMTA currently does not have any spares in the paratransit fleet. As the new vehicles are delivered, the SFMTA plans to shift all those vehicles that are retired into the reserve fleet for the short term. The paratransit fleet vehicles will then be removed

Table 28. Paratransit Vehicle Fleet Inventory

MANUFACTURER/VENDER (vehicle year)	NUMBER OF VEHICLES	PERSON CAPACITY	WHEELCHAIR CAPACITY	MODE OF POWER
Type II Van				
Bus West (2008)	24	12	2	Diesel
El Dorado (2006)	20	12	2	Gasoline
El Dorado (2008)	6	12	2	Diesel
El Dorado (2011)	1	12	2	Hybrid
Type B Van				
Bus West (2009)	26	12	2	Gasoline
A-Z Bus Sales (2014)*	35	12	2	Gasoline
Class D Minivan				
El Dorado (2008)	5	2	2	Gasoline
A-Z Bus Sales (2014)*	6	2	2	Gasoline

<sup>\*</sup> Vehicles currently in going through the procurement process and are projected to be in service by the end of 2014.

entirely on a rolling basis, as the maintenance team determines which vehicles can be kept in reserve and which should not be used for service at all.

#### **NON-REVENUE VEHICLE FLEET PLANNING**

The SFMTA owns and maintains just under 900 transit service critical and SFMTA operations support vehicles. The largest subfleets support the work of the Sustainable Streets Division's Enforcement units, including vehicles for the parking control officers and the security response teams, and Transit Operations that requires light- and heavy-duty vehicles to respond to incidents and transport equipment around the city. Other vehicles are used to transport materials between operating divisions and assist the planning, engineering, and construction of SFMTA projects around the city.

Per city policy, all city departments must retire vehicles older than 12 years old. The SFMTA is currently developing a strategy that will improve the management of the non-revenue fleet to accommodate its needs while meeting the city's reduction and retirement goals.

San Francisco Healthy Air and Clean Transportation Ordinance

In 2010, San Francisco voters added the Healthy Air and Clean Transportation Ordinance (HACTO) to the city's Environment Code. It is intended to assist the City in achieving its air pollution and greenhouse gas reduction goals by mandating that all City employees and departments should use sustainable transportation modes (such as public transit, walking, ridesharing or biking) to minimize single-occupancy vehicle transportation as much as possible and, when it is not, to use green vehicles. To implement this ordinance, each city department is required to develop

a *Transit First* plan outlining how it will implement the various sustainable options to reduce vehicle usage and a *Transit First* report on implementation. Additionally, for departments that manage their own fleet of vehicles like the SFMTA, the light duty (non-revenue and non-service critical vehicles) fleet size must be reduced by 20% from the 2010 baseline by the end of FY 2015.

The SFMTA manages 559 vehicles that are subject to HACTO guidelines. In compliance with HACTO, the SFMTA submitted waivers for 422 of these vehicles, as they are critical for performing job-critical tasks

Table 29. Current Non-Revenue Vehicle Fleet Inventory

within the agency. As of FY 2013, 34 vehicles were retired from the fleet since 2010 and the SFMTA plans to permanently remove 21 additional vehicles from service by the end of FY 2014-2015 for full HACTO compliance.

Non-Revenue Vehicle Fleet Funding Sources

The SFMTA non-revenue fleet, both the light-duty and heavy-duty vehicles, are funded through the pooled locally-generated operating funds that come from a variety of sources, including the SF General Fund, fares/fees/fines, parking meters, etc.

DIVISION SUBFLEET	NO. OF VEHICLES	MODEL YEAR RANGE	VEHICLE TYPE(S)	MODE OF POWER
Agency Administrative Functions (Communications, Information Technology, Human Resources, etc.)	29	1988-2015	Car, Minivan, Cargo Van, Pick-up	Gasoline
Building and Grounds Vehicles	5	1986-2010	SUV, Van, Pick-up, Cargo Van, Super- Duty Truck Hybrid, G	
Capital Projects & Construction Division Vehicles	15	1997-2015	Van, Car, Pick-ups, Cargo Van, Super- Duty Truck	Gasoline
Custodial Vehicles	11	1987-2010	Van, Pick-up	Gasoline
Parking Control Officer Vehicles	273	1996-2013	Cart	Gasoline, CNG
Revenue & Collections Vehicles	17	1986-2013	Pick-up, Minivan, Cargo Van	Gasoline
Security, Investigations, Enforcement, and Proof-of-Payment Vehicles	67	1987-2013	Car, SUV, Pick-up, Van	Gasoline, Hybrid
SFMTA SFPD K-9 Unit Vehicles	6	1996-2010	Car, SUV	Gasoline
Sustainable Streets Division Pool Vehicles	14	1998-2010	Car, Cargo Van	Gasoline
Sustainable Streets Shops Vehicles	133	1987-2014	SUV, Van, Pick-up, Super-Duty Truck	Hybrid, Gasoline
System Safety Vehicles	7	1992-2012	Car, SUV, Cargo Van	Gasoline
Taxi Services Investigations Vehicles	2	2010	Car	Gasoline
Transit Operations Pool Light-Duty Vehicles	68	1982-2010	Car, SUV, Van, Minivan, Pick-up	Hybrid, Gasoline
Transit Operations Division Overhead Lines & Track Maintenance Vehicles	67	1981-2012	Super-Duty Truck, Freight	Gasoline, Biodiesel
Transit Operations Heavy-Duty Facilities and Maintenance Vehicles	127	1981-2013	Sweeper, Cargo Van, Super-Duty Truck, Tanker Truck, Freight	Gasoline, Biodiesel
Transit Street Operations Vehicles	38	1992-2013	Car, SUV, Pick-up, Super-DutyTrack	Gasoline, Biodiesel
TOTAL	879			

#### **FACILITIES**

Efficient and well-functioning maintenance, fueling, storage, and staging facilities are vital to ensuring that SFMTA's fleet is in a state of good repair. Informed by the Real Estate and Facilities Vision for the 21st Century (Vision Report), the five-year Facilities Capital Improvement Program (CIP) supports the modernization and expansion of outdated facilities to make them safe, efficient, and able to service modern vehicles. The CIP also assigned projected funding to acquire new facilities to accommodate fleet growth. Where possible, however, existing facilities will be reconfigured, consolidated, or expanded to best meet operational needs, identify cost savings, and to make our facilities as environmentally friendly as possible

#### **FUNDING FACILITIES IMPROVEMENTS**

These costs include the soft costs (e.g., planning, design, construction management, surveying, and testing) and hard (construction) costs. The cost estimates are based on industry standards and are applied on a unit or square-foot basis where possible, with an appropriate contingency to account for San Francisco conditions. As the predevelopment phases for the individual projects for each facility are initiated, the estimates will be updated as additional information becomes available.

Although the SFMTA has programmed a significant amount of projected funding over the next five years to start the pre-development, planning, design and construction of the following facilities and equipment projects, a substantial amount of funding is still needed to complete the construction of the projected recommended by the Vision Report. The SFMTA is working closely with its regional, state, and federal partners to develop a funding strategy for this critical capital improvement program.

#### **FUTURE MAJOR NEW AND EXPANDED FACILITIES**

The projects summarized in this section were recommended in the long range Vision Report and prioritized to be implemented in the next five years. These projects will accommodate the projected expansion in the revenue fleet and take the first steps in the major reconfiguration, consolidation, and expansion of the SFMTA facilities. More information on the implementation schedule and funding plan for each of these projects is available in the SFMTA FY 2015 - FY 2019 CIP.

Additional Bus Storage and Maintenance Yard (Estimated initial investment: \$150 million): Due to vehicle acquisition and fleet expansion projections from the most recent Transit Fleet Management Plan numbers, additional bus storage will be required to adequately store and maintain the expansion fleet.

Burke Warehouse (Estimated initial investment: \$14.3 million): The renovation of the Burke Warehouse may include: demolition of existing ground floor structures; build to suit offices/workstations; Installation of new ventilation system; ADA accessible work spaces and elevator; Installation of two new roll-up doors; Installation of network/phone; and Installation of security system.

Islais Creek (Estimated initial investment: \$130 million): The new 65,000 square foot motor coach maintenance and operations building including light and heavy maintenance bays, warehouse space, operations and maintenance offices, showers, gilley room, locker rooms and training space.

Muni Metro East (MME) Division – Historic Streetcar Storage Tracks (Estimated initial investment: \$23.7 million): This project will construct storage tracks and canopies at the existing MME facility to provide weather protection for the historic streetcar fleet.

Muni Metro East (MME) Phase II (Overhaul, Paint & Body Shops) (Estimated initial investment: \$152 million): The scope of work includes construction of a new (min. 75,000 sf) auxiliary building east of the existing Muni Metro East (MME) Light Rail Facility site at Illinois/Cesar Chavez Streets. This facility will house Overhaul activities, Paint shop, Body Shop, and Maintenance of Way functions intended to ensure that the SFMTA fleet can be successfully and safely operated for prolonged operational life without the need for any further major repairs to the structure and/or subject subsystems.

Woods Division Lifts & Structural Improvements (Estimated initial investment: \$69 million): This project will relocate the Parts Storeroom, increasing the repair capacity of the facility from 24 bays to 40 bays.

Yosemite Warehouse Purchase (Estimated initial investment: \$8 million): The SFMTA Sustainable Streets' Paint and Meter Shops are currently occupying this leased facility. The lease agreement included a purchase option for the SFMTA to acquire the property and the agency must exercise its purchase option within 3 years of the recording of the subdivision map on the site.

### SHORT-TERM AND GENERAL MAINTENANCE FACILITIES PROJECTS

The SFMTA has identified the following list of smaller facilities upgrades that will improve maintenance and operations of the facility and the transit system as a whole. More information on the implementation schedule and funding plan for each of these projects is available in the SFMTA FY 2015 - FY 2019 CIP.

 Operator Convenience Facilities Phases I-III: \$6 million estimated initial investment

- Life & Fire Safety Systems at Flynn, Kirkland, Scott, Metro Green, and Potrero: \$2.5 million estimated initial investment
- Lift Upgrades at Flynn, Potrero, and Presidio: 11.5 million estimated initial investment
- Kirkland Division Underground Storage Tank Replacement: \$2.9 million estimated initial investment
- SFMTA Tow Facility Vehicle Stackers: \$2 million estimated initial investment
- Wash Racks at Flynn, Potrero, Presidio, Kirkland, Beach, and Green: \$3.4 million estimated initial investment
- Woods Division and Potrero Division Paint Booth Upgrade: \$8 million estimated initial investment

#### **TOOLS & EQUIPMENT PURCHASES**

In addition to the structural changes and reconfiguration of the SFMTA facilities, the following smaller equipment purchases and renovation projects have been included in the five-year Capital Improvement Program. More information on the funding plan for each of these purchases is available in the SFMTA FY 2015 - FY 2019 CIP.

- Alternator testers (Estimated Cost: \$500,000):
   Each SFMTA motor coach yard (Woods, Flynn, Kirkland and Islais Creek) will get a tester.
- Electric Diagnostic Station (Estimated Cost: \$6
  million): The following yards will get a tester:
  Flynn, Kirkland, Islais Creek, Woods, Potrero and
  Presidio.
- Floor Sweepers & Scrubbers (Estimated Cost:

- \$657,000): Each of the six transit yards will get one to two sweepers and scrubbers to clean work stalls, floors, and aprons.
- Fluid Dispensing Reels, Hoses, and Plumbing (Estimated Cost: \$500,000): Each of the six shops and yards will get new reels for the fuel islands and shop stalls.
- Parts Cleaners (Estimated Cost: \$1.2 million): All six division motor or trolley coach yards will get a unit or two based on the shop.
- Pressure Washers (Estimated Cost: \$100,000):
   Each of the six bus maintenance yards will get a pressure washer.
- Shop Pusher Tugs (Estimated Cost: \$378,000):
   Each of the six transit yards will get one tug.
- Vehicle Vacuum Systems (Estimated Cost: \$775,000): This project will fund the replacement of the vehicle vacuum systems at Woods, Flynn, Kirkland and Potrero Divisions

#### PARATRANSIT VEHICLE FACILITIES

The SFMTA is also working to find a paratransit operating facility, which would accommodate the 87 SFMTA-owned paratransit vans. Ideally this location would accommodate growth of the fleet to 125 vehicles. The vans are currently parked and maintained at various contractors' sites in San Francisco and Brisbane. The van heights are too high to fit into any of the off-street parking garages currently owned and operated by the SFMTA. Office space for administration and dispatching is also needed. To date, this is still an open issue for the SFMTA and the Paratransit contractors.

A great captionGendandebit, omnim rempori oribus A great captionGendandebit, omnim rempori oribus A great captionGendandebit, omnim rempori oribus

#### OTHER SFMTA CAPITAL PROGRAMS

#### **ACCESSIBILITY**

SFMTA strives to make public transportation accessible to every person in San Francisco. This requires planning, designing, and constructing capital projects to enhance the accessibility of the transportation system, such as installing elevators at transit stations or constructing boarding islands and platforms. These improvements benefit a broad spectrum of San Francisco residents and visitors. Families traveling with small children in strollers, for example, can more easily board transit vehicles and stations and those who may be temporarily disabled from an injury will enjoy easier access. Additionally, people with disabilities and those who rely on a wheelchair or other mobility aid will enjoy consistent access to the transportation network.

The Accessibility Program is dedicated to projects that go above and beyond Americans with Disabilities Act (ADA) requirements to make most modes and aspects of the transportation system accessible from buses to streetcars to transit stops. Accessibility improvements are at the core of the SFMTA's Capital Improvement Program and are not limited to the projects listed in that program, but are incorporated into the design of many projects in the other Capital Programs. For example, all the projects in the Transit Optimization and Expansion program have elements that enhance access to the transit system like sidewalk extensions at transit stops and busy intersections. Likewise, the projects in the Transit Fixed Guideway program like the Sunset Tunnel Rail Replacement include the construction of key stops and ramps to facilitate easier boarding for those of limited mobility. Additionally, many of the projects in the Traffic & Signals program have incorporated the installation of pedestrian countdown and accessible pedestrian signals in the scope of work. In this way, improving transit access for all users is a key element of all SFMTA work.

#### **BICYCLE**

The Bicycle Program is designed to create a cohesive, city-wide network of safe bicycle routes. The agency's overall goal is to more than double the current number of trips taken by bicycles on our city streets by 2018. Bicycle Program funds are used for the planning, design and construction of capital projects to enhance the safety and comfort of San Francisco's bicycle infrastructure, including: new bicycle lanes and separated cycletracks, safety and spot improvements, and secure bicycle parking. The SFMTA Bicycle Strategy identified key corridors that have a high rate of bicycle travel, high population density, and frequent collisions with cars. Concentrating infrastructure improvements in these corridors helps to eliminate the most dangerous bicycling conditions and improve the safety of San Francisco for bicyclists citywide.

The Bicycle Program in the CIP also supports events such as Bike to Work Day and bicycle education and safety programs in local elementary schools.

# COMMUNICATIONS AND IT INFRASTRUCTURE

The Communications and InformationTechnology (IT) Program supports the design and implementation of IT infrastructure to improve the efficiency and ease of use of the transportation system. This includes maintaining the fiber network that provides the internal communication backbone of the Metro system. SFMTA is currently replacing the remaining non-fiber SFMTA facilities with a link to the SFMTA core fiber network. These upgrades will reduce costs, improve bandwidth, and make our communication tools faster and more usable for the public.

The Communications and IT Program also supports investments in new technology to improve the Muni customer experience. Key transit communications projects include:

- Blue Light Emergency Telephone Replacement:
   The existing emergency phone will be upgraded and new phones added throughout the Muni subway. These phones are crucial for contacting emergency services in a crisis, such as a natural disaster or medical emergency.
- Radio Replacement: As part of a system-wide upgrade to Muni communications, SFMTA is upgrading the outdated radio system. The new radio system will improve communications on all Muni vehicles, provide enhanced American Disabilities Act (ADA) passenger travel information and improve how Muni responds to unexpected service disruptions.

Other key projects planned for the next five years include additional safety upgrades and new Clipper Card readers on Muni vehicles. In coordination with the transit and streets projects, these initiatives all help to make riding Muni easier and more efficient, and help passengers to better integrate the transit system into their day-to-day lives.

#### **ASSET MANAGEMENT**

Funding for the development and implementation of an Enterprise Asset Management System (EAMS) is also in the Communications and IT Capital Program. The EAMS will support the SFMTA's Transportation Asset Management (TAM) Program that will help maintain the agency's approximately \$13.2 billion replacement value of assets in a state of good repair. These assets go beyond the Muni-related transit assets and include walking, bicycling, and parking infrastructure in San Francisco.

Once fully deployed, the EAMS will integrate the currently disparate asset tracking systems within the agency while providing full visibility of the current and historical state of all active SFMTA assets. This will help better assess the condition of the agency's assets and enable accurate financial forecasting and planning. The agency's TAM Program will use data from the EAMS to prioritize investments based on asset condition and meet state of good repair targets.

Together, the TAM Program and EAMS will help the agency comply with the asset management policy and associated requirements under the 2012 Moving Ahead for Progress in the 21st Century Act (MAP-21) as well as enable data-driven decisions on managing and reinvesting in the City's transportation network.

The development of the EAMS and the associated software tools started in late 2012 with the development of the conceptual engineering report for the system. In 2014, the SFMTA hired dedicated staff to implement the EAMS and issued a request for proposal for professional services to assist with deploying and configuring the EAMS. The SFMTA has planned for a three year deployment across approximately 45 business units in the agency. Deploying at each business unit will include replacing legacy systems and processes that involve managing assets, work orders, and materials. The table below shows the projected timeline for development and implementation of the EAMS.



#### **PARKING**

SFMTA is responsible for maintaining public parking facilities, including both on- and off-street, that serve San Francisco residents, visitors, and businesses. The Parking CIP Program supports the planning, design, rehabilitation and construction of public parking garages, as well as street infrastructure and facilities related to public parking. This includes ensuring that parking garages are structurally sound, wellventilated, and can withstand harsh weather and earthquake activity. SFMTA also ensures that parking structures are accessible and meet the requirements of the Americans with Disabilities Act (ADA).

Some of the parking projects over the next five years include the rehabilitation and equipment upgrades of key parking structures: Civic Center Plaza, Golden Gateway, Japan Center, Moscone Center, Performing Arts Center, Union Square, and neighborhood

garages in North Beach and the Mission.

Table 30. Projected Development and Implementation Timeline for the SFMTA Enterprise Asset Management System

Project Phase	Implementation Dates	Assets Affected
Phase 1	2015 to early 2016	The Maintenance of Way/Transit Fixed Guideway assets: overhead lines, motive power, track maintenance, cable car machinery, buildings and grounds, custodial, etc.; Purchasing; and Materials Management.
Phase 2	2016 to early 2017	Sustainable Streets assets associated with the Livable Streets subdivision and the Sustainable Streets shops, e.g. parking meters, traffic signs and signals, street striping and paint, SFgo signal timing, etc.
Phase 3	Late 2016 through 2017	OtherTransit assets, revenue vehicle fleet for all modes, and vehicle maintenance; SFMTA Real Estate and Facilities; Transportation Management Center, and Information Technology assets.



#### **PEDESTRIAN**

Making the city's streets safe, vibrant and enjoyable places to walk is integral to SFMTA's goal of a Transit-First city. Whether people are walking to a bus stop, a car, or all the way to their destination, almost every trip is in part a pedestrian trip – and 17% of all trips in San Francisco are made by walking alone. The Pedestrian Program covers planning, design, and implementation of capital projects such as refuge islands, speed tables, and corner bulb-outs. Such projects help protect people walking from car traffic, turning neighborhood roads into Complete Streets and making busy intersections more people-friendly.

SFMTA is a key partner in city-wide task forces such as WalkFirst, Vision Zero, the Pedestrian Safety Advisory Committee, and the Mayor's Pedestrian Safety Task Force to conduct rigorous, data-driven studies and community outreach. Only 6% of San Francisco streets account for 60% of severe or fatal pedestrian injuries. By focusing on these high-injury corridors and intersections, capital projects can vastly improve the safety of San Francisco as a whole.

More information on Vision Zero, WalkFirst and other pedestrian-focused planning and projects is available on the on the SFMTA website: visionzerosf.org.



#### **SCHOOL**

Providing San Francisco children with safe and direct routes to school is a critical objective of the SFMTA. The School Program provides funding for capital projects and programs that help to make active modes of transportation safer and more accessible for children, including those with disabilities. Funded projects include street redesigns, bicycle infrastructure, removal of pedestrian barriers, and programs such as Walk to School Day and pedestrian safety classes in elementary schools. These initiatives have broad implications, from public health to social equity. Walking and biking to school reduces childhood obesity and improves kids' health and wellbeing. It also provides mobility for those who need it most, as low-income youth are less likely to have reliable access to a car.

Many of the projects in the School CIP are supported by federal grants from the Safe Routes to Schools program. SFMTA is currently working in conjunction with other city agencies to develop several Safe Routes to Schools projects, including routes to Cesar Chavez, ER Taylor, John Yehall Chin, Longfellow, and Tenderloin elementary schools.



#### **SECURITY**

Developing state-of-the-art emergency security systems is crucial to providing San Francisco with a safe and reliable transportation system. The Security Program funds are used to plan, design, and implement security initiatives in case of a natural disaster, terrorist attack, or other emergency situations. SFMTA also applies for competitive grants such as the federal Transit Security Grant Program, which provides funding for projects that protect vital transportation infrastructure against potential terrorist and security threats.

Some of the security projects planned for the next five years include investments in site-hardening of the Muni subway systems and the installation of threats and vulnerabilities countermeasures to improve the security of the traveling public and the Muni transit operators. The Security Program also covers security and emergency preparedness training for staff and transit operators.



#### TAXI

The Taxi Program strives to make comfortable, efficient, and environmentally friendly taxis available throughout the city. Program funds are used to plan, design, and implement improvements to the taxi system and to provide a better customer experience for all taxi users. The Taxi Program includes initiatives to reduce the environmental impact of taxi use, such as a taxi Clean Air Energy Rebate which is given to companies and medallion holders that purchase new alternative fuel vehicles. It also includes: programs to expand the taxi network through the installation of taxi stands; programs that encourage the innovative use of technology by the industry; and initiatives to improve driver safety and the customer experience through annual driver training programs that emphasize customer service and best safety practices.

More information on taxi projects is available on the on the SFMTA website: http://www.sfmta.com/services/taxi-industry



#### TRAFFIC CALMING

The Traffic Calming Program helps to make San Francisco streets welcoming environments for all users by slowing car traffic and increasing the safety and visibility of people walking, bicycling, and using transit. Program funds are used to plan, design, engineer, and construct capital projects such as 'road diets' (e.g. narrowing roads and/or widening sidewalks to reduce car speeds), speed humps, pedestrian median islands, traffic circles, and lane shifting. Since a pedestrian struck by a car moving at 30 mph is six times more likely to die than a pedestrian being struck by a car moving at 20 mph, slowing car traffic is paramount to reducing pedestrian and bicyclist deaths – especially in the city's residential neighborhoods.

Traffic calming projects fall into three categories (local, arterial, or school) depending on the type of street being treated. These projects are often combined with streetscape enhancements, pedestrian projects and bicycle infrastructure to create vibrant and livable Complete Streets.

More information on traffic calming is available on the on the SFMTA website: http://www.sfmta.com/node/77946



#### **TRAFFIC & SIGNALS**

Traffic signals are integral to the smooth functioning of the transportation system. The Traffic & Signals Program provides funding for upgrading, renovating and replacing traffic signals and signal infrastructure.

Some of San Francisco's traffic signals and supporting infrastructure is over half a century old. Modernizing these systems to better manage traffic flow will result in huge savings of both time and money for people across every mode of transportation. For example, through the innovative SFgo program, SFMTA is replacing outdated signals with Intelligent Transportation Systems (ITS) tools to enhance traffic analysis, provide transit signal priority, and expedite maintenance procedures. The ITS tools include advanced traffic signal controllers, traffic cameras, video detection, variable message signs, a communications network, the Transportation Management Center (TMC) and remote workstations.

This program also funds the design and construction of new and upgraded traffic signals to improve safety. Upgrading and replacing signals and signal infrastructure will decrease travel time, improve mobility, and increase the safety of the roadways.



# **MAJOR EXPANSION PROJECTS**

#### **CENTRAL SUBWAY**

The Central Subway Project is the second phase of the SFMTA's Third Street Light Rail Transit Project. Phase 1 of the project constructed a 5.1-mile light-rail line along the densely populated Third Street corridor. This first segment of the T Third Line opened to customers in April 2007, restoring light-rail service to a high transit-ridership corridor of San Francisco for the first time in 50 years.

Phase 2, the Central Subway Project, will extend the TThird Line from the 4th Street Caltrain Station to Chinatown, providing a direct, rapid transit link from the Bayshore and Mission Bay areas to South of Market (SoMa), Union Square and downtown. Four new stations will be built along the 1.7-mile Central Subway Project alignment:

- 4th and Brannan Station at 4th and Brannan streets (street level)
- Yerba Buena/Moscone Station at 4th and Folsom streets (subway)
- Union Square/Market Street Station on Stockton Street at Union Square (subway)
- Chinatown Station at Stockton and Washington streets (subway)

The Central Subway Project will contribute greatly to San Francisco's economic competitiveness and help secure the city's status as a regional, national and global hub. It will provide a clean, pollution-free transit alternative for the residents of one of the most densely populated neighborhoods in the country, provide a rapid transit link to a burgeoning technology and digital-media hub, and improve access to a premier commercial district and tourist attraction. Additionally, this project will help

Figure 16. Map of TThird Phase 2 (Central Subway)



reduce the environmental impact of transportation in our city, save natural resources, reduce traffic congestion and improve transportation options for an underserved area of San Francisco. The project map shows the continuous alignments of the two phases of the Third Street Light Rail Program as it will operate when completed.

#### **PROJECT CAPITAL COSTS**

The Central Subway's current capital budget is \$1,578,300,000.

The Federal Transit Administration (FTA) sponsored a year-long formal Central Subway Risk Assessment as part of the FTA New Starts Program to complete the preliminary engineering of the project, achieve FTA Final Design entry approval, and to identify the total project FTA eligible capital costs. From May 2008 through May 2009, a series of four Risk Assessment Workshops performed a detailed risk analysis of the project costs, constructability, and schedule. At the

Table 31. Central Subway Capital Costs, as of August 2014

PROJECT CAPITAL ELEMENTS (Applicable line items only)	YOE DOLLARS TOTAL (\$ MILLIONS)		
10 Guideway & Track Elements (1.7 miles)	\$316		
20 Stations, Stops, Terminals, Intermodal (4)	\$433		
40 Sitework & Special Conditions	\$233		
50 Systems	\$108		
Construction Subtotal (10 - 50)	\$1,090		
60 ROW, Land, Existing Improvements	\$37		
70 Vehicles (4)	\$26		
80 Professional Services (Applies To Cats. 10-50)	\$362		
Subtotal (10 - 80)	\$1,515		
90 Unallocated Contingency	\$63		
Total Project Cost (10 - 100)	\$1,578		

conclusion of these workshops, the FTA recommended that the capital budget and implementation schedule be modified to account for all risks:

- \$200 million was added for a new total budget of \$1.578 billion.
- 21 months were added to the schedule for a new opening date of December 2018.

#### CAPITAL FUNDING SOURCES

The Third Street Light Rail Transit Project is the most significant capital investment in public transit in San Francisco in generations. About \$648 million was invested in Phase 1 of the project, and nearly \$1.6 billion is budgeted for Phase 2.

The Central Subway Project is funded by a mixture of federal, state and local sources, as shown in the table below. The majority of funding for the Central Subway Project will be provided by the FTA's New Starts program, with a total approved commitment of \$942.2 million. An additional \$41 million in federal funds is designated to the project as part of the U.S. Department of Transportation's Congestion Mitigation and Air Quality Improvement Program, which supports environmental efforts for surface transportation and related projects.

The baseline budget for the Central Subway Project remains at \$1.578 billion. There has been no increase in the local funding commitment since original voter approval in 2003 of \$126 million in Proposition B/K sales tax funds. The table below presents Central Subway funding allocations, use of funds and

Table 32. Central Subway Funding Sources, Expenditures, and Cash on Hand, as of August 2014

	FUNDING		EXPENDITURES		AVAILABLE CASH ON HAND		
FUNDING Sources	Committed Funding Sources	Total Awarded Funds to Date	Encumbrances to Date	Expenditures Billed to Date	Available for Billing Budgeted Expenses	Percent of Awarded Funds Allocated	Available for 2014
Federal							
Sect. 5309-NS	\$ 942,200	\$ 319,182	\$ 304,111	\$ 259,345	\$ 44,765	95 %	\$ 15,071
CMAQ	\$ 41,025	\$ 41,025	\$ 41,025	\$ 41,025	\$0	100 %	\$0
Federal Subtotal	\$ 983,225	\$360,207	\$ 345,136	\$ 300,371	\$ 44,765	96%	\$ 15,071
State	'						
TCRP	\$ 14,000	\$ 14,000	\$ 14,000	\$ 14,000	\$0	100 %	\$0
State RIP	\$ 88,000	\$0	\$0	\$0	\$0	0 %	\$0
Prop 1B (I-Bond) PTIMSE	\$ 307,792	\$ 225,912	\$ 145,142	\$ 145,142	\$ 77,557	99 %	\$ 3,213
Prop 1A (HSR-Bond)	\$61,308	\$ 61,308	\$ 61,308	\$ 61,308	\$0	100 %	\$0
State Subtotal	\$471,100	\$ 301,220	\$ 220,450	\$ 220,450	\$ 77,557	98.93 %	\$ 3,213
Local							
Prop K	\$ 123,975	\$ 123,975	\$ 123,975	\$ 113,254	\$ 10,721	100 %	\$0
Local Subtotal	\$ 123,975	\$ 123,975	\$ 123,975	\$ 113,254	\$ 10,721	100 %	\$ 0
TOTAL	\$ 1,578,300	\$ 785,401	\$ 767,118	\$ 634,075	\$ 133,043	98 %	\$ 18,284

amounts to date by source, and is organized by funding sources, reports the grant funds received and expended and the cash balance remaining by source.

There are no significant changes in secured or anticipated funding from that listed in MTC Resolution No. 3434. The Central Subway Project's cash flow projections are based on the expected receipt of outstanding grant sources combined with an estimate of future contract expenditures. Relying on past grant receipt patterns, the project should not have cash flow issues for several years. Should grant receipts be delayed, the project may require the use of short-term commercial paper financing. The SFMTA has \$100M in commercial capacity that is available for use by the Central Subway project.

At the start of FY 2015, the project's cost contingency funding was a concern. The Total Project Contingency is \$70.96 million, which is \$69.04 million less than the FTA recommended minimum contingency level of \$140 million. The Total Project Cost Contingency was further reduced with the award of Contract 1300, which reduced project cost contingency by approximately \$120 million, resulting in a level significantly below the FTA recommendation. However, on April 26, 2011, SFMTA obtained a commitment from the Metropolitan Transportation Commission (MTC) for \$150 million of (State) Regional Improvement Program funds to the project to be accessed in the event project costs increase above \$1.5783 billion.

#### **PROJECT SCHEDULE**

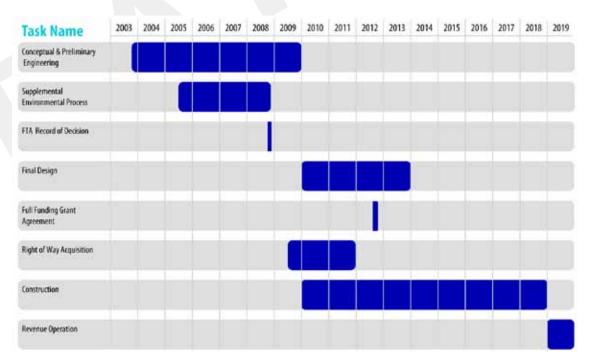
The Central Subway Project has been in the planning, design, and construction phases for just over a decade. In that time, the major project milestones include:

- 2005: The environmental review process for the Central Subway Project began. More than 100 public meetings were held before the project received environmental clearance from the FTA in November 2008.
- 2010: Work to relocate utility lines began at the future site of the Yerba Buena/Moscone Station.
   Similar work began in 2011 to prepare the site

where the Union Square/Market Street Station will be built. In 2012, construction to prepare for the Central Subway tunnel commenced in SoMa, Union Square and North Beach.

- 2012: After a decade of planning, design and advocacy, an agreement dedicating \$942.2 million in New Starts funds to the Central Subway Project was approved by the FTA in October 2012.
- 2013: Construction of the subway tunnel and stations started and will continue through 2017.
- 2019: The Central Subway segment of the TThird Line is slated to open to the public.

Figure 17. Central Subway Project Schedule



# CENTRAL SUBWAY OPERATING COSTS

The Central Subway, with its 35,000 projected daily boardings by 2030, will increase the SFMTA's \$760 million annual operating budget by less than 0.25 percent. When the Central Subway opens to the public in 2019, it is expected to increase the SFMTA's overall operating budget by \$20.9 million. By 2030, the cost of operating the subway is projected to be \$60.4 million in current dollars.

#### ASSOCIATED LAND USE CHANGES

The SFMTA has collaborated with the SF Planning Department and the San Francisco County Transportation Authority (SFCTA) to understand and prepare for growth associated with development projects in Mission Bay and the southeast quadrant of the City. This collaboration has resulted in a better understanding of the future travel plans of customers along the alignment and improved operating-cost projections.

#### **BAYVIEW/HUNTERS POINT AND MISSION BAY**

The T Third Line was designed with population growth in mind and will be able to accommodate new ridership without overcrowding as the Visitacion Valley, Bayview/Hunters Point, and Mission Bay areas continue to develop. Currently 68 percent of residents along the Central Subway alignment do not own vehicles and rely heavily on public transportation.

With the influx of 10,000 new housing units planned for Hunters Point and the Schlage Lock redevelopment site and the dramatic growth in businesses and residential units in Mission Bay, an estimated 24,000 additional people will depend on the T Third Line to

connect to Caltrain, AT&T Park, the new Warriors Arena, Yerba Buena/Moscone Convention Center, Market Street, Union Square and Chinatown.

#### **CENTRAL SOMA**

In 2011, the San Francisco Planning Department began the process to develop an integrated community vision for the southern portion of the Central Subway rail corridor, located generally in the vicinity of 4th Street between Townsend and Market streets (see Figure 20). The development of the Draft Plan was largely funded by a Transportation Planning Grant from Caltrans. The Central Corridor Plan provides the vision and the strategies to support positive change

Figure 18. Central SoMa Project Area



along and around the Fourth Street transit spine, while maintaining SoMa's diverse social and economic mix. The plan presents a comprehensive strategy that addresses such issues as land use, building size and heights, transportation, the public realm (including sidewalks and open space), preservation of historic buildings and environmental sustainability. The Central Corridor Plan also aims to ensure SoMa serves a local neighborhood by increasing access to jobs and to housing, making safer streets and more public spaces, strengthening the neighborhood's character, supporting economic vitality, and improving 24-hour livability.

#### LAND ACQUISITION

In preparation for the extensive construction process for the Central Subway, the SFMTA has acquired many properties adjacent to the line and stations in order to provide land for the construction of the stations. Specifically, the Agency has gained lands adjacent to the Moscone/Yerba Buena, Union Square and Chinatown stations. The agency has also acquired easement rights with private property owners in order to accommodate the machinery and equipment needed for construction. The use of these lands after construction is undetermined at this time.

# POLICY, PLANNING, FUNDING OR OPERATING ISSUES

There are no current or anticipated policy, planning, funding or operating issues associated with the project.

Figure 19. Van Ness Bus Rapid Transit Project Area



# VAN NESS BUS RAPID TRANSIT PROJECT

The Van Ness Bus Rapid Transit (BRT) project will apply bus rapid transit principles like transit-only lanes, transit signal priority, high-quality stations, and streetscape elements to Van Ness Avenue between Mission Street and Lombard Street. Transit on this section of the corridor is currently provided by Muni routes 47 and 49, and Golden Gate Transit service. As one of the busiest north-south corridors in San Francisco, the combined service has an average ridership of 16,000 passengers per day, and ridership is expected to grow to 25,000-30,000 passengers per day along this corridor by 2035.

When completed, this project will bring faster and more reliable transit service to this important corridor. Implementation of BRT service and infrastructure changes are expected to cut transit travel times by 32%.

# PROJECT CAPITAL COSTS & FUNDING SOURCES

The current cost estimate for the Van Ness BRT Project is approximately \$162.1 million. Funding for the Van Ness BRT project comes from a variety of sources including FTA Small Starts, San Francisco Prop K funds, and developer contributions. Projects associated with the Van Ness BRT project include repaving Van Ness Avenue, new traffic signal hardware and software, new transit vehicles, and streetlights/poles replacement. These projects are funded by FTA Formula Funds, San Francisco Prop K funds, and regional and statewide sources.

Of the approximately \$162.1 million total project cost, local, regional, and state programs account for \$51.1 million of this amount, \$75 million is secured by 5309 FTA Small Starts Funds, and \$36 million from Proposition K, San Francisco's half-cent sales tax increase. As of August 2014, there are no changes in secured or anticipated funding for the project.

#### PROJECT SCHEDULE

The Van Ness BRT Project completed the environmental review phase in December 2013 and is currently finalizing the detailed design of the project. Construction is projected to begin in late 2015, and revenue service along the corridor is anticipated to begin in 2018.

Table 33. Van Ness Bus RapidTransit Project Capital Costs, as of July 2014

PROJECT CAPITAL ELEMENTS (Applicable line items only)	YOE DOLLARS TOTAL (\$ MILLIONS)
10 Guideway & Track Elements (2 miles)	\$5
20 Stations, Stops, Terminals, Intermodal (9)	\$13
30 Support Facilities: Yards, Shops, Administrative Buildings	\$0
40 Sitework & Special Conditions	\$61
50 Systems	\$16
Construction Subtotal (10 - 50)	\$95
60 ROW, Land, Existing Improvements	\$0
70 Vehicles (4)	\$4
80 Professional Services (Applies To Categories 10-50)	\$53
Subtotal (10 - 80)	\$152
90 Unallocated Contingency	\$10
Subtotal (10 - 90)	\$162
100 Finance Charges	\$0
Total Project Cost (10 - 100)	\$162

Table 34. Van Ness Bus Rapid Transit Project Schedule

DATE	MILESTONE
September 2013	Local CEQA Approval
December 2013	Final EIR/EIS – Record of Decision (ROD)
December 2013	Draft 30% Design
April 2014	30% Design complete
October 2014	Submit Draft Small Starts Grant Agreement to FTA
November 2014	65% Design complete
April 2015	Small Starts Grant Agreement Execution
July 2015	100% Design complete
2015 - 2016	Arrival of new transit vehicles
Late 2015 – Mid 2018	Construction period
Fall 2018	Revenue Service

#### **OPERATING COSTS**

The table below shows the projected annual costs for SFMTA to run vehicles and provide revenue service for the No Build Alternative and initial build alternatives included in the environmental review documentation. The locally-preferred alternative (LPA) is a combination of Alternatives 3 and 4, and therefore the costs associated with the LPA would be similar to these options. The build alternatives would allow SFMTA to provide the same amount of service to passengers for a 16 to 32 percent lower operating cost, as shown in the table. The LPA operating cost would be similar to that of Build Alternatives 3B and 4B, with 32 percent lower operating cost compared to the No Build Alternative. This savings is due to the faster speed and shorter running times, which means maintaining the same frequency of service would require fewer vehicles operating on the corridor at any one time. These operating savings could be reinvested in the corridor and used to increase the frequency of the BRT service, or they could be invested in other parts of the Muni system.

Each of build alternatives and the LPA would have a modest incremental maintenance cost over and above the no-build scenario. Increased maintenance costs include repairs to potholes and patches to the runningway; maintenance of the red transit-only lanes; additional landscaping costs to prune trees under Build Alternatives 3 and 4 due to their proximity to the overhead wire system; additional platform cleaning and repair; and maintenance of additional ticket vending machines required to support platform proof of payment. The LPA maintenance costs would be similar to those of Build Alternative 3B in the table below and the major component of runningway maintenance costs, tree pruning costs would be similar to Build Alternative 4B. Incremental costs attributed to the build alternatives are based on estimates from Public Works and the SFMTA.

#### **ASSOCIATED LAND USE CHANGES**

Although there are no local land use policy changes associated with the project, there is a great deal of new development along the Van Ness Avenue corridor.

The new California Pacific Medical Center plan for the Van Ness and Geary campus was approved by the Planning Commission and a number of high density residential and office developments are along the corridor are in the planning or construction phase.

There are many city-owned or controlled properties adjacent to the transit stops/stations. Some of these properties include; City Hall, War Memorial Opera House, Davies Symphony Hall, One South Van Ness, 25 Van Ness Avenue, 30 Van Ness, and the Goodwill store at the corner of South Van Ness and Mission. Though outside the scope of the Van Ness BRT project, some of these city-owned properties along the corridor may be reviewed as potential development sites at a later date.

# POLICY, PLANNING, FUNDING OR OPERATING ISSUES

At this time, there are no existing or anticipated policy, planning, funding or operating issues associated with the project

Table 35. Projected Van Ness BRT Operating Cost

	NO BUILD ALT.	BUILD ALT. 2	BUILD ALT. 3	BUILD ALT. 3 (with Design Option B)	BUILD ALT. 4	BUILD ALT. 4 (with Design Option B)
Annualized Revenue Hour Vehicles Operating Costs*	\$ 8,300,000	\$ 6,900,000	\$ 6,100,000	\$ 5,600,000	\$ 6,100,000	\$ 5,600,000
Other Incremental Annualized O&M Costs**	n/a	\$ 200,000	\$ 400,000	\$ 400,000	\$ 300,000	\$ 300,000
TOTAL	\$ 8,300,000	\$7,100,000	\$ 6,500,000	\$ 6,000,000	\$ 6,400,000	\$ 5,900,000

<sup>\*</sup> Only includes costs to operate BRT between Mission and Lombard Street.



<sup>\*\*</sup> Only includes incremental costs associated with BRT.





# **ACKNOWLEDGEMENTS**

#### **SFMTA BOARD MEMBERS**

Tom Nolan, Chair Cheryl Brinkman, Vice-Chair Gwyneth Borden Malcolm Heinicke Joél Ramos Cristina Rubke

#### **SFMTA EXECUTIVE TEAM**

Edward D. Reiskin, Director of Transportation
Sonali Bose, Director of Finance & Information Technology
Kate Breen, Director of Government Affairs
Donald Ellison, Director of Human Resources
John Haley, Director of Transit
Vince Harris, Director of Capital Programs & Construction
Melvyn Henry, Director of System Safety
Alicia John-Baptiste, Chief of Staff
Rob Maerz, General Counsel
Tom Maguire, Director of Sustainable Streets
Candace Sue, Director of Communications
Kate Toran, Director of Taxi & Accessible Services

#### SRTP DEVELOPMENT TEAM

Anne Fritzler Camille Guiriba Danielle Harris Darton Ito

Development of this Short Range Transit Plan has involved a large number of individuals associated with the San Francisco Municipal Transportation Agency. We would like to thank everyone who was involved for contributing their time and expertise to this planning effort.

#### **PHOTOGRAPHY & FIGURES**

 ${\it All\ images\ and\ figures\ by\ the\ San\ Francisco\ Municipal\ Transportation\ Agency\ unless\ noted}.$ 

# SFMTA Fiscal Year 2015 - Fiscal Year 2030 Short Range Transit Plan