

SFMTA

Municipal Transportation Agency

(SAN FRANCISCO MUNICIPAL RAILWAY)**SHORT RANGE TRANSIT PLAN****FY2008-2027**

***PUBLIC DRAFT – COMMENTS REQUESTED BY
NOVEMBER 6, 2007***

OCTOBER 2, 2007

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 Plan (TIP). The TIP implements the RTP by programming federal funds to transportation projects contained in the RTP. In order to execute these planning and programming responsibilities effectively, MTC requires each transit operator in its region that receives federal funding through the TIP to prepare, adopt, and submit to MTC a Short Range Transit Plan (SRTP).

The preparation of this SRTP has been funded in part by a grant from the United States Department of Transportation (USDOT) through Section 5303 of the Federal Transit Act. The contents of this SRTP reflect the views of the San Francisco Municipal Railway, a department of the San Francisco Municipal Transportation Agency, and are not necessarily those of USDOT, the Federal Transit Administration, or MTC. The San Francisco Municipal Railway is solely responsible for the accuracy of the information presented in this SRTP.

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October 2, 2007

To: All Interested Parties:

The San Francisco Municipal Railway, a department of the San Francisco Municipal Transportation Agency (SFMTA), is pleased to present the FY 2008-2027 Draft Short Range Transit Plan (SRTP). The SFMTA Board is scheduled to adopt this SRTP in fall 2007 once reviewed by policy makers and citizens. The SRTP chronicles Muni's accomplishments for the past two years and provides a guide on initiatives to improve Muni service over the next 20 years.

The FY 2008-2027 SRTP is the product of an agency-wide collaboration to present the operational, financial, and administrative framework required to sustain, improve and expand the public transit system. The SRTP contains information about the organization, our current and planned transit services, current and projected operating data and performance information. It also contains Muni's Capital Improvement Program (CIP) and Operating Financial Plan, both of which cover a 20-year period. The CIP includes the plan on how we intend to build improvements to the public transit system including the purchase of new vehicles and equipment. The Operating Financial Plan (OFP) projects what the revenues and costs to operate the system over the next 20 years based on current information.

A major project in this SRTP is the Third Street Light Rail Project, which is the city's largest capital project in decades. With Phase 1 successfully operating between the Market Street Subway and Visitacion Valley, the SFMTA can concentrate more fully on the design of Phase 2, the Central Subway, which will extend the Third Street Line into Chinatown.

Another major initiative is the Transit Effectiveness Project (TEP), now past the halfway point. This once-in-a-generation comprehensive review of Muni operations and finances is expected to lead to significant improve in the quality and efficiency of service provided to our passengers. Due to external schedule requirements, the SRTP needs to be finalized before the TEP is complete. However, this SRTP is influenced by many of the intermediate findings of the TEP. In 2008, the Mini-SRTP Update will provide a full report on the TEP findings and implementation steps.

I hope that you will find this edition of the SRTP to be a useful reference. The SFMTA team is working to improve service for everyone using public transit in San Francisco. We appreciate your interest in Muni and SFMTA.

Sincerely,

Nathaniel P. Ford, Sr.
Executive Director/CEO

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Executive Summary

Chapter 1. Introduction

The San Francisco Municipal Railway (Muni) is the eighth largest public transit operator in the U.S. based on ridership. It is a critical component of the city's and region's transportation system.

This Short Range Transit Plan (SRTP) is the primary planning document for the system. It is required by the Metropolitan Transportation Commission (MTC) to receive federal funding, and serves as a basis for San Francisco transit needs in MTC's Regional Transportation Plan and Regional Transit Expansion Plan. It describes the organization, current and planned services, the 20-year Operating Financial Plan (OFP), and the Capital Investment Program (CIP).

This SRTP reports on major changes in the two years since the last major SRTP update was adopted in December 2005, including the opening of the Third Street Light Rail project, significant progress on the Central Subway, and the initiation of the Transit Effectiveness Project (TEP).

This SRTP is consistent with the *SFMTA 2008-2012 Strategic Plan*. The goals of the Strategic Plan are:

Goal 1: To provide safe, accessible, clean, and environmentally sustainable service and encourage the use of auto-alternative modes through the Transit First Policy.

Goal 2: To get customers where they want to go, when they want to be there.

Goal 3: To improve the customer experience, community value, and enhance the image of SFMTA, as well as ensure SFMTA is a leader in the industry.

Goal 4: To ensure financial stability and effective resource utilization.

Goal 5: To provide a flexible, supportive work environment and develop a workforce that takes pride and ownership of the agency's mission and vision and leads the agency into the evolving, technology-driven future.

Goal 6: To improve service and efficiency, the SFMTA must leverage technology.

Chapter 2. System Organization

Muni is governed by the seven-member Board of Directors of the San Francisco Municipal Transportation Agency (SFMTA), the umbrella agency for both Muni and the Department of Parking and Traffic (DPT). The SFMTA Board is appointed by the Mayor and confirmed by the Board of Supervisors. It establishes basic policies for Muni operations. It also has jurisdiction over bus zone changes and other traffic-related changes under the purview of DPT.

The majority (73%) of SFMTA's 4,865 employees are in Muni Service Delivery (operations and maintenance). The next largest divisions are Security (including fare inspectors and parking control officers) and Transportation Planning and Development (primarily engineers and planners).

Muni's relationships with other agencies and policy bodies are critical. Proposition E (passed by voters in 1999) gave the SFMTA Board greater authority and reduced, but did not eliminate, the

role of the Board of Supervisors and the Mayor in governing Muni. The Mayor's Office reviews the SFMTA annual operating budget and the Board of Supervisors must approve it. The SFMTA is largely independent in areas such as human resources. However, Muni works closely with such agencies/departments as the County Transportation Authority, Metropolitan Transportation Commission, Department of Public Works, and the City of San Francisco's Planning Department. A proposed Charter Amendment on the November 2007 ballot could increase the independence and resources of the SFMTA and change its structure. For example, Parking and Traffic functions could be completely integrated into the SFMTA organization.

Chapter 3. Third Street Light Rail

The Third Street Light Rail Project is the most significant capital investment in generations for Muni. The Initial Operating Segment (Bayshore and Arleta to Fourth and King Streets/Caltrain Station) began revenue service in April 2007. With the planned Central Subway extension from the Caltrain Station to Chinatown (projected opening in 2016), transit travel times should be reduced by up to 10 minutes for the 24.6 million annual trips projected on the Third Street LRT line. Operating cost savings are forecast, primarily by providing a shorter, more direct rail link between Third Street stations, the Caltrain Terminal, and the Market Street subway, reducing vehicle miles and hours.

The Third Street Light Rail Project is bringing major improvements to the corridor, such as pedestrian safety, accessibility enhancements and public art. The project should also support economic development and reduce vehicle emissions.

The Metro East Light Rail Maintenance Facility is a critical part of the project. It will store and maintain 80 light rail vehicles, reducing severe overcrowding at the Green Division. It is scheduled for operation by fall 2008.

Chapter 4. Current Service and Service Evaluation

Service Design Standards

Muni's service is based on service design standards for route spacing, service frequency, stop spacing, and acceptable loads. For example, all residential locations should be within about one-quarter mile of a Muni route that operates at least 19 hours per day. Passenger stop spacing should be about 800-1,000 feet on motor coach and trolley coach lines, except where there are steep grades, and 1,000-1,200 feet between stops on LRV surface lines. These service design standards are currently being reviewed by the Transit Effectiveness Project.

Service and Ridership Changes

Muni operates five modes: motor coach, trolley coach, light rail (comprised of Muni Metro and historic streetcars), and cable cars. In addition, Muni provides paratransit service by contract.

The primary service changes since the last SRTP involve the Third Street Light Rail Project. This rail project was accompanied by significant service changes, including a new 20-Columbus trolley coach line connecting Van Ness Avenue and North Point Street with Beale and Howard Streets, via North Beach and the Financial District. The Third Street Light Rail line freed up articulated motor coaches formerly assigned to the discontinued 15-Third line, which were reassigned to the 9X/AX/BX-San Bruno Expresses, the 1/31/38 Richmond District Expresses, selected school service trips on the 29-Sunset, and the 71-Haight-Noriega (weekends only).

There has been a slight decline in annual ridership over the last several years. Total ridership in FY 2001 of 235 million dropped about 10% to 211 million in FY 2006, after ridership increased in the late 1990s. This trend corresponds closely to the Bay Area transit trend (8% drop in regional ridership between 2001-02 and 2005-06). This probably relates largely to the state of the local economy, but may partly reflect more dispersed travel patterns that make it harder for public transit to serve local travel.

Service Performance

One of the major changes initiated by Proposition E in 1999 is that the City Charter mandates service standards that Muni must meet by specific deadlines. For example, the FY 2006 goal was for 85% on-time performance, but 69.2% of vehicle trips were on time, improving to 70.8% for FY 2007. The FY 2006 goal was for 98.5% of scheduled service hours to be delivered, versus 94.2% achieved, improving to 94.3% for FY 2007. Over 19% of transit lines had excessive peak period load factors (over 85%) in FY 2006, improving to only 15% of lines for the latest fiscal year. Vehicle availability was very close to the goal for FY 06 (98.3% actual vs. 98.5% goal), but exceeded the goal (99.1%) for FY 2007.

Chapter 5. Planning and Expansion

Muni's current service design and basic route structure has been in place since the early 1980s. While Muni's current service covers the city well, there is room for improvement of the system. Corridor planning, investments in technology, and coordination with other modes and projects in the City are key efforts that Muni is undertaking to improve service to riders. Muni is also undertaking a systematic and in-depth review of the entire system through the Transit Effectiveness Project (TEP), the first in 25 years.

Transit Effectiveness Project (TEP)

The TEP's goal is to increase the effectiveness and efficiency of Muni. This project includes an intensive analysis of transit ridership potentials and the development of service planning projects.

Early TEP results show that Muni is strong in serving radial trips to/within the urban core, but most trips in San Francisco are not radial, and there is significant unmet demand for peripheral travel within and between outer districts. A revealed preference telephone survey of approximately 600 San Francisco residents, including both Muni riders and non-Muni riders, found that reliability is the most important factor when San Franciscans make travel decisions, followed by travel time, then flexibility.

A TEP comparison of Muni to peer transit systems found that Muni's service is more extensive than other operators and is relatively lower cost per mile than its peers.

- Muni carries about 51% of Bay Area public transit passengers, with boardings almost equal to the population of the city every day;
- Muni's density of service (transit hours per square mile) is significantly higher than other peer transit agencies; and
- As a system, Muni's costs per passenger trips are lower than most peers, with Muni's bus service providing the lowest cost per passenger trip compared to its peers.

Muni bus lines in 2004 carried 64 unlinked trips per vehicle revenue hour, with an operating cost of \$1.75 per passenger trip and a farebox recovery ratio (fares as a proportion of operating costs)

of 27%. Muni light rail lines in 2004 carried 77 passengers per vehicle revenue hour, with an operating cost of \$2.34 per passenger trip and a farebox recovery ratio of 20%.

However, Muni's share of the overall commute mode has been gradually decreasing since the late 1970s. System productivity has fallen 19% since 1991 to roughly 65 passengers per service hour. This is related in part to declining speed, gradually dropping over the last 30 years, from over 9.0 mph to about 8.0 mph, a substantial percentage change, due primarily to congestion and lack of transit-only corridors. Reliability has also largely hit a plateau below service standards.

Reliability depends principally on management of staff, vehicle availability, and on-street operations. However, a portion of reliability is due to factors beyond Muni's control. These include the fact that Muni operates primarily on-street and is very sensitive to traffic congestion, as well as budget reductions in 2004 and 2005. Vehicle availability has been close to 100%, but operator availability has been about 90-95% of needed levels. While Muni provides extra board operators to cover for absences, overall operator staff levels are below the need. On-street operations are affected by double parking and traffic congestion, as well as "real time" adjustments to operations. Increased enforcement, dedicated transit lanes, transit signal priority, reduced bus stops and faster boarding (e.g., through proof-of-payment or level boarding) and other measures could improve on-street reliability.

In looking at future changes, the TEP has found that about 12-29% more trips are expected in San Francisco over the next 25 years (based primarily on forecast population and job growth). With 17% of all trips made on Muni, this translates into the potential for a major expansion of ridership. However, commute travel by residents is increasingly destined outside of the city.

Automatic Passenger Counters (APCs) have been installed on a portion of the bus fleet, allowing much more detailed, up-to-date information on ridership and passenger loads. An on-time performance bus pilot project on the 1-California line increased on-time performance from 81% to 88%. A similar study is underway on the J-Church, the rail system's most-delayed Metro line. Future "early action" (short-term) projects include: a 29-Sunset Lifeline service improvement effort aimed at transit dependent riders, a pilot study of bus "proof of payment", and Geary service enhancements. In the last phase, an operations/financial plan will be created to provide a 5-7-year implementation plan.

Planning Considerations and Principles

San Francisco's Transit First Policy (in the City Charter, and included in the Appendix) is the basis for Muni's planning for major corridors. The policy prioritizes transit improvements, along with other alternatives to the private auto, such as walking and bicycling.

The SFMTA 2002 *Vision for Rapid Transit in San Francisco* is a conceptual framework for 12 major transit corridors. Recommendations in the document are reflected in other recent and ongoing planning efforts. Its principles include:

- Integrate local and regional transit into a seamless transit network;
- Physically separate transit service from auto traffic on major corridors by creating exclusive rights-of-way;
- Provide high-capacity, rapid transit-style service in major corridors; and

- Upgrade transit service incrementally, from relatively low-cost Transit Preferential Streets (TPS) upgrades to moderate cost conversion of diesel bus to electric trolley bus , to more costly options, such as Bus Rapid Transit (BRT) and light rail.

Bus Rapid Transit (BRT) and Other Service Improvement Projects

Besides the Third Street Light Rail Project described earlier, the two major corridor projects under study involve BRT for Van Ness Avenue and Geary Boulevard. BRT involves such potential components as:

- Exclusive lanes;
- Modern, low-floor, high-capacity buses with wide doors and aisles;
- High quality bus stops/stations, potentially with increased spacing;
- Streamlined (pre-paid) fare collection;
- Transit signal priority;
- Real time traveler information;
- Streetscape and safety improvements and amenities, such as landscaping and pedestrian countdown signals; and
- Frequent all day service.

The Van Ness BRT project started environmental analysis in spring 2007. Environmental review is scheduled for completion in 2008. Assuming project approval, preliminary engineering is expected to follow, with construction tentatively scheduled for FY 2010.

The Geary BRT environmental analysis is scheduled to start in fall 2007, with its completion in 2009. Assuming project approval, identification of adequate facilities, and funding for required vehicles and operations, construction is tentatively scheduled to begin in FY 2011.

Two other prime BRT candidates are Potrero and 19th Avenues. BRT on 19th Avenue would be particularly challenging due to the heavy traffic volumes.

Muni is studying the expansion of historic streetcar service in several areas. A new E-line (running between Fisherman's Wharf and the Caltrain Terminal at Fourth and King) is possible, as is a historic streetcar extension to Fort Mason and the Presidio. These expansions are subject to access to adequate facilities, vehicles, and resources for operations.

The Transit Preferential Streets (TPS) program has installed semi-exclusive transit lanes on 16 streets, over 30 bus bulbs, 100 boarding islands, signal priority at over 100 intersections, and other signal improvements. Corridors for future TPS projects include: Market Street, 19th Avenue, Outer Mission Street, and Geneva Avenue.

SFMTA is also involved in several area-wide planning efforts, focused on Balboa Park, Glen Park, the Transbay Terminal, and the Eastern Neighborhoods.

Transit Oriented Development

SFMTA intends to promote transit oriented development (TOD). TOD encompasses both development of SFMTA assets and also encouraging non-SFMTA development patterns that support higher ridership.

SFMTA has already undertaken the development of one parcel for joint transit/commercial use (the Hotel Vitale on a former bus layover property at Mission and Steuart Streets). It is exploring opportunities at several other sites. Income derived from such development can support SFMTA's operating budget through ongoing revenue streams, or provide capital for major projects. Other development opportunities include assets owned by SFMTA that include parking garages and lots and other facilities and land.

TOD also involves encouraging denser development adjacent to transit stations and stops. Project design and orientation can also encourage transit use by, for example, making sure that there are convenient and safe pedestrian connections to transit and by limiting parking. Larger developments can be encouraged to provide transit facilities, such as shelters and bus bulbs.

Chapter 6. Operating Financial Plan

Overview of Funding Sources and Cost Elements

Muni receives revenues from a wide variety of federal, state, and local sources. Some of these are earmarked for capital projects; others are for operating costs. Operating revenue sources include:

Local Revenue Sources:

- Passenger fares;
- General Fund and Parking Revenues;
- Sales Tax, Proposition K (1/2-cent sales tax); and
- Other Local Revenue Sources.

State and Regional Revenue Sources:

- Gasoline Sales Tax;
- State Transit Assistance Base, Gas Tax (operating support);
- Gas Tax Increment, Proposition 42 (operating support);
- Sales Tax;
- Transportation Development Act (TDA) Articles 3, 4, 4.5 and 8 (1/4-cent sales tax);
- AB 1107 Permanent 1/2¢ Sales Tax for Transit in Alameda, San Francisco and Contra Costa Counties; and
- Bridge Tolls (Base toll, state-owned bridges).

Federal Revenue Sources

- Federal Section 5307 Funds (operating support for paratransit).

Passenger fares account for 20 to 25% of operating revenues. The majority of expenditures (72%) are for personnel salaries and fringe benefits.

Operating Budget

Muni's Operating Budget in FY 2007 was \$596 million and comparatively the FY 2008 Operating Budget of \$585 million is \$10.5 million lower. The decrease in forecast revenue is a result of using the year to date actual figures in FY 2007 to project the FY 2008 budget and adjusting various line items such as traffic fines, proof of payment fines, transit fare revenue and State Sales Tax accordingly. There were no transit fare increases in the FY 2008 Operating Budget, however, there were increases to parking garage rates and cable car and historical vehicle rental fees.

The FY 2008 Operating Budget includes reductions in various line items based on actual amounts saved from prior fiscal years. Additionally, the FY 2008 budget realigns certain long standing vacancies into positions that support the strategic plan goals. These positions include street supervision, revenue booth staffing, administrative support for the Muni Service Delivery and Operations Division to manage operator absence and personnel related issues, and administrative staff in External Affairs, Information Technology and Human Resources.

20-Year Operating Budget Forecast and Revenue Enhancement Initiatives

The forecast of Muni's operating revenues and expenditures with future service plans is built into the 20-year OFP. The 20-year Muni OFP will require new sources of revenue to keep the budget balanced. There are, multiple initiatives underway to address potential shortfalls:

- The Transit Effectiveness Project;
- Mayor's panel to address the Muni structural deficit; and
- A proposed City Charter amendment scheduled for the November 2007 ballot.

The ballot proposition would double the amount of parking tax funding allocated to Muni annually. This would provide about \$26 million additional, or about a 4% increase, over the FY 2007-2008 Operating Budget. It would also move the final authority to increase parking rates, fines and fees from the Board of Supervisors to the SFMTA and the entire increase would be dedicated to primarily to support Muni (currently these revenues are shared 50-50 with the City's General Fund). Muni would be able to offer greater financial incentives for changes in employee work rules and assignments. **Additionally, the SFMTA will be able to issue debt directly.**

These initiatives may result in one, or a combination of any, of the following potential revenue sources after careful consideration and approvals:

- Sales tax;
- Vehicle environmental impact fee;
- Parking tax;
- Transit Assessment District;
- Citywide Parcel Tax;
- Downtown Parcel Tax;
- Transit Impact Fee on Downtown Businesses; and/or

- State-level Initiatives.

The OFP forecast indicates that, assuming approval of the November 2007 ballot Charter Amendment measure, revenues should be sufficient to cover operating costs. In FY 2009, net funds estimated at \$77 million should be available to help support capital needs, such as vehicle and infrastructure rehabilitation and repair. This transfer to capital projects is forecast to grow to \$299 million on FY 2027.

Any future operating transfers to support rehabilitation and other capital needs are heavily dependent on new and increased parking revenues that would be facilitated by passage of the Charter Amendment on the November 2007 ballot. Parking revenues are assumed to more than triple, while fares grow about 130% between FY 2007 and 2027, and State TDA sales tax assistance grows 52% in the same period. Increased operating costs over the next 20 years are primarily the result of increased costs for labor and materials for existing service, with new service accounting for a small proportional increase in overall operating costs.

Chapter 7. Fleet Program

Muni has developed a Fleet Plan to respond to anticipated changes in service, vehicle demand, fleet composition, and ridership. The Fleet Plan addresses goals to reduce air pollution and crowding on vehicles, as well as meet future new service demands.

The Fleet Plan includes the following changes:

- Growth in motor coaches from 473 to a peak of 607 in FY 2022;
- Minimal change in trolley coach fleet of 333;
- Growth in light rail vehicles from 151 to a peak of 223 by FY 2021;
- Growth in historic streetcars from 27 to a peak of 48 in FY 2011;
- No net change in the cable car fleet of 40; and
- Non-revenue vehicle fleet (mainly maintenance vehicles) would remain near the existing 543, but would be replaced more quickly as they approach the end of their useful life.

Muni is committed to increasing clean fuel vehicles, with a goal of a 100% zero emissions fleet by year 2020. As of 2006, over half of Muni's fleet was electrically powered. Muni has nearly finished replacing and upgrading a large portion of the revenue vehicle fleet with newer and less polluting vehicles, using 86 Orion VII hybrid diesel-electric buses being delivered in the second half of 2007, and 45 "clean diesel" Gillig buses from AC Transit. The new Islais Creek maintenance facility will be equipped to accommodate a future retrofit for both natural gas and hydrogen fuel. Muni may also expand electric trolley coach use and will participate in a regional fuel cell bus demonstration program.

The current ratios of spare vehicles to all revenue vehicles are 21.7% for motor coach, 43.5% for trolley coach, and 28.0% for light rail vehicles. The Federal Transit Administration has expressed concern about spare ratios higher than FTA guidelines. As the oldest vehicles are eliminated from the fleet, the spare ratios should fall.

Muni has an LRV overhaul program funded to \$25 million underway. This is a cost-effective measure, but it is difficult to obtain funding for such a program.

The San Francisco Planning Department and the Redevelopment Agency have started to plan for significant growth and increased residential densities along the City's eastern waterfront from Rincon Hill south to Visitacion Valley. This will significantly increase service demands and vehicle needs for Muni.

The Third Street/Central Subway, Mission Bay, and demand growth primarily related to transit oriented development may increase vehicle needs by about 118 buses and 72 Light Rail Vehicles within the 20-year timeframe of the SRTP.

Accessible bus service is currently provided on all motor coach and trolley coach lines, including the recently accessible 41-Union trolley coach line (peak hour only). Muni Metro subway stations and the new T-Third line are fully accessible, and a Key Stops program has been completed to meet ADA mandates. However, Muni intends to pursue accessibility improvements at stops beyond those mandated by the ADA Key Station requirements, as funding permits.

Well over half of the 543 non-revenue vehicles (mainly maintenance vehicles) were acquired seven or more years ago. These are at or approaching the end of their useful life and should be replaced.

Chapter 8. Infrastructure Program

The Infrastructure Program consists of capital projects to build and maintain the fixed guideway elements such as rail, communication and signaling, overhead power lines and power distribution systems, subway rehabilitation, station construction/rehabilitation, and cable car system rehabilitation/replacement. Accessibility improvements are also included in this program.

Planned funding for major infrastructure projects and programs such as Rail Replacement and Overhead Rehabilitation falls short of the estimated costs for these programs over the 20-year period. However, these programs generally have sufficient funding for the current fiscal year.

The Rail Replacement Program (from FY 1998 through FY 2029) has an estimated cost of \$864 million, including recently completed projects. The largest future projects include the L-line rail replacement (Ulloa/Forest Side to 48th/Taraval), due to start in FY 2009 and cost about \$39 million, and the \$50 million N-line replacement (Arguello to Terminal Loop), with no scheduled starting date.

The Trolley Overhead Rehabilitation Program cost including completed and future projects is estimated at \$454 million. The largest project, replacing overhead wiring for the 5-Fulton/21-Hayes lines, started conceptual engineering in FY 2006.

The Route Electrification program (for trolley wiring extensions) is estimated at \$963 million, of which \$26 million is in committed projects to extend trolley service to Mission Bay on the 22-Fillmore and 45-Union.

Wayside signal control program needs (for trolley and light rail lines) are estimated to cost \$150 million. This includes about \$29 million in committed projects, including the Automated Train Control System upgrade to Windows and signal upgrades at Church Street and Duboce Avenue.

Chapter 9. Facilities Program

SFMTA maintains a complex set of operational, maintenance and administrative facilities. The Facilities Program needs to respond to serious existing deficiencies as well as to meet future needs, such as adapting to fleet increases and changes in fleet composition. This program presents the most significant operating challenges for Muni.

The current deficiencies include:

- Kirkland Division (Muni's oldest motor coach facility) is overcrowded and outmoded, requiring parking some buses and all employee personal vehicles on surrounding streets. It is being replaced by the Islais Creek Division, with design and property acquisition underway.
- The Green Division, used for light rail vehicles, is seriously overcrowded. It requires extensive labor just to shuttle vehicles around the yard, plus a satellite yard at 6th and King Streets. It should be relieved by Metro East, which is under construction. The Upper Geneva Yard may be needed to accommodate growth in historic fleet beyond the capacity of the main Geneva facility.
- The Presidio Division trolley facility has outmoded, overcrowded maintenance facilities and offices.
- The Overhead Lines Maintenance building at 1401 Bryant Street needs seismic upgrading at a cost estimated at over \$21 million. Thus, SFMTA will soon relocate this function to the Burke Avenue facility. The Bryant Street property will become available for sale, lease, or reuse.
- The Central Control facility that manages operations for all revenue vehicles is outmoded and inadequately sized.

Eastern waterfront growth, increased traffic congestion near Muni facilities, and the potential need for a dedicated BRT fleet may require changes in the number or size of fleet facilities.

SFMTA has already undertaken the development of one parcel for joint transit/commercial use (the Hotel Vitale on a former bus layover property at Mission and Steuart Streets). It is exploring opportunities at several other sites. Income derived from such development can support SFMTA's operating budget through ongoing revenue streams, or provide capital for major projects, with the option of retaining some of the site for SFMTA uses.

Chapter 10. Equipment Program and Other Projects

The Equipment Program provides support tools for Muni's operating, maintenance, and administrative functions (such as rail grinders and personal computers). Many of the projects are related to technology and communications

Technology projects completed in the last two years include:

- Upgrades to Shop History and On-line Parts System (SHOPS);
- Trapeze Operator Scheduling Software;
- Automatic Passenger Counters and analytical reporting software for 110 vehicles;
- Fiber-optic loop that links multiple SFMTA sites;

- SFgo Traffic Management Center and Initial Phase (intersection interconnection and traffic monitoring camera installation); and
- Activating entire revenue fleet for Automated Vehicle Location (AVL) predictions delivered via NextMuni.

Two key ongoing projects are the SFgo and AVL projects. Improved traffic flow and transit signal priority will significantly reduce Muni travel times. AVL enables NextMuni to provide accurate predictions of vehicle arrivals to passengers, improving customer knowledge and satisfaction.

Chapter 11. Capital Investment Program

The 20-year Muni Capital Investment Program (CIP) describes and prioritizes capital projects (with a depreciable life of 5+ years). It also forecasts expected capital costs and funding. It finds that expected capital funding may fall far short of capital needs, particularly in the area of infrastructure enhancements, such as BRT and light rail projects.

The total 20-year cost of the CIP is estimated at \$18.3 billion, compared to expected and identified funding of only \$9.3 billion. Most of this apparent deficiency comes in FY 2021 and beyond. This total deficit is influenced especially by several unapproved light rail projects (e.g., Van Ness Avenue) that have no identified funding at this point and have not been through planning and environmental analysis.

In FY 2008-09, \$672 million in costs are forecast, compared to \$335 million in expected and identified funding. All four capital programs (fleet, infrastructure, facilities, and equipment) are significantly unfunded, with the largest single gap in the fleet program.

Several initiatives are underway to provide additional revenues to meet capital needs, as described in Chapter 6.

This CIP uses a new procedure for priority scoring projects:

Step 1. Vetting or assignment to one of several primary categories (Mission Critical, Preservation, Transportation Priority, and Mission Development), consistent with the *Strategic Plan*. This is performed by staff familiar with the capital projects.

Step 2. Evaluation (high, medium, or low) of projects. This is performed by staff familiar with the detailed attributes of the project, its purpose, and likely impact on the SFMTA.

Step 3. Review of the overall project scoring and ranking by the organization.

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